

STATEMENT OF BASIS

Proposed Approval

Toxic Substances Control Act Polychlorinated Biphenyls (PCB) Commercial Storage Facility and Chemical Waste Landfill

Chemical Waste Management, Inc. Kettleman Hills Facility

Kings County, California

U.S. EPA ID: CAT 000 646 117



August 27, 2019

Land, Chemicals & Redevelopment Division
U.S. Environmental Protection Agency Region 9
San Francisco, California



For further information on this Statement of Basis document, please contact:

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Most documents referenced in this Statement of Basis and many other documents relevant to this proposed Approval may be found on www.regulations.gov [docket number EPA-R09-RCRA-2019-0088]. Several of the key documents may also be found at www.epa.gov/ca/kettleman-hills and the Kettleman City Library (104 Becky Pease Street, Kettleman City, California). Please contact Frances Wicher for information on how to obtain copies of other documents in the administrative record for this proposed Approval.



AUGUST 27, 2019

EXECUTIVE SUMMARY

STATEMENT OF BASIS — PROPOSED APPROVAL

TOXIC SUBSTANCES CONTROL ACT POLYCHLORINATED BIPHENYLS (PCB) COMMERCIAL STORAGE FACILITY AND CHEMICAL WASTE LANDFILL CHEMICAL WASTE MANAGEMENT, INC. KETTLEMAN HILLS FACILITY

U.S. EPA proposes to issue an approval to store, treat for disposal, and dispose of polychlorinated biphenyls (“PCB”) waste at Chemical Waste Management, Inc.’s Kettleman Hills Facility. We encourage the public to comment on all aspects of this proposed Approval and its supporting determinations and analyses.

Una traducción al español
de este Resumen
Ejecutivo se puede
encontrar en el Apéndice
A de esta Declaración de
Bases.

The Kettleman Hills Facility is located in Kings County, California, approximately 3.5 miles southwest of Kettleman City. It is a commercial hazardous waste treatment, storage and disposal facility that accepts PCB waste and other types of hazardous wastes. It is currently approved by U.S. EPA under the Toxic Substances Control Act (“TSCA”) to dispose of PCB waste in Landfill B-18 and to store and treat PCB waste at the PCB Flushing/Storage Unit. The PCB Flushing/Storage Unit has both an enclosed building and an outside containment area. There are also three closed landfills at the Facility which were used for PCB waste disposal—Landfills B-14, B-16, and B-19. These units as well as other storage, treatment, and disposal units at the Facility are permitted by the State of California’s Department of Toxic Substances Control (“DTSC”) under the Resource Conservation and Recovery Act.

U.S. EPA’s proposed Approval, if made final, would replace the existing Approvals and would allow Chemical Waste Management, Inc. to continue to:

- Dispose of PCB waste in Landfill B-18 Phases I and II;
- Store PCB waste in the enclosed building at the PCB Flushing/Storage Unit;
- Drain and flush PCB-containing electrical equipment at the PCB Flushing/Storage Unit; and
- Bulk (combine small containers of waste into a larger container) and repackage PCB waste in the enclosed building at the PCB Flushing/Storage Unit.

The Approval would also increase the TSCA-approved capacity of Landfill B-18 and contain conditions for storage and treatment of PCBs that will allow Chemical Waste Management, Inc. to perform these operations:

- Dispose of PCB waste in Landfill B-18 Phase III;



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- Store PCB waste that is within thirty days of its removal from service date in the outside containment area at the PCB Flushing/Storage Unit;
 - Bulk and repackage PCB waste within the outside containment area at the PCB Flushing/Storage Unit; and
 - Perform bin-top and container-top solidification of incidental liquids at the PCB Flushing/Storage Unit.

To maintain compliance with all applicable TSCA regulations for storage, treatment for disposal, and disposal of PCB waste, the Approval would also require Chemical Waste Management, Inc. to:

- Maintain records on Facility operations;
- Regularly inspect and maintain the Facility;
- Maintain and implement a contingency plan to respond to spills or other emergencies;
- Promptly report any PCB spill or emergency that requires implementation of the contingency plan;
- Test groundwater annually from wells monitoring active Landfill B-18 and every five years from wells monitoring closed Landfills B-14, B-16, and B-19 for PCBs and report the results;
- Test leachate annually from Landfills B-14, B-16, B-18, and B-19 for PCBs and report the results;
- Implement an air quality monitoring program that includes four monitoring sites and provide quarterly air monitoring reports.
- Test surfaces quarterly at the PCB Flushing/Storage Unit for PCB contamination and promptly clean up any PCB contamination found at or above 10 micrograms per 100 square centimeters;
- Promptly report any detection of PCBs in groundwater, leachate, air, or on surfaces at the PCB Flushing/Storage Unit;
- Maintain and implement post-closure plans, cost estimates, and financial assurance for post-closure care for closed Landfills B-14, B-16 and B-19;
- Maintain plans, cost estimates, and financial assurance for closure and post-closure care of Landfill B-18;
- Maintain a closure plan, cost estimates, and financial assurance for closure of the PCB Flushing/Storage Unit; and
- Follow public process requirements for many types of modifications to the Approval.



Overall, the proposed Approval would result in the following changes to the Facility:

- Increases the TSCA-approved capacity of Landfill B-18 from 10.7 million cubic yards to 15.6 million cubic yards by approving the disposal of PCB waste in Phase III; and
- Set a maximum PCB waste storage capacity at the PCB Flushing/Storage Unit of 44,015 gallons.

U.S. EPA proposes to issue this Approval based in part on its finding that operations of the Kettleman Hills Facility, under the terms and conditions of the proposed Approval, will not pose an unreasonable risk of injury to health and the environment from PCBs. This finding is based on the engineering and operational controls and monitoring requirements included in the proposed Approval and on an assessment of the overarching weight of the scientific evidence regarding the relationship between Kettleman Hills Facility PCB releases and the likelihood and magnitude of adverse health impacts in the surrounding communities. U.S. EPA has analyzed a number of objective, site and media-specific, multidisciplinary scientific investigations which collectively assessed the exposure-threat and quantitative health-risk posed by PCB releases from the Kettleman Hills Facility.

Based upon a comprehensive review, U.S. EPA did not identify PCB concentrations above a level of concern in air, water, vegetation or soils in areas proximate to the Kettleman Hills Facility. In addition, U.S. EPA was not able to derive unacceptable health risk-estimates to either residents or on-site workers from Kettleman Hills Facility PCB releases. Finally, based on the available data, the concentration of PCBs found in environmental media proximate to the Facility are consistent with the concentration of PCBs found in many rural areas of California's Central Valley. These PCB concentrations are also consistent with the concentrations of PCBs found by a separate U.S. EPA investigation in undisturbed wilderness locations within the United States.

We also propose to issue this Approval based on our findings that the Kettleman Hills Facility complies with applicable requirements for PCB storage facilities and PCB landfills including meeting applicable design and operational requirements, personnel qualifications, and provision of closure and post-closure plans, cost estimates, and financial assurance.

We propose to continue to grant four waivers of regulatory requirements for PCB landfills. These waivers allow:

- Use of the DTSC-approved groundwater well purge method instead of the method listed in PCB regulations.
- Testing of groundwater using the same parameters and analytic methods required by state permits instead of the outdated methods in the PCB regulations.
- Testing of leachate using the same parameters and analytic methods required by state permits instead of the outdated methods in the PCB regulations.



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- Disposal of small containers of ignitable waste in overpacked drums (lab packs) as an exception to the prohibition on the disposal of ignitable waste in PCB landfills in the PCB regulations.

We have also reviewed the compliance history of the Kettleman Hills Facility. While the Facility has violated applicable requirements in the past, these violations do not evidence a pattern of noncompliance that demonstrates Chemical Waste Management, Inc.'s unwillingness or inability to achieve and maintain compliance with the regulations applicable to it and its operations at the Kettleman Hills Facility. In addition, the corrective actions that the Facility implemented to address these past violations include physical and operational improvements which reduce the potential for future violations and prevent and contain future releases.

We have also prepared a Draft Environmental Justice Analysis to document that environmental justice concerns, including past outreach to seek the affected communities' involvement, were considered in the drafting of the proposed permit. We are now seeking community input before reaching a final permit decision.

We have consulted with U.S. Fish and Wildlife Service to ensure that this Approval will not have an adverse impact on any endangered species. We have also consulted with the California Office of Historic Preservation to ensure that the Approval will not adversely impact any historic properties. Finally, we evaluated the project to assure that it conforms to the San Joaquin Valley's plans to attain and maintain the national health-based air quality standards.

The proposed Approval was issued on August 27, 2019. Public comments on the proposal can be submitted until Friday, November 1, 2019. Public comments on all aspects of the proposed Approval and its supporting determinations and analyses are welcome. Public comments can be submitted on www.regulations.gov [docket number EPA-R09-RCRA-2019-0088] or postmarked or emailed to the following address no later than November 1, 2019.

Frances Wicher, Kettleman Hills Project Manager
Permits Office, Land, Chemicals & Redevelopment Division (LND-4-2)
U.S. Environmental Protection Agency Region 9
75 Hawthorne Street
San Francisco, CA 94105
Phone Number 415-972-3957
Email: wicher.frances@epa.gov

All comments that are received by email or through www.regulations.gov will be included in the administrative record for the proposed Approval without change and will be available to the public, including any personal information provided with the comments. If a commenter sends email directly to U.S. EPA, the sender's email address will be automatically captured and included as part of the public comment. Comments submitted to the U.S. EPA through the U.S. Mail or any other non-electronic delivery method will also be included in the administrative record without change and will be available to the public, including any personal information provided, unless the comment includes Confidential Business Information (CBI) or other information the disclosure of which is restricted by



statute. Information that is considered to be CBI or otherwise protected should be clearly identified as such and should be submitted only through U.S. Mail or a non-electronic delivery method; such information should not be submitted through www.regulations.gov or email.

U.S. EPA will hold a public meeting with a question and answer session followed by a public hearing on the proposed Approval at the time and location listed below. Simultaneous Spanish translation will be provided at the meeting and hearing.

Thursday, October 10, 2019

Public Meeting/Question and Answer Session: 5:30 to 7:00 pm

Public Hearing: 7:30 pm

Kettleman City Elementary School Cafeteria

701 General Petroleum Avenue

Kettleman City, California 93239

A copy of the proposed Approval, this Statement of Basis and its appendices, the Draft Environmental Justice Analysis, the application submitted by Chemical Waste Management, Inc., and other key documents can be found on U.S. EPA's Kettleman Hills project website at <https://www.epa.gov/ca/kettleman-hills>; on www.regulations.gov [docket number EPA-R09-RCRA-2019-0088]; and from the Kettleman Hills Project Manager listed above. Other documents relevant to the proposed Approval are on www.regulations.gov. A hard copy of the proposed Approval, this Statement of Basis (including the Draft Environmental Justice Analysis), and the application can be found at:

Kettleman City Library

104 Becky Pease Street

Kettleman City, CA 93239

(559) 386-9804

U.S. EPA will review, summarize and provide written responses to all substantive comments received during the public comment period and at the public hearing prior to making a decision on whether to issue or deny a final Approval.

Información en español sobre la Aprobación propuesta y la Declaración de Bases se puede obtener por medio de:

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ACRONYMS, ABBREVIATIONS, AND FREQUENTLY CITED DOCUMENTS

AAMP	Ambient Air Monitoring Program
CAA	Clean Air Act
CalEPA	California Environmental Protection Agency
CalRecycle	California Department of Resources Recycling and Recovery
CARB	California Air Resources Board
CBI	Confidential business information
CDPR	California Department of Pesticide Regulations
C.F.R.	Code of Federal Regulations
COC	Constituents of concern
CWM	Chemical Waste Management, Inc.
DTSC	California Department of Toxic Substances Control
ESA	Endangered Species Act
FWS	United States Fish and Wildlife Service
KHF	Kettleman Hills Facility
LCRS	Leachate collection and removal systems
MPars	Detection monitoring parameters
MRP	Monitoring and reporting program
NAHC	Native American Heritage Commission
NEIC	National Enforcement Investigations Center
NHPA	National Historic Preservation Act
NOD	Notice of deficiency
NON	Notice of noncompliance
PM _{2.5}	Particulate matter less than 2.5 microns in diameter
PM ₁₀	Particulate matter less than 10 microns in diameter
PCB or PCBs	Polychlorinated biphenyls
PCB F/SU	PCB Flushing and Storage Unit
ppm	Parts per million
RCRA	Resource Conservation and Recovery Act
RWQCB	Central Valley Regional Water Quality Control Board
SB	Statement of Basis
SJVAPCD	San Joaquin Valley Air Pollution Control District

ACRONYMS, ABBREVIATIONS, AND FREQUENTLY-CITED DOCUMENTS

TSCA	Federal Toxic Substances Control Act
U.S. EPA	United States Environmental Protection Agency
µg/100 cm ²	micrograms per 100 square centimeters
VOC	Volatile organic compound
WDR	Waste discharge restrictions
WSRA	Wild and Scenic Rivers Act

Renewal Application: “TSCA Permit Renewal Application, Chemical Waste Management, Kettleman Hills Facility” dated October 1, 2018.

Operation Plan: “Hazardous Waste Facility Permit Renewal Application, Operation Plan,” Chemical Waste Management, Inc. Kettleman Hills Facility, Revision 3, March 16, 2018.

MRP R5-2014-0003: “Monitoring and Reporting Program R5-2014-0003 for Chemical Waste Management, Inc. Class I/II Waste Management Units Kettleman Hills Facility.” California Regional Water Quality Control Board Central Valley Region. January 16, 2014.

PCB Regulations: U.S. EPA’s regulations at 40 C.F.R. Part 761 that implement the PCB program under TSCA.

Proposed Approval: “Proposed Approval, Toxic Substances Control Act PCB Commercial Storage Facility and Chemical Waste Landfill, Chemical Waste Management, Inc. Kettleman Hills Facility, Kings County, California.” U.S. EPA Region 9. August 27, 2019.

State RCRA Permit: “Hazardous Waste Facility Permit, Permit Number: 02-SAC-03” Department of Toxic Substances Control. Effective June 16, 2003 (modified May 5, 2005, July 25, 2006, September 21, 2007, and May 21, 2014).

TSCA Operation Plan: “TSCA Operation Plan, Landfill B-18 Phases I, II, and III; PCB Building and Outside Containment Area.” Chemical Waste Management, Inc. Revision 3: October 1, 2018.

WDR R5-2014-0003: “Order R5-2014-0003 Waste Discharge Requirements for Chemical Waste Management, Inc. Class I/II Waste Management Units Kettleman Hills Facility Kings County.” Central Valley Regional Water Control Board. January 16, 2014.

STATEMENT OF BASIS — PROPOSED APPROVAL

TOXIC SUBSTANCES CONTROL ACT POLYCHLORINATED BIPHENYLS (PCB) COMMERCIAL STORAGE FACILITY AND CHEMICAL WASTE LANDFILL CHEMICAL WASTE MANAGEMENT, INC. KETTLEMAN HILLS FACILITY

I. INTRODUCTION AND INFORMATION ON PUBLIC PARTICIPATION

A. INTRODUCTION

This Statement of Basis (“SB”) document provides supporting information and analyses for the U.S. Environmental Protection Agency’s (“U.S. EPA”) proposed Approval of a Toxic Substances Control Act (“TSCA”) polychlorinated biphenyl (“PCB”) Commercial Storage Facility and Chemical Waste Landfills at Chemical Waste Management, Inc.’s Kettleman Hills Facility in Kings County, California. This proposed Approval is based on the application “TSCA Permit Renewal Application, Chemical Waste Management, Kettleman Hills Facility” dated October 1, 2018 (“Renewal Application”) [CWM 2018c] and documents submitted in support of the application.

In addition to providing supporting information and analyses, this Statement of Basis also provides information on how the public can provide comments on the proposed Approval, information on the public meeting and hearing on the proposed Approval, and a brief description and history of the Kettleman Hills Facility.

B. PUBLIC HEARING AND COMMENTS

U.S. EPA is requesting comments on all aspects of its proposed Approval for the storage, treatment for disposal, and disposal of PCB waste at Chemical Waste Management, Inc.’s Kettleman Hills Facility including the Statement of Basis, Draft Environmental Justice Analysis, and compliance with applicable federal statutes.

We have issued a public notice and fact sheet in English and Spanish (**Appendix B**) providing a summary of the proposed Approval and its basis and announcing a public meeting and hearing and a public comment period. The public comment period began on August 27 2019 and will end on November 1, 2019.

Comments may be submitted during the public comment period in writing on **www.regulations.gov** [docket number EPA-R09-RCRA-2019-0088], by mail or email, or in person at a public hearing on the proposed Approval. All comments must be submitted, postmarked, or emailed by November 1, 2019.

All comments that are received by email or through www.regulations.gov will be included in the administrative record for the proposed Approval without change and will be available to the public, including any personal information provided with the comments. If a commenter sends email



directly to U.S. EPA, the sender's email address will be automatically captured and included as part of the public comment. Comments submitted to the U.S. EPA through the U.S. Mail or any other non-electronic delivery method will also be included in the administrative record without change and will be available to the public, including any personal information provided, unless the comment includes Confidential Business Information (CBI) or other information the disclosure of which is restricted by statute. Information that is considered to be CBI or otherwise protected should be clearly identified as such and should be submitted only through U.S. Mail or a non-electronic delivery method; such information should not be submitted through www.regulations.gov or email. For the full U.S. EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit Commenting on EPA Dockets (<https://www.epa.gov/dockets/commenting-epa-dockets>).

The public meeting with a question and answer session will be held on October 10, 2019, 5:30 to 7:00 pm. The public hearing will follow at 7:30 pm. Both the meeting and hearing will be held at the address below. Simultaneous Spanish translation will be provided at the meeting and hearing.

Kettleman City Elementary School Cafeteria
701 General Petroleum Street
Kettleman City, CA 93239

Written comments can be submitted on www.regulations.gov [docket number EPA-R09-RCRA-2019-0088] or mailed or emailed. All written comments must be submitted, postmarked or emailed on or before November 1, 2019. Mailed or emailed comments should be sent to:

Frances Wicher, Kettleman Hills Project Manager
Permits Office, Land, Chemicals & Redevelopment Division (LND-4-2)
U.S. Environmental Protection Agency Region 9
75 Hawthorne Street
San Francisco, CA 94105
Phone Number: 415-972-3957
Email: r9Landsubmit@epa.gov and wicher.frances@epa.gov

A copy of the proposed Approval, this Statement of Basis, the application, the Draft Environmental Justice Analysis, and other key documents can be found on www.regulations.gov [docket number EPA-R09-RCRA-2019-0088], U.S. EPA's Kettleman Hills project website at www.epa.gov/ca/kettleman_hills, and the Kettleman City Library (104 Becky Pease Street, Kettleman City). Additional information, including all documents referenced in this Statement of Basis and the Draft Environmental Justice Analysis (with the exception of confidential business information) can be found on www.regulations.gov [docket number EPA-R09-RCRA-2019-0088].

U.S. EPA will review, summarize and provide written responses to all substantive comments received during the public comment period and at the public hearing prior to making a final decision on Chemical Waste Management, Inc.'s application to renew and modify its TSCA Approval for the Kettleman Hills Facility. We will send notice of the final decision to each person who provides contact information (email and/or mailing address) and who: submits comments



during the public comment period, including oral comments provided at the public hearing or requests notice of the final TSCA permit decision. Please note that an email or postal address must be provided if the commenter wishes to be directly notified of U.S. EPA's final decision on the proposed Approval. We will also post the final decision including our response to comments, a copy of the public hearing transcript, and other relevant documents to the Kettleman Hills project website at www.epa.gov/ca/kettleman_hills.

Información en español sobre la Aprobación propuesta y la Declaración de Bases se puede obtener por medio de:

Soledad Calvino
U.S. Environmental Protection Agency Region 9
Office: 415-972-3512
Email: calvino.maria@epa.gov

II. BACKGROUND

A. FACILITY DESCRIPTION

The Kettleman Hills Facility is a commercial hazardous waste treatment, storage and disposal facility located in Kings County, California, southwest of the intersection of Interstate 5 and Highway 41, approximately 3.5 miles southwest of Kettleman City, and 6.5 miles southeast of Avenal. See **Figure 1**. The Facility owns and occupies approximately 1,600 acres of property, of which 695.5 acres are permitted by Kings County for the management of federal- and state-listed hazardous wastes, and municipal solid and designated wastes. Of these 695.5 acres, 555 acres are within the fenced operational area [CWM 2018a, p. 3-1]. See **Figure 2**.

The Facility is located on the southwestern edge of the Kettleman Hills, an area that has been used for natural gas and oil exploration and extraction and ranching. The Facility is currently surrounded by general agriculture and grazing lands for several miles in all directions with some oil and gas exploration operations. The closest non-agricultural/oil exploration areas and the nearest group of permanent residents are located in Kettleman City [CWM 2018a, p. 48-1].



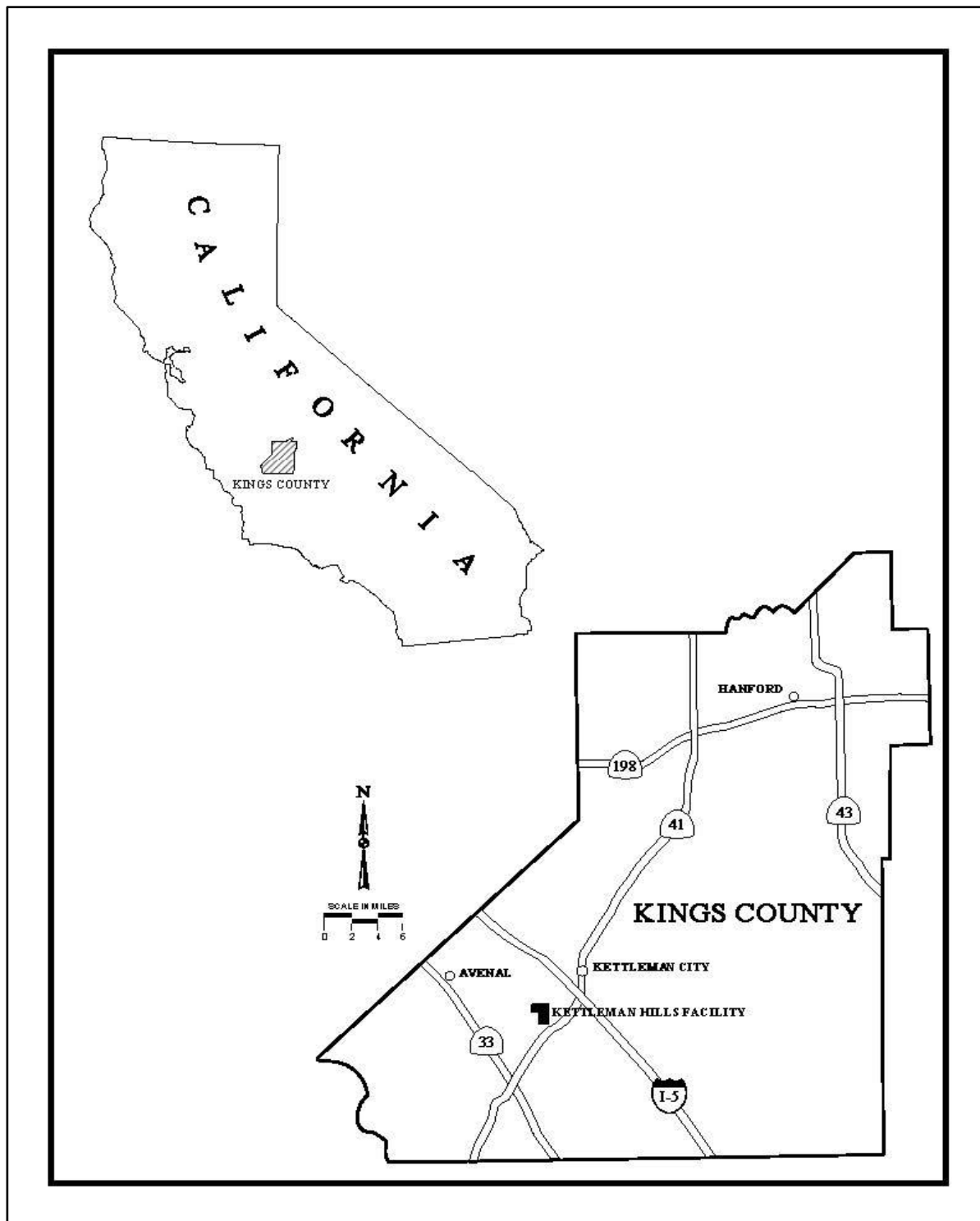


FIGURE 1 – LOCATION OF THE KETTLEMAN HILLS FACILITY

Source: RWQCB 2014a (modified).



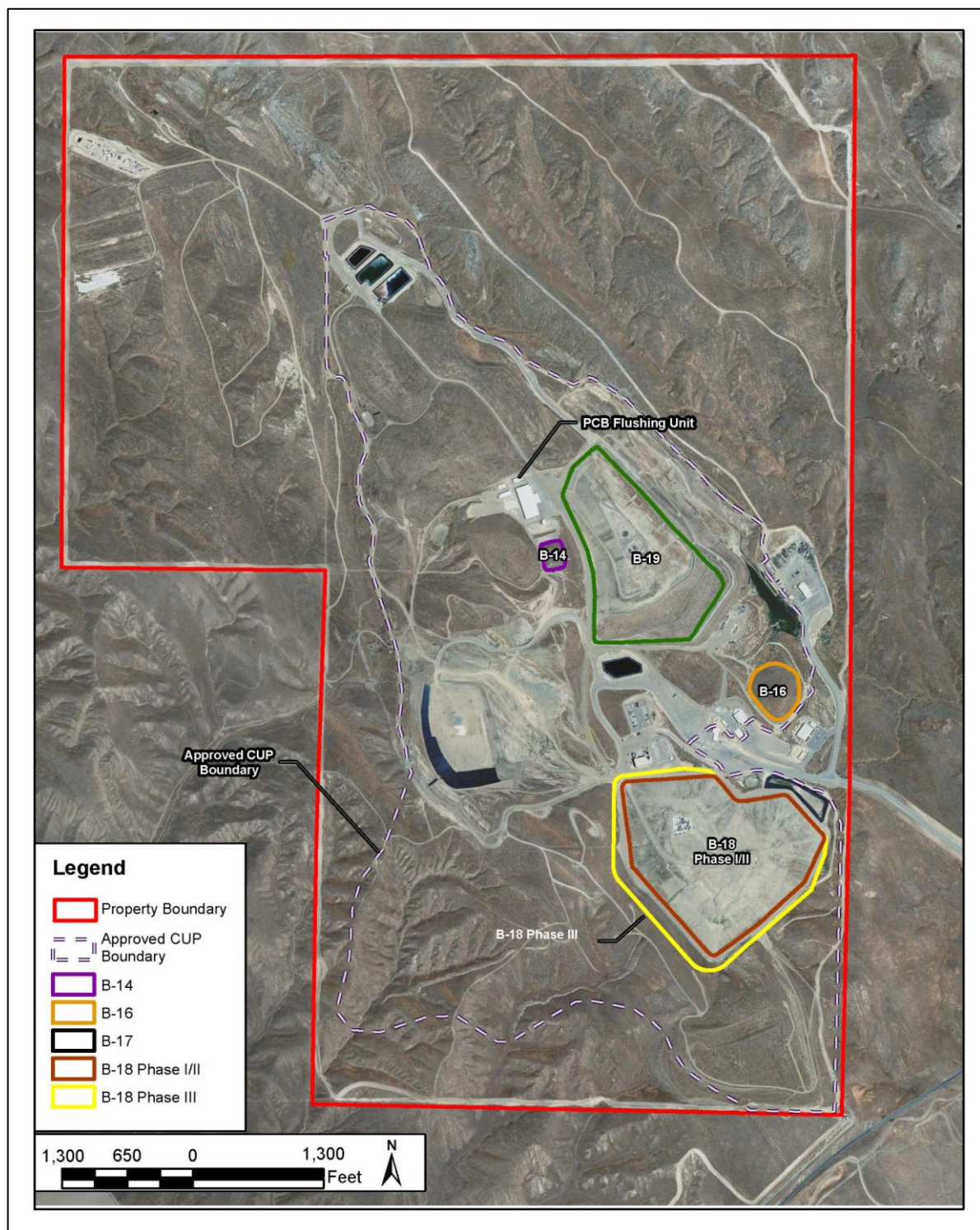


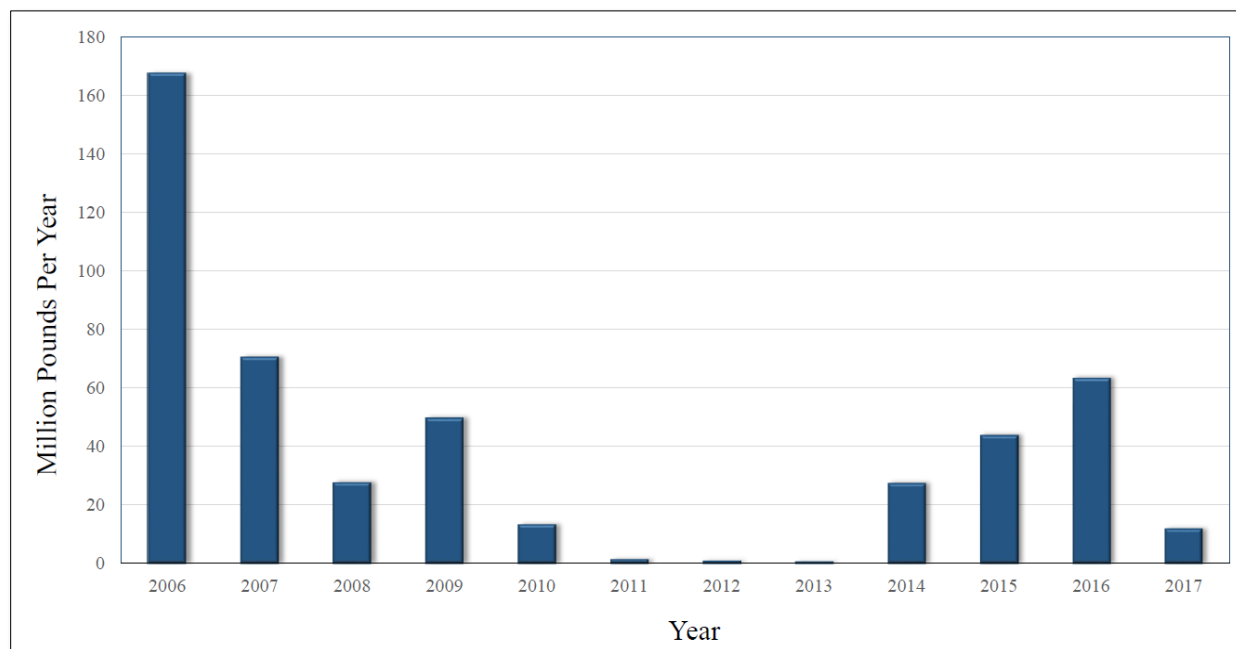
FIGURE 2 – MAP OF THE KETTLEMAN HILLS FACILITY

Source: Wenck 2011c (modified)



Most PCB waste received at KHF is soil, concrete, and other types of debris from cleanup sites contaminated with PCBs. Other types of PCB waste received are building debris with PCB-containing material such as caulk and paint, electrical equipment such as transformers and capacitors which contain PCB liquids, fluorescent light ballasts, and liquids containing PCBs (e.g., liquids generated during the decontamination of PCB items) [CWM 2007, 2008b, 2009b, 2010, 2011, 2012b, 2013, 2014, 2015, 2016, 2017a, 2018d]. The annual amount of PCB waste received at the KHF has varied greatly. See Figure 3 for the amount of PCB waste received at KHF from 2006-2017.

FIGURE 3 – PCB WASTE RECEIVED AT THE KETTLEMAN HILLS FACILITY FROM 2006-2017



Source: CWM 2007, 2008b, 2009b, 2010, 2011, 2012b, 2013, 2014, 2015, 2016, 2017a, 2018d

1. PCB WASTE STORAGE, TREATMENT, AND DISPOSAL UNITS AND ACTIVITIES

There are five waste management units at the Kettleman Hills Facility that are or have been used for the storage, treatment for disposal, or disposal of PCBs.

a. PCB FLUSHING/STORAGE UNIT

PCB waste storage and treatment for disposal at the Kettleman Hills Facility is conducted at the PCB Flushing/Storage Unit (“PCB F/SU”). The unit consists of a 65-foot by 35-foot enclosed building and a 65-foot by 35-foot outside containment area [CWM 2018a, Table 14-1]. The location of the PCB F/SU is shown on **Figure 2**. Diagrams of the PCB Flushing/Storage Unit are located in the Renewal Application, Attachment 5.



The enclosed building began operations in 1982. It has a roof, walls, and a continuous 1.5-foot-high concrete curb inside and adjacent to the walls of the building. The building's reinforced concrete floor has a vinyl epoxy resin surface and has no drain valves, floor drains, expansion joints, sewer lines, or other openings that would permit liquids to flow from the curbed area [CWM 2018f, p. 27].

One 10,082 gallon above ground storage tank is located within the building for the storage of PCB liquid and flushing solution. The tank has an effective maximum capacity of 8,422 gallons and a working capacity of 7,500 gallons. [CWM 2018f, p. 29].

The outside containment area was constructed in 2010 [ADE 2011]. It has a reinforced concrete floor with a continuous 1.5-foot-high curb and has no drain valves, floor drains, expansion joints, sewer lines, or other openings that would permit liquids to flow from the curbed area. The floor, curb, and sump are coated with vinyl epoxy resin. The outside containment area does not have a roof or walls. [CWM 2018f, p. 27].

The enclosed building at the PCB F/SU is currently used for the storage of TSCA-regulated PCB waste in containers and the tank, the draining and flushing of PCB-contaminated and PCB electrical equipment, and the repackaging and bulking of PCB waste [CWM 2018f, p. 9]. Under the proposed Approval, the bin- or container-top solidification of incidental PCB liquids will be allowed in addition to the current operations. The outside containment area is currently used for the temporary storage of PCB waste consistent with 40 C.F.R. § 761.65(c)(1) (that is, storage of PCB waste that is within 30 days of its removal from service date) and the draining and flushing of PCB-contaminated and PCB electrical equipment [CWM 2018f, p. 9]. Under the proposed Approval, the repackaging and bulking of PCB waste and the bin- and container-top solidification of incidental PCB liquids will also be allowed in the outside containment area.

b. CHEMICAL WASTE LANDFILLS

There is one active chemical waste landfill (that is, a landfill where PCB waste is disposed) at the Kettleman Hills Facility: Landfill B-18. There are three closed chemical waste landfills: Landfills B-14, B-16, and B-19. The location of these four landfills is shown on **Figure 2**. Diagrams of Landfill B-18 can be found in Golder 2018a, Appendix A-1.

Landfill B-18 is permitted as both a solid waste, Resource Conservation and Recovery Act ("RCRA") and TSCA landfill. It was constructed in three phases. Phase I was constructed in 1991-1992 with hazardous waste disposal beginning in 1992. Phase II was constructed in 1992-1993 with waste disposal beginning in 1994. Phase III was constructed in 2014-2015 with waste disposal beginning in 2015. [Golder 2018a, p. 7, CWM 2018f, Attachment 10]. All three phases are permitted by the California Department of Toxic Substances Control ("DTSC") for the disposal of RCRA waste; however, only Phase I and II are currently approved for the disposal of nonliquid PCB waste. The proposed Approval would allow disposal of nonliquid PCB waste in Phase III.¹

¹ TSCA PCB regulations at 40 C.F.R. § 761.61(a)(5) and § 761.62(a) also allow certain PCB wastes to be disposed of in a RCRA hazardous waste landfill if that disposal is also allowed by the landfill's other permits. CWM is currently allowed to dispose of certain PCB wastes, mainly PCB remediation waste from sites with U.S. EPA-approved PCB cleanup plans in Landfill B-18 Phase III, under the PCB regulations and its state RCRA permit.



As now constructed, Landfill B-18 is 67 acres in area, has a maximum total capacity of 15,600,000 cubic yards inclusive of all disposed waste and cover, and a maximum elevation of 1,018 feet above mean sea level [CWM 2018a, Chapter 2, Attachment 4; Golder 2008, p. 29]. The current TSCA-approved portion of the landfill (Phases I and II) is 53 acres in area with an approved capacity of 10,700,000 cubic yards.

Landfill B-18 is constructed with primary and secondary liner systems; primary, secondary, and vadose zone leachate detection, collection and removal systems; run-on and runoff precipitation collection and holding facilities; and a groundwater monitoring system. More detailed information on Landfill B-18's various systems is in the "Engineering and Design Report, Landfill B-18, Class 1 Landfill, Phase III Expansion and Final Closure, Kettleman Hills Facility, Kettleman City, California" (Golder Associates Inc., November 2008, Revised August 2011) [Golder 2008] which can be found in the Administrative Record for this proposed Approval.

Kettleman Hills Facility TSCA landfills that have previously received PCB waste include:

- Landfill B-14: 0.8 acres, capacity 6,000 cubic yards, operated from 1982 to 1984, TSCA waste only, closed in 1985.
- Landfill B-16: 5 acres, capacity 290,000 cubic yards, operated from 1983 to 1987, approximately 230,000 cubic yards of TSCA waste only. In 2004, 60,000 cubic yards of non-hazardous waste was disposed of in Landfill B-16 to bring the unit up to final grade, and the unit was closed.
- Landfill B-19: 40 acres developed in four phases (Phase IA, IB, II and III), a mixed RCRA, TSCA, and municipal solid waste/designated waste landfill with a RCRA/TSCA waste capacity of 7,000,000 cubic yards in Phases IB, II, and III. RCRA/TSCA waste phases closed in 2006 [CWM 2018a, Table 42-2].

These three closed landfills are included in Kettleman Hills Facility's post-closure care plan [Golder 2018a].

2. OTHER WASTE MANAGEMENT UNITS AND ACTIVITIES

The Kettleman Hills Facility is currently operating under a RCRA hazardous waste permit issued by the Department of Toxic Substances Control ("Hazardous Waste Facility Permit, Permit Number: 02-SAC-03") ("State RCRA Permit") [DTSC 2003] issued June 16, 2003 and modified to allow construction and operation of Phase III of Landfill B-18 on May 21, 2014.² The State

² California initially received authorization to administer the RCRA hazardous waste management program in lieu of the federal program effective on August 1, 1992 (57 FR 32726 (July 23, 1992)). RCRA state authorization is a rulemaking process by which U.S. EPA delegates the primary responsibility of implementing the RCRA hazardous waste program to individual states pursuant to Section 3006 of RCRA and 40 C.F.R. Part 271. California's authorized hazardous waste program is established pursuant to the Hazardous Waste Control Law, Chapter 6.5 of Division 20 of the California Health and Safety Code, and the regulations promulgated thereunder at Title 22, Division 4.5 of the California Code of Regulations, 22 C.C.R. §§ 66001 et seq. A facility in California subject to RCRA must comply with the authorized State requirements in lieu of the corresponding federal requirements in order to comply with RCRA. Additionally, such facilities must comply with any applicable Federally-issued requirements and RCRA requirements that are not supplanted by authorized state-issued requirements. The State program is broader in scope than the federal RCRA program because it includes PCBs as a hazardous waste material and imposes requirements on facilities that manage PCBs.



RCRA Permit has an expiration date of June 16, 2013; however, Chemical Waste Management, Inc. submitted a timely permit renewal application and continues to operate under the conditions of the 2003 Permit. DTSC is currently reviewing this permit renewal application.

In addition to PCB waste, the Kettleman Hills Facility accepts most types of solid, semi-solid, and liquid hazardous and extremely hazardous wastes except forbidden explosives, compressed gas cylinders (excluding aerosol cans), most radioactive waste, and biological agents or infectious wastes [DTSC 2003, p. 4]. The Facility conducts the following activities: solar evaporation; land disposal; and stabilization, solidification and storage of bulk and drummed wastes.

RCRA and California hazardous waste is stored, processed and disposed of in a number of units at the Facility. These units include:

- Landfill B-18
- Surface Impoundment P-9
- Surface Impoundment P-14
- Surface Impoundment P-16
- Bulk Storage Unit 1
- Bulk Storage Unit 2
- Final Stabilization Unit
- Drum Storage Unit

More information on these units and the activities permitted at each is in the State RCRA Permit and the most recently-submitted RCRA renewal application: “Hazardous Waste Facility Permit Renewal Application, Operation Plan,” Chemical Waste Management, Inc. Kettleman Hills Facility, Revision 3, March 16, 2018 [CWM 2018a].

The Kettleman Hills Facility is also permitted by several other State and local agencies including the Central Valley Regional Water Quality Control Board, the San Joaquin Valley Air Pollution Control District, and Kings County. A list of the Facility’s current permits is in Table 2 of the Renewal Application.

The Kettleman Hills Facility also disposes of municipal/solid wastes (Class II/III wastes) in Landfill B-17. This landfill is permitted by the California Department of Resources Recycling and Recovery (“CalRecycle”). No RCRA or TSCA waste is allowed to be disposed of in Landfill B-17.

B. FACILITY PERMITTING HISTORY

U.S. EPA has issued five TSCA approvals or amendments for the disposal and storage of PCB waste at the Kettleman Hills Facility:



- June 29, 1981 – Approval to dispose of nonliquid PCB waste in what would become known as Landfill B-14 [U.S. EPA 1981].
- February 16, 1983 – Approval to dispose of nonliquid PCB waste in Landfill B-16 (amended February 22, 1988 and November 30, 1990) [U.S. EPA 1983].
- February 22, 1988 – Approval to dispose of nonliquid PCB waste in Landfill B-19 and to continue disposal of nonliquid PCB waste in Landfill B-16 (amended November 30, 1990) [U.S. EPA 1988].
- November 30, 1990 – Amendment to the 1983 and 1988 Approval to include PCB storage requirements; to prohibit disposal of PCB waste in the closed Landfill B-14; and to set an expiration date for the 1988 Approval/1990 Amendments of January 1, 1998 [U.S. EPA 1990a; EPA 1990b].
- May 19, 1992 – Approval to dispose of nonliquid PCB waste in Landfill B-18 Phase I and, on approval of the construction certification report, Phase II (Approval granted on December 30, 1993). Approval expired May 19, 1997 [U.S. EPA 1992a; EPA 1992b].

The conditions of both the amended 1988 and 1992 Approvals were administratively extended by CWM's timely submittal of renewal applications in 1997 [CWM 1997a; CWM 1997b]; therefore, the Kettleman Hills Facility continues to operate under the terms and conditions of its amended 1988 and 1992 Approvals.

The proposed Approval, if finalized, will supersede all five of the previous approvals/amendments. See proposed Approval, section III.D.

A timeline of key waste disposal permitting actions by U.S. EPA, Kings County, the Central Valley Regional Water Quality Control Board, and DTSC (and its predecessor agency, the Department of Health Services) for the Kettleman Hills Facility is given in **Table 1** below.



TABLE 1 – TIMELINE OF KEY KETTLEMAN HILLS FACILITY HAZARDOUS WASTE AND PCB PERMITTING ACTIONS

1960-1975	McKay Trucking Company uses site for the disposal of municipal sewage.
1975	Kings County issues a Conditional Use Permit to the McKay Trucking Company for disposal of oilfield wastes on 60 acres. The Central Valley Regional Water Quality Control Board issues waste discharge requirements.
1977	Kings County revises the Conditional Use Permit to include evaporation ponds and land disposal of industrial wastes.
1978	The California Department of Health Services issues a Hazardous Waste Permit to the McKay Trucking Company to allow acceptance of more types of hazardous waste. McKay Trucking changes its name to Environmental Disposal Services, Inc.
1979	Kings County issues a Conditional Use Permit to Environmental Disposal Services, Inc. to operate a Class I (Hazardous Waste) treatment and disposal facility on 211 acres. The Central Valley Regional Water Quality Control Board issues a waste discharge requirements order reclassifying the site as a Class I disposal site. Chemical Waste Management, Inc. purchases the Kettleman Hills Facility from Environmental Disposal Services, Inc.
1980	Chemical Waste Management, Inc. submits a Part A RCRA Application and obtains interim status under RCRA.
1981	U.S. EPA issues a TSCA Approval allowing disposal of nonliquid PCB waste in Landfill B-14.
1982	The California Department of Health Services issues a Hazardous Waste Permit to Chemical Waste Management, Inc. allowing it to operate the Kettleman Hills Facility as a Class I disposal site (modified 1983).
1983	U.S. EPA issues a TSCA Approval allowing disposal of nonliquid PCB waste in Landfill B-16
1985	Kings County issues a Conditional Use Permit to include Landfills B-17, B-18 (Phases I and II), B-19 allowing hazardous waste operations on 499 acres.
1987	The Central Valley Regional Water Quality Control Board issues waste discharge requirements.
1988	California Department of Health Services and U.S. EPA issue a RCRA hazardous waste permit to Chemical Waste Management, Inc. (Permits were revised in 1989 and 1991.) U.S. EPA issues TSCA Approval allowing disposal of nonliquid PCB waste in Landfills B-16 and B-19.
1990	U.S. EPA issues modification to the 1988 TSCA Approval to include the PCB storage facilities and prohibit disposal of PCB waste in Landfill B-14.
1992	U.S. EPA issues TSCA Approval allowing disposal of nonliquid PCB waste in Landfill B-18, Phase I and Phase II. Disposal in Phase II is allowed only after approval of the construction quality assurance document for Phase II (approved in 1993).



TABLE 1 (CONTINUED) – TIMELINE OF KEY KETTLEMAN HILLS FACILITY HAZARDOUS WASTE AND PCB PERMITTING ACTIONS

1993	The California Department of Toxic Substances Control (successor organization for the Department of Health Services for hazardous waste permitting) renews 1988 RCRA permit.
1997	Chemical Waste Management, Inc. applies to U.S. EPA to renew its TSCA PCB Approvals for Landfill B-18, Phases I and II and PCB storage unit. (A timely application administratively extends the existing approval conditions.) Kings County modifies Conditional Use Permit to include municipal solid waste operations at Landfill B-19.
1998	The Central Valley Regional Water Quality Control Board issues a revised waste discharge requirements order. Chemical Waste Management converts a portion of Landfill B-19 to a Class II/III industrial non-hazardous/municipal solid waste landfill.
2003	The California Department of Toxic Substances Control issues a 10-year hazardous waste RCRA permit renewal. Chemical Waste Management, Inc. requests EPA to grant a TSCA coordinated approval.
2007	U.S. EPA proposes a TSCA PCB coordinated approval covering Landfill B-18 Phases I and II and PCB storage unit. (A coordinated approval recognizes the State RCRA permit as the primary TSCA approval document.) It holds a public meeting and hearing on proposed coordinated approval.
2008	Chemical Waste Management, Inc. submits a RCRA permit modification request to Department of Toxic Substances Control to expand the Landfill B-18 for RCRA waste. U.S. EPA requests Chemical Waste Management, Inc. carry out the PCB Congeners Study.
2009	Chemical Waste Management, Inc. submits application to U.S. EPA to expand the Landfill B-18 for PCB waste. Kings County modifies Conditional Use Permit to include Landfills B-18 Phase III and B-20 allowing hazardous waste operations on 696 acres.
2011	U.S. EPA informs Chemical Waste Management, Inc. that U.S. EPA would not be doing a Coordinated Approval with Department of Toxic Substances Control.
2013	Chemical Waste Management, Inc. submits RCRA permit renewal application.
2014	Department of Toxic Substances Control approves RCRA permit modification allowing construction and operation of Landfill B-18, Phase III. The Central Valley Regional Water Quality Control Board issues a revised waste discharge requirements order to include approval of Landfill B-18 Phase III.
2017-2018	Chemical Waste Management, Inc. submits revised approval renewal and permit renewal applications to U.S. EPA and Department of Toxic Substances Control for TSCA and RCRA, respectively.

Sources: CWM 2018a, CWM 2018f, RWQCB 2014a



III. PROPOSED APPROVAL

A. SUMMARY OF PROPOSED ACTION

This proposed Approval covers the following units and activities at the Kettleman Hills Facility:

TABLE 2 – PROPOSED APPROVAL UNITS AND ACTIVITIES AT THE KETTLEMAN HILLS FACILITY

UNIT NAME	TYPE OF UNIT	AUTHORIZED ACTIVITY	MAXIMUM TOTAL CAPACITY	LOCATION IN PROPOSED APPROVAL
Landfill B-18 (Phases I to III)	Landfill	Disposal of nonliquid PCB waste	15.6 million cubic yards	Section VI
PCB Flushing/Storage Unit	Storage Building	Storage, draining/flushing, bulking, repackaging, and solidification	44,015 gallons	Section V
Landfill B-14	Closed Landfill	Post-closure care	Not applicable	Section VII
Landfill B-16	Closed Landfill	Post-closure care	Not applicable	Section VII
Landfill B-19	Closed Landfill	Post-closure care	Not applicable	Section VII

The proposed Approval also includes leachate, groundwater, and air monitoring requirements as well as recordkeeping, reporting, inspection and emergency management (contingency) requirements. Finally, it includes requirements to maintain closure and post-closure plans, closure and post-closure cost estimates, and financial assurance for closure, post-closure, and sudden and non-sudden accidents.

The proposed Approval includes the following changes from the Approvals issued in 1988 (as amended in 1990) and 1992:

- Increases the TSCA-approved capacity of Landfill B-18 from 10.7 million cubic yards to 15.6 million cubic yards by approving the disposal of PCB waste in Phase III.
- Increases the TSCA-approved height of Landfill B-18 from 965 feet to 1,018 feet by approving the disposal of PCB waste in Phase III;
- Increases the TSCA-approved footprint of Landfill B-18 from 53 to 67 acres by approving the disposal of PCB waste in Phase III;



- Sets a maximum storage capacity for the PCB Flushing/Storage Unit of 44,015 gallons in total and specific maximum storage capacities for the enclosed building of 16,500 gallons, the tank of 7,500 gallons, and the outside containment area of 20,015 gallons;
- Allows the bulking and repackaging of PCB waste and bin-top and container-top solidification of incidental liquids within the outside containment area at the PCB Flushing/Storage Unit;
- Allows the bin-top and container-top solidification of incidental liquids within the enclosed building at the PCB Flushing/Storage Unit;
- Requires quarterly testing of the PCB Flushing/Storage Unit for PCB contamination;
- Requires the maintenance and implementation of post-closure plans, cost estimates, and financial assurance for post-closure care for Landfills B-14, B-16 and B-19;
- Requires annual testing for PCBs of groundwater from wells monitoring active Landfill B-18 and every five years for wells monitoring closed Landfills B-14, B-16, and B-19;
- Requires annual testing of leachate from each leachate collection sump at Landfills B-14, B-16, B-18, and B-19;
- Requires the implementation of an air quality monitoring program which includes four monitoring sites and quarterly air monitoring reports; and
- Provides modification procedures that include public process for some approval modifications.

Many of the conditions in the proposed Approval are already incorporated into the Kettleman Hills Facility's State RCRA Permit issued by DTSC and therefore reflect current operating practices at the Facility.

B. APPLICATION SUBMITTAL, REQUESTS FOR ADDITIONAL INFORMATION, AND NOTICES OF DEFICIENCIES

40 C.F.R. § 761.65(d)(3) and § 761.75(c) require owners or operators of commercial PCB waste storage facilities and chemical waste landfills, respectively, to submit certain information to U.S. EPA to obtain approvals to operate. We apply these same requirements to renewal of existing approvals.

Chemical Waste Management, Inc. submitted the initial application for renewal of the 1990 Amended Approval for Landfills B-14, B-16, and B-19 and commercial storage activities on July 1, 1997 [CWM 1997a]. It submitted the initial application for renewal of the 1992 Approval for Landfill B-18 on April 1, 1997 [CWM 1997b]. After DTSC issued the Facility's RCRA Permit in 2003, CWM submitted a request for a coordinated TSCA PCB approval under 40 C.F.R. § 761.77 [CWM 2003]. The request to include the Landfill B-18 Phase III expansion in the coordinated approval was submitted on June 26, 2009 [CWM 2009a].



Chemical Waste Management, Inc. also submitted revised applications or modifications on January 13, 2005 [CWM 2005], June 26, 2009 [CWM 2009a], November 21, 2011 [CWM 2011], July 15, 2017 [CWM 2017a], and April 19, 2018 [CWM 2018b]. All of these earlier applications were superseded by an October 2, 2018 submittal [CWM 2018h]. The October 2018 Application (which will be referred to in this document and the proposed Approval as the “Renewal Application”) is the basis for U.S. EPA’s proposed Approval.

Since receiving the initial applications in 1997, U.S. EPA has issued several requests for additional information and notices of deficiencies on the applications. The four most relevant for this proposal are the December 2, 2008 request for additional sampling of air, soil and vegetation for PCB congeners [U.S. EPA 2008b]; the December 20, 2016 request to update the 2011 application [U.S. EPA 2016]; the December 21, 2017 notice of deficiency (“NOD”) [U.S. EPA 2017c], and the September 2, 2018 request for clarification on operations at the PCB Flushing/Storage Unit and additional information [U.S. EPA 2018h]. The 2008 request resulted in “Final Dioxin-Like Polychlorinated Biphenyl (PCB) Congeners Study Report” [Wenck 2010]. The 2016 request resulted in the submittal of the July 15, 2017 revised application [CWM 2017b and CWM 2017c]. The 2017 NOD, which addressed issues with the 2017 application, resulted in the submittal of the April 20, 2018 application [CWM 2018c and CWM 2018d]. The 2018 request resulted in the submittal of the October 1, 2018 application³ [CWM 2018f].

Copies of U.S. EPA’s requests for information and 2017 NOD and CWM’s responses can be found in the Administrative Record. A copy of the index to the Administrative Record and information on how to obtain copies of documents can be found in **Appendix C**.

U.S. EPA has used checklists of 40 C.F.R. Part 761 requirements to document that the Renewal Application meets all applicable submittal and approval requirements for commercial storage facilities and chemical waste landfills in the PCB regulations. Copies of these checklists are in **Appendix D**. Note that 40 C.F.R. § 761.75(c)(1) requires submittal of an “initial report” by the owner or operators of chemical waste landfill. CWM’s Renewal Application is the “initial report” for the purposes of § 761.75(c)(1).

C. REGULATORY REQUIREMENTS FOR CHEMICAL WASTE LANDFILLS APPROVALS

The PCB regulations at 40 C.F.R. § 761.75(a) states that a landfill used for the disposal of PCB waste must be approved by the U.S. EPA, meet the list of specific requirements in § 761.75(b) (unless we waive a requirement under § 761.75(c)(4)) and meet other requirements that we may set under § 761.75(c)(3)(ii). The PCB regulations at 40 C.F.R. § 761.75(c) describes the process to obtain the required approval.

1. TECHNICAL AND OPERATIONAL REQUIREMENTS FOR CHEMICAL WASTE LANDFILL UNDER 40 C.F.R. §761.75(b)

40 C.F.R. § 761.75(b) includes a list of technical and operational requirements for chemical waste landfills. The technical requirements include minimum standards for soils underlying the landfills, synthetic membrane liners (when required), site hydrologic conditions, flood protection,

³ The latest Renewal Application is dated October 1, 2018 and was submitted to U.S. EPA on October 2, 2018 [CWM 2018i].



topography surface and groundwater monitoring, and leachate collection. The operational requirements include development and submittal of an operation plan with specific elements, restrictions on the type and placement of waste in the landfill, recordkeeping, and provision of support facilities.

U.S. EPA has evaluated the Renewal Application and TSCA Operation Plan (which is Attachment 1 to the Renewal Application) [CWM 2018g] for compliance with each of these technical and operational requirements and has documented the results in the “Review Checklist for 40 C.F.R. Part 761 Requirements for Chemical Waste Landfills” found in **Appendix D-1**. As documented in this checklist, the Renewal Application and TSCA Operation Plan comply with each applicable Part 761 requirement except for few operational provisions from which Chemical Waste Management, Inc. has requested waivers under 40 C.F.R. § 761.75(c)(4). These waiver requests are discussed in the next section.

2. WAIVERS UNDER 40 C.F.R. § 761.75(c)(4)

Under 40 C.F.R. § 761.75(c)(4), an owner or operator of a chemical waste landfill may submit information in its application that operation of the landfill will not present an unreasonable risk of injury to health or the environment from PCBs if a technical or operational requirement in 40 C.F.R. § 761.75(b) is not met. U.S. EPA may waive the requirement based on the submitted information and any other available information if it agrees that the requirement is not necessary to protect against such a risk.

Chemical Waste Management, Inc. has requested the waiver of five 40 C.F.R. § 761.75(b) requirements [CWM 2018f, p. 30]. Four of these requests are for renewals of waivers granted in the 1992 Approval. In most cases, it is requesting to be allowed to use an alternative method to comply with the PCB regulations rather than to waive the requirement entirely.

a. PURGING OF GROUNDWATER MONITOR WELLS

40 C.F.R. § 761.75(b)(6)(ii)(B) requires that groundwater monitoring wells at chemical waste landfills be pumped to remove the volume of liquid initially contained in the well before a sample for analysis is taken. Removal of water from a groundwater monitoring well prior to sampling the well is known as “purging”.

Chemical Waste Management, Inc. currently uses a different purging procedure at the Kettleman Hills Facility than the one in 40 C.F.R. § 761.75(b)(6)(ii)(B) and requests a waiver to use its current method. The current purging method is described in Section 6.2.4. of the RWQCB-approved 2014 “Revised Site-Specific Groundwater Monitoring Plan Class I Waste Management Units, Kettleman Hills Facility, Kings County, California” [AMEC 2014] and summarized in the Renewal Application on p. 30. It is the same purge method in the 2001 Kettleman Hills site-specific monitoring plan [Geosyntec 2001] approved by DTSC. At the request of DTSC, CWM evaluated this purge method [Geomatrix 2007; DTSC 2008; AMEC 2008]. The evaluation concluded that this purge method provides a sample that is representative of in-situ groundwater conditions near the well [Geomatrix 2007, p. 12].



The proposed well purging method provides representative samples of groundwater underlying the chemical waste landfills at the Kettleman Hills Facility, and its substitution for the method in the PCB regulations will not pose an unreasonable risk of injury to health or the environment. We are therefore proposing to grant a waiver of the use of well-purging method in 40 C.F.R. § 761.75(b)(6)(ii)(B) and require in its place the use of the procedures in “Groundwater Field Sampling Plan” in the *Site-Specific Groundwater Monitoring Plan, Class I Waste Management Units*, April 2014 [AMEC 2014]. See proposed Condition VIII.B.2.

b. GROUNDWATER SAMPLING AND ANALYSIS METHODS AND PARAMETERS

40 C.F.R. § 761.75(b)(6)(iii) requires, at a minimum, that all groundwater samples from chemical waste landfills shall be analyzed for four specific parameters (PCBs, pH, specific conductance, chlorinated organic compounds) using the sampling methods and analytical procedures specified in 40 C.F.R. Part 136 as amended in 41 FR 52779 (December 1, 1976).

Chemical Waste Management, Inc. requests a waiver to substitute the parameters listed in the Kettleman Hills Facility’s Waste Discharge Restrictions Order (“WDR”) [RWQCB 2014a] and its incorporated WDR Monitoring and Reporting Program (WDR MRP) [RWQCB 2014b] and to use SW-846 Methods 6010, 8260, 8270, 8082, 8081, and other methods as required for those required by 40 C.F.R. § 761.75(b)(6)(iii) for the testing of PCBs and chlorinated organic compounds in groundwater samples.

U.S. EPA proposes to require CWM to analyze groundwater samples from wells monitoring the Facility’s chemical waste landfills for PCBs using Test Method 8082A. See proposed Condition VIII.B.2. This test method is the latest version of Test Method 8082, the analytic method for PCBs in SW-846,⁴ U.S. EPA’s official compendium of methods for use in complying with RCRA regulations. Test Method 8082 is the method generally required in the PCB regulations for testing for PCBs in all types of media including water (see, for example, 40 C.F.R. § 761.272). It is also the test method required by DTSC and RWQCB for analyzing groundwater for PCBs at the Kettleman Hills Facility. See State RCRA Permit, Condition III.4.B. [DTSC 2003] and WDR MRP, Table 2 [RWQCB 2014b].

Test methods in 40 C.F.R. Part 136 are used to comply with Clean Water Act requirements. Additionally, the test methods in Part 136 have been extensively updated since 1976. Maintaining the testing requirement as written in 40 C.F.R. § 761.75(b)(6)(iii) would mean requiring testing for PCBs using outdated methods from a different media program.

U.S. EPA proposes to find that substituting the most current version of the PCB test method recommended/required by the Agency for determining compliance with solid waste and PCB disposal requirements for outdated methods from a different media program will provide the most reliable measure of PCB concentrations in groundwater at the Kettleman Hills Facility and therefore does not present an unreasonable risk of injury to health or the environment from PCBs.

U.S. EPA is also proposing to require CWM to test all groundwater samples for the Detection Monitoring Parameters (MPars) listed in WDR MRP Table 2 using Test Method 8260B as substitute for the monitoring for chlorinated organic compounds in § 761.75(b)(6)(iii) using the

⁴ <https://www.epa.gov/hw-sw846/sw-846-compendium>



test methods in 40 C.F.R. Part 136. Chlorinated organic compounds are no longer listed as such in 40 C.F.R. Part 136. The closest similar parameter still listed in Part 136 is “purgeable halocarbons”, a set of 29 halogenated compounds that is tested for using EPA Wastewater Test Method 601. The MPars include each of these 29 compounds. See 40 C.F.R. Part 136, Appendix A. The MPars are waste constituents, reaction products, hazardous constituents and physical parameters that provide a reliable indicator of a release from a waste management unit such as a landfill and for Kettleman Hills Facility are primarily chlorinated organic compounds [RWQCB 2014b, Condition C.2.].

We are also proposing to allow testing for constituents of concern (COC) in lieu of the MPars every five years. These COC are listed in WDR MRP, Table 1. The required U.S. EPA test methods are also listed in this table. Both DTSC and RWQCB currently require COC testing every five years. See State RCRA Permit, Condition III.4.B. [DTSC 2003] and WDR MRP, Condition C.1 [RWQCB 2014b]. The constituents of concern include all the MPars and a wide variety of other compounds.

U.S. EPA proposes to find that substituting testing for the Detection monitoring parameters/constituents of concern in the WDR Monitoring and Reporting Program [RWQCB 2014b] using hazardous-waste specific test methods for the outdated “chlorinated organic compounds” parameter in the PCB regulations will provide a more reliable measure of chlorinated compounds in groundwater at the Kettleman Hills Facility and therefore will not present an unreasonable risk of injury to health or the environment from PCBs.

c. LEACHATE SAMPLING AND ANALYSIS METHODS AND PARAMETERS

40 C.F.R. §761.75(b)(7) requires leachate collection systems for a chemical waste landfill be monitored monthly for quantity and physicochemical characteristics of leachate and the sampling methods and analytical procedures used to test leachate comply with those specified in 40 C.F.R. Part 136 as amended in 41 FR 52779 (December 1, 1976).

Leachate at Kettleman Hills Facility is tested for two purposes: as part of the groundwater protection program (see WDR MRP, Condition D.3. [RWQCB 2014b]) and to determine the appropriate treatment and disposal method for the leachate (see TSCA Operation Plan, “Leachate Collection Systems” [CWM 2018g]). All leachate systems at operating and closed landfills at Kettleman Hills Facility are checked regularly for the presence of liquid in the sumps and the quantity of leachate removed, if any, recorded. See Operation Plan, Chapter 31 Inspection Program Plan, Table 31-3 [CWM 2018a] and proposed Conditions VI.E.3.d and e.

For groundwater protection purposes, U.S. EPA proposes to waive the requirement for the monthly testing of leachate in 40 C.F.R. §761.75(b)(7) and require annual testing of leachate for PCBs, pH, specific conductance, and MPars. Annual testing is consistent with the Facility’s current WDR (see WDR MRP, Condition D.3.) and State RCRA Permit (page 29). PCBs have been detected in only four leachate samples at the Kettleman Hills Facility since 1995 [CWM 2018i].⁵ Given the

⁵ PCBs were detected in leachate from Landfill B-19 in 1995 at a concentration of 0.0019 milligrams per liter (mg/l) (0.0019 ppm), in leachate from Landfill B-18 Phase IA also in 1995 at a concentration of 0.0013 mg/l (0.0013 ppm), in B181B Leachate Tank in 2009 at 0.0011 milligrams/kilogram (mg/kg) (0.0011 ppm), and in B181A Leachate Tank in 2010 at 0.092 mg/kg (0.092 ppm) [CWM 2018h].



rarity of PCB detection in recovered leachate, annual sampling is sufficient to identify any threat to groundwater from PCBs leaching from the Facility's landfills.

For the same reasons discussed above for the testing of groundwater, we propose to require the leachate be tested annually for PCBs using Test Method 8082A and MPars using Test Method 8260B. See proposed Condition VI.E.5.a. and VII.B.3. We also propose to find that substituting these parameters and test methods for those required by 40 C.F.R. §761.75(b)(7) will provide a more reliable measure of their concentrations in leachate and therefore this substitution does not present an unreasonable risk of injury to health or the environment from PCBs.

For disposal purposes, all leachate removed from the hazardous waste landfills is considered a hazardous waste containing PCBs under the RCRA regulations at 40 C.F.R. Part 261. See proposed Condition VI.E.2.

d. SUPPORTING FACILITIES - FENCING

40 C.F.R. § 761.75(b)(9) requires that a six-foot woven mesh fence be placed around the site to prevent unauthorized persons and animals from entering.

Chemical Waste Management, Inc. requested that U.S. EPA approve its current fencing as meeting this requirement and to not require separate fencing around the PCB Flushing/Storage Unit and Landfill B-18. Currently, the entire Kettleman Hills Facility's operations area (shown on **Figure 2**) is surrounded by an approximately 6-foot high chain link fence.

U.S. EPA does not believe that a waiver of this requirement is necessary as it does not interpret 40 C.F.R. § 761.75(b)(9) to require each TSCA unit at a site to be individually fenced if the site as a whole has fencing that prevents unauthorized persons and animals from reaching the TSCA units. The fencing already present at the Kettleman Hills Facility is sufficient to meet this requirement.

Note: The Facility's 1992 Approval included a temporary waiver of the fencing requirements because the fence was under construction at the time the Approval was issued [U.S. EPA 1992b, p. 8].

e. DISPOSAL OF IGNITABLE WASTES IN LANDFILL B-18

40 C.F.R. § 761.75(b)(8)(iii) prohibits the disposal of ignitable wastes in chemical waste landfills.

Chemical Waste Management, Inc. has requested renewal of the existing waiver of this requirement to allow the disposal of small containers of hazardous waste in overpacked drums (lab packs) in Landfill B-18. It is not requesting to be able to dispose of any other types of ignitable waste in Landfill B-18.

Under its current State RCRA Permit (p. 27) and 1992 TSCA Approval, Attachment E, the only ignitable waste that can be disposed of in Landfill B-18 is small containers of hazardous waste in overpacked drums (lab packs) that meet the provisions of 40 C.F.R. § 264.316 and 22 California Code of Regulations (CCR) § 66264.316. All other types of wastes which exhibit the characteristic



of ignitability as listed in 40 C.F.R. § 261.21 and 22 CCR § 66261.21 (liquid, solid, compressed gas, or oxidizers) are prohibited.

In its waiver application (Renewal Application, Section 12.1.5), CWM states its belief that the purpose of 40 C.F.R. § 761.75(b)(8)(iii) is to prevent the disposal of significant quantities of ignitable liquid material which may create a potentially hazardous situation. It also states that the overpacking requirements of the 40 C.F.R. § 264.316 and 22 CCR § 66264.316 effectively eliminate the possibility that any ignitable waste placed in the landfill would ignite or otherwise react adversely with PCB articles or any other TSCA or RCRA waste placed in the landfill and concludes that the overpacking of ignitable wastes provides adequate protection to prevent unreasonable risk of injury to health or the environment.

We agree that small quantities of ignitable waste when overpacked to meet the requirements of 40 C.F.R. § 264.316 and 22 CCR § 66264.316 are unlikely to ignite or react in the landfill in a manner that would present any unreasonable risk of injury to health or the environment. We therefore propose to grant a limited waiver of the 40 C.F.R. § 761.75(b)(8)(iii) prohibition on placing ignitable waste in Landfill B-18. We have included Condition VI.C.1. in the proposed Approval to implement this waiver.

3. APPLICATION REQUIREMENTS FOR AN APPROVAL FOR A CHEMICAL WASTE LANDFILL

40 C.F.R. § 761.75(c) lists the information that must be submitted to U.S. EPA to obtain an approval to dispose of PCB waste in a chemical waste landfill. § 761.75(c)(1) requires the owner or operator of the chemical waste landfill to submit an “initial report” that includes the information specified in this Part 761 section. Chemical Waste Management, Inc. submitted the latest version of Renewal Application on October 1, 2018. As noted before, the Renewal Application functions as the “initial report” for the purposes of § 761.75(c)(1). We have reviewed the Renewal Application and found that it includes all the required information. Our finding is documented in the “Review Checklist for 40 C.F.R. Part 761 Requirements for PCB Chemical Waste Landfills” in **Appendix D-1**.

4. REGULATORY REQUIREMENTS FOR CHEMICAL WASTE LANDFILL APPROVALS (40 C.F.R. § 761.75(c))

40 C.F.R. § 761.75(c)(6) requires that an approval for a chemical waste landfill be in writing and signed by the Regional Administrator (or his designee) and state all requirements applicable to the landfill and include:

- A finding that the chemical waste landfill and its operations meet all the requirements in § 761.75(b) except for those that are waived under § 761.75(c)(4) [§ 761.75(c)(3)(i)];
- The inclusion of any other requirements that the U.S. EPA finds are necessary to ensure that operation of the chemical waste landfill does not present an unreasonable risk of injury to health or the environment from PCBs [§ 761.75(c)(3)(ii)]; and



- The designation of the persons who own and who are authorized to operate the chemical waste landfill [§ 761.75(c)(5)].

We have documented in the “Review Checklist for 40 C.F.R. Part 761 Requirements for PCB Chemical Waste Landfills” in **Appendix D-1** that Landfill B-18 and its operations meet all the requirements of § 761.75(b) except for those few that we are proposing to waive and replace with alternative compliance requirements. We have also provided a summary of the required findings in Appendix A of the proposed Approval.

We have added a number of additional requirements to the proposed Approval under the “omnibus” provision in § 761.75(c)(3)(ii), including requirements for closure and post-closure care and financial assurance, that we propose to find are necessary to ensure that operations of Landfill B-18 do not present an unreasonable risk of injury to health or the environment from PCBs. We discuss these omnibus requirements in **section III.G**. We have listed and provided a justification for each omnibus requirement in **Appendix E**.

The proposed Approval designates Chemical Waste Management, Inc. as the owner and operator of the Kettleman Hills Facility. See proposed Condition III.A.

D. REGULATORY REQUIREMENTS FOR PCB COMMERCIAL STORAGE FACILITY APPROVALS

40 C.F.R. §§ 761.65(b)(2) and (d) together require all commercial storers of PCB waste to apply for and obtain approval from U.S. EPA to operate a PCB waste storage facility. A “commercial storer of PCB waste” is defined in § 761.3 as an owner or operator of a facility that is subject to the PCB storage unit standards in § 761.65(b)(1) or (c)(7) or meets the alternate storage criteria of § 761.65(b)(2) and who engages in storage activities involving either PCB waste generated by others or that was removed while servicing the equipment owned by others and brokered for disposal. The PCB waste storage operations at the Kettleman Hills Facility qualify Chemical Waste Management, Inc. as a commercial storer of PCB waste. 40 C.F.R. § 761.65(d) includes several options that could be used to approve PCB waste storage at the Kettleman Hills Facility: § 761.65(d)(2), § 761.65(d)(6), and § 761.65(d)(7).

40 C.F.R. § 761.65(d)(2) lists the determinations that U.S. EPA must make in order to issue an PCB storage approval under this section. These determinations cover the applicant’s qualifications, the facility’s capacity and design, a closure plan, financial assurance for closure, the risk of injury to health or the environment from the facility’s operations, and the applicant’s compliance history. A more detailed discussion of these determinations is in **section III.D.2.a** below.

40 C.F.R. § 761.65(d)(6) provides that storage areas at RCRA-permitted facilities *may* be exempt from the separate TSCA storage approval under § 761.65(d)(2) upon a showing to the Regional Administrator’s satisfaction that the facility’s existing RCRA closure plan is substantially equivalent to this PCB regulation’s closure plan standards, its closure cost estimate and financial assurance demonstration account for maximum PCB waste inventories, and the requirements of § 761.65(d)(3)(i) through (d)(3)(v) and (d)(3)(vii) are met. Section 761.65(d)(3) lists information that must be included in an application for a PCB waste storage approval. More detail on the



information required in PCB storage applications is in **section III.D.1.** and “Review Checklist for 40 C.F.R. Part 761 Requirements for PCB Commercial Storage Facilities” in **Appendix D-2.**

40 C.F.R. § 761.65(d)(7) provides that storage areas ancillary to TSCA-approved disposal facilities *may* be exempt from a separate approval under § 761.65(d)(2) provided certain conditions are included in the TSCA disposal approval. These approval conditions include an expiration date for the Approval, closure and financial responsibility requirements for the storage unit, and operator qualifications. More information on the provisions of § 761.65(d)(7) can be found in “Review Checklist for 40 C.F.R. Part 761 Requirements for PCB Commercial Storage Facilities” in **Appendix D-2.** In 1990, we used this provision to include the PCB storage activities in the Approvals for Landfills B-16 and B-19 [U.S. EPA 1990a].

Approval requirements under §§ 761.65(d)(6) and (d)(7) are not as extensive as those under § 761.65(d)(2). U.S. EPA, therefore, chose to evaluate the proposed application for PCB waste storage at the PCB Flushing/Storage Unit under the requirements of § 761.65(d)(2) as the most conservative approach for ensuring that the PCB waste storage operations at the Kettleman Hills Facility do not pose an unreasonable risk of injury to health or the environment. This choice is also based on the volume of storage (44,015 gallons) and the type of waste handling operations (drainage, flushing, repackaging, bulking, and solidification) that Chemical Waste Management, Inc. has requested to be approved for the Unit.⁶ Additionally, this choice is consistent U.S. EPA’s approval of the storage provisions pursuant to § 761.65(d)(2) in U.S. Ecology Nevada’s TSCA storage, treatment, and disposal approval [U.S. EPA 2012b]. U.S. Ecology Nevada is the only other landfill approved under TSCA for the disposal of PCBs in U.S. EPA Region 9. Like the Kettleman Hills Facility, it also stores and treats PCB wastes.

1. APPLICATION REQUIREMENTS FOR PCB COMMERCIAL STORAGE FACILITIES

40 C.F.R. § 761.65(d)(3) lists the information that must be submitted to U.S. EPA to obtain a commercial PCB waste storage approval under § 761.65(d)(2). This includes information, among other things, on the owners/operators of the storage facility, the technical qualifications and experience of the persons operating the facility, and past state or federal environmental violations. The application must also include an estimate of maximum PCB waste quantity to be handled, a closure plan and cost estimate, and financial assurance for closure. U.S. EPA has reviewed the Renewal Application to check that it contains all the information required by § 761.65(d)(3) and has documented the results in the “Review Checklist for 40 C.F.R. Part 761 Requirements for PCB Commercial Storage Facilities” which can be found in **Appendix D-2.** As documented in this checklist, the Renewal Application contained all required information.

2. REQUIRED CONTENTS OF A PCB COMMERCIAL STORAGE FACILITY APPROVAL

40 C.F.R. § 761.65(d)(4) lists the required contents of a PCB storage approval under § 761.65(d)(2). These include certain regulatory determinations under § 761.65(d)(2), inclusion of

⁶ This requested maximum storage capacity is similar to or much greater than other § 761.65(d)(2)-approved PCB commercial storage facilities in U.S. EPA Region 9. There are three PCB commercial storage facilities in Region 9 that are not also disposal facilities. The approved maximum PCB storage capacities at these facilities are 44,190 gallons (Veolia, Phoenix) [U.S. EPA 2015]; the equivalent of 7,889 gallons (Lighting Resources, Phoenix) [U.S. EPA 2003]; and 7,920 gallons (Emerald Transformers, formerly Clean Harbors, Los Angeles) [U.S. EPA 2013].



the closure plan, conditions imposing maximum PCB storage capacity, and other conditions that U.S. EPA deems necessary to ensure that the operations of the PCB storage facility will not pose an unreasonable risk of injury to health or the environment. We address each of the required elements below and in Appendix A of the proposed Approval.

a. 40 C.F.R. § 761.65(d)(4)(i) - REGULATORY DETERMINATIONS UNDER § 761.65(d)(2)

40 C.F.R. § 761.65(d)(2) states that U.S. EPA Regional Administrator shall grant written, final approval to engage in the commercial storage of PCB waste upon a determination that the criteria in § 761.65(d)(2) have been met by the applicant.

We have evaluated the Renewal Application including the supporting documents and other information contained in the Administrative Record and propose to find that the requirements contained in 40 C.F.R. § 761.65(d)(2) have been met by the applicant Chemical Waste Management, Inc. We discuss these proposed findings and our basis for them below.

(1) PERSONNEL REQUIREMENTS

40 C.F.R. § 761.65(d)(2)(i) requires U.S. EPA to determine that the applicant, its principals, and its key employees responsible for the establishment or operation of the commercial storage facility are qualified to engage in the business of commercial storage of PCB waste.

We propose to determine that Chemical Waste Management, Inc., and its principals and key employees responsible for the operation of the PCB Flushing/Storage Unit at the Kettleman Hills Facility are qualified to engage in the business of commercial storage of PCB waste. This finding is based on U.S. EPA's evaluation of the experience of the personnel that manage the Facility as given in Renewal Application, Section 2.3. The finding is also based on the Facility's employee training program as described in Operation Plan, Chapter 36 "Training Plan". The proposed Approval requires that CWM implement and maintain records of this training program. See proposed Conditions IV.E and O.2.

(2) FACILITY CAPACITY REQUIREMENTS

40 C.F.R. § 761.65(d)(2)(ii) requires U.S. EPA to determine that the facility possesses the capacity to handle the quantity of PCB waste which the owner or operator has estimated will be the maximum quantity of PCB waste that will be handled at any one time.

We propose to determine that the PCB Flushing/Storage Unit possesses the capacity to handle the quantity of PCB waste which is the amount that Chemical Waste Management, Inc. has estimated will be the maximum quantity of PCB waste that will be stored at any one time at the Unit. Proposed Condition V.C.1 imposes a maximum storage capacity using these maximum capacities, which are set separately for the enclosed building, PCB storage tank, and outside containment area. These maximum capacities are listed in Table 1 of the proposed Approval and replicated in **Table 3** below. These maximum capacities are based on the secondary containment calculations contained in Attachments 6 and 7 of the Renewal Application that demonstrate the maximum



storage capacity quantities allow the Unit to meet the minimum containment requirements of § 761.65(b)(1)(ii).

(3) CERTIFICATION OF COMPLIANCE WITH STORAGE FACILITY STANDARDS

40 C.F.R. § 761.65(d)(2)(iii) requires U.S. EPA to determine that the owner or operator of the PCB storage unit has certified compliance with the storage facility standards in § 761.65(b) and (c)(7) using the certification language in § 761.3.

We propose to determine that Chemical Waste Management, Inc. has met this requirement. This determination is based on the certification by the CWM's district manager with responsibility for operations at the Kettleman Hills Facility that the Facility meets the storage facility standards in 40 C.F.R. § 761.65(b) and (c)(7). See Renewal Application, Section 10. We have also independently assessed and determined that the enclosed building at the PCB Flushing/Storage Unit meets these requirements of § 761.65(b) as documented in "Review Checklist for 40 C.F.R. Part 761 Requirements for PCB Commercial Storage Facilities" found in **Appendix D-2**. The outside containment area at the PCB Flushing/Storage Unit, because it does not have a roof or walls, does not meet the storage facility standard in § 761.65(b)(1)(i). U.S. EPA, however, proposes to authorize PCB waste storage in this area under § 761.65(c)(1) which allows PCB waste storage in areas that do not meet the storage facility standards but limits the types of PCB items that may be stored and also limits storage of these PCB Items to 30 days from their removal from service date. See proposed Condition V.C.4.

(4) CLOSURE PLAN DEVELOPMENT

40 C.F.R. § 761.65(d)(2)(iv) requires U.S. EPA to determine that the owner or operator has developed a written closure plan for the facility that is acceptable under the closure plan standards of paragraph § 761.65(e).

40 C.F.R. § 761.65(e) contains a list of requirements for closure plans including a schedule for closure (that meets the requirements of § 761.65(e)(6)), description of how a storage facility will be closed including post-closure testing, and any activities that will be needed to present any post-closure release of PCBs.

The closure plan for the PCB Flushing/Storage Unit is in section 2.7 of the "Closure and Post-Closure Plans, Kettleman Hills Facility" (Golder Associates, March 15, 2018) [Golder 2018a] ("Closure Plan"). We have reviewed this Closure Plan for compliance with the requirements of § 761.65(e) and documented the results in "Review Checklist for 40 C.F.R. Part 761 Requirements for PCB Commercial Storage Facilities" (**Appendix D-2**). Based on our review, we propose to find that Chemical Waste Management, Inc. has developed a written closure plan for the PCB Flushing/Storage Unit that is acceptable under the closure plan standards of 40 C.F.R. § 761.65(e).

The proposed Approval requires implementation of the Closure Plan on closure. See proposed Condition V.I.5. The Closure Plan will be incorporated into any final Approval. See proposed Approval, Appendix B-3.



The PCB Flushing/Storage Unit will be “clean” closed with no residual PCB contamination remaining at the site; therefore, no post-closure care plan is needed for the Unit [Golder 2018a, p. 43].

(5) DEMONSTRATION OF FINANCIAL RESPONSIBILITY FOR CLOSURE

40 C.F.R. § 761.65(d)(2)(v) requires U.S. EPA to determine that the owner or operator has included in the application a demonstration of financial responsibility for closure that meets the financial responsibility standards of § 761.65(g). U.S. EPA proposes to find, contingent upon submission of one or more of the financial assurance mechanisms listed at 40 C.F.R. § 761.65(g), that Chemical Waste Management, Inc. has provided a demonstration of financial responsibility that meets the financial responsibility standards of 40 C.F.R. § 761.65(g).

Chemical Waste Management, Inc. maintains financial assurance that covers the cost of closure and post-closure care for all RCRA units at the Kettleman Hills Facility including the PCB Flushing/Storage Unit and Landfill B-18 as required by 22 C.C.R. § 66264.140 *et seq.* and its State RCRA Permit. The current financial assurance mechanism is a surety bond guaranteeing payment into a closure/post-closure trust fund that meets applicable RCRA regulatory requirements. See CWM 2018j. U.S. EPA finds that Chemical Waste Management, Inc.’s existing financial assurance mechanism is sufficient to demonstrate the required financial responsibility for closure of the PCB Flushing/Storage Unit under the Facility’s existing approvals. However, U.S. EPA (not DTSC) is the agency with authority over the closure requirements that is named in the instruments required under § 761.65(g). Thus, U.S. EPA has determined that in order for it to make the required finding above, Chemical Waste Management, Inc. must submit for the PCB Flushing/Storage Unit one or more of the financial assurance mechanisms listed at 40 C.F.R. § 761.65(g) prior to U.S. EPA’s issuance of a final approval. We are proposing to require CWM to use one or more of the financial assurance mechanisms listed at 40 C.F.R. § 761.65(g) for the PCB Flushing/Storage Unit. See proposed Condition IV.M.3.

(6) OPERATIONS WILL NOT POSE AN UNREASONABLE RISK TO PUBLIC HEALTH AND THE ENVIRONMENT

40 C.F.R. § 761.65(d)(2)(vi) requires U.S. EPA to determine that operation of the storage facility will not pose an unreasonable risk of injury to health or the environment. As discussed in **section V** of this SB, we propose to determine that operations of the Kettleman Hills Facility, including the PCB waste storage and processing at the PCB Flushing/Storage Unit, as allowed and limited by our proposed Approval will not pose an unreasonable risk of injury to health or the environment. This proposed determination is based on the design, construction, and operations of the Unit as described in the Renewal Application, proposed Approval conditions, studies performed to evaluate the impact of the Kettleman Hills Facility on surrounding areas, monitoring data, the Facility’s compliance record, and proposed findings on endangered species.



(7) COMPLIANCE HISTORY

Under 40 C.F.R. § 761.65(d)(2)(vii), the environmental compliance history of the applicant, its principals, and its key employees may be deemed to constitute a sufficient basis for denial of an approval if the history of environmental civil violations or criminal convictions evidences in U.S. EPA's judgement a pattern or practice of noncompliance that demonstrates the applicant's unwillingness or inability to achieve and maintain compliance with the regulations.

We have carefully reviewed Chemical Waste Management, Inc.'s compliance history at the Kettleman Hills Facility. See **section IV** of this SB. This review included information in Table 6 of the Renewal Application [CWM 2018d], CWM's Response to NOD Comment 60 [CWM 2018c], our inspection records, and DTSC's Envirostor database https://www.envirostor.dtsc.ca.gov/public/hwmp_profile_report.asp?global_id=CAT000646117. The Facility's compliance history does not show unresolved violations, an inability to return to compliance after violations are found, or an unwillingness/inability to modify operations at the Facility to prevent repeat noncompliance. The corrective actions that Kettleman Hills Facility implemented to address past violations include physical and operational improvements to reduce the potential for future violations and to prevent and contain future releases. Based on our review of this compliance history, we are proposing to determine that this history does not demonstrate the applicant's unwillingness or inability to achieve and maintain compliance with the regulations.

b. CLOSURE PLAN

40 C.F.R. § 761.65(d)(4)(ii) requires that the closure plan be incorporated into the Approval. We are proposing to incorporate the Closure Plan into a final approval. See proposed Conditions IV.A.3 and B.9. and Appendix B-3 of the proposed Approval.

c. MAXIMUM PCB STORAGE CAPACITY

40 C.F.R. § 761.65(d)(4)(iii) requires that U.S EPA include a condition imposing a maximum PCB storage capacity which a facility cannot exceed during its PCB waste storage operations. This section of Part 761 also requires that maximum storage capacity imposed cannot be greater than the estimated maximum inventory of PCB waste included in the owner's or operator's application for final approval.

Condition V.C.1. in the proposed Approval limits the maximum storage capacity at the PCB Flushing/Storage Unit to the values listed in Table 1 of the proposed Approval. These maximum capacities are listed in **Table 3** below. Total maximum capacity for all parts of the Unit is 44,015 gallons, however, maximum capacities are set separately for the enclosed building, PCB storage tank, and outside containment area. These maximum storage capacities are the same as in the Facility's Closure Plan [Golder 2018b, Tables A-3 and A-4].



TABLE 3 – MAXIMUM STORAGE CAPACITIES AT THE PCB FLUSHING/STORAGE UNIT

AREA	MAXIMUM UNIT STORAGE CAPACITY (GALLONS)	
	INDIVIDUAL COMPONENT	TOTAL
PCB F/SU – Enclosed Building – on floor or racks	16,500 gallons (equivalent of 300 55-gallon drums ¹)	24,000 gallons
PCB F/SU – Enclosed Building – PCB Storage Tank	7,500 gallons	
PCB F/SU – Outside Containment Area	20,015 gallons (equivalent of 273 55-gallon drums ¹ and one 5,000-gallon container)	20,015 gallons ²

¹ When doubled stacked on pallets.

² Storage limited to the PCB waste listed in proposed Condition V.C.4. and to 30 days from removal from service date.

The proposed Approval also contains conditions setting minimum aisle spacing and maximum container stacking height to facilitate safe operations at the PCB F/SU. See proposed Approval Conditions V.D.2. and 3. We note that approval by U.S. EPA of a maximum PCB storage capacity does not relieve Chemical Waste Management, Inc. of any requirements related to safe container management including the required aisle spacing and maximum container stacking height.

d. OMNIBUS PROVISIONS

40 C.F.R. § 761.65(d)(4)(iv) allows U.S. EPA to include other conditions in a PCB commercial storage facility approval as needed to ensure that the operations of the facility will not pose an unreasonable risk of injury to health or the environment. These additional conditions are known as “omnibus” provisions.

We have included a number of omnibus conditions in the proposed Approval. These omnibus conditions are discussed further in **section III.G.** of this SB. **Appendix E** lists each omnibus condition and provides our reason for including each in the proposed Approval.

E. RECORDKEEPING AND REPORTING REQUIREMENTS

40 C.F.R. § 761.180 includes the primary recordkeeping and reporting requirements for disposers and commercial storers of PCB waste. These requirements include annual documents, an annual document log, and an annual report. CWM addressed these requirements in its Renewal Application. See “Review Checklist for 40 C.F.R. Part 761 Requirements for Recordkeeping and Reporting” (**Appendix D-3**). All these requirements are included in the proposed Approval. See Subsection IV.O. We have also included in the proposed Approval the other applicable 40 C.F.R. Part 761 recordkeeping requirements such as those in § 761.65(c)(5) for records of inspections, maintenance, cleanup and disposal at storage facilities and § 761.75(b)(8)(iv)) for three dimensional burial coordinates in chemical waste landfills. See proposed Condition VI.D.5.



requiring maintenance of records of waste locations within Landfill B-18 using a grid coordinate system; Condition IV.O.4 requiring TSCA Operation Plan recordkeeping procedures to be followed, and IV.O.6 citing to PCB waste burial coordinates. The proposed Approval also includes some omnibus recordkeeping and reporting requirements such as tracking PCB waste in the PCB F/SU to document that the maximum storage capacity is not exceeded and early reporting of any detection of PCBs in groundwater or leachate. See proposed Conditions IV.O.3. and VIII.B.6. A table of the reporting, notification, and submittal requirements included in the proposed Approval can be found in **Appendix F** of this Statement of Basis.

F. OTHER PROPOSED APPROVAL CONDITIONS

Our proposed Approval has a number of other conditions that are necessary to comply with 40 C.F.R. Part 761 requirements or to ensure that PCB waste disposal, storage, and processing at the Kettleman Hills Facility will not present an unreasonable risk to health or the environment. We briefly discuss some of these requirements below.

1. GROUNDWATER MONITORING REQUIREMENTS

The Kettleman Hills Facility has a current network of 41 groundwater wells monitoring both open and closed landfills and evaporative ponds. The TSCA (PCB) groundwater monitoring network is a subset of this larger groundwater monitoring system and has 23 wells monitoring the four TSCA landfills units. See “TSCA Groundwater Monitoring Addendum to Site-Specific Monitoring Plan” (April 17, 2018). Under its current DTSC permit, KHF is required to tests all wells quarterly. Under the current RWQCB order, wells are required to be tested semiannually. Quarterly/semiannual testing is limited to the Detection Monitoring Parameters (MPars) listed in MRP R5-2014-0003 Table 2 with testing for a more extensive list of constituents, including PCBs, every five years [RWQCB 2014b]. Because PCBs have been rarely been detected in groundwater at the Kettleman Hills Facility, U.S. EPA proposes that groundwater wells for the operating landfill, Landfill B-18, be tested annually for PCBs and wells in the closed landfills be tested every 5 years for PCBs.⁷ See proposed Approval Section VIII.B.

⁷ PCBs have been detected twice in groundwater at the Kettleman Hills Facility [CWM 1999/CWM 2018i]:

A sample collected from corrective action monitoring (“CAM”) well A02 on May 21, 1985 detected Aroclor 1248 at 1.5 ug/l (0.0015 ppm) and Aroclor 1254 at 1.5 ug/l (0.0015 ppm). CAM well A02 monitors releases from closed ponds P-12 and P-12A. No subsequent sample detected any PCBs.

A sample collected from CAM well A05 on March 20, 1995 detected Aroclor 1232 at 2.0 ug/l (0.002 ppm). No subsequent quarterly sample has detected any PCBs. CAM well A02 monitors releases from pond P-9.

No PCBs have been detected in groundwater wells monitoring the four landfills approved for PCB waste disposal at KHF.

In 1995 and 2004, PCBs were detected in samples collected from sounding well B14MW2 [CWM 2018i]. Sounding well B14MW2 was one of four shallow (42 – 102 feet below ground level) sounding wells installed in 1981 on the perimeter of Landfill B-14 to monitor for and collect fluids that could potentially migrate out of the landfill [Geomatrix 2006]. The Landfill B-14 sounding wells were checked regularly for fluids. In 1995, surface water from heavy rains entered the B14MW2. Testing of the water in the well detected PCBs at a concentration of 0.002 ppm in February 1995 and 0.0007 ppm in March 1995 [CWM 2018i]. In 2004, all residual water was removed from the well and tested. PCBs were detected at a concentration of 0.0027 ppm [CWM 2018i]. All four Landfill B-14



2. AIR QUALITY MONITORING REQUIREMENTS

Under our omnibus authority in 40 C.F.R. § 761.65(d)(4)(iv) and § 761.75(c)(3)(ii), we are proposing to require Chemical Waste Management, Inc. to continue to operate its current air monitoring program as described in the *Site-Specific Ambient Air Monitoring Plan* (January, 2016) (“AAMP”) [Wenck 2016a] and Operation Plan, Chapter 26 Environmental Monitoring Programs, Section “Summary of Ambient Air Monitoring Program” [CWM 2018a]. See proposed Condition VIII.A.⁸ Air emissions are one of the main pathways that PCBs may be transported offsite from the Kettleman Hills Facility and potentially impact surrounding communities. Monitoring this pathway, therefore, is necessary to ensure that operations at the Facility do not pose an unreasonable risk of injury to health and the environment from PCBs.

The current Kettleman Hills Facility’s air monitoring program measures PCBs, volatile organic compounds (VOCs), carbonyls, pesticides, metals, and particulate matter less than 10 microns (PM₁₀) in order to evaluate the risk to human health from the Facility’s emissions. The program includes four monitoring stations near the Facility’s property line, one upwind, two southeast of Landfill B-18, and one between the Facility and Kettleman City. Ambient air samples are collected for a 24-hour period every 12-days at all four stations for VOCs, carbonyls, pesticides, PCBs, and PM₁₀ metals. In addition, a month-long PCB/pesticide sample is collected once per quarter at all four monitoring locations. The proposed Approval also requires CWM to submit air monitoring reports quarterly. See proposed Condition VIII.A.3.

3. LEACHATE COLLECTION, REMOVAL, AND MONITORING REQUIREMENTS

Leachate is any liquid that has percolated through or drained from a hazardous waste landfill. Leachate is collected, removed, and monitored to protect a landfill’s liners, provide early detection of possible leaks from a landfill, and to protect groundwater under the landfill.

The proposed Approval requires Chemical Waste Management, Inc. to provide, maintain, and operate leachate collection and removal systems at Landfill B-18 and the closed Landfills B-14, B-16, and B-19 (proposed Conditions VI.E. and VII.B.3.b. and c.). These requirements include the weekly monitoring of the liquid level in each leachate collection sump at Landfill B-18 (proposed Condition VI.E.3.d.) and monthly monitoring of these levels at the closed Landfills B-14, B-16, and B-19 (proposed Condition VII.B.3.b.). It also requires the removal of leachate from each sump as needed to prevent liquid levels from exceeding a specified head or trigger level (proposed Conditions VI.E.3.b. and c. and VII.B.3.b.)

The proposed Approval also requires annually testing leachate for PCBs from each leachate collection sump (proposed Conditions VI.E.5.a. and VII.B.3.b.), immediate reporting to U.S. EPA if any PCBs are detected (proposed Conditions VI.E.5.b. and VII.B.3.b.), and submittal of an annual report on the results of the leachate testing (proposed Conditions VI.E.5.b. and VII.B.3.b.).

sounding wells were decommissioned in 2009 with U.S. EPA’s approval [USEPA 2008a]. Potential releases to groundwater from Landfill B-14 are currently monitored by well K-50 [AMEC 2014].

⁸ The current DTSC-approved AAMP [Wenck 2016a] includes three operating air monitoring sites and discusses the installation of a fourth site. The fourth monitoring site was approved by DTSC in 2016 [DTSC 2016] and is already installed and operating. U.S. EPA is proposing to require CWM to update the AAMP to include this fourth site within 180 days of a final approval. See proposed Condition VIII.A.2.



4. SURFACE WATER MANAGEMENT AND MONITORING REQUIREMENTS

The proposed Approval requires Chemical Waste Management, Inc. to provide, maintain, and operate stormwater diversion structures capable of diverting all surface water away from Landfill B-18 from a 24-hour, 25-year storm event of 2 inches in 24 hours (proposed Condition VI.F.1.). Currently stormwater run-on to the landfill is caught prior to contact with the waste and directed by surface drainage channels to stormwater discharge basins on the Facility [TSCA Operation Plan, Section “Surface Water Handling Procedures”]. All stormwater that enters or accumulates within the Landfill B-18 is collected. Under the proposed Approval, this collected stormwater is to be stored, tested, and disposed of as leachate (proposed Condition VI.F.3.). A sample from the first collection of stormwater that contacts waste in Landfill B-18 after each storm event must be analyzed for PCBs (proposed Condition VI.F.4.). If PCBs are detected in a sample taken from the accumulated precipitation, CWM must notify U.S. EPA within 24 hours of reviewing the analytical report (proposed Condition VI.F.4.).

KHF maintains and implements a Stormwater Pollution Prevention Plan [Golder 2016]. U.S. EPA proposes to require compliance with this in its proposed Approval and to incorporate this plan into the Approval. See proposed Condition VI.F.1.

5. POST-CLOSURE CARE OF LANDFILLS B-14, B-16, AND B-19

We have previously approved disposal of nonliquid PCBs in each of these landfills and each has been closed and a final cover constructed [Golder 2018a]. Chemical Waste Management, Inc. currently maintains and implements post-closure care for these landfills [Golder 2018a]. Because PCB waste will remain in these closed landfills indefinitely, it is necessary to monitor conditions and maintain post-closure care into the future.

Under our omnibus authority in 40 C.F.R. § 761.75(c)(3)(ii), we are proposing to require Chemical Waste Management, Inc. to maintain and implement post-closure care plans for Landfills B-14, B-16, and B-19 for 30 years from the effective date of a final approval. See proposed Conditions VII.B.2. and B.3. Required post-closure care includes groundwater monitoring, leachate monitoring, and inspection and maintenance of the final cover. See proposed Condition VII.B.3. The proposed Approval, if finalized, would also require CWM to maintain a post-closure care cost estimate for each landfill and sufficient financial assurance to cover these costs. See proposed Approval Subsections IV.L. and M. Finally, the proposed Approval, if finalized, would require CWM to apply for a modification to update the post-closure care plan for an appropriate period prior to the end of the initial post-closure period. See proposed Condition VII.B.5.

These post-closure requirements are consistent with the provisions proposed to be placed on Landfill B-18 discussed above at [section III.C.4](#). We discuss these omnibus requirements in [section III.G](#), and we have listed and provided a justification for each omnibus requirement in [Appendix E](#).



6. FACILITY INSPECTION AND MAINTENANCE REQUIREMENTS

The proposed Approval includes requirements that Chemical Waste Management, Inc. perform and document regular comprehensive inspections of the Facility including the PCB Flushing/Storage Unit and operating Landfill B-18 and its support systems. See proposed Approval Section IV.I. and proposed Conditions IV.I.4.; V.H.1. and VI.G.1. These inspections cover all aspects of the Facility operations including site security, environmental monitoring systems, surface water management, safety and emergency equipment, leachate systems, and all waste management units on site. These inspections are to be documented. See proposed Conditions IV.I.4.; V.H.3., VI.G.3. and VII.B.1. CWM currently performs and documents inspections of the Kettleman Hills Facility under its State RCRA permit and TSCA approvals.

The proposed Approval also requires CWM to evaluate and address all deficiencies identified during inspection and maintain records of any actions taken. See proposed Conditions IV.I.3. and 4.; V.H.2. and 3.; and VI.G.2 and 3.

Quarterly PCB Sampling Plan. Under the proposed Approval, CWM must conduct random wipe sampling of the PCB Flushing/Storage Unit every quarter. See proposed Approval Section V.G. Once per year, it must use a third party to conduct the sampling. See proposed Condition V.G.1. If PCB contamination above certain levels is discovered, CWM must notify U.S. EPA and initiate decontamination processes. See proposed Condition V.G.3. CWM is already conducting this wipe sampling [CWM 2018c, Answer 10 and NOD Comment 10 Attachments].

7. CONTINGENCY PLANS

The proposed Approval also requires Chemical Waste Management, Inc. to conduct any emergency response and spill prevention and cleanup activities at the Kettleman Hills Facility in accordance with its Contingency Plan. See proposed Condition IV.G.2. We propose to incorporate this Contingency Plan into any final approval, making it an enforceable part of the Approval (see Appendix B-1-11 of the proposed Approval). The Contingency Plan includes detailed information on emergency response procedures including remediation actions, emergency equipment that must be kept on site, and notification and reporting requirements.

The proposed Approval also requires CWM to immediately report any incident involving PCBs that requires implementation the Contingency Plan and provide a more detailed report within 15 days of the incident. See proposed Conditions IV.G.3. and 4. It also requires reporting of any unauthorized entry, tampering, destruction, or loss which caused PCBs to be discharged. See proposed Condition IV.G.14.

There are also a number of other emergency response, spill prevention and control, and notice and reporting requirements in the proposed Approval. For examples, see proposed Approval Section IV.G. and proposed Condition V.B.3.

8. APPROVAL MODIFICATION PROCEDURES

U.S. EPA proposes to include detailed procedures for modifying the approval (proposed Approval Section IX). The PCB regulations contain few requirements for modifying approvals. In contrast,



U.S. EPA's RCRA regulations contain detailed procedures for modifying RCRA permits. See 40 C.F.R. § 270.41 and § 270.42. We have used these RCRA requirements as a model for the approval modification procedures in the proposed Approval. We have previously included similar procedures in the approval for PCB landfill and storage operations at U.S. Ecology's Beatty, Nevada facility. See EPA 2012c.

The proposed Approval specifies the administrative procedures to modify, transfer ownership or operational control, revoke, suspend, deny, continue or renew an approval. These procedures are necessary to ensure that the Facility continues to operate under an approval that reflects current ownership and operation control as well as current operating procedures and contains the terms and conditions necessary to ensure that the Facility is operated in a manner that does not pose an unreasonable risk of injury to health and the environment.

The proposed Approval provides for public notice and comment for certain types of modifications. Public participation in the modification process helps to ensure that all issues related to operations of the Facility that affect the surround community are known and approval conditions to address those issues and prevent an unreasonable risk of injury to health and the environment are included.

G. USE OF THE OMNIBUS APPROVAL PROVISIONS AT 40 C.F.R. § 761.65(d)(4)(iv) AND 40 C.F.R. § 761.75(c)(3)(ii)

The PCB regulations at 40 C.F.R. § 761.65(d)(4)(iv) and 40 C.F.R. § 761.75(c)(3)(ii) allow U.S. EPA to include other requirements in an approval that the Agency finds necessary to ensure that PCB storage and disposal operations at a facility “will not pose an unreasonable risk of injury to health or the environment.”

The proposed Approval for the Kettleman Hills Facility includes use of these provisions to include requirements that are not specifically delineated in the PCB regulations but are necessary to ensure that operations at the Facility do not present unreasonable risk. For example, the PCB regulations for chemical waste landfills (40 C.F.R. § 761.75) do not include the requirement for either a closure or post-closure care plan. Using the omnibus regulation 40 C.F.R. § 761.75(c)(3)(ii), U.S. EPA is requiring Landfill B-18 be included in the Facility Closure Plan and that all four chemical waste landfills at the Facility (Landfills B-14, B-16, B-18, and B-19) be included in the Facility Post-Closure Care Plan.

U.S. EPA's justification for using the omnibus provisions of 40 C.F.R. § 761.65(d)(4)(iv) and 40 C.F.R. § 761.75(c)(3)(ii) in the proposed Approval are provided in **Appendix E**.

IV. COMPLIANCE HISTORY

U.S. EPA reviews a facility's compliance history as part of its decision-making process as to whether to grant an approval under TSCA for several reasons. First, under 40 C.F.R. § 761.65(d)(2)(ii), the environmental compliance history of the applicant, its principals, and its key employees may provide a sufficient basis for denial of an approval if the history of environmental civil violations or criminal convictions establishes, in U.S. EPA's judgement, the



applicant's unwillingness or inability to comply with the regulations. Second, remedies to non-compliance, such as changes to operational procedures, may need to be incorporated into an approval. Finally, information developed through compliance monitoring, and the inspection reports they generate, increases familiarity with a facility allowing for a better and more comprehensive permit.

Kettleman Hills Facility is inspected by U.S. EPA and a number of state and local agencies including DTSC, the Central Valley Regional Water Quality Control Board, San Joaquin Valley Air Pollution Control District (SJVAPCD), and Kings County. For this evaluation, we focused on our and DTSC's inspections and enforcement actions because they are most relevant to our proposed Approval. We did, however, review the last five years of inspection reports by other agencies that inspect the Kettleman Hills Facility. Copies of these reports can be found in CWM's response to U.S. EPA's Notice of Deficiency [CWM 2018c]. We also reviewed the environmental violations at the Facility that have resulted in the assessment of penalties during the past ten years. In total, the Facility had civil penalties assessed for eleven violations during this period: two from DTSC, three from U.S. EPA, and six from the SJVAPCD. See Renewal Application, Table 6. Most of the air violations related to operations of the Facility's flare. See Renewal Application, Table 6. This flare controls gases from the municipal solid waste landfills and is not part of the Facility's hazardous or PCB waste operations. We discuss the DTSC and U.S. EPA enforcement actions below.

Table 4 is a list of inspections by U.S. EPA and DTSC and their results over the past 20 years. The majority of inspections do not uncover any violations of regulations or permit conditions or other issues of concern. U.S. EPA found a number of violations of the PCB regulations during inspections at the Kettleman Hills Facility. Chemical Waste Management also self-disclosed some violations. We describe several of these violations below as well as RCRA violations that DTSC and U.S. EPA found. Each of these violations have been remedied and, in some cases, proposed Approval terms have been added to help prevent reoccurrences.

Based on its review, U.S. EPA does not find that the compliance history of the Kettleman Hills Facility suggests a pattern or practice of noncompliance that demonstrates the CWM's unwillingness or inability to comply with the regulations.

A. TSCA VIOLATIONS

In February 2004, Chemical Waste Management disclosed that it had failed to perform required monthly monitoring of lysimeters at one of four PCB disposal units from June 1996 to November 2003 [CWM 2004]. A consent agreement between U.S. EPA and CWM for these violations included a \$10,000 penalty and \$37,500 to purchase emergency response equipment for the Kings County Environmental Health Services [U.S. EPA 2005]. The proposed Approval includes weekly inspection of the leachate removal systems in Landfill B-18 and monthly inspections in the closed Landfills B-14, B-16, and B-19. See proposed Conditions VI.E.3.d. and e. and VII.B.3.b.

In August 2005, U.S. EPA's National Enforcement Investigations Center ("NEIC") conducted a TSCA investigation of the Kettleman Hills Facility (Phase 1 of its multi-media investigation) and



found several areas of non-compliance including improperly calibrating laboratory instruments analyzing PCBs [U.S. EPA 2006]. We issued a Notice of Noncompliance (“NON”) which required documentation of appropriate laboratory procedures [U.S. EPA 2007c; EPA 2007d]. CWM provided the required information [CWM 2008a]. Accordingly, we found that CWM had remedied the issues of noncompliance and did not assess a penalty [U.S. EPA 2010a].

In February and June 2010, US EPA inspectors documented violations of the Approval and TSCA PCB regulations, including [U.S. EPA 2010b; EPA 2010c]:

- Failure to indicate removal from service date on PCB containers. PCB regulations require disposal of PCB waste within one year of its removal from service and the labeling of PCB Items including containers with this date.
- Failure to properly complete manifests by not including removal from service dates or weights on some manifests;
- Continued use of a PCB-contaminated building. PCB regulations prohibit the continued use of items and structures that are contaminated with PCBs unless they are first appropriately decontaminated.
- Improper disposal of PCBs. High-levels of PCBs were found in the building and in the soil around the PCB Flushing/Storage Unit that were the result of leaks and spills, both of which are considered disposal.

To settle these violations, CWM was required to clean-up the contamination around the PCB F/SU and to pay a penalty of over \$300,000 [U.S. EPA 2010d, EPA 2010e]. DTSC also took enforcement action against CWM for PCB releases around the PCB F/SU and required the Facility to take corrective action [DTSC 2011]. The final corrective action remedy included construction of the outside containment area at the PCB F/SU with a sealed concrete floor and curb to prevent releases to soil around the Unit [ADE 2011].

In May 2012, CWM self-reported that it failed to test leachate from Landfill B-18 prior to its disposal as required by conditions in its 1992 Approval [CWM 2012a]. Subsequent testing of the remaining leachate, however, did not detect the presence of PCBs. CWM paid a penalty of \$9,750 [U.S. EPA 2012b].

U.S. EPA most recently inspected KHF in 2017 and found no violations [U.S. EPA 2017b].

B. RCRA VIOLATIONS

In December 2005, NEIC conducted a follow-up RCRA/TSCA investigation (Phase 2 of its multi-media investigation). The focus of this investigation was on the CWM’s testing and sampling methodologies and protocols. In its investigation report, NEIC documented problems with CWM’s hazardous waste sampling, laboratory and testing protocols indicating CWM may have improperly disposed hazardous wastes that do not meet RCRA treatment standards [U.S. EPA 2007a].

In February 2010, U.S. EPA and DTSC jointly conducted an inspection of the Kettleman Hills Facility. As a result of the inspection, we found the following alleged violations [U.S. EPA 2011b]:



- Failure to determine whether waste meets the hazardous waste Land Disposal Treatment Standards prior to land disposal. Specifically, the Facility generated leachate from its hazardous waste landfill and surface impoundments and did not thoroughly evaluate whether the waste met treatment standards before land disposal.
- Impermissible land disposal of prohibited hazardous waste. The Facility reported instances where it excavated hazardous waste that was land disposed without proper treatment. In addition, U.S. EPA review of laboratory analysis found instances where the Facility disposed of hazardous waste that did not fully meet treatment standards.
- Failure to comply with the Hazardous Waste Permit – Non-compliance with EPA Method Lab Methods (Test Method 6010B). Both the Facility's RCRA permit and state and federal RCRA regulations require that the Facility comply with a particular laboratory method for analysis of hazardous waste. During review of laboratory records, U.S. EPA found that the Facility did not follow specific laboratory quality control requirements.
- Failure to comply with container requirements for several universal waste fluorescent lamps stored in the drum storage unit.

In August 2011, U.S. EPA and CWM reached a \$1 million settlement for these violations [U.S. EPA 2011b]. The settlement required CWM to pay \$400,000 penalty and spend an estimated \$600,000 to make physical and operational improvements at the Kettleman Hills Facility. The compliance activities include:

- Continued use of an outside laboratory for post-treatment metals analysis for a minimum of two years until an independent audit demonstrates that the Facility can produce reliable results;
- Replacing lab equipment;
- Installing new laboratory software;
- Annual characterization of landfill leachate;
- Covering and eliminating stormwater from entering the leachate tanks;
- Modifying cyanide treatment procedures; and
- Sampling liquids and sludge from onsite surface impoundment P-16.

In March 2013, DTSC penalized CWM over \$290,000 for failure to report 72 hazardous waste spills at the Kettleman Hills Facility over a four-year period from June 2008 to 2012 [DTSC 2013]. The penalty also addressed violations identified during the DTSC's April 2012 inspection. DTSC reviewed these spills, including the size, location, offsite consequences, cleanup response, and causes of these spills. Of the 72 spills, the largest spill was estimated at five to eight gallons, and 13 spills were less than a pint. The largest number of spills involved non-RCRA hazardous waste between a quart and a gallon. Most of these spills (60 out of 72) occurred at the sampling platforms and untarping racks, where the Facility samples incoming loads for analysis [DTSC 2012].



DTSC required CWM to construct a containment system at the sampling platforms and untarping racks to isolate any spills of hazardous waste from contact with the ground [DTSC 2003]. Construction of the containment system was completed in 2016 [Golder 2017].



TABLE 4 – KHF RCRA/TSCA INSPECTIONS FROM 1992 TO PRESENT

DATE	TYPE OF INSPECTION	AGENCY	FINDINGS
05/07/1992	Financial Record Review	DTSC	No violations.
05/12/1992	Compliance Evaluation Inspection	DTSC	RCRA violations – \$65,000 penalty. Return to compliance 06/25/1992.
05/14/1992	Compliance Evaluation Inspection	U.S. EPA	No violations.
08/15/1992	Operations and Maintenance Inspection	DTSC	No violations.
09/18/1992	Follow-up Inspection (to 05/12/1992 inspection)	DTSC	RCRA violations – \$65,000 penalty. Return to compliance 08/08/1993.
11/03/1992	Compliance Evaluation Inspection	DTSC	RCRA violations – One 55-gallon container and 2 bags of PCB waste not labeled. Two containers of incompatible waste stored next to each other. Penalty of \$1,100. Return to compliance 01/21/1993.
11/12/1992	Financial Record Review	DTSC	No violations.
03/27/1993	Operations and Maintenance Inspection	DTSC	No violations.
04/23/1993	Compliance Evaluation Inspection	U.S. EPA	RCRA violations related to land disposal restrictions and container management. Return to compliance 12/14/1993
11/01/1993	Compliance Evaluation Inspection	DTSC	No violations.
12/08/1993	TCA PCB Inspection	U.S. EPA	No violations.
04/05/1994	Compliance Evaluation Inspection	U.S. EPA	RCRA violations related to land disposal restrictions and container management. Return to compliance 10/05/1994.
11/07/1994	Compliance Evaluation Inspection	DTSC	No violations.



TABLE 4 (CONTINUED) – KHF RCRA/TSCA INSPECTIONS FROM 1992 TO PRESENT

DATE	TYPE OF INSPECTION	AGENCY	FINDINGS
05/03/1995	Compliance Evaluation Inspection	U.S. EPA	RCRA violations. Return to compliance 10/13/1995.
05/15/1995	Operations and Maintenance Inspection	DTSC	No violations.
08/31/1995	TSCA PCB Inspection	DTSC (as grantee to U.S. EPA)	No violations.
11/07/1995	Compliance Evaluation Inspection	DTSC	RCRA violations: Return to compliance 11/17/1995.
04/15/1996	Operations and Maintenance Inspection	DTSC	RCRA violations related to groundwater monitoring. Return to compliance 07/19/1996.
10/18/1996	Financial Record Review	DTSC	No violations.
11/19/1996	Compliance Evaluation Inspection	DTSC	No violations.
02/12/1997	Compliance Evaluation Inspection	DTSC	No violations.
03/31/1997	Compliance Evaluation Inspection	DTSC	No violations.
04/01/1997	Compliance Evaluation Inspection	DTSC	No violations.
04/08/1997	TSCA PCB Inspection	DTSC (as grantee to U.S. EPA)	No violations.
05/12/1997	Compliance Evaluation Inspection	DTSC	No violations.
06/23/1997	Compliance Evaluation Inspection	DTSC	No violations.
10/03/1997	Compliance Evaluation Inspection	DTSC	No violations.
10/22/1997	Compliance Evaluation Inspection	DTSC	No violations.



TABLE 4 (CONTINUED) – KHF RCRA/TSCA INSPECTIONS FROM 1992 TO PRESENT

DATE	TYPE OF INSPECTION	AGENCY	FINDINGS
11/19/1997	Compliance Evaluation Inspection	DTSC	No violations.
12/03/1997	Compliance Evaluation Inspection	DTSC	No violations.
02/23/1998	Compliance Evaluation Inspection	DTSC	No violations.
04/13/1998	Compliance Evaluation Inspection	DTSC	No violations.
05/12/1998	Compliance Evaluation Inspection	DTSC	No violations.
06/18/1998	Compliance Evaluation Inspection	DTSC	No violations.
07/21/1998	Compliance Evaluation Inspection	DTSC	No violations.
08/27/1998	Compliance Evaluation Inspection	DTSC	No violations.
10/06/1998	Compliance Evaluation Inspection	DTSC	RCRA violation – emergency shower not operational. Return to compliance 10/09/1998.
10/14/1998	TSCA PCB Inspection	U.S. EPA	No violations.
11/24/1998	Compliance Evaluation Inspection	DTSC	No violations.
12/30/1998	Compliance Evaluation Inspection	DTSC	No violations.
02/02/1999	Compliance Evaluation Inspection	DTSC	No violations.
03/10/1999	Follow-up Inspection	DTSC	No violations.
04/30/1999	Follow-up Inspection	DTSC	No violations.
05/21/1999	Follow-up Inspection	DTSC	No violations.
06/16/1999	Compliance Evaluation Inspection	DTSC	No violations.



TABLE 4 (CONTINUED) – KHF RCRA/TSCA INSPECTIONS FROM 1992 TO PRESENT

DATE	TYPE OF INSPECTION	AGENCY	FINDINGS
09/08/1999	Compliance Evaluation Inspection	U.S. EPA	No violations.
09/28/1999	Follow-up Inspection	DTSC	No violations.
11/18/1999 – 11/19/1999 & 12/01/1999 – 12/02/1999	Financial Records Review	DTSC	RCRA violation – CWM reduced the face amount of their closure insurance without written approval from DTSC. \$5,000 penalty. Return to compliance 03/21/2000.
04/06/2000	Financial Record Review	U.S. EPA	No violations.
10/30/2000 – 11/03/2000	Compliance Evaluation Inspection	DTSC	RCRA violation – biennial report data error from 1996-2000 and broken eyewash unit in the lab. Return to compliance 11/03/2000.
05/02/2001	Groundwater Operation and Maintenance Inspection	DTSC	No violations.
09/17/2001	Compliance Evaluation Inspection	DTSC	No violations.
10/25/2001	TSCA PCB Inspection	U.S. EPA	No violations.
02/26/2002	Groundwater Operation and Maintenance Inspection	DTSC	No violations.
09/16/2002	Compliance Evaluation Inspection	DTSC	No violations.
11/19/2002	Closure/Post-Closure Inspection	U.S. EPA	No violations.
06/10/2003	Groundwater Monitoring Evaluation	DTSC	RCRA violation – related to sampling procedures - written informal enforcement action. Return to compliance 06/20/2003.
01/21/2004	Compliance Evaluation Inspection	DTSC	No violations.
02/13/2004	Facility Self Disclosure	CWM	TSCA violations. See description in narrative.



TABLE 4 (CONTINUED) – KHF RCRA/TSCA INSPECTIONS FROM 1992 TO PRESENT

DATE	TYPE OF INSPECTION	AGENCY	FINDINGS
03/15/2004	Compliance Evaluation Inspection	DTSC	No violations.
04/14/2004	TSCA PCB Inspection	U.S. EPA	No violations.
06/15/2004	Groundwater Operation and Maintenance Inspection	DTSC	No violations.
09/30/2004	Financial Records Review	DTSC	No violations.
10/15/2004	Compliance Evaluation Inspection	U.S. EPA	No violations. RCRA inspection only.
11/09/2004	Compliance Evaluation Inspection	DTSC	No violations.
03/23/2005	Compliance Evaluation Inspection	DTSC	No violations.
08/22/2005 – 08/23/2005	Multimedia - TSCA/RCRA	U.S. EPA (NEIC)	TSCA violations. See description in narrative.
12/5/2005 – 12/16/2005	Multimedia - TSCA/RCRA	U.S. EPA (NEIC)	RCRA violations. See description in narrative.
01/11/2006	Compliance Evaluation Inspection	DTSC	No violations.
09/22/2006	Financial Records Review	U.S. EPA	No violations.
11/06/2006 – 11/16/2006	Compliance Evaluation Inspection	DTSC	No violations.
03/01/2007	Financial Records Review	DTSC	No violations.
11/15/2007	Compliance Evaluation Inspection	DTSC	No violations.
10/02/2008	Compliance Evaluation Inspection	DTSC	No violations.
10/29/2008	Compliance Evaluation Inspection	DTSC	No violations.



TABLE 4 (CONTINUED) – KHF RCRA/TSCA INSPECTIONS FROM 1992 TO PRESENT

DATE	TYPE OF INSPECTION	AGENCY	FINDINGS
03/13/2009	Financial Records Review	DTSC	No violations
09/15/2009	Compliance Evaluation Inspection	DTSC	No violations.
10/06/2009	Financial Records Review	DTSC	No violations.
02/07/2010 – 02/12/2010	Compliance Evaluation Inspection & TSCA PCB Inspection	DTSC/U.S. EPA	RCRA violations and TSCA violations. See description in narrative.
06/02/2010	TSCA PCB Inspection	U.S. EPA	TSCA violations. See description in narrative.
11/12/2010	Air Monitoring of Evaporation Ponds	U.S. EPA	No violations.
02/22/2012	Operation and Maintenance Inspection	DTSC	No violations.
04/9/2012 – 04/10/2012 04/12-13/2012 – 04/13/2012	Compliance Evaluation Inspection	DTSC/U.S. EPA	RCRA violation – Failure to properly treat hazardous waste prior to disposal and failure to resolve a significant manifest discrepancy within 15 days of discovery. Minor, failure to sign and check the certification on CWM-KHF's Waste Treatment and Disposal Form. Return to compliance 03/22/2013.
05/09/2012	Facility Self Disclosure	CWM	TSCA violations. See description in narrative.
06/12/2012	Financial Records Review	DTSC	No violations.
11/29/2012	TSCA PCB Inspection	U.S. EPA	No violations.
04/23/2013 – 04/24/2013	Compliance Evaluation Inspection	DTSC	No violations.
05/20/2013	Financial Records Review	DTSC	No violations.



TABLE 4 (CONTINUED) – KHF RCRA/TSCA INSPECTIONS FROM 1992 TO PRESENT

DATE	TYPE OF INSPECTION	AGENCY	FINDINGS
02/14/2014	Facility Self Disclosure	CWM	RCRA violations – one load of hazardous waste was disposed of in Landfill B-18 that exceeded the Universal Treatment Standard for selenium. Return to compliance 03/29/2014.
02/19/2014	Focused Compliance Inspection (Groundwater)	DTSC	No violations.
03/18/2014	Compliance Evaluation Inspection	DTSC	No violations.
08/11/2014	Financial Records Review	DTSC	No violations.
09/24/2014	Focused Compliance Inspection	DTSC	No violations.
12/10/2014	Focused Compliance Inspection	DTSC	No violations.
03/17/2015 – 03/18/2015	Compliance Evaluation Inspection	DTSC	RCRA violations – failure to enter most appropriate hazardous waste code for manifest in two manifests and the appropriate unit volume in one manifest. Return to compliance 03/18/2015.
04/28/2015	Financial Records Review	DTSC	No violations.
09/30/2015	Focused Compliance Inspection	DTSC	No violations.
10/02/2015	Facility Self-Disclosure		RCRA violations. Return to compliance 10/02/2015.
12/29/2015	Focused Compliance Inspection	DTSC	No violations.
02/09/2016	Compliance Evaluation Inspection	DTSC	RCRA violation – failure to enter a California waste code on a manifest. Return to compliance 02/09/2016.
02/29/2016	Financial Records Review	DTSC	No violations.
09/14/2016	Focused Compliance Inspection	DTSC	No violations.



TABLE 4 (CONTINUED) – KHF RCRA/TSCA INSPECTIONS FROM 1992 TO PRESENT

DATE	TYPE OF INSPECTION	AGENCY	FINDINGS
10/13/2016	Non-Financial Record Review	DTSC	RCRA violations – failure to conduct and analyze the monitoring parameters listed in the Operation Plan of its RCRA Permit. DTSC concluded the groundwater data required were not received for many evaluation monitoring program wells for the 2014 calendar year. Additionally, wells within the Class I monitoring program were not monitored quarterly. Return to compliance 10/13/2016.
02/01/2017	Compliance Evaluation Inspection	DTSC	RCRA violation – failure to label one hazardous waste container per RCRA regulations. Return to compliance 02/01/2017.
03/15/2017	Financial Records Review	DTSC	No violations.
05/02/2017– 05/03/2017	Focused Compliance Inspection (Groundwater)	DTSC	No violations.
08/17/2017	Compliance Evaluation Inspection	DTSC	No violations.
09/28/2017	TSCA Compliance Evaluation Inspection	U.S. EPA	No violations.
03/27-28/2018	Compliance Evaluation Inspection	DTSC	RCRA violations – Mistake on manifest paperwork, failure to close a single 55-gallon drum containing used oil filters, cracking in perimeter flooring of the drum storage unit with no mention of cracking in the weekly KHF reports. Return to compliance 04/26/2018.
04/10/2018	Financial Records Review	DTSC	No violations.
6/28/2018	Focused Compliance Inspection	DTSC	No violations.
09/11/2018	Focused Compliance Inspection	DTSC	No violations.
02/07/2019	Focused Compliance Inspection	DTSC	No violations.



TABLE 4 (CONTINUED) – KHF RCRA/TSCA INSPECTIONS FROM 1992 TO PRESENT

DATE	TYPE OF INSPECTION	AGENCY	FINDINGS
04/16/2019	Compliance Evaluation Inspection	DTSC	Minor violations. Return to compliance: 04/16/2019
05/21/2019	Financial Records Review	DTSC	No violations.

Sources: U.S. EPA 2018h, CWM 2018f, https://www.envirostor.dtsc.ca.gov/public/eeperp_profile_report.asp?global_id=3002354



V. EVALUATION OF RISK OF INJURY TO HUMAN HEALTH AND THE ENVIRONMENT FROM PCB OPERATIONS AT THE KETTLEMAN HILLS FACILITY

40 C.F.R. § 761.65(d)(2)(vi) requires U.S. EPA to determine that a PCB commercial storage facility will not pose an unreasonable risk of injury to health or the environment before granting an approval for its operations. 40 C.F.R. § 761.75(c)(3)(ii) allows U.S. EPA to include any requirements that we find necessary to ensure that operations of a chemical waste landfill do not pose an unreasonable risk of injury to health or the environment from PCBs.

A. EVALUATION OF RISK

While there are many definitions of health and ecological risk, in this context U.S. EPA considers risk to be a measure of the likelihood of developing adverse human health or ecological impacts from exposure to environmental stressors. See <https://www.epa.gov/risk/about-risk-assessment#whatisrisk>.

A stressor is any physical, chemical, biological or social entity that can induce an adverse health impact. In this case we are assessing the risk, or likelihood of developing adverse human or ecological health impacts, from exposure to PCBs potentially released from the Kettleman Hills Facility.

In general terms, the likelihood of developing adverse health and ecological impacts from PCBs is influenced by the following factors:

- The amount (concentration) of PCBs in the environment (e.g., soil, water, air)
- The extent and nature of exposure that an individual or ecosystem has with the contaminant, and
- The intrinsic toxicity or potency of the PCB family of chemicals.

1. PCB ADVERSE HEALTH IMPACTS

PCBs have been demonstrated to cause a variety of adverse health impacts. They have been shown to increase the likelihood (risk) of developing cancer in animals as well as several systemic, non-cancer health effects. Those include adverse impacts on the immune, reproductive, nervous and endocrine systems [ATSDR 2000]. For additional information on the health effects of PCBs, see <https://www.epa.gov/pcbs/learn-about-polychlorinated-biphenyls-pcbs#healtheffects>.

2. KETTLEMAN HILLS FACILITY CONCEPTUAL SITE MODEL AND POTENTIAL ROUTES OF PCB EXPOSURE

A conceptual site model (CSM) is a representation of the linkages among contaminant sources, release mechanisms, and the potential pathways of human or ecosystem exposure. An exposure pathway describes the pathway a chemical or physical agent takes from its source to the exposed individual (receptor). An exposure pathway analysis links the sources, locations and types of



environmental releases with population locations and receptor activity patterns. A complete exposure pathway generally consists of four elements:

- a source and mechanism of chemical release,
- a retention or transport medium or media (e.g., soil, air),
- a point of potential human or ecological contact with the contaminated medium (referred to as the exposure point), and
- an exposure route (inhalation, ingestion or dermal uptake) at the contact point.

The likelihood, or risk, of developing adverse health impacts is dependent on all four elements of this exposure pathway remaining complete. If any element of this exposure pathway is missing, then the pathway is considered incomplete and the resultant health-risk to either humans or the environment is mitigated.

For the Kettleman Hills Facility, PCBs may be released from the Facility as either air emissions or in contamination of water. Air dispersion of PCBs can occur from volatilization (evaporation) of PCB liquids from open containers, from spills and leaks, and from the surface of the landfill. It can also occur if PCB-containing soils become airborne during storage, treatment or disposal operations or during high winds. Water contamination can occur if stormwater contacts PCB waste and is not properly managed onsite and if leaks from the PCB landfills or from the storage containment areas impact groundwater.

A schematic conceptual site model (CSM) for the landfills at Kettleman Hills Facility is provided in **Figure 4** below.

3. NUMERICAL ESTIMATES OF HEALTH-RISK

U.S. EPA's National Oil and Hazardous Substances Pollution Contingency Plan (NCP) [40 C.F.R. Part 300] and risk-assessment guidance⁹ specifies the Agency's acceptable threshold for cancer-causing constituents. Cancer risk is a measure of the likelihood of developing cancer from exposure to a cancer-causing contaminant. The acceptable risk-range for carcinogens spans from 1 additional case of cancer in 1 million exposed individuals (1E-6) to 100 additional cases of cancer in 1 million (1E-4) exposed individuals. See 40 C.F.R. § 300.430(e)(2)(i)(A)(2). The current background incidence of cancer in the United States is 1 case in 3. See <https://seer.cancer.gov/statfacts/html/all.html>.

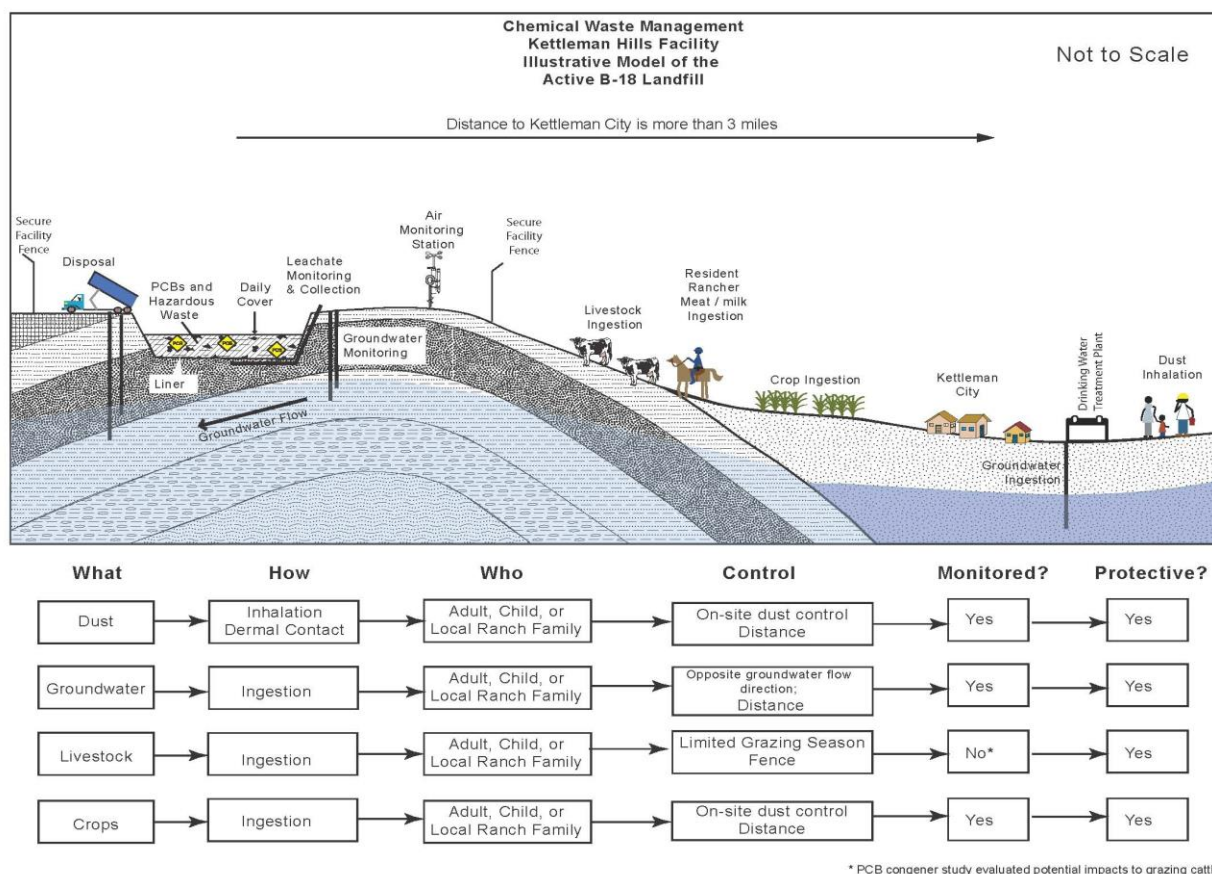
U.S. EPA assesses the potential for developing non-cancer or systemically-toxic adverse health impacts from chemical exposures by initially identifying the minimum concentration of the contaminant that has not been associated with inducing an adverse health impact. This contaminant concentration is then reduced by a number of safety and modifying factors to further reduce the contaminant concentration below a level of concern even for sensitive individuals or subgroups. See 40 C.F.R. § 300.430(e)(2)(i)(A)(1).

⁹ See "Risk Assessment Guidance for Superfund (RAGS) – Volume 1 Human Health Evaluation Manual (EPA/540/1-89/002)." U.S. EPA. December 1989 found at https://www.epa.gov/sites/production/files/2015-09/documents/rags_a.pdf



This conceptual approach allows U.S. EPA to arrive at an estimate of a daily exposure amount for PCBs that is likely to be without appreciable risk of deleterious impacts over a lifetime. This exposure amount is referred to as a reference dose (RfD) for oral (ingestion) exposures and/or a reference concentration (RfC) for inhalation exposures. The RfD for PCBs is 2×10^{-5} milligrams of PCBs per kilogram of body weight per day (mg/kg-day).

FIGURE 4 – CONCEPTUAL SITE MODEL FOR THE KETTLEMAN HILLS FACILITY



B. EXISTING PCB SCIENTIFIC AND PUBLIC HEALTH STUDIES

There have been several multidisciplinary studies and investigations evaluating potential public health and environmental impacts of the Kettleman Hills Facility. We focus in this section on those that evaluate PCBs. We discuss other non-PCB related studies and investigations in **section V.G.** below.

1. THE PCB CONGENERS STUDY AND RISK ASSESSMENT

In response to community concerns, U.S. EPA requested Chemical Waste Management, Inc. to study possible off-site impacts that PCB disposal operations at Kettleman Hills Facility may present to human health or the environment [U.S. EPA 2008b]. U.S. EPA requested the collection

of soil, vegetation and air samples at the perimeter of the Facility and analysis of these samples for the 12 most toxic PCB congeners.¹⁰ This sampling took place during 2009. The results of this sampling were then used to assess risk to human health and the environment from PCB operations at the Facility. These studies are collectively referred to as the Dioxin-Like PCB Congeners Study Report (“PCB Congeners Study”) [Wenck 2010].

U.S. EPA worked closely with Chemical Waste Management to: 1) design the study; 2) review and approve all sampling plans to ensure that Agency standards and protocols were met; 3) oversee sample collection; 4) collect soil split samples; 5) review all of the data against Agency quality assurance/quality control standards; and 6) review and approve the risk analysis report. We also worked closely with the community, including providing multiple opportunities for study design input.¹¹

U.S. EPA reviewed the PCB Congeners Study report and its associated risk analysis report. The study found no evidence suggesting that PCB congeners from operations at KHF migrate off-site at concentrations that would adversely impact the health of nearby residents or the environment. Based on the study results, U.S. EPA concluded the following:

- Concentrations of the most toxic PCB congeners in soil samples collected at the perimeter of the Kettleman Hills Facility are significantly below U.S. EPA’s health-based clean-up levels.
- Risk of health impacts from PCB congener concentrations measured in soils, vegetation, and air near the perimeter of the Facility are in the same range as risk of health impacts in other rural areas without known PCB activities or sources.
- Concentrations of PCB congeners measured in soils, vegetation and air at the Facility perimeter as well as those collected at the Landfill B-18 landfill drainage swale do not adversely affect ecological species.
- There is no evidence suggesting that PCBs are migrating off-site at concentrations that would adversely affect the health of local community residents or the environment.

More information on the results and conclusions of the PCB Congeners Study can be found in the study’s final report a copy of which is located in the administrative record for this action.

2. THE KETTLEMAN CITY COMMUNITY EXPOSURE ASSESSMENT

The Community Exposure Assessment was conducted by the California Environmental Protection Agency (CalEPA) to assess potential environmental contamination in the air, groundwater and soils in Kettleman City that could cause birth defects and other potential health risks to the

¹⁰ PCBs are a group of man-made chemicals that contain 209 individual compounds known as congeners. Twelve of these 209 congeners have been identified by the World Health Organization as having dioxin-like properties and most toxic to human health and the environment. Typically, PCBs are analyzed for Aroclors, which are a mixture of PCB congeners; however, for the PCB Congeners Study, U.S. EPA required the collected samples to be analyzed for the subset of 12 dioxin-like congeners because they are the most significant contributors to risk from PCBs.

¹¹ More information on this community outreach and involvement is in section 6.1 of the Environmental Justice Analysis which can be found in Appendix G of this SB.



community [CalEPA 2010]. The Assessment was concurrent with and in support of California Department of Public Health's (CDPH) investigation into an increase in the number of birth defects in Kettleman City during 2007-2010.¹² The list of chemicals evaluated included PCBs as well as a broad range of industrial and commercial chemicals (volatile and semi-volatile organic compounds), metals, and pesticides [CalEPA 2010, part 2, pp. 9-15].

Responsibility for the Assessment was divided among several CalEPA boards and departments including the California Air Resource Board (CARB), DTSC, and the California Department of Pesticide Regulations (CDPR). More detailed discussion of each agency's investigation as each relates to PCBs is below. More details on the investigations as they related to other chemicals and metals can be found in Draft Environmental Justice Analysis. See **section VI.** and **Appendix G.**

a. KETTLEMAN CITY AIR QUALITY ASSESSMENT

Air monitoring as part of the Community Exposure Assessment was planned and carried out by CARB with analyses of the PCB congener samples done by the U.S. EPA Laboratory [CalEPA 2010, part 2, p. 23]. Air monitoring was conducted at three sites: Kettleman City Elementary School and the upwind monitoring site and downwind air monitoring site #2 at the Kettleman Hills Facility. Results from the monitoring showed that PCBs were found in the ambient air at concentrations similar to other parts of California with the concentration found at the Kettleman City Elementary School monitoring site a little higher than found upwind and downwind of the Facility. The ambient concentrations of PCB congeners found at all these sites were well below the level of health concern. [CalEPA 2010, part 2, p. 57]

Overall, CalEPA concluded that the air monitoring indicated that the Kettleman Hills Facility did not affect the ambient concentrations of the chemicals found in the air of Kettleman City. It also concluded that it was not likely that airborne contaminants measured during the study at the Facility pose health risks to the residents of Kettleman City. [CalEPA 2010, part 2, p. 58]

b. KETTLEMAN CITY WATER QUALITY ASSESSMENT

Sampling of water in Kettleman City as part of the Community Exposure Assessment was planned and carried out by DTSC with analyses of the samples done primarily by the U.S. EPA Region 9 Richmond Laboratory [CalEPA 2010, part 2, p. 28]. Water samples were taken from eleven home kitchen sink faucets, the three community water wells, the California Aqueduct, and an agricultural drainage canal. Three of the residential water samples and all well and canal samples were analyzed for PCBs. No PCBs were detected in any sample [CalEPA 2010, part 2, pp. 51, 53, and 54].

Multiple lines of scientific evidence have indicated that groundwater beneath Kettleman Hills Facility is not hydraulically connected to the groundwater underlying Kettleman City [CalEPA 2010, section 2, p. 17; RWQCB 2014a, p. 3]. This means that groundwater below the Facility is

¹² The final report for this investigation "Investigation of Birth Defects and Community Exposures in Kettleman City, CA" was issued jointly by the CDPH and CalEPA in November 2010 and consists of an executive summary and two parts. Part 1 contains the "Investigation of Birth Defects in Kettleman City" and "An Evaluation of the Pattern of Cancer Occurrences in the Vicinity of Kettleman City" both by CDPH. Part 2 is the "Kettleman City Community Exposure Assessment" by CalEPA. The final report without its appendices is listed in the **reference section** of this SB under CalEPA 2010. The appendices, when referenced in this SB, are listed separately.



hydraulically isolated from any drinking water source, and that groundwater is not considered to be a possible exposure pathway to residents through the consumption of contaminated drinking water.

c. KETTLEMAN CITY SOIL CONTAMINATION ASSESSMENT

Sampling of soil in Kettleman City as part of the Community Exposure Assessment was planned and carried out by DTSC with analyses of the samples done primarily by the U.S. EPA Region 9 Richmond Laboratory [CalEPA 2010, part 2, pp. 28]. Nine samples from residences distributed evenly across the community and four additional samples from the base of utility poles that had transformers¹³ attached to them were analyzed for PCBs [CalEPA 2010, part 2, p. 28; ACS 2010]. No PCBs were detected in any of the soil samples [CalEPA, part 2, p. 55].

3. THE KETTLEMAN HILLS FACILITY 2011 HEALTH RISK ASSESSMENT

DTSC required Chemical Waste Management, Inc. to establish an Ambient Air Quality Monitoring Program (AAMP) as part the Facility's 2003 RCRA permit. The AAMP was designed to assess releases of VOCs, semi-volatile compounds (including PCBs), metals, and particulates from the Facility. Historic waste profiles and the Facility's 1994 characterization study¹⁴ were used to establish the list of chemicals of concern. The AAMP originally established three monitoring locations near the Facility's property line: two fixed locations downwind (south-southeast and east) and one fixed location upwind (north-northwest).¹⁵ [Wenck 2016a]. More information on the AAMP can be found in **section III.F.2.** of this SB.

In 2011, the Kettleman Hills Facility evaluated ambient air quality data from the three sampling stations between 2006 and 2010 and performed a risk assessment using these data to evaluate potential risks to human health in the area surrounding the Facility from emissions from the Facility [Wenck 2011c].

This study included two components, an "Inhalation Health Risk Assessment" (HRA) and a "Residential HRA." The Inhalation HRA evaluated risks from potential emissions from the Facility to a hypothetical ranch worker working next to the Facility's property line and for a hypothetical commercial/industrial worker working at a facility located next to the property line. The "Residential HRA" evaluated risks from potential emissions from the Facility for four different scenarios. Three scenarios covered residential areas in and around Kettleman City (Kettleman City, Kettleman Junction and the nearest resident to the Facility). The fourth scenario was a hypothetical long-term resident rancher living right next to the Facility's property line. All

¹³ Dielectric fluid in electrical transformers is the most common historical uses of PCBs. Leaks or other releases from PCB-containing transformers could contaminate the ground around the base of utility poles.

¹⁴ Under DTSC guidelines, an independent firm conducted the "1994 Topographical, Meteorological and Airborne Contaminant Characterization at Kettleman Hills Facility" [Rust 1995]. The purpose of this study was to "identify and quantify hazardous constituents being emitted into the air from the facility and to fully characterize the topography and meteorological conditions at the facility which would affect their transport." [Rust 1995, p. v].

¹⁵ The 2014 RCRA permit modification required installation of a fourth permanent station between the Facility and Kettleman City. This site began operating in 2016. This additional ambient air monitoring location was added to assess releases of VOCs, semi-volatile organic compounds (including PCBs), metals and particulates that are emitted when the predominant wind direction is toward Kettleman City.



four residential risk assessments evaluated risks associated with potential emissions from KHF. The assessment found that potential emissions of PCBs as well as VOCs, pesticides, metals, and particulates from Kettleman Hills Facility do not pose health risks in residential areas in and around Kettleman City for the following reasons:

- The risk results for additional lifetime cancer risks and noncancer health effects at all three residential locations in and around Kettleman City were well below target risk levels identified by U.S. EPA.
- The calculated risks in and around Kettleman City associated with KHF emissions were at least 1,000 times lower than the calculated background inhalation risk.
- The potential worst-case additional lifetime cancer risks for a hypothetical long-term resident rancher living at the maximum impact property boundary location, were within U.S. EPA's target risk management range.
- The potential lifetime cancer risks due to the Facility's emissions for a hypothetical commercial/industrial worker working at the maximum impact property boundary location were at the low end of USEPA's benchmark risk management range, and marginally higher than the DTSC benchmark risk level.
- The risk results for noncancer health effects for all scenarios (the Hazard Index) were well below target risk levels identified by U.S. EPA.

Chemical Waste Management, Inc. annually prepares and submits to DTSC a screening level human risk evaluation which updates the 2011 Health Risk Assessment using the most recent year's ambient air monitoring data. Annual screening reports have been submitted for 2012, 2013, 2014, 2015, 2016, 2017, and 2018. None have shown substantial differences in human health risks from Facility air emissions compared to the 2011 assessment [Wenck 2012c, Wenck 2013b, Wenck 2014a, Wenck 2015b, Wenck 2016b, Wenck 2017a, Wenck 2018a].

C. AIR QUALITY AND GROUNDWATER MONITORING

U.S. EPA reviewed available ambient air quality monitoring data that has been collected at the Kettleman Hills Facility's monitoring stations since the conclusion of the PCB Congeners Study. We also reviewed groundwater monitoring data collected after completion of the Kettleman City Community Exposure Assessment. We reviewed this data to determine if PCB releases from the Facility have been detected since these studies concluded.

The air quality and groundwater monitoring programs at the Kettleman Hills Facility have been on-going for many years under the Facility's state RCRA permit and waste discharge order [DTSC 2003; RWQCB 2014b]. The Facility's previous TSCA approvals also required groundwater monitoring [U.S. EPA 1992b].

Since the current program of air monitoring at the Facility started in October 2006 until 2016, air samples for PCB analysis were collected once every 12 days for 24-hours each.¹⁶ In 2016, month

¹⁶ From mid-April 2008 until early January 2011, PCB monitoring under the Facility's AAMP was discontinued with DTSC's approval because no PCBs above the detection limits had been identified in the 18 months of sampling prior



long sampling for PCBs was added [Wenck 2016; DTSC 2016]. U.S. EPA reviewed air monitoring reports submitted by the Facility between 2011 and 2018 to determine if PCBs have been detected at the Facility's air monitors.¹⁷ No PCBs have been detected above the applicable detection limits. [Wenck 2011a, b, & d; Wenck 2012a, b, d, & e; Wenck 2013a & c-e; Wenck 2014b-d; Wenck 2015a& c-e; Wenck 2016a& c-e; Wenck 2017b-e; Wenck 2018b-e; Wenck 2019].

Groundwater monitoring data has been collected at the Kettleman Hills Facility for over 30 years. Currently, groundwater samples are tested for PCBs once every five years as part of the constituents of concern (COC) testing required by the RWQCB and DTSC. The last COC testing was conducted in the fourth quarter of 2016 (October through December 2016) [AMEC 2017]. Previous COC testing was performed in the first quarter of 2012 [AMEC 2012]. PCBs were not detected in either of these tested samples.

D. EXISTING AND PROPOSED PHYSICAL AND OPERATIONAL CONTROLS TO LIMIT RISK

The design of the PCB Units and required operational controls at Kettleman Hills Facility address each of the pathways that PCBs may travel offsite to reduce the potential for PCB releases.

The potential for air emissions of PCBs is reduced through requirements for:

- keeping containers closed when waste is not being transferred in or out (proposed Condition V.D.5.),
- a carbon filter on PCB Storage Tank vent (proposed Condition V.F.7.),
- swift cleanup of spills (proposed Conditions IV.G.1. and 2.),
- regularly inspection of containers and tanks for leaks (proposed Condition V.H.1.),
- solidification of liquids prior to landfiling (proposed Conditions VI.B.1.i. and r.),
- daily landfill cover (proposed Condition VI.D.7.),
- dust management practices (proposed Conditions IV.F.5. and VI.D.8.), and
- cessation of landfiling operations during high wind events (proposed Condition VI.D.8.).

The potential for PCB contamination of stormwater is reduced through requirements for:

- design of landfill to prevent run on and runoff (proposed Conditions VI.F.1. and 2. and VII.B.3.e.),
- collection of stormwater that contacts waste (collected stormwater is treated as hazardous waste) (proposed Conditions VI.F.1., 2. and 3.),

to 2008 [Wenck 2010, p. 2-6.]. However, during this period, air monitoring for PCBs was conducted throughout 2009 as part of the PCB Congeners Study [Wenck 2010, p. 3-5] and again between mid-June and September, 2010 for the Kettleman City Environment Assessment [CARB 2010].

¹⁷ Air monitoring data prior to 2009 were reviewed as part of the PCB Congeners Study. No PCBs were identified above the detection limit [Wenck 2010, p. 2-6].



- implementation of a pollution prevention program for stormwater (proposed Condition VI.F.1.),
- limiting amount of PCB waste that can be stored to 25 percent of available containment volume (proposed Condition V.C.1.),
- PCB Waste handling and storage operations to occur within containment areas (proposed Conditions V.E.1.), and
- sizing of outside containment area to account for a maximum rain event (proposed Condition V.C.1. and Renewal Application, Attachment 7).

The potential for PCB contamination of groundwater is reduced through requirements for:

- no disposal of PCB liquids in Landfill B-18 (proposed Condition VI.C.2.),
- lined landfills (Renewal Application, Section 5.1),
- leachate collection and removal systems (proposed Conditions VI.E. and VII.B.3.b.);
- inspection and maintenance of covers on closed landfills (proposed Condition VII.B.3.d.),
- maintenance of the containment areas at the PCB F/SU (proposed Conditions V.H.4), and
- the conditions listed previously to reduce PCB contamination by stormwater.

E. MONITORING REQUIREMENTS TO IDENTIFY PCB RELEASES

The Kettleman Hills Facility has ambient air and groundwater monitoring programs that can detect releases of PCBs. These programs were designed in conjunction with the DTSC (air and groundwater) and the Central Valley Regional Water Quality Control Board (groundwater) to provide the information needed to protect human health and the environment. In addition to these environmental monitoring program, the Facility has a comprehensive facility inspection program which requires daily, weekly, and monthly checks of all aspects of the Facility's operations and quarterly tests the PCB Flushing/Storage Unit for PCB contamination. These programs are described in **section III.F.** of this SB.

F. PROPOSED DETERMINATION

U.S. EPA proposes to determine that PCB waste storage, treatment for disposal, and disposal operations at the Kettleman Hills Facility as allowed and limited by the proposed Approval will not pose an unreasonable risk of injury to health and the environment.

This risk-based determination is predicated on the analysis of a number of objective, site-specific and multidisciplinary scientific investigations which collectively assessed the exposure threat and health-risk posed by potential PCB releases from the Kettleman Hills Facility. This risk-based determination is also contingent upon the multimedia monitoring and surveillance requirements



for PCBs, as discussed above, as well as design and operational controls imposed on the Facility in this proposed Approval.

Any individual scientific study or environmental investigation may suffer from data gaps, study-design limitations and confounding factors that collectively serve to undermine the findings or conclusions that can be drawn from that study. Because of these vulnerabilities, rather than rely on any single study, this determination relies on the findings and conclusions drawn from a number of multidisciplinary and complementary site or community-specific scientific investigations. This strategic approach allows U.S. EPA to assess the overarching weight of the scientific evidence regarding the exclusive relationship between potential PCB releases and the likelihood or magnitude of adverse health impacts within the Kettleman City community. Collectively, these studies focused on the potential relationship between PCBs released from the Facility and the wide-ranging public health impacts documented in Kettleman City (see Environmental Justice Analysis, section 3.4). These studies were not able to identify PCB concentrations above a level of concern, nor unacceptable health risk-estimates to either residents or Facility (on-site) workers. Further, based on comprehensive monitoring and surveillance information, the concentration of PCBs found at locations proximate to the Facility are consistent with the concentrations of PCBs found in many rural areas of California's Central Valley [Wenck 2010; EPA 2007b]. These PCB concentrations are also consistent with the concentration of PCBs found by a separate U.S. EPA investigation in undisturbed wilderness locations of the U.S. [Wenck 2010; EPA 2007b].

U.S. EPA acknowledges this determination is predicated exclusively on the potential PCB releases and consequences from the Kettleman Hills Facility. By definition then, the scientific criteria evaluated in support of this determination are not inclusive of the social determinants of health which negatively impact the residents of Kettleman City. Unfortunately, other environmental and social stressors which potentially impact the public health status of this community—such as high levels of arsenic in drinking water and low incomes—remain beyond the scope of this regulatory action under TSCA. U.S. EPA has evaluated these stressors for the Kettleman City community in the Environmental Justice Analysis that accompanies this proposal. See **section VI.** and **Appendix G.** Nevertheless, TSCA does allow U.S. EPA to impose PCB control and monitoring requirements as necessary to ensure that the Kettleman Hills Facility does not pose an unreasonable risk to public health or the environment. U.S. EPA believes the multimedia controls and monitoring requirements included in this proposed Approval ensure this level of protection.

A number of other environmental and health studies and investigations have evaluated potential contaminants other than PCBs in Kettleman City and the Kettleman Hills Facility. These studies and investigations were not able to correlate or characterize a causal relationship between facility operations, facility releases and the public health impacts that have been previously documented within the Kettleman City community. A synopsis of these studies found in the Draft Environmental Justice Analysis in **Appendix G.**



VI. ENVIRONMENTAL JUSTICE ANALYSIS

Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Achieving environmental justice is a U.S. EPA priority and is an integral part of the U.S. EPA's mission to protect human health and the environment.

U.S. EPA focused the Draft EJ Analysis on Kettleman City. The Kettleman City community has a long history of advocating for environmental justice in local, state, and federal decisions related to the Facility. This history of advocacy has already helped the community in the ways discussed in this Draft EJ Analysis and has also helped U.S. EPA to prepare this Draft EJ Analysis and the proposed Approval.

For the proposed Approval, U.S. EPA considered publicly available data, tools, studies, and concerns expressed by the community to focus on potential health and environmental impacts that are within U.S. EPA's legal authority to address during the permitting process. Multiple objective, site-specific and multidisciplinary scientific investigations have been completed since 2007, giving U.S. EPA information to better understand any exposure threat or potential health risks posed by Facility operations. Previous and more recent outreach activities have also helped U.S. EPA engage with Kettleman City to identify and address community concerns both inside and outside the scope of the PCB action. U.S. EPA's findings, based on the information detailed in the analysis, can be summarized as follows:

- U.S. EPA acknowledges that the majority of Kettleman City residents are minority and low-income. It also shows that Kettleman City has an above average number of residents whose primary language is Spanish and above average number of adults that did not graduate high school. Kettleman City faces several environmental burdens including poor air quality and drinking water that exceeds the state drinking water quality standards for arsenic. In past years, the community suffered an increased occurrence of birth defects. Mortality rates in Kings County are higher than the state-wide rates and children and older adults in Kings County are more impacted by asthma than the state average.
- U.S. EPA reviewed air monitoring between 2011 and 2018. PCBs have not been detected above the applicable detection limits.
- Groundwater monitoring has been conducted at the Facility for over 30 years. PCBs have rarely been detected.
- The PCB Congeners Study found no evidence suggesting that PCB congeners from operations at the Facility are migrating off-site at concentrations that would adversely affect the health of local community residents or the environment.
- CWM has been responsive to RCRA and TSCA compliance issues. While KHF has violated applicable requirements in the past, the corrective actions that the Facility implemented to address these violations include physical and operational improvements to reduce the potential for future violations and to prevent and contain future releases.



- The proposed permit conditions will prevent or reduce releases, quickly discover and correct situations that could lead to releases or minimize releases that may happen and continue Facility-specific air and groundwater monitoring for PCBs.

U.S. EPA's analysis is that the proposed PCB permit, if finalized, will ensure that PCB operations at the Kettleman Hills Facility will not pose an unreasonable risk of injury to health and the environment. The proposed permit includes engineering and operational controls that prevent or reduce the likelihood of PCB releases from the facility. It also includes facility PCB monitoring requirements for air and water that will provide additional information to protect the community. The proposed permit decision is supported by a number of multidisciplinary public health investigations conducted or required by local, state and federal agencies. Collectively, these studies have shown no increased human health risk to the community from PCB operations at this facility. The Draft EJ Analysis can be found in **Appendix G**.

VII. SUPPORTING DETERMINATIONS

A. NATIONAL HISTORIC PRESERVATION ACT

Section 106 of the National Historic Preservation Act ("NHPA"), 54 U.S.C. §100101 *et seq.*, requires federal agencies to account for the effects of their undertakings on historic properties, and afford consulting parties and the public reasonable opportunity to comment. The requirements of NHPA apply to the U.S. EPA for the renewal and modification of the TSCA Approvals for CWM to manage PCB waste at the Facility because issuance of this Approval is an "undertaking" pursuant to NHPA.

Pursuant to 36 C.F.R. § 800.4(d)(1), U.S. EPA made the determination of "No Effect to Historic Properties" for the renewal and modification of the Approvals in a letter to the California Office of Historic Preservation ("OHP") on September 17, 2018 [U.S. EPA 2018f]. The OHP's State Historic Preservation Officer concurred with U.S. EPA's determination in a letter dated October 8, 2018 [COHP 2018].

On September 28, 2017, U.S. EPA submitted a request for a Sacred Lands File and Native American Contacts List to the Native American Heritage Commission (NAHC), located in Sacramento, California [U.S. EPA 2017a]. In an October 17, 2017 letter to U.S. EPA, the NAHC indicated that a Sacred Lands File Search was completed for the Area of Potential Effect with negative results [NAHC 2017]. NAHC also responded with a Native American Contact List which the U.S. EPA used to contact Tribes listed via certified mail on July 25, 2018, with a written description of the project and a request for each tribe to become a consulting party [U.S. EPA 2018a-e]. We received confirmation of receipt for all letters. No Tribes responded to our request.

Key documents related to U.S. EPA's determination under the NHPA can be found in **Appendix H**. Additional information is located in the administrative record.



B. ENDANGERED SPECIES ACT

Section 7(a)(2) of the Endangered Species Act (“ESA”) [16 U.S.C. § 1536(a)(2)] requires all Federal agencies, in consultation with the United States Fish and Wildlife Service (“FWS”), to insure that any action they carry out, fund, or authorize (such as through a permit) is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat.

U.S. EPA considers issuance of a TSCA approval as an action subject to the ESA. To assist the Agency in fulfilling its obligations under Section 7 of the ESA, U.S. EPA required that Chemical Waste Management, Inc. identify any listed species (e.g., Kit Fox) and designated critical habitat that may be present at or near the Facility [CWM 2011]; conduct soil, air, and vegetation sampling for PCB congeners [U.S. EPA 2008b]; develop an ecological risk assessment [CWM 2010]; and develop a biological assessment [CWM 2011]. On September 20, 2011, U.S. EPA requested formal consultation with FWS on CWM’s application for the renewal and modification of its TSCA Approval for the Kettleman Hills Facility [U.S. EPA 2011c]. FWS responded with a final Biological Opinion dated August 15, 2012 [FWS 2012a], which was amended on September 5, 2012 [FWS 2012b] and July 23 and 30, 2014 [FWS 2014a and FWS 2014b]. A copy of the amended 2012 Biological Opinion that includes conditions of the Biological Opinion is included in the Administrative Record. These conditions include:

- CWM and KHF employees and/or contractors must adhere to the standard operational measures set forth in the FWS’s revised January 2011 (as updated) *Standard Measures for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance Construction and Operation Requirements*. Requirement is included in proposed Condition IV.B.3.
- Disturbance to all San Joaquin kit fox dens shall be avoided to the maximum extent possible and if dens or potential dens are identified monitoring and/or excavation of those dens shall take place. This requirement is included in proposed Condition IV.B.3.
- All exclusionary fencing shall be inspected monthly to ensure proper integrity and if gaps and/or holes are discovered operational activities shall cease and the project footprint shall be resurveyed for San Joaquin kit fox. Requirement is included in proposed Condition IV.I.2.
- EPA shall verify the CWM purchase of San Joaquin kit fox conservation credits at a conservation bank with an appropriate service are and at a ratio of three acres of conservation habitat purchased for every one acre of habitat lost.¹⁸

Table 5 provides the FWS species list of federal endangered and threatened species that may be present in the area of the Proposed Project (operations at the Kettleman Hills Facility). Of the species on that list, the Proposed Project could affect the following federally and state listed species.

¹⁸ CWM purchased the required San Joaquin kit fox credits at the Kreyenhagen Hills Conservation Bank on March 27, 2013 [WDLN 2013].



TABLE 5 – FEDERAL ENDANGERED AND THREATENED SPECIES POTENTIALLY PRESENT AT THE KETTLEMAN HILLS FACILITY

SPECIES	CRITICAL HABITAT	STATUS	EFFECTS DETERMINATION
San Joaquin kit fox (<i>Vulpes macrotis mutica</i>)	None	Federally Endangered, State Threatened	May affect, and is likely to adversely affect
Blunt-nosed leopard lizard (<i>Gambelia sila</i>)	None	Federally and State Endangered, State Fully Protected	May affect, but not likely to adversely affect
San Joaquin woolly-threads (<i>Lambertia congdonii</i>)	None	Federally Endangered	May affect, but not likely to adversely affect
California jewelflower (<i>Caulanthus californicus</i>)	None	Federally and State Endangered	May affect, but not likely to adversely affect

On October 11, 2018, U.S. EPA concluded that the reinitiation of formal consultation with FWS was not needed [U.S. EPA 2018i]. U.S. EPA determined that none the of the four conditions for reinitiation of formal consultation, as provided in the 2012 Biological Opinion, were met and therefore the scope of the proposed Approval has been addressed in the Biological Opinion. On December 7, 2018, FWS concurred with U.S. EPA’s determination [FWS 2018]. See **Appendix I**.

C. WILD AND SCENIC RIVERS ACT

The Wild and Scenic Rivers Act, (“WSRA”) 16 U.S.C. § 1273, *et seq.* Section 7 of the WSRA prohibits federal agencies from assisting the licensing or construction of any water resources project that would have a direct, adverse effect on the values for which a national wild and scenic river was established.

The issuance of TSCA Approval to the Kettleman Hills Facility is not subject to the WSRA because it is a not a water resources project as defined in section 16(b) of the WSRA and the Facility is not located within the bed or banks upstream, downstream, or on a tributary to a Wild and Scenic River corridor.

D. COASTAL ZONE MANAGEMENT ACT

The Coastal Zone Management Act, 16 U.S.C. § 1451, *et seq.* Section 307(c) of the Coastal Zone Management Act, and its implementing regulations at 15 C.F.R. Part 930, prohibit federal agencies from issuing a permit for an activity affecting land or water use in the coastal zone until the applicant certifies that the proposed activity complies with the state Coastal Zone Management program, and the state or its designated agency concurs with the certification (or the Secretary of Commerce overrides the State's non-concurrence).



The Coastal Zone Management Act does not apply to this proposed Approval because the Kettleman Hills Facility does not lie within the California Coastal Zone management program as defined by the State of California. See <https://www.coastal.ca.gov/maps/czb/>

E. FISH AND WILDLIFE COORDINATION ACT

The Fish and Wildlife Coordination Act, 16 U.S.C. § 661, et seq. requires federal agencies, before issuing a permit proposing or authorizing the impoundment (with certain exemptions), diversion, or other control or modification of any body of water, consult with the appropriate state agency exercising jurisdiction over wildlife resources to conserve those resources.

The Fish and Wildlife Coordination Act does not apply to this proposed Approval because it neither proposes nor authorizes the impoundment, diversion, or other control or modification of any body of water.

F. GENERAL CONFORMITY UNDER THE CLEAN AIR ACT

1. GENERAL CONFORMITY REQUIREMENTS

Section 176(c) of the Clean Air Act (CAA) [42 U.S.C. § 7506(b)] requires all federal agencies ensure their actions conform to states' plans to attain and maintain the National Ambient Air Quality Standards (NAAQS). Conformity to a state's air quality plan means that a federal activity will not cause new violations of the NAAQS, increase the frequency or severity of NAAQS violations, or delay timely attainment of the NAAQS or any interim milestone toward attainment. The conformity process ensures that emissions of air pollutants from planned federal activities would not affect the state's ability to attain and maintain the NAAQS.

A general conformity determination is based on emissions from the federal action. Federal agencies must evaluate and address both direct and indirect emissions that are likely to occur from an action. More information on general conformity requirements can be found at <https://epa.gov/general-conformity>.

U.S. EPA has adopted regulations at 40 C.F.R. Part 93, Subpart B to implement the CAA's general conformity requirements. The requirements of Part 93, Subpart B apply in areas where U.S. EPA has not approved a state (or tribal) General Conformity rule. See 40 C.F.R. § 93.151. Where U.S. EPA has approved a state conformity rule, a conformity evaluation is governed by the approved state criteria and procedures. The Kettleman Hills Facility is located in jurisdictional boundaries of the San Joaquin Valley Air Pollution Control District ("SJVAPCD"). U.S. EPA approved the SJVAPCD's general conformity rule, Rule 9110 (adopted October 20, 1994), on April 23, 1999 (64 FR 19916). We have, therefore, followed Rule 9110 for the purposes of this conformity analysis.

2. GENERAL CONFORMITY APPLICABILITY ANALYSIS

As noted above general conformity applies to non-transportation-related federal actions that take place in areas designated as nonattainment or maintenance for a NAAQS. The first step in the



general conformity process is to determine if there is a federal action that requires a general conformity determination under 40 C.F.R. Part 93, Subpart B. This is the “applicability analysis” as defined in 40 C.F.R. § 93.152 and required by § 93.153.

This proposed Approval for the Kettleman Hills Facility is a federal action that takes place in an area that is designated nonattainment or maintenance for a NAAQS. The Kettleman Hills Facility is located in Kings County which is part of the San Joaquin Air Basin. The San Joaquin Valley Air Basin is currently designated as nonattainment and classified as extreme for all ozone NAAQS, designated nonattainment and classified as serious for all fine particulate matter (PM_{2.5}) NAAQSs and designated as a maintenance area for coarse particulate matter (PM₁₀) NAAQS (40 C.F.R. § 81.305).

The General Conformity applicability requirements in Rule 9110 § 51.853 and 40 C.F.R. § 93.153 lists several types of projects that are exempted from the requirement for a general conformity determination, including 40 C.F.R. § 93.153(c)(ii)/Rule 9011 § 51.853(c)(2)(ii) which addresses continuing and recurring activities such as permit renewals where activities conducted will be similar in scope and operation to activities currently being conducted. The proposed PCB Approval for the Kettleman Hills Facility includes approval of both continuing and new activities, therefore, some portions of the proposed Approval can be exempted from this general conformity applicability. However, we have chosen to include emissions from both continuing and new activities in this applicability analysis to be conservative in our estimate of potential emissions.

To determine if the Kettleman Hills Facility’s PCB Approval is exempt from a general conformity determination due to de minimis emissions, U.S. EPA estimated the total direct and indirect emissions that could be emitted as a consequence of a final approval. As shown in **Table 6** below, total estimated direct and indirect emissions are well below de minimis emissions thresholds. In addition, Rule 9110 subjects any otherwise exempt federal project whose emissions are 10 percent or great of the nonattainment or maintenance area’s total emissions to a general conformity determination. Total direct and indirect emissions from a final approval are also well below 10 percent of the San Joaquin Valley air basin’s total emission inventories. Based our emission calculations, U.S. EPA’s proposed TSCA Approval for Chemical Waste Management, Inc.’s Kettleman Hills Facility is exempt from a conformity determination under CAA section 176(c), SJVAPCD Rule 9110, and 90 C.F.R. Part 93, Subpart B. A more detailed analysis is in **Appendix J** to this SB.



TABLE 6 – ESTIMATED EMISSIONS FROM PCB OPERATIONS COMPARED TO APPLICABLE DE MINIMIS LEVELS – KETTLEMAN HILLS FACILITY

	NO_x	VOC	SO_x	PM₁₀	PM_{2.5}	CO
	<i>tons per year</i>					
PCB F/SU operations	0.017	0.007	—	0.019	0.006	—
Landfill B-18 PCB waste operations	1.22	0.11	0.00	1.05	0.35	0.5
Total PCB operations	1.237	0.117	0.00	1.069	0.356	0.5
De minimis level	10	10	70	100	70	70
Above de minimis level?	No	No	No	No	No	No
10% of regional emissions	7,811	10,877	N/A	9,673	N/A	1,679
Above 10% of regional emissions?	No	No	N/A	No	N/A	No
Subject to general conformity determination?	No	No	No	No	No	No



VIII. REFERENCES

- ACS 2010 Kettleman City Site Investigation Report, Sampling Results Addendum XX. ACS Associates. October 25, 2010 (Appendix to CalEPA 2010).
- ADE 2011 “PCB Outside Pad Replacement and Cleanup Completion Report Kettleman Hills Facility, Kings County, CA.” Associated Design & Engineering, Inc. January 10, 2011 (revised July 20, 2011).
- AMEC 2008 “Addendum to Evaluation of Pre-Sample Purge Methods, Kettleman Hills Facility, Kings Kettleman City, California.” Letter, Bradley A. Loewen and Philip P. Ross, AMEC Geomatrix, Inc. to Paul Turek, Chemical Waste Management, Inc. June 27, 2008.
- AMEC 2012 “Second Quarter 2012 Groundwater and Unsaturated Zone Monitoring and Constituents of Concern Report for Class I Waste Management Units, Kettleman Hills Facility, Kings County, CA.” AMEC Environment & Infrastructure, Inc. September 25, 2012.
- AMEC 2014 “Revised Site-Specific Groundwater Monitoring Plan Class I Waste Management Units, Kettleman Hills Facility, Kings County, California.” AMEC Environment & Infrastructure, Inc. 2014.
- AMEC 2017 “Fourth Quarter 2016 Monitoring and Constituents of Concern Report for Class I Waste Management Units As Required by DTSC on March 6, 2015, Kettleman Hills Facility, Kings County, CA.” AMEC Environment & Infrastructure, Inc. February 24, 2017.
- ATSDR 2000 “Toxicological Profile for Polychlorinated Biphenyls (PCBs).” Agency for Toxic Substances and Disease Registry. November 2000. Found at <https://www.atsdr.cdc.gov/ToxProfiles/tp.asp?id=142&tid=26>
- CalEPA 2010 “Investigation of Birth Defects and Community Exposures in Kettleman City, CA.” California Environmental Protection Agency and California Department of Public Health. December 2010.
- CARB 2010 “Report to the Office of Environmental Health Hazard Assessment, Kettleman City Air Quality Assessment.” California Air Resources Board, November 2010.
- COHP 2018 “Toxic Substances Control Act Permit Renewal, Kettleman Hills Facility, 35251 Old Skyline Road, Kettleman City, Kings County, California.” Letter, Julianne Polanco, State Historic Preservation Officer, California Office of Historic Preservation to Barbara Gross, U.S. EPA Region 9. October 8, 2018.
- CWM 1997a “TSCA Approval Renewal for Landfills B-18, Chemical Waste Management, Inc. Kettleman Hills Facility CAT 000 646 117.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Yoshiro Tokiwa, U.S. EPA Region 9. April 1, 1997



CWM 1997b	“TSCA Approval Renewal for Landfills B-14, B-16 and B-19 and Ancillary Commercial Storage Activities, Chemical Waste Management, Inc. Kettleman Hills Facility CAT 000 646 117.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Yoshiro Tokiwa, U.S. EPA Region 9. July 1, 1997.
CWM 1999	“Re: Chemical Waste Management, Inc. – Kettleman Hills Facility Response to TSCA Permit Renewal Information Request #2.” Letter, Paul Turek, Chemical Waste Management, Inc. to Paula Bisson, U.S. EPA Region 9. October 11, 1999. With Attachments.
CWM 2003	“Chemical Waste Management, Inc. – Kettleman Hills Facility Request for TSCA PCB Coordinated Approval.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Wayne Nastri, Regional Administrator, U.S. EPA Region 9. October 20, 2003.
CWM 2004	“Chemical Waste Management, Inc. – Kettleman Hills Facility Monitoring of Landfill B-16 Lysimeters.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Max Weintraub, U.S. EPA Region 9. February 13, 2004.
CWM 2007	“Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2006 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. June 26, 2007.
CWM 2008a	“Chemical Waste Management, Inc. -Kettleman Hills Facility Response To TSCA Notice Of Noncompliance Follow-Up Letter PCB Performance Evaluation Samples-Second Set.” Letter, Paul Turek, Chemical Waste Management, Inc. to Christopher Rollins, U.S. EPA Region 9. February 12, 2008.
CWM 2008b	“Chemical Waste Management, Inc. Kettleman Hills Facility CAT 000 646 117 Revised 2007 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. August 4, 2008.
CWM 2009a	“Chemical Waste Management, Inc. – Kettleman Hills Facility Request to Modify TSCA PCB Coordinated Approval Request.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. June 26, 2009.
CWM 2009b	“Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2008 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 15, 2009.
CWM 2010	“Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2009 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 8, 2010.



CWM 2011	“Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2010 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 13, 2011.
CWM 2012a	“Chemical Waste Management, Inc. – Kettleman Hills Facility Re: “Other” Noncompliance Report.” Letter, Paul Turek, Chemical Waste Management, Inc. to Wayne Lorentzen, DTSC. May 23, 2012.
CWM 2012b	“Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2011 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 6, 2012.
CWM 2013	“Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2012 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 8, 2013.
CWM 2014	“Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2013 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 9, 2014.
CWM 2015	“Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2014 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 8, 2015.
CWM 2016	“Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2015 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 20, 2016.
CWM 2017a	“Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2016 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 5, 2017.
CWM 2017b	“Chemical Waste Management, Inc. – Kettleman Hills Facility Revised TSCA Permit Renewal Application – Revision 1”. Reyna Verdin, Chemical Waste Management, Inc. to Frances Wicher, U.S. EPA Region 9. July 13, 2017.
CWM 2017c	“TSCA Renewal Application, Chemical Waste Management, Inc. Kettleman Hills Facility.” Revision 1: July 15, 2017.
CWM 2018a	“Hazardous Waste Facility Permit Renewal Application, Operation Plan, Chemical Waste Management, Inc. Kettleman Hills Facility.” Chemical Waste Management, Inc. Revision 3: March 16, 2018.
CWM 2018b	“Chemical Waste Management, Inc. – Kettleman Hills Facility Revised TSCA Permit Renewal Application – Revision 2”. Reyna Verdin, Chemical Waste Management, Inc. to Frances Wicher, U.S. EPA Region 9. April 19, 2017.



CWM 2018c	“TSCA Permit Renewal Application, Chemical Waste Management, Kettleman Hills Facility.” Revision 2: April 20, 2018.
CWM 2018d	“First Notice of Deficiency for TSCA Permit Renewal Application Chemical Waste Management, Inc. – Kettleman Hills Facility EPA ID No. CAT 000646117” (responses). Chemical Waste Management, Inc. April 20, 2018.
CWM 2018e	“Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2017 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 9, 2018.
CWM 2018f	““TSCA Permit Renewal Application, Chemical Waste Management, Kettleman Hills Facility.” Chemical Waste Management, Inc. Revision 3: October 1, 2018..
CWM 2018g	“TSCA Operation Plan, Landfill B-18 Phases I, II, and III; PCB Building and Outside Containment Area.” Chemical Waste Management, Inc. Revision 3: October 1, 2018.
CWM 2018h	Chemical Waste Management, Inc. – Kettleman Hills Facility Revised TSCA Permit Renewal Application – Revision 3.” Reyna Verdin, Chemical Waste Management, Inc. to Frances Wicher, U.S. EPA Region 9. October 2, 2018.
CWM 2018i	“Notifications correspondence from KHF to EPA-IX for PCB detections in groundwater monitoring results and leachate analytic results for TSCA-regulated units from 1992 – 2018. Compiled by Chemical Waste Management, Inc. October 2, 2018. Attachment to CWM 2018h.
CWM 2018j	“Chemical Waste Management, Inc. - Kettleman Hills Facility, 22 CCR Financial Assurance for Closure & Post-Closure Costs.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Julie Mullins, DTSC. December 31, 2018.
CWM 2019	“CWM-KHF Information Request.” Email, Reyna Verdin, Chemical Waste Management, Inc. to Frances Wicher, U.S. EPA Region 9. July 15, 2019.
DTSC 2003	“Hazardous Waste Facility Permit - Chemical Waste Management, Inc. Kettleman Hills Facility (Permit Number: 02-SAC-03).” California Department of Toxic Substances Control. Effective June 16, 2003 (modified May 5, 2005, July 25, 2006, September 21, 2007, and May 21, 2014).
DTSC 2008	Review of Evaluation of Pre-Sample Purge Methods, Chemical Waste Management, Inc. – Kettleman Hills Facility, Kings county, US environmental Protection Agency ID CAT0006460117.” Ruth Cayabyab, DTSC to Paul Turek, Chemical Waste Management, Inc. February 20, 2008.
DTSC 2011	In the matter of Chemical Waste Management, Inc. Enforcement Order.” California Department of Toxic Substances Control. May 20, 2011.



DTSC 2012	“Summary of Violations.” Ignacio R. Dominguez, DTSC to Bob Henry, Chemical Waste Management. October 22, 2012. Includes enclosure: “Summary of Violations.” DTSC. October 22, 2012.
DTSC 2013	“Complaint for Civil Penalties and Injunctive Relief, Case No. BC503092.” California Department of Toxic Substances Control. March 18, 2013.
DTSC 2016	“Revised Site-Specific Ambient Air Monitoring Plan(SSAAMP) for Location of Additional Downwind Monitoring Station and Month-Long PCB Sampling, Chemical Waste Management, Inc., Kettleman Hills Facility, 35251 Old Skyline Road, Kettleman City, Kings County, California 93239, Environmental Protection Agency Identification Number CAT000646117.” Edward Nieto, DTSC to Robert Henry, Chemical Waste Management, Inc. May 11, 2016.
FWS 2012a	“Draft Biological Opinion for Toxic Substances Control Act Permit Application for Chemical Waste Management’s Kettleman Hills Facility (modification and expansion of PCB disposal Cell B-18), Kings County, California.” Letter, Susan K. Moore, U.S. Fish and Wildlife Service to Caleb Shaffer, U.S. EPA Region 9. August 15, 2012.
FWS 2012b	“Amendment to the Biological Opinion for Toxic Substances Control Act Permit Application for Chemical Waste Management’s Kettleman Hills Facility (modification and expansion of PCB disposal Cell B-18), Kings County, California.” Letter, Thomas Leeman, U.S. Fish and Wildlife Service to Chip Poalinelli, U.S. EPA Region 9. September 5, 2012.
FWS 2014a	“CWM’s Kettleman Hills Facility Fence Realignment: Changes to Biological Opinion #81420-2012-F-0044-2.” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to John Moody, U.S. EPA Region 9. July 23, 2014.
FWS 2014b	“Re: CWM’s Kettleman Hills Facility Fence Realignment: Changes to Biological Opinion #81420-2012-F-0044-2.” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to John Moody, U.S. EPA Region 9. July 30, 2014.
FWS 2018	“Kettleman Hills PCB Approval Review.” Letter, Patricia Cole, U.S. Fish and Wildlife Service to Sara Ziff, U.S. EPA Region 9. December 7, 2018.
Geomatrix 2006	“Re: Recommendation for Decommissioning Sounding Wells, B-14 Waste Management Unit, Kettleman Hills Facility, Kettleman City, California.” Letter, Bradley A. Loewen and Philip P Ross, Geomatrix Consultants, Inc. to Paul Turek, Chemical Waste Management, Inc. January 12, 2006.
Geomatrix 2007	“Evaluation of Pre-Sample Purge Methods.” Geomatrix. March 2007.
Geosyntec 2001	“Site-Specific Groundwater Monitoring Plan, Kettleman Hills Facility, Chemical Waste Management, Inc., Kings County, California.” Geosyntec Consultants. May 2001.



Golder 2008	“Engineering and Design Report, Landfill B-18, Class 1 Landfill, Phase III Expansion and Final Closure, Kettleman Hills Facility, Kettleman City, California.” Golder Associates Inc. November 2008, Revised August 2011.
Golder 2016	“Storm Water Pollution Prevention Plan Chemical Waste Management, Inc. – Kettleman Hills Facility.” Golder Associates. June 2015, Amended March 2016.
Golder 2017	“Responses to DTSC Review Comments on the Phase 1 And Phase 2 Construction Quality Assurance (CQA) Reports Spill Isolation And Containment System at the Sampling Platforms and Untarpping Racks Kettleman Hills Facility – Kings County, California.” Letter, Ryan Hillman, Golder Associates Inc. to Reyna Verdin, Chemical Waste Management, Inc. March 2, 2017.
Golder 2018a	“Closure and Post-Closure Cost Plan, Kettleman Hills Facility, Kings County, California.” Golder Associates. March 15, 2018.
Golder 2018b	“Closure and Post-Closure Cost Estimates, Kettleman Hills Facility, Kings County, California.” Golder Associates. March 15, 2018
NAHC 2017	“Chemical Waste Management Kettleman Hills Facility Permit and Expansion, Kings County.” Sharaya Souza, Native American Heritage Commission. October 17, 2017.
Rust 1995	“1994 Topographical, Meteorological and Airborne Contaminant Characterization at Kettleman Hills Facility.” Rust Environmental & Infrastructure Inc. April 1995 with Appendices (6 volumes).
RWQCBB 2014a	“Order R5-2014-0003 Waste Discharge Requirements for Chemical Waste Management, Inc. Class I/II Waste Management Units Kettleman Hills Facility Kings County.” Central Valley Regional Water Control Board. January 16, 2014.
RWQCBB 2014b	“Monitoring and Reporting Program R5-2014-0003 for Chemical Waste Management, Inc. Class I/II Waste Management Units Kettleman Hills Facility.” California Regional Water Quality Control Board Central Valley Region. January 16, 2014.
U.S. EPA 1981	“Approval for Disposal of PCB Waste.” Sheila M. Prinderville, Regional Administrator, U.S. EPA Region 9 to Don McCombs, Waste Management, Inc. June 29, 1981.
U.S. EPA 1983	“Approval for Disposal of PCB Landfill.” Sonia F. Crow, Regional Administrator, U.S. EPA Region 9 to Craig McKenzie, Chemical Waste Management, Inc. February 16, 1983.
U.S. EPA 1988	“Approval to Operate A Chemical Waste Landfill for PCB Disposal (Chemical Waste Management, Inc. Kettleman Facility).” John C. Wise, Acting Regional Administrator, U.S. EPA Region 9. February 22, 1988.



- U.S. EPA 1990a “Amendment to the Approvals to Operate a Chemical Waste Landfill for PCB Disposal.” Daniel W. McGovern, Regional Administrator, U.S. EPA Region 9. November 30, 1990.
- U.S. EPA 1990b “Amendment to the Approvals to Operate Landfills B-14, B-16, and B-19.” Daniel W. McGovern, Regional Administrator, U.S. EPA Region 9 to Mark Langowski, Chemical Waste Management, Inc. December 3, 1990.
- U.S. EPA 1992a “Chemical Waste Management, Inc. Kettleman Hills Facility TSCA Approval to Operate Landfill B-18.” Letter, David P. Howekamp, Director Air and Toxics Division, U.S. EPA Region 9 to Leo Stahlecker, Chemical Waste Management, Inc. May 19, 1992.
- U.S. EPA 1992b “Approvals to Operate a Chemical Waste Landfill for PCB Disposal.” David P. Howekamp, Director Air and Toxics Division, U.S. EPA Region 9. May 19, 1992.
- U.S. EPA 2003 “Approval for a Toxic Substances Control Act PCB Commercial Storage Facility Permittee: Lighting Resources, Inc. 1522 East Victory Street, Suite 4 Phoenix, AZ 85040 EPA ID Number: AZD 983 476 680.” U.S. EPA Region 9. January 23, 2003.
- U.S. EPA 2005 “Docket No. TSCA-09-2005-0002 Consent Agreement and Final Order Pursuant to 40 C.F.R. §§ 22.13 and 22.18.” U.S. EPA Region 9. May 3, 2005.
- U.S. EPA 2006 “Transmittal of Final Report – ‘Multimedia Compliance Investigation: Phase 1’ Chemical Waste Management, Inc. Kettleman Hills, CA NEIC Project No.: VP0686.” Memorandum, Diana A. Love, Director, NEIC (U.S. EPA) to Christopher Rollins, U.S. EPA Region 9. January 17, 2006.
- U.S. EPA 2007a “Multimedia Compliance Investigation: Phase 2 Chemical Waste Management, Inc. Kettleman Hills, CA NEIC Project No.: VP0686E04.” U.S. EPA National Enforcement Investigations Center. April 2007.
- U.S. EPA 2007b “Pilot Survey of Levels of Polychlorinated Dibenzo-p-dioxins, Polychlorinated Dibenzofurans, Polychlorinated Biphenyls, and Mercury in Rural Soils of the United States” EPA/600/R-05/048F. U.S. EPA. April 2007 (including Appendices).
- U.S. EPA 2007c “Notice of Noncompliance for Violations of Toxic Substances Control Act.” Letter, Paula Bisson, U.S. EPA Region 9 to Paul Turek, Chemical Waste Management, Inc. June 26, 2007.
- U.S. EPA 2007d “Notice of Noncompliance Follow Up Letter.” Letter, Paula Bisson, U.S. EPA Region 9 to Paul Turek, Chemical Waste Management, Inc. November 28, 2007.
- U.S. EPA 2008a “Decommissioning Landfill Unit B-14 Sounding Wells.” Letter, Adrienne Priselac, U.S. EPA to Chemical Waste Management, Inc. August 28, 2008.



- U.S. EPA 2008b “Request for Additional Sampling of Air, Soil, and Biota/Vegetation and Analysis for PCB Congeners.” Letter, Cheryl Nelson, U.S. EPA Region 9 to Paul Turek, Chemical Waste Management, Inc. December 2, 2008.
- U.S. EPA 2010a “Violations of the Toxic Substances Control Act (“TSCA”). Amy C. Miller, U.S. EPA Region 9 to Paul Turek, Chemical Waste Management, Inc. February 4, 2010.
- U.S. EPA 2010b “TSCA Compliance Evaluation Inspection Report, Chemical Waste Management, Inc. February 8-12, 2010.” U.S. EPA Region 9. March 12, 2010.
- U.S. EPA 2010c “TSCA Compliance Evaluation Inspection Report, Chemical Waste Management, Inc. June 2, 2010.” U.S. EPA Region 9. July 27, 2010.
- U.S. EPA 2010d “Polychlorinated Biphenyls (PCBs) - USEPA Conditional Approval Under 40 CFR 761.61(a), Toxic Substances Control Act, Self-Implementing Cleanup of PCBs at PCB Building, Waste Management Kettleman Hills Facility.” Arlene Kabei, U.S. EPA Region 9 to Bob Henry, Chemical Waste Management, Inc. September 23, 2010.
- U.S. EPA 2010e “Docket No. TSCA-09-2011-0001 Consent Agreement and Final Order Pursuant to 40 C.F.R. §§ 22.13 and 22.18.” U.S. EPA Region 9. November 29, 2010.
- U.S. EPA 2011a “Inspection Report [November 12, 2010], Waste Management, Kettleman Hills Facility.” U.S. EPA, Office of Enforcement and Compliance Assurance. February 5, 2011.
- U.S. EPA 2011b “Docket No. RCRA-09-2011-0016 Consent Agreement and Final Order Pursuant to 40 C.F.R. §§ 22.13 and 22.18.” U.S. EPA Region 9. August 23, 2011.
- U.S. EPA 2011c “Request for Formal Consultation Under Section 7 of the Endangered Species Act on TSCA Permit Application for Chemical Waste Management Kettleman Hills Facility.” Caleb Shaffer, U.S. EPA Region 9 to Thomas Leeman, US Fish and Wildlife Service. September 20, 2011.
- U.S. EPA 2011d “Kettleman City Indoor Pesticide Sampling, Status Update.” U.S. EPA Region 9. November 2011.
- U.S. EPA 2012a “Docket No. TSCA-09-2012-0009 Consent Agreement and Final Order Pursuant to 40 C.F.R. §§ 22.13 and 22.18.” U.S. EPA Region 9. September 7, 2012.
- U.S. EPA 2012b “Statement of Basis, Approval for Commercial Storage and Disposal of Polychlorinated Biphenyls (“PCBs”) U.S. Ecology Nevada, Inc. Beatty, Nevada U.S. EPA ID: NVT 330010000.” U.S. EPA Region 9. November 5, 2012.



- U.S. EPA 2012c “Approval for Commercial Storage and Disposal of Polychlorinated Biphenyls (“PCBs”) U.S. Ecology Nevada, Inc. Beatty, Nevada U.S. EPA ID: NVT 330010000.” U.S. EPA Region 9. November 5, 2012.
- U.S. EPA 2013 “Approval for Commercial Storage of Polychlorinated Biphenyls (“PCBs”) Clean Harbors Los Angeles, LLC Los Angeles, California U.S. EPA ID: CAD 050806850.” U.S. EPA Region 9. October 24, 2013.
- U.S. EPA 2015 “Approval for Commercial Storage of Polychlorinated Biphenyls Veolia Environmental Services Technical Solutions, L.L.C. Phoenix, Arizona EPA ID: AZ0000337360.” U.S. EPA Region 9 September 30, 2015.
- U.S. EPA 2016 Letter, Tom Huetteman, U.S. EPA Region 9 to Robert Henry, CWMI. December 20, 2016.
- U.S. EPA 2017a “Sacred Lands File and Native American Contacts List Request for Kettleman Hills Facility.” Letter, Sarah Bielski, U.S. EPA Region 9 to Native American Heritage Commission, September 28, 2017.
- U.S. EPA 2017b “Region 9 Enforcement Division Inspection Report, 09/28/2017 Inspection Waste Management, Inc. Kettleman Hills Facility.” October 27, 2017.
- U.S. EPA 2017c Letter, Barbara Gross, U.S. EPA Region 9, to Reyna Verdin, CWMI. December 21, 2017.
- U.S. EPA 2018a Letter, Barbara Gross, U.S. EPA to Stan Alec, Chairman, Kings River Choinumni Tribe. July 25, 2018.
- U.S. EPA 2018b Letter, Barbara Gross, U.S. EPA to Ruben Barrios, Chairman, Santa Rosa Indian Community of the Santa Rosa Rancheria. July 25, 2018.
- U.S. EPA 2018c Letter, Barbara Gross, U.S. EPA to Neil Peyron, Chairman, Tule River Indian Tribe. July 25, 2018.
- U.S. EPA 2018d Letter, Barbara Gross, U.S. EPA to Leanne Walker-Grant, Chairwoman, Table Mountain Rancheria of California. July 25, 2018.
- U.S. EPA 2018e Letter, Barbara Gross, U.S. EPA to Kenneth Woodrow, Chairman, Wuksache Indian Tribe/Eshom Valley Band. July 25, 2018.
- U.S. EPA 2018f Letter, Barbara Gross, U.S. EPA to Tristan Tozer, California Office of Historic Preservation. September 17, 2018.
- U.S. EPA 2018g “Comprehensive Compliance Monitoring and Enforcement Report.” U.S. EPA. September 17, 2018.
- U.S. EPA 2018h “Memorandum to File (CAT 000 646 117 Chemical Waste Management, Inc. TSCA Approval), Subject: September 7, 2018 Call with Chemical Waste Management, Inc. Kettleman Hills Facility.” Frances Wicher, U.S. EPA Region 9. September 17, 2018.



- U.S. EPA 2018i “Kettleman Hills PCB Approval Review – FWS Biological Opinion 81420-2012-F-0044. Letter, Sara Ziff, U.S. EPA to Jennifer Norris, U.S. Fish and Wildlife Service. October 11, 2018.
- WDLN 2013 “First Amendment to Kreyenhagen Hills Conservation Bank Agreement for Sale of Conservation Credits (Service File No. 81420-2012-F-0044 and 81420-2012-F-004402). Wildlife Inc. March 27, 2013.
- Wenck 2010 “Final Dioxin-Like Polychlorinated Biphenyl (PCB) Congeners Study Report, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. November 2010.
- Wenck 2011a “Quarterly Ambient Air Monitoring Program Data Report January 2011 - March 2011 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. June 2011.
- Wenck 2011b “Quarterly Ambient Air Monitoring Program Data Report April 2011 -June 2011 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. September 2011.
- Wenck 2011c “Final 2011 Health Risk Assessment.” Wenck Associates, Inc. November 2011.
- Wenck 2011d “Quarterly Ambient Air Monitoring Program Data Report July 2011 - September 2011 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. December 2011.
- Wenck 2012a “Quarterly Ambient Air Monitoring Program Data Report September 2011 - December 2011 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. March 2012.
- Wenck 2012b “Quarterly Ambient Air Monitoring Program Data Report January 2012 - March 2012 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. June 2012.
- Wenck 2012c “Final Annual Screening Level Health Risk Assessment October 2010 – September 2011, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF)” Wenck Associates, Inc. July 2012.
- Wenck 2012d “Quarterly Ambient Air Monitoring Program Data Report April 2012 -June 2012 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. August 2012.
- Wenck 2012e “Quarterly Ambient Air Monitoring Program Data Report July 2012 - September 2012 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. November 2012.
- Wenck 2013a “Quarterly Ambient Air Monitoring Program Data Report October 2012 - December 2012, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. March 2013.



- Wenck 2013b “Annual Screening Level Health Risk Assessment October 2011 – September 2012, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF)” Wenck Associates, Inc. March 2013.
- Wenck 2013c “Quarterly Ambient Air Monitoring Program Data Report January 2013 - March 2013 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. June 2013.
- Wenck 2013d “Quarterly Ambient Air Monitoring Program Data Report April 2013 -June 2013 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. August 2013.
- Wenck 2013e “Quarterly Ambient Air Monitoring Program Data Report July 2013 - September 2013 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. December 2013.
- Wenck 2014a “Annual Screening Level Health Risk Assessment October 2012 – September 2014, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF)” Wenck Associates, Inc. March 2014.
- Wenck 2014b “Quarterly Ambient Air Monitoring Program Data Report October 2013 - December 2013 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. February 2014.
- Wenck 2014c “Quarterly Ambient Air Monitoring Program Data Report January 2014 - March 2014 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. May 2014.
- Wenck 2014d “Quarterly Ambient Air Monitoring Program Data Report April 2014 - June 2014 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. August 2014.
- Wenck 2014e “Quarterly Ambient Air Monitoring Program Data Report July 2013 - September 2013 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. December 2014.
- Wenck 2015a “Ambient Air Monitoring Program Quarterly Report October 2014 - December 2014 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. February 2015.
- Wenck 2015b “Annual Screening Level Health Risk Assessment October 2013 – September 2014, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF)” Wenck Associates, Inc. March 2015.
- Wenck 2015c “Ambient Air Monitoring Program Quarterly Report January 2015 - March 2015 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. June 2015.



Wenck 2015d	“Ambient Air Monitoring Program Quarterly Report April 2015 -June 2015 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. September 2015.
Wenck 2015e	“Ambient Air Monitoring Program Quarterly Report July 2015 - September 2015 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. December 2015.
Wenck 2016a	“Site-Specific Ambient Air Monitoring Plan, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. January 2016.
Wenck 2016b	“Annual Screening Level Health Risk Assessment October 2014 – September 2015, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF)” Wenck Associates, Inc. March 2016.
Wenck 2016c	“Ambient Air Monitoring Program Quarterly Report October 2015 - December 2015 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. March 2016.
Wenck 2016d	“Ambient Air Monitoring Program Quarterly Report January 2016 - March 2016 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. June 2016.
Wenck 2016e	“Ambient Air Monitoring Program Quarterly Report April 2016 -.June 2016 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. September 2016.
Wenck 2016f	“Ambient Air Monitoring Program Quarterly Report July 2016 - September 2016 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. December 2016.
Wenck 2017a	“Annual Screening Level Health Risk Assessment October 2015 – September 2016, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF)” Wenck Associates, Inc. March 2017.
Wenck 2017b	“Ambient Air Monitoring Program Quarterly Report October 2016 - December 2016 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. March 2017.
Wenck 2017c	“Ambient Air Monitoring Program Quarterly Report January 2017 - March 2017 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. June 2017.
Wenck 2017d	“Ambient Air Monitoring Program Quarterly Report April 2017 - June 2017 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. September 2017.
Wenck 2017e	“Ambient Air Monitoring Program Quarterly Report July 2017 - September 2017 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. December 2017.



- Wenck 2018a “Annual Screening Level Health Risk Assessment October 2016 – September 2017, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF)” Wenck Associates, Inc. March 2018.
- Wenck 2018b “Ambient Air Monitoring Program Quarterly Report October 2017 - December 2017 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. March 2018.
- Wenck 2018c “Ambient Air Monitoring Program Quarterly Report January 2018 - March 2018 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. June 2018.
- Wenck 2018d “Ambient Air Monitoring Program Quarterly Report April 2018 - June 2018 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. September 2018.
- Wenck 2018e “Ambient Air Monitoring Program Quarterly Report July 2018 - September 2018 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. December 2018.
- Wenck 2019 “Ambient Air Monitoring Program Quarterly Report October 2018 - December 2018 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. January 2019.



APPENDICES

**APPENDIX A –
EXECUTIVE SUMMARY IN SPANISH**



27 DE AGOSTO DE 2019 RESUMEN EJECUTIVO

DECLARACIÓN DE FUNDAMENTOS — APROBACIÓN PROPUESTA LEY DE CONTROL DE SUSTANCIAS TÓXICAS BIFENILOS POLICLORADOS (PCB) INSTALACIÓN DE ALMACENAMIENTO COMERCIAL Y VERTEDERO DE RESIDUOS QUÍMICOS INSTALACIÓN KETTLEMAN HILLS DE CHEMICAL WASTE MANAGEMENT, INC.

La EPA propone emitir una aprobación para el almacenamiento, el tratamiento para la eliminación y la eliminación de residuos de bifenilos policlorados (por sus siglas en inglés y de aquí en adelante, PCB) en la instalación Kettleman Hills de Chemical Waste Management, Inc. Alentamos al público a realizar comentarios sobre todos los aspectos de esta Aprobación propuesta, así como sobre sus determinaciones y análisis de respaldo.

Las instalación Kettleman Hills está ubicada en el condado de Kings, California, aproximadamente a 3.5 millas al suroeste de Kettleman City. Es una instalación comercial de eliminación, almacenamiento y tratamiento de residuos peligrosos que acepta residuos de PCB y otros tipos de residuos peligrosos. Actualmente está aprobada por la EPA en virtud de la Ley de Control de Sustancias Tóxicas (por sus siglas en inglés y de aquí en adelante, TSCA) para eliminar los residuos de PCB en el vertedero B-18, así como para almacenar y tratar los residuos de PCB en la Unidad de Lavado/Almacenamiento de PCB. La Unidad de Lavado/Almacenamiento de PCB cuenta con un recinto cerrado y un área de contención exterior. También hay tres vertederos cerrados en la instalación que se utilizaron para la eliminación de residuos de PCB: los vertederos B-14, B-16 y B-19. Estas unidades, así como otras unidades de almacenamiento, tratamiento y eliminación de la instalación, están autorizadas por el Departamento de Control de Sustancias Tóxicas (por sus siglas en inglés y de aquí en adelante, DTSC) del Estado de California en virtud de la Ley de Conservación y Recuperación de Recursos.

La Aprobación propuesta por la EPA, si se hace definitiva, reemplazaría a las Aprobaciones existentes y permitiría a Chemical Waste Management, Inc. continuar haciendo lo siguiente:

- Eliminar los residuos de PCB en el vertedero B-18, etapas I y II.
- Almacenar los residuos de PCB en el recinto cerrado de la Unidad de Lavado/Almacenamiento de PCB.
- Drenar y descargar equipos eléctricos que contienen PCB en la Unidad de Lavado/Almacenamiento de PCB.
- Combinar de forma masiva (combinar pequeños contenedores de residuos en un gran contenedor) y reempaquetar residuos de PCB en el recinto cerrado de la Unidad de Lavado/Almacenamiento de PCB.



La Aprobación también aumentaría la capacidad aprobada por la TSCA del vertedero B-18 e incluiría condiciones para el almacenamiento y tratamiento de PCB que permitirán a Chemical Waste Management, Inc. realizar estas operaciones:

- Eliminar los residuos de PCB en el vertedero B-18, etapa III.
- Almacenar los residuos de PCB que estén dentro de los treinta días de su retirada de la fecha de servicio en el área externa de contención de la Unidad de Lavado/Almacenamiento de PCB.
- Combinar de forma masiva y reempaquetar los residuos de PCB dentro del área externa de contención de la Unidad de Lavado/Almacenamiento de PCB.
- Llevar a cabo una solidificación en la parte superior de los contenedores de líquidos incidentales de la Unidad de Lavado/Almacenamiento de PCB.

Con el objetivo de conservar el cumplimiento con todas las regulaciones aplicables de la TSCA en cuanto al almacenamiento, el tratamiento para la eliminación y la eliminación de los residuos de PCB, la Aprobación también requeriría que Chemical Waste Management, Inc. hiciera lo siguiente:

- Conservar registros sobre las operaciones de la instalación.
- Inspeccionar y mantener periódicamente la instalación.
- Mantener e implementar un plan de contingencia para responder ante derrames u otro tipo de emergencias.
- Informar debidamente todo tipo de derrame de PCB o emergencia que tengan lugar y que requieran de la implementación del plan de contingencia.
- Realizar pruebas anuales de las aguas subterráneas de los pozos y monitorear de manera activa el vertedero B-18, y, cada cinco años, las aguas subterráneas de los pozos de los vertederos cerrados B-14, B-16 y B-19 en lo que respecta a PCB e informar los resultados.
- Realizar pruebas anuales de los lixiviados de los vertederos B-14, B-16, B-18 y B-19 en lo que respecta a PCB, e informar los resultados.
- Implementar un programa de monitoreo de la calidad del aire que incluya cuatro sitios de monitoreo y proporcionar informes trimestrales de monitoreo del aire.
- Realizar pruebas trimestrales en la Unidad de Lavado/Almacenamiento de PCB para detectar contaminación por PCB y limpiar en tiempo y forma toda contaminación por PCB que se detecte por encima de los 10 microgramos por cada 100 centímetros cuadrados.



- Informar a la brevedad todo tipo de detección de PCB en aguas subterráneas, lixiviados, aire u otras superficies en la Unidad de Lavado/Almacenamiento de PCB.
- Mantener e implementar planes posteriores al cierre, estimaciones de costos y garantía financiera para el cuidado posterior al cierre de los vertederos cerrados B-14, B-16 y B-19.
- Mantener planes, estimaciones de costos y garantía financiera para el cuidado al cierre y posterior al cierre del vertedero B-18.
- Mantener un plan de cierre, estimaciones de costos y garantía financiera para el cierre de la Unidad de Lavado/Almacenamiento de PCB.
- Cumplir con los requisitos del proceso público en lo que respecta a los distintos tipos de modificaciones a la Aprobación.

En general, la Aprobación propuesta daría lugar a los siguientes cambios en la instalación:

- Incremento de la capacidad aprobada por la TSCA del vertedero B-18 de 10.7 millones de yardas cúbicas a 15.6 millones de yardas cúbicas mediante la aprobación de la eliminación de los residuos de PCB en la etapa III.
- Definición de una capacidad máxima de almacenamiento de residuos de PCB en la Unidad de Lavado/Almacenamiento de PCB de 44,015 galones.

La EPA propone emitir esta Aprobación basada en parte en su conclusión de que las operaciones de la instalación Kettleman Hills, en virtud de los términos y condiciones de la Aprobación propuesta, no representarán un riesgo irrazonable de daños para la salud y el medio ambiente a causa de los PCB. Esta conclusión se basa en los controles de ingeniería y operativos, así como en los requisitos de monitoreo incluidos en la Aprobación propuesta, y en una evaluación del peso general de la evidencia científica con respecto a la relación entre las emisiones de PCB de la instalación Kettleman Hills y la probabilidad y magnitud de los impactos adversos para la salud en las comunidades circundantes. La EPA ha analizado una serie de investigaciones científicas multidisciplinarias, objetivas, específicas del lugar y de los medios, que evaluaron colectivamente la amenaza de exposición y el riesgo cuantitativo para la salud que representan las emisiones de PCB de la instalación Kettleman Hills.

Según una revisión exhaustiva, la EPA no identificó concentraciones de PCB por encima de un nivel de preocupación en el aire, el agua, la vegetación o los suelos en áreas próximas a la instalación Kettleman Hills. Además, la EPA no pudo obtener estimaciones de riesgo inaceptable para la salud de los residentes o de los trabajadores del sitio de las emisiones de PCB de la instalación Kettleman Hills. Por último, en función de los datos disponibles, la concentración de PCB que se encontró en los medios ambientales próximos a la instalación concuerda con la concentración de PCB que se encontró en muchas áreas rurales del Valle Central de California. Estas concentraciones de PCB también concuerdan con las concentraciones de PCB detectadas en



una investigación individual de la EPA en lugares silvestres no alterados dentro de los Estados Unidos.

También proponemos emitir esta Aprobación en función de nuestras conclusiones de que la instalación Kettleman Hills cumple con los requisitos aplicables a las instalaciones de almacenamiento de PCB y a los vertederos de PCB, incluido el cumplimiento de los requisitos de diseño y operativos aplicables, las calificaciones del personal y la provisión de planes de cierre y posteriores al cierre, las estimaciones de costos y la garantía financiera.

Proponemos seguir concediendo cuatro exenciones de los requisitos regulatorios para los vertederos de PCB. Estas exenciones permiten lo siguiente:

- El uso del método de purga de pozos de aguas subterráneas aprobado por DTSC en lugar del método que figura en las regulaciones de PCB.
- Pruebas de aguas subterráneas mediante los mismos parámetros y métodos analíticos requeridos por los permisos estatales en lugar de los métodos obsoletos de las regulaciones de PCB.
- Pruebas de lixiviados mediante los mismos parámetros y métodos analíticos requeridos por los permisos estatales en lugar de los métodos obsoletos de las regulaciones de PCB.
- Eliminación de pequeños contenedores de residuos inflamables en tambores demasiado cargados (paquetes de laboratorio) como excepción a la prohibición de la eliminación de residuos inflamables en vertederos de PCB en las regulaciones PCB.

También hemos revisado el historial de cumplimiento de la instalación Kettleman Hills. Si bien la instalación ha violado los requisitos aplicables en el pasado, estas violaciones no evidencian un patrón de incumplimiento que demuestre la falta de voluntad o incapacidad de Chemical Waste Management, Inc. para lograr y mantener el cumplimiento de las regulaciones aplicables a la misma y a sus operaciones en la instalación Kettleman Hills. Además, las acciones correctivas implementadas por la instalación para abordar estas violaciones del pasado incluyen mejoras físicas y operativas que reducen la posibilidad de que se produzcan violaciones en el futuro, así como evitan y contienen futuras emisiones.

La EPA también ha preparado un Borrador del Análisis de Justicia Ambiental para documentar que las inquietudes de justicia ambiental, incluyendo el alcance hecho en el pasado para buscar la participación de las comunidades afectadas, se consideraron en la redacción del permiso propuesto. La EPA ahora está buscando aportes de la comunidad antes de llegar a una decisión final sobre el permiso.

Hemos consultado al Servicio de Pesca y Vida Silvestre de EE. UU. para asegurarnos de que esta Aprobación no tenga un impacto adverso en ninguna especie en peligro de extinción. También hemos consultado a la Oficina de Preservación Histórica de California para asegurarnos de que la



Aprobación no afecte negativamente a ningún bien histórico. Por último, hemos evaluado el proyecto para asegurarnos de que se ajusta a los planes del Valle de San Joaquin para alcanzar y mantener los estándares nacionales de calidad del aire basados en la salud.

La Aprobación propuesta se emitió el 27 de agosto de 2019. Los comentarios del público sobre la propuesta se pueden presentar hasta el viernes 1 de noviembre de 2019. Se reciben con gusto los comentarios del público sobre todos los aspectos de la Aprobación propuesta, así como sobre las determinaciones y los análisis de respaldo. Los comentarios del público pueden presentarse en www.regulations.gov [número de expediente EPA-R09-RCRA-2019-0088], enviarse por correo postal o por correo electrónico a la siguiente dirección antes del 1 de noviembre de 2019.

Frances Wicher, gerente de proyectos de Kettleman Hills
Oficina de permisos, División Tierras, Productos Químicos y Reurbanización
(LND-4-2)
Agencia de Protección Ambiental, Región 9
75 Hawthorne Street
San Francisco, CA 94105
Número de teléfono 415-972-3957
Correo electrónico: wicher.frances@epa.gov

Todos los comentarios que se reciban por correo electrónico o a través de www.regulations.gov se incluirán en el registro administrativo correspondiente a la Aprobación propuesta sin modificaciones y estarán disponibles al público, incluida la información personal que se brinde en los comentarios. Si una persona que realiza comentarios envía un correo electrónico directamente a la EPA, se capturará en forma automática la dirección de correo electrónico del remitente y se incluirá como parte del comentario público. Los comentarios que se envían a la EPA a través del correo postal o de algún otro método de entrega no electrónico también se incluirán en el registro administrativo sin modificaciones y estarán disponibles al público, incluida la información personal proporcionada, excepto que el comentario incluya Información Confidencial de Negocios (por sus siglas en inglés y de aquí en adelante, CBI) o algún otro tipo de información cuya divulgación se encuentra prohibida por la ley. Toda información que se considere CBI o que, de algún otro modo, esté protegida debería estar debidamente identificada como tal y enviarse únicamente por correo postal u otro método de entrega no electrónico. Dicha información no debe enviarse a través de www.regulations.gov o por correo electrónico.

La EPA llevará a cabo una reunión pública que incluirá una sesión de preguntas y respuestas seguida de una audiencia pública sobre la Aprobación propuesta a la hora y en el lugar indicados a continuación. Se brindarán servicios de traducción simultánea al español, tanto en la reunión como en la audiencia.

Jueves 10 de octubre de 2019
Reunión pública/Sesión de preguntas y respuestas: de 5:30 a 7:00 p. m.
Audiencia pública: 7:30 p. m.



Cafetería de la escuela primaria de Kettleman City
701 General Petroleum Avenue
Kettleman City, California 93239

Puede encontrar una copia de la Aprobación propuesta, esta Declaración de Fundamentos y sus apéndices, el borrador del Análisis de Justicia Ambiental, la solicitud presentada por Chemical Waste Management, Inc. y otros documentos clave en el sitio web del proyecto de Kettleman Hills de la EPA de EE. UU. en <https://www.epa.gov/ca/kettleman-hills-en-espanol>; en www.regulations.gov [número de expediente EPA-R09-RCRA-2019-0088]; o bien, puede solicitarla al gerente de proyectos de Kettleman Hills mencionado anteriormente. En www.regulations.gov puede encontrar otros documentos relevantes para la Aprobación propuesta. Puede encontrar una copia impresa de la Aprobación propuesta, esta Declaración de Fundamentos (incluido el borrador del Análisis de Justicia Ambiental) y la solicitud en:

Biblioteca de Kettleman City
104 Becky Pease Street
Kettleman City, CA 93239
(559) 386-9804

La EPA revisará, resumirá y responderá por escrito a todos los comentarios de relevancia recibidos durante el período de comentarios públicos y en la audiencia pública antes de tomar una decisión sobre si emitir o rechazar una Aprobación final.

Se puede solicitar información en español sobre la Aprobación propuesta y la Declaración de Fundamentos a:

Soledad Calvino
Agencia de Protección Ambiental, Región 9
Oficina: 415-972-3512
Correo electrónico: calvino.maria@epa.gov



**APPENDIX B –
FACT SHEETS AND PUBLIC MEETING/HEARING FLYERS
(ENGLISH AND SPANISH)**



U.S. Environmental Protection Agency
Pacific Southwest / Region 9

U.S. EPA Requests Public Comment on Proposed PCB Permit for Kettleman Hills Facility

Land, Chemicals and Redevelopment Division
August 2019

75 Hawthorne Street, San Francisco, CA 94105
866-EPA-WEST ♦ www.epa.gov/region9

Why am I receiving this mailing?

The U.S. Environmental Protection Agency (EPA) is asking for your comments on its proposed permit to allow for polychlorinated biphenyl (PCB) waste storage and disposal at Chemical Waste Management Inc.'s Kettleman Hills Facility, 3.5 miles southwest of Kettleman City. This mailing provides information on the proposed permit, where to learn more, and how to comment.



What is included in the proposed permit?

EPA is proposing a permit to allow the facility to continue to store and treat PCB waste at the PCB Flushing/Storage Unit, and dispose of PCB waste in its hazardous waste landfill. It also proposes to increase PCB waste disposal capacity at the facility.

The proposal, if finalized by EPA, would require regular sampling of groundwater and air at the facility, and includes inspection and maintenance, recordkeeping and reporting requirements, an emergency response plan, and plans and funding for eventual safe closure and post-closure maintenance of the facility.



Kettleman Hills hazardous waste landfill.

What changes at the Kettleman Hills Facility are being proposed?

The Kettleman Hills Facility currently stores and disposes of PCB waste under existing permits issued by EPA under the Toxic Substances Control Act. If the proposed permit is finalized, the facility will be able to place PCB waste into a new section of the hazardous waste landfill. This expanded area was approved by the California Department of Toxic Substances Control in 2014 for the disposal of other types of hazardous waste.

Does the proposed PCB permit protect me, my family and my community from PCBs at the facility?

Yes – EPA's analysis is that the proposed PCB permit, if finalized, will protect public health and the environment. EPA invites public comment on this analysis and on the conditions in the proposed PCB permit.

The proposed permit includes a number of engineering and operational controls that are designed to mitigate the potential for PCB releases from this facility. It also includes facility PCB monitoring requirements for air and water that will provide additional information to protect the community. In addition, EPA has reviewed a number of multidisciplinary studies to better understand the exposure threat and potential health risk posed by facility operations. These site- and community-specific studies have shown no increased human health risk to the community from PCB operations at this facility.



How can I send EPA my comments and concerns?

You may use the comment card in this mailer to send comments. You may also submit written comments to the EPA contact listed below, or on www.regulations.gov [docket number EPA-R09-RCRA-2019-0088]. Email comments are also welcome. All comments must be submitted by Friday, November 1, 2019.

EPA will hold a public hearing on this proposed permit at Thursday, October 10, 2019. You may provide spoken or written comments at that time. Spanish language translation will be available.

Where can I get more information?

The proposed permit and EPA's analysis of it (called the "Statement of Basis"), including a Draft Environmental Justice Analysis and other documents related to this proposed permit, can be found on EPA's website at www.epa.gov/ca/kettleman-hills.

Copies of these documents can be found at the Kettleman City Library at 104 Becky Pease Street. Library hours are 1 p.m. to 6 p.m., Tuesday through Thursday.

EPA will hold a community meeting and answer questions before the public hearing on Thursday, October 10, 2019. The time and place for this meeting are shown in the box below.

Who can I contact at EPA?

Additional information may be obtained by contacting:
Frances Wicher, Kettleman Hills Project Manager
U.S. EPA, Region 9 (LND-4-2)
75 Hawthorne Street
San Francisco, CA 94105
Office: 415-972-3957
Email: wicher.frances@epa.gov

Información en Español se puede obtener contactando a:
Soledad Calvino
U.S. EPA, Region 9
Office: 415-972-3512
Email: calvino.maria@epa.gov

Polychlorinated biphenyls, or PCBs, are a group of toxic chemicals that were widely used in electrical equipment because of their insulating and nonflammable properties. Congress banned the manufacture of PCBs in the United States in 1976 because of their potential environmental and public health hazards. Exposure to high levels of PCBs can harm the human immune, reproductive and nervous systems, and may cause cancer.



PCB storage building at Kettleman Hills facility.

EPA Public Meeting and Hearing on the Proposed PCB Permit for the Kettleman Hills Facility

Date:	October 10, 2019
Public Meeting and Questions & Answers:	5:30 p.m. to 7:00 p.m.
Public Hearing:	7:30 p.m.
Address:	Kettleman City Elementary School 701 General Petroleum Ave. Kettleman City, CA





Agencia de Protección
Ambiental de EE. UU.
Pacífico Sudoeste/Región 9

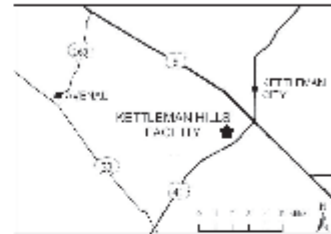
La EPA solicita comentarios públicos sobre el permiso propuesto para realizar operaciones con PCB en la instalación Kettleman Hills

División de Tierras, Productos Químicos y Reurbanización
Agosto de 2019

75 Hawthorne Street, San Francisco, CA 94105
866-EPA-WEST ♦ www.epa.gov/region9

¿Por qué recibo este envío postal?

La Agencia de Protección Ambiental de EE. UU. (EPA, por sus siglas en inglés) le solicita que haga comentarios sobre el permiso propuesto por la Agencia para almacenar y eliminar residuos de bifenilos policlorados (PCB, por sus siglas en inglés) en la instalación Kettleman Hills de Chemical Waste Management Inc., situada a 3.5 millas al sudoeste de la ciudad de Kettleman. Este envío postal brinda información sobre el permiso propuesto e indica cómo hacer comentarios y dónde obtener más detalles.



¿Qué incluye el permiso propuesto?

La EPA propone un permiso que autorice a la instalación a seguir almacenando y tratando residuos de PCB en la Unidad de Lavado/Almacenamiento de PCB y eliminando los residuos de PCB en su vertedero de residuos peligrosos. También propone aumentar la capacidad de eliminación de residuos de PCB de la instalación.

La propuesta, si es finalizada por EPA, requeriría muestreos regulares del agua subterránea y del aire en la instalación, e incluye inspección y mantenimiento, gestión de registros e informes, y un plan de respuesta a emergencias, además de planes y financiamiento para un eventual mantenimiento seguro durante y después del cierre de la instalación.



Vertedero de residuos peligrosos de Kettleman Hills.

¿Cuáles son los cambios propuestos para la instalación Kettleman Hills?

Actualmente, la instalación Kettleman Hills almacena y elimina residuos de PCB conforme a permisos existentes emitidos por la EPA en virtud de la Ley de Control de Sustancias Tóxicas. En caso de aprobarse el permiso propuesto, la instalación podrá depositar residuos de PCB en una nueva sección del vertedero de residuos peligrosos. Esta zona ampliada fue aprobada por el Departamento de Control de Sustancias Tóxicas de California en 2014 para la eliminación de otros tipos de residuos peligrosos.

¿El permiso propuesto para realizar operaciones con PCB nos protege a mí, a mi familia y a mi comunidad de los PCB presentes en la instalación?

Sí. El análisis de la EPA es que el permiso propuesto para el almacenamiento y la eliminación de PCB, si se aprueba, protegerá la salud pública y el medio ambiente.

El permiso propuesto incluye controles de ingeniería y operativos que reducen la probabilidad de que se liberen PCB de la instalación. A su vez, exige que la instalación incluya sistemas de monitoreo de PCB en el aire y en el agua que brindarán información adicional para proteger a la comunidad. La decisión sobre el permiso propuesto está respaldada por una serie de investigaciones multidisciplinarias de salud pública realizadas o solicitadas por agencias federales, estatales y locales. En conjunto, estos estudios han demostrado que las operaciones con PCB en esta instalación no aumentan los riesgos de salud humana para la comunidad.



¿Como puedo enviar mis comentarios e inquietudes a la EPA?

Puede enviar sus comentarios usando la tarjeta de comentarios que se incluye en este envío postal. También puede enviar comentarios por escrito al contacto de la EPA que figura más abajo o publicarlos en www.regulations.gov [Docket No. EPA-R09-RCRA-2019-0088]. Asimismo, se aceptan comentarios por correo electrónico a R9LandSubmit@epa.gov. Todos los comentarios deben enviarse antes del 1 de noviembre de 2019.

La EPA llevará a cabo una audiencia pública sobre este permiso propuesto el jueves, 10 de noviembre de 2019. Durante la audiencia puede realizar comentarios en forma verbal o escrito. Habrá un servicio de traducción al español disponible.

¿Dónde puedo obtener más información?

Puede acceder al permiso propuesto y al análisis de la EPA sobre el mismo (denominado "Declaración de Fundamentos" (Statement of Basis), incluyendo un borrador del análisis de justicia ambiental y otros documentos relacionados con este permiso propuesto, en el sitio web de la EPA en <https://www.epa.gov/ca/kettleman-hills-en-espanol>.

Hay copias de estos documentos disponibles en la Biblioteca Municipal de Kettleman, situada en 104 Becky Pease Street. El horario de la Biblioteca es de martes a jueves de 1 p.m. a 6 p.m.

La EPA llevará a cabo una reunión con la comunidad y responderá preguntas antes de la audiencia pública del [fecha]. La hora y el lugar de dicha reunión se indican en el recuadro que aparece más abajo.

¿A qué persona de la EPA puedo contactar?

Para obtener información adicional puede comunicarse con:

Frances Wicher
Gerente de Proyecto de Kettleman Hills
U.S. EPA, Región 9 (LND-4-2)
75 Hawthorne Street
San Francisco, CA 94105
Oficina: 415-972-3957
Correo electrónico: wicher.frances@epa.gov

Para obtener información en español, puede comunicarse con:

Soledad Calvino
U.S. EPA, Región 9
Oficina: 415-972-3512
Correo electrónico: calvino.maria@epa.gov

Los bifenilos policlorados o PCB son un grupo de sustancias químicas tóxicas ampliamente usadas en los equipos eléctricos debido a sus propiedades aislantes y no inflamables. En 1976, el Congreso prohibió la fabricación de PCB en los Estados Unidos por sus posibles riesgos para el medio ambiente y la salud pública. La exposición a niveles elevados de PCB puede dañar los sistemas inmunológico, reproductivo y nervioso, y puede causar cáncer.



Edificio de almacenamiento de PCB en la instalación Kettleman Hills.

Reunión y audiencia pública de la EPA acerca del permiso propuesto

Fecha:	10 de octubre de 2019
Reunión pública y Preguntas y respuestas:	De 5:30 p.m. a 7:00 p.m.
Audiencia pública:	7:30 p.m.
Dirección:	Kettleman Elementary School 701 General Petroleum Ave. Kettleman City, CA



KETTLEMAN HILLS FACILITY – PROPOSED PCB PERMIT



PUBLIC MEETING & HEARING

WHEN

Thursday, October 10, 2019

WHERE

Kettleman City Elementary School

701 General Petroleum Ave., Kettleman City, CA 93239

Simultaneous Spanish interpretation will be provided.

The U.S. Environmental Protection Agency (EPA) is asking for your comments on its proposed permit for polychlorinated biphenyl (PCB) waste storage and disposal at Chemical Waste Management Inc.'s Kettleman Hills Facility.

If you require a reasonable accommodation, please contact Laurie Amaro at (415) 972-3364 or amaro.laurie@epa.gov two weeks prior to the event or as far in advance of the event as possible.

To review the proposed permit and submit written comments, please see EPA's website:

WWW.EPA.GOV/CA/KETTLEMAN-HILLS

MEETING

5:30

Presentations on the Proposed Permit and Draft Environmental Justice Analysis

Question and Answer Session

HEARING

7:30

Opportunity to provide spoken or written comments

CONTACTS

Project Manager:

Frances Wicher
wicher.frances@epa.gov
(415) 972-3957

Media Contact

(English & Spanish):
Soledad Calvino
calvino.maria@epa.gov
(415) 972-3512



INSTALACIÓN KETTLEMAN HILLS - PERMISO PROPUESTO DE PCB



REUNIÓN PÚBLICA Y AUDIENCIA

¿CUÁNDO?

Jueves 10 de octubre, 2019

¿DÓNDE?

Kettleman City Elementary School

701 General Petroleum Ave. Kettleman City, CA 93239

Se proporcionará interpretación simultánea al español.

La Agencia de Protección Ambiental de EE. UU. (EPA, por sus siglas en inglés) está solicitando sus comentarios sobre el permiso propuesto para el almacenamiento y la eliminación de residuos de bifenilo policlorado (PCB) en la Instalación de Kettleman Hills de Chemical Waste Management Inc.

Si necesita un acomodo razonable, comuníquese con Laurie Amaro al (415) 972-3364 dos semanas antes del evento o con la mayor anticipación posible al evento.

Para revisar el permiso propuesto y enviar comentarios por escrito, consulte el sitio web de la EPA:

**WWW.EPA.GOV/CA/KETTLEMAN-HILLS-
EN-ESPANOL**

REUNIÓN

5:30

Presentaciones sobre el permiso propuesto y el Análisis de Justicia Ambiental

Sesión de preguntas y respuestas

AUDIENCIA

7:30

Oportunidad para proporcionar comentarios en forma verbal o por escrito

CONTACTOS

Gerente de proyecto:

Frances Wicher
wicher.frances@epa.gov
(415) 972-3957

Contacto de prensa

(inglés & español):

Soledad Calvino
calvino.maria@epa.gov
(415) 972-3512



**APPENDIX C –
ADMINISTRATIVE RECORD INDEX**

Availability of Administrative Record Documents

Electronic versions of many documents listed in this Administrative Record are available on **www.regulations.gov** [docket number EPA-R09-RCRA-2019-0088].

Please contact the Kettleman Hills Project Manager for information on how to obtain documents not available on Regulations.gov. Please note that not all Administrative Record documents (or portions of certain documents) are available for public release. Release of documents to the public are governed by applicable confidential business information, copyright, and privacy protection requirements.

Frances Wicher
Kettleman Hills Project Manager
Land, Chemicals & Redevelopment Division (LND-4-2)
U.S. Environmental Protection Agency Region 9
75 Hawthorne Street
San Francisco, California 94105
(415) 972-3957
wicher.frances@epa.gov



I. PROPOSED APPROVAL AND APPENDICES

- A.** “Proposed Approval – Toxic Substances Control Act PCB Commercial Storage Facility and Chemical Waste Landfill, Chemical Waste Management, Inc. Kettleman Hills Facility, Kings County, California, U.S. EPA ID: CAT 000 646 117.” Land, Chemicals & Redevelopment Division, U.S. EPA Region 9. August 27, 2019.
1. “Appendix B – Incorporated Documents – Volume 1”. August 27, 2019.
 2. “Appendix B – Incorporated Documents – Volume 2”. August 27, 2019.
 3. “Appendix B – Incorporated Documents – Volume 3”. August 27, 2019.
 4. “Appendix B – Incorporated Documents – Volume 4”. August 27, 2019.
 5. “Appendix B – Incorporated Documents – Volume 5”. August 27, 2019.
 6. “Appendix B – Incorporated Documents – Volume 6”. August 27, 2019.
 7. “Appendix B – Incorporated Documents – Volume 7”. August 27, 2019.

II. STATEMENT OF BASIS, APPENDICES, AND REFERENCES DOCUMENTS

Note: The Environmental Justice Analysis and reference documents are listed in Section III.

A. STATEMENT OF BASIS

1. “Statement of Basis – Proposed Approval Toxic Substance Control Act Polychlorinated Biphenyls (PCBs) Commercial Storage Facility and Chemical Waste Landfill, Chemical Waste Management, Inc. Kettleman Hills Facility, Kings County, California, U.S. EPA ID: CAT 000 646 117.” Land, Chemicals & Redevelopment Division, U.S. EPA Region 9. August 27, 2019 with Appendices:
 - a. Appendix A – Executive Summary in Spanish
 - b. Appendix B – Public Notices and Fact Sheet (English and Spanish)
 - c. Appendix C – Administrative Record Index
 - d. Appendix D – U.S. EPA TSCA Review Checklists for the Proposed Approval
 - e. Appendix E – Justifications for Use of Omnibus Provisions
 - f. Appendix F – Reporting, Notification, and Submittal Requirements in the Kettleman Hills Facility Proposed TSCA Approval
 - g. Appendix G – Environmental Justice Analysis (See Section III)
 - h. Appendix H – National Historic Preservation Act Determination
 - i. Appendix I – Endangered Species Act Determination
 - j. Appendix J – Clean Air Act Conformity Applicability Analysis



B. REFERENCES FOR THE STATEMENT OF BASIS

1. “Kettleman City Site Investigation Report, Sampling Results Addendum XX.” ACS Associates. October 25, 2010 (Appendix to CalEPA 2010).
2. “PCB Outside Pad Replacement and Cleanup Completion Report Kettleman Hills Facility, Kings County, CA.” Associated Design & Engineering, Inc. January 10, 2011 (revised July 20, 2011).
3. “Addendum to Evaluation of Pre-Sample Purge Methods, Kettleman Hills Facility, Kings Kettleman City, California.” Letter, Bradley A. Loewen and Philip P. Ross, AMEC Geomatrix, Inc. to Paul Turek, Chemical Waste Management, Inc. June 27, 2008.
4. “Second Quarter 2012 Groundwater and Unsaturated Zone Monitoring and Constituents of Concern Report for Class I Waste Management Units, Kettleman Hills Facility, Kings County, CA.” AMEC Environment & Infrastructure, Inc. September 25, 2012.
5. “Revised Site-Specific Groundwater Monitoring Plan Class I Waste Management Units, Kettleman Hills Facility, Kings County, California.” AMEC Environment & Infrastructure, Inc. April 14, 2014.
6. “Fourth Quarter 2016 Monitoring and Constituents of Concern Report for Class I Waste Management Units as Required by DTSC on March 6, 2015, Kettleman Hills Facility, Kings County, CA.” AMEC Environment & Infrastructure, Inc. February 24, 2017.
7. “Toxicological Profile for Polychlorinated Biphenyls (PCBs).” Agency for Toxic Substances and Disease Registry. November 2000.
8. “Investigation of Birth Defects and Community Exposures in Kettleman City, CA.” California Environmental Protection Agency and California Department of Public Health. December 2010 (revised February 24, 2011).
9. “Report to the Office of Environmental Health Hazard Assessment, Kettleman City Air Quality Assessment.” California Air Resources Board, December 2010.
10. “Toxic Substances Control Act Permit Renewal, Kettleman Hills Facility, 35251 Old Skyline Road, Kettleman City, Kings County, California.” Letter, Julianne Polanco, State Historic Preservation Officer, California Office of Historic Preservation to Barbara Gross, U.S. EPA Region 9. October 8, 2018.
11. “TSCA Approval Renewal for Landfills B-18, Chemical Waste Management, Inc. Kettleman Hills Facility CAT 000 646 117.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Yoshiro Tokiwa, U.S. EPA Region 9. April 1, 1997.
12. “TSCA Approval Renewal for Landfills B-14, B-16 and B-19 and Ancillary Commercial Storage Activities, Chemical Waste Management, Inc. Kettleman Hills Facility CAT 000 646 117.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Yoshiro Tokiwa, U.S. EPA Region 9. July 1, 1997.
13. “Chemical Waste Management, Inc. – Kettleman Hills Facility Response to TSCA Permit Renewal Information Request #2.” Letter, Paul Turek, Chemical Waste



- Management, Inc. to Paula Bisson, U.S. EPA Region 9. October 11, 1999. With Enclosures.
14. “Chemical Waste Management, Inc. – Kettleman Hills Facility Request for TSCA PCB Coordinated Approval.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Wayne Nastri, Regional Administrator, U.S. EPA Region 9. October 20, 2003.
 15. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monitoring of Landfill B-16 Lysimeters.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Max Weintraub, U.S. EPA Region 9. February 13, 2004.
 16. “Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2006 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. June 26, 2007. [REDACTED for posting on regulations.gov]
 17. “Chemical Waste Management, Inc. - Kettleman Hills Facility Response to TSCA Notice of Noncompliance Follow-Up Letter PCB Performance Evaluation Samples - Second Set.” Letter, Paul Turek, Chemical Waste Management, Inc. to Christopher Rollins, U.S. EPA Region 9. February 12, 2008.
 18. “Chemical Waste Management, Inc. Kettleman Hills Facility CAT 000 646 117 Revised 2007 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. August 4, 2008. [REDACTED for posting on regulations.gov]
 19. “Chemical Waste Management, Inc. – Kettleman Hills Facility Request to Modify TSCA PCB Coordinated Approval Request.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. June 26, 2009.
 20. “Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2008 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 15, 2009. [REDACTED for posting on regulations.gov]
 21. “Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2009 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 8, 2010. [REDACTED for posting on regulations.gov]
 22. “Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2010 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 13, 2011. [REDACTED for posting on regulations.gov]
 23. “Chemical Waste Management, Inc. – Kettleman Hills Facility Re: “Other” Noncompliance Report.” Letter, Paul Turek, Chemical Waste Management, Inc. to Wayne Lorentzen, Department of Toxic Substances Control. May 23, 2012.
 24. “Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2011 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional



- Administrator, U.S. EPA Region 9. July 6, 2012. [REDACTED for posting on regulations.gov]
25. “Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2012 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 8, 2013. [REDACTED for posting on regulations.gov]
 26. “Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2013 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 9, 2014. [REDACTED for posting on regulations.gov]
 27. “Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2014 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 8, 2015. [REDACTED for posting on regulations.gov]
 28. “Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2015 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 20, 2016.
 29. “Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2016 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 5, 2017.
 30. “Chemical Waste Management, Inc. – Kettleman Hills Facility Revised TSCA Permit Renewal Application – Revision 1”. Reyna Verdin, Chemical Waste Management, Inc. to Frances Wicher, U.S. EPA Region 9. July 13, 2017.
 31. “TSCA Renewal Application, Chemical Waste Management, Inc. Kettleman Hills Facility.” Revision 1: July 15, 2017.
 32. “Hazardous Waste Facility Permit Renewal Application, Operation Plan, Chemical Waste Management, Inc. Kettleman Hills Facility.” Chemical Waste Management, Inc. Revision 3: March 16, 2018. [REDACTED for posting on regulations.gov]
 33. “Chemical Waste Management, Inc. – Kettleman Hills Facility Revised TSCA Permit Renewal Application – Revision 2”. Reyna Verdin, Chemical Waste Management, Inc. to Frances Wicher, U.S. EPA Region 9. April 19, 2018.
 34. “TSCA Permit Renewal Application, Chemical Waste Management, Kettleman Hills Facility.” Revision 2: April 20, 2018.
 35. “First Notice of Deficiency for TSCA Permit Renewal Application Chemical Waste Management, Inc. – Kettleman Hills Facility EPA ID No. CAT 000646117” (responses). Chemical Waste Management, Inc. April 20, 2018.
 36. “Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2017 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 9, 2018.



37. "TSCA Permit Renewal Application, Chemical Waste Management, Kettleman Hills Facility." Chemical Waste Management, Inc., Revision 3: October 1, 2018.
38. "TSCA Operation Plan, Landfill B-18 Phases I, II, and III; PCB Building and Outside Containment Area." Chemical Waste Management, Inc., Revision 3: October 1, 2018.
39. "Chemical Waste Management, Inc. – Kettleman Hills Facility Revised TSCA Permit Renewal Application – Revision 3." Letter, Reyna Verdin, Chemical Waste Management, Inc. to Frances Wicher, U.S. EPA Region 9. October 2, 2018.
40. "Notifications correspondence from KHF to EPA-IX for PCB detections in groundwater monitoring results and leachate analytic results for TSCA-regulated units from 1992 – 2018. Compiled by Chemical Waste Management, Inc. October 2, 2018.
41. "Chemical Waste Management, Inc. – Kettleman Hills Facility, 22 CCR Financial Assurance for Closure & Post-Closure Costs." Letter, Reyna Verdin, Chemical Waste Management, Inc. to Julie Mullins, Department of Toxic Substances Control. December 31, 2018. With Enclosures. [REDACTED for posting on regulations.gov].
42. "CWM-KHF Information Request." Email, Reyna Verdin, Chemical Waste Management, Inc. to Frances Wicher, U.S. EPA Region 9. July 16, 2019.
43. "Hazardous Waste Facility Permit – Chemical Waste Management, Inc. Kettleman Hills Facility (Permit Number: 02-SAC-03)." Department of Toxic Substances Control. Effective June 16, 2003 (modified May 5, 2005, July 25, 2006, September 21, 2007, and May 21, 2014).
44. "Review of Evaluation of Pre-Sample Purge Methods, Chemical Waste Management, Inc. – Kettleman Hills Facility, Kings county, US environmental Protection Agency ID CAT0006460117." Ruth Cayabyab, Department of Toxic Substances Control to Paul Turek, Chemical Waste Management, Inc. February 20, 2008.
45. "In the matter of Chemical Waste Management, Inc. Enforcement Order." Department of Toxic Substances Control. May 20, 2011.
46. "Summary of Violations." Ignacio R. Dominguez, Department of Toxic Substances Control to Bob Henry, Chemical Waste Management. October 22, 2012. With enclosure: "Summary of Violations." Department of Toxic Substances Control. October 22, 2012.
47. "California v. Chemical Waste Management, Inc. Complaint for Civil Penalties and Injunctive Relief, Case No. BC503092." Department of Toxic Substances Control. March 18, 2013.
48. "Revised Site-Specific Ambient Air Monitoring Plan (SSAAMP) for Location of Additional Downwind Monitoring Station and Month-Long PCB Sampling, Chemical Waste Management, Inc., Kettleman Hills Facility, 35251 Old Skyline Road, Kettleman City, Kings County, California 93239, Environmental Protection Agency Identification Number CAT000646117." Letter, Edward Nieto, Department of Toxic Substances Control to Robert Henry, Chemical Waste Management, Inc. May 11, 2016.



49. “Draft Biological Opinion for Toxic Substances Control Act Permit Application for Chemical Waste Management’s Kettleman Hills Facility (modification and expansion of PCB disposal Cell B-18), Kings County, California.” Letter, Susan K. Moore, U.S. Fish and Wildlife Service to Caleb Shaffer, U.S. EPA Region 9. August 15, 2012.
50. “Amendment to the Biological Opinion for Toxic Substances Control Act Permit Application for Chemical Waste Management’s Kettleman Hills Facility (modification and expansion of PCB disposal Cell B-18), Kings County, California.” Letter, Thomas Leeman, U.S. Fish and Wildlife Service to Chip Poalinelli, U.S. EPA Region 9. September 5, 2012.
51. “CWM’s Kettleman Hills Facility Fence Realignment: Changes to Biological Opinion #81420-2012-F-0044-2.” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to John Moody, U.S. EPA Region 9. July 23, 2014.
52. “CWM’s Kettleman Hills Facility Fence Realignment: Changes to Biological Opinion #81420-2012-F-0044-2.” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to John Moody, U.S. EPA Region 9. July 30, 2014.
53. “Kettleman Hills PCB Approval Review.” Letter, Patricia Cole, U.S. Fish and Wildlife Service to Sara Ziff, U.S. EPA Region 9. December 7, 2018.
54. “Recommendation for Decommissioning Sounding Wells, B-14 Waste Management Unit, Kettleman Hills Facility, Kettleman City, California.” Letter, Bradley A. Loewen and Philip P Ross, Geomatrix Consultants, Inc. to Paul Turek, Chemical Waste Management, Inc. January 12, 2006 .“Recommendation for Decommissioning Sounding Wells, B-14 Waste Management Unit, Kettleman Hills Facility, Kettleman City, California.” Letter, Bradley A. Loewen and Philip P Ross, Geomatrix Consultants, Inc. to Paul Turek, Chemical Waste Management, Inc. January 12, 2006.
55. “Evaluation of Pre-Sample Purge Methods.” Geomatrix. March 2007.
56. “Site-Specific Groundwater Monitoring Plan, Kettleman Hills Facility, Chemical Waste Management, Inc., Kings County, California.” Geosyntec Consultants. May 2001.
57. “Engineering and Design Report, Landfill B-18, Class 1 Landfill, Phase III Expansion and Final Closure, Kettleman Hills Facility, Kettleman City, California.” Golder Associates, Inc. November 2008, Revised August 2011.
58. “Storm Water Pollution Prevention Plan Chemical Waste Management, Inc. – Kettleman Hills Facility.” Golder Associates, Inc. June 2015 (amended March 2016).
59. “Responses to DTSC Review Comments on the Phase 1 And Phase 2 Construction Quality Assurance (CQA) Reports Spill Isolation and Containment System at the Sampling Platforms and Untarpping Racks Kettleman Hills Facility – Kings County, California.” Letter, Ryan Hillman, Golder Associates, Inc. to Reyna Verdin, Chemical Waste Management, Inc. March 2, 2017.
60. “Closure and Post-Closure Cost Plan, Kettleman Hills Facility, Kings County, California.” Golder Associates, Inc. March 16, 2018.



61. "Closure and Post-Closure Cost Estimates, Kettleman Hills Facility, Kings County, California." Golder Associates, Inc. March 15, 2018.
62. "Chemical Waste Management Kettleman Hills Facility Permit and Expansion, Kings County." Letter, Sharaya Souza, Native American Heritage Commission. October 17, 2017.
63. "1994 Topographical, Meteorological and Airborne Contaminant Characterization at Kettleman Hills Facility." Rust Environmental & Infrastructure Inc. April 1995 with Appendices.
64. "Order R5-2014-0003 Waste Discharge Requirements for Chemical Waste Management, Inc. Class I/II Waste Management Units Kettleman Hills Facility Kings County." Central Valley Regional Water Control Board. January 16, 2014.
65. "Monitoring and Reporting Program R5-2014-0003 for Chemical Waste Management, Inc. Class I/II Waste Management Units Kettleman Hills Facility." California Regional Water Quality Control Board Central Valley Region. January 16, 2014.
66. "Approval for Disposal of PCB Waste." Letter, Sheila M. Prinderville, Regional Administrator, U.S. EPA Region 9, to Don McCombs, Waste Management, Inc. June 29, 1981.
67. "Approval for Disposal of PCB Landfill." Letter, Sonia F. Crow, Regional Administrator, U.S. EPA Region 9, to Craig McKenzie, Chemical Waste Management, Inc. February 16, 1983.
68. "Approval to Operate A Chemical Waste Landfill for PCB Disposal (Chemical Waste Management, Inc. Kettleman Facility)." John C. Wise, Acting Regional Administrator, U.S. EPA Region 9. February 22, 1988.
69. "Amendment to the Approvals to Operate a Chemical Waste Landfill for PCB Disposal." Daniel W. McGovern, Regional Administrator, U.S. EPA Region 9. November 30, 1990.
70. "Amendment to the Approvals to Operate Landfills B-14, B-16, and B-19." Daniel W. McGovern, Regional Administrator, U.S. EPA Region 9, to Mark Langowski, Chemical Waste Management, Inc. December 3, 1990.
71. "Chemical Waste Management, Inc. Kettleman Hills Facility TSCA Approval to Operate Landfill B-18." Letter, David P. Howekamp, Director Air and Toxics Division, U.S. EPA Region 9, to Leo Stahlecker, Chemical Waste Management, Inc. May 19, 1992. With enclosure:
 - a. "Approvals to Operate a Chemical Waste Landfill for PCB Disposal." David P. Howekamp, Director Air and Toxics Division, U.S. EPA Region 9. May 19, 1992.
72. "Approval for a Toxic Substances Control Act PCB Commercial Storage Facility Permittee: Lighting Resources, Inc. 1522 East Victory Street, Suite 4 Phoenix, AZ 85040 EPA ID Number: AZD 983 476 680." U.S. EPA Region 9. January 23, 2003.



73. “Docket No. TSCA-09-2005-0002 Consent Agreement and Final Order Pursuant to 40 C.F.R. §§ 22.13 and 22.18.” U.S. EPA Region 9. May 3, 2005.
74. “Transmittal of Final Report – ‘Multimedia Compliance Investigation: Phase 1’ Chemical Waste Management, Inc. Kettleman Hills, CA NEIC Project No.: VP0686.” Memorandum, Diana A. Love, Director, NEIC (U.S. EPA) to Christopher Rollins, U.S. EPA Region 9. January 17, 2006.
75. “Multimedia Compliance Investigation: Phase 2 Chemical Waste Management, Inc. Kettleman Hills, CA NEIC Project No.: VP0686E04.” U.S. EPA National Enforcement Investigations Center. April 2007. [REDACTED]
76. “Pilot Survey of Levels of Polychlorinated Dibenzo-p-dioxins, Polychlorinated Dibenzofurans, Polychlorinated Biphenyls, and Mercury in Rural Soils of the United States” EPA/600/R-05/048F. U.S. EPA Region 9. April 2007 (including Appendices).
77. “Notice of Noncompliance for Violations of Toxic Substances Control Act.” Letter, Paula Bisson, U.S. EPA Region 9, to Paul Turek, Chemical Waste Management, Inc. June 26, 2007.
78. “Notice of Noncompliance Follow Up Letter.” Letter, Paula Bisson, U.S. EPA Region 9, to Paul Turek, Chemical Waste Management, Inc. November 28, 2007.
79. “Decommissioning Landfill Unit B-14 Sounding Wells.” Letter, Adrienne Priselac, U.S. EPA to Chemical Waste Management, Inc. August 28, 2008.
80. “Request for Additional Sampling of Air, Soil, and Biota/Vegetation and Analysis for PCB Congeners.” Letter, Cheryl Nelson, U.S. EPA Region 9, to Paul Turek, Chemical Waste Management, Inc. December 2, 2008.
81. “Violations of the Toxic Substances Control Act (“TSCA”). Amy C. Miller, U.S. EPA Region 9, to Paul Turek, Chemical Waste Management, Inc. February 4, 2010.
82. “TSCA Compliance Evaluation Inspection Report, Chemical Waste Management, Inc. February 8-12, 2010.” U.S. EPA Region 9. March 12, 2010.
83. “TSCA Compliance Evaluation Inspection Report, Chemical Waste Management, Inc. June 2, 2010.” U.S. EPA Region 9. July 27, 2010.
84. “Polychlorinated Biphenyls (PCBs) – USEPA Conditional Approval Under 40 CFR 761.61(a), Toxic Substances Control Act, Self-Implementing Cleanup of PCBs at PCB Building, Waste Management Kettleman Hills Facility.” Arlene Kabei, U.S. EPA Region 9, to Bob Henry, Chemical Waste Management, Inc. September 23, 2010.
85. “Docket No. TSCA-09-2011-0001 Consent Agreement and Final Order Pursuant to 40 C.F.R. §§ 22.13 and 22.18.” U.S. EPA Region 9. November 29, 2010.
86. “Inspection Report [November 12, 2010], Waste Management, Kettleman Hills Facility.” U.S. EPA, Office of Enforcement and Compliance Assurance. February 5, 2011.
87. “Docket No. RCRA-09-2011-0016 Consent Agreement and Final Order Pursuant to 40 C.F.R. §§ 22.13 and 22.18.” U.S. EPA Region 9. August 23, 2011.



88. “Request for Formal Consultation Under Section 7 of the Endangered Species Act on TSCA Permit Application for Chemical Waste Management Kettleman Hills Facility.” Caleb Shaffer, U.S. EPA Region 9, to Thomas Leeman, US Fish and Wildlife Service. September 20, 2011.
89. “Kettleman City Indoor Pesticide Sampling, Status Update.” U.S. EPA Region 9. November 2011.
90. “Docket No. TSCA-09-2012-0009 Consent Agreement and Final Order Pursuant to 40 C.F.R. §§ 22.13 and 22.18.” U.S. EPA Region 9. September 7, 2012.
91. “Statement of Basis, Approval for Commercial Storage and Disposal of Polychlorinated Biphenyls (“PCBs”) U.S. Ecology Nevada, Inc. Beatty, Nevada U.S. EPA ID: NVT 330010000.” U.S. EPA Region 9. November 5, 2012.
92. “Approval for Commercial Storage and Disposal of Polychlorinated Biphenyls (“PCBs”) U.S. Ecology Nevada, Inc. Beatty, Nevada U.S. EPA ID: NVT 330010000.” U.S. EPA Region 9. November 5, 2012.
93. “Approval for Commercial Storage of Polychlorinated Biphenyls (“PCBs”) Clean Harbors Los Angeles, LLC Los Angeles, California U.S. EPA ID: CAD 050806850.” U.S. EPA Region 9. October 24, 2013.
94. “Approval for Commercial Storage of Polychlorinated Biphenyls Veolia Environmental Services Technical Solutions, L.L.C. Phoenix, Arizona EPA ID: AZ0000337360.” U.S. EPA Region 9 September 30, 2015.
95. Letter, Tom Huetteman, U.S. EPA Region 9, to Robert Henry, CWMI. December 20, 2016.
96. “Sacred Lands File and Native American Contacts List Request for Kettleman Hills Facility.” Letter, Sarah Bielski, U.S. EPA Region 9, to Native American Heritage Commission, September 28, 2017.
97. “Region 9 Enforcement Division Inspection Report, 09/28/2017 Inspection Waste Management, Inc. Kettleman Hills Facility.” October 27, 2017.
98. Letter, Barbara Gross, U.S. EPA Region 9, to Reyna Verdin, Chemical Waste Management, Inc. December 21, 2017.
99. Letter, Barbara Gross, U.S. EPA Region 9, to Stan Alec, Chairman, Kings River Choinumni Tribe. July 25, 2018.
100. Letter, Barbara Gross, U.S. EPA Region 9, to Ruben Barrios, Chairman, Santa Rosa Indian Community of the Santa Rosa Rancheria. July 25, 2018.
101. Letter, Barbara Gross, U.S. EPA Region 9, to Neil Peyron, Chairman, Tule River Indian Tribe. July 25, 2018.
102. Letter, Barbara Gross, U.S. EPA Region 9, to Leanne Walker-Grant, Chairwoman, Table Mountain Rancheria of California. July 25, 2018.



103. Letter, Barbara Gross, U.S. EPA Region 9, to Kenneth Woodrow, Chairman, Wuksache Indian Tribe/Eshom Valley Band. July 25, 2018.
104. Letter, Barbara Gross, U.S. EPA Region 9, to Tristan Tozer, California Office of Historic Preservation. September 17, 2018.
105. “Comprehensive Compliance Monitoring and Enforcement Report.” U.S. EPA Region 9. September 17, 2018.
106. “Memorandum to File (CAT 000 646 117 Chemical Waste Management, Inc. TSCA Approval), Subject: September 7, 2018 Call with Chemical Waste Management, Inc. Kettleman Hills Facility.” Frances Wicher, U.S. EPA Region 9. September 17, 2018.
107. “Kettleman Hills PCB Approval Review – FWS Biological Opinion 81420-2012-F-0044. Letter, Sara Ziff, U.S. EPA to Jennifer Norris, U.S. Fish and Wildlife Service. October 11, 2018.
108. “First Amendment to Kreyenhagen Hills Conservation Bank Agreement for Sale of Conservation Credits (Service File No. 81420-2012-F-0044 and 81420-2012-F-004402). Wildlife Inc. March 27, 2013.
109. “Final Dioxin-Like Polychlorinated Biphenyl (PCB) Congeners Study Report, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. November 2010.
110. “Quarterly Ambient Air Monitoring Program Data Report January 2011 -March 2011 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. June 2011.
111. “Quarterly Ambient Air Monitoring Program Data Report April 2011 -June 2011 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. September 2011.
112. “Final 2011 Health Risk Assessment.” Wenck Associates, Inc. November 2011.
113. “Quarterly Ambient Air Monitoring Program Data Report July 2011 -September 2011 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. December 2011.
114. “Quarterly Ambient Air Monitoring Program Data Report September 2011 – December 2011 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. March 2012.
115. “Quarterly Ambient Air Monitoring Program Data Report January 2012 -March 2012 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. June 2012.
116. “Final Annual Screening Level Health Risk Assessment October 2010 – September 2011, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF). Wenck Associates, Inc. July 2012.



117. “Quarterly Ambient Air Monitoring Program Data Report April 2012 -June 2012 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. August 2012.
118. “Quarterly Ambient Air Monitoring Program Data Report July 2012 -September 2012 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. November 2012.
119. “Quarterly Ambient Air Monitoring Program Data Report October 2012 – December 2012 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. March 2013.
120. “Annual Screening Level Health Risk Assessment October 2011 – September 2012, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF)” Wenck Associates, Inc. March 2013.
121. “Quarterly Ambient Air Monitoring Program Data Report January 2013 -March 2013 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. May 2013.
122. “Quarterly Ambient Air Monitoring Program Data Report April 2013 -June 2013 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. August 2013.
123. “Quarterly Ambient Air Monitoring Program Data Report July 2013 -September 2013 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. December 2013.
124. “Annual Screening Level Health Risk Assessment October 2012 – September 2014, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF). Wenck Associates, Inc. March 2014.
125. “Quarterly Ambient Air Monitoring Program Data Report October 2013 – December 2013 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. February 2014.
126. “Quarterly Ambient Air Monitoring Program Data Report January 2014 -March 2014 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. May 2014.
127. “Quarterly Ambient Air Monitoring Program Data Report April 2014 – June 2014 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. August 2014.
128. “Quarterly Ambient Air Monitoring Program Data Report July 2013 – September 2013 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. December 2014.
129. “Ambient Air Monitoring Program Quarterly Report October 2014 – December 2014 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. February 2015.



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130. “Annual Screening Level Health Risk Assessment October 2013 – September 2014, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF)” Wenck Associates, Inc. March 2015.
 131. “Ambient Air Monitoring Program Quarterly Report January 2015 – March 2015 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. June 2015.
 132. “Ambient Air Monitoring Program Quarterly Report April 2015 -June 2015 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. September 2015.
 133. “Ambient Air Monitoring Program Quarterly Report July 2015 – September 2015 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. December 2015.
 134. “Site-Specific Ambient Air Monitoring Plan, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. January 2016.
 135. “Annual Screening Level Health Risk Assessment October 2014 – September 2015, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF)” Wenck Associates, Inc. March 2016.
 136. “Ambient Air Monitoring Program Quarterly Report October 2015 – December 2015 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. March 2016.
 137. “Ambient Air Monitoring Program Quarterly Report January 2016 – March 2016 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. June 2016.
 138. “Ambient Air Monitoring Program Quarterly Report April 2016 -. June 2016 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. September 2016.
 139. “Ambient Air Monitoring Program Quarterly Report July 2016 – September 2016 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. December 2016.
 140. “Annual Screening Level Health Risk Assessment October 2015 – September 2016, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF)” Wenck Associates, Inc. March 2017.
 141. “Ambient Air Monitoring Program Quarterly Report October 2016 – December 2016 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. March 2017.
 142. “Ambient Air Monitoring Program Quarterly Report January 2017 – March 2017 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. June 2017.



143. “Ambient Air Monitoring Program Quarterly Report April 2017 – June 2017 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. September 2017.
144. “Ambient Air Monitoring Program Quarterly Report July 2017 – September 2017 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. December 2017.
145. “Annual Screening Level Health Risk Assessment October 2016 – September 2017, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF)” Wenck Associates, Inc. March 2018.
146. “Ambient Air Monitoring Program Quarterly Report October 2017 – December 2017 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. March 2018.
147. “Chemical Waste Management, Inc. – Kettleman Hills Facility Ambient Air Monitoring Program – First Quarter 2018 Report.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Ryan Batty, Department of Toxic Substances Control. June 27, 2018. With enclosure: “Ambient Air Monitoring Program Quarterly Report January 2018 – March 2018 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. June 2018.
148. “Chemical Waste Management, Inc. – Kettleman Hills Facility Ambient Air Monitoring Program – Second Quarter 2018 Report.” Letter, Paul Turek, Chemical Waste Management, Inc. to Ryan, Department of Toxic Substances Control. September 24, 2018. With enclosure: “Ambient Air Monitoring Program Quarterly Report April 2018 – June 2018 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. September 2018.
149. “Chemical Waste Management, Inc. – Kettleman Hills Facility Ambient Air Monitoring Program – Third Quarter 2018 Report.” Letter, Paul Turek, Chemical Waste Management, Inc. to Ryan Batty, Department of Toxic Substances Control. December 21, 2018. With enclosure: “Ambient Air Monitoring Program Quarterly Report July 2018 – September 2018 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. December 2018.
150. “Chemical Waste Management, Inc. – Kettleman Hills Facility Ambient Air Monitoring Program – Fourth Quarter 2018 Report.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Camille Rogado, Department of Toxic Substances Control. March 27, 2019. With enclosure: “Ambient Air Monitoring Program Quarterly Report October 2018 – December 2018 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. March 2019.

C. REFERENCES FOR APPENDIX D – U.S. EPA TSCA APPLICATION REVIEW CHECKLISTS

1. “Kettleman Hills Facility CAT 0000646 117 Notification of PCB Waste Activity” Christopher W. Hansen, Chemical Waste Management, Inc. to Chief, Chemical Regulations Branch, U.S. EPA Region 9. February 22, 1990. With attached EPA Form



- No.7710-53 for Chemical Waste Management, Inc. Kettleman Hills Facility, dated February 22, 1990 and signed by Mark A. Langowski, Chemical Waste Management, Inc.
2. “Amendment of Approval to Operate a Chemical Waste Landfill for PCB Disposal.” U.S. EPA, Region IX. November 30, 1990.
 3. “Hazardous Waste Facility Permit – Chemical Waste Management, Inc. Kettleman Hills Facility (Permit Number: 02-SAC-03).” Department of Toxic Substances Control. Effective June 16, 2003 (modified May 5, 2005, July 25, 2006, September 21, 2007, and May 21, 2014).
 4. “Request for Additional Sampling of Air, Soil, and Biota/Vegetation and Analysis for PCB Congeners.” Letter, Cheryl Nelson, U.S. EPA Region 9, to Paul Turek, Chemical Waste Management, Inc. December 2, 2008.
 5. “Surface Water Control Program for Kettleman Hills Facility,” Centra Consulting, Inc. October 23, 2009.
 6. “U.S. Environmental Protection Agency (“U.S. EPA”) Completeness Review of Chemical Waste Management, Inc. – Kettleman Hills Facility Request to Modify Toxic Substance Control Act (“TSCA”) Polychlorinated Biphenyl (“PCB”) Coordinated Approval Request for Landfill B-18 (Phase III).” Letter, Cheryl Nelson, U.S. EPA Region 9, to Paul Turek, Chemical Waste Management, Inc. November 25, 2009.
 7. “Chemical Waste Management, Inc. – Kettleman Hills Facility Response to Landfill B-18 Phase III Coordinated Approval Completeness Review.” Letter, Paul Turek, Chemical Waste Management, Inc. to Chip Poalinelli, U.S. EPA Region 9. December 22, 2009.
 8. “Final Dioxin-Like Polychlorinated Biphenyl (PCB) Congeners Study Report, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. November 2010.
 9. “Engineering and Design Report, B-18 Class 1 Landfill, Phase III Expansion and Final Closure, Kettleman Hills Facility, Kettleman City California, Revision 2.” Golder Associates, Inc. August 2011.
 10. “Notice of Deficiency (“NOD”) for Toxic Substances Control Act (“TSCA”) Permit Renewal and Modification Applications dated April 1, 1997, as revised, and May 10, 2010; Chemical Waste Management Kettleman Hills Facility (CAT 000646117).” Caleb Shaffer, U.S. EPA Region 9, to Bob Henry, Chemical Waste Management, Inc. September 22, 2011.
 11. “Chemical Waste Management, Inc. – Kettleman Hills Facility Response to Notice of Deficiency -TSCA Permit Renewal and Modification.” Letter, Paul Turek, Chemical Waste Management, Inc. to Chip Poalinelli, U.S. EPA Region 9. November 21, 2011 with attachments.



12. “Revised Site-Specific Groundwater Monitoring Plan Class I Waste Management Units, Kettleman Hills Facility, Kings County California,” AMEC Environmental & Infrastructure, Inc., April 14, 2014.
13. “Site-Specific Ambient Air Monitoring Plan, Chemical Waste Management, Inc., Kettleman Hills Facility (KHF), Kings County, California.” Wenck Associates, Inc. January 2016.
14. “Stormwater Pollution Prevention Plan Chemical Waste Management, Inc., – Kettleman Hills Facility.” Golder Associates and SWT Engineering. March 2016.
15. “Spill Prevention Control and Countermeasure Plan (SPCC) prepared for Chemical Waste Management, Inc. Kettleman Hills Facility.” Golder Associates, Inc. and Waste Management. October 2016.
16. Letter, Tom Huetteman, U.S. EPA Region 9, to Robert Henry, CWMI. December 20, 2016.
17. “Chemical Waste Management, Inc. – Kettleman Hills Facility Revised TSCA Permit Renewal Application – Revision 1.” Reyna Verdin, Chemical Waste Management, Inc. to Frances Wicher, U.S. EPA Region 9. July 13, 2017.
18. Letter, Barbara Gross, U.S. EPA Region 9, to Reyna Verdin, Chemical Waste Management, Inc. December 21, 2017. With enclosure:
 - a. “Notice of Deficiency, TSCA Permit Renewal Application (dated July 1, 2017), Chemical Waste Management, Inc. – Kettleman Hills Facility, EPA ID. NO CAT 000 646 117.” U.S. EPA Region 9. December 21, 2017.
19. “Hazardous Waste Facility Permit Renewal Application, Operation Plan, Chemical Waste Management, Inc. Kettleman Hills Facility.” Chemical Waste Management, Inc. Revision 3: March 16, 2018. [REDACTED for posting on regulations.gov]
20. “Notice of Annual Meeting and Proxy Statement and Annual Report on Form 10-K for the Year Ended December 31, 2017.” Waste Management. March 27, 2018.
21. “TSCA Groundwater Monitoring Addendum to Site-Specific Monitoring Plan, Kettleman Hills Facility, Kings County, California.” AMEC Foster Wheeler. April 17, 2018.
22. “Chemical Waste Management, Inc. – Kettleman Hills Facility Revised TSCA Permit Renewal Application – Revision 2”. Reyna Verdin, Chemical Waste Management, Inc. to Frances Wicher, U.S. EPA Region 9. April 19, 2018.
23. “Chemical Waste Management, Inc. – Kettleman Hills Facility 22 CCR Sudden and Non-sudden Accidental Liability Coverage.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Permitting Branch, Department of Toxic Substances Control. June 28, 2018. With enclosure: “Liability Certificate of Insurance” Great American E&S Insurance Company. Effective July 1, 2018



24. “Memorandum to File (CAT 000 646 117 Chemical Waste Management, Inc. TSCA Approval), Subject: September 7, 2018 Call with Chemical Waste Management, Inc. Kettleman Hills Facility.” Frances Wicher, U.S. EPA Region 9. September 17, 2018.
25. “TSCA Permit Renewal Application, Chemical Waste Management, Kettleman Hills Facility.” Chemical Waste Management, Inc., Revision 3: October 1, 2018..
26. “TSCA Operation Plan, Landfill B-18 Phases I, II, and III; PCB Building and Outside Containment Area.” Chemical Waste Management, Inc., Revision 3: October 1, 2018.
27. “Chemical Waste Management, Inc. – Kettleman Hills Facility Revised TSCA Permit Renewal Application – Revision 3”. Reyna Verdin, Chemical Waste Management, Inc. to Frances Wicher, U.S. EPA Region 9. October 2, 2018.
28. “Chemical Waste Management, Inc. – Kettleman Hills Facility, 22 CCR Financial Assurance for Closure & Post-Closure Costs.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Julie Mullins, Department of Toxic Substances Control. December 31, 2018. Enclosures REDACTED.
29. “Chemical Waste Management, Inc. – Kettleman Hills Facility 22 CCR Financial Assurance for Closure & Post-Closure Costs.” Letter, Reyna Verdin, CWM to Julie Mullins, Department of Toxic Substances Control. January 17, 2019. Enclosures REDACTED.
30. “Chemical Waste Management, Inc., (CWMI) Kettleman Hills Facility (KHF) CAT 000 646 117 2018 PCB Annual Report”. Letter, Tracy Reddick, Waste Management, Inc. to Regional Administrator Region 9. July 11, 2019.

D. REFERENCES FOR APPENDIX H – NATIONAL HISTORIC PRESERVATION ACT DETERMINATION

1. “Primary Archaeological Reconnaissance and Paleontological Overview of a Parcel in the Kettleman Hills, Kings County, California.” Archaeological Consulting. September 4, 1984.
2. “Supplemental Cultural Resources Survey, Proposed Expansion, Kettleman Hills Facility – Chemical Waste Management, Inc., Kings County, California.” TRC Companies, Inc. May 2004. [Confidential Business Information]
3. “Order #EP079000258: CWM Kettleman Hills Facility Project.” Adele Baldwin, California Historical Resources Information System to Max Weintraub, U.S. EPA Region 9. November 23, 2007.
4. “Sacred Lands file & Native American Contacts List Request: Kettleman Hills – Chemical Waste Management B-18 Expansion.” Fax, Edwin Poalinelli, U.S. EPA to Native American Heritage Commission. August 26, 2008.
5. “Compliance with Section 106 of the National Historic Preservation Act for the Renewal and Modification of Toxic Substance Control Act (“TSCA”) Polychlorinated Biphenyls (“PCBs”) B-18 Permit – Kettleman Hills Facility.” Letter, Cheryl Nelson,



- U.S. EPA Region 9, to Tristan Tozer, State Historian, Office of Historic Preservation. December 21, 2009.
6. “Modification of TSCA PCB B-18 Permit – Kettleman Hills Facility.” Email, Edwin Poalinelli, U.S. EPA Region 9, to Tristan Tozer, State Historian, Office of Historic Preservation. January 11, 2010.
 7. “Request for a Sacred Lands File Search and Native American Contacts List for a Proposed “Kettleman Hills Chemical Waste Management – B-18 Expansion Project, under a TSCA Permit to Store and Dispose of Waste Containing PCBs” located in western Kings County, California 2.6 miles west of Interstate 5 where it intersects with State Route 41.” Letter, Dave Singleton, Native American Heritage Commission to Edwin Poalinelli, U.S. EPA Region 9. March 4, 2010. [REDACTED for posting on regulations.gov].
 8. “Request for Information on Culturally Significant Areas; Compliance with Section 106 of the National Historic Preservation Act for the Renewal and Modification of Toxic Substance Control Act (“TSCA”) Polychlorinated Biphenyls (“PCBs”) B-18 Permit – Kettleman Hills Facility.” Letter, Cheryl Nelson, U.S. EPA Region 9, to John Davis, Chairman, Kings River Choinumni Tribe. March 10, 2010.
 9. “Request for Information on Culturally Significant Areas; Compliance with Section 106 of the National Historic Preservation Act for the Renewal and Modification of Toxic Substance Control Act (“TSCA”) Polychlorinated Biphenyls (“PCBs”) B-18 Permit – Kettleman Hills Facility.” Letter, Cheryl Nelson, U.S. EPA Region 9, to Director – Cultural Department, San Rosa Rancheria. March 10, 2010.
 10. “Request for Information on Culturally Significant Areas; Compliance with Section 106 of the National Historic Preservation Act for the Renewal and Modification of Toxic Substance Control Act (“TSCA”) Polychlorinated Biphenyls (“PCBs”) B-18 Permit – Kettleman Hills Facility.” Letter, Cheryl Nelson, U.S. EPA Region 9, to Bob Pennell, Table Mountain Rancheria. March 10, 2010.
 11. “Request for Information on Culturally Significant Areas; Compliance with Section 106 of the National Historic Preservation Act for the Renewal and Modification of Toxic Substance Control Act (“TSCA”) Polychlorinated Biphenyls (“PCBs”) B-18 Permit – Kettleman Hills Facility.” Letter, Cheryl Nelson, U.S. EPA Region 9, to Chairperson, Tule River Indian Tribe. March 10, 2010.
 12. “Request for Information on Culturally Significant Areas; Compliance with Section 106 of the National Historic Preservation Act for the Renewal and Modification of Toxic Substance Control Act (“TSCA”) Polychlorinated Biphenyls (“PCBs”) B-18 Permit – Kettleman Hills Facility.” Letter, Cheryl Nelson, U.S. EPA Region 9, to Kenneth Woodrow, Esohm Valley Band of Indians/Wuksache Tribe. March 10, 2010.
 13. “Memo to Admin Record.” Email, Edwin Poalinelli, U.S. EPA to Edwin Poalinelli. March 18, 2010.
 14. “Kettleman Hills Facility.” Letter, Bob Pennell, Table Mountain Rancheria to Chip Poalinelli, U.S. EPA Region 9. April 7, 2010.



15. “Compliance with Section 106 of the National Historic Preservation Act for Potential Renewal and Modification of Toxic Substance Control Act (“TSCA”) Polychlorinated Biphenyls (“PCBs”) B-18 Permit- Chemical Waste Management Kettleman Hills Facility- Response to Additional Information Request.” Letter, Caleb Shaffer, U.S. EPA Region 9, to Tristan Tozer, State Historian, Office of Historic Preservation. September 20, 2011.
16. “Landfill B-18 Permit Renewal and Expansion of Chemical Waste Management Kettleman Hills Facility, Kettleman Hills, California.” Letter, Milford Wayne Donaldson, State Historic Preservation Officer to Caleb Shaffer, U.S. EPA Region 9. October 28, 2011.
17. “Sacred Lands File and Native American Contacts List Request for Kettleman Hills Facility.” Letter, Sarah Bielski, U.S. EPA Region 9, to Native American Heritage Commission, September 28, 2017.
18. “Chemical Waste Management Kettleman Hills Facility Permit and Expansion, Kings County.” Letter, Sharaya Souza, Native American Heritage Commission. October 17, 2017.
19. Letter, Barbara Gross, U.S. EPA Region 9, to Stan Alec, Chairman, Kings River Choinumni Tribe. July 25, 2018.
20. Letter, Barbara Gross, U.S. EPA Region 9, to Ruben Barrios, Chairman, Santa Rosa Indian Community of the Santa Rosa Rancheria. July 25, 2018.
21. Letter, Barbara Gross, U.S. EPA Region 9, to Neil Peyron, Chairman, Tule River Indian Tribe. July 25, 2018.
22. Letter, Barbara Gross, U.S. EPA Region 9, to Leanne Walker-Grant, Chairwoman, Table Mountain Rancheria of California. July 25, 2018.
23. Letter, Barbara Gross, U.S. EPA Region 9, to Kenneth Woodrow, Chairman, Wuksache Indian Tribe/Eshom Valley Band. July 25, 2018.
24. Letter, Barbara Gross, U.S. EPA Region 9, to Tristan Tozer, California Office of Historic Preservation. July 25, 2018.
25. Letter, Barbara Gross, U.S. EPA Region 9, to Tristan Tozer, California Office of Historic Preservation. September 17, 2018.
26. “Toxic Substances Control Act Permit Renewal, Kettleman Hills Facility, 35251 Old Skyline Road, Kettleman City, Kings County, California.” Letter, Julianne Polanco, State Historic Preservation Officer, California Office of Historic Preservation to Barbara Gross, U.S. EPA Region 9. October 8, 2018.

E. REFERENCES FOR APPENDIX I – ENDANGERED SPECIES ACT DETERMINATION

1. “Request for Formal Consultation Under Section 7 of the Endangered Species Act on TSCA Permit Application for Chemical Waste Management Kettleman Hills Facility.” Letter, Caleb Shaffer, U.S. EPA to Thomas Leeman, U.S. Fish and Wildlife Service.



- September 20, 2011. With enclosure: “CWM Kettleman Hills Facility, B-18 Landfill Expansion Project, Section 7 Biological Assessment.” Berryman Ecological. July 2011.
2. “Request for Formal Consultation and Receipt of Initiation Package for the Toxic Substances Control Act Permit Application for Chemical Waste Management’s Kettleman Hills Facility Landfill Expansion.” Letter, Daniel Russell, U.S. Fish and Wildlife Service to Caleb Shaffer, U.S. EPA Region 9. December 7, 2011.
 3. “Summary of Surface Water Controls for Landfill B-18.” Letter, Robert Henry, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. December 14, 2011.
 4. “Chemical Waste Management, Inc. – Kettleman Hills Facility Section 7 Biological Assessment – January 2012 Revision.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. January 24, 2012. With enclosure: “CWM Kettleman Hills Facility, B-18 Landfill Expansion Project, Section 7 Biological Assessment.” Berryman Ecological. July 2009. Rev: January 2012.
 5. “Initiation of Formal Consultation – Kettleman Hills PCB Facility Expansion.” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to Edwin Poalinelli, U.S. EPA Region 9. January 26, 2012.
 6. “FW: RE: Questions.” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to Edwin Poalinelli, U.S. EPA Region 9. January 31, 2012.
 7. “Re: Biological Opinion Revision.” Email, Edwin Poalinelli, U.S. EPA to Kevin Aceituno, U.S. Fish and Wildlife Service. February 3, 2012.
 8. “Follow-up Re: Kettleman Hills PCB Facility Expansion Consultation.” Email, John Beach, U.S. EPA, to Kevin Aceituno, U.S. Fish and Wildlife Service. February 9, 2012.
 9. “Follow-up Re: Kettleman Hills PCB Facility Expansion Consultation.” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to John Beach, U.S. EPA Region 9. February 9, 2012. With enclosure: “General Rare Plant Survey Guidelines.” Ellen A. Cypher, California State University, Stanislaus, Revised July 2002.
 10. “Chemical Waste Management, Inc. – Kettleman Hills Facility Section 7 Biological Assessment – February 2012 Revision.” Letter, Paul Turek, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. February 21, 2012. With enclosure: “Section 7 Draft Biological Assessment B-18/B-20 Hazardous Waste Disposal Project, CWM Kettleman Hills Facility, Berryman Ecological. February 2012.
 11. “Follow-up Re: Kettleman Hills PCB Facility Expansion Consultation.” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to John Beach, U.S. EPA Region 9. February 13, 2012.
 12. “Follow-up Re: Kettleman Hills PCB Facility Expansion Consultation.” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to Edwin Poalinelli, U.S. EPA Region 9. February 17, 2012.
 13. “Chemical Waste Management, Inc. – Kettleman Hills Facility Section 7 Biological Assessment – February 2012 Revision.” Letter, Paul E. Turek, Chemical Waste



- Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. February 21, 2012. With enclosure: “CWM Kettleman Hills Facility, B-18 Landfill Expansion Project, Section 7 Biological Assessment.” Berryman Ecological. July 2009. Rev: February 2012.
14. “Chemical Waste Management, Inc. – Kettleman Hills Facility Section 7 Biological Assessment – March 2012 Revision.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. March 6, 2012. With enclosure: “CWM Kettleman Hills Facility, B-18 Landfill Expansion Project, Section 7 Biological Assessment.” Berryman Ecological. July 2009. Rev: March 2012.
 15. “Kettleman Hills Facility B-18 Landfill Expansion Project Section 7 Biological Assessment (Revision dated March 2012).” Letter, Caleb Shaffer, U.S. EPA to Thomas Leeman, U.S. Fish and Wildlife Service. March 9, 2012. With enclosure: “CWM Kettleman Hills Facility, B-18 Landfill Expansion Project, Section 7 Biological Assessment.” Berryman Ecological. July 2009. Rev: March 2012.
 16. “Chemical Waste Management, Inc. – Kettleman Hills Facility Section 7 Biological Assessment – March 2012 Revision 2.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. March 12, 2012. With enclosure: “CWM Kettleman Hills Facility, B-18 Landfill Expansion Project, Section 7 Biological Assessment.” Berryman Ecological. July 2009. Rev: March 2012 (Rev 2).
 17. “Kettleman Hills Facility Landfill Expansion Project Section 7 Biological Assessment (Revision dated March 2012).” Letter, Caleb Shaffer, U.S. EPA to Thomas Leeman, U.S. Fish and Wildlife Service. March 13, 2012. With enclosure: “CWM Kettleman Hills Facility, B-18 Landfill Expansion Project, Section 7 Biological Assessment.” Berryman Ecological. July 2011. Rev: March 2012 (Rev 2).
 18. “Rare Plant Survey Results for the Proposed Chemical Waste Management, Inc. B-18 Landfill Expansion, Kings County, California.” McCormick Biological, Inc. April 2012.
 19. “Draft Biological Opinion for Toxic Substances Control Act Permit Application for Chemical Waste Management’s Kettleman Hills Facility (modification and expansion of PCB disposal Cell B-18), Kings County, California.” Letter, Susan K. Moore, U.S. Fish and Wildlife Service to Caleb Shaffer, U.S. EPA Region 9. June 29, 2012. With enclosure: “U.S. Fish and Wildlife Service Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance.” [U.S. Fish and Wildlife Service] Sacramento Office. January 2011.
 20. “Draft Biological Opinion for Toxic Substances Control Act Permit Application for Chemical Waste Management’s Kettleman Hills Facility (modification and expansion of PCB disposal Cell B-18), Kings County, California.” Letter, Susan K. Moore, U.S. Fish and Wildlife Service to Caleb Shaffer, U.S. EPA Region 9. August 15, 2012. With enclosure: “U.S. Fish and Wildlife Service Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance.” [U.S. Fish and Wildlife Service] Sacramento Office. January 2011.
 21. “Request for Formal Consultation Under Section 7 of the Endangered Species Act on TSCA Permit Application for Chemical Waste Management Kettleman Hills Facility.



- (Biological Opinion Revision Request).” Letter, Edwin Poalinelli, U.S. EPA to Thomas Leeman, U.S. Fish and Wildlife Service. August 30, 2012.
22. “Amendment to the Biological Opinion for Toxic Substances Control Act Permit Application for Chemical Waste Management’s Kettleman Hills Facility (modification and expansion of PCB disposal Cell B-18), Kings County, California.” Letter, Thomas Leeman, U.S. Fish and Wildlife Service to Chip Poalinelli, U.S. EPA Region 9. September 5, 2012.
23. “First Amendment to Kreyenhagen Hills Conservation Bank Agreement for Sale of Conservation Credits (Service File No. 81420-2012-F-0044 and 81420-2012-F-004402). Wildlife Inc. March 27, 2013.
24. Re: Chemical Waste Management, Inc. – Kettleman Hills Facility.” Email, Bob Henry, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. June 5, 2014. With attachment: “Possible Re-Alignment – Maintain 81 Acres – Draft.”
25. “Endangered Species Survey – B18III Fence.” Email, Paul Turek, Chemical Waste Management, Inc. to John Moody, U.S. EPA, June 16, 2014. With attachments: 1) “Chemical Waste Management, Inc. – Kettleman Hills Facility TSCA Permit Renewal. Biological Opinion – B18III Preconstruction Survey –Fence.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to John Moody, U.S. EPA, June 16, 2014. 2) Letter, Michael Bumgardner, Bumgardner Biological Consulting to Paul Turek, Chemical Waste Management, Inc. June 15, 2014.
26. “FW: KHF B-18 Landfill Expansion Security Fence SJKF Potential Den Clearance Monitoring.” Email, Paul E. Turek, Chemical Waste Management, Inc. to John Moody, U.S. EPA Region 9. June 25, 2014.
27. “USFWS Biological Opinion for Toxic Substances Control Act Permit Application for Chemical Waste Management's Kettleman Hill Facility (modification and expansion of PCB disposal Cell B-18), Kings County, California, dated August 15, 2012 as amended September 5, 2012 (2012 BO).” Letter, Barbara Gross, U.S. EPA to Steven Hubbert, CA Department of Fish and Wildlife. June 27, 2014. With enclosures: 1) “Chemical Waste Management, Inc. – Kettleman Hills Facility TSCA Permit Renewal. Biological Opinion – B18III Preconstruction Survey –Fence.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to John Moody, U.S. EPA, June 16, 2014. 2) Letter, Michael Bumgardner, Bumgardner Biological Consulting to Paul Turek, Chemical Waste Management, Inc. June 15, 2014.
28. “USFWS Biological Opinion for Toxic Substances Control Act Permit Application for Chemical Waste Management's Kettleman Hill Facility (modification and expansion of PCB disposal Cell B-18), Kings County, California, dated August 15, 2012 as amended September 5, 2012 (2012 BO).” Letter, Barbara Gross, U.S. EPA to Kevin Aceituno, U.S. Fish and Wildlife Service. June 27, 2014. With enclosure: 1) “Chemical Waste Management, Inc. – Kettleman Hills Facility TSCA Permit Renewal. Biological Opinion – B18III Preconstruction Survey –Fence.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to John Moody, U.S. EPA, June 16, 2014. 2) Letter, Michael



- Bumgardner, Bumgardner Biological Consulting to Paul Turek, Chemical Waste Management, Inc. June 15, 2014.
29. “CWM (Kettleman) Letter Report Submittal under 2012 BO.” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to John Moody, U.S. EPA Region 9. June 30, 2014 with attachments: “USFWS Biological Opinion for Toxic Substances Control Act Permit Application for Chemical Waste Management's Kettleman Hill Facility (modification and expansion of PCB disposal Cell B-18), Kings County, California, dated August 15, 2012 as amended September 5, 2012 (2012 BO).” Letter, Barbara Gross, U.S. EPA to Kevin Aceituno, U.S. Fish and Wildlife Service. June 27, 2014.
 30. “CWM Kettleman’s response to our Para 4 (SJKE) dens) question.” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to John Moody, U.S. EPA Region 9. June 30, 2014.
 31. “USFWS Biological Opinion for Toxic Substances Control Act Permit Application for Chemical Waste Management's Kettleman Hill Facility (modification and expansion of PCB disposal Cell B-18), Kings County, California, dated August 15, 2012 as amended September 5, 2012 (2012 BO).” Letter, Barbara Gross, U.S. EPA to Robert G. Henry. July 3, 2014. With enclosures: 1) “CWM (Kettleman) Letter Report Submittal under 2012 BO.” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to John Moody, U.S. EPA Region 9. June 30, 2014 and 2) “CWM Kettleman’s response to our Para 4 (SJKE) dens) question.” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to John Moody, U.S. EPA Region 9. June 30, 2014.
 32. “Chemical Waste Management, Inc. – Kettleman Hills Facility TSCA Permit Renewal. Biological Opinion – B18III Preconstruction Survey – Fence, Response to EPA-IX Letter Dated July 3, 2014.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Barbara Gross, U.S. EPA, July 7, 2014. With enclosure: Letter, Michael Bumgardner, Bumgardner Biological Consulting to Paul Turek, Chemical Waste Management, Inc. July 7, 2014.
 33. “Response from Chemical Waste Management regarding 2012 Biological Opinion.” Email, Barbara Gross, U.S. EPA to Kevin Aceituno, U.S. Fish and Wildlife Service. July 9, 2014. With attachments: 1) “Chemical Waste Management, Inc. – Kettleman Hills Facility TSCA Permit Renewal. Biological Opinion – B18III Preconstruction Survey – Fence, Response to EPA-IX Letter Dated July 3, 2014.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Barbara Gross, U.S. EPA, July 7, 2014. With enclosure: Letter, Michael Bumgardner, Bumgardner Biological Consulting to Paul Turek, Chemical Waste Management, Inc. July 7, 2014; 2) “Figure 1, New Perimeter Fence, Kettleman Hills, California.” Golder Associates; 3) Letter, Michael Bumgardner, Bumgardner Biological Consulting to Paul Turek, Chemical Waste Management, Inc. July 7, 2014; and 4) “First Amendment to Kreyenhagen Hills Conservation Bank Agreement for Sale of Conservation Credits (Service File No. 81420-2012-F-0044 and 81420-2012-F-004402). Wildlife Inc. March 27, 2013.



34. “Response from Chemical Waste Management regarding 2012 Biological Opinion.” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to John Moody, U.S. EPA Region 9. July 9, 2014.
35. “Response from Chemical Waste Management regarding 2012 Biological Opinion.” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to Barbara Gross, U.S. EPA Region 9. July 10, 2014.
36. “Kettleman Hills Fence Re-alignment: Modification of Biological Opinion # 81420-2012-F-0044-2.” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to Bob Henry, Chemical Waste Management, Inc. July 14, 2014.
37. “CWM’s Kettleman Hills Fence Realignment: Modification of Biological Opinion # 81420-2012-F-0044-2.” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to John Moody, U.S. EPA Region 9. July 23, 2014.
38. “Modification of Kettleman Hills Facility Biological Opinion (81420-2012-F-0044-2).” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to John Moody, U.S. EPA Region 9. July 23, 2014.
39. “FYI-USFWS to EPA FW: CWM’s Kettleman Hills Fence Realignment: Modification of Biological Opinion # 81420-2012-F-0044-2.” Email, Paul Turek, Chemical Waste Management, Inc. to John Moody, U.S. EPA Region 9. July 29, 2014.
40. “CWM’s Kettleman Hills Fence Realignment: Modification of Biological Opinion # 81420-2012-F-0044-2.” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to John Moody, U.S. EPA Region 9. July 30, 2014.
41. “KHF Fence Survey- Take 2.” Email, Paul Turek, Chemical Waste Management, Inc. to John Moody, U.S. EPA Region 9. August 11, 2014. With enclosures: 1) “Chemical Waste Management, Inc. – Kettleman Hills Facility TSCA Permit Renewal. Biological Opinion – B18III Preconstruction Survey – Fence” Letter, Paul E. Turek, Chemical Waste Management, Inc. to John Moody, U.S. EPA, August 11, 2014; 2) Letter, Michael Bumgardner, Bumgardner Biological Consulting to Paul Turek, Chemical Waste Management, Inc. August 10, 2014; and 3) “New Perimeter Map, Kettleman Hills, California.” Golder Associates, Inc. No date.
42. “KHF Fence Survey – Take 2.” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to John Moody, U.S. EPA Region 9. August 18, 2014.
43. “Waste Management Letter to US EPA, dated August 11, 2014; USFWS Biological Opinion for Toxic Substances Control Act Permit Application for Chemical Waste Management’s Kettleman Hill Facility (modification and expansion of PCB disposal Cell B-18), Kings County, California, dated August 15, 2012, as amended (2012BO).” Letter, John R. Moody, U.S. EPA to Paul E. Turek, Chemical Waste Management, Inc. August 21, 2014.
44. “KHF B-18 Stockpile Survey.” Email, Paul Turek, Chemical Waste Management, Inc. to John Moody, U.S. EPA Region 9. September 9, 2014. With attachments: 1) “Chemical Waste Management, Inc. – Kettleman Hills Facility TSCA Permit Renewal. Biological Opinion – B18III Preconstruction Survey – B-18 Stockpile.” Letter, Paul E.



- Turek, Chemical Waste Management, Inc. to John Moody, U.S. EPA, September 9, 2014; and 2) Letter, Michael Bumgardner, Bumgardner Biological Consulting to Paul Turek, Chemical Waste Management, Inc. September 8, 2014.
45. “Kettleman Pre-construction Survey, B-18 Soil Stockpile.” Email, John Moody, U.S. EPA to Paul Turek, Chemical Waste Management, Inc. September 23, 2014.
 46. “Kettleman Pre-construction Survey, B-18 Soil Stockpile.” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to John Moody, U.S. EPA Region 9. September 23, 2014.
 47. “KHF 81 Acre Survey.” Email, Paul Turek, Chemical Waste Management, Inc. to John Moody, U.S. EPA Region 9. October 13, 2014. With attachments: 1) “Chemical Waste Management, Inc. – Kettleman Hills Facility TSCA Permit Renewal. Biological Opinion – B18III Preconstruction Survey – 81 Acres.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to John Moody, U.S. EPA, October 13, 2014; and 2) Letter, Michael Bumgardner, Bumgardner Biological Consulting to Paul Turek, Chemical Waste Management, Inc. October 10, 2014.
 48. “EPA Response to CWM Letter Report, 10/10/14.” Email, John Moody, U.S. EPA to Paul Turek, Chemical Waste Management, Inc. October 27, 2014.
 49. “Waste Management Letter to US EPA, dated October 13, 2014; USFWS Biological Opinion for Toxic Substances Control Act Permit Application for Chemical Waste Management’s Kettleman Hill Facility (modification and expansion of PCB disposal Cell B-18), Kings County, California, dated August 15, 2012, as amended (2012BO).” Letter, John R. Moody, U.S. EPA to Paul E. Turek, Chemical Waste Management, Inc. October 30, 2014.
 50. “Kettleman Hills PCB Approval Review – FWS Biological Opinion 81420-2012-F-0044” Letter, Sara Ziff, U.S. EPA, to Jennifer Norris, U.S. Fish and Wildlife Service. October 11, 2018.
 51. “Kettleman Hills PCB Approval Review.” Letter, Patricia Cole, U.S. Fish and Wildlife Service to Sara Ziff, U.S. EPA Region 9. December 7, 2018.
 52. “Kettleman Hills PCB Permit Application Review – EPA Endangered Species Act Determination.” Memorandum, Sara Ziff, U.S. EPA to Frances Wicher, U.S. EPA Region 9. August 19, 2019.
 53. “Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project.” Letter. Fish and Wildlife Service. August 19, 2019.

F. REFERENCES FOR APPENDIX J – CLEAN AIR ACT CONFORMITY APPLICABILITY ANALYSIS

1. “Chemical Waste Management, Inc. Kettleman Hills Facility CAT 000 646 117 Revised 2007 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. August 4, 2008. [REDACTED for posting on regulations.gov].



2. “Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2008 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 15, 2009. [REDACTED for posting on regulations.gov].
3. “Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2009 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 8, 2010. [REDACTED for posting on regulations.gov].
4. “Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2010 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 13, 2011. [REDACTED for posting on regulations.gov].
5. “Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2011 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 6, 2012. [REDACTED for posting on regulations.gov].
6. “Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2012 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 8, 2013. [REDACTED for posting on regulations.gov].
7. “Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2013 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 9, 2014. [REDACTED for posting on regulations.gov].
8. “Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2014 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 8, 2015. [REDACTED for posting on regulations.gov].
9. “Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2015 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 20, 2016.
10. “Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2016 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 5, 2017.
11. “Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2017 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 9, 2018.
12. “Business Confidential – Percentage TSCA Disposal to Total Disposal 2002-2017.” Chemical Waste Management, Inc. October 2, 2019. [Confidential Business Information]



13. “CWM-KHF Information Request.” Email, Reyna Verdin, Chemical Waste Management, Inc. to Frances Wicher, U.S. EPA Region 9. July 16, 2019.
14. “CWM-KHF Information Request.” Email, Reyna Verdin, Chemical Waste Management, Inc. to Frances Wicher, U.S. EPA Region 9. July 18, 2019.
15. “In the Matter of Adopting the 2018 Regional Transportation Plan/Sustainable transportation Plan/Sustainable Communities Strategy, 2019 Federal Transportation Improvement Program, and Corresponding Air Quality Conformity Analysis. Resolution No. 18-12. Kings County Association of Governments Transportation Policy Committee. August 22, 2018.
16. “Truck and commute traffic to and from Kettleman Hills Waste Disposal Facility.” Email, Christopher Xiong, Kings County Association of Governments to Frances Wicher, U.S. EPA, Region IX. January 28, 2019.
17. “Rule 9110 General Conformity.” San Joaquin Valley Air Pollution Control District. October 20, 1994.
18. “Permit to Operate C-283--0-3.” San Joaquin Valley Air Pollution Control District. Expiration Date: August 31. 2022.
19. “Air Quality Technical Analysis, Kettleman Hills Facility B-18/B-20 Landfill Disposal Project,” Shaw Environmental, Inc., November 2007 [Appendix F to the “Draft Subsequent Environmental Impact Report,” CH2MHill, March 2008].
20. “San Joaquin Valley Air Basin, Annual Average Day Emissions 2019.” U.S. EPA Region 9. April 11, 2019. Data obtained from CARB CEPAM.
21. “U.S. EPA calculation of emissions from diesel-powered fork lift used at the PCB F/SU at KHF” U.S. EPA Region 8, July 19, 2019.
22. “July 3, 2019 Call with Chemical Waste Management, Inc. Kettleman Hills Facility.” Memorandum, Frances Wicher, U.S. EPA to File (CAT 000 646 117 Chemical Waste Management, Inc. TSCA Approval). July 24, 2019.

III. DRAFT ENVIRONMENTAL JUSTICE ANALYSIS AND REFERENCES

A. DRAFT ENVIRONMENT JUSTICE ANALYSIS

1. “Environmental Justice Analysis – Chemical Waste Management, Inc. Kettleman Hills Facility, Kings County, California, U.S. EPA ID: CAT 000 646 117.” Land, Chemicals, and Revitalization Division, U.S. EPA Region 9. August 19, 2019.
2. “Borrador del Análisis de Justicia Ambiental para el Permiso Propuesto de la TSCA para la instalación Kettleman Hills Condado de Kings, California ID de la EPA: CAT 000 646 117.” Agencia de Protección Ambiental de EE. UU., Región 9. Agosto de 2019.



B. REFERENCES FOR THE DRAFT ENVIRONMENTAL JUSTICE ANALYSIS

1. “PCB Outside Pad Replacement and Cleanup Completion Report – Kettleman Hills Facility, Kings County, California.” Associated Design & Engineering, Inc. January 10, 2011 (revised July 20, 2011).
2. “Second Quarter 2012 Groundwater and Unsaturated Zone Monitoring and Constituents of Concern Report for Class I Waste Management Units – Kettleman Hills Facility, Kings County, California.” AMEC Environment & Infrastructure, Inc. September 25, 2012.
3. “Revised Site-Specific Groundwater Monitoring Plan Class I Waste Management Units, Kettleman Hills Facility, Kings County, California.” AMEC Environment & Infrastructure, Inc. April 14, 2014.
4. “Chemical Waste Management, Inc. Kettleman Hills Facility, Fourth Quarter 2016 Monitoring and Constituents of Concern Report for Class I Waste Management Units as Required by DTSC on March 6, 2015.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Permitting Division, Department of Toxic Substances Control. February 28, 2017. With enclosure: “Fourth Quarter 2016 Monitoring and Constituents of Concern Report for Class I Waste Management Units as Required by DTSC on March 6, 2015.” AMEC. February 24, 2017.
5. “CalEnviroScreen: Download Data” [Data File]. Retrieved July 7, 2019 from www.oehha.ca.gov/calenviroscreen/maps-data/download-data.
6. “Investigation of Birth Defects and Community Exposures in Kettleman City, CA.” California Environmental Protection Agency and the California Department of Public Health. December 2010 (revised February 24, 2011).
7. “CalEnviroScreen 3.0.” California Environmental Protection Agency and the Office of Environmental Health Hazard Assessment. January 2017.
8. “2009 Traffic Volumes on the California State Highway System.” California Department of Public Transportation. September 2010.
9. “2010 Traffic Volumes on the California State Highway System.” California Department of Public Transportation. August 2011.
10. “Traffic Volumes: Annual Average Daily Traffic.” [Data File]. Retrieved from <http://www.dot.ca.gov/trafficops/census/>.
11. “Truck Traffic: Annual Average Daily Truck Traffic.” [Data File]. Retrieved from <http://www.dot.ca.gov/trafficops/census/#tab2015d4>.
12. “Report to the Office of Environmental Health Hazard Assessment – Kettleman City Air Quality Assessment.” California Air Resources Board. December 2010.
13. “Age-Adjusted Invasive Cancer Incidence Rates in California – All Sites 1996-2015 by County.” Retrieved March 2019 from www.cancer-rates.info/ca/.
14. “County Health Profiles Status 2010.” California Department of Public Health. 2010.



15. "County Health Profiles Status 2011." California Department of Public Health. 2011.
16. "County Health Profiles Status 2012." California Department of Public Health. 2012.
17. "County Health Profiles Status 2013." California Department of Public Health. 2013.
18. "County Health Profiles Status 2014." California Department of Public Health. 2014.
19. "County Health Profiles Status 2015." California Department of Public Health. 2015.
20. "County Health Profiles Status 2016." California Department of Public Health. 2016.
21. "County Health Profiles Status 2017." California Department of Public Health. 2017.
22. "County Health Profiles Status 2018." California Department of Public Health. 2019.
23. "County Health Profiles Status 2019." California Department of Public Health. 2019.
24. "Kettleman City Community Exposure Assessment – Evaluation of Pesticides in Air." California Department of Pesticide Regulation. December 2010.
25. "Pesticide Use Report Data" [Electronic Database]. California Department of Pesticide Regulation. Retrieved October 3, 2018 from www.cdpr.ca.gov/docs/pur/purmain.htm.
26. "Asthma Data Query" [Electronic Database]. California Environmental Health Tracking Program. Retrieved March 28, 2019 from www.cehtp.org/page/asthma/query.
27. "Maternal and Infant Health Data Query" [Electronic Database]. California Environmental Health Tracking Program. Retrieved June 28, 2019 from <https://trackingcalifornia.org/mih/query>.
28. "Chemical Waste Management, Inc. – Kettleman Hills Facility Monitoring of Landfill B-16 Lysimeters." Letter, Paul E. Turek, Chemical Waste Management, Inc. to Max Weintraub, U.S. EPA Region 9. February 13, 2004.
29. "Chemical Waste Management, Inc. – Kettleman Hills Facility CAT000646117 2006 PCB Annual Report." Letter, Tracy Reddick, Chemical Waste Management, Inc. to Regional Administrator, U.S. EPA Region 9. June 26, 2007. [REDACTED for posting on regulations.gov]
30. "Chemical Waste Management, Inc. Kettleman Hills Facility CAT000646117 Revised 2007 PCB Annual Report." Letter, Tracy Reddick, Chemical Waste Management, Inc. to Regional Administrator, U.S. EPA Region 9. August 4, 2008. [REDACTED for posting on regulations.gov]
31. "Chemical Waste Management, Inc. - Kettleman Hills Facility Response to TSCA Notice of Noncompliance Follow-Up Letter PCB Performance Evaluation Samples - Second Set." Letter, Paul Turek, Chemical Waste Management, Inc. to Christopher Rollins, U.S. EPA Region 9. February 12, 2008.
32. "Chemical Waste Management, Inc. – Kettleman Hills Facility CAT000646117 2008 PCB Annual Report." Letter, Tracy Reddick, Chemical Waste Management, Inc. to Regional Administrator, U.S. EPA Region 9. July 15, 2009. [REDACTED for posting on regulations.gov].



33. “Chemical Waste Management, Inc. Kettleman Hills Facility, Draft Dioxin-Like PCB Congeners Study Workplan Revision 1.” Letter, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. March 3, 2009.
34. “Draft Dioxin-Like PCB Congeners Study Workplan (Revision 1).” Chemical Waste Management, Inc. January 2009 (revised March 2009).
35. “Chemical Waste Management, Inc. – Kettleman Hills Facility CAT000646117 2009 PCB Annual Report.” Letter, Tracy Reddick, Chemical Waste Management, Inc. to Regional Administrator, U.S. EPA Region 9. July 8, 2010. [REDACTED for posting on regulations.gov].
36. “Chemical Waste Management, Inc. – Kettleman Hills Facility CAT000646117 2010 PCB Annual Report.” Letter, Tracy Reddick, Chemical Waste Management, Inc. to Regional Administrator, U.S. EPA Region 9. July 13, 2011. [REDACTED for posting on regulations.gov].
37. “Chemical Waste Management, Inc. – Kettleman Hills Facility CAT000646117 2011 PCB Annual Report.” Letter, Tracy Reddick, Chemical Waste Management, Inc. to Regional Administrator, U.S. EPA Region 9. July 6, 2012. [REDACTED for posting on regulations.gov].
38. “Chemical Waste Management, Inc. – Kettleman Hills Facility Re: “Other” Noncompliance Report.” Letter, Paul Turek, Chemical Waste Management, Inc. to Wayne Lorentzen, Department of Toxic Substances Control. May 23, 2012.
39. “Chemical Waste Management, Inc. – Kettleman Hills Facility CAT000646117 2012 PCB Annual Report.” Letter, Tracy Reddick, Chemical Waste Management, Inc. to Regional Administrator, U.S. EPA Region 9. July 8, 2013. [REDACTED for posting on regulations.gov].
40. “Chemical Waste Management, Inc. – Kettleman Hills Facility CAT000646117 2013 PCB Annual Report.” Letter, Tracy Reddick, Chemical Waste Management, Inc. to Regional Administrator, U.S. EPA Region 9. July 9, 2014. [REDACTED for posting on regulations.gov].
41. “Chemical Waste Management, Inc. – Kettleman Hills Facility CAT000646117 2014 PCB Annual Report.” Letter, Tracy Reddick, Chemical Waste Management, Inc. to Regional Administrator, U.S. EPA Region 9. July 8, 2015. [REDACTED for posting on regulations.gov].
42. “Chemical Waste Management, Inc. – Kettleman Hills Facility CAT000646117 2015 PCB Annual Report.” Letter, Tracy Reddick, Chemical Waste Management, Inc. to Regional Administrator, U.S. EPA Region 9. July 20, 2016.
43. “Chemical Waste Management, Inc. – Kettleman Hills Facility CAT000646117 2016 PCB Annual Report.” Letter, Tracy Reddick, Chemical Waste Management, Inc. to Regional Administrator, U.S. EPA Region 9. July 5, 2017.



44. “Chemical Waste Management, Inc. – Kettleman Hills Facility CAT000646117 2017 PCB Annual Report.” Letter, Tracy Reddick, Chemical Waste Management, Inc. to Regional Administrator, U.S. EPA Region 9. July 9, 2018.
45. “Notifications correspondence from KHF to EPA-IX for PCB detections in groundwater monitoring results and leachate analytic results for TSCA-regulated units from 1992 – 2018. Compiled by Chemical Waste Management, Inc. October 2, 2018.
46. “TSCA Permit Renewal Application, Chemical Waste Management, Kettleman Hills Facility.” Chemical Waste Management, Inc., Revision 3: October 1, 2018.
47. “TSCA Operation Plan, Landfill B-18 Phases I, II, and III; PCB Building and Outside Containment Area.” Chemical Waste Management, Inc., Revision 3: October 1, 2018.
48. “Healthy People 2020: Maternal, Infant and Child Health.” United States Department of Health and Human Services. Retrieved June 20, 2018 from <https://www.healthypeople.gov/2020/topics-objectives/topic/maternal-infant-and-child-health>.
49. “Hazardous Waste Facility Permit – Chemical Waste Management, Inc. Kettleman Hills Facility (Permit Number: 02-SAC-03).” Department of Toxic Substances Control. Effective June 16, 2003 (modified May 5, 2005, July 25, 2006, September 21, 2007, and May 21, 2014).
50. “In the matter of Chemical Waste Management, Inc. Enforcement Order.” Department of Toxic Substances Control. May 20, 2011.
51. “Summary of Violations.” Ignacio R. Dominguez, Department of Toxic Substances Control to Bob Henry, Chemical Waste Management, Inc. October 22, 2012. With enclosure: “Summary of Violations.” Department of Toxic Substances Control. October 22, 2012.
52. “California v. Chemical Waste Management, Inc. Complaint for Civil Penalties and Injunctive Relief, Case No. BC503092.” Department of Toxic Substances Control. March 18, 2013.
53. “Environmental Justice Review.” Department of Toxic Substances Control. June 2013.
54. “Revised Site-Specific Ambient Air Monitoring Plan (SSAAMP) for Location of Additional Downwind Monitoring Station and Month-Long PCB Sampling, Chemical Waste Management, Inc., Kettleman Hills Facility, 35251 Old Skyline Road, Kettleman City, Kings County, California 93239, Environmental Protection Agency Identification Number CAT000646117.” Letter, Edward Nieto, Department of Toxic Substances Control to Robert Henry, Chemical Waste Management, Inc. May 11, 2016.
55. “Come Visit Us at the Kings County Public Safety Event.” Department of Toxic Substances Control and U.S. EPA Region 9. October 2017.
56. “Community Meeting.” Department of Toxic Substances Control and U.S. EPA Region 9. October 2017.



57. “Save the Date: Community Meeting.” Department of Toxic Substances Control and U.S. EPA Region 9. October 2017.
58. “Recommendation for Decommissioning Sounding Wells, B-14 Waste Management Unit, Kettleman Hills Facility, Kettleman City, California.” Letter, Bradley A. Loewen and Philip P Ross, Geomatrix Consultants, Inc. to Paul Turek, Chemical Waste Management, Inc. January 12, 2006.
59. “Storm Water Pollution Prevention Plan Chemical Waste Management, Inc. – Kettleman Hills Facility.” Golder Associates, Inc. June 2015 (amended March 2016).
60. “Responses to DTSC Review Comments on the Phase 1 And Phase 2 Construction Quality Assurance (CQA) Reports Spill Isolation And Containment System at the Sampling Platforms and Untarpping Racks Kettleman Hills Facility – Kings County, California.” Letter, Ryan Hillman, Golder Associates, Inc. to Reyna Verdin, Chemical Waste Management, Inc. March 2, 2017.
61. “HPSA Find” [Electronic Database]. Health Resources and Services Administration Retrieved November 28, 2018 from www.data.hrsa.gov/tools/shortage-area/hpsa-find.
62. “MUA Find” [Electronic Database]. Health Resources and Services Administration Retrieved November 28, 2018 from www.data.hrsa.gov/tools/shortage-area/mua-find.
63. “Order R5-2014-0003 Waste Discharge Requirements for Chemical Waste Management, Inc. Class I/II Waste Management Units Kettleman Hills Facility Kings County.” Central Valley Regional Water Quality Control Board. January 16, 2014.
64. “Memo #1: Some observations and suggestions regarding California Environmental Protection Agency's Proposed Exposure Assessment for Kettleman City.” Technical Assistance Services for Communities Program. April 6, 2010.
65. “Memo #2: Some Consideration of the Reported Health Status of Residents of Kettleman City and Suggestions for Next Activities” Technical Assistance Services for Communities Program. April 14, 2010.
66. “Memo #3: What can be done to help Kettleman City residents now?” Technical Assistance Services for Communities Program. October 4, 2010.
67. “Memo #4: Comments and Recommendations in Response to the California Department of Public Health and California Environmental Protection Agency’s Investigation of Birth Defects and Community Exposures in Kettleman City, CA Public Review Draft released November 22, 2010.” Technical Assistance Services for Communities Program. December 1, 2010.
68. “Memo #5: Comments and Recommendations in Response to the California Department of Public Health and California Environmental Protection Agency’s Investigation of Birth Defects and Community Exposures in Kettleman City, CA Public Review Draft released November 22, 2010 (Part 2).” Technical Assistance Services for Communities Program. November 20, 2011.
69. “Memo #6: Incidence Patterns of Birth Defects and Cancer in Kettleman City and California’s Central Valley including California Department of Public Health’s



- Response to Community Concerns.” Technical Assistance Services for Communities Program. August 20, 2012.
70. “American Community Survey Information Guide.” U.S. Census Bureau. October 2017.
 71. “American Fact Finder” [Electronic Database]. U.S. Census Bureau. Retrieved from May 14, 2019 from <https://factfinder.census.gov/>.
 72. “Approval to Operate a Chemical Waste Landfill for PCB Disposal.” David P. Howekamp Region 9 Director Air and Toxics Division, U.S. EPA Region 9. May 19, 1992.
 73. “Docket No. TSCA-09-2005-0002 Consent Agreement and Final Order Pursuant to 40 C.F.R. §§ 22.13 and 22.18.” U.S. EPA Region 9. May 3, 2005.
 74. “Transmittal of Final Report – ‘Multimedia Compliance Investigation: Phase 1’ Chemical Waste Management, Inc. Kettleman Hills, CA NEIC Project No.: VP0686.” Memorandum, Diana A. Love, Director, National Enforcement Investigations Center (U.S. EPA) to Christopher Rollins, U.S. EPA Region 9. January 17, 2006.
 75. “Notice of Noncompliance for Violations of Toxic Substances Control Act.” Letter, Paula Bisson, U.S. EPA to Paul Turek, Chemical Waste Management, Inc. June 26, 2007.
 76. “Notice of Noncompliance Follow Up Letter.” Letter, Paula Bisson, U.S. EPA Region 9, to Paul Turek, Chemical Waste Management, Inc. November 28, 2007.
 77. “Decommissioning Landfill Unit B-14 Sounding Wells.” Letter, Adrienne Priselac, U.S. EPA to Chemical Waste Management, Inc. August 28, 2008.
 78. “Request for Additional Sampling of Air, Soil, and Biota/Vegetation and Analysis for PCB Congeners.” Letter, Cheryl Nelson, U.S. EPA Region 9, to Paul Turek, Chemical Waste Management, Inc. December 2, 2008.
 79. “Chemical Waste Management, Inc. Kettleman Hills Facility Draft Dioxin-Like PCB Congeners Study Workplan Technical Review.” U.S. EPA Region 9. February 12, 2009.
 80. “Kettleman Hills Facility – PCB Disposal Activity Impact Analysis.” U.S. EPA Region 9. February 2009.
 81. “Split Sampling Field Report: Chemical Waste Management, Inc. Kettleman Hills Facility.” U.S. EPA Region 9. November 30, 2009.
 82. “Technical Review: Draft Dioxin-Like Polychlorinated Biphenyl (PCB) Congener Study Work Plan, Revision 1.” U.S. EPA Memorandum. March 2009.
 83. “Violations of the Toxic Substances Control Act (“TSCA”).” Amy C. Miller, U.S. EPA Region 9, to Paul Turek, Chemical Waste Management, Inc. February 4, 2010.
 84. “TSCA Compliance Evaluation Inspection Report, Chemical Waste Management, Inc. February 8-12, 2010.” U.S. EPA Region 9. March 12, 2010.



85. "TSCA Compliance Evaluation Inspection Report, Chemical Waste Management, Inc. June 2, 2010." U.S. EPA Region 9. July 27, 2010.
86. "Polychlorinated Biphenyls (PCBs) – U.S. EPA Conditional Approval Under 40 CFR 761.61(a), Toxic Substances Control Act, Self-Implementing Cleanup of PCBs at PCB Building, Waste Management Kettleman Hills Facility." Arlene Kabei, U.S. EPA Region 9, to Bob Henry, Chemical Waste Management, Inc. September 23, 2010.
87. "Docket No. TSCA-09-2011-0001 Consent Agreement and Final Order Pursuant to 40 C.F.R. §§ 22.13 and 22.18." U.S. EPA Region 9. November 29, 2010.
88. "Docket No. RCRA-09-2011-0016 Consent Agreement and Final Order Pursuant to 40 C.F.R. §§ 22.13 and 22.18." U.S. EPA Region 9. August 23, 2011.
89. "EPA Information Sheet: Results of the PCB Congeners Study." U.S. EPA Region 9. January 2011.
90. "Kettleman City Indoor Pesticide Sampling." U.S. EPA Region 9. November 2011.
91. "Kettleman City Indoor Pesticide Sampling Proposed." U.S. EPA Region 9. February 2, 2011.
92. "Questions and EPA Responses Received From Greenaction/Center on Race, Poverty, and the Environment Regarding CWM PCB Congener Study Report." U.S. EPA Region 9. January 2011.
93. "Statement of Basis, Approval for Commercial Storage and Disposal of Polychlorinated Biphenyls ("PCBs") U.S. Ecology Nevada, Inc. Beatty, Nevada U.S. EPA ID: NVT 330010000." U.S. EPA Region 9. November 5, 2012.
94. "Technical Guidance for Assessing Environmental Justice in Regulatory Analysis." U.S. EPA Region 9. June 2016.
95. "Region 9 Enforcement Division Inspection Report, 09/28/2017 Inspection Waste Management, Inc. Kettleman Hills Facility." U.S. EPA Region 9. October 27, 2017.
96. "EJSCREEN Report: Kettleman City, California; Kings County, California" [Electronic Database]. U.S. EPA Region 9. Retrieved June 20, 2018 from www.ejscreen.epa.gov/mapper/.
97. "Nonattainment Areas for Criteria Pollutants (Green Book)" [Electronic Database]. U.S. EPA Region 9. Retrieved August 2, 2018 from www.epa.gov/green-book.
98. "NEPAssist Report: Kettleman Hills Facility" [Electronic Database]. U.S. EPA Region 9. Retrieved July 20, 2018 from www.U.S.EPA.gov/nepa/NEPAssist.
99. "Report on the Environment: Health Status." U.S. EPA Region 9. Retrieved June 20, 2018 from www.epa.gov/report-environment/health-status.
100. "Particle Pollution and Respiratory Effects." U.S. EPA Region 9. Retrieved from <https://www.epa.gov/particle-pollution-and-your-patients-health/health-effects-pm-patients-lung-disease>.



101. “Mujer Saludable es Familia Saludable (A Healthy Woman is a Healthy Family) Prevention of Pesticide Exposure Project.” Final Report. Vision y Compromiso. December 8, 2011.
102. “Kettleman Hills Facility 3rd Annual Informational Meeting.” Waste Management, Inc. March 2018.
103. “Locations” [Electronic Database]. Waste Management. Retrieved June 21, 2018 from www.wmsolutions.com/locations/#state=CA&zip=&distance=500&material=&lat=&lon=.
104. “Kettleman Hills Facility 4th Annual Information Meeting.” Waste Management, Inc. March 2019.
105. “State Water Resources Control Board – Board Meeting Session – Division of Financial Assistance.” State Water Resources Control Board. December 6, 2016.
106. “Final Dioxin-Like Polychlorinated Biphenyl Congeners Study Report.” Wenck Associates, Inc. November 2010.
 - a. Executive Summary (en español)
 - b. Appendices A through O, except D and G (Dispersion Modeling Report)
 - c. Appendix D: Field Notes
 - d. Appendix G: Laboratory Analytical Data
107. “Final 2011 Health Risk Assessment.” Wenck Associates, Inc. September 2011.
108. “Quarterly Ambient Air Monitoring Program Data Report January 2011 – March 2011 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. June 2011.
109. “Quarterly Ambient Air Monitoring Program Data Report April 2011 – June 2011 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. September 2011.
110. “Quarterly Ambient Air Monitoring Program Data Report July 2011 – September 2011 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. December 2011.
111. “Quarterly Ambient Air Monitoring Program Data Report October 2011 – December 2011 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. March 2012.
112. “Quarterly Ambient Air Monitoring Program Data Report January 2012 – March 2012 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. June 2012.
113. “Quarterly Ambient Air Monitoring Program Data Report April 2012 – June 2012 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. August 2012.



114. “Quarterly Ambient Air Monitoring Program Data Report July 2012 – September 2012 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. November 2012.
115. “Quarterly Ambient Air Monitoring Program Data Report October 2012 – December 2012 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. March 2013.
116. “Quarterly Ambient Air Monitoring Program Data Report January 2013 – March 2013 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. June 2013.
117. “Quarterly Ambient Air Monitoring Program Data Report April 2013 – June 2013 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. August 2013.
118. “Quarterly Ambient Air Monitoring Program Data Report July 2013 – September 2013 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. December 2013.
119. “Quarterly Ambient Air Monitoring Program Data Report October 2013 – December 2013 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. March 2014.
120. “Quarterly Ambient Air Monitoring Program Data Report January 2014 – March 2014 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. May 2014.
121. “Quarterly Ambient Air Monitoring Program Data Report April 2014 – June 2014 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. August 2014.
122. “Quarterly Ambient Air Monitoring Program Data Report July 2013 – September 2013 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. December 2014.
123. “Ambient Air Monitoring Program Quarterly Report October 2014 – December 2014 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. February 2015.
124. “Ambient Air Monitoring Program Quarterly Report January 2015 – March 2015 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. June 2015.
125. “Ambient Air Monitoring Program Quarterly Report April 2015 – June 2015 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. September 2015.
126. “Ambient Air Monitoring Program Quarterly Report July 2015 – September 2015 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. December 2015.



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127. “Ambient Air Monitoring Program Quarterly Report October 2015 – December 2015 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. March 2016.
 128. “Ambient Air Monitoring Program Quarterly Report January 2016 – March 2016 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. June 2016.
 129. “Ambient Air Monitoring Program Quarterly Report April 2016 – June 2016 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. September 2016.
 130. “Ambient Air Monitoring Program Quarterly Report July 2016 – September 2016 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. December 2016.
 131. “Site-Specific Ambient Air Monitoring Plan, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. January 2016.
 132. “Ambient Air Monitoring Program Quarterly Report October 2016 – December 2016 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. March 2017.
 133. “Ambient Air Monitoring Program Quarterly Report January 2017 – March 2017 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. June 2017.
 134. “Ambient Air Monitoring Program Quarterly Report April 2017 – June 2017 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. September 2017.
 135. “Ambient Air Monitoring Program Quarterly Report July 2017 – September 2017 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. December 2017.
 136. “Ambient Air Monitoring Program Quarterly Report October 2017 – December 2017 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. March 2018.
 137. “Ambient Air Monitoring Program Quarterly Report January 2018 – March 2018 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. June 2018.
 138. “Ambient Air Monitoring Program Quarterly Report April 2018 – June 2018 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. September 2018.
 139. “Ambient Air Monitoring Program Quarterly Report July 2018 – September 2018 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. December 2018.



140. “Air Quality Monitoring at the Kettleman Hills Facility.” Wenck Associates, Inc. April 2019.

141. “Kettleman Hills Facility Groundwater and Unsaturated Zone – 2018 Annual Summary.” Wood Environment & Infrastructure Solutions, Inc. April 2019.

C. OTHER DOCUMENTS

1. “Is There a Toxic Monster in Kettleman City? Why the State of California’s Draft Report and Investigation of Kettleman City Birth Defects are Incomplete, Flawed, and Misleading.” El Pueblo Para El Air y Agua Limpio and GreenAction for Health and Environmental Justice. December 2, 2010.
2. “Kettleman City Community Canvass, Community Forum Kettleman City Library.” Slide Presentation, Public Health Institute. June 2017.
3. “Resources & Contacts. Recursos y Contactos Kettleman City, California.” Public Health Institute. June 27, 2017.
4. “Kettleman City Community Heath Canvass, Final Report.” Presentation, Public Health Institute for Kings County Department of Public Health. June 29, 2017.

IV. PUBLIC PARTICIPATION DOCUMENTS

A. 2019 PROPOSED APPROVAL

1. “U.S. EPA Requests Public Comment on Proposed PCB Permit for Kettleman Hills Facility.” Land, Chemicals and Redevelopment Division, U.S. EPA Region 9. August 27, 2019.
2. “La EPA solicita comentarios publicos sobre el permiso propuesto para realizar operaciones con PCB en la instalación Kettleman Hills.” Land, Chemicals and Redevelopment Division, U.S. EPA Region 9. August 27, 2019.
3. “Kettleman Hills Facility – Proposed PCB Permit; Public Meeting & Hearing.” U.S. EPA Region 9. August 27, 2019.
4. “Instalación Kettleman Hills – Permiso Propuesto de PCB; Reunión Pública y Audiencia.” U.S. EPA Region 9. August 27, 2019.

B. HISTORICAL PUBLIC PARTICIPATION DOCUMENTS

1. 2007 Public Hearing
 - a. “U.S. EPA Requests Public Comments on the Draft Permit and Draft Environmental Justice Assessment for the Chemical Waste Management, Inc., Kettleman Hills Facility.” U.S. EPA Region 9. January 2007.
 - b. “United States Environmental Protection Agency (EPA) Seeks Public Comment on Draft Permit and Draft Environmental Justice (EJ) Assessment for Chemical Waste Management, Inc. – Kettleman Hills Facility.” U.S. EPA Region 9. January 2007.



- c. “U.S. EPA Requests Public Comments on the Draft Permit and Draft Environmental Justice Assessment for the Chemical Waste Management, Inc., Kettleman Hills Facility.” U.S. EPA Region 9. March 2007.
 - d. “U.S. EPA holds public workshop on draft permit and environmental justice assessment for Kettleman Hills landfill.” Media Advisory. U.S. EPA Region 9. March 8, 2007.
 - e. “Agenda U.S. EPA (EPA) Workshop and Public Hearing about Draft Permit for PCB Activities at Chemical Waste Management, Inc. – Kettleman Hills Facility and Draft Environmental Justice (EJ) Assessment.” U.S. EPA March 27, 2007. Includes other materials handed out at meeting.
 - f. “U.S. EPA Extends Public Comment Period on the Draft Permit and Draft Environmental Justice (EJ) Assessment for Chemical Waste Management, Inc. – Kettleman Hills Facility until June 4, 2007.” U.S. EPA Region 9. May 2007.
2. 2009/2010 U.S. EPA Meetings
- a. “United States Environmental Protection Agency (EPA) Chemical Waste Management, Inc. – Kettleman Hills Facility PCB Permit Renewal Update Meeting – February 4, 2009.” Notice. January 2009.
 - b. “Kettleman Hills Facility PCB Congener Sampling, March 31-April 1, 2009.” Photos. U.S. EPA Region 9. March-April 2009.
 - c. “Possible meeting dates/times on PCB data in Kettleman City.” Email, Cheryl Nelson, U.S. EPA Region 9, to Bradley Angel, Greenaction. November 9, 2009.
 - d. “Informe de Campo Sobre Muestras Separadas, Chemical Waste Management, Incorporated, Kettleman Hills, California.” Handout. U.S. EPA Region 9. November 30, 2009.
 - e. “PCB Congener Study Preliminary Results Discussion. Agenda.” U.S. EPA Region 9. December 16, 2009. Includes copies of handouts.
 - f. “PCB Congener Study Preliminary Results Discussion. Agenda.” U.S. EPA Region 9, December 16, 2009. Includes color copies of handouts.
 - g. “EPA Factsheet on PCBs.” U.S. EPA Region 9. September 24, 2010.
3. 2011 U.S. EPA Meeting
- a. “Fact Sheet on United States Environmental Protection Agency’s Compliance Investigation and Enforcement at Chemical Waste Management, Kettleman Hills.” U.S. EPA Region 9. November 2011.
 - b. “Kettleman Community Workshop & Meeting. Thursday, November 17th.” Department of Toxic Substances Control and U.S. EPA Region 9. November 2011.



- c. “Air, Soil Vapor, Surface Water, and Groundwater Monitoring, Waste Management, Inc. – Kettleman Hills Facility (MAP).” Department of Toxic Substances Control and U.S. EPA Region 9. November 2011.
- d. “Regulación de Aire, Vapor del Suelo, Agua Superficial y Agua Subterránea Waste Management, Inc. – Instalación Kettleman Hills (MAP).” Department of Toxic Substances Control and U.S. EPA Region 9. November 2011.
- e. “Air, Soil Vapor, Surface Water, and Groundwater Monitoring, Waste Management, Inc. – Kettleman Hills Facility.” Department of Toxic Substances Control and U.S. EPA Region 9. November 2011.
- f. “Regulación de Aire, Vapor del Suelo, Agua Superficial y Agua Subterranea Waste Management, Inc. – Instalación Kettleman Hills.” Department of Toxic Substances Control and U.S. EPA Region 9. November 2011.
- g. “Hazardous Waste Permitting – Map, Waste Management, Inc. – Kettleman Hills Facility.” Department of Toxic Substances Control and U.S. EPA Region 9. November 2011.
- h. “Permisos para Desechos Peligrosos – Diagrama, Waste Management, Inc. – Instalación Kettleman Hills.” Department of Toxic Substances Control and U.S. EPA Region 9. November 2011.
- i. “Hazardous Waste Permitting – Activity, Waste Management, Inc. – Kettleman Hills Facility.” Department of Toxic Substances Control and U.S. EPA Region 9. November 2011.
- j. “Permisos para Desechos Peligrosos – Actividades, Waste Management, Inc. – Instalación Kettleman Hills.” Department of Toxic Substances Control and U.S. EPA Region 9. November 2011.
- k. “Enforcement Program, Waste Management, Inc. – Kettleman Hills Facility.” Department of Toxic Substances Control and U.S. EPA Region 9. November 2011.
- l. “Programa de Cumplimiento, Waste Management, Inc. – Instalación Kettleman Hills.” Department of Toxic Substances Control and U.S. EPA Region 9. November 2011.
- m. “Kettleman Hills Facility Permitting Process, Waste Management, Inc. – Kettleman Hills Facility.” Department of Toxic Substances Control and U.S. EPA Region 9. November 2011.
- n. “Instalación Kettleman Hills Proceso de Tramitación de Permisos, Waste Management, Inc. – Instalación Kettleman Hills.” Department of Toxic Substances Control and U.S. EPA Region 9. November 2011.
- o. “Kettleman Hills Facility Permitting Process – Water Board, Waste Management, Inc. – Kettleman Hills Facility.” Department of Toxic Substances Control and U.S. EPA Region 9. November 2011.



- p. “Instalación Kettleman Hills Proceso de Tramitación de Permisos, Waste Management, Inc. – Kettleman Hills Facility.” Department of Toxic Substances Control and U.S. EPA Region 9. November 2011.
 - q. “Human Health Risk Assessment at K.H. Facility, Waste Management, Inc. – Kettleman Hills Facility.” Department of Toxic Substances Control and U.S. EPA Region 9. November 2011.
 - r. “Evaluación de Riesgos Para la Salud Humana en la Instalación K.H. Waste Management, Inc. – Instalación Kettleman Hills.” Department of Toxic Substances Control and U.S. EPA Region 9. November 2011.
 - s. “Critical Distances Affecting Human Health Risk, Waste Management, Inc. – Kettleman Hills Facility.” Department of Toxic Substances Control and U.S. EPA Region 9. November 2011.
 - t. “Distancias Críticas Que Afectan los Riesgos Para la Salud Humana, Waste Management, Inc. – Instalación Kettleman Hills.” Department of Toxic Substances Control and U.S. EPA Region 9. November 2011.
 - u. “RCRA and TSCA Compliance History of Chemical Waste Management, Inc.” U.S. EPA Region 9. November 2011.
 - v. “Historial de Cumplimiento de RSCA y TSCA de Chemical Waste Management, Kettleman Hills.” U.S. EPA Region 9. November 2011.
 - w. “Agenda Workshop/Public Meeting Thursday, November 17, 2011.” Department of Toxic Substances Control and U.S. EPA Region 9. November 2011.
 - x. “Pesticide Sampling Poster.” U.S. EPA Region 9. November 2011.
 - y. “Pesticide Safety Project: Preventing Pesticide Exposure among Women of Childbearing Age in Kettleman City, California.” U.S. EPA Region 9, November 2011.
 - z. “Project Summary & Update – Update on Chemical Waste Management – Kettleman Hills Facility PCB Permit Application Project.” U.S. EPA Region 9. November, 2011.
 - aa. “Untitled.” Presentation. U.S. EPA Region 9. November 16, 2011.
 - bb. “Kettleman City Community Workshop Public Workshop November 17, 2011 (sic) Sign-In sheet.” U.S. EPA Region 9. November 16, 2011. [REDACTED for posting on regulations.gov]
4. Community Fair 2017
- a. “Visit our booth at the Kings County Public Safety Event.” Postcard, Department of Toxic Substances Control and U.S. EPA to Kettleman City post office boxes. October 2017.
 - b. Safety Fair Booth Posters (English). U.S. EPA Region 9. October 2017.



- c. Safety Fair Booth Posters (Spanish). U.S. EPA Region 9. October 2017.
 - d. Letter, Frances Wicher, U.S. EPA Region 9, to Kettleman City Residents who signed up to receive more information on the Kettleman Hills Project at the October 2017 Safety Fair. November 8, 2017.
5. Public Meeting 2017
- a. “Save the Date! DTSC & USEPA Community Meeting.” Department of Toxic Substances Control and U.S. EPA Region 9. November 2017.
 - b. “How Does the EPA Decision Process Work?” Poster, U.S. EPA Region 9. November 16, 2017 (English & Spanish).
 - c. “What Does the Facility Want to Do?” Poster, U.S. EPA Region 9. November 16, 2017.
 - d. “Qué quiere hacer la instalación?” Poster, U.S. EPA Region 9. November 16, 2017.
 - e. “What Should I Know About PCBs?” Poster, U.S. EPA Region 9. November 16, 2017.
 - f. “Qué debería saber sobre los PCBs?” Poster, U.S. EPA Region 9. November 16, 2017.
 - g. “November 16, 2017 Community Meeting Applications for Chemical Waste Management’s Kettleman Hills Facility (Agenda).” Handout. Department of Toxic Substances Control and U.S. EPA Region 9. November 16, 2017.
 - h. “PCB Application Review Process Under TSCA – Chemical Waste Management – Kettleman Hills Facility.” Presentation, U.S. EPA Region 9. November 16, 2017.
 - i. “Proceso de revisión de la solicitud de PCB bajo la ley TSCA – Chemical Waste Management – Kettleman Hills Facility.” Presentation, U.S. EPA Region 9. November 16, 2017.
6. Community Notice and Community Fair 2018
- a. “Community Update.” Department of Toxic Substances Control. April 2018. (English and Spanish)
 - b. “Major Changes Requested in Permit Renewal Application/“Revisión de la aplicación, Comentarios público y Proceso de decisión.” Posters. U.S. EPA Region 9. October 2018.

C. CWM COMMUNITY MEETINGS

- 1. “Kettleman Hills Facility – Three Decades of Community Support” Waste Management. January 2012.
- 2. “Annual Community Meeting Notification” Letter, Robert Henry, Chemical Waste Management, Inc to Chairman, Kings County Board of Supervisors. March 24, 2017.



3. “Kettleman Hills Facility 2016 Groundwater and Unsaturated Zone Annual Summary.” AMEC Foster Wheeler. April 2017.
4. “Resumen Anual 2016 de Las Aguas Subterráneas y Zonas Insaturadas de las Instalaciones de Kettleman Hills.” AMEC Foster Wheeler. April 2017.
5. “Air Quality Monitoring at the Kettleman Hills Facility.” Wenck Associates, Inc. April 2017.
6. “Control de Calidad del Aire en las Instalaciones de Kettleman Hills.” Wenck Associates, Inc. April 2017.
7. “Chemical Waste Management, Inc- Kettleman Hills Facility DTSC Permit Number: 02-SAC-03; DTSC Permit Condition: Part III. General Conditions, Condition 4. (C)” Letter, Robert Henry to Department of Toxic Substances Control, April 18, 2017.
8. “Kettleman Hills Facility 2nd Annual Informational Meeting.” Flyer, Chemical Waste Management, Inc. April 25, 2017.
9. “Instalación de Kettleman Hills 2ª Reunión Informativa Annual.” Flyer, Chemical Waste Management, Inc. April 25, 2017.
10. “Waste Management Kettleman Hills Facility Annual Community Meeting” Presentation.” Waste Management. April 25, 2017.
11. “2nd Annual Community Meeting.” Email, Bob Henry, Chemical Waste Management, Inc. to Frances Wicher, U.S. EPA Region 9. April 29, 2017.
12. “Annual Community Meeting Notification” Letter, Robert Henry, Chemical Waste Management, Inc to Chairman, Kings County Board of Supervisors. March 27, 2018.
13. “Air Quality Monitoring at the Kettleman Hills Facility.” Wenck Associates, Inc. April 2018.
14. “Control de Calidad del Aire en las Instalaciones de Kettleman Hills.” Wenck Associates, Inc. April 2018.
15. “Kettleman Hills Facility 2017 Groundwater and Unsaturated Zone Annual Summary.” AMEC Foster Wheeler. April 2018.
16. “Resumen Anual 2017 de Las Aguas Subterráneas y Zonas Insaturadas de las Instalaciones de Kettleman Hills.” AMEC Foster Wheeler. April 2018.
17. “Kettleman Hills Facility 3rd Annual Informational Meeting.” Flyer, Chemical Waste Management, Inc. April 26, 2018.
18. “Instalación de Kettleman Hills 2ª Reunión Informativa Annual.” Flyer, Chemical Waste Management, Inc. April 26, 2018.
19. “Air Quality Monitoring at the Kettleman Hills Facility.” Wenck Associates, Inc. April 2019.
20. “Control de Calidad del Aire en las Instalaciones de Kettleman Hills.” Wenck Associates, Inc. April 2019.



21. “Kettleman Hills Facility 2018 Groundwater and Unsaturated Zone Annual Summary.” AMEC Foster Wheeler. April 2019.
22. “Resumen Anual 2018 de Las Aguas Subterráneas y Zonas Insaturadas de las Instalaciones de Kettleman Hills.” AMEC Foster Wheeler. April 2019.
23. “Kettleman Hills Facility 4th Annual Informational Meeting.” Flyer, Chemical Waste Management, Inc. April 23, 2019.
24. “Instalación de Kettleman Hills 4ª Reunión Informativa Annual.” Flyer, Chemical Waste Management, Inc. April 23, 2019.

D. PUBLIC COMMENTS AND OTHER PUBLIC RESPONSES RECEIVED

1. Comments Received on the 2007 Proposed Coordinated Approval
 - a. “In Re: US Environmental Protection Agency (EPA) Workshop and Public Hearing About Draft Permit for PCB Activities at Chemical Waste Management, Inc. Kettleman Hills Facility and Draft Environmental Justice Assessment.” Condensed Transcript. Diana K. Morris, CSR No. 12451. March 27, 2007.
 - b. “Comment Sheet for Draft Permit for CWM Kettleman Hills Facility and/or Draft Environmental Justice Assessment, Public Comments.” March 27, 2007. [REDACTED for posting on regulations.gov].
 - c. “Comments on the Draft Environmental Justice Assessment for Chemical Waste Management’s Kettleman Hills Facility” Comment Letter, Center on Race Poverty and the Environment, April 23, 2007. [REDACTED for posting on regulations.gov].
 - d. “Declarations of Residents of Kettleman City and Avenal City.” Transcribed and Translated Public Comments. May 1, 2007. [REDACTED for posting on regulations.gov]
 - e. “Why the US EPA’s Draft Environmental Justice Assessment and PCB Permit are Wrong!” El Pueblo’s Bullet Points on EJ Assessment, May 1, 2007.
 - f. “U.S. EPA’s Draft Environmental Justice Assessment of the Chemical Waste Management Hazardous Waste Facility in Kettleman City, California is Environmental Racism and Injustice.” Statement. Maricela Mares Alatorre, El Pueblo, et al. May 1, 2007.
 - g. “Comments of Greenaction for Health and Environmental Justice and El Pueblo Para El Aire Y Agua Limpia/ People for Clean Air and Water documenting why US EPA must rescind their “Draft Environmental Justice Assessment” and reject the proposed permit for the Chemical Waste Management Kettleman Hills Facility.” Letter, Maricela Mares-Alatorre, El Pueblo Para el Aire y Agua Limpia and Erica Swinney, Greenaction for Health and Environmental Justice to Max Weintraub/Debbie Lowe, U.S. EPA Region 9. May 21, 2007.



- h. “Chemical Waste Management, Inc. – Kettleman Hills Facility Comments on Draft Coordinated Approval.” Letter Robert Henry, Chemical Waste Management, Inc. to Max Weintraub, U.S. EPA Region 9. June 1, 2007.
 - i. “Kettleman City Draft EJ Assessment.” Letter, Steven Morgan, Chemical Waste Management, Inc. to Max Weintraub and Debbie Lowe, U.S. EPA Region 9. June 1, 2007.
 - j. “Kettleman Elementary Hearing, March 27, 2007.” Letter, Alexis Yalon, Paulson Reporting and Litigation Services to Max Weintraub, U.S. EPA Region 9. June 18, 2007. With enclosure: “In Re: US Environmental Protection Agency (EPA) Workshop and Public Hearing About Draft Permit for PCB Activities at Chemical Waste Management, Inc. Kettleman Hills Facility and Draft Environmental Justice Assessment.” Original Transcript. Diana K. Morris, CSR No. 12451. March 27, 2007.
2. Comments Received on the 2019 Proposal Approval
- a. “Kettleman City PCB Permit.” Email, Maricela Mares-Alatorre, El Pueblo of Kettleman City to Frances Wicher, et al., U.S. EPA Region 9. May 20, 2019.
 - b. “Proposed Dates for EPA Kettleman City Public Meeting.” Email, Bradley Angel, Greenaction to Frances Wicher, U.S. EPA Region 9. July 15, 2019.
 - c. “Proposed Dates for EPA Kettleman City Public Meeting.” Email, Maricela Mares-Alatorre, El Pueblo of Kettleman City to Frances Wicher, et al., U.S. EPA Region 9. July 15, 2019.
3. Other Comments Received
- a. “Civil Rights and Environmental Justice Discrimination in Kettleman City, CA.” Letter, Center on Race, Poverty & the Environment to Senator Barbara Boxer. September 29, 2008.
 - b. “Kettleman City Listening Session Kettleman Community Center, Kettleman, CA, Wednesday, August 12, 2009.” Transcript. August 12, 2009. [REDACTED for posting on regulations.gov].
 - c. “Dear State of California EPA/Department of Toxic Substances Control.” Public Petition. April 2010. [REDACTED for posting on regulations.gov].
 - d. Letter, Jared Blumenfeld, Regional Administrator, U.S. EPA Region 9, to Senator Diane Feinstein. April 8, 2010.
 - e. “Padres Hacia una Vida Mejor, et al v. California Environmental Protection Agency, Department of Toxic Substances Control, et al, Complaint No. 01R-95-R9.” Letter, Center on Race Poverty & the Environment, et al to Lisa Jackson, Administrator, U.S.EPA. June 8, 2010.



- f. “Questions and EPA Responses Received From Greenaction/Center on Race, Poverty, and the Environment Regarding CWM PCB Congener Study Report.” U.S. EPA Region 9. January 2011.
- g. “FW: Responses to Mr. Angel Concerning CWM Kettleman Hills, March 14, 2016.” Email, Barbara Gross, U.S. EPA Region 9, to Bradley Angel, Greenaction, et al. March 30, 2016.
- h. “Request regarding November 16 Kettleman City public meeting.” Emails, Tom Huettelman, et al. U.S. EPA Region 9 to Bradley Angel, Greenaction, et al. November 9, 2017.
- i. “Questions on landfill liners.” Email, Frances Wicher, U.S. EPA Region 9, to Maricela Mares-Alatorre, El Pueblo. December 15, 2017.
- j. “Touch base on Kettleman Hills Facility PCB application.” Email, Frances Wicher, to Maricela Mares-Alatorre, El Pueblo of Kettleman City. May 28, 2019.

V. CHEMICAL WASTE MANAGEMENT, INC. APPLICATION FOR TSCA APPROVAL RENEWAL

A. OCTOBER 2018 APPLICATION

- 1. “TSCA Permit Renewal Application, Chemical Waste Management, Kettleman Hills Facility.” Chemical Waste Management, Inc., Revision 3: October 1, 2018.
- 2. “TSCA Permit Renewal Application, Chemical Waste Management, Kettleman Hills Facility.” Chemical Waste Management, Inc., Revision 3: October 1, 2018. Redlined.
- 3. “TSCA Operation Plan, Landfill B-18 Phases I, II, and III; PCB Building and Outside Containment Area.” Chemical Waste Management, Inc., Revision 3: October 1, 2018.
- 4. “TSCA Operation Plan, Landfill B-18 Phases I, II, and III; PCB Building and Outside Containment Area.” Chemical Waste Management, Inc., Revision 3: October 1, 2018. Redlined.
- 5. “Chemical Waste Management, Inc. – Kettleman Hills Facility Revised TSCA Permit Renewal Application – Revision 3.” Reyna Verdin, Chemical Waste Management, Inc. to Frances Wicher, U.S. EPA Region 9. October 2, 2018.
- 6. “Chemical Waste Management, Inc. – Kettleman Hills Facility Class 1 Permit Modification: Contingency Plan and Training Plan.” Reyna Verdin, Chemical Waste Management, Inc. to Camille Rogado, Department of Toxic Substances Control. May 30, 2019. [REDACTED for posting on regulations.gov].

B. APRIL 2018 APPLICATION

- 1. “Chemical Waste Management, Inc. – Kettleman Hills Facility Re: TSCA Permit Renewal Application – Revision 1: July 15, 2017.” Reyna Verdin, Chemical Waste Management, Inc. to Frances Wicher, U.S. EPA Region 9. February 14, 2018.



2. “Chemical Waste Management, Inc. – Kettleman Hills Facility Revised TSCA Permit Renewal Application – Revision 2.” Reyna Verdin, Chemical Waste Management, Inc. to Frances Wicher, U.S. EPA Region 9. April 19, 2018.
3. “TSCA Permit Renewal Application, Chemical Waste Management, Kettleman Hills Facility.” Revision 2: April 20, 2018.
4. “Hazardous Waste Facility Permit Renewal Application, Operation Plan, Chemical Waste Management, Inc. Kettleman Hills Facility.” Chemical Waste Management, Inc. Revision 3: March 16, 2018. [REDACTED for posting on regulations.gov]
5. “Closure and Post-Closure Plans, Kettleman Hills Facility, Kings County, California.” Golder Associates, Inc. March 15, 2018.

C. PREVIOUS APPLICATIONS

1. “TSCA Approval Renewal for Landfill Unit B-18, Chemical Waste Management, Inc. – Kettleman Hills Facility, CAT 000646 0117.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Yoshiro Tokiwa, U.S. EPA Region 9. April 1, 1997 with Enclosures.
2. “TSCA Approval Renewal for Landfill Unit B-14, B-16 and B-19 and Ancillary Commercial Storage Activities, Chemical Waste Management, Inc. – Kettleman Hills Facility, CAT 000646 0117.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Yoshiro Tokiwa, U.S. EPA Region 9. July 1, 1997. With enclosure.
3. “TSCA Approval Renewal for Landfill Unit B-18, Chemical Waste Management, Inc. – Kettleman Hills Facility, CAT 000646 0117.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Yoshiro Tokiwa, U.S. EPA Region 9. July 28, 1997. With enclosure.
4. Letter, Max Weintraub, U.S. EPA Region 9, to Paul E. Turek, Chemical Waste Management, Inc. August 21, 1998.
5. “Status of B-14 and B-19 Landfills Related to TSCA Letter of Authorization Renewal Request, Chemical Waste Management, Kettleman Hills Facility.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Max Weintraub, U.S. EPA Region 9. August 26, 1998.
6. “Chemical Waste Management, Inc. – Kettleman Hills Facility Request for Submittal for Approval – Revised PCB Operations Plan.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Max Weintraub, U.S. EPA Region 9. April 14, 1999. With enclosure: “Operation Plan, Landfill Unit B-18 and B-16; Closed Landfill Unit B-14, In Closure Landfill Unit B-19, Kettleman Hills Facility Chemical Waste Management, Inc.” Chemical Waste Management, Inc. April 1999.
7. “Chemical Waste Management, Inc. – Kettleman Hills Facility Request for TSCA PCB Coordinated Approval.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Wayne Nastri, U.S. EPA Region 9. October 20, 2003. With enclosure.



8. “TSCA Approval Modification for Certain PCB Activities.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Max Weintraub, U.S. EPA Region 9. January 13, 2005. With enclosure.
9. “TSCA Approval Modification for Certain PCB Activities.” Letter, Paul Bisson, U.S. EPA Region 9, to Paul E. Turek, Chemical Waste Management, Inc. March 8, 2005.
10. “Chemical Waste Management, Inc. – Kettleman Hills Facility Request for to Modify TSCA PCB Coordinated Approval.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. June 26, 2009. With enclosures: “Initial Report TSCA Approval Request Chemical Waste Management, Inc. Kettleman Hills Facility Landfill Unit B-18, Phases I, II, and III.” and “Operation Plan, Landfill Unit B-18, Phases I, II, and III Kettleman Hills Facility Chemical Waste Management, Inc.” Chemical Waste Management, Inc. Revision 1: June 26, 2009.
11. “Chemical Waste Management, Inc. – Kettleman Hills Facility Request for to Modify TSCA PCB Coordinated Approval.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. July 28, 2009. With enclosures: “Operation Plan, Landfill Unit B-18, Phases I, II, and III Kettleman Hills Facility Chemical Waste Management, Inc.” Chemical Waste Management, Inc. Revision 1: July 27, 2009 and other documents documenting approval of waste disposal in Landfill B-18 Phases I and II.
12. “Chemical Waste Management, Inc. – Kettleman Hills Facility Revised Initial Report, Omission from Response to Landfill B-18 Phase III Coordinated Approval Completeness Review.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Chip Poalinelli, U.S. EPA Region 9. February 18, 2010. With Enclosure: “Initial Report, TSCA Approval Request, Chemical Waste Management, Inc. Kettleman Hills Facility, Landfill Unit B-18, Phase I, II, and III.” Chemical Waste Management, Inc. February 17, 2010.
13. “Chemical Waste Management, Inc. – Kettleman Hills Facility Response to Notice of Deficiency – TSCA Permit Renewal and Modification.” Letter, Paul Turek, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. November 21, 2011 with Enclosures: 1) “Chemical Waste Management, Inc. – Kettleman Hills Facility (KHF), EPA-IX Notice of Deficiency for TSCA Permit Renewal and Modification Applications – Attachment A, dated September 22, 2011.” Chemical Waste Management, Inc. (November 21, 2011); 2) “TSCA Application – Supplemental Information.” Chemical Waste Management, Inc. (November 21, 2011); 3) “Initial Report, TSCA Approval Request, Chemical Waste Management, Inc. Kettleman Hills Facility, Landfill Unit B-18, Phase I, II, and III.” Chemical Waste Management, Inc. November 21, 2011 and 4) “TSCA Operation Plan, landfill Unit B-18, Phases I, II, and III, Kettleman Hills Facility, Chemical Waste Management, Inc.” Chemical Waste Management, Inc. November 21, 2011.
14. “Chemical Waste Management, Inc. – Kettleman Hills Facility TSCA Certification” Letter, Robert G. Henry, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. January 24, 2012.



15. “Additional Permit Requests for the PCB Building.” Email, Bob Henry, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. February 4, 2013.
16. “Chemical Waste Management, Inc. – Kettleman Hills Facility TSCA Permit Renewal – Supplemental Information.” Letter, Paul Turek, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. March 8, 2013. With enclosure.
17. “TSCA Supplemental Information – NOD 3/23/13 Response.” Spreadsheet, Chemical Waste Management. March 27, 2013.
18. “Chemical Waste Management Inc. – Kettleman Hills Facility Revised TSCA Permit Renewal Application – Revision 1.” Reyna Verdin, Chemical Waste Management, Inc. to Frances Wicher, U.S. EPA, July 13, 2017. With enclosures:
19. “TSCA Permit Renewal Application, Chemical Waste Management, Inc. Kettleman Hills Facility.” Chemical Waste Management, Inc., Revision 1: July 15, 2017.
20. “Hazardous Waste Facility Permit Renewal Application, Operation Plan, Chemical Waste Management, Inc. Kettleman Hills Facility.” Chemical Waste Management, Inc. Revision 2: July 15, 2017. [REDACTED]

VI. REQUESTS FOR INFORMATION, NOTICES OF DEFICIENCIES, AND RESPONSES

A. U.S. EPA 2016 REQUEST FOR UPDATE AND RESPONSE/DEPARTMENT OF TOXIC SUBSTANCES CONTROL FIRST NOTICE OF DEFICIENCY

1. 2016 U.S. EPA Request for Update and Department of Toxic Substances Control First Notice of Deficiency
 - a. “Notice of Deficiency for the Permit Renewal Application for the Chemical Waste Management, Inc., Kettleman Hills Facility Hazardous Waste Facility, 35251 Old Skyline Road, Kettleman City, Kings County, California, 93239, Environmental Protection Agency Identification Number: CAT000646117.” Letter, Ryan Batty, Department of Toxic Substance Control, to Bob Henry, Chemical Waste Management, Inc. November 18, 2016. With enclosures.
 - b. Letter, Tom Huetteman, U.S. EPA Region 9, to Robert Henry, Chemical Waste Management, Inc. December 20, 2016.
 - c. “Letter following up on the discussions at the November 30, 2016 meeting.” Email, Bob Henry, Chemical Waste Management, Inc. to Frances Wicher, U.S. EPA Region 9. January 13, 2017.
 - d. “Letter following up on the discussions at the November 30, 2016 meeting.” Email, Frances Wicher, U.S. EPA Region 9 to Bob Henry, Chemical Waste Management, Inc. January 17, 2017.
 - e. “Request for a Response Extension for the Notice of Deficiency for the Permit Renewal Application for the Chemical Waste Management, Inc., Kettleman Hills Facility Hazardous Waste Facility, 35251 Old Skyline Road, Kettleman City,



- Kings County, California, 93239, Environmental Protection Agency Identification Number: CAT000646117.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Ryan Batty, Department of Toxic Substances Control. February 7, 2017.
- f. “Approval of Extension to Respond to Notice of Deficiency, Permit Renewal for the Chemical Waste Management, Inc., Kettleman Hills Facility, Kings, County, California; EPA ID. No. CAT000646117.” Letter, Ryan Batty, Department of Toxic Substances Control to Reyna Verdin, Chemical Waste Management, Inc. February 14, 2017.
 - g. “Revised submittal schedule for the TSCA application.” Email, Frances Wicher, U.S. EPA to Bob Henry, Chemical Waste Management, Inc. February 21, 2017.
 - h. “Revised submittal schedule for the TSCA application.” Email, Frances Wicher, U.S. EPA to Bob Henry, Chemical Waste Management, Inc. February 24, 2017.
 - i. “March 7, 2017 DTSC (GSU) Meeting Notes.” Email Bob Henry, Chemical Waste Management, Inc. to Ryan Batty, Department of Toxic Substances Control. March 9, 2017 with attachment: “Proposed Changes to Table 1 (Draft).”
 - j. “FW: Minutes for Kettleman Hills meeting.” Email, Ryan Batty, Department of Toxic Substances Control, to Bob Henry, Chemical Waste Management, Inc. March 10, 2017.
2. Response to 2016 Request for Update/Department of Toxic Substances Control First Notice of Deficiency
- a. First Incremental Submittal
 - (1) “Responses to the Permit Renewal Application Notice of Deficiency. Submittal No. 1 (March 15, 2017) Kettleman Hills Facility – Kings, County, California; EPA ID. NO. CAT000646117.” Letter, Michelle Kampen and Ryan Hillman, Golder Associates to Ryan Batty, Department of Toxic Substances Control, and Frances Wicher, U.S. EPA Region 9. March 15, 2017 including 3 Attachments.
 - b. Second Incremental Submittal
 - (1) “Responses to the Permit Renewal Application Notice of Deficiency. Submittal No. 2 (April 15, 2017) Kettleman Hills Facility – Kings, County, California; EPA ID. NO. CAT000646117.” Letter, Michelle Kampen and Ryan Hillman, Golder Associates to Ryan Batty, Department of Toxic Substances Control, and Frances Wicher, U.S. EPA Region 9. April 15, 2017 including 12 attachments.
 - (2) “Exposure Information Report for the Chemical Waste Management, Inc. Kettleman Hills Facility, Kings County California. EPA ID No. CAT000646117.” August 8, 1985.



- (3) “Potential Release Report for the Chemical Waste Management, Inc. Kettleman Hills Facility, Kings County California. EPA ID No. CAT000646117.” September 6, 1985.
- (4) “Response to July 1985 Second Notice of Deficiency – Engineering Plans, Specifications and Certification Reports for Existing Surface Impoundment Units, Kettleman Hills Facility, Kings County, California.” EMCON Associates. September 7, 1985.
- (5) “Final Environmental Impact Report – Chemical Waste Management, Inc. Kettleman Hills Hazardous Waste Treatment, Storage, and Disposal Facility.” CH2M Hill. October 1985.
- (6) “State Siting Criteria Equivalency Assessment for Chemical Waste Management’s Inc. Kettleman Hills Facility.” Meredith/Boli & Associates, Inc. October 28, 1985.
- (7) “Inorganic Chemical Characterization of Ground Water, Kettleman Hills Facility, Kettleman Hills, California.” EMCON Associates. April 1, 1986.
- (8) “Interim Status Period Ground-Water Monitoring Results Kettleman Hills Facility, Kettleman Hills Facility, Kettleman Hills, California.” EMCON Associates. April 1, 1986.
- (9) “Construction Certification Report Pond P-16 Kettleman Hills Facility, Kings County, California.” EMCON Associates. May 23, 1986.
- (10) “Construction Certification Report Pond P-9 Kettleman Hills Facility, Kings County, California.” EMCON Associates. May 27, 1986.
- (11) “Chemical Waste Management, Inc. – Quality Assurance Manual for the Installation of the Soil Components of Lining and Final Cover Systems.” Golder Associates, Inc. June 1, 1986.
- (12) “Construction Certification Report Pond P-14 Kettleman Hills Facility Kings County, California.” EMCON Associates. July 9, 1986.
- (13) “Faulting/Seismicity Report Kettleman Hills Facility for Chemical Waste Management, Inc.” Dames & Moore. November 10, 1986.
- (14) “Neutralization/Filtration Unit Operation Plan for Chemical Waste Management, Inc.’s Kettleman Hills Facility, Kings County, California.” Chemical Waste Management, Inc. November 10, 1986.
- (15) “RCRA Facility Assessment of Solid Waste Management Units at Chemical Waste Management, Inc.’s Kettleman Hills Facility, Kettleman City, California.” A.T. Kearney, Inc. February 20, 1987.
- (16) ““Certification and Signatory”” page for October 1985 Interim Status Monitoring Plan for Chemical Waste Management’s Kettleman Hills Facility.” EMCON. December 27, 1987. Includes “Hydrogeologic



- Characterization, Kettleman Hills Facility, Kings County, California.” EMCON Associates. December 1986.
- (17) “Proposed Evaporative Tank System, Application to Modify the Kettleman Hills Facility Part B Permit (CAT000646117).” Meredith/Boli & Associates, Inc. August 12, 1988.
- (18) “California Regional Water Quality Control Board Central Valley Region, Resolution No. 88-155, Amendment to the Water Quality Control Plan for the Tulare Lake Basin (5D).” California Regional Water Quality Control Board – Central Valley Region. August 11, 1989.
- (19) “Certification Report September 12, 1989 for Drum Storage Unit Kettleman Hills Facility, Kings County, California.” Engineering Services, Inc. September 12, 1989.
- (20) “Bid Documents for Evaporative Tank Farm Kettleman Hills Facility, Kettleman City, California.” ESI Engineering Services, Inc. September 26, 1989.
- (21) “State Water Resource Control Board Resolution No. 90-5 – Approval of an Amendment to the Water Quality Control Plan for Tulare Lake Basin (Basin 5D) Deleting a Beneficial Use Designation for Specific Ground Waters in the Vicinity of Kettleman Hills.” California Regional Water Quality Control Board – Central Valley Region. January 18, 1990.
- (22) “Certification Report February 13, 1990 for Final Stabilization Unit, Kettleman Hills Facility, Kings County, California.” Engineering Services, Inc. February 13, 1990.
- (23) “Phase I Holocene Surface Faulting Study Nunez Fault and Kettleman Hills Facility for Chemical Waste Management, Inc.” Roger Foott Associates, Inc. April 2, 1990.
- (24) “Evaporative Tank Farm Design Drawings.” ESI Engineering Services Inc. May 11, 1990.
- (25) “Quality Assurance Manual for the Installation of the Geosynthetic Lining Systems.” Chemical Waste Management, Inc. June 15, 1990.
- (26) “Stabilized Bulk Waste Storage Area Design Plans and Specifications Kettleman Hills Facility.” Golder Associates, Inc. June 27, 1990.
- (27) “Second Generation Stabilization Engineering Report for Chemical Waste Management, Inc. Kettleman Hills Facility, Kettleman City, California. Vol. 1.” RUST. July 27, 1990.
- (28) “Second Generation Stabilization Engineering Report for Chemical Waste Management, Inc. Kettleman Hills Facility, Kettleman City, California. Vol. 2.” RUST. July 27, 1990.



- (29) “Second Generation Stabilization Engineering Report for Chemical Waste Management, Inc. Kettleman Hills Facility, Kettleman City, California. Vol. 3.” RUST. July 27, 1990.
- (30) “Kettleman Hills Facility CAT 000 646 117 Evaporative Tank System EPA/DHS Permit Conditions III.K.2. and III.K.3.” Letter, Carol J. Carollo, Chemical Waste Management, Inc. to Director Hazardous Waste Management Division, U.S. EPA Region IX. July 30, 1990 with Attachment “Quality Assurance Plan, Chemical Waste Management, Inc. Kettleman Hills Facility, Evaporative Tank System.” July 30, 1990.
- (31) “Construction Specifications and Quality Assurance Plan, Landfill Unit B-18 Phases I and II and Final Closure, Kettleman Hills Facility, Kings County, California.” Environmental Solutions, Inc. July 31, 1990.
- (32) “Landfill Unit B-18 Phases I and II and Final Closure Volume II.” Environmental Solutions, Inc. August 1, 1990.
- (33) “Transmittal Engineering and Design Report Landfill Unit B-18, Kettleman Hills Facility, Kings County, California.” Environmental Solutions, Inc. August 15, 1990.
- (34) “Bulk Storage Unit Phase 2 Design Plans and Specifications Kettleman Hills Facility.” Golder Associates, Inc. November 1, 1991.
- (35) “Clay Source Report Landfill B-18, Phases I1 and IB Kettleman Hills Facility, Kettleman City, California.” Environmental Construction Services, Inc. November 25, 1991.
- (36) “Subgrade Geologic Mapping and Chemical Analysis for Landfill B-18, Phase I Kettleman Hills Facility, California.” Golder Associates, Inc. November 1991.
- (37) “Secondary Clay Liner Report Landfill B-18, Phases IA and IB, Kettleman Hills Facility, Kettleman City, California.” Environmental Construction Services, Inc. January 6, 1992.
- (38) “Potential Chemical Similarities between the B-19 and B-18 Clay, Kettleman Hills Facility.” Environmental Solutions, Inc. January 9, 1992.
- (39) “Secondary HDPE Liner and Leachate Collection System Report Landfill B-18, Phases IA and IB Kettleman Hills Facility, Kettleman City, California, Volume A.” Environmental Construction Services, Inc. January 13, 1992.
- (40) “Secondary HDPE Liner and Leachate Collection System Report Landfill B-18, Phases IA and IB Kettleman Hills Facility, Kettleman City, California, Volume A.” Environmental Construction Services, Inc. January 13, 1992.



- (41) “Primary Clay Liner Report Landfill B-18, Phases IA and IB, Kettleman Hills Facility, Kettleman City, California.” Environmental Construction Services, Inc. January 13, 1992.
- (42) “Secondary HDPE Liner and Leachate Collection System Report Landfill B-18, Phases IA and IB Kettleman Hills Facility, Kettleman City, California Volume A” Environmental Construction Services, Inc. January 13, 1992.
- (43) “Secondary HDPE Liner and Leachate Collection System Report Landfill B-18, Phases IA and IB Kettleman Hills Facility, Kettleman City, California Volume B” Environmental Construction Services, Inc. January 13, 1992.
- (44) “Primary HDPE Liner and Leachate Collection System Report Landfill B-18, Phases IA and IB Kettleman Hills Facility, Kettleman City, California Volume B” Environmental Construction Services, Inc. January 20, 1992.
- (45) “Test Fill and Infiltration Test Results Landfill Unit B-18 Phases I and II and Final Closure.” Environmental Solutions, Inc. January 23, 1992.
- (46) “Summary Construction Report Landfill B-18, Phases IA and IB Kettleman Hills Facility, Kettleman City, California.” Environmental Construction Services, Inc. February 18, 1992.
- (47) “Design Changes and Design Clarifications Landfill B-18, Phases IA and IB Kettleman Hills Facility, Kettleman City, California.” Environmental Construction Services, Inc. February 18, 1992.
- (48) “Field Observations and Field and Laboratory Testing For The Construction of Phase 2 Bulk Storage Unit (BSU), Revision 1.” Golder Construction Services, Inc. May 1, 1992.
- (49) “Field Observations, and Field and Laboratory Testing for the Construction of Phase I Stabilized Bulk Waste Storage Area (SBWSA).” Golder Construction Services, Inc. May 1, 1992.
- (50) “Response Action Plan, Landfill B-18, Kettleman Hills Facility.” SEC Donohue, Inc. June, 1992.
- (51) “Operational Features Report Landfill B-18, Phases IA and IB, Kettleman Hills Facility, Kettleman City, California.” Environmental Construction Services, Inc. June 26, 1992.
- (52) “Vadose Zone Response Plan Landfill B-18, Kettleman Hills Facility.” SEC Donohue, Inc. June 1992.
- (53) “Landfill Unit B-18, Phases IIA and IIB Construction Reports, Volume 1 – Clay Liner Source Report.” Golder Construction Services, Inc. May 1, 1993.
- (54) “Landfill B-18, Phases IIA and IIB Construction Reports, Volume 2 – Subgrade Geologic Mapping and Chemical Analysis Report.” Golder Construction Services, Inc. May 1, 1993.



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- (55) “Revised Intermediate Waste Fill Plan Landfill Unit B-18, Phase I, Kettleman Hills Facility, Kings County, California.” Environmental Solutions, Inc. August 1, 1993.
- (56) “Final Report, Construction Reports for Landfill B-18, Phases IIA and IIB, Kettleman City, California, Excavation and Structural Fill Replacement Construction Report Volume 3.” Golder Construction Services, Inc. August 27, 1993.
- (57) “Final Report Construction Reports for Landfill B-18, Phases IIA and IIB, Kettleman City, California, Excavation and Structural Fill Replacement Construction Report Volume 3 – Attachment 1 (OVS).” Golder Construction Services, Inc. August 27, 1993.
- (58) “Final Report Construction Reports for Landfill B-18, Phases IIA and IIB, Kettleman City, California, Excavation and Structural Fill Replacement Construction Report Volume 3 – Attachment 2 (OVS).” Golder Construction Services, Inc. August 27, 1993.
- (59) “Final Report Construction Reports for Landfill B-18, Phases IIA and IIB, Kettleman City, California, Secondary Clay Liner Construction Report, Volume 4.” Golder Construction Services, Inc. September 13, 1993.
- (60) “Final Report Construction Reports For Landfill B-18, Phases IIA and IIB, Kettleman City, California, Secondary and Vadose HDPE Liner and Leachate Collection System Construction Report Volume 5.” Golder Construction Services, Inc. October 20, 1993.
- (61) “Landfill B-18 Phases IIA and IIB Construction Reports, Volume 5A – Secondary and Vadose HDPE Liner and Leachate Collection System Report (Appendices A-D).” Golder Construction Services, Inc. October 1993.
- (62) “Landfill B-18, Phases IIA and IIB Construction Reports Volume 5B – Secondary and Vadose HDPE Liner and Leachate Collection System Report (Appendix E).” Golder Construction Services, Inc. October 1993.
- (63) “Landfill B-18, Phases IIA and IIB Construction Reports, Volume 5C – Secondary and Vadose HDPE Liner and Leachate Collection System Report (Appendices F-O).” Golder Construction Services, Inc. October 20, 1993.
- (64) “Construction Report Landfill B-18, Phases IIA and IIB Volume 6 – Primary Clay Liner.” Golder Construction Services, Inc. October 20, 1993.
- (65) “Landfill B-18, Phases IIA and IIB Construction Reports Volume 7A – Primary HPDE Liner and Leachate Collection System Report (Appendices).” Golder Construction Services, Inc. November 8, 1993.
- (66) “Final Report to Chemical Waste Management, Inc. Kettleman Hills Facility, Kettleman City, California. Construction Reports for Landfill B-18, Phases IIA and IIB, Kettleman City, California, Primary HDPE Liner and



- Leachate Collection System Construction Report, Volume 7.” Golder Construction Services, Inc. November 8, 1993.
- (67) “Landfill B-18, Phases IIA and IIB Construction Reports, Volume 8 – Summary Construction Report.” Golder Construction Services, Inc. November 1993.
- (68) “Final Report to Chemical Waste Management, Inc. Kettleman Hills Facility, Kettleman City, California. Construction Reports for Landfill B-18, Phases IIA and IIB, Kettleman City, California, Operational Features Report, Volume 9.” Golder Construction Services, Inc. December 6, 1993.
- (69) “Kettleman Hills Landfill B-18 Phase II & IIB Response Action Plan Update.” Rust Environment & Infrastructure, Inc. January 29, 1994.
- (70) “Construction Quality Assurance Report for Surface Impoundment P-15 Emergency Retrofit Kettleman Hills Facility.” Golder Construction Services, Inc. February 1, 1995.
- (71) “Partial Closure Certification Report for Surface Impoundment P-15.” Rust Environment & Infrastructure, Inc. January 17, 1997.
- (72) “Draft Subsequent Environmental Impact Report. B-18/B-20 Hazardous Waste Disposal Project Kettleman Hills Facility Chemical Waste Management, Inc.” CH2MHill. March 2008.
- (73) “Draft Subsequent Environmental Impact Report – Volume II: Appendices. B-18/B-20 Hazardous Waste Disposal Project Kettleman Hills Facility Chemical Waste Management, Inc.” CH2MHill. March 2008.
- (74) “Revised Project Description and Analysis; Draft Subsequent Environmental Impact Report. B-18/B-20 Hazardous Waste Disposal Project Kettleman Hills Facility Chemical Waste Management, Inc.” CH2MHill. May 1, 2008.
- (75) “Recirculated Portions of Draft Subsequent Environmental Impact Report Draft. B-18/B-20 Hazardous Waste Disposal Project Kettleman Hills Facility.” CH2MHill. May 1, 2009.
- (76) “Engineering and Design Report B-18 Class I Landfill Phase III Expansion and Final Closure Kettleman Hills Facility.” Golder Associates, Inc. August 1, 2011.
- (77) “Assessment of Increasing Groundwater Levels and Trichloroethene Concentrations in the K40 Corrective Action Area.” AMEC Environmental & Infrastructure. July 18, 2012.
- (78) “Transmittal of Adopted Waste Discharge Requirements Order R5-2014-0003, Chemical Waste Management, Inc., Kettleman Hills Facility, Kings County.” Letter Regional Water Quality Control Board – Central Valley Region to Jim Sook, Chemical Waste Management, Inc. February 6, 2014. With enclosures: 1) “Order R5-2014-0003 Waste Discharge Requirements



for Chemical Waste Management, Inc. Class I/II Waste Management Units Kettleman Hills Facility Kings County.” California Regional Water Quality Control Board Central Valley. January 14, 2014.

- (79) “Construction Quality Assurance (CQA) Report for Landfill B-18 Phase III Expansion – Volume 1: Phase IIIA Subgrade and Secondary Clay Liner.” Golder Associates, Inc. January 2015.
 - (80) “Construction Quality Assurance (CQA) Report for Landfill B-18 Phase III Expansion – Volume 2: Phase IIIA Geosynthetics and Operations Layer.” Golder Associates, Inc. February 2015.
 - (81) “Construction Quality Assurance (CQA) Report for Landfill B-18 Phase III Expansion – Volume 3: Phase IIIB Phase IIIB subgrade and Secondary Clay Liner.” Golder Associates, Inc. November 2015.
 - (82) “Construction Quality Assurance (CQA) Report for Landfill B-18 Phase III Expansion – Volume 4: Phase IIIB Geosynthetics, Phase IIIB Operations Layer, and Phase III Operations Features.” Golder Associates, Inc. December 2015 (Revised April 2016).
 - (83) “Operations and Maintenance Plan for the Spill Isolation and Containment System at the Sampling Platforms and Untarpping Racks.” Golder Associates, Inc. May 2016.
 - (84) “Construction Quality Assurance (CQA) Report for the Phase 1 Construction of the Spill Isolation and Containment System at the Sampling Platforms and Untarpping Racks, Kettleman Hills Facility – Kings County, California.” Letter, Golder Associates, Inc. to Rober Henry, Chemical Waste Management, Inc. May 27, 2016.
 - (85) “Responses to DTSC Review Comments on the Phase 1 and Phase 2 Construction Quality Assurance (CQA) Reports Spill Isolation and Containment System at the Sampling Platforms and Untarpping Racks, Kettleman Hills Facility – Kings County, California.” Letter, Ryan Hillman, Golder Associates, Inc. to Rena Verdin, Chemical Waste Management, Inc. March 2, 2017.
 - (86) “Closure and Post-Closure Plans, Kettleman Hills Facility, Kings County, California.” Golder Associates, Inc. April 15, 2017.
- c. Third Incremental Submittal
- (1) “Responses to the Permit Renewal Application Notice of Deficiency. Submittal No. 3 (April 30, 2017) Kettleman Hills Facility – Kings, County, California; EPA ID. NO. CAT000646117.” Letter, Michelle Kampen and Ryan Hillman, Golder Associates to Ryan Batty, Department of Toxic Substances Control, and Frances Wicher, U.S. EPA Region 9. April 30, 2017. Including attachments – Reponses to Specific Comments 1-7.



d. Fourth Incremental Submittal

- (1) “Responses to the Permit Renewal Application Notice of Deficiency. Submittal No. 4 (May 1, 2017) Kettleman Hills Facility – Kings, County, California; EPA ID. NO. CAT000646117.” Letter, Michelle Kampen and Ryan Hillman, Golder Associates to Ryan Batty, Department of Toxic Substances Control, and Frances Wicher, U.S. EPA Region 9. May 1, 2017. Including attachments Responses to HERO Memorandum General Comment #1 and Specific Comments #1-15.
- (2) “Kettleman Hills Facility, Air Monitoring – Technical Work Plan.” NUS Corporation. February 24, 1986.
- (3) “California Regional Water Quality Control Board Central Valley Region, Resolution No. 88-051, Determination of the Existence of Absence of a Potential Source of Drinking Water Within One-Half Mile of the Surface Impoundments at Kettleman Hills Facility.” California Regional Water Quality Control Board – Central Valley Region. March 25, 1988.
- (4) “Air Quality Solid Waste Assessment Test Report, Kettleman Hills Facility, Kettleman City, California.” NUS Corporation. October 1988.
- (5) “Gaseous Tracer Study at the Chemical Waste Management Kettleman Hills Facility, November 7 -17, 1988.” Tracer Technologies. November 15, 1988.
- (6) “1994 Topographical, Meteorological and Airborne Contaminant Characterization at Kettleman Hills Facility – Volume I.” Rust Environment & Infrastructure, Inc. April 1995.
- (7) “1994 Topographical, Meteorological and Airborne Contaminant Characterization at Kettleman Hills Facility – Volume II.” Rust Environment & Infrastructure, Inc. April 1995.
- (8) “1994 Topographical, Meteorological and Airborne Contaminant Characterization at Kettleman Hills Facility – Volume III.” Rust Environment & Infrastructure, Inc. April 1995.
- (9) “1994 Topographical, Meteorological and Airborne Contaminant Characterization at Kettleman Hills Facility – Volume IV.” Rust Environment & Infrastructure, Inc. April 1995.
- (10) “1994 Topographical, Meteorological and Airborne Contaminant Characterization at Kettleman Hills Facility – Volume V.” Rust Environment & Infrastructure, Inc. April 1995.
- (11) “1994 Topographical, Meteorological and Airborne Contaminant Characterization at Kettleman Hills Facility – Volume VI.” Rust Environment & Infrastructure, Inc. April 1995.
- (12) “Subject: Air Toxics Information and Assessment Act, Chemical Waste Management, Inc. – Prioritization Score and Ranking Based on the Toxic Emissions Inventory Submitted for the 1992 Reporting Year, Facility ID#:



- 40029.” Letter, Seyed Sadredin, San Joaquin Valley Unified Air Pollution Control District to Paul Turek, Chemical Waste Management, Inc. June 25, 1996.
- (13) “Final Ambient Monitoring Plan.” EarthTech. February 2006.
- (14) “Site-Specific Ambient Monitoring Plan – First Revision.” EarthTech. February 2007.
- (15) “Site-Specific Ambient Monitoring Plan – Second Revision.” EarthTech. July 2007.
- (16) “Dispersion Modeling Report Associated with the PCB Congener Study – Appendix G Laboratory Analytical Data TestAmerica.” Wenck Associates, Inc. May 9, 2009.
- (17) “Final Subsequent Environmental Impact Report. B-18/B-20 Hazardous Waste Disposal Project Kettleman Hills Facility.” CH2MHill. September 1, 2009. First Part.
- (18) “Final Subsequent Environmental Impact Report. B-18/B-20 Hazardous Waste Disposal Project Kettleman Hills Facility.” CH2MHill. September 1, 2009. Second Part.
- (19) “Final Subsequent Environmental Impact Report. B-18/B-20 Hazardous Waste Disposal Project Kettleman Hills Facility.” CH2MHill. September 1, 2009. Third Part.
- (20) “Dispersion Modeling Report Associated with the PCB Congener Study.” Wenck Associates, Inc. October 1, 2009.
- (21) “Dispersion Modeling Report Associated with the PCB Congener Study – Appendix D Soil and Vegetation Sampling Field Book, Photo Logs, Data Sheets, etc.” Wenck Associates, Inc. October 1, 2009.
- (22) “Surface Water Control Program for Kettleman Hills Facility,” Centra Consulting, Inc. October 23, 2009.
- (23) “Site-Specific Ambient Air Monitoring Plan – Third Revision.” EarthTech. May 2010.
- (24) “Site-Specific Ambient Air Monitoring Plan – Fourth Revision” EarthTech. November 2010.
- (25) “Final Dioxin-Like Polychlorinated Biphenyl (PCB) Congeners Study Report, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. November 2010.
- (26) “Final 2011 Health Risk Assessment.” Wenck Associates, Inc. November 2011.



- (27) “Final Annual Screening Level Health Risk Assessment October 2010 – September 2011, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF)” Wenck Associates, Inc. July 2012.
 - (28) “Annual Screening Level Health Risk Assessment October 2011 – September 2012, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF)” Wenck Associates, Inc. March 2013.
 - (29) “Annual Screening Level Health Risk Assessment October 2012 – September 2014, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF)” Wenck Associates, Inc. March 2014.
 - (30) “Annual Screening Level Health Risk Assessment October 2013 – September 2014, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF)” Wenck Associates, Inc. March 2015.
 - (31) “Site-Specific Ambient Air Monitoring Plan – Fifth Revision.” Wenck Associates, Inc. January 2016.
 - (32) “Annual Screening Level Health Risk Assessment October 2014 – September 2015, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF)” Wenck Associates, Inc. March 2016.
 - (33) “Storm Water Pollution Prevention Plan Chemical Waste Management, Inc. – Kettleman Hills Facility.” Golder Associates, Inc. June 2015 (amended March 2016).
 - (34) “Annual Screening Level Health Risk Assessment October 2015 – September 2016, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF)” Wenck Associates, Inc. March 2017.
- e. Fifth Incremental Submittal
- (1) Department of Toxic Substances Control/EPA Submittal
 - (a) “Responses to the Permit Renewal Application Notice of Deficiency. Submittal No. 5 (May 15, 2107) Kettleman Hills Facility -- Kings, County, California; EPA ID. NO. CAT000646117.” Letter, Michelle Kampen and Ryan Hillman, Golder Associates to Ryan Batty, Department of Toxic Substances Control, and Frances Wicher, U.S. EPA Region 9. May 15, 2017. With included attachments, responses to NOD General Comment #1, Specific Comments #8-39, GSU Memorandum Specific Comments #4-6. With separate attachment:
 - (i) Example Analytic Results. Curtis and Tompkins. [REDACTED for posting on regulations.gov]
 - (ii) Example 10.1: Manifest: NH30283117 [REDACTED]
 - (iii) Example 10.2: Manifest: 016881648JJK [REDACTED]
 - (iv) Example 10.3: Manifest: 016123755JJK [REDACTED]



(2) TSCA Submittal

- (a) “Chemical Waste Management, Inc. – Kettleman Hills Facility Revised TSCA Permit Renewal Application.” Reyna Verdin, Chemical Waste Management, Inc. to Frances Wicher, U.S. EPA Region 9. May 15, 2017.
- (b) “TSCA Permit Renewal Application, Chemical Waste Management, Inc. Kettleman Hills Facility.” Chemical Waste Management, Inc., Revision 0: May 15, 2017. With included appendices and attachments.

f. Sixth Incremental Submittal

- (1) “Chemical Waste Management, Inc. – Kettleman Hills Facility Revised TSCA Permit Renewal Application – Revision 1.” Reyna Verdin, Chemical Waste Management, Inc. to Frances Wicher, U.S. EPA Region 9. July 13, 2017.
- (2) “TSCA Permit Renewal Application, Chemical Waste Management, Inc. Kettleman Hills Facility.” Chemical Waste Management, Inc., Revision 0: May 15, 2017. With included appendices and attachments.
- (3) “Hazardous Waste Facility Permit Renewal Application, Operation Plan, Chemical Waste Management, Inc. Kettleman Hills Facility.” Chemical Waste Management, Inc. Revision 2: July 15, 2017. [REDACTED for posting on regulations.gov]
- (4) “Hazardous Waste Facility Permit Renewal Application, Operation Plan, Chemical Waste Management, Inc. Kettleman Hills Facility.” Chemical Waste Management, Inc. Revision 2: July 15, 2017 (redline). [REDACTED for posting on regulations.gov]
- (5) “Site-Specific Water Quality and Soil-Gas Monitoring Plan 2017 Class I Waste Management Units – Kettleman Hills Facility, Kings County, California.” Amec Foster Wheeler Environment & Infrastructure, Inc. July 12, 2017.
- (6) “Engineering Feasibility Study 2017 Class I Waste Management Units, Kettleman Hills Facility, Kings County, California. Amec Foster Wheeler Environment & Infrastructure, Inc. July 12, 2017.

B. 2017 U.S. EPA NOTICE OF DEFICIENCY AND RESPONSE**1. 2017 U.S. EPA NOD**

- a. “KHF Update.” Email, Bob Henry, Chemical Waste Management, Inc. to Frances Wicher, U.S. EPA Region 9. August 10, 2017.
- b. “U.S. EPA-IX Conference Call November 1, 2017.” Email, Bob Henry, Chemical Waste Management, Inc. to Frances Wicher, U.S. EPA Region 9. October 27, 2017.



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- c. Letter, Barbara Gross, U.S. EPA Region 9, to Reyna Verdin, Chemical Waste Management, Inc. December 21, 2017. With enclosure:
 - (1) “Notice of Deficiency, TSCA Permit Renewal Application (dated July 1, 2017), Chemical Waste Management, Inc. – Kettleman Hills Facility, EPA ID. NO CAT 000 646 117.” U.S. EPA Region 9. December 21, 2017.
 - 2. Response to 2017 U.S. EPA NOD
 - a. “Chemical Waste Management, Inc. – Kettleman Hills Facility Re: TSCA Permit Renewal Application, Revision 1: July 15, 2017.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Frances Wicher, U.S. EPA Region 9. February 14, 2018.
 - b. “Chemical Waste Management, Inc. – Kettleman Hills Facility Re: Sufficiency of Groundwater Monitoring Program.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Ryan Batty, Department of Toxic Substances Control. February 17, 2018. With enclosure: “Sufficiency of Groundwater Monitoring Program.” AMEC Foster Wheeler. February 7, 2018
 - c. “Closure and Post-Closure Plans, Kettleman Hills Facility, Kings County, California.” Golder Associates, Inc. March 15, 2018.
 - d. “Hazardous Waste Facility Permit Renewal Application, Operation Plan, Chemical Waste Management, Inc. Kettleman Hills Facility.” Chemical Waste Management, Inc. Revision 3: March 16, 2018. [REDACTED for posting on regulations.gov]
 - e. “Hazardous Waste Facility Permit Renewal Application, Operation Plan, Chemical Waste Management, Inc. Kettleman Hills Facility.” Chemical Waste Management, Inc. Revision 3: March 16, 2018 (redlined). [REDACTED for posting on regulations.gov]
 - f. “First Notice of Deficiency for TSCA Permit Renewal Application, Chemical Waste Management, Inc. – Kettleman Hills Facility, EPA ID. NO CAT 000 646 117 (Response to Comments).” Chemical Waste Management, Inc. April 2018. [REDACTED for posting on regulations.gov].
 - g. “Chemical Waste Management, Inc. – Kettleman Hills Facility Revised TSCA Permit Renewal Application – Revision 2.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Frances Wicher, U.S. EPA Region 9. April 19, 2018.
 - h. “TSCA Permit Renewal Application, Chemical Waste Management, Inc. Kettleman Hills Facility.” Chemical Waste Management, Inc., Revision 2: April 20, 2018.
 - i. “TSCA Permit Renewal Application, Chemical Waste Management, Inc. Kettleman Hills Facility.” Chemical Waste Management, Inc., Revision 2: April 20, 2018 (redlined).



C. 2018 U.S. EPA REQUEST FOR INFORMATION**1. 2018 Request for Information**

- a. “Memorandum to File (CAT 000 646 117 Chemical Waste Management, Inc. TSCA Approval), Subject: September 7, 2018 Call with Chemical Waste Management, Inc. Kettleman Hills Facility.” Frances Wicher, U.S. EPA Region 9. September 17, 2018.

2. Response to 2018 Request for Information Response

- a. “Chemical Waste Management, Inc. – Kettleman Hills Facility Revised TSCA Permit Renewal Application – Revision 3.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Frances Wicher, U.S. EPA Region 9. October 2, 2018.
- b. “TSCA Permit Renewal Application, Chemical Waste Management, Inc. Kettleman Hills Facility.” Chemical Waste Management, Inc., Revision 3: October 2, 2018.
- c. “TSCA Operation Plan, Landfill B-18 Phases I, II, and III; PCB Building and Outside Containment Area.” Chemical Waste Management, Inc., Revision 3: October 1, 2018.
- d. “TSCA Permit Renewal Application, Chemical Waste Management, Inc. Kettleman Hills Facility.” Chemical Waste Management, Inc., Revision 3: October 2, 2018 (redlined).
- e. “TSCA Operation Plan, Landfill B-18 Phases I, II, and III; PCB Building and Outside Containment Area.” Chemical Waste Management, Inc., Revision 3: October 1, 2018 (redlined).
- f. “Engineer’s Certification for the Outside Containment System for the PCB Flushing/Storage Unit at the Kettleman Hills Facility – Kings County, California (EPA ID NO.: CAT000646117).” Ryan Hillman, Golder Associates, Inc. to Reyna Verdin, Chemical Waste Management, Inc., October 1, 2018.
- g. “Engineer’s Certification for the Interior Containment System for the PCB Flushing/Storage Unit at the Kettleman Hills Facility – Kings County, California (EPA ID NO.: CAT000646117).” Ryan Hillman, Golder Associates, Inc. to Reyna Verdin, Chemical Waste Management, Inc., October 1, 2018.
- h. “Business Confidential - Percentage TSCA Disposal to Total Disposal 2002-2017.” Chemical Waste Management, Inc., October 2, 2019. [Confidential Business Information]
- i. “Closure and Post-Closure Plans, Kettleman Hills Facility, Kings County, California.” Golder Associates, Inc. March 15, 2018.
- j. “Chemical Waste Management, Inc. – Kettleman Hills Facility Revised Site-Specific Groundwater Monitoring Plan Revised site-specific Unsaturated Zone



Monitoring Plan.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Regional Water Quality Control Board. April 15, 2014. With enclosure: “Revised Site-Specific Groundwater Monitoring Plan Class I Waste Management Units, Kettleman Hills Facility, Kings County, California.” AMEC Environment & Infrastructure, Inc. April 14, 2014.

- k. “Notifications correspondence from KHF to EPA-IX for PCB detections in groundwater monitoring results and leachate analytic results for TSCA-regulated units from 1992 – 2018. Compiled by Chemical Waste Management, Inc. October 2, 2018.
- l. “In the Matter of Certifying the Final Subsequent Environmental Impact Report for the Kettleman Hills Facility B-18/B-20 Hazardous Waste Disposal Project, Resolution No. 09-12.” Kings County Planning Commission. October 19, 2009.
- m. “In the Matter of Approving Conditional Use Permit Application Number CUP 05-10 And Adopting the CEQA Findings ff Fact and a Statement ff Overriding Considerations, Adopting the Mitigation Monitoring Plan, and Adopting the Conditions of Approval for the Kettleman Hills Facility B-18/B-20 Hazardous Waste Disposal Project, Resolution No. 09-13.” Kings County Planning Commission. October 19, 2009.

D. 2019 U.S. EPA REQUESTS FOR INFORMATION AND RESPONSE

- 1. “CWM-KHF Information Request.” Email, Reyna Verdin, Chemical Waste Management, Inc. to Frances Wicher, U.S. EPA Region 9. July 15, 2019.
- 2. “CWM-KHF Information Request.” Email, Reyna Verdin, Chemical Waste Management, Inc. to Frances Wicher, U.S. EPA Region 9. July 18, 2019.
- 3. “July 3, 2019 Call with Chemical Waste Management, Inc. Kettleman Hills Facility.” Memorandum, Frances Wicher, U.S. EPA to File (CAT 000 646 117 Chemical Waste Management, Inc. TSCA Approval). July 24, 2019.

E. PRE-2016 U.S. EPA NOTICES OF DEFICIENCIES AND RESPONSES

- 1. Letter, Paula Bisson, U.S. EPA Region 9, to Paul Turek, Chemical Waste Management, Inc. June 4, 1999. With enclosure “Information Needed to Review the Application for Renewal of TSCA Approval at the CWMI Kettleman Hills Facility.”
- 2. “Chemical Waste Management, Inc. – Kettleman Hills Facility Response to TSCA Permit Renewal Questions.” Letter, Paul Turek, Chemical Waste Management, Inc. to Paula Bisson, U.S. EPA Region 9. July 7, 1999. With enclosures.
- 3. “Information Request #2 for Data Relevant to the Renewal of TSCA Approvals – CWMI Kettleman Hills Facility.” Letter, Paula Bisson, U.S. EPA Region 9, to Paul Turek, Chemical Waste Management, Inc. September 16, 1999. With enclosure “Information Request #2 for Review the Application for Renewal of TSCA Approval at the CWMI Kettleman Hills Facility.”
- 4. “Chemical Waste Management, Inc. – Kettleman Hills Facility Response to TSCA Permit Renewal Information Request #2.” Letter, Paul Turek, Chemical Waste



- Management, Inc. to Paula Bisson, U.S. EPA Region 9. October 11, 1999. With enclosures.
5. “Information Request #3 for Data Relevant to the Renewal of TSCA Approvals – CWMI Kettleman Hills Facility.” Letter, Paula Bisson, U.S. EPA Region 9, to Paul Turek, Chemical Waste Management, Inc. December 16, 1999. With enclosure “Information Request #3 for Review the Application for Renewal of TSCA Approval at the CWMI Kettleman Hills Facility.”
 6. “Chemical Waste Management, Inc. – Kettleman Hills Facility Response to TSCA Permit Renewal Information Request #3.” Letter, Paul Turek, Chemical Waste Management, Inc. to Paula Bisson, U.S. EPA Region 9. January 10, 2000. With enclosures.
 7. “Amendment of reference documents submitted for the renewal of TSCA approvals.” Letter, Paula Bisson, U.S. EPA Region 9, to Paul Turek, Chemical Waste Management, Inc. March 14, 2000.
 8. “Chemical Waste Management, Inc. – Kettleman Hills Facility Response to TSCA Permit Renewal Information Request #5.” Letter, Paul Turek, Chemical Waste Management, Inc. to Paula Bisson, U.S. EPA Region 9. March 22, 2000.
 9. “March 14, 2000 Request for Amendment of Reference Documents.” Letter, Paula Bisson, U.S. EPA Region 9, to Paul Turek, Chemical Waste Management, Inc. May 19, 2000.
 10. “Chemical Waste Management, Inc. – Kettleman Hills Facility Response to TSCA Permit Renewal Information Request #5.” Letter, Paul Turek, Chemical Waste Management, Inc. to Paula Bisson, U.S. EPA Region 9. June 8, 2000.
 11. “TSCA approval.” Email, Max Weintraub, U.S. EPA to Paul Turek, Chemical Waste Management, Inc. November 27, 2000.
 12. “Chemical Waste Management, Inc. – Kettleman Hills Facility Response to TSCA Permit Renewal Information Request #6.” Letter, Paul Turek, Chemical Waste Management, Inc. to Max Weintraub, U.S. EPA Region 9. December 4, 2000.
 13. “Application for Renewal of TSCA Approval” Letter, Paula Bisson, U.S. EPA Region 9, to Paul Turek, Chemical Waste Management, Inc. April 4, 2001.
 14. “Chemical Waste Management, Inc. – Kettleman Hills Facility Response to TSCA Permit Renewal Information Request #7.” Letter, Paul Turek, Chemical Waste Management, Inc. to Max Weintraub, U.S. EPA Region 9. May 11, 2001. With enclosures.
 15. “Closure of TSCA Units” Letter, Paula Bisson, U.S. EPA Region 9, to Paul Turek, Chemical Waste Management, Inc. December 5, 2002.
 16. “Chemical Waste Management, Inc. – Kettleman Hills Facility Response to TSCA Permit Renewal Information Request #8.” Letter, Paul Turek, Chemical Waste Management, Inc. to Max Weintraub, U.S. EPA Region 9. January 21, 2003.



17. “Chemical Waste Management, Inc. – Kettleman Hills Facility Response to TSCA Permit Renewal Information Request #8.” Letter, Paul Turek, Chemical Waste Management, Inc. to Max Weintraub, U.S. EPA Region 9. April 11, 2003.
18. “U.S. EPA (“U.S. EPA”) Completeness Review of Chemical Waste Management, Inc. – Kettleman Hills Facility Request to Modify Toxic Substances Control Act (“TSCA”) Polychlorinated Biphenyl (“PCB”) Coordinated Approval Request for Landfill Unit B-18 (Phase III).” Letter, Cheryl Nelson, U.S. EPA to Paul Turek, Chemical Waste Management, Inc. November 25, 2009. With enclosure “U.S. EPA Completeness Review Comments (Engineering) Chemical Waste Management, Inc. Kettleman Hills Facility Request to Modify TSCA PCB Coordinated Approval Request (June 26, 2009) for Landfill Unit B-18 (Phase III). November 25, 2009.
19. “Completeness Review Comments – Request to Modify TSCA PCB Coordinated Approval Request for Landfill B-18.” Email, Edwin Poalinelli, U.S. EPA to Paul Turek, Chemical Waste Management. December 15, 2009 (a).
20. “Completeness Review Comments – Request to Modify TSCA PCB Coordinated Approval Request for Landfill B-18.” Email, Edwin Poalinelli, U.S. EPA to Paul Turek, Chemical Waste Management. December 15, 2009 (b).
21. “Completeness Review Comments – Request to Modify TSCA PCB Coordinated Approval Request for Landfill B-18.” Email, Edwin Poalinelli, U.S. EPA to Paul Turek, Chemical Waste Management. December 15, 2009 (c).
22. “Chemical Waste Management, Inc. – Kettleman Hills Facility Response to Landfill B-18 Phase III Coordinated Approval Completeness Review.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Chip Poalinelli, U.S. EPA Region 9. December 22, 2009. With enclosures 1-4 included in file. Additional Attachments:
23. “Response to Comments, U.S. EPA Completeness Review of Chemical Waste Management, Inc. Kettleman Hills Request to Modify TSCA PCB Coordinated Approval Request for Landfill Unit B-18 (Phase III).” Golder Associates, Inc. December 17, 2009.
24. “Site Specific Groundwater Monitoring Plan, Kettleman Hills Facility, Kings County, California.” GeoSyntec Consultants. May 2001.
25. “Hydrogeologic Characterization, Kettleman Hills Facility, Kings County, California.” EMCON Associates. December 1986.
26. “Surface Water Control Program for Kettleman Hills Facility,” Centra Consulting, Inc. October 23, 2009.
27. “State Siting Criteria Equivalency Assessment for Chemical Waste Management’s Inc. Kettleman Hills Facility.” Meredith/Boli & Associates, Inc. October 28, 1985.
28. “Transmittal of Adopted Waste Discharge Requirements for Chemical Waste Management, Inc., Kettleman Hills Facility, Kings County.” Letter, William F. Pfister, California Regional Water Quality Control Board Central Valley Region to Robert g. Henry, Chemical Waste Management, Inc. March 11, 1998. With enclosure: “Order No.



- 98-058, Waste discharge Requirements for Chemical Waste Management, Inc. Kettleman Hills Facility, Kings County.” California Regional Water Quality Control Board Central Valley Region. February 27, 1998.
29. “Completeness Review – Clarification.” Email, Edwin Poalinelli, U.S. EPA Region 9, to Paul Turek, Chemical Waste Management, Inc. February 9, 2010. With attachment.
30. “Chemical Waste Management, Inc. – Kettleman Hills Facility Revised Initial Report, Omission from Response to Landfill B-18 Phase III Coordinated Approval Completeness Review.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Chip Poalinelli, U.S. EPA Region 9. February 18, 2010. With enclosure: “Initial Report, TSCA Approval Request, Chemical Waste Management, Inc. Kettleman Hills Facility, Landfill Unit B-18, Phase I, II, and III.” Chemical Waste Management, Inc. February 17, 2010. With enclosure:
- a. “Surface Water Control Program for Kettleman Hills Facility,” Centra Consulting, Inc. October 23, 2009.
31. “Chemical Waste Management, Inc. – Kettleman Hills Facility Re: Notice of Violation – EPA I.D. Number CAT000646117.” Letter, Paul Turek, Chemical Waste Management, Inc. to Christopher Rollins, U.S. EPA Region 9. May 10, 2010.
32. “Chemical Waste Management, Inc. Kettleman Hills Facility, Information Request Regarding B-18 Capacity and Surveying.” Letter, Robert Henry, Chemical Waste Management, Inc. to Christopher Rollins, U.S. EPA Region 9, October 15, 2010. With enclosures (REDACTED).
33. “Notice of Deficiency (“NOD”) for Toxic Substances Control Act (“TSCA”) Permit Renewal and Modification Applications dated April 1, 1997, as revised and May 10, 2010; Chemical Waste Management Kettleman Hills Facility (CAT 000646117).” Letter, Caleb Shaffer, U.S. EPA Region 9, to Bob Henry, Chemical Waste Management, Inc. September 22, 2011. With enclosure “Notice of Deficiency – Attachment A Chemical Waste Management (“CWM”) Inc., Kettleman Hills, California – July 1, 1997/May 10, 2010 (Request for a Coordinated Polychlorinated Biphenyl (“PCB”) Approval) Toxic substances Control Act Permit Application (“TSCA Application” Kettleman Hills Facility, 35251 Old Skyline Road, Kettleman City, California (the “Facility”).
34. “Call re Kettleman Hills NOD.” Email, Andrew M. Kenefick, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. November 17, 2011.
35. “Chemical Waste Management, Inc. – Kettleman Hills Facility Response to Notice of Deficiency – TSCA Permit Renewal and Modification.” Letter, Paul Turek, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. November 21, 2011 with Attachments:
36. “Chemical Waste Management, Inc. – Kettleman Hills Facility (KHF), EPA-IX Notice of Deficiency for TSCA Permit Renewal and Modification Applications – Attachment A, dated September 22, 2011.” Chemical Waste Management, Inc. (November 21, 2011);



37. “TSCA Application – Supplemental Information.” Chemical Waste Management, Inc. (November 21, 2011);
38. “Initial Report, TSCA Approval Request, Chemical Waste Management, Inc. Kettleman Hills Facility, Landfill Unit B-18, Phase I, II, and III.” Chemical Waste Management, Inc. November 21, 2011
39. “TSCA Operation Plan, landfill Unit B-18, Phases I, II, and III, Kettleman Hills Facility, Chemical Waste Management, Inc.” Chemical Waste Management, Inc. November 21, 2011.
40. “Site Specific Groundwater Monitoring Plan, Kettleman Hills Facility, Kings County, California.” GeoSyntec Consultants. May 2001.
41. “Chemical Waste Management, Inc. – Kettleman Hills Facility TSCA Permit Renewal – Supplemental Information.” Letter, Paul Turek, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. March 8, 2013. With enclosure.
42. “U.S. EPA Evaluation of TSCA Renewal/Modification Application for Landfill Unit B-18, Supplemental Information, dated March 8, 2013. EPA ID CAT000646117.” Letter, Caleb Shaffer, U.S. EPA to Bob Henry, Chemical Waste Management, Inc. March 22, 2013.
43. “TSCA Supplemental Information – NOD 3/23/13 Response.” Spreadsheet, Chemical Waste Management. March 27, 2013.
44. “Poly-Air Activated Carbon Vent Filters.” Rex-Bac-T Technologies. Undated.
45. “Kettleman Hills Facility – PCB Building Secondary Containment Volume.”: Scott Summer, P.E.” Chemical Waste Management, Inc. February 8, 2012.
46. “Kettleman Hills Facility – PCB Building Secondary Containment Volume.”: Scott Summer, P.E.” Chemical Waste Management, Inc. May 17, 2012.

F. DEPARTMENT OF TOXIC SUBSTANCES CONTROL NOTICES OF DEFICIENCIES AND RESPONSES

1. Department of Toxic Substances Control First Notice of Deficiency (November 2016) – see Section VI.A. for response documents
 - a. “Notice of Deficiency for the Permit Renewal Application for the Chemical Waste Management, Inc., Kettleman Hills Facility Hazardous Waste Facility, 35251 Old Skyline Road, Kettleman City, Kings County, California, 93239, Environmental Protection Agency Identification Number: CAT000646117.” Ryan Batty, Department of Toxic Substances Control to Bob Henry, Chemical Waste Management, Inc. November 18, 2016.



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2. Department of Toxic Substances Control Second Notice of Deficiency (November 2017) and Response
- a. Department of Toxic Substances Control Second Notice of Deficiency
- (1) “Second Notice of Deficiency for Revised Permit Renewal Application for the Chemical Waste Management, Inc., Kettleman Hills Facility Hazardous Waste Facility, 35251 Old Skyline Road, Kettleman City, California, Environmental Protection Agency Identification Number: CAT000646117.” Ryan Batty, Department of Toxic Substances Control to Bob Henry, Chemical Waste Management, Inc. November 6, 2017. With enclosures:
- (a) “Second Notice of Deficiency Chemical Waste Management, Inc. Kettleman Hills Facility EPA ID. NO.: CAT 000 646 117.” Department of Toxic Substances Control. November 6, 2017.
- (b) “Used Oil Testing Language.” Department of Toxic Substances Control. November 6, 2017. Attachment to Second Notice of Deficiency Chemical Waste Management, Inc. Kettleman Hills Facility.
- (c) “Review of the Closure and Post-Closure Cost Estimate for Financial Assurance, Chemical Waste Management Kettleman Hills Facility CAT000646117 (Site Code 100032-33).” Memorandum, William Kilgore, Department of Toxic Substances Control to Ryan Batty, Department of Toxic Substances Control. October 26, 2017.
- (d) “Part B Permit Renewal Application, Chemical Waste Management Kettleman Hills Facility, Kings County, California, Project No. 25040/100032-33/20042986.” Memorandum, Matthew Farris and Jeff Brown, Department of Toxic Substances Control to Ryan Batty, Department of Toxic Substances Control. November 6, 2017.
- (e) “Review of Hazardous Waste Facility Permit Renewal Application Operation Plan and Closure and Post-Closure Plans, Kettleman Hills Facility CAT000646117 (Site Code 100032-33).” Memorandum, Peter Gathungu, Department of Toxic Substances Control to Ryan Batty, Department of Toxic Substances Control. November 6, 2017.
- b. Second Department of Toxic Substances Control Notice of Deficiency Response
- (1) “Second Notice of Deficiency for Chemical Waste Management, Inc. – Kettleman Hills Facility, EPA ID NO. CAT 000646117.” Chemical Waste Management, Inc. March 16, 2017
- (2) “Hazardous Waste Facility Permit Renewal Application, Operation Plan, Chemical Waste Management, Inc. Kettleman Hills Facility.” Chemical Waste Management, Inc. Revision 3: March 16, 2018. [REDACTED for posting on regulations.gov]



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- (3) “Hazardous Waste Facility Permit Renewal Application, Operation Plan, Chemical Waste Management, Inc. Kettleman Hills Facility.” Chemical Waste Management, Inc. Revision 3: March 16, 2018 (redline). [REDACTED for posting on regulations.gov]
 - (4) “Chemical Waste Management, Inc. – Kettleman Hills Facility Re: Sufficiency of Groundwater Monitoring Program.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Ryan Batty, Chemical Waste Management, Inc. February 17, 2018.
 - (5) “Sufficiency of Groundwater Monitoring Program, Kettleman Hills Facility, Kings County, California.” AMEC Foster Wheeler. February 7, 2018.
 - (6) “Chemical Waste Management, Inc. – Kettleman Hills Facility Re: Ambient Air Monitoring Plan – Technical Memorandum for Proposed Ambient Air Increase Criteria & Detection Monitoring Plan Approach.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Camille Rogado, Department of Toxic Substances Control. March 26, 2019. With enclosure:
 - (a) “Proposed Ambient Air Increase Criteria & Detection Monitoring Plan Approach.” Technical Memo, Halley H. Roberts, Wenck to Reyna Verdin, Chemical Waste Management, Inc. March 25, 2019.
3. Department of Toxic Substances Control Third Notice of Deficiency (March 2019)
- a. “Third Notice of Deficiency for Revised Permit Renewal Application for the Chemical Waste Management, Inc., Kettleman Hills Facility Hazardous Waste Facility, 35251 Old Skyline Road, Kettleman City, California, Environmental Protection Agency Identification Number: CAT000646117.” Ryan Batty, Department of Toxic Substances Control to Bob Henry, Chemical Waste Management, Inc. March 29, 2019.
 - (1) “Third Notice of Deficiency Chemical Waste Management, Inc. Kettleman Hills Facility EPA ID. NO.: CAT 000 646 117.” Department of Toxic Substances Control. March 29, 2019.
 - (2) “Technical Completeness Checklist.” Department of Toxic Substances Control. March 26, 201. Attachment to Third Notice of Deficiency Chemical Waste Management, Inc. Kettleman Hills Facility.
 - (3) “Review of the Closure and Post-Closure Cost Estimate for Financial Assurance (March 2018), Chemical Waste Management Kettleman Hills Facility, Kings County, California (Site Code: DTSC100032-33).” Memorandum, Perry Myers, Department of Toxic Substances Control to Ryan Batty, Department of Toxic Substances Control. February 12, 2019.
 - (4) “2018 Engineering Feasibility Study, Chemical Waste Management Kettleman Hills Facility, Kings County, California, Project No. 25040/100032-33/20042986.” Memorandum, Jeff Brown, Department of Toxic Substances Control to Ryan Batty, Department of Toxic Substances Control. March 4, 2019.



- (5) “Review of Hazardous Waste Facility Permit Renewal Application Operation Plan, and Closure and Post-Closure Plans, Kettleman Hills Facility, Kings County, California (Site Code: DTSC100032-33).” Memorandum, Peter Gathungu, Department of Toxic Substances Control to Ryan Batty, Department of Toxic Substances Control. February 20, 2019.
- b. “Chemical Waste Management, Inc. – Kettleman Hills Facility Re: Ambient Air Monitoring Plan – Technical Memorandum for Proposed Diesel Particulate Matter Air Dispersion Modeling Analysis.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Raminder Bola, Department of Toxic Substances Control. June 27, 2019. With enclosure: “Kettleman Hills Facility Diesel Particulate Matter Air Dispersion Modeling Analysis.” Technical Memo, Charlene Becka, Wenck to Reyna Verdin, Chemical Waste Management, Inc. June 25, 2019.
- c. “CWM-KHF – Proposed Diesel Particulate Matter Air Dispersion Analysis.” Email, Camille Rogado, Department of Toxic Substances Control to Reyna Verdin, Chemical Waste Management, Inc. July 2, 2019.
- d. “Request for a Response Extension for the Third Notice Of Deficiency for the Permit Renewal Application for The Chemical Waste Management, Inc., Kettleman Hills Facility Hazardous Waste Facility, 35251 Old Skyline Road, Kettleman City, Kings County, California, 93239, Environmental Protection Agency Identification Number: CAT000646117.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Raminder Bola, Department of Toxic Substances Control. July 3, 2019.
- e. Approval of Extension Request for Third Notice of Deficiency for Permit Renewal Application, Chemical Waste Management, Inc.- Kettleman Hills Facility, Kings County, California (EPA ID NO. CAT 000 646117). Letter, Raminder Bola, Department of Toxic Substances Control to Reyna Verdin, Chemical Waste Management, Inc. July 16, 2019.

VII. KETTLEMAN HILL FACILITY OPERATION DOCUMENTS

A. HAZARDOUS WASTE OPERATION PLAN

1. “Operation Plan, Chemical Waste Management, Inc. Kettleman Hills Facility.” Chemical Waste Management, Inc. June 16, 2003.
2. “Class 3 Permit Modification Request, 22 CCR 66270.42(c) Landfill B-18 Phase III Expansion.” Letter, Carol J. Carollo, Chemical Waste Management, Inc. to Ruth Cayabyab, Department of Toxic Substances Control. December 12, 2008. With enclosure: “Markup Copies of [Operation Plan] Pages with Changes.”; “Clean Copies of Affected Text in Application.”;



B. NON-TSCA KETTLEMAN HILLS FACILITY PERMITS

1. “In the Matter of Certifying the Final Subsequent Environmental Impact Report for the Kettleman Hills Facility B-18/B-20 Hazardous Waste Disposal Project, Resolution No. 09-12.” Kings County Planning Commission. October 19, 2009.
2. “In the Matter of Approving Conditional Use Permit Application Number CUP 05-10 And Adopting the CEQA Findings of Fact and a Statement of Overriding Considerations, Adopting the Mitigation Monitoring Plan, and Adopting the Conditions of Approval for the Kettleman Hills Facility B-18/B-20 Hazardous Waste Disposal Project, Resolution No. 09-13.” Kings County Planning Commission. October 19, 2009.
3. “Order R5-2014-0003 Waste Discharge Requirements for Chemical Waste Management, Inc. Class I/II Waste Management Units Kettleman Hills Facility Kings County.” Central Valley Regional Water Control Board. January 16, 2014.
4. “Hazardous Waste Facility Permit – Chemical Waste Management, Inc. Kettleman Hills Facility (Permit Number: 02-SAC-03).” Department of Toxic Substances Control. Effective June 16, 2003 (modified May 5, 2005, July 25, 2006, September 21, 2007, and May 21, 2014).
5. “Authority to Construct Permit No: C-283-11-6.” San Joaquin Valley Air Pollution Control District. Expiration Date: May 23, 2014.
6. “Permit to Operate C-283-0-3.” San Joaquin Valley Air Pollution Control District. Expiration Date: August 31, 2022.

C. LANDFILL CLOSURE AND POST-CLOSURE REPORTS

1. Landfill B-14 Closure and Post-Closure Documents
 - a. “Kettleman Hills Facility B-14 Closure Certification DHS Permit Condition IV.D.2.e.” Letter, Christopher Hansen, Chemical Waste Management, Inc. to Section Chief Northern California Section Department of Health Services Toxic Substance Control Division. April 13, 1988.
 - b. “Kettleman Hills Facility, I.D. CAT 000646117 – Landfill B-14 Record of Survey and Record of Wastes.” Letter, Christopher W. Hansen, Chemical Waste Management, Inc. to Regional Administrator, U.S. EPA Region 9. May 10, 1989.
 - c. “Landfill B-14 Post-Closure Inspection Kettleman Hills Facility.” Woodward-Clyde Consultants. November 1, 1991.
 - d. “Post-Closure Inspection Landfill Unit B-14, Kettleman Hills Facility.” TRC. October 2001.
 - e. “Chemical Waste Management, Inc. – Kettleman Hills Facility Decommissioning Plan for Landfill B-14 Sounding Wells.” Letter, Paul Turek, Chemical Waste Management, Inc. to Max Weintraub, U.S. EPA Region 9. January 19, 2006.



- f. “Decommissioning Landfill Unit B-14 Sounding Wells.” Letter, Adrienne Priselac, U.S. EPA Region 9, to Paul Turek, Chemical Waste Management, Inc. August 28, 2008.

2. Landfill B-16 Closure and Post – Closure Documents

- a. “Construction Specification, Chemical Waste Management, Inc., Kettleman Hills Class I Disposal Site, Kings County, CA.” Burial Area 16, PCB Disposal Facility.” Chemical Waste Management, Inc. June 1982.
- b. “Closure Plan for Landfill B-16 Kettleman Hills Facility, Kettleman City, California DHS Permit Condition IV.D.6.d.” Letter, Michael Cranston, Chemical Waste Management, Inc. to Director Hazardous Waste Management Division, U.S. EPA Region 9. August 27, 1990.
- c. “Kettleman Hills Facility CAT 000 646 117, Landfill Capacity.” Letter, Carol Carollo, Chemical Waste Management, Inc. to William Veile, Department of Toxic Substances Control. October 14, 1992.
- d. “Kettleman Hills Facility CAT 000 646 117 Updated Status and Request for Revised Schedule Approval, Facility Closure Construction Project.” Letter, Michael Cranston, Chemical Waste Management, Inc. to Director Hazardous Waste Management Division, U.S. EPA Region 9. March 10, 1993.
- e. “Closure Plan for Landfill B-16, Kettleman Hills Facility, Kettleman City, California, Revision 1, Final Report to Chemical Waste Management, Inc.” Golder Associates, March 11, 1993.
- f. “Landfill B-16 Closure Schedule Chemical Waste Management, Inc – Kettleman Hills Facility (CAT00646117).” Letter, Kamal Azzam, Chemical Waste Management, Inc. to Permitting Branch Region 1, Department of Toxic Substances Control. September 5, 1996.
- g. “Updated Facility Closure Status and Schedule Chemical Waste Management, Inc. Kettleman Hills Facility.” Letter, Kamal Azzam, Chemical Waste Management, Inc. to Permitting Branch Region 1, Department of Toxic Substances Control, August 21, 1997.
- h. “TSCA Capacity for B-16.” Letter, Paula Bisson, U.S. EPA Region 9, to Paul Turek, Chemical Waste Management, Inc. August 13, 1999.
- i. “Chemical Waste Management, Inc. – Kettleman Hills Facility Response to TSCA Capacity for B-16.” Letter, Paul Turek, Chemical Waste Management, Inc. to Paula Bisson, U.S. EPA Region 9. September 3, 1999.
- j. “Landfill B-16 Closure Approval Cover System Slope Stability Analysis.” Letter, Carol Carollo, Chemical Waste Management, Inc., to Max Weintraub, U.S. EPA Region 9. January 15, 2004.



- k. “Chemical Waste Management, Inc. – Kettleman Hills Facility Landfill B-16 Closure Project” Letter, Carol Carollo, Chemical Waste Management, Inc., to Max Weintraub, U.S. EPA Region 9. March 12, 2004.
 - l. “Requested Information on Landfill B-16 LCRS Sump.” Letter, Paul Turek, Chemical Waste Management Inc. to Max Weintraub, U.S. EPA Region 9. June 1, 2004.
 - m. “Construction Quality Assurance Report on Final Closure of Landfill B-16 Kettleman Hills Facility.” Golder Associates, Inc. December 2004.
 - n. “Landfill Unit B-16 Closure Construction Certification Report DTSC Permit V.5(A) and 22 CCR 66264.115, WDR Provisions C.7., 23 CCR 2590(c)(6).” Letter, Fred Paap and Carol Carollo, Waste Management, Inc. to Janice Yonekura, Department of Toxic Substances Control; Jim Dowdall, Regional Water Quality Control Board; and Max Weintraub, U.S. EPA Region 9. December 15, 2004.
 - o. “Chemical Waste Management, Inc. – Kettleman Hills Facility Landfill Unit B—16 Closure Construction Certification Report.” Letter, James Dowdall and Shelton Gray, Regional Water Quality Control Board, to Fred Paap and Carol Carollo, Chemical Waste Management, Inc. February 15, 2005.
 - p. “Landfill Unit B-16 Closure Construction Certification Report Response to RWQCB Comments and Report Revision Letter, Fred Paap and Carol Carollo, Chemical Waste Management, Inc. to Janice Yonekura, Department of Toxic Substances Control; Jim Dowdall, Regional Water Quality Control Board; and Max Weintraub, U.S. EPA Region 9. March 16, 2003.
 - q. “Revised Text – Construction Quality Assurance Report on Final Closure of Landfill B-16 Kettleman Hills Facility.” Golder Associates, Inc. December 2004 Revised March 2005.
 - r. “Closure Certification Acknowledgement for the Landfill Unit B-16 Chemical Waste Management, Inc, Kettleman Hills Facility Kettleman California, US EPA ID Number CAT000646117.” Letter, James Pappas, Department of Toxic Substances to Paul Turek, Chemical Waste Management, Inc. June 30, 2005.
3. Landfill B-19 Closure and Post-Closure Documents
- a. “Begin Construction of the Initial Phare of Landfill B-19 Class II/III and Closure of the Existing Landfill B-19 Class I. Chemical Waste Management, Inc. – Kettleman Hills Facility CAT 000 646 117.” Letter, Kamal Azzam, Chemical Waste Management, Inc. to Shelton Gray, Regional Water Quality Control Board and William Veile, Department of Toxic Substances Control. July 8, 1998.
 - b. “Notice of Decision to Approve of Landfill Unit B-19 Modified Closure Plan, September 1998.” Department of Toxic Substances Control. September 1998.



- c. “Final Closure Certification Statements for the Landfill Unit B-19 Class I Partial Closure. Chemical Waste Management, Inc. – Kettleman Hills Facility CAT 000 646 117.” Letter, Kamal Azzam, Chemical Waste Management, Inc. to John McCarroll, U.S. EPA Region 9; Department of Toxic Substances Control; and, Regional Water Quality Control Board. December 30, 1998.
- d. “Chemical Waste Management, Incorporated (CWMI) Kettleman Hills Facility, Kings County, EPA I.D. #CAT 000 646 117, Certification of Closure for the Landfill B-19.” Letter, Robert Crandell, Department of Toxic Substances Control to Robert Henry, Chemical Waste Management, Inc. “June 20, 1999.
- e. “Landfill Unit B19 – Record of Survey and Record of Waste Chemical Waste Management, Inc. – Kettleman Hills Facility CAT 000 646 117.” Letter, Kamal Azzam, Chemical Waste Management, Inc. to John McCarroll, U.S. EPA Region 9. July 2, 1999.
- f. “Construction Quality Assurance Report on Landfill B-19 Perimeter Berm 2004 Construction Kettleman Hills Facility, Kettleman City, California.” Golder Associates, Inc. May 2005.
- g. “Revisions to the As-Build Construction and Partial Closure Report for Landfill B-19 Perimeter Berm 2004 Construction, WDR No. 98-058 Discharge Specification B.8. and Provisions C.7. 27 CCR §§20323 and 20324; 22 CCR §6664.115 (in part).” Letter, Fred Papp, Chemical Waste Management, Inc. to Jim Koponen, Department of Toxic Substances Control and Jim Dowdall, Regional Water Quality Control Board. August 10, 2005.
- h. “Construction Quality Assurance Report on Landfill B-19 Perimeter Berm 2005 Construction Kettleman Hills Facility, Kettleman City, California.” Golder Associates, Inc. June 2006.
- i. “Construction Quality Assurance Report on Landfill B-19 Class I Final Closure, Stability Berm and Drainage 2006 Construction Kettleman Hills Facility, Kettleman City, California.” Golder Associates, Inc. December 2006.
- j. “Landfill Unit B-19 Closure Documents Recorded by Kings County.” Letter, Carol Carollo, Chemical Waste Management, Inc. to Ruth Cayabyab, Department of Toxic Substances Control and Jim Dowdall, Regional Water Quality Control Board. August 10, 2005.
- k. “Modification 2 to Landfill B-19 Closure Plan for Class I Portion.” Letter, Chemical Waste Management, Inc. to Ruth Cayabyab, Department of Toxic Substances Control and Jim Dowdall, Regional Water Quality Control Board. April 14, 2006. With Enclosures: “03/17/06 Landfill B-19 Addendum Closure Plan Meeting Summary and Response to Comments.” Chemical Waste Management, Inc. April 14, 2006 and “Modification No. 2 to Landfill Unit B-19 Closure Plan for Class I Portion, Kettleman Hills Facility.” Golder Associates, Inc. April 2006.



- l. “Temporary Authorization Request, Supplemental Information on Landfill B-19 Closure.” Letter, Robert Henry, Chemical Waste Management, Inc. to Pauline Batarseh, Department of Toxic Substances Control. June 2, 2006. With enclosure: “Response to DTSC Comments on Modification No. 2 Landfill Unit B-19 Closure Plan for Class I Portion, Kettleman Hills Facility.” Letter, Scott G. Sumner, Golder Associates to Chemical Waste Management, Inc. May 2, 2006.
4. Post-Closure Inspection Reports
- a. “Chemical Waste Management, Inc., – Kettleman Hills Facility 2008 Annual Post-Closure Inspection Report & 2008 Annual Facility Inspection Certification.” Letter, Paul Turek, Chemical Waste Management, Inc. to Ruth Cayabyab, Department of Toxic Substances Control and Jim Dowdall, Regional Water Quality Control Board. October 1, 2008.
 - b. “Chemical Waste Management, Inc. – Kettleman Hills Facility 2009 Annual Post-Closure Inspection Report & 2009 Annual Facility Inspection Certification.” Letter, Paul Turek, Chemical Waste Management, Inc. to Ruth Cayabyab, Department of Toxic Substances Control and Jim Dowdall, Regional Waste Quality Control Board. September 29, 2009.
 - c. “2010 Annual Post-Closure Inspection Kettleman Hills Facility Kettleman City, California.” Golder Associated, Inc. September 28, 2010.
 - d. “Chemical Waste Management, Inc. – Kettleman Hills Facility 2010 Annual Post-Closure Inspection Report & 2010 Annual Facility Inspection Certification.” Letter Paul Turek, Chemical Waste Management, Inc. to Wayne Lorentzen, Department of Toxic Substances Control and Jim Dowdall, Regional Waste Quality Control Board. September 30, 2010.
 - e. “2011 Annual Post-Closure Inspection Kettleman Hills Facility Kettleman City, California.” Golder Associated, Inc. September 2011.
 - f. “Chemical Waste Management, Inc. – Kettleman Hills Facility 2011 Annual Post-Closure Inspection & 2011 Annual Facility Inspection Certification.” Letter Paul Turek, Chemical Waste Management, Inc. to Wayne Lorentzen, Department of Toxic Substances Control and Jim Dowdall, Regional Waste Quality Control Board.t.” Golder Associated, Inc. for Chemical Waste Management, Inc. September 29, 2011.
 - g. “Report on 2011 Annual Post-Closure Inspection, Kettleman Hills Facility Kettleman City California.” Golder Associates, Inc. September 2011.
 - h. “Report on 2012 Annual Post-Closure Inspection, Kettleman Hills Facility Kings County, California.” Golder Associates, Inc. September 2012.
 - i. “Chemical Waste Management, Inc. – Kettleman Hills Facility 2012 Annual Post-Closure Inspection Report & 2012 Annual Facility Inspection Certification.” Letter Paul Turek, Chemical Waste Management, Inc. to Wayne



- Lorentzen, Department of Toxic Substances Control and Jim Dowdall, Regional Waste Quality Control Board. September 26, 2012.
- j. “Report on 2013 Annual Post-Closure Inspection Kettleman Hills Facility Kings County, California.” Golder Associates, Inc. September 2013.
 - k. “Report on 2014 Annual Post-Closure Inspection Kettleman Hills Facility Kings County, California.” Golder Associates, Inc. September 2014.
 - l. “Report on 2015 Annual Post-Closure Inspection Kettleman Hills Facility Kings County, California.” Golder Associates, Inc. September 2015.
 - m. “Report on 2016 Annual Post Closure Inspection Kettleman Hills Facility, Kings County, California.” Golder Associates, Inc. September 2016.
 - n. “Chemical Waste Management, Inc. – Kettleman Hills Facility 2016 Annual Post-Closure Inspection Report & 2016 Annual Facility Inspection Certification.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Muzhda Ferouz, Department of Toxic Substances Control and Daniel Carlson, Regional Water Quality Control Board. September 26, 2016.
 - o. “Chemical Waste Management, Inc. – Kettleman Hills Facility 2017 Annual Post-Closure Inspection Report & 2017 Annual Facility Inspection Certification.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Ryan Batty, Department of Toxic Substances Control and Daniel Carlson, Regional Water Quality Control Board. September 29, 2017.
 - p. “Chemical Waste Management, Inc. – Kettleman Hills Facility Proposed Workplan for Annual Surveys of Hazardous Waste Management Units in Post-Closure Care at the Kettleman Hills Facility.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Ryan Batty, Department of Toxic Substances Control and Daniel Carlson, Regional Water Quality Control Board. March 30, 2018.
 - q. “Chemical Waste Management, Inc. – Kettleman Hills Facility 2018 Annual Post-Closure Inspection Report & 2018 Annual Facility Inspection Certification.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Ryan Batty, Department of Toxic Substances Control and Daniel Carlson, Regional Water Quality Control Board, September 28, 2018. With enclosure: “Report on 2018 Annual Post Closure Inspection Kettleman Hills Facility, Kings County, California.” Golder Associates, Inc. September 2018.

D. LANDFILL B-18 CONSTRUCTION DOCUMENTS

- 1. “Kettleman Hills Facility CAT 0006461176 Request for Approval on Landfill B18 Detailed Design.” Letter, Chemical Waste Management, Inc. to Department of Health Services; U.S. EPA Region 9; and Regional Water Quality Control Board. July 31, 1990. With enclosure: “Construction Specifications and Quality Assurance Plan Landfill Unit B-18 Phases I and II and Final Closure, Kettleman Hills Facility Kings County, California. Environmental Solutions, Inc. July 31, 1990.



2. “Construction Specifications and Quality Assurance Plan Landfill Unit B-18 Phases I and II and Final Closure, Kettleman Hills Facility Kings County, California. Environmental Solutions, Inc. July 31, 1990.
3. “Engineering and Design Report Landfill Unit B-18 Kettleman Hills Facility Kings County, California.” Environmental Solutions, Inc. August 15, 1990.
4. “Subgrade Geologic Mapping and Chemical Analysis for Landfill B-18, Phase I Kettleman Hills Facility Kettleman, California.” Golder Associates, Inc. November 27, 1991.
5. “Clay Source Report Landfill B-18, Phases IA and IB Kettleman Hills Facility Kettleman City, California.” Environmental Construction Services, Inc. November 25, 1991.
6. “Secondary Clay Liner Report Landfill B-18, Phases IA and IB Kettleman Hills Facility Kettleman City California.” Environmental Construction Services, Inc. January 6, 1992.
7. “Potential Chemical Similarities between the B-19 and B-18 Clay, Kettleman Hill Facility.” Letter, Kerry Parkinson, Environmental Solutions, Inc. to Robert Henry, Chemical Waste Management, Inc. January 9, 1992.
8. “Primary Clay Liner Report Landfill B-18, Phases IA and IB Kettleman Hills Facility Kettleman City California.” Environmental Construction Services, Inc. January 13, 1992.
9. “Secondary HDPE liner and Leachate Collection System Report Landfill B-18, Phases IA and IIB, Volume B, Kettleman Hills Facility Kettleman City, California.” Environmental Construction Services, Inc. January 13, 1992.
10. “Secondary HDPE liner and Leachate Collection System Report Landfill B-18, Phases IA and IIB, Volume A, Kettleman Hills Facility Kettleman City, California.” Environmental Construction Services, Inc. January 13, 1992.
11. “Primary HDPE Liner and Leachate Collection System Report, Landfill B-18, Phases IA and IB Kettleman Hills Facility, Kettleman City, California.” Environmental Construction Services, Inc. January 20, 1992.
12. “Test Fill and Infiltration Test Results Landfill Unit B-18 Phases I and II and Final Closure.” Environmental Solutions Inc. January 23, 1992.
13. “Design Changes and Design Clarification Landfill B-18, Phases IA and IB, Kettleman Hills Facility, Kettleman City California.” Environmental Construction Services, Inc. February 18, 1992.
14. “Summary Construction Report Landfill B-18 Phases IA and IB.” Environmental Construction Services, Inc. February 18, 1992.
15. “Final Inspection – Landfill B-18 Phases IA and IB – Chemical Waste Management, Inc.’s Kettleman Hills Facility – Kings County.” Letter, Shelton Gray, California Regional Water Quality Control Board to Rich Zweig, Chemical Waste Management, Inc. February 28 1992.



16. “Approval of the Certification Reports and As-Built Drawings for the Landfill B-18, Phase I, DTSC Permit Condition IV.C.9., Chemical Waste Management, Inc., Kettleman Hills Facility, EPA ID No. CAT 000646117.” Letter, Val Siebal, Department of Toxic Substances Control to Mark Langowski, Chemical Waste Management, Inc. March 10, 1992.
17. “Kettleman Hills Facility CAT 000646117 TSCA Approval Request for Landfill Unit B-18.” Letter, Carol Corollo, Chemical Waste Management, Inc., to Greg Czajkowski, U.S. EPA Region 9. April 10, 1992.
18. “Chemical Waste Management, Inc., Kettleman Hills Facility TSCA Approval to Operate Landfill Unit B-18.” Letter, David Howekamp, U.S. EPA Region 9, to Leo Stahlecker, Chemical Waste Management, Inc. May 15, 1992.
19. “Response Action Plan Landfill B-18 Kettleman Hills Facility.” SEC Donohue, Inc. for Chemical Waste Management, Inc. June 1, 1992.
20. “Operational Features Report Landfill B-18, Phases IA and IB, Kettleman Hills Facility, Kettleman City California.” Environmental Construction Services, Inc. June 26, 1992.
21. “Kettleman Hills Facility CAT 000646117 TSCA Approval to Operate Landfill Unit B-18.” Letter, Richard Zweig, Chemical Waste Management, Inc. to David Howekamp, U.S. EPA Region 9. August 18, 1992.
22. “Landfill B-18, Phases IA and IB, Construction Reports, Volume 1 – Clay Liner Source Report.” Golder Construction Services and ACZ Engineering and Environmental Services. May 1, 1993.
23. “Landfill B-18, Phases IA and IB, Construction Reports, Volume 2 – Subgrade Geologic Mapping and Chemical Analysis Report.” Golder Construction Services and ACZ Engineering and Environmental Service. May 1, 1993.
24. “Revised Intermediate Waste Fill Plan – Landfill Unit B-18, Phase I, Kettleman Hills Facility, Kings County, California.” Environmental Solutions, Inc. August 1993.
25. “Landfill Unit B-18 Phases IIA/IIB Volume 3 Extension Basin Detail (Design).” Stamped by Michael Cranston for Chemical Waste Management Inc. August 27, 1993.
26. “Construction Reports for Landfill B-18, Phases IIA and IIB, Kettleman City California Excavation and Structural Fill Placement Construction Report – Volume 3.” Golder Construction Services and ACZ Engineering, Inc. August 27, 1993.
27. “Construction Reports for Landfill B-18, Phases IIA and IIB, Kettleman City California – Secondary Clay Liner Volume 4, Final Report.” Golder Construction Services, Inc. and ACZ Engineering Inc. September 13, 1993.
28. “Construction Reports for Landfill B-18, Phases IIA and IIB, Kettleman City California – Secondary and Vadose HDPE Liner and Leachate Collection System Construction Report Volume 5, Final Report.” Golder Construction Services, Inc. and ACZ Engineering Inc. October 20, 1993.



29. “Construction Reports for Landfill B-18, Phases IIA and IIB, Kettleman City California – Volume 5A – Secondary Vadose HDPE Liner and Leachate Collection System Report (Appendices A-D), Report.” Golder Construction Services, Inc. and ACZ Engineering Inc. October 20, 1993.
30. “Construction Reports for Landfill B-18, Phases IIA and IIB, Kettleman City California – Volume 5B – Secondary Vadose HDPE Liner and Leachate Collection System Report (Appendix E), Report.” Golder Construction Services, Inc. and ACZ Engineering Inc. October 20, 1993.
31. “Construction Reports for Landfill B-18, Phases IIA and IIB, Kettleman City California – Volume 5C – Secondary Vadose HDPE Liner and Leachate Collection System Report (Appendices F-O), Report.” Golder Construction Services, Inc. and ACZ Engineering Inc. October 20, 1993.
32. “Construction Reports for Landfill B-18, Phases IIA and IIB, Kettleman City California – Volume 6 – Primary Clay Liner Construction Report.” Golder Construction Services, Inc. and ACZ Engineering Inc. October 20, 1993.
33. “Construction Reports for Landfill B-18, Phases IIA and IIB, Primary HPDE Liner and Leachate Collection System Report (Appendices), Volume 7A.” Golder Construction Services, Inc. and ACZ Engineering Inc. November 8, 1993.
34. “Construction Reports for Landfill B-18, Phases IIA and IIB, Construction Reports for Primary HPDE Liner and Leachate Collection System– Volume 7 –Report.” Golder Construction Services, Inc. and ACZ Engineering Inc. November 8, 1993.
35. “Landfill B-18, Phases IIA and IIB Construction Reports Volume 8 – Summary Construction Report.” Golder Construction Services and ACZ Engineering and Environmental Services. November 8, 1993.
36. “Construction Reports for Landfill B-18, Phases IIA and IIB, Kettleman City, California, Operations Features Report, Volume 9, Final Report.” Golder Construction Services, Inc. and ACZ Engineering, Inc. December 6, 1993.
37. “Chemical Waste Management, Inc. (CWM) – Landfill Unit B-18 Phase II Final Inspection and Construction Certification Report.” Letter, William Pfister and Shelton Gray, California Regional Water Quality Control Board Central Valley Region to Rich Zweig, Chemical Waste Management, Inc. December 8, 1993.
38. “Approval of the Certification Reports and as Built Drawings for the Landfill b-18, Phase II, DTSC Permit Condition IV.C.9.C Chemical Waste Management, Incorporated, Kettleman hills Facility, EPA I.D. No. CAT 000646117.” Letter, James Pappas, Department of Toxic Substances Control Region 1 to Richard Zweig, Chemical Waste Management, Inc. December 23, 1993.
39. “TSCA Approval Request for Landfill B-18 Phase II, Chemical Waste Management Inc.’s Kettleman Hills Facility”, Letter, Catherine Pool, Chemical Waste Management, Inc., to Vince Mancus, U.S. EPA Region 9, December 27, 1993.



40. “Re; Chemical Waste Management, Inc., Kettleman Hills Facility TSCA Approval to Operate Landfill Unit B-18, Phase II”, Letter, David Howekamp, US Environmental Protection Agency Region 9 to Leo Stahlecker, Chemical Waste Management, Inc., December 30, 1993.
41. “Kettleman Hills Landfill B-18 Phase IIA & IIB Response Action Plan Update Based on As-built Conditions.” Letter, Robert Fifarek, RUST Environment & Infrastructure to Catherine Poole, Chemical Waste Management, Inc. January 29, 1994.
42. “Engineering and Design Report, Landfill Unit B-18, Kettleman Hills Facility, Kettleman City California.” Golder Associates, Inc. August 2011.
43. “Construction Quality Assurance (CQA) Report for Landfill B-18 Phase III Expansion, Volume 1: Phase IIIA Subgrade and Secondary Clay Liner, Kettleman Hills Facility, Kings County, California.” Golder Associates, Inc. January 2015.
44. “Construction Quality Assurance (CQA) Report for Landfill B-18 Phase III Expansion, Volume 2: Phase IIIA Geosynthetics and Operations Layer, Kettleman Hills Facility, Kings County, California.” Golder Associates, Inc. February 2015.
45. “Construction Quality Assurance (CQA) Report for Landfill B-18 Phase III Expansion, Volume 4: Phase IIIB Geosynthetics, Phase IIIB Operations Layer, and Phase III Operations Features, Kettleman Hills Facility, Kings County, California.” Golder Associates, Inc. December 2015 (Revised April 2016).
46. “Construction Quality Assurance (CQA) Report for Landfill B-18 Phase III Expansion, Volume 3: Phase IIIB Subgrade and Secondary Clay Liner, Kettleman Hills Facility, Kings County, California.” Golder Associates, Inc. November 2015.

E. PCB FLUSHING AND STORAGE UNIT

1. “PCB Building Containment Area.” Email, Bob Henry, Chemical Waste Management to Edwin Poalinelli, U.S. EPA Region 9. July 1, 2010.
2. Letter, Robert Henry, Chemical Waste Management, Inc. to Regional Administrator, U.S. EPA Region 9. August 25, 2010. With enclosure: “Kettleman Hills Facility PCCB Building Self-Implementing Cleanup Plan, 40 CFR §762.61(a).” Waste Management, Inc. August 2010.
3. “Polychlorinated Biphenyls (PCBs) – USEPA Conditional Approval Under 40 CFR 761.61(a), Toxic Substances Control Act, Self-Implementing Cleanup of PCBs at PCB Building, Waste Management Kettleman Hills Facility.” Letter, Arlene Kabei, U.S. EPA Region 9, to Robert Henry, Chemical Waste Management, Inc. September 23, 2010.
4. “Chemical Waste Management, Inc. Kettleman Hills Facility PCB Cleanup Completion Report.” Letter, Robert Henry, Chemical Waste Management, Inc. to Carmen Santos, U.S. EPA Region 9. December 16, 2010. With enclosures.
5. “PCB Outside Pad Replacement and Cleanup Completion Report, Kettleman Hills Facility, Kings County, CA.” Associated Design & Engineering, Inc. January 10, 2011.



6. “March 24, 2011 Letter re CWMI’s PCB Outside Pad Replacement and Cleanup Completion Report – Kettleman Hills Facility (EPA Identification No. CAT 000646117).” Letter, Paul Turek, Chemical Waste Management, Inc. to Wayne Lorentzen, Department of Toxic Substance Control. May 6, 2011.
7. “DTSC Review of Response to Comments on the IM Corrective Action Completion Report, Chemical Waste Management, Inc., Kettleman Hills Facility, 35251 Old Skyline Road, Kettleman City, Kings County, California 93239, Environmental Protection Agency Identification Number CAT000646117.” Letter, Wayne Lorentzen, Department of Toxic Substance Control to Paul Turek, Chemical Waste Management, Inc. June 21, 2011.
8. “Chemical Waste Management, Inc. – Kettleman Hills Facility Revised IM Corrective Action Completion Report: PCB Outside Pad Replacement and Cleanup report, PCB Cleanup Completion Report.” Letter, Paul Turek, Chemical Waste Management, Inc. to Wayne Lorentzen, Department of Toxic Substance. July 21, 2011. With Enclosures
 - a. “PCB Outside Pad Replacement and Cleanup Completion Report, Kettleman Hills Facility Kings Count, CA.” Associated Design & Engineering, Inc. January 10, 2011 (revised July 20, 2011).
9. “Acceptance of the Interim Measures Corrective Action Completion Report, Chemical Waste Management, Inc. Kettleman Hills Facility, 35251 Old Skyline Road, Kettleman City, Kings County, California 93239, Environmental Protection Agency Identification Number CAT000646117.” Letter, Wayne Lorentzen, Department of Toxic Substances Control to Paul Turek, Chemical Waste Management, Inc. August 17, 2011.
10. “Notice of Decision – Approval of the Interim Measures Corrective Action Completion Report.” Public Notice, Wayne Lorentzen, Department of Toxic Substances Control to Whom it May Concern. February 13, 2012.
11. “Final Statement of Basis -- Selected Remedy for the PCB Storage Building Cleanup Chemical Waste Management, Inc. Kettleman Hills Facility, 35251 Old Skyline Road, Kettleman City, Kings County, California 93239, Environmental Protection Agency Identification Number CAT000646117.” Department of Toxic Substances Control to Whom it May Concern. February 13, 2012.
12. “Engineer’s Certification for the Outside Containment System for the PCB Flushing/Storage Unit at the Kettleman Hills Facility – Kings County, California (EPA ID NO.: CAT000646117).” Letter from Ryan Hillman, Golder Associates to Reyna Verdin, Chemical Waste Management, Inc. October 1, 2018.
13. “Engineer’s Certification for the Interior Containment System for the PCB Flushing/Storage Unit at the Kettleman Hills Facility – Kings County, California (EPA ID NO.: CAT000646117).” October 1, 2018.



F. OTHER KETTLEMAN HILLS FACILITY WIDE PLANS**1. Ambient Air Monitoring Plans**

- a. “Air Monitoring – Technical Work Plan.” Kettleman Hills Facility.” NUS Corporation. February 1986.
- b. “Ambient Air Monitoring Plan, Final.” EarthTech, Inc. February 2006.
- c. “Approval of the Final Ambient Air Monitoring Plan, February 2006, Kettleman Hills Facility, Kings County, California, United States Environmental Protection Agency (USEPA) ID Number CAT000646117.” Letter, Pauline Batarseh, Department of Toxic Substances Control to Paul Turek, Chemical Waste Management, Inc. March 29, 2006.
- d. “Chemical Waste Management, Inc., Kettleman Hills Facility requested Air Modeling Data” Letter, Paul Turek, Chemical Waste Management, Inc. to Lily Lee, U.S. EPA Region 9. July 27, 2006.
- e. “Site-Specific Ambient Air Monitoring Plan.” EarthTech, Inc. February 2007.
- f. “Site-Specific Ambient Air Monitoring Plan.” EarthTech, Inc. Second Revision, July 2007.
- g. “Risk analysis.” Letter from Paula Bisson, U.S. EPA Region 9, to Paul Turek, Chemical Waste Management, Inc. September 8, 2008.
- h. “Site-Specific Ambient Monitoring Plan.” Wenck Associates, Inc. Fourth Revision, November 2010.
- i. “Site-Specific Ambient Air Monitoring Plan.” EarthTech, Inc. Third Revision, May 2010.
- j. “Comments on Site Specific Air Monitoring Plan, Third Revision, Chemical Waste Management, Inc., Kettleman Hills Facility, 35251 Old Skyline Road, Kettleman City, Kings County, California 93239, Environmental Protection Agency Identification Number CAT000646117.” Letter, Wayne Lorentzen, Department of Toxic Substances Control to Paul Turek, Chemical Waste Management, Inc. August 10, 2010.
- k. “Site-Specific Ambient Air Monitoring Plan.” Wenck Associated, Inc. Fifth Revision, January 2016.
- l. “Revised Site-Specific Ambient Air Monitoring Plan (SSAAMP) for Location of Additional Downwind Monitoring Station and Month-Long PCB Sample, Chemical Waste Management, Inc., Kettleman Hills Facility, 35251 Old Skyline Road, Kettleman City, Kings County, California 93239, Environmental Protection Agency Identification Number CAT000646117.” Letter, Edward Nieto, Department of Toxic Substances to Robert Henry, Chemical Waste Management, Inc. May 11, 2016.



2. Groundwater Monitoring Plans

- a. ““Certification and Signatory”” page for October 1985 Interim Status Monitoring Plan for Chemical Waste Management’s Kettleman Hills Facility.” EMCON. December 27, 1987. Includes “Hydrogeologic Characterization, Kettleman Hills Facility, Kings County, California.” EMCON Associates. December 1986.
- b. “Transmittal of Adopted Waste Discharge Requirements for Chemical Waste Management, Inc., Kettleman Hills Facility, Kings County.” Letter, William F. Pfister, California Regional Water Quality Control Board Central Valley Region to Robert g. Henry, Chemical Waste Management, Inc. March 11, 1998. With enclosure: “Order No. 98-058, Waste discharge Requirements for Chemical Waste Management, Inc. Kettleman Hills Facility, Kings County.” California Regional Water Quality Control Board Central Valley Region. February 27, 1998.
- c. “Site-Specific Groundwater Monitoring Plan, Kettleman Hills Facility, Chemical Waste Management, Inc., Kings County, California.” Geosyntec Consultants. May 2001.
- d. “Chemical Waste Management, Inc. – Kettleman Hills Facility Revised Site-Specific Ground Water Monitoring Plan Revised Site-Specific Unsaturated Zone Monitoring Plan.” Letter, Paul Turek, Chemical Waste Management, Inc. to Executive Officer, Regional Water Quality Control Board. April 15, 2014. With enclosure: “Revised Site-Specific Groundwater Monitoring Plan Class I Waste Management Units, Kettleman Hills Facility, Kings County, California.” AMEC Environment & Infrastructure, Inc. April 14, 2014.
- e. “Kettleman Hills Facility – TSCA Groundwater Monitoring Requirements.” Letter, Andrew M. Kenefick, Chemical Waste Management, Inc. to Frances Wicher, U.S. EPA Region 9. May 30, 2018. With enclosures.

3. Surface and Storm Water Plans

- a. “Surface Water Control Program for Kettleman Hills Facility,” Centra Consulting, Inc. October 23, 2009.
- b. “Stormwater Pollution Prevention Plan Chemical Waste Management, Inc., – Kettleman Hills Facility.” Golder Associates and SWT Engineering. March 2016.

4. SPCC Plan

- a. “Spill Prevention Control and Countermeasure Plan (SPCC) prepared for Chemical Waste Management, Inc. Kettleman Hills Facility.” Golder Associates, Inc. and Waste Management. October 2016.

G. OTHER DOCUMENTS

1. “Chemical Waste Management, Inc. – Kettleman Hills Facility Seismic Hazard Assessment for the Kettleman Hills Facility, Letter, Reyna Verdin, Chemical Waste



Management, Inc. to Ryan Batty, Department of Toxic Substances Control, December 28, 2017.

VIII. COMPLIANCE AND MONITORING DOCUMENTS

A. COMPLIANCE AND ENFORCEMENT DOCUMENTS

1. TSCA Inspection Reports

- a. “Inspection Report. Facility: Kettleman Hills Facility, Chemical Waste Management, Inc.” U.S. EPA Region 9. Date of Inspection: December 8, 1993.
- b. “Inspection Report. Facility: Chemical Waste Management, Inc., Kettleman City, California.” Department of Toxic Substances Control. Date of Inspection: August 31, 1995; Date of Report: September 22, 1995.
- c. “Inspection Report. Facility: Chemical Waste Management, Inc., Kettleman Hills Facility.” Department of Toxic Substances Control. Date of Inspection: April 8, 1997; Date of Report: July 14, 1997.
- d. “Inspection Report. Purpose: TSCA Section 6(e) PCB Inspection. Inspection Date: October 14-15, 1998. Facility: Chemical Waste Management, Inc., Kettleman Hills Facility.” U.S. EPA Region 9. No date.
- e. “Chemical Waste Management, Inc. – Kettleman Hills Facility Response to TSCA Inspection Follow-Up Questions.” Letter, Paul Turek, Chemical Waste Management, Inc. to Max Weintraub, U.S. EPA Region 9. March 22, 1999.
- f. “Inspection Report. Purpose: TSCA Section 6(e) PCB Inspection. Inspection Date: October 25-26, 2001. Facility: Chemical Waste Management, Inc., Kettleman Hills Facility.” U.S. EPA Region 9. No date.
- g. “Inspection Report. Purpose: TSCA Section 6(e) PCB Inspection. Inspection Date: April 14-15, 2004. Facility: Chemical Waste Management, Inc., Kettleman Hills Facility.” U.S. EPA Region 9. No date.
- h. “Transmittal of Final Report – Multimedia Compliance Investigation: Phase 1; Chemical Waste Management, Inc. Kettleman Hills, CA NEIC Project No.: VP0686.” Memorandum, Diana Love, NEIC U.S. EPA to Christopher Rollins, U.S. EPA Region 9. January 17, 2006. With enclosure: “Multimedia Compliance Investigation: Phase 1; Chemical Waste Management, Inc. Kettleman Hills, CA NEIC Project No.: VP0686.” NEIC, U.S. EPA. January 2006.
- i. “TSCA Compliance Evaluation Inspection Report, February 8-12, 2010, Chemical Waste Management, Inc.” U.S. EPA Region 9. March 12, 2010.
- j. “TSCA Compliance Evaluation Inspection Report, June 2, 2010, Chemical Waste Management, Inc.” U.S. EPA Region 9. July 27, 2010.
- k. “TSCA Compliance Evaluation Inspection Report, November 29, 2012, Chemical Waste Management, Inc.” U.S. EPA Region 9. January 10, 2013.



- l. “Inspection Report, Waste Management, Inc. – Kettleman Hills Facility, date of inspection: September 28, 2017.” U.S. EPA Region 9. October 27, 2017.
2. RCRA Inspection Reports
 - a. Letter, Astrid L. Brown, Department of Toxic Substances Control to Paul Turek, Chemical Waste Management, Inc. February 8, 2005. With enclosure: “Inspection Report: November 9, 10 and 30, 2004.” Department of Toxic Substances Control. February 8, 2005.
 - b. “Multimedia Compliance Investigation: Phase 2; Chemical Waste Management, Inc. Kettleman Hills, CA NEIC Project No.: VP0686.” NEIC, U.S. EPA. April 2007. [REDACTED].
 - c. “Financial Responsibility Review Findings – Chemical Waste Management, 35251 Old Skyline Road, Kettleman City, California 93239, Environmental Protection Agency Identification Number CAT000646117.” Letter, Keith Kihara, Department of Toxic Substances Control to Paul Turek, Chemical Waste Management, Inc. March 16, 2009. With enclosure: “Financial Responsibility Review Findings.” Department of Toxic Substances Control. March 13, 2009.
 - d. “Financial Responsibility Review Findings – Chemical Waste Management, 35251 Old Skyline Road, Kettleman City, California 93239, Environmental Protection Agency Identification Number CAT000646117.” Letter, Keith Kihara, Department of Toxic Substances Control to Paul Turek, Chemical Waste Management, Inc. October 8, 2009. With enclosure: “Financial Responsibility Review Findings.” Department of Toxic Substances Control. October 6, 2009.
 - e. “Inspection Report: September 15-16, 2009.” Department of Toxic Substances Control. October 21, 2009.
 - f. Letter, Amy Miller, U.S. EPA Region 9, to Paul Turek, Chemical Waste Management, Inc. February 25, 2011. With enclosure: “Inspection Report, Waste Management, Kettleman Hills Facility (Inspection date: November 12, 2010).” U.S. EPA Region 9. February 25, 2011.
 - g. “Financial Responsibility Review Findings – Chemical Waste Management, 35251 Old Skyline Road, Kettleman City, California 93239, Environmental Protection Agency Identification Number CAT000646117.” Letter, Jerry Barnes, Department of Toxic Substances Control to Paul Turek, Chemical Waste Management, Inc. June 12, 2012. With enclosure: “Financial Responsibility Review Findings.” Department of Toxic Substances Control. June 12, 2012.
 - h. “Groundwater Operation and Maintenance (O&M) Inspection Report, Chemical Waste Management – Kettleman Hills Facility, Kings County, California.” Department of Toxic Substances Control. September 9, 2012.
 - i. “Financial Responsibility Review Findings – Chemical Waste Management, 35251 Old Skyline Road, Kettleman City, California 93239, Environmental Protection Agency Identification Number CAT000646117.” Letter, Jerry Barnes,



- Department of Toxic Substances Control to Paul Turek, Chemical Waste Management, Inc. May 20, 2013. With enclosure: “Financial Responsibility Review Findings.” Department of Toxic Substances Control. May 17, 2013.
- j. Letter, Ignacio R. Dominguez, Department of Toxic Substances Control, to Paul Turek, Chemical Waste Management, Inc. June 25, 2013. With enclosure: “Inspection Report: April 23-24, 2013.” Department of Toxic Substances Control. June 24, 2013.
 - k. “Transmittal of Groundwater Audit Report for February 19, 2014 Chemical Waste Management, Kettleman Facility, Kings County, California, CAT000646117.” Letter, Jeff Brown, Department of Toxic Substances Control to Paul Turek, Chemical Waste Management, Inc. April 8, 2014. With enclosure: “Groundwater Audit Report, Chemical Waste Management – Kettleman Hills Facility, Kings County, California.” Department of Toxic Substances Control. April 7, 2014.
 - l. Letter, Dan Lynch, Department of Toxic Substances Control, to Jim Sook, Chemical Waste Management, Inc. July 24, 2014. With enclosure: “Inspection Report: March 18, 2014.” Department of Toxic Substances Control. July 24, 2014.
 - m. “Financial Responsibility Review Findings.” Department of Toxic Substances Control. August 12, 2014.
 - n. Letter, Dan Lynch, Department of Toxic Substances Control, to Bob Henry, Chemical Waste Management, Inc. December 3, 2014. With enclosure: “Inspection Report: September 24, 2014.” Department of Toxic Substances Control. November 19, 2015.
 - o. Letter, Dan Lynch, Department of Toxic Substances Control, to Bob Henry, Chemical Waste Management, Inc. December 18, 2014. With enclosure: “Inspection Report: December 10, 2014.” Department of Toxic Substances Control. December 3, 2014.
 - p. “Financial Responsibility Review Findings.” Department of Toxic Substances Control. April 28, 2015.
 - q. Letter, Robert Easley, Department of Toxic Substances Control, to Bob Henry, Chemical Waste Management, Inc. June 30, 2015. With enclosure: “Inspection Report: March 17 and 18, 2015.” Department of Toxic Substances Control. June 30, 2015.
 - r. Letter, Dan Lynch, Department of Toxic Substances Control, to Paul Turek, Chemical Waste Management, Inc. December 4, 2015. With enclosure: “Inspection Report: September 30, 2015.” Department of Toxic Substances Control. December 4, 2015.
 - s. Letter, Dan Lynch, Department of Toxic Substances Control, to Paul Turek, Chemical Waste Management, Inc. February 16, 2016. With enclosure:



- “Inspection Report: December 29, 2015.” Department of Toxic Substances Control. February 16, 2016.
- t. “Financial Responsibility Review Findings.” Department of Toxic Substances Control. February 29, 2016.
 - u. Letter, Robert Easley, Department of Toxic Substances Control, to Paul Turek, Chemical Waste Management, Inc. April 1, 2016. With enclosure: “Inspection Report: February 9 and 10, 2016.” Department of Toxic Substances Control. April 1, 2016.
 - v. Letter, Robert Easley, Department of Toxic Substances Control, to Reyna Verdin, Chemical Waste Management, Inc. September 28, 2016. With enclosure: “Inspection Report: September 14, 2016.” Department of Toxic Substances Control. September 28, 2016.
 - w. “Financial Responsibility Review Findings.” Department of Toxic Substances Control. March 10, 2017.
 - x. Letter, Dan Lynch, Department of Toxic Substances Control, to Reyna Verdin, Chemical Waste Management, Inc. April 4, 2017. With enclosure: “Inspection Report: February 1-2, 2017.” Department of Toxic Substances Control. April 4, 2017.
 - y. “Transmittal of Groundwater Audit Report for May 2, 2017 Chemical Waste Management, Kettleman Facility, Kings County, California, CAT000646117.” Letter, Matthew Farris, Department of Toxic Substances Control to Reyna Verdin, Chemical Waste Management, Inc. May 31, 2017. With enclosure: “Focused Groundwater Audit Report, Chemical Waste Management – Kettleman Hills Facility, Kings County, California.” Department of Toxic Substances Control. June 6, 2017.
 - z. Letter, Robert Easley, Department of Toxic Substances Control, to Reyna Verdin, Chemical Waste Management, Inc. June 21, 2017. With various enclosures.
 - aa. Letter, April Ranney, Department of Toxic Substances Control, to Reyna Verdin, Chemical Waste Management, Inc. September 28, 2017. With enclosure: “Summary of Observations.” Department of Toxic Substances Control. August 17, 2017.
 - bb. “Financial Responsibility Review Findings.” Department of Toxic Substances Control. April 9, 2018.
 - cc. Letter, Robert Easley, Department of Toxic Substances Control, to Reyna Verdin, Chemical Waste Management, Inc. October 2, 2018. With enclosure: “Inspection Report: September 11, 2018.” Department of Toxic Substances Control. October 2, 2018.



- dd. .“Inspection Report, Kettleman Hills Facility: April 17, 2019.” Department of Toxic Substances Control. May 14, 2019.

3. Compliance Documents

- a. “Chemical Waste Management, Inc – Kettleman Hills Facility Monitoring of Landfill B-16 Lysimeters.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Max Weintraub, U.S. EPA Region 9. February 13, 2004.
- b. “Chemical Waste Management’s Voluntary Disclosure of a Possible TSCA Violation.” Letter, Paula Bisson, U.S. EPA Region 9 to Paul Turek, Chemical Waste Management, Inc. May 6, 2004.
- c. “Chemical Waste Management, Inc – Kettleman Hills Facility Voluntary Disclosure Questionnaire Landfill B-16 Lysimeters.” Letter, Paul Turek, Chemical Waste Management, Inc. to Paula Bisson, U.S. EPA Region 9. May 24, 2004.
- d. “TSCA Information Request Letter.” Letter, Paula Bisson, U.S. EPA Region 9 to Paul Turek, Chemical Waste Management, Inc. June 3, 2004.
- e. “Chemical Waste Management, Inc – Kettleman Hills Facility Voluntary Disclosure Landfill B-16 Lysimeters.” Letter, Andrew M. Kenefick, Chemical Waste Management, Inc. to David Kim, U.S. EPA Region 9. August 20, 2004. [Confidential Settlement Communication].
- f. Letter, Enrique Manzanilla, U.S. EPA Region 9 to Andrew M. Kenefick, Chemical Waste Management, Inc. May 3, 2005. With enclosure: “Docket No. TSCA-09-2005-0002 Consent Agreement and Final Order Pursuant to 40 C.F.R. §§ 22.13 and 22.18.” U.S. EPA Region 9. May 3, 2005.
- g. “Notice of Noncompliance for Violations of Toxic Substances Control Act.” Letter, Paula Bisson, U.S. EPA to Paul Turek, Chemical Waste Management, Inc. June 26, 2007.
- h. “Aviso de incumplimiento para violaciones de la ley de control de sustancias tóxicas.” Letter, Paula Bisson, U.S. EPA Region 9 to Paul Turek, Chemical Waste Management, Inc. 26 de junio de 2007.
- i. “Chemical Waste Management, Inc. – Kettleman Hills Facility Response to 06/26/07 TSCA Notice of Noncompliance PCB Analytical Methodology.” Letter, Paul Turek, Chemical Waste Management, Inc. to Christopher Rollins, U.S. EPA Region 9. August 1, 2007. With enclosure.
- j. “Notice of Noncompliance Follow Up Letter.” Letter, Paula Bisson, U.S. EPA Region 9, to Paul Turek, Chemical Waste Management, Inc. November 28, 2007.
- k. “Chemical Waste Management, Inc. – Kettleman Hills Facility Response to TSCA Notice of Noncompliance Follow-Up Letter PCB Performance Evaluation Samples.” Letter, Paul Turek, Chemical Waste Management, Inc. to Christopher Rollins, U.S. EPA Region 9. December 20, 2007.



- l. “Chemical Waste Management, Inc. - Kettleman Hills Facility Response to TSCA Notice of Noncompliance Follow-Up Letter PCB Performance Evaluation Samples - Second Set.” Letter, Paul Turek, Chemical Waste Management, Inc. to Christopher Rollins, U.S. EPA Region 9. February 12, 2008.
- m. “Notice of Violation.” Letter, Amy Miller, U.S. EPA Region 9 to Paul Turek, Chemical Waste Management, Inc. January 26, 2010.
- n. “Aviso de Violación.” Letter, Amy Miller, U.S. EPA Region 9 to Paul Turek, Chemical Waste Management, Inc. 26 de enero de, 2010.
- o. “Chemical Waste Management, Inc. – Kettleman Hills Facility Re: Notice of Violation – EPA I.D. Number CAT000646117.” Letter, Paul Turek, Chemical Waste Management, Inc. to Kandace Bellamy, U.S. EPA Region 9. January 29, 2010.
- p. “Notice of Violation.” Letter, Amy Miller, U.S. EPA Region 9 to Paul Turek, Chemical Waste Management, Inc. February 4, 2010.
- q. “Chemical Waste Management, Inc. – Kettleman Hills Facility Re: Notice of Violation – EPA I.D. Number CAT000646117.” Letter, Paul Turek, Chemical Waste Management, Inc. to Kandace Bellamy, U.S. EPA Region 9. February 26, 2010.
- r. “Kettleman Hills Facility, Kettleman City, CA EPA Identification Number CAT 000 646 117.” Letter, Amy Miller, U.S. EPA Region 9 to Andrew Kenefick, Chemical Waste Management, Inc. April 8, 2010. With enclosure: “Multimedia Compliance Investigation: Phase 2; Chemical Waste Management, Inc. Kettleman Hills, CA NEIC Project No.: VP0686.” NEIC, U.S. EPA. April 2007 [REDACTED].
- s. “Aviso de violaciones de la Ley de Control de Sustancias Tóxicas.” Letter, Amy Miller, U.S. EPA Region 9 to Andrew Kenefick, Chemical Waste Management, Inc. 8 de abril; del 2010.
- t. “60-Day Notice of Unacceptability Under the CERCLA Off-Site Rule and Opportunity for Informal Conference.” Letter, Amy Miller, U.S. EPA Region 9 to Paul Turek, Chemical Waste Management, Inc. April 8, 2010.
- u. “Chemical Waste Management, Inc. – Kettleman Hills Facility Re: Notice of Violation – EPA I.D. Number CAT000646117.” Letter, Paul Turek, Chemical Waste Management, Inc. to Christopher Rollins, U.S. EPA Region 9. May 10, 2010.
- v. “Chemical Waste Management, Inc., Kettleman Hills Facility Laboratory.” Letter, Jeff Scott, U.S. EPA Region 9 to Andrew Kenefick, Chemical Waste Management, Inc. May 27, 2010.



- w. “Laboratorio de la Instalación de Kettleman Hills de Chemical Waste Management, Inc.” Letter, Jeff Scott, U.S. EPA Region 9 to Andrew Kenefick, Chemical Waste Management, Inc. 27 de mayo de 2010.
- x. “Chemical Waste Management, Inc., Kettleman Hills Facility Laboratory.” Letter, Andrew Kenefick, Chemical Waste Management, Inc. to Letitia Moore, U.S. EPA Region 9. June 7, 2010. With enclosures.
- y. “Request for Meeting Regarding Kettleman Hills Facility.” Letter, Duane Woods, Chemical Waste Management, Inc. to Jared Blumenfeld, U.S. EPA Region 9. June 9, 2010. With enclosure: “Chemical Waste Management, Inc., Kettleman Hills Facility Laboratory.” Letter, Andrew Kenefick, Chemical Waste Management, Inc. to Letitia Moore, U.S. EPA Region 9. June 7, 2010.
- z. “Resolution of April 8, 2010 Off-Site Rule Notice letter.” Letter, Jeff Scott, U.S. EPA Region 9 to Paul Turek, Chemical Waste Management, Inc. July 8, 2010.
- aa. “Resolución de la notificación del 8 de abril de 2010 bajo el reglamento sobre la disposición fuera del sitio (“Off-Site Rule).” Letter, Jeff Scott, U.S. EPA Region 9 to Paul Turek, Chemical Waste Management, Inc. 8 de julio de 2010
- bb. “60-Day Notice of Unacceptability Under the CERCLA Off-Site Rule and Opportunity for Informal Conference.” Letter, Amy Miller, U.S. EPA Region 9 to Paul Turek, Chemical Waste Management, Inc. July 15, 2010. With enclosure: 58 FR 49200 (September 22, 1993) “Amendment to the National Oil and Hazardous Substances Pollution Contingency Plan; Procedures for Planning and Implementing Off-Site Response Actions.”
- cc. “Notice of Toxic Substances Control Act Violation. Kettleman Hills Facility, Kettleman City, CA EPA Identification Number CAT 000 646 117.” Letter, Amy Miller, U.S. EPA Region 9 to Paul Turek, Chemical Waste Management, Inc. July 15, 2010.
- dd. “Aviso de violaciones de la Ley de control de Sustancias Tóxicas. Instalación Kettleman Hills, Kettleman City, Número de Identificación de la EPA CAT 000 646 117.” Letter, Amy Miller, U.S. EPA Region 9 to Paul Turek, Chemical Waste Management, Inc. 15 de julio de 2010.
- ee. “TSCA Compliance Evaluation Inspection Report and Notice of Violation.” Letter, Amy Miller, U.S. EPA Region 9 to Paul Turek, Chemical Waste Management, Inc. September 8, 2010.
- ff. “Informe de Inspeccion de Evaluacion de Cumplimiento bajo TSCA y Aviso de violaciones .” Letter, Amy Miller, U.S. EPA Region 9 to Paul Turek, Chemical Waste Management, Inc. 8 de septiembre de 2010.
- gg. “Polychlorinated Biphenyls (PCBs) – USEPA Conditional Approval Under 40 CFR 761.61(a), Toxic Substances Control Act, Self-Implementing Cleanup of PCBs at PCB Building, Waste Management Kettleman Hills Facility.” Letter,



- Arlene Kabei, U.S. EPA Region 9, to Robert Henry, Chemical Waste Management, Inc. September 23, 2010.
- hh. “Bifeniles Policlorados (PCBs) – Aprobación Condicional de USEPA bajo 40 CFR 761.61(a), Ley de Control de Sustancias Tóxicas, Limpieza Independiente de PCBs en el Edificio de PCB, Instalación Waste Management Kettleman Hills.” Letter, Arlene Kabei, U.S. EPA Region 9, to Robert Henry, Chemical Waste Management, Inc. 23 de septiembre de 2010.
- ii. “Corrective Action Consent Order, Chemical Waste Management, Inc. Kettleman Hills Facility, 35251 Old Skyline Road, Kettleman City, Kings County, California 93239, Environmental Protection Agency Identification Number CAT 000646117.” Letter, Wayne Lorentzen, Department of Toxic Substances Control to Robert Henry, Chemical Waste Management, Inc. October 18, 2010. With enclosure “Docket HWCA P1-10/11-001 Corrective Action Consent Order, Health and Safety Code Section 25187.” Department of Toxic Substances Control. October 14, 2010.
- jj. “Summary of Violations – Chemical Waste Management – Kettleman Hills.” Department of Toxic Substances Control. October 19, 2010.
- kk. “Consent Agreement and Final Order in the Matter of Chemical Waste Management, Inc.” Letter, Jeff Scott, U.S. EPA Region 9 to Bob Henry, Chemical Waste Management, Inc. November 29, 2010. With enclosure: “Docket No. TSCA-09-2011-0001 Consent Agreement and Final Order Pursuant to 40 C.F.R. §§ 22.13 and 22.18.” U.S. EPA Region 9. November 29, 2010.
- ll. “Orden No. TSCA-09-0211-0001 Acuerdo de Consentimiento y Orden Final Conforme A 40 C.F.R. §§ 22.13 and 22.18.” U.S. EPA Region 9. 29 de noviembre de 2010.
- mm. “Notice of Violation.” Letter, Amy Miller, U.S. EPA Region 9 to Paul Turek, Chemical Waste Management, Inc. February 25, 2011.
- nn. “In the matter of Chemical Waste Management, Inc. Enforcement Order.” Department of Toxic Substances Control. May 20, 2011.
- oo. “Docket No. RCRA-09-2011-0016 Consent Agreement and Final Order Pursuant to 40 C.F.R. §§ 22.13 and 22.18.” U.S. EPA Region 9. August 23, 2011.
- pp. “Orden No. TSCA-09-21-011-0016 Acuerdo de Consentimiento y Orden Final Conforme A 40 C.F.R. §§ 22.13 and 22.18.” U.S. EPA Region 9. 23 de agosto de 2011.
- qq. “DTSC proposes approval of the Kettleman Hills Facility’s cleanup of PCB storage building spills.” Factsheet. Department of Toxic Substances Control. September 2011.



- rr. “Fact Sheet on United States Environmental Protection Agency’s Compliance Investigation and Enforcement at Chemical Waste Management, Kettleman Hills.” Factsheet (English and Spanish). November 2011.
 - ss. “Docket No. TSCA-09-2012-0009 Consent Agreement and Final Order Pursuant to 40 C.F.R. §§ 22.13 and 22.18.” U.S. EPA Region 9. September 7, 2012.
 - tt. Letter, Ignacio R. Dominguez, Department of Toxic Substances Control to Bob Henry, Chemical Waste Management, Inc. October 22, 2012. With enclosure: “Summary of Violations.” Department of Toxic Substances Control. October 22, 2012.
 - uu. “CWM Kettleman Hills Facility RCRA/TSCA Inspections 1983 – Present.” Department of Toxic Substances Control. March 2013.
 - vv. “California v. Chemical Waste Management, Inc. Complaint for Civil Penalties and Injunctive Relief, Case No. BC503092.” Department of Toxic Substances Control. March 18, 2013.
 - ww. “California v. Chemical Waste Management, Inc. Final Judgment on Consent and Permanent Injunction, Case No. BC503093.” Department of Toxic Substances Control. March 23, 2013.
 - xx. Letter, Dan Lynch, Department of Toxic Substances Control to Reyna Verdin, Chemical Waste Management, Inc. October 13, 2016. With enclosures.
 - yy. Letter, LeeAnn Young, Department of Toxic Substances Control to Reyna Verdin, Chemical Waste Management, Inc. August 10, 2017.
 - zz. “Summary of Violations – Chemical Waste Management – Kettleman Hills.” Department of Toxic Substances Control. March 28, 2018.
 - aaa. Letter, April Ranney, Department of Toxic Substances Control to Reyna Verdin, Chemical Waste Management, Inc. July 24, 2018. With enclosures.
 - bbb. Letter, Maria G. Durand, Department of Toxic Substances Control to Reyna Verdin, Chemical Waste Management, Inc. May 28, 2019. With enclosure.
4. Other Compliance-Related Documents
- a. “Chemical Waste Management, Inc. – Kettleman Hills Facility Re: “Other” Noncompliance Report.” Letter, Paul Turek, Chemical Waste Management, Inc. to Wayne Lorentzen, Department of Toxic Substances Control. December 28, 2011.
 - b. “Chemical Waste Management, Inc. – Kettleman Hills Facility Re: “Other” Noncompliance Report.” Letter, Paul Turek, Chemical Waste Management, Inc. to Wayne Lorentzen, Department of Toxic Substances Control. May 23, 2012.
 - c. “Chemical Waste Management, Inc. – Kettleman Hills Facility re: Supplemental Information re Voluntary Disclosure of Non-compliance (Feb. 14, 2014)” Letter,



- Paul Turek, Chemical Waste Management, Inc. to Wayne Lorentzen, Department of Toxic Substances Control. March 28, 2014.
- d. “Chemical Waste Management, Inc. – Kettleman Hills Facility Re: “Other” Noncompliance Report.” Letter, Paul Turek, Chemical Waste Management, Inc. to Muzhda Ferouz, Department of Toxic Substances Control. August 3, 2015.
 - e. “Chemical Waste Management, Inc. – Kettleman Hills Facility Re: “Other” Noncompliance Report.” Letter, Paul Turek, Chemical Waste Management, Inc. to Muzhda Ferouz, Department of Toxic Substances Control. October 2, 2015.
 - f. “Chemical Waste Management, Inc. – Kettleman Hills Facility re: “Other” Noncompliance Report.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Ryan Batty, Department of Toxic Substances Control. August 10, 2017.
 - g. “Chemical Waste Management, Inc. – Kettleman Hills Facility re: Supplemental Information re Voluntary Disclosure of Noncompliance (August 10, 2017)” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Ryan Batty, Department of Toxic Substances Control. November 6, 2017.
 - h. “Comprehensive Compliance Monitoring and Enforcement Report – LAD000777201 Chemical Waste Management, Inc. Sulpher, Louisiana.” U.S. EPA. September 18, 2018. [Enforcement sensitive data].
 - i. “Comprehensive Compliance Monitoring and Enforcement Report – ORD089452353 Chemical Waste Management, Inc. Arlington, Oregon.” U.S. EPA. September 18, 2018. [Enforcement sensitive data].
 - j. “Comprehensive Compliance Monitoring and Enforcement Report – NYD04836679 Chemical Waste Management, Inc. Model City, New York.” U.S. EPA. September 19, 2018. [Enforcement sensitive data].
 - k. “Chemical Waste Management, Inc. – Kettleman Hills Facility, Written Release Report.” Reyna Verdin, Chemical Waste Management, Inc. to Camille Rogado, Department of Toxic Substances Control. August 16, 2019.

B. GROUNDWATER MONITORING

1. Annual Groundwater Reports

- a. “Annual Graph Report for Data Through 2008, Kettleman Hills Facility, Kings County, CA.” AMEC Geomatrix, Inc. March 23, 2009.
- b. “Chemical Waste Management, Inc. – Kettleman Hills Facility Annual Graph Report.” Letter, Paul Turek, Chemical Waste Management, Inc. to Jim Dowdall, Regional Water Quality Control Board and Wayne Lorentzen, Department of Toxic Substances. March 1, 2011. With enclosure: “Annual Graph Report for Data Through 2010, Kettleman Hills Facility, Kings County, CA.” AMEC Environment & Infrastructure, Inc. March 1, 2011.



- c. “Annual Graph Report for Data through 2011, Kettleman Hills Facility, Kings County, CA.” AMEC Environment & Infrastructure, Inc. February 16, 2012.
 - d. “Annual Graph Report for Data Through 2012, Kettleman Hills Facility, Kings County, CA.” AMEC Environment & Infrastructure, Inc. February 25, 2013.
 - e. “Annual Graph Report for Data Through 2013, Kettleman Hills Facility, Kings County, CA.” AMEC Environment & Infrastructure, Inc. February 25, 2014.
 - f. “Chemical Waste Management, Inc. – Kettleman Hills Facility Annual Graph Report (Data Through 2014).” Letter, Paul Turek, Chemical Waste Management, Inc. to Dan Carlson, Regional Water Quality Control Board and Muzhda Ferouz, Department of Toxic Substance Control. February 26, 2015. With enclosure: “Annual Graph Report for Data Through 2014, Kettleman Hills Facility, Kings County, CA.” AMEC Foster Wheeler. February 23, 2014.
 - g. “Chemical Waste Management, Inc. – Kettleman Hills Facility Annual Graph Report (Data Through 2015). Letter, Paul Turek, Chemical Waste Management, Inc. to Dan Carlson, Regional Water Quality Control Board and Muzhda Ferouz, Department of Toxic Substance Control. February 26, 2016. With enclosure: “Annual Graph Report for Data Through 2015, Kettleman Hills Facility, Kings County, CA.” AMEC Foster Wheeler. February 23, 2015.
 - h. “Chemical Waste Management, Inc. – Kettleman Hills Facility Annual Evaluation of Soil-Gas Data Through 2016.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Regional Water Quality Control Board and Department of Toxic Substance Control. February 28, 2017. With enclosure: “Annual Graph Report for Data Through 2016, Kettleman Hills Facility, Kings County, CA.” AMEC Foster Wheeler. February 24, 2016.
 - i. “Chemical Waste Management, Inc. – Kettleman Hills Facility Annual Graph Report (Data Through 2017), Reyna Verdin, Chemical Waste Management, Inc. to Dan Carlson, Regional Water Quality Control Board and Ryan Batty, Department of Toxic Substance Control. February 28, 2018. With enclosure: “Annual Graph Report for Data Through 2017, Kettleman Hills Facility, Kings County, CA.” AMEC Foster Wheeler. February 23, 2018.
 - j. “Chemical Waste Management, Inc. – Kettleman Hills Facility Annual Graph Report” (Data Through 2018)”. Letter, Reyna Verdin, Chemical Waste Management, Inc. to Dan Carlson, Regional Water Quality Control Board and Ryan Batty, Department of Toxic Substance Control. February 28, 2019. With enclosure: “Annual Graph Report for Data Through 2014, Kettleman Hills Facility, Kings County, CA.” Wood Environment & Infrastructure Solutions, Inc. February 27, 2019.
2. Groundwater Monitoring Reports
- a. “First Quarter 2007 Groundwater and Unsaturated Zone Monitoring Report for Title 22 and 23 Regulated Waste Management Units. Kettleman Hills Facility,



- Kettleman City, California.” Letter, Bradley A. Loewen, Geomatrix, to Paul Turek, Chemical Waste Management, Inc. June 19, 2007. With enclosure: “First Quarter 2007 Groundwater and Unsaturated Zone Monitoring Report for Title 22 and 23 Regulated Waste Management Units. Kettleman Hills Facility, Kettleman City, California.” Geomatrix. June 19, 2007.
- b. “Second Quarter 2007 Groundwater and Unsaturated Zone Monitoring Report for Title 22 and 23 Regulated Waste Management Units. Kettleman Hills Facility, Kettleman City, California.” Letter, Bradley A. Loewen, Geomatrix, to Paul Turek, Chemical Waste Management, Inc. September 26, 2007. With enclosure: “Second Quarter 2007 Groundwater and Unsaturated Zone Monitoring Report for Title 22 and 23 Regulated Waste Management Units. Kettleman Hills Facility, Kettleman City, California.” Geomatrix. September 2007.
 - c. “Third Quarter 2007 Groundwater and Unsaturated Zone Monitoring Report for Class I Waste Management Units. Kettleman Hills Facility, Kettleman City, California.” Letter, Bradley A. Loewen, Geomatrix, to Paul Turek, Chemical Waste Management, Inc. December 19, 2007. With enclosure: “Third Quarter 2007 Groundwater and Unsaturated Zone Monitoring Report for Class I Waste Management Units. Kettleman Hills Facility, Kettleman City, California.” Geomatrix, December 2007.
 - d. “Fourth Quarter 2007 Groundwater Constituents of Concern and Unsaturated Zone Monitoring Report for Class I Waste Management Units. Kettleman Hills Facility, Kettleman City, California.” Letter, Bradley A. Loewen, Geomatrix, to Paul Turek, Chemical Waste Management, Inc. April 9, 2008. With enclosure: “Fourth Quarter 2007 Groundwater Constituents of Concern and Unsaturated Zone Monitoring Report for Class I Waste Management Units. Kettleman Hills Facility, Kettleman City, California.” Geomatrix. April 2008.
 - e. “First Quarter 2008 Groundwater and Unsaturated Zone Monitoring Report for Class I Waste Management Units. Kettleman Hills Facility, Kettleman City, California.” Letter, Bradley A. Loewen, Geomatrix, to Paul Turek, Chemical Waste Management, Inc. June 17, 2008. With enclosure: “First Quarter 2008 Groundwater and Unsaturated Zone Monitoring Report for Class I Waste Management Units, Kettleman Hills Facility, Kettleman City, California” Geomatrix, June 2008.
 - f. “Second Quarter 2008 Groundwater and Unsaturated Zone Monitoring Report for Class I Waste Management Units. Kettleman Hills Facility, Kettleman City, California.” Letter, Bradley A. Loewen, Geomatrix, to Paul Turek, Chemical Waste Management, Inc. September 22, 2008. With enclosure: “Second Quarter 2008 Groundwater and Unsaturated Zone Monitoring Report for Class I Waste Management Units. Kettleman Hills Facility, Kettleman City, California.” Geomatrix. September 23, 2008.
 - g. “Third Quarter 2008 Groundwater and Unsaturated Zone Monitoring Report for Class I Waste Management Units. Kettleman Hills Facility, Kettleman City,



- California.” Letter, Bradley A. Loewen, Geomatrix, to Paul Turek, Chemical Waste Management, Inc. December 22, 2008. With enclosure: “Third Quarter 2008 Groundwater and Unsaturated Zone Monitoring Report for Class I Waste Management Units. Kettleman Hills Facility, Kettleman City, California.” Geomatrix. December 22, 2008.
- h. “Fourth Quarter 2008 Groundwater and Unsaturated Zone Monitoring Report for Class I Waste Management Units. Kettleman Hills Facility, Kettleman City, California.” Letter, Bradley A. Loewen, Geomatrix, to Paul Turek, Chemical Waste Management, Inc. March 17, 2009. With enclosure: “Fourth Quarter 2008 Groundwater and Unsaturated Zone Monitoring Report for Class I Waste Management Units. Kettleman Hills Facility, Kettleman City, California.” Geomatrix. March 17, 2009.
 - i. “First Quarter 2009 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” Letter, Bradley A. Loewen, Amec, to Paul Turek, Chemical Waste Management, Inc. June 18, 2009. With enclosure: “First Quarter 2009 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” AMEC Geomatrix. June 18, 2009.
 - j. “Second Quarter 2009 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” Letter, Alex O. Olsen, Amec, to Paul Turek, Chemical Waste Management, Inc. September 17, 2009. With enclosure: “Second Quarter 2009 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” AMEC Geomatrix. September 17, 2009.
 - k. “Third Quarter 2009 Groundwater and Unsaturated Zone Monitoring Report for Class I Waste Management Units. Kettleman Hills Facility, Kettleman City, California.” Letter, Alex O. Olsen, Geomatrix, to Paul Turek, Chemical Waste Management, Inc. December 22, 2008. With enclosure: “Third Quarter 2009 Groundwater and Unsaturated Zone Monitoring Report for Class I Waste Management Units. Kettleman Hills Facility, Kettleman City, California.” Geomatrix. December 22, 2009.
 - l. “Fourth Quarter 2007 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” Letter, Alex Olsen, AMEC, to Paul Turek, Chemical Waste Management, Inc. March 16, 2010. With enclosure: “Fourth Quarter 2007 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” AMEC. March 16, 2010.
 - m. “First Quarter 2010 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County,



- California.” Letter, Alex O. Olsen, AMEC, to Paul Turek, Chemical Waste Management, Inc. June 18, 2010. With enclosure: “First Quarter 2010 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” AMEC Geomatrix. June 18, 2010.
- n. “Second Quarter 2010 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” Letter, Alex O. Olsen, AMEC, to Paul Turek, Chemical Waste Management, Inc. September 20, 2010. With enclosure: “Second Quarter 2010 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” AMEC Geomatrix. September 20, 2010.
- o. “Third Quarter 2010 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” Letter, Alex O. Olsen, AMEC, to Paul Turek, Chemical Waste Management, Inc. December 21, 2010. With enclosure: “Third Quarter 2010 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” AMEC Geomatrix. December 21, 2010.
- p. “Chemical Waste Management, Inc. – Kettleman Hills Facility, Forth Quarter 2010 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” Letter, Paul Turek, Chemical Waste Management, Inc to Executive Officer, Regional Water Quality Control Board. March 1, 2011. With enclosure: “Fourth Quarter 2010 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” AMEC Geomatrix. March 1, 2011.
- q. “First Quarter 2011 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” Letter, Bradley A. Loewen, AMEC, to Paul Turek, Chemical Waste Management, Inc. June 13, 2011. With enclosure: “First Quarter 2011 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” AMEC Geomatrix. June 13, 2011.
- r. “Chemical Waste Management, Inc. – Kettleman Hills Facility, Second Quarter 2011 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste Management Units.” Letter, Paul Turek, Chemical Waste Management, Inc to Executive Officer, Regional Water Quality Control Board. September 20, 2011. With enclosure: “Second Quarter 2011 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” AMEC Geomatrix. September 19, 2011.



- s. “Third Quarter 2011 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” Letter, Bradley A. Loewen, AMEC, to Paul Turek, Chemical Waste Management, Inc. December 20, 2011. With enclosure: “Third Quarter 2011 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” AMEC Geomatrix. December 20, 2011.
- t. “Fourth Quarter 2011 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” Letter, Bradley A. Loewen, AMEC, to Paul Turek, Chemical Waste Management, Inc. February 21, 2012. With enclosure: “Fourth Quarter 2011 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” AMEC Geomatrix. February 21, 2012.
- u. “First Quarter 2012 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” Letter, Bradley A. Loewen, AMEC, to Paul Turek, Chemical Waste Management, Inc. June 20, 2012. With enclosure: “First Quarter 2012 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” AMEC Geomatrix. June 20, 2012.
- v. “Second Quarter 2012 Groundwater and Unsaturated Zone Monitoring Constituents of Concern Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” Letter, Bradley A. Loewen, AMEC, to Paul Turek, Chemical Waste Management, Inc. September 25, 2012. With enclosure: “Second Quarter 2012 Groundwater and Unsaturated Zone Monitoring and Constituents of Concern Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” AMEC. September 25, 2012.
- w. “Third Quarter 2012 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” Letter, Bradley A. Loewen, AMEC, to Paul Turek, Chemical Waste Management, Inc. December 12, 2012. With enclosure: “Third Quarter 2012 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” AMEC. December 12, 2012.
- x. “Fourth Quarter 2012 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” Letter, Bradley A. Loewen, AMEC, to Paul Turek, Chemical Waste Management, Inc. February 26, 2013. With enclosure: “Fourth Quarter 2012 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste



- Management Units. Kettleman Hills Facility, Kings County, California.” AMEC Geomatrix. February 26, 2013.
- y. “First Quarter 2013 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” Letter, Bradley A. Loewen, AMEC, to Paul Turek, Chemical Waste Management, Inc. June 25, 2013. With enclosure: “First Quarter 2013 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” AMEC Geomatrix. June 25, 2013.
 - z. “Second Quarter 2013 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” Letter, Bradley A. Loewen, AMEC, to Paul Turek, Chemical Waste Management, Inc. September 17, 2013. With enclosure: “Second Quarter 2013 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” AMEC. September 17, 2013.
 - aa. “Third Quarter 2013 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” Letter, Bradley A. Loewen, AMEC, to Paul Turek, Chemical Waste Management, Inc. December 19, 2013. With enclosure: “Third Quarter 2012 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” AMEC. December 13, 2013.
 - bb. “Fourth Quarter 2013 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” Letter, Bradley A. Loewen, AMEC, to Paul Turek, Chemical Waste Management, Inc. February 25, 2014. With enclosure: “Fourth Quarter 2012 Groundwater and Unsaturated Zone Monitoring Report for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” AMEC Geomatrix. February 25, 2014.
 - cc. “First Quarter 2014 Groundwater and Unsaturated Zone Monitoring Data Report,. Kettleman Hills Facility, Kings County, California.” Letter, Bradley A. Loewen, AMEC, to Paul Turek, Chemical Waste Management, Inc. June 27, 2014. With enclosures.
 - dd. “First Semiannual 2014 Groundwater and Unsaturated Zone Monitoring for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” Letter, Bradley A. Loewen, AMEC, to Paul Turek, Chemical Waste Management, Inc. September 26, 2014. With enclosure: “First Semiannual 2014 Groundwater and Unsaturated Zone Monitoring for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” AMEC. September 26, 2014.



- ee. “Third Quarter 2014 Groundwater and Unsaturated Zone Monitoring Data Report,. Kettleman Hills Facility, Kings County, California.” Letter, Bradley A. Loewen, AMEC, to Paul Turek, Chemical Waste Management, Inc. December 8, 2014. With enclosures.
- ff. “Second Semiannual 2014 Groundwater and Unsaturated Zone Monitoring for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” Letter, Bradley A. Loewen, AMEC, to Paul Turek, Chemical Waste Management, Inc. February 25, 2015. With enclosure: “Second Semiannual 2014 Groundwater and Unsaturated Zone Monitoring for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” AMEC. February 23, 2015.
- gg. “First Quarter 2015 Groundwater and Unsaturated Zone Monitoring Data Report,. Kettleman Hills Facility, Kings County, California.” Letter, Bradley A. Loewen, AMEC, to Paul Turek, Chemical Waste Management, Inc. June 16, 2015. With enclosures.
- hh. “First Semiannual 2015 Groundwater and Unsaturated Zone Monitoring for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” Letter, Bradley A. Loewen, AMEC, to Paul Turek, Chemical Waste Management, Inc. September 21, 2015. With enclosure: “First Semiannual 2015 Groundwater and Unsaturated Zone Monitoring for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” AMEC. September 21, 2015.
- ii. “Second Semiannual 2015 Groundwater and Unsaturated Zone Monitoring for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” Letter, Bradley A. Loewen, AMEC, to Paul Turek, Chemical Waste Management, Inc. March 18, 2016. With enclosure: “Second Semiannual 2015 Groundwater and Unsaturated Zone Monitoring for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” AMEC. March 18, 2016.
- jj. “First Semiannual 2016 Groundwater and Unsaturated Zone Monitoring for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” Letter, Bradley A. Loewen, AMEC, to Reyna Verdin, Chemical Waste Management, Inc. September 22, 2016. With enclosure: “First Semiannual 2016 Groundwater and Unsaturated Zone Monitoring for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” AMEC. September 22, 2016.
- kk. “Chemical Waste Management, Inc. Kettleman Hills Facility, Third Quarter 2016 Monitoring Report for Class I Waste Management Units as Required by DTSC on March 6, 2015.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Permitting Division, Department of Toxic Substances Control. December 2, 2016. With enclosure: “Third Quarter 2016 Monitoring Report for Class I Waste



- Management Units as Required by DTSC on March 6, 2015.” AMEC. November 30, 2016.
- ll. “Chemical Waste Management, Inc. Kettleman Hills Facility, Fourth Quarter 2016 Monitoring and Constituents of Concern Report for Class I Waste Management Units as Required by DTSC on March 6, 2015.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Permitting Division, Department of Toxic Substances Control. February 28, 2017. With enclosure: “Fourth Quarter 2016 Monitoring and Constituents of Concern Report for Class I Waste Management Units as Required by DTSC on March 6, 2015.” AMEC. February 24, 2017.
- mm. “Chemical Waste Management, Inc. Kettleman Hills Facility, First Quarter 2017 Monitoring Report for Class I Waste Management Units as Required by DTSC on March 6, 2015.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Permitting Division, Department of Toxic Substances Control. June 26, 2017. With enclosure: “First Quarter 2017 Monitoring Report for Class I Waste Management Units as Required by DTSC on March 6, 2015.” AMEC. June 15, 2017.
- nn. “Chemical Waste Management, Inc. Kettleman Hills Facility, Second Quarter 2017 Monitoring Report for Class I Waste Management Units as Required by DTSC on March 6, 2015.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Ryan Batty, Department of Toxic Substances Control. September 15, 2017. With enclosure: “Second Quarter 2017 Monitoring Report for Class I Waste Management Units as Required by DTSC on March 6, 2015.” AMEC. September 13, 2017.
- oo. “Chemical Waste Management, Inc. Kettleman Hills Facility, First Semiannual 2017 Groundwater and UZ Monitoring – Class 1 Waste Management Units.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Permitting Division, Department of Toxic Substances Control. September 28, 2017. With enclosure: “First Semiannual 2017 Groundwater and Unsaturated Zone Monitoring for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” AMEC. September 27, 2017.
- pp. “Chemical Waste Management, Inc. Kettleman Hills Facility, Third Quarter 2017 Monitoring Report for Class I Waste Management Units as Required by Department of Toxic Substances Control on March 6, 2015.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Ryan Batty, Department of Toxic Substances Control. December 22, 2017. With enclosure: “Third Quarter 2017 Monitoring Report for Class I Waste Management Units as Required by DTSC on March 6, 2015.” AMEC. December 20, 2017.
- qq. “Chemical Waste Management, Inc. Kettleman Hills Facility, Fourth Quarter 2017 Monitoring Report for Class I Waste Management Units as Required by DTSC on March 6, 2015.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Ryan Batty, Department of Toxic Substances Control. February 28, 2018.



- With enclosure: “Fourth Quarter 2017 Monitoring Report for Class I Waste Management Units as Required by DTSC on March 6, 2015.” AMEC. February 23, 2018.
- rr. “Chemical Waste Management, Inc. Kettleman Hills Facility, Second Semiannual 2017 Groundwater and UZ Monitoring – Class 1 Waste Management Units.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Permitting Division, Department of Toxic Substances Control. March 29, 2018. With enclosure: “Second Semiannual 2017 Groundwater and Unsaturated Zone Monitoring for Class 1 Waste Management Units. Kettleman Hills Facility, Kings County, California.” AMEC. March 26, 2018.
- ss. “Chemical Waste Management, Inc. Kettleman Hills Facility, First Quarter 2018 Monitoring Report for Class I Waste Management Units as Required by DTSC on March 6, 2015.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Ryan Batty, Department of Toxic Substances Control. June 26, 2018. With enclosure: “First Quarter 2018 Monitoring Report for Class I Waste Management Units as Required by DTSC on March 6, 2015.” Wood. June 21, 2018.
- tt. “Chemical Waste Management, Inc. Kettleman Hills Facility, Second Quarter 2018 Monitoring Report for Class I Waste Management Units as Required by DTSC on March 6, 2015.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Ryan Batty, Department of Toxic Substances Control. September 21, 2018. With enclosure: “Second Quarter 2018 Monitoring Report for Class I Waste Management Units as Required by DTSC on March 6, 2015.” Wood. September 21, 2018.
- uu. “Chemical Waste Management, Inc. Kettleman Hills Facility, Third Quarter 2018 Monitoring Report for Class I Waste Management Units as Required by DTSC on March 6, 2015.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Ryan Batty, Department of Toxic Substances Control. December 19, 2018. With enclosure: “Third Quarter 2018 Monitoring Report for Class I Waste Management Units as Required by DTSC on March 6, 2015.” Wood. December 13, 2018.
- vv. “Chemical Waste Management, Inc. Kettleman Hills Facility, Fourth Quarter 2018 Monitoring Report for Class I Waste Management Units as Required by DTSC on March 6, 2015.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Ryan Batty, Department of Toxic Substances Control. February 21, 2019. With enclosure: “Fourth Quarter 2018 Monitoring Report for Class I Waste Management Units as Required by DTSC on March 6, 2015.” Wood. February 18, 2019.
- ww. “Chemical Waste Management, Inc. Kettleman Hills Facility, First Quarter 2019 Monitoring Report for Class I Waste Management Units as Required by DTSC on March 6, 2015.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Camille Rogado, Department of Toxic Substances Control. June 27, 2019. With



enclosure: “First Quater 2019 Monitoring Report for Class I Waste Management Units as Required by DTSC on March 6, 2015.” Wood. June 21, 2019.

3. Other Documents Related Groundwater Monitoring Results

- a. “Kettleman City Well Question.” Email, Jim Dowdall, Regional Water Quality Control Board, to Edwin Poalinelli, U.S. EPA Region 9. July 30, 2010.
- b. “Notifications correspondence from KHF to EPA-IX for PCB detections in groundwater monitoring results and leachate analytic results for TSCA-regulated units from 1992 – 2018. Compiled by Chemical Waste Management, Inc. October 2, 2018.

C. LEACHATE MONITORING REPORTS

1. Annual LCRS Fluid Analysis Reports

- a. “Chemical Waste Management, Inc. – Kettleman Hills Facility 2009 Annual LCRS Fluid Analysis Report.” Letter, Paul Turek, Chemical Waste Management, Inc. to Jim Dowdall, Regional Water Quality Control Board. April 9, 2010. With enclosures.
- b. “Chemical Waste Management, Inc. – Kettleman Hills Facility 2010 Annual LCRS Fluid Analysis Report.” Letter, Paul Turek, Chemical Waste Management, Inc. to Jim Dowdall, Regional Water Quality Control Board. April 19, 2011. With enclosures.
- c. “Chemical Waste Management, Inc. – Kettleman Hills Facility Corrections to 2010 Annual LCRS Fluid Analysis Report.” Letter, Paul Turek, Chemical Waste Management, Inc. to Jim Dowdall, Regional Water Quality Control Board. May 5, 2011. With enclosures.
- d. “Chemical Waste Management, Inc. – Kettleman Hills Facility 2012 Annual LCRS Fluid Analysis Report.” Letter, Paul Turek, Chemical Waste Management, Inc. to Dean Hubbard, Regional Water Quality Control Board. April 8, 2013. With enclosures.
- e. “Chemical Waste Management, Inc. – Kettleman Hills Facility 2014 Annual LCRS Fluid Analysis Report.” Letter, Paul Turek, Chemical Waste Management, Inc. to Daniel Carlson, Regional Water Quality Control Board. April 16, 2015. With enclosures.
- f. “Chemical Waste Management, Inc. – Kettleman Hills Facility 2015 Annual LCRS Fluid Analysis Report.” Letter, Paul Turek, Chemical Waste Management, Inc. to Daniel Carlson, Regional Water Quality Control Board. April 28, 2016. With enclosures.
- g. “Chemical Waste Management, Inc. – Kettleman Hills Facility 2016 Annual LCRS Fluid Analysis Report.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Daniel Carlson, Regional Water Quality Control Board. April 27, 2017. With enclosures.



- h. “Chemical Waste Management, Inc. – Kettleman Hills Facility 2017 Annual LCRS Fluid Analysis Report.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Daniel Carlson, Regional Water Quality Control Board. May 1, 2018. With enclosures.
 - i. “Chemical Waste Management, Inc. – Kettleman Hills Facility 2018 Annual LCRS Fluid Analysis Report.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Daniel Carlson, Regional Water Quality Control Board. April 30, 2019. With enclosures.
2. Annual Monitoring Report and LCRS Integrity Report
- a. “Chemical Waste Management, Inc. – Kettleman Hills Facility 2012 Annual Monitoring Summary Report & LCRS Integrity Testing.” Letter, Paul Turek, Chemical Waste Management, Inc. to Regional Water Quality Control Board. February 27, 2012. With enclosure.
 - b. “Chemical Waste Management, Inc. – Kettleman Hills Facility 2014 Annual Monitoring Summary Report & LCRS Integrity Testing.” Letter, Paul Turek, Chemical Waste Management, Inc. to Regional Water Quality Control Board. February 26, 2014. With enclosure.
 - c. “Chemical Waste Management, Inc. – Kettleman Hills Facility 2015 Annual Monitoring Summary Report & LCRS Integrity Testing.” Letter, Paul Turek, Chemical Waste Management, Inc. to Regional Water Quality Control Board. February 27, 2015. With enclosure.
 - d. “Chemical Waste Management, Inc. – Kettleman Hills Facility 2016 Annual Monitoring Summary Report & LCRS Integrity Testing.” Letter, Paul Turek, Chemical Waste Management, Inc. to Regional Water Quality Control Board. February 26, 2016. With enclosure.
 - e. “Chemical Waste Management, Inc. – Kettleman Hills Facility 2017 Annual Monitoring Summary Report & LCRS Integrity Testing.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Regional Water Quality Control Board. February 28, 2017. With enclosure.
 - f. “Chemical Waste Management, Inc. – Kettleman Hills Facility 2018 Annual Monitoring Summary Report & LCRS Integrity Testing.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Regional Water Quality Control Board. February 28, 2018. With enclosure.
 - g. “Chemical Waste Management, Inc. – Kettleman Hills Facility 2019 Annual Monitoring Summary Report & LCRS Integrity Testing.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Regional Water Quality Control Board. February 28, 2019. With enclosure.
3. Monthly Monitoring Reports



- a. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – May 2014.” Letter, John Prill, Chemical Waste Management, Inc. to Dan Carlson, Regional Water Quality Control Board. June 9, 2014. With enclosures.
- b. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – June 2014.” Letter, John Prill, Chemical Waste Management, Inc. to Dan Carlson, Regional Water Quality Control Board. July 11, 2014. With enclosures.
- c. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – July 2014.” Letter, John Prill, Chemical Waste Management, Inc. to Dan Carlson, Regional Water Quality Control Board. August 13, 2014. With enclosures.
- d. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – August 2014.” Letter, John Prill, Chemical Waste Management, Inc. to Dan Carlson, Regional Water Quality Control Board. September 10, 2014. With enclosures.
- e. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – September 2014.” Letter, John Prill, Chemical Waste Management, Inc. to Dan Carlson, Regional Water Quality Control Board. October 24, 2014. With enclosures.
- f. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – October 2014.” Letter, John Prill, Chemical Waste Management, Inc. to Dan Carlson, Regional Water Quality Control Board. November 12, 2014. With enclosures.
- g. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – November 2014.” Letter, John Prill, Chemical Waste Management, Inc. to Dan Carlson, Regional Water Quality Control Board. December 11, 2014. With enclosures.
- h. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – December 2014.” Letter, John Prill, Chemical Waste Management, Inc. to Dan Carlson, Regional Water Quality Control Board. January 14, 2015. With enclosures.
- i. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – January 2015.” Letter, John Prill, Chemical Waste Management, Inc. to Dan Carlson, Regional Water Quality Control Board. February 10, 2015. With enclosures.
- j. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – February 2015.” Letter, John Prill, Chemical Waste Management, Inc. to Dan Carlson, Regional Water Quality Control Board. March 12, 2015. With enclosures.



- k. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – March 2015.” Letter, John Prill, Chemical Waste Management, Inc. to Dan Carlson, Regional Water Quality Control Board. April 14, 2015. With enclosures.
- l. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – April 2015.” Letter, John Prill, Chemical Waste Management, Inc. to Dan Carlson, Regional Water Quality Control Board. May 14, 2015. With enclosures.
- m. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – May 2015.” Letter, John Prill, Chemical Waste Management, Inc. to Dan Carlson, Regional Water Quality Control Board. June 9, 2015. With enclosures.
- n. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – June 2015.” Letter, John Prill, Chemical Waste Management, Inc. to Dan Carlson, Regional Water Quality Control Board. July 14, 2015. With enclosures.
- o. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – July 2015.” Letter, John Prill, Chemical Waste Management, Inc. to Dan Carlson, Regional Water Quality Control Board. August 12, 2015. With enclosures.
- p. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – August 2015.” Letter, John Prill, Chemical Waste Management, Inc. to Dan Carlson, Regional Water Quality Control Board. September 14, 2015. With enclosures.
- q. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – September 2015.” Letter, John Prill, Chemical Waste Management, Inc. to Dan Carlson, Regional Water Quality Control Board. October 14, 2015. With enclosures.
- r. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – October 2015.” Letter, John Prill, Chemical Waste Management, Inc. to Dan Carlson, Regional Water Quality Control Board. November 12, 2015. With enclosures.
- s. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – November 2015.” Letter, John Prill, Chemical Waste Management, Inc. to Dan Carlson, Regional Water Quality Control Board. December 14, 2015. With enclosures.
- t. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – December 2015.” Letter, John Prill, Chemical Waste Management, Inc. to Dan Carlson, Regional Water Quality Control Board. January 11, 2016. With enclosures.



- u. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – January 2016.” Letter, John Prill, Chemical Waste Management, Inc. to Dan Carlson, Regional Water Quality Control Board. February 12, 2016. With enclosures.
- v. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – February 2016.” Letter, John Prill, Chemical Waste Management, Inc. to Dan Carlson, Regional Water Quality Control Board. March 14, 2016. With enclosures.
- w. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – March 2016.” Letter, John Prill, Chemical Waste Management, Inc. to Dan Carlson, Regional Water Quality Control Board. April 14, 2016. With enclosures.
- x. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – April 2016.” Letter, John Prill, Chemical Waste Management, Inc. to Dan Carlson, Regional Water Quality Control Board. May 11, 2016. With enclosures.
- y. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – May 2016.” Letter, John Prill, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. June 10, 2016. With enclosures.
- z. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – June 2016.” Letter, John Prill, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. July 13, 2016. With enclosures.
- aa. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – July 2016.” Letter, John Prill, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. August 11, 2016. With enclosures.
- bb. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – August 2016.” Letter, John Prill, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. September 15, 2016. With enclosures.
- cc. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – September 2016.” Letter, John Prill, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. October 12, 2016. With enclosures.
- dd. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – October 2016.” Letter, John Prill, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. November 11, 2016. With enclosures.



- ee. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – November 2016.” Letter, John Prill, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. December 14, 2016. With enclosures.
- ff. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – December 2016.” Letter, John Prill, Chemical Waste Management, Inc. to Kristen Gomes,, Regional Water Quality Control Board. January 11, 2017. With enclosures.
- gg. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – January 2017.” Letter, John Prill, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. February 14, 2017. With enclosures.
- hh. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – February 2017.” Letter, John Prill, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. March 13, 2017. With enclosures.
- ii. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – March 2016.” Letter, John Prill, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. April 14, 2016. With enclosures.
- jj. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – April 2017.” Letter, John Prill, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. May 15, 2017. With enclosures.
- kk. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – May 2017.” Letter, John Prill, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. June 13, 2017. With enclosures.
- ll. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – June 2017.” Letter, John Prill, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. July 13, 2017. With enclosures.
- mm. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – July 2017.” Letter, John Prill, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. August 14, 2017. With enclosures.
- nn. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – August 2017.” Letter, John Prill, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. September 14, 2017. With enclosures.



- oo. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – September 2017.” Letter, John Prill, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. October 13, 2017. With enclosures.
- pp. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – October 2017.” Letter, John Prill, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. November 14, 2017. With enclosures.
- qq. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – November 2017.” Letter, John Prill, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. December 14, 2017. With enclosures.
- rr. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – December 2017.” Letter, John Prill, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. January 11, 2018. With enclosures.
- ss. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – January 2018.” Letter, John Prill, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. February 13, 2018. With enclosures.
- tt. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – February 2018.” Letter, John Prill, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. March 14, 2018. With enclosures.
- uu. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – March 2018.” Letter, John Prill, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. April 13, 2018. With enclosures.
- vv. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – April 2018.” Letter, John Prill, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. May 14, 2018. With enclosures.
- ww. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – May 2018.” Letter, John Prill, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. June 14, 2018. With enclosures.
- xx. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – June 2018.” Letter, John Prill, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. July 11, 2018. With enclosures.



- yy. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – July 2018.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. August 13, 2018. With enclosures.
- zz. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – Correction to July 2018 Report” Letter, John Prill, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. August 22, 2018. With enclosures.
- aaa. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – August 2018.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. September 13, 2018. With enclosures.
- bbb. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – September 2018.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. October 15, 2018. With enclosures.
- ccc. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – October 2018.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. November 9, 2018. With enclosures.
- ddd. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – November 2018.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. December 11, 2018. With enclosures.
- eee. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – December 2018.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. January 10, 2019. With enclosures.
- fff. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – January 2019.” Letter, John Prill, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. February 14, 2019. With enclosures.
- ggg. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – February 2019.” Letter, John Prill, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. March 14, 2019. With enclosures.
- hhh. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – March 2019.” Letter, John Prill, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. April 15, 2019. With enclosures.



- iii. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – April 2019.” Letter, John Prill, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. May 14, 2019. With enclosures.
- jjj. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – May 2019.” Letter, John Prill, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. June 14, 2019. With enclosures.
- kkk. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – June 2019.” Letter, John Prill, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. July 15, 2019. With enclosures.
- lll. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly Monitoring Report – July 2019.” Letter, John Prill, Chemical Waste Management, Inc. to Kristen Gomes, Regional Water Quality Control Board. August 15, 2019. With enclosures.

D. AIR MONITORING REPORTS

1. “Chemical Waste Management, Inc. – Kettleman Hills Facility Ambient Air Monitoring Program – Fourth Quarter 2010 Report.” Letter, Paul Turek, Chemical Waste Management, Inc. to Wayne Lorentzen, Department of Toxic Substances Control. March 25, 2011. With enclosure: “Quarterly Ambient Air Monitoring Program Data Report January 2011 – March 2011 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. June 2011.
2. “Quarterly Ambient Air Monitoring Program Data Report January 2011 – March 2011 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. June 2011.
3. “Quarterly Ambient Air Monitoring Program Data Report April 2011 – June 2011 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. September 2011.
4. “Chemical Waste Management, Inc. – Kettleman Hills Facility Ambient Air Monitoring Program – Third Quarter 2011 Report.” Letter, Paul Turek, Chemical Waste Management, Inc. to Wayne Lorentzen, Department of Toxic Substances Control. December 23, 2011. With enclosure: “Quarterly Ambient Air Monitoring Program Data Report July 2011 -September 2011 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. December 2011.
5. “Quarterly Ambient Air Monitoring Program Data Report September 2011 – December 2011 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. March 2012.



6. “Quarterly Ambient Air Monitoring Program Data Report January 2012 – March 2012 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. June 2012.
7. “Quarterly Ambient Air Monitoring Program Data Report April 2012 – June 2012 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. August 2012.
8. “Quarterly Ambient Air Monitoring Program Data Report July 2012 -September 2012 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. November 2012.
9. “Chemical Waste Management, Inc. – Kettleman Hills Facility Ambient Air Monitoring Program – Forth Quarter 2012 Report.” Letter, Paul Turek, Chemical Waste Management, Inc. to Wayne Lorentzen, Department of Toxic Substances Control. March 5, 2013. With enclosure: “Quarterly Ambient Air Monitoring Program Data Report October 2012 – December 2012 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. March 2013.
10. “Chemical Waste Management, Inc. – Kettleman Hills Facility Ambient Air Monitoring Program – First Quarter 2013 Report.” Letter, Paul Turek, Chemical Waste Management, Inc. to Wayne Lorentzen, Department of Toxic Substances Control. June 5, 2013. With enclosure: “Quarterly Ambient Air Monitoring Program Data Report January 2013 – March 2013 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. May 2013.
11. “Chemical Waste Management, Inc. – Kettleman Hills Facility Ambient Air Monitoring Program – Second Quarter 2013 Report.” Letter, Paul Turek, Chemical Waste Management, Inc. to Wayne Lorentzen, Department of Toxic Substances Control. August 30, 2013. With enclosure: “Quarterly Ambient Air Monitoring Program Data Report April 2013 -June 2013 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. August 2013.
12. “Chemical Waste Management, Inc. – Kettleman Hills Facility Ambient Air Monitoring Program – Third Quarter 2013 Report.” Letter, Paul Turek, Chemical Waste Management, Inc. to Wayne Lorentzen, Department of Toxic Substances Control. December 4, 2013. With enclosure: “Quarterly Ambient Air Monitoring Program Data Report July 2013 -September 2013 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. December 2013.
13. “Chemical Waste Management, Inc. – Kettleman Hills Facility Ambient Air Monitoring Program – Fourth Quarter 2013 Report.” Letter, Paul Turek, Chemical Waste Management, Inc. to Wayne Lorentzen, Department of Toxic Substances Control. March 4, 2014. With enclosure: “Quarterly Ambient Air Monitoring Program Data Report October 2013 – December 2013 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. February 2014.
14. “Chemical Waste Management, Inc. – Kettleman Hills Facility Ambient Air Monitoring Program – First Quarter 2014 Report.” Letter, Paul Turek, Chemical Waste Management, Inc. to Wayne Lorentzen, Department of Toxic Substances Control. June



- 9, 2014. With enclosure: “Quarterly Ambient Air Monitoring Program Data Report January 2014 -March 2014 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. May 2014.
15. “Chemical Waste Management, Inc. – Kettleman Hills Facility Ambient Air Monitoring Program – Second Quarter 2014 Report.” Letter, Paul Turek, Chemical Waste Management, Inc. to Muzhda Ferouz, Department of Toxic Substances Control. September 4, 2014. With enclosure: “Quarterly Ambient Air Monitoring Program Data Report April 2014 – June 2014 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. August 2014.
16. “Chemical Waste Management, Inc. – Kettleman Hills Facility Ambient Air Monitoring Program – Third Quarter 2014 Report.” Letter, Paul Turek, Chemical Waste Management, Inc. to Muzhda Ferouz, Department of Toxic Substances Control. December 5, 2014. With enclosure: “Quarterly Ambient Air Monitoring Program Data Report July 2014 – September 2014 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. December 2014.
17. “Chemical Waste Management, Inc. – Kettleman Hills Facility Ambient Air Monitoring Program – Fourth Quarter 2014 Report.” Letter, Paul Turek, Chemical Waste Management, Inc. to Muzhda Ferouz, Department of Toxic Substances Control. March 4, 2014. With enclosure: “Ambient Air Monitoring Program Quarterly Report October 2014 – December 2015 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. February 2015.
18. “Ambient Air Monitoring Program Quarterly Report January 2015 – March 2015 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. June 2015.
19. “Ambient Air Monitoring Program Quarterly Report April 2015 -June 2015 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. September 2015.
20. “Ambient Air Monitoring Program Quarterly Report July 2015 – September 2015 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. December 2015.
21. “Ambient Air Monitoring Program Quarterly Report October 2015 – December 2015 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. March 2016.
22. “Chemical Waste Management, Inc. – Kettleman Hills Facility Ambient Air Monitoring Program – First Quarter 2016 Report.” Letter, Paul Turek, Chemical Waste Management, Inc. to Muzhda Ferouz, Department of Toxic Substances Control. June 23, 2016. With enclosure: “Ambient Air Monitoring Program Quarterly Report January 2016 – March 2016 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. June 2016.
23. “Chemical Waste Management, Inc. – Kettleman Hills Facility Ambient Air Monitoring Program – Second Quarter 2016 Report.” Letter, Paul Turek, Chemical Waste



- Management, Inc. to Muzhda Ferouz, Department of Toxic Substances Control. September 22, 2016. With enclosure: “Ambient Air Monitoring Program Quarterly Report April 2016 – June 2016 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. September 2016.
24. “Ambient Air Monitoring Program Quarterly Report July 2016 – September 2016 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. December 2016.
25. “Ambient Air Monitoring Program Quarterly Report October 2016 – December 2016 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. March 2017.
26. “Ambient Air Monitoring Program Quarterly Report January 2017 – March 2017 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. June 2017.
27. “Ambient Air Monitoring Program Quarterly Report April 2017 – June 2017 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. September 2017.
28. “Ambient Air Monitoring Program Quarterly Report July 2017 – September 2017 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. December 2017.
29. “Ambient Air Monitoring Program Quarterly Report October 2017 – December 2017 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. March 2018.
30. “Chemical Waste Management, Inc. – Kettleman Hills Facility Ambient Air Monitoring Program – First Quarter 2018 Report.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Ryan Batty, Department of Toxic Substances Control. June 27, 2018. With enclosure: “Ambient Air Monitoring Program Quarterly Report January 2018 – March 2018 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. June 2018.
31. “Chemical Waste Management, Inc. – Kettleman Hills Facility Ambient Air Monitoring Program – Second Quarter 2018 Report.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Ryan Batty, Department of Toxic Substances Control. September 24, 2018. With enclosure: “Ambient Air Monitoring Program Quarterly Report April 2018 – June 2018 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. September 2018.
32. “Chemical Waste Management, Inc. – Kettleman Hills Facility Re: Response to DTSC Review of Ambient Air Monitoring Program Quarterly Report, January 2018-March 2018.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Ryan Batty, Department of Toxic Substances Control. November 2, 2018.
33. “Chemical Waste Management, Inc. – Kettleman Hills Facility Ambient Air Monitoring Program – Third Quarter 2018 Report.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Ryan Batty, Department of Toxic Substances Control. December



- 21, 2018. With enclosure: “Ambient Air Monitoring Program Quarterly Report July 2018 – September 2018 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. December 2018.
34. “Chemical Waste Management, Inc. – Kettleman Hills Facility Ambient Air Monitoring Program – Fourth Quarter 2018 Report.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Camille Rogado, Department of Toxic Substances Control. March 27, 2019. With enclosure: “Ambient Air Monitoring Program Quarterly Report October 2018 – December 2018 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. March 2019.
35. “Chemical Waste Management, Inc. – Kettleman Hills Facility Ambient Air Monitoring Program – First Quarter 2019 Report.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Camille Rogado, Department of Toxic Substances Control. June 27, 2019. With enclosure: “Ambient Air Monitoring Program Quarterly Report January 2019 – March 2019 Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. June 2019.

E. MONTHLY AND ANNUAL PCB REPORTS

1. Monthly PCB Reports

- a. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – January 2008.” Letter, Paul Turek, Chemical Waste Management, Inc. to Max Weintraub, U.S. EPA Region 9. February 13, 2008.
- b. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – February 2008.” Letter, Paul Turek, Chemical Waste Management, Inc. to Max Weintraub, U.S. EPA Region 9. March 12, 2008.
- c. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – March 2008.” Letter, Paul Turek, Chemical Waste Management, Inc. to Max Weintraub, U.S. EPA Region 9. April 10, 2008.
- d. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – April 2009.” Letter, Paul Turek, Chemical Waste Management, Inc. to Max Weintraub, U.S. EPA Region 9. May 15, 2008.
- e. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – May 2008.” Letter, Paul Turek, Chemical Waste Management, Inc. to Max Weintraub, U.S. EPA Region 9. June 13, 2008.
- f. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – June 2006.” Letter, Paul Turek, Chemical Waste Management, Inc. to Max Weintraub, U.S. EPA Region 9. July 15, 2008.
- g. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – July 2008.” Letter, Paul Turek, Chemical Waste Management, Inc. to Max Weintraub, U.S. EPA Region 9. August 14, 2008.



- h. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – August 2008.” Letter, Paul Turek, Chemical Waste Management, Inc. to Max Weintraub, U.S. EPA Region 9. September 15, 2008.
- i. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – September 2008.” Letter, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. October 14, 2008.
- j. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – October 2008.” Letter, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. November 12, 2008.
- k. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – November 2008.” Letter, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. December 11, 2008.
- l. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – December 2008.” Letter, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. January 12, 2009.
- m. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – January 2009.” Letter, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. February 12, 2009.
- n. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – February 2009.” Letter, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. March 14, 2009.
- o. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – March 2009.” Letter, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. April 14, 2009.
- p. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – April 2009.” Letter, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. May 15, 2009.
- q. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – May 2009.” Letter, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. June 11, 2009.
- r. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – June 2009.” Letter, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. July 14, 2009.
- s. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – July 2009.” Letter, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. August 12, 2009.
- t. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – August 2009.” Letter, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. September 11, 2009.



- u. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – September 2009.” Letter, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. October 13, 2009.
- v. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – October 2009.” Letter, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. November 13, 2009.
- w. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – November 2009.” Letter, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. December 15, 2009.
- x. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – December 2009.” Letter, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. January 11, 2010.
- y. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – January 2010.” Letter, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. February 15, 2010.
- z. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – February 2010.” Letter, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. March 10, 2010.
- aa. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – March 2010.” Letter, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. April 12, 2010.
- bb. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – April 2010.” Letter, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. May 12, 2010.
- cc. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – May 2010.” Letter, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. June 10, 2010.
- dd. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – June 2010.” Letter, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. July 15, 2010.
- ee. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – July 2010.” Letter, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. August 10, 2010.
- ff. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – August 2010.” Letter, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. September 7, 2010.
- gg. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – September 2010.” Letter, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. October 6, 2010.



- hh. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – October 2010.” Letter, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. November 8, 2010.
- ii. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – November 2010.” Letter, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. December 7, 2010.
- jj. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – December 2010.” Letter, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. January 11, 2011.
- kk. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – January 2011.” Letter, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. February 9, 2011.
- ll. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – February 2011.” Letter, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. March 8, 2011.
- mm. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – March 2011.” Letter, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. April 21, 2011.
- nn. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – April 2011.” Letter, Paul Turek, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. May 5, 2011.
- oo. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – May 2011.” Letter, Paul Turek, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. June 8, 2011.
- pp. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – June 2011.” Letter, Paul Turek, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. July 12, 2011.
- qq. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – July 2011.” Letter, Paul Turek, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. August 4, 2011.
- rr. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – August 2011.” Letter, Paul Turek, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. September 12, 2011.
- ss. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – September 2011.” Letter, Paul Turek, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. October 13, 2011.
- tt. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – October 2011.” Letter, Paul Turek, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. November 10, 2011.



- uu. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – November 2011.” Letter, Paul Turek, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. December 20, 2011.
- vv. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – December 2011.” Letter, Paul Turek, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. January 23, 2012.
- ww. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – January 2012.” Letter, Paul Turek, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. February 16, 2012.
- xx. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – February 2012.” Letter, Paul Turek, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. March 15, 2012.
- yy. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – March 2012.” Letter, John Prill, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. April 26, 2012.
- zz. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – April 2012.” Letter, John Prill, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. May 24, 2012.
- aaa. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – May 2012.” Letter, John Prill, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. June 19, 2012.
- bbb. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – June 2012.” Letter, John Prill, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. July 25, 2012.
- ccc. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – July 2012.” Letter, John Prill, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. August 16, 2012.
- ddd. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – August 2012.” Letter, John Prill, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. September 25, 2012.
- eee. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – September 2012.” Letter, John Prill, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. October 24, 2012.
- fff. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – October 2012.” Letter, John Prill, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. November 16, 2012.
- ggg. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – November 2012.” Letter, John Prill, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. December 17, 2012.



- hhh. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – December 2012.” Letter, John Prill, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. January 17, 2013.
- iii. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – January 2013.” Letter, John Prill, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. February 19, 2013.
- jjj. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – February 2013.” Letter, John Prill, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. March 18, 2013.
- kkk. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – March 2013.” Letter, John Prill, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. April 23, 2013.
- lll. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – April 2013.” Letter, John Prill, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. May 23, 2013.
- mmm. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – May 2013.” Letter, John Prill, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. June 25, 2013.
- nnn. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – June 2013.” Letter, John Prill, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. July 26, 2013.
- ooo. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – July 2013.” Letter, John Prill, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. August 23, 2013.
- ppp. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – August 2013.” Letter, John Prill, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. September 23, 2013.
- qqq. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – September 2013.” Letter, John Prill, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. October 29, 2013.
- rrr. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – October 2013.” Letter, John Prill, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. November 25, 2013.
- sss. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – November 2013.” Letter, John Prill, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. December 20, 2013.
- ttt. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – December 2013.” Letter, John Prill, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. January 21, 2014.



- uuu. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – January 2014.” Letter, John Prill, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. February 24, 2014.
- vvv. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – February 2014.” Letter, John Prill, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. March 11, 2014.
- www. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – April 2014.” Letter, John Prill, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. May 23, 2014.
- xxx. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – May 2014.” Letter, John Prill, Chemical Waste Management, Inc. to John R. Moody, U.S. EPA Region 9. June 27, 2014.
- yyy. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – June 2014.” Letter, John Prill, Chemical Waste Management, Inc. to John R. Moody, U.S. EPA Region 9. July 22, 2014.
- zzz. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – July 2014.” Letter, John Prill, Chemical Waste Management, Inc. to John R. Moody, U.S. EPA Region 9. August 28, 2014.
- aaaa. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – August 2014.” Letter, John Prill, Chemical Waste Management, Inc. to John R. Moody, U.S. EPA Region 9. September 19, 2014.
- bbbb. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – September 2014.” Letter, John Prill, Chemical Waste Management, Inc. to John R. Moody, U.S. EPA Region 9. October 22, 2014.
- cccc. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – October 2014.” Letter, John Prill, Chemical Waste Management, Inc. to John R. Moody, U.S. EPA Region 9. November 26, 2014.
- dddd. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – November 2014.” Letter, John Prill, Chemical Waste Management, Inc. to John R. Moody, U.S. EPA Region 9. December 30, 2014.
- eeee. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – December 2014.” Letter, John Prill, Chemical Waste Management, Inc. to John R. Moody, U.S. EPA Region 9. January 27, 2015.
- ffff. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – January 2015.” Letter, John Prill, Chemical Waste Management, Inc. to John R. Moody, U.S. EPA Region 9. February 26, 2015.
- gggg. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – February 2015.” Letter, John Prill, Chemical Waste Management, Inc. to John R. Moody, U.S. EPA Region 9. March 24, 2015.



- hhhh. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – March 2015.” Letter, John Prill, Chemical Waste Management, Inc. to John R. Moody, U.S. EPA Region 9. April 28, 2015.
- iiii. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – April 2015.” Letter, John Prill, Chemical Waste Management, Inc. to John R. Moody, U.S. EPA Region 9. May 26, 2015.
- jjjj. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – May 2015.” Letter, John Prill, Chemical Waste Management, Inc. to John R. Moody, U.S. EPA Region 9. June 29, 2015.
- kkkk. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – June 2015.” Letter, John Prill, Chemical Waste Management, Inc. to John R. Moody, U.S. EPA Region 9. July 28, 2015.
- llll. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – July 2015.” Letter, John Prill, Chemical Waste Management, Inc. to John R. Moody, U.S. EPA Region 9. August 26, 2015.
- mmmm. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – August 2015.” Letter, John Prill, Chemical Waste Management, Inc. to John R. Moody, U.S. EPA Region 9. September 28, 2015.
- nnnn. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – September 2015.” Letter, John Prill, Chemical Waste Management, Inc. to John R. Moody, U.S. EPA Region 9. October 28, 2015.
- oooo. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – October 2015.” Letter, John Prill, Chemical Waste Management, Inc. to John R. Moody, U.S. EPA Region 9. November 25, 2015.
- pppp. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – November 2015.” Letter, John Prill, Chemical Waste Management, Inc. to John R. Moody, U.S. EPA Region 9. December 29, 2015.
- qqqq. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – May 2016.” Letter, John Prill, Chemical Waste Management, Inc. to John R. Moody, U.S. EPA Region 9. June 24, 2016.
- rrrr. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – July 2016.” Letter, John Prill, Chemical Waste Management, Inc. to Frances P. Wicher, U.S. EPA Region 9. August 26, 2016.
- ssss. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – August 2016.” Letter, John Prill, Chemical Waste Management, Inc. to Frances P. Wicher, U.S. EPA Region 9. September 27, 2016.



- tttt. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – September 2016.” Letter, John Prill, Chemical Waste Management, Inc. to Frances P. Wicher, U.S. EPA Region 9. October 26, 2016.
- uuuu. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – October 2016.” Letter, John Prill, Chemical Waste Management, Inc. to Frances P. Wicher, U.S. EPA Region 9. November 28, 2016.
- vvvv. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – November 2016.” Letter, John Prill, Chemical Waste Management, Inc. to Frances P. Wicher, U.S. EPA Region 9. December 28, 2016.
- www. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – December 2016.” Letter, John Prill, Chemical Waste Management, Inc. to Frances P. Wicher, U.S. EPA Region 9. January 30, 2017.
- xxxx. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – January 2017.” Letter, John Prill, Chemical Waste Management, Inc. to Frances P. Wicher, U.S. EPA Region 9. February 27, 2017.
- yyyy. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – February 2017.” Letter, John Prill, Chemical Waste Management, Inc. to Frances P. Wicher, U.S. EPA Region 9. March 28, 2017.
- zzzz. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – March 2017.” Letter, John Prill, Chemical Waste Management, Inc. to Frances P. Wicher, U.S. EPA Region 9. April 24, 2017.
- aaaa. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – April 2017.” Letter, John Prill, Chemical Waste Management, Inc. to Frances P. Wicher, U.S. EPA Region 9. May 25, 2017.
- bbbb. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – May 2017.” Letter, John Prill, Chemical Waste Management, Inc. to Frances P. Wicher, U.S. EPA Region 9. June 21, 2017.
- cccc. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – June 2017.” Letter, John Prill, Chemical Waste Management, Inc. to Frances P. Wicher, U.S. EPA Region 9. July 27, 2017.
- dddd. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – July 2017.” Letter, John Prill, Chemical Waste Management, Inc. to Frances P. Wicher, U.S. EPA Region 9. August 28, 2017.
- eeee. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – August 2017.” Letter, John Prill, Chemical Waste Management, Inc. to Frances P. Wicher, U.S. EPA Region 9. September 28, 2017.



- fffff. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – September 2017.” Letter, John Prill, Chemical Waste Management, Inc. to Frances P. Wicher, U.S. EPA Region 9. October 26, 2017.
- ggggg. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – October 2017.” Letter, John Prill, Chemical Waste Management, Inc. to Frances P. Wicher, U.S. EPA Region 9. November 27, 2017.
- hhhhh. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – November 2017.” Letter, John Prill, Chemical Waste Management, Inc. to Frances P. Wicher, U.S. EPA Region 9. December 27, 2017.
- iiii. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – December 2017.” Letter, John Prill, Chemical Waste Management, Inc. to Frances P. Wicher, U.S. EPA Region 9. January 30, 2018.
- jjjj. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – January 2018.” Letter, John Prill, Chemical Waste Management, Inc. to Frances P. Wicher, U.S. EPA Region 9. February 23, 2018.
- kkkkk. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – February 2018.” Letter, John Prill, Chemical Waste Management, Inc. to Frances P. Wicher, U.S. EPA Region 9. March 26, 2018.
- llll. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – March 2018.” Letter, John Prill, Chemical Waste Management, Inc. to Frances P. Wicher, U.S. EPA Region 9. April 24, 2018.
- mmmm. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – April 2018.” Letter, John Prill, Chemical Waste Management, Inc. to Frances P. Wicher, U.S. EPA Region 9. May 29, 2018.
- nnnn. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – May 2018.” Letter, John Prill, Chemical Waste Management, Inc. to Frances P. Wicher, U.S. EPA Region 9. June 28, 2018.
- oooo. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – June 2018.” Letter, John Prill, Chemical Waste Management, Inc. to Frances P. Wicher, U.S. EPA Region 9. July 31, 2018.
- pppp. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – July 2018.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Frances P. Wicher, U.S. EPA Region 9. August 24, 2018.
- qqqq. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – August 2018.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Frances P. Wicher, U.S. EPA Region 9. September 13, 2018.



- rrrrr. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – September 2018.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Frances P. Wicher, U.S. EPA Region 9. October 1, 2018.
- sssss. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – October 2018.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Frances P. Wicher, U.S. EPA Region 9. November 13, 2018.
- ttttt. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – November 2018.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Frances P. Wicher, U.S. EPA Region 9. December 11, 2018.
- uuuuu. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – December 2018.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Frances P. Wicher, U.S. EPA Region 9. January 17, 2019.
- vvvvv. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – January 2019.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Frances P. Wicher, U.S. EPA Region 9. February 14, 2019.
- wwwww. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – February 2019.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Frances P. Wicher, U.S. EPA Region 9. March 15, 2019.
- xxxxx. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – March 2019.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Frances P. Wicher, U.S. EPA Region 9. April 22, 2019.
- yyyyy. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – April 2019.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Frances P. Wicher, U.S. EPA Region 9. May 15, 2019.
- zzzzz. “Chemical Waste Management, Inc. – Kettleman Hills Facility Monthly TSCA Monitoring Report – May 2019.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Frances P. Wicher, U.S. EPA Region 9. June 27, 2019.

2. Annual PCB Reports

- a. “Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 111 2005 PCB Annual Report.” Letter, Tracy Reddick, Chemical Waste Management, Inc. to Regional Administrator, U.S. EPA Region 9. June 21, 2006. With enclosure: “2005 PCB Annual Report.” Chemical Waste Management, Inc.



- b. “Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 111 2006 PCB Annual Report.” Letter, Tracy Reddick, Chemical Waste Management, Inc. to Regional Administrator, U.S. EPA Region 9. June 26, 2007. With enclosure: “2006 PCB Annual Report.” Chemical Waste Management, Inc.
- c. “Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 111 2007 PCB Annual Report.” Letter, Tracy Reddick, Chemical Waste Management, Inc. to Regional Administrator, U.S. EPA Region 9. August 4, 2008. With enclosure: “2007 PCB Annual Report.” Chemical Waste Management, Inc.
- d. “Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 111 2008 PCB Annual Report.” Letter, Tracy Reddick, Chemical Waste Management, Inc. to Regional Administrator, U.S. EPA Region 9. July 15, 2009. With enclosure: “2008 PCB Annual Report.” Chemical Waste Management, Inc.
- e. “Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 111 2009 PCB Annual Report.” Letter, Tracy Reddick, Chemical Waste Management, Inc. to Regional Administrator, U.S. EPA Region 9. July 8, 2010. With enclosure: “2009 PCB Annual Report.” Chemical Waste Management, Inc.
- f. “Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 111 2010 PCB Annual Report.” Letter, Tracy Reddick, Chemical Waste Management, Inc. to Regional Administrator, U.S. EPA Region 9. July 13, 2011. With enclosure: “2010 PCB Annual Report.” Chemical Waste Management, Inc.
- g. “Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 111 2011 PCB Annual Report.” Letter, Tracy Reddick, Chemical Waste Management, Inc. to Regional Administrator, U.S. EPA Region 9. July 6, 2012. With enclosure: “2011 PCB Annual Report.” Chemical Waste Management, Inc.
- h. “Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 111 2012 PCB Annual Report.” Letter, Tracy Reddick, Chemical Waste Management, Inc. to Regional Administrator, U.S. EPA Region 9. July 8, 2013. With enclosure: “2012 PCB Annual Report.” Chemical Waste Management, Inc.
- i. “Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 111 2013 PCB Annual Report.” Letter, Tracy Reddick, Chemical Waste Management, Inc. to Regional Administrator, U.S. EPA Region 9. July 9, 2014. With enclosure: “2013 PCB Annual Report.” Chemical Waste Management, Inc.



- j. “Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 111 2014 PCB Annual Report.” Letter, Tracy Reddick, Chemical Waste Management, Inc. to Regional Administrator, U.S. EPA Region 9. July 8, 2015. With enclosure: “2014 PCB Annual Report.” Chemical Waste Management, Inc.
- k. “Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 111 2015 PCB Annual Report.” Letter, Tracy Reddick, Chemical Waste Management, Inc. to Regional Administrator, U.S. EPA Region 9. July 20, 2016. With enclosure: “2015 PCB Annual Report.” Chemical Waste Management, Inc.
- l. “Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 111 2016 PCB Annual Report.” Letter, Tracy Reddick, Chemical Waste Management, Inc. to Regional Administrator, U.S. EPA Region 9. July 5, 2017. With enclosure: “2016 PCB Annual Report.” Chemical Waste Management, Inc.
- m. “Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 111 2017 PCB Annual Report.” Letter, Tracy Reddick, Chemical Waste Management, Inc. to Regional Administrator, U.S. EPA Region 9. July 9, 2018. With enclosure: “2017 PCB Annual Report.” Chemical Waste Management, Inc.
- n. “Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 111 2018 PCB Annual Report.” Letter, Tracy Reddick, Chemical Waste Management, Inc. to Regional Administrator, U.S. EPA Region 9. July 11, 2019. With enclosure: “2018 PCB Annual Report.” Chemical Waste Management, Inc.

IX. ENVIRONMENTAL AND PUBLIC HEALTH STUDIES

A. 2010 DIOXIN-LIKE PCB CONGENERS STUDY

- 1. “Risk Analysis.” Letter, Paula Bisson, U.S. EPA Region 9, to Paul Turek, Chemical Waste Management, Inc. September 8, 2006.
- 2. “Pilot Survey of Levels of Polychlorinated Dibenzo-p-dioxins, Polychlorinated Dibenzofurans, Polychlorinated Biphenyls, and Mercury in Rural Soils of the United States.” Report EPA/600/R-05048F. U.S. EPA. April 2007.
- 3. “Update on Chemical Waste Management, – Kettleman Hills Facility PCB Permit Project.” Email, Kevin Wong, U.S. EPA Region 9, to Maricela Mares-Alatorre, et al. November 2, 2008. [REDACTED for posting on regulations.gov]
- 4. “Request for Additional Sampling of Air, Soil, and Biota/Vegetation and Analysis for PCB Congeners.” Letter, Cheryl Nelson, U.S. EPA Region 9, to Paul Turek, Chemical Waste Management, Inc. December 2, 2008.



5. “Draft Dioxin-Like Polychlorinated Biphenyl (PCB) Congeners Study Workplan.” Wenck Associates, Inc. January 2009.
6. “EPA Region IX Comments on CWM’s Draft Dioxin-like Polychlorinated Biphenyl (PCB) Congener Study Workplan.” Email, Kevin Wong, U.S. EPA Region 9, to Paul Turek Chemical Waste Management, Inc. February 12, 2009. With attachment: “Draft Dioxin-Like Polychlorinated Biphenyl (PCB) Congeners Study Workplan Technical Review.” Memorandum, Kevin Wong, U.S. EPA Region 9, to Chemical Waste Management – Kettleman Hills Hazardous Waste Landfill Facility Technical Support Team, U.S. EPA Region 9. February 2009.
7. “Chemical Waste Management, Inc. Kettleman Hills Facility, Draft Dioxin-Like PCB Congeners Study Workplan, Revision 1.” Letter, Paul Turek, Chemical Waste Management, Inc., to Cheryl Nelson, U.S. EPA Region 9. March 3, 2009. With Enclosure: “Draft Dioxin-Like Polychlorinated Biphenyl (PCB) Congeners Study Workplan Technical Review.” Memorandum, Kevin Wong, U.S. EPA Region 9, to Chemical Waste Management – Kettleman Hills Hazardous Waste Landfill Facility Technical Support Team, U.S. EPA Region 9. No date. With Chemical Waste Management, Inc.’s incorporated responses to U.S. EPA’s comments. And:
 - a. “Draft Dioxin-Like Polychlorinated Biphenyl (PCB) Congeners Study Workplan (Revision 1).” Wenck Associates, Inc. January 2009 (Rev. March 2009).
8. “EPA Review Comments – CWM-KHF Revised PCB Congener Workplan.” Email, Kevin Wong, U.S. EPA Region 9, to Paul Turek Chemical Waste Management, Inc. March 12, 2009. With attachment: “Technical Review: “Draft Dioxin-Like Polychlorinated Biphenyl (PCB) Congeners Study Work Plan, Revision 1, Revised March 2009 – Chemical Waste Management.” Memorandum, Kevin Wong, U.S. EPA Region 9, to Chemical Waste Management – Kettleman Hills Hazardous Waste Landfill Facility Technical Support Team, U.S. EPA Region 9. March 2009.
9. “Chemical Waste Management, Inc. Kettleman Hills Facility, Draft Dioxin-Like PCB Congeners Study Workplan, Revision 2.” Letter, Paul Turek, Chemical Waste Management, Inc., to Cheryl Nelson, U.S. EPA Region 9. March 20, 2009. With Enclosure: “Chemical Waste Management’s Responses to EPA’s Memorandum: Technical Review: “Draft Dioxin-Like Polychlorinated Biphenyl (PCB) Congeners Study Work Plan, Revision 1, Revised March 2009 – Chemical Waste Management.” Chemical Waste Management, Inc. March 2009. (Responses incorporated into U.S. EPA’s memorandum).
10. “Analytical Results – Soil Samples March-April 2009.” TestAmerica. May 19, 2009.
11. “Analytical Results – Air Samples March 2009.” TestAmerica. May 19, 2009.
12. “Analytical Results – Vegetation Samples March-April 2009 (Set 1).” TestAmerica. May 19, 2009.
13. “Analytical Results – Vegetation Samples March-April 2009 (Set 2).” TestAmerica. May 19, 2009.



14. “Final Analytical Report – Kettleman Hills Waste Management Facility.” U.S. EPA Region 3 Environmental Science Center. May 21, 2009.
15. “Analytical Results – Air Samples January 2009.” TestAmerica. May 28, 2009.
16. “Analytical Results – Air Samples February 2009.” TestAmerica. May 28, 2009.
17. “Analytical Results – Air Samples April 2009.” TestAmerica. June 8, 2009.
18. “Analytical Results – Air Samples May 2009.” TestAmerica. June 23, 2009.
19. “Analytical Results – Air Samples June 2009.” TestAmerica. July 31, 2009.
20. “Analytical Results – Air Samples July 2009.” TestAmerica. August 24, 2009.
21. “Analytical Results – Air Samples August 2009 and Fresno.” TestAmerica. September 30, 2009.
22. “Analytical Results – Vegetation Samples August 2009.” TestAmerica. September 30, 2009.
23. “Analytical Results – Air Samples September 2009.” TestAmerica. November 11, 2009.
24. “Review of Ecological Components of Section 5.0 Risk Assessment submitted by Chemical Waste Management on October 27, 2009 – Toxic Substances Control Act (“TSCA”) B-18 Application Kettleman Hills Facility.” Letter, Cheryl Nelson, U.S. EPA Region 9, to Paul Turek, Chemical Waste Management, Inc. November 25, 2009. With enclosure: “U.S. EPA Review of Ecological Components of Section 5.0, Risk Assessment Submitted by Chemical Waste Management on October 27, 2009 – Toxic Substances Control Act (“TSCA”) B-18 Application Kettleman Hills Facility (“KHF”).” November 23, 2009.
25. “Analytical Results – Air Samples October 2009.” TestAmerica. November 27, 2009.
26. “Split Sampling Field Report – Chemical Waste Management, Inc. Kettleman Hills, California.” U.S. EPA Region 9. November 30, 2009.
27. “Informe de Campo Sobre Muestras Separadas, – Chemical Waste Management, Inc. Kettleman Hills, California.” U.S. EPA Region 9. November 30, 2009.
28. “Kettleman Hills PCB Risk Assessment Comments .” Email, John Beach, U.S. EPA Region 9, to Bill Brown, Wenck Associates, Inc. December 8, 2009.
29. “KHF PCB Risk Assessment Comments .” Emails, John Beach, U.S. EPA Region 9, to/from Steve Dillard, AECOM. December 11-14, 2009.
30. “KHF PCB Risk Assessment Comments – % lipid.” Emails, John Beach, U.S. EPA Region 9, to/from Steve Dillard, AECOM. December 14, 2009.
31. “PCB Congener Study Preliminary Results Discussion, December 16, 2009.” Agenda and attendance sheets. U.S. EPA Region 9. December 16, 2009. [REDACTED for posting on regulations.gov]



32. "PCB Congener Study Preliminary Results Discussion, December 16, 2009." Agenda and handouts. U.S. EPA Region 9. December 16, 2009.
33. "Analytical Results – Air Samples November 2009." TestAmerica. December 30, 2009.
34. "Air Dispersion Model (December 16, 2009 Action Item)." Email, Edwin Poalinelli, U.S. EPA Region 9, to/from Bill Brown, Wenck Associates, Inc. December 18, 2009 – January 6, 2010.
35. "FW: Response to Comments and Updated ERA." Email, Paul Turek, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. January 19, 2010. With attachments: 1) "Response to Comments, USEPA Review of Ecological Components of Section 5.0, Risk Assessment, Comment Letter Dated November 25, 2009." Wenck Associates, Inc. January 18, 2010. 2) "Chapter 5.0 Risk Assessment." Wenck Associates, Inc. January 15, 2010. 3) "Chapter 5.4 ecological Risk Assessment." Wenck Associates, Inc. October 23, 2009. 4) "Table 5-24." Wenck Associates, Inc. January 18, 2010. 5) "Table L-24." Wenck Associates, Inc. January 18, 2010. 6) "Table M-24." Wenck Associates, Inc. January 18, 2010. 7) "Table N-1." Wenck Associates, Inc. January 18, 2010.
36. "Analytical Results – Air Samples December 2009." TestAmerica. January 29, 2009.
37. "Chemical Waste Management – Kettleman Hills Facility draft Polychlorinated Biphenyl Congener Human Health & Ecological Risk Assessment." Memorandum, Edwin Poalinelli, U.S. EPA Region 9, to Paul Turek, Chemical Waste Management, Inc. January 29, 2010.
38. "ERA Comments." Email, Edwin Poalinelli, U.S. EPA Region 9, to Paul Turek, Chemical Waste Management, Inc. February 2, 2010.
39. "Responses to Comments USEPA Review of Ecological Components of Section 5.0 Risk Assessment Comment Letter Dated November 25, 2009." Wenck Associates, Inc. February 2, 2010.
40. "ERA Comment#6." Email, Edwin Poalinelli, U.S. EPA Region 9, to/from Paul Turek, Chemical Waste Management, Inc. February 3, 2010.
41. "Review of Ecological Components of Section 5.0 revised Ecological Risk Assessment Submitted by Chemical Waste Management on January 19, 2010 – Toxic Substances Control Act ("TSCA") B-18 Application Kettleman Hills Facility." Letter, Cheryl Nelson, U.S. EPA Region 9, to Bob Henry, Chemical Waste Management, Inc. February 5, 2010. With enclosure: "Review of ecological components (Section 5.1, 5.2, and 5.4) of the revised risk assessment submitted by Chemical Waste Management on January 19, 2010 – Toxic Substances Control Act (TSCA) permit application for Cell B-18 at the Kettleman Hills Facility." Memorandum, John Beach, U.S. EPA Region 9, to Edwin Poalinelli, U.S. EPA Region 9. February 5, 2010.
42. "Review of Human Health Components of Section 5.0 Risk Assessment Submitted by Chemical Waste Management on October 27, 2009 – Toxic Substances Control Act ("TSCA") B-18 Application Kettleman Hills Facility." Letter, Cheryl Nelson, U.S. EPA Region 9, to Bob Henry, Chemical Waste Management, Inc. February 5, 2010. With



- enclosure: “Chemical Waste Management – Kettleman Hills Facility draft Polychlorinated Biphenyls Congener Human Health & Ecological Risk Assessment.” Memorandum, Patrick Wilson, U.S. EPA Region 9, to Edwin Poalinelli, U.S. EPA Region 9. January 29, 2010.
43. “Review of the Human Health Components of Section 5.0, Risk Assessment Submitted by Chemical Waste Management on January 19, 2010 – Toxic Substance Control Act (“TSCA”) B-18 Application Kettleman Hills Facility.” Letter, Cheryl Nelson, U.S. EPA Region 9, to Bob Henry, Chemical Waste Management, Inc. February 5, 2010. With Enclosure: “Chemical Waste Management – Kettleman Hills Facility draft Polychlorinated Biphenyl Congener Human Health & Ecological Risk Assessment.” Memorandum, Patrick Wilson, U.S. EPA to Edwin Poalinelli, U.S. EPA Region 9. January 29, 2010.
44. “WM Kettleman Hills Congener Study.” Emails, Edwin Poalinelli, U.S. EPA Region 9, to/from Bill Brown, Wenck Associates, Inc. February 15-17, 2010.
45. “Two Other EPA-IX Responses Due by 03/10/10.” Emails, Edwin Poalinelli, U.S. EPA Region 9, to/from Katherine Cole, Waste Management, Inc. February 23-24, 2010.
46. “Chemical Waste Management, Inc. – Kettleman Hills Facility Request for Additional 30 Days for Response.” Letter, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. February 25, 2010.
47. “Request for Additional 30 Days for Response – Chemical Waste Management, Inc. – Kettleman Hills Facility, Kettleman City, CA EPA Facility ID – CAT000646117.” Letter, Cheryl Nelson, U.S. EPA Region 9, to Paul Turek, Chemical Waste Management, Inc. March 3, 2010.
48. “Revised ERA and ERA RTC.” Email, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. March 12, 2010. With attachments:
- a. “Chapter 5 – Risk Assessment.” Wenck Associates, Inc. March 12, 2010.
 - b. “Chemical Waste Management, Inc. – Kettleman Hills Facility, Responses to Comments, USEPA Review of ecological components (Section 5.1, 5.2., and 5.4) of the revised risk assessment submitted by Chemical Waste Management on January 19, 2010 – Toxic Substance Control Act (“TSCA”) B-18 Application Kettleman Hills Facility. Comment Memorandum dated February 5, 2010.” Wenck Associates, March 12, 2010.
 - c. “Chemical Waste Management, Inc. – Kettleman Hills Facility Revised Ecological Risk Assessment for the PCB Congener Study, Previously submitted January 19, 2010.” Letter, William Brown, Wenck Associates, Inc. to Edwin Poalinelli, U.S. EPA Region 9. March 12, 2010.
49. “ERA Questions.” Email, Edwin Poalinelli, U.S. EPA Region 9, to Katherine Cole, Waste Management, Inc. March 16, 2010.



50. “ERA Questions.” Emails, Edwin Poalinelli, U.S. EPA Region 9, to/from Bill L. Brown, Wenck Associates and Katherine Cole, Waste Management, Inc. March 16 – 18, 2010.
51. “Organic Data Quality Review Report, PCB Congeners by EA 1668A.” Diane Short & Associates, Inc. March 18, 2010.
52. “Review ecological components (Sections 5.1, 5.2, and 5.4) of the revised of risk assessment.” Chemical Waste Management on March 12, 2010, and supplemental material submitted March 16, 2010 in support of their Toxic Substance Control Act (TSCA) permit application for the landfill Cell B-18 expansion at the Kettleman Hills Facility.” Memorandum, John Beach, U.S. EPA Region 9, to Edwin Poalinelli, U.S. EPA Region 9. March 22, 2010.
53. “ERA- Kettleman Hills Facility Action Items and Final Edits.” Emails, Edwin Poalinelli, U.S. EPA Region 9, to/from Katherine Cole, Waste Management, Inc. March 23-25, 2010.
54. “WM KHF Working Draft of PCB Congener Study Report.” Email, Bill Brown, Wenck Associates, Inc. to Edwin Poalinelli, U.S. EPA Region 9. April 9, 2010. With attachment: “DRAFT Dioxin-Like Polychlorinated Biphenyl (PCB) Congeners Study Report.” Wenck Associates, Inc. April 2010.
55. “Kettleman Hills Facility PCB Congeners Study – Human Health Risk Assessment.” Email, Susan Provenzano, AECOM, to Edwin Poalinelli, U.S. EPA Region 9. April 6, 2010.
56. “AECOM SendFiles Notification: Susan Provenzano has sent you files.” Email, Susan Provenzano, AECOM, to Edwin Poalinelli, U.S. EPA Region 9. April 6, 2010 (4:00 pm)
57. “Draft Human Health Risk Assessment Chapter 5, Tables 5.2.1. – 5.3-32, Figure 6.” Wenck Associates, Inc. April 6, 2010.
58. “AECOM SendFiles Notification: Susan Provenzano has sent you files.” Email, Susan Provenzano, AECOM, to Edwin Poalinelli, U.S. EPA Region 9. April 6, 2010 (4:31 pm).
59. “Draft Human Health Risk Assessment Tables L5.3.1. – 32 and M5.3.1 – 32.” Wenck Associates, Inc. April 6, 2010.
60. “AECOM SendFiles Notification: Susan Provenzano has sent you files.” Email, Susan Provenzano, AECOM, to Edwin Poalinelli, U.S. EPA Region 9. April 6, 2010 (4:42 pm).
61. “Draft Human Health Risk Assessment Tables M5.3.21, N5.3.1-32.” Wenck Associates, Inc. April 6, 2010.
62. “AECOM SendFiles Notification: Susan Provenzano has sent you files.” Email, Susan Provenzano, AECOM, to Edwin Poalinelli, U.S. EPA Region 9. April 6, 2010 (4:51 pm).



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63. “Draft Human Health Risk Assessment Tables O5.3.1 through O5.3.32 and Tables P-1 to P-7.” Wenck Associates, Inc. April 6, 2010.
 64. “WM KHF HHRA Response to Comments.” Emails, Bill L. Brown, Wenck Associates, to/from Edwin Poalinelli, U.S. EPA Region 9. April 7 and 8, 2010. With attachment: “Chemical Waste Management, Inc. – Kettleman Hills Facility, Responses to Comments, USEPA Review of Human Health Components of Section 5.0, Risk Assessment Submitted by Chemical Waste Management on October 27, 2009 – Toxic Substance Control Act (“TSCA”) B-18 Application Kettleman Hills Facility. Comment Memorandum dated February 5, 2010.” Wenck Associates, April 7, 2010.
 65. “WM KHF HHRA Response to Comments.” Emails, Bill Brown, Wenck Associates, Inc. to/from Edwin Poalinelli, U.S. EPA Region 9. April 7-8, 2010.
 66. “WM KHF HHRA Response to Comments.” Emails, Edwin Poalinelli, U.S. EPA Region 9, to/from Bill Brown, Wenck Associates, Inc. April 7-8, 2010.
 67. “WM KHF Working Draft of PCB Congener Study Report” Email, Bill Brown, Wenck Associates, Inc. to Edwin Poalinelli, U.S. EPA Region 9. April 9, 2010. With attachment: “Draft Dioxin-Like Polychlorinated Biphenyl (PCB) Congeners Study Report.” Wenck Associates, Inc. April 2010.
 68. “Congener Study Update?” Emails. Edwin Poalinelli, U.S. EPA Region 9, to/from Paul Turek, Chemical Waste Management, Inc. May 7 and 11, 2010.
 69. “Congener Study Update?” Emails, Paul Turek, Chemical Waste Management, Inc. to/from Cheryl Nelson, U.S. EPA Region 9. May 20 and May 26, 2010.
 70. “Congeners vs non-dioxin-like PCBs in the Kettleman ecological risk assessment.” Email, John Beach, U.S. EPA to Edwin Poalinelli, U.S. EPA Region 9. August 19, 2010.
 71. “EPA Comments on the Draft Congener Study Report.” Email, Edwin Poalinelli, U.S. EPA Region 9, to Bob Henry, Chemical Waste Management, Inc. August 19, 2010. With attachment:
 - a. “U.S. EPA Review of the Draft Congener Study Report Submitted by Chemical Waste Management on April 7, 2010 – Toxic Substances Control Act (“TSCA”) B-18 Application Kettleman Hills Facility (CAT 000646117).” Letter, Cheryl Nelson, U.S. EPA Region 9, to Bob Henry, Chemical Waste Management, Inc. August 19, 2010. With enclosure: “Environmental Protection (“EPA”) Review of the Draft Congener Study Report Submitted by Chemical Waste Management on April 7, 2010 – Toxic Substances Control Act (“TSCA”) B-18 Application Kettleman Hills Facility (“KHF”)” August 19, 2010.
 72. “EPA Comments on Draft Congener Study Report.” Emails, Edwin Poalinelli. U.S. EPA Region 9, to/from Paul Turek, Chemical Waste Management, Inc. August 24, 2010.
 73. “EPA Comments on the Draft Congener Study Report.” Emails, Paul Turek, Chemical Waste Management, Inc. to/from Chip Poalinelli, U.S. EPA Region 9. August 30, 2010.



74. “Proposed Approach for Addressing Comment 17 of EPA Region 9 Comments (19 August 2010) on the Draft PCB Congener Study Report (7 April 2010) for the Kettleman Hills Facility.” Wenck Associates, Inc. September 2010.
75. “Follow-up to the 9-14-10 CWM/EPA Draft Congener Study Conference Call (Discussion on Comment #17[b])” Email, Edwin Poalinelli. U.S. EPA Region 9, to Bob Henry, Chemical Waste Management, Inc. September 16, 2010.
76. “Follow-up to the 9-14-10 CWM/EPA Draft Congener Study Conference Call (Discussion on Comment #17[b])” Email, Paul Turek, Chemical Waste Management, Inc. to Edwin Poalinelli. U.S. EPA Region 9. September 20, 2010.
77. “Draft-Final Dioxin-Like Polychlorinated Biphenyl (PCB) Congeners Study Report.” Wenck Associates, Inc. October 2010.
78. “[DRAFT] Executive Summary -Final Dioxin-Like Polychlorinated Biphenyl (PCB) Congeners Study Report.” Wenck Associates, Inc. October 2010.
79. “Chemical Waste Management, Inc. – Kettleman Hills Facility, Draft Congeners Study Report – Response to Comments.” Letter, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. October 22, 2010. With Enclosure: Chemical Waste Management, Inc. – Kettleman Hills Facility Response to Comments, Environmental Protection Agency (“EPA”) Review of the Draft Congeners Study Report Submitted by Chemical Waste Management on April 7, 2010 – Toxic Substance Control Act (“TSCA”) B-18 Application Kettleman Hills Facility (“KH”) August 19, 2010.” October 22, 2010.
80. “FW: AECOM SendFiles Notification: Tony Collins has sent you files.” Email, Paul Turek, Chemical Waste Management, Inc. to , Edwin Poalinelli, U.S. EPA Region 9. October 28, 2010. With Attached Tables (in folder titled 2010-10-28 Email – tables).
81. “Minor Comments on the Draft Final Congener Report.” Email, Edwin Poalinelli. U.S. EPA Region 9, to Paul Turek, Chemical Waste Management, Inc. November 1, 2010.
82. “Minor Comments on the Draft Final Congener Report.” Emails, Edwin Poalinelli. U.S. EPA Region 9, to/from Paul Turek, Chemical Waste Management, Inc. November 1 -3, 2010 (12:58 pm).
83. “Two Additional Comments Regarding the ERA Sections.” Emails, Edwin Poalinelli. U.S. EPA Region 9, to Paul Turek, Chemical Waste Management, Inc. November 2, 2010.
84. “Minor Comments on the Draft Final Congener Report.” Emails, Paul Turek, Chemical Waste Management, Inc. to/from Edwin Poalinelli. U.S. EPA Region 9. November 3, 2010 (1:38 pm).
85. “Minor Comments on the Draft Final Congener Report.” Emails, Edwin Poalinelli. U.S. EPA Region 9, to/from Paul Turek, Chemical Waste Management, Inc. November 3, 2010 (3:10 pm).



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86. “Minor Comments on the Draft Final Congener Report.” Emails, Edwin Poalinelli. U.S. EPA Region 9, to/from Paul Turek, Chemical Waste Management, Inc. November 3, 2010 (4:13 pm).
 87. “Two Additional Comments Regarding the ERA Sections.” Emails, Edwin Poalinelli. U.S. EPA Region 9, to/from Paul Turek, Chemical Waste Management, Inc. November 3, 2010.
 88. “[DRAFT] Executive Summary -Final Dioxin-Like Polychlorinated Biphenyl (PCB) Congeners Study Report.” Wenck Associates, Inc. November 2010.
 89. “Congener Study Report Executive Summary.” Email, Edwin Poalinelli. U.S. EPA Region 9, to Paul Turek, Chemical Waste Management, Inc. November 4, 2010. (8:17 am)
 90. “Congener Study Report Comments and Proposed Schedule.” Email, Edwin Poalinelli. U.S. EPA Region 9, to Paul Turek, Chemical Waste Management, Inc. November 4, 2010 (8:24 am).
 91. “Congener Study Report Comments and Proposed Schedule.” Email, Edwin Poalinelli. U.S. EPA Region 9, to/from Paul Turek, Chemical Waste Management, Inc. November 4, 2010 (9:05 am).
 92. “Minor Comments on the Draft Final Congener Report.” Emails, Edwin Poalinelli. U.S. EPA Region 9, to/from Paul Turek, Chemical Waste Management, Inc. November 4, 2010 (10:47 am).
 93. “Congener Study Report Comments and Proposed Schedule.” Emails, Edwin Poalinelli. U.S. EPA Region 9, to/from Paul Turek, Chemical Waste Management, Inc. November 4, 2010 (3:00 pm).
 94. “Congener Study Report Comments and Proposed Schedule.” Emails, Edwin Poalinelli. U.S. EPA Region 9, to/from Paul Turek, Chemical Waste Management, Inc. November 8, 2010.
 95. “Final Dioxin-Like Polychlorinated Biphenyl (PCB) Congeners Study Report.” Wenck Associates, Inc. November 2010.
 - a. Appendices A – O (except for Appendices D and G) -- “Dispersion Modeling Report Associated with the PCB Congener Study.” Wenck Associates, Inc. October 2009.
 - b. Appendix D – Field Notes/Data Sheets/Photo Log for Soil and Vegetation Sampling (No date).
 - c. Appendix G – Laboratory Analytical Data.
 96. “Resumen Ejecutivo, Informe Final: Estudio de Congéneres de Bifenilos Policlorados (PCB) de Tipo Dioxina.” Wenck Associations, Inc. November 2010.
 97. “Questions and EPA Responses Received from Greenaction/Center on Race, Poverty, and the Environment Regarding CWM PCB Congener Study Report.” U.S. EPA Region 9. December 2010.
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98. “EPA Information Sheet – Results of the Polychlorinated Biphenyls (PCB) Congener Study Chemical Waste Management Kettleman Hills Facility.” U.S. EPA Region 9. January 2011. (English and Spanish)
99. “CWM Kettleman Hills Polychlorinated Biphenyls (PCB) Congener Study, EPA’s Quality Assurance/Oversight Efforts.” Memorandum, EPA’s Kettleman PCB Congener Study Team to Cheryl Nelson, U.S. EPA Region 9. January 3, 2011.

B. 2010 ENVIRONMENTAL ASSESSMENT

1. “Comments on draft Kettleman Sampling and Analysis Plan.” Email, Katherine Baylor, U.S. EPA Region 9, to Katherine Baylor, U.S. EPA Region 9. March 29, 2010.
2. “Benzene in Water Supply Wells, Kettleman City, Kings County.” Memorandum, Greg Issinghoff, California Regional Water Quality Control Board, Central Valley Region to Russell W. Walls and others, California Regional Water Quality Control Board, Central Valley Region. October 13, 2010.
3. “Appendix DTSC Report – Kettleman City Site Investigation Report Sampling Results Addendum.” ACS Associates. October 25, 2010.
4. “Investigation of Birth Defects and Community Exposures in Kettleman City, CA. Public Review Draft” California Environmental Protection Agency and California Department of Public Health. November 2010.
5. “Investigation of Birth Defects and Community Exposures in Kettleman City, CA.” California Environmental Protection Agency and California Department of Public Health. December 2010 (revised February 24, 2011).
6. “Investigación de defectos de nacimiento y exposiciones ambientales en la comunidad de Kettleman City, CA.” California Environmental Protection Agency and California Department of Public Health. diciembre del 2010 (24 de Febrero de 2011).
7. “Report to the Office of Environmental Health Hazard Assessment, Kettleman City Air Quality Assessment.” California Air Resources Board, December 2010.
8. “Kettleman City Community Exposure Assessment, Evaluation of Pesticides in Air.” Department of Pesticide Regulation. December 2010.
9. “Response to Public Comments on the Investigation of Birth Defects and Community Exposures in Kettleman City, CA.” California Environmental Protection Agency and California Department of Public Health. February 1, 2011.
10. “Respuesta a comentarios publicos sobre la Investigación de defectos de nacimiento y exposiciones ambientales en la comunidad de Kettleman City, CA.” California Environmental Protection Agency and California Department of Public Health. February 2, 2011.
11. “Question about asthma data in Kettleman City Report.” Email, Meredith Milet, California Department of Public Health, to Debbie Lowe, U.S. EPA Region 9. February 17, 2011.



12. “Errata to Investigation of Birth Defects and Community Exposures in Kettleman City, CA.” California Environmental Protection Agency and California Department of Public Health. February 24, 2011.
13. “Erratum to Investigation of Birth Defects and Community Exposures in Kettleman City, CA.” California Environmental Protection Agency and California Department of Public Health. February 24, 2011.
14. “California Department of Public Health and California Environmental Protection Agency Follow-Up to Kettleman City Investigation: An Update.” California Department of Public Health and California Environmental Protection Agency. October 2011.
15. “Departamento de Salud Publica de California Agencia de Proteccion Ambiental de California Seguimiento a la Investigación en Kettleman City: Actualización.” California Department of Public Health and California Environmental Protection Agency. October 2011.
16. “Birth Defects in Kettleman City and Surrounding Areas 2009-2011 Update.” California Department of Public Health, California Birth Defect Monitoring Program. June 2012.

C. HEALTH RISK ASSESSMENTS (Department of Toxic Substances Control Requirement)

1. “Comments on the Draft 2011 Health Risk Assessment, Chemical Waste Management, Inc. Kettleman Hills Facility, 35251 Old Skyline Road, Kettleman City, Kings County, California 93239, Environmental Protection Agency Identification Number CAT 000646117.” Letter, Wayne Lorentzen, Department of Toxic Substances Control to Paul Turek, Chemical Waste Management, Inc. August 4, 2011. With Enclosure: “Chemical Waste Management, Inc. Kettleman Hills Facility, Kings County, California CAT 000646117 Draft 2011 Health Risk Assessment.” Memorandum, Brian Endlich, Department of Toxic Substances Control to Wayne Lorentzen, Department of Toxic Substances Control. July 27, 2011.
2. “Final 2011 Health Risk Assessment.” Wenck Associates, Inc. September 2011.
3. “Final 2011 Health Risk Assessment.” Wenck Associates, Inc. November 2011.
4. “Final Annual Screening Level Health Risk Assessment October 2010 – September 2011, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF)” Wenck Associates, Inc. July 2012.
5. “Annual Screening Level Health Risk Assessment October 2011 – September 2012, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF)” Wenck Associates, Inc. March 2013.
6. “Annual Screening Level Health Risk Assessment October 2012 – September 2014, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF)” Wenck Associates, Inc. March 2014.



7. “Annual Screening Level Health Risk Assessment October 2013 – September 2014, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF)” Wenck Associates, Inc. March 2015.
8. “Annual Screening Level Health Risk Assessment October 2014 – September 2015, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF)” Wenck Associates, Inc. March 2016.
9. “Annual Screening Level Health Risk Assessment October 2015 – September 2016, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF)” Wenck Associates, Inc. March 2017.
10. “Chemical Waste Management, Inc. – Kettleman Hills Facility Ambient Air Monitoring Program – Annual Screening Level, Health Risk Assessment.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Ryan Batty, Department of Toxic Substances Control. March 27, 2018. With enclosure “Annual Screening Level Health Risk Assessment October 2016 – September 2017, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF)” Wenck Associates, Inc. March 2018.
11. “Chemical Waste Management, Inc. – Kettleman Hills Facility Ambient Air Monitoring Program – Annual Screening Level, Health Risk Assessment.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Ryan Batty, Department of Toxic Substances Control. March 27, 2019. With enclosure “Annual Screening Level Health Risk Assessment October 2017 – September 2018, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF)” Wenck Associates, Inc. March 2019.

D. CALIFORNIA ENVIRONMENTAL QUALITY ACT DOCUMENTS

1. “Traffic Impact Study, Chemical Waste Management, Inc. Kettleman Hills Facility.” TPG Consulting. February 2009.
2. “Kettleman Hills Facility B-18/B-20 Landfill (Chemical Waste Management, Inc.); Revised Analysis: Hazardous Waste Truck Trips as Percentage of Total Truck Trips on I-5 at State Route 41 and on State Route 41 from Quail Avenue to I-5.” Revised Memorandum, Robert Mason, Ch2M HILL to Bob Henry, Chemical Waste Management, Inc. March 1, 2012.
3. “Environmental Document Analysis – Hazardous Waste Facility Permit Renewal, Chemical Waste Management, Inc. Kettleman Hills Facility.” Department of Toxic Substances Control. May 2019.

E. BIOLOGICAL ASSESSMENT

1. “Mitigation and Monitoring Plan for the Chemical Waste Management, Inc. Kettleman Hills Facility in King County, California, Revision 6.” Chemical Waste Management, April 1, 2008.
2. “Biological Assessment.” Email, Paul Turek, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. January 19, 2010. With attachment: “Map Perimeter Fence Relocation, Kettleman Hills, California.”



3. “Chemical Waste Management, Inc. – Kettleman Hills Facility Section 7 Biological Assessment – March 2010 Revision.” Email, Paul Turek, Chemical Waste Management, Inc. to Cheryl Nelson, U.S. EPA Region 9. March 12, 2010. With enclosure:
 - a. “Section 7 Draft Biological Assessment B-18/B-20 Hazardous Waste Disposal Project, CWM Kettleman Hills Facility.” Berryman Ecological. March 2010.
4. “Kettleman Hills Facility B-18/B-20 Expansion Project.” Letter, Robert Uram, Sheppard, Mullin, Richter & Hampton, LLP. to Jeff Scott, U.S. EPA Region 9. May 6, 2010.
5. “Chemical Waste Management, Inc. Kettleman Hills Facility B-18 Landfill Expansion Project PCB Permit Application Renewal and Expansion Kettleman City, CA.” Letter, Jeff Scott, U.S. EPA Region 9, to Robert Uram, Sheppard Mullin Richter & Hampton, LLP. June 21, 2010.
6. “Other Species.” Email, Paul Turek, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. November 10, 2010.
7. “Other Species.” Email, Edwin Poalinelli, U.S. EPA Region 9, to Paul Turek and Bob Henry, Chemical Waste Management, Inc. November 19, 2010.
8. “Memo to File – Biological Assessment CWM Briefing.” Email, Edwin Poalinelli, U.S. EPA Region 9, to Edwin Poalinelli, U.S. EPA Region 9. January 26, 2011.
9. “Section 7 Draft Biological Assessment B-18/B-20 Hazardous Waste Disposal Project, CWM Kettleman Hills Facility, Berryman Ecological. April 7, 2011.
10. “Section 7 Draft Biological Assessment B-18/B-20 Hazardous Waste Disposal Project, CWM Kettleman Hills Facility, Berryman Ecological. May 2011.
11. “Chemical Waste Management, Inc. – Kettleman Hills Facility Section 7 Biological Assessment – July 2011 Revision.” Letter, Paul Turek, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. July 12, 2011. With enclosure:
 - a. “Section 7 Draft Biological Assessment B-18/B-20 Hazardous Waste Disposal Project, CWM Kettleman Hills Facility, Berryman Ecological. July 2011.
12. “Chemical Waste Management, Inc. – Kettleman Hills Facility Section 7 Biological Assessment – February 2012 Revision.” Letter, Paul Turek, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. February 21, 2012. With enclosure: “Section 7 Draft Biological Assessment B-18/B-20 Hazardous Waste Disposal Project, CWM Kettleman Hills Facility, Berryman Ecological. February 2012.
13. “Chemical Waste Management, Inc. – Kettleman Hills Facility Section 7 Biological Assessment – March 2012 Revision.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. March 6, 2012. With enclosure: “CWM Kettleman Hills Facility, B-18 Landfill Expansion Project, Section 7 Biological Assessment.” Berryman Ecological. July 2009. Rev: March 2012



14. “Chemical Waste Management, Inc. – Kettleman Hills Facility Section 7 Biological Assessment – March 2012 Revision 2.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. March 13, 2012. With enclosure: “CWM Kettleman Hills Facility, B-18 Landfill Expansion Project, Section 7 Biological Assessment.” Berryman Ecological. July 2011. Rev: March 2012 (Rev 2).

F. PESTICIDE-RELATED STUDIES

1. “Preventing Pesticide Exposure in Kettleman City, California – An EPA Region 9 Pesticide Program Outreach Initiative.” Pam Cooper and Fabiola Estrada, U.S. EPA Region 9. February 1, 2010.
2. “Muestro Residencial en Kettleman City.” Pesticides Factsheet Spanish, Agencia de Proteccion Ambiental de los Estados Unidos. Julio 2011.
3. “Kettleman City Residential Sampling, Kettleman City Indoor Pesticide Sampling.” U.S. EPA Region 9. July 2011.
4. “Kettleman City Residential Sampling, Kettleman City Indoor Pesticide Sampling: Status Update.” Factsheet, U.S. EPA Region 9. November 2011.
5. “Mujer Saludable es Familia Saludable (A Healthy Woman is a Healthy Family) Prevention of Pesticide Exposure Project.” Final Report. Vision y Compromiso. December 8, 2011.

X. OTHER DOCUMENTS

A. PREVIOUS APPROVALS

1. Letter, Sheila M. Prendiville, U.S. EPA Region IX to Don McCombs, Waste Management, Inc. June 29, 1981 with Attachment: “Approval to Operate a Chemical Waste Landfill for PCB Disposal.” U.S. EPA, Region IX. June 29, 1981.
2. Letter, Sonia F. Crow, U.S. EPA Region IX to Craig McKenzie, Chemical Waste Management, Inc. February 16, 1993 with Attachment: “Approval to Operate a Chemical Waste Landfill for PCB Disposal.” U.S. EPA, Region IX. February 16, 1983.
3. “Approval to Operate a Chemical Waste Landfill for PCB Disposal.” U.S. EPA, Region IX. February 22, 1988.
4. “Amendment of Approval to Operate a Chemical Waste Landfill for PCB Disposal.” U.S. EPA, Region IX. November 30, 1990.
5. Letter, John Wise, U.S. EPA Region IX to Mark Langowski, Chemical Waste Management, Inc. December 3, 1990.
6. “Approval of B-18 Phase I As-Built Drawings and Certification Report, and Approval of B-18 Acceptance of Waste, EPA I.D. CAT 000646 117.” Letter, Jeffry Zelikson, U.S. EPA Region 9, to Mark Langowski, Chemical Waste Management, Inc. March 12, 1992.
7. “Chemical Waste Management, Inc., Kettleman Hills Facility TSCA Approval to Operate Landfill Unit B-18.” Letter, David P. Howekamp, U.S. EPA Region IX to Leo



Stahlecker, Chemical Waste Management, Inc. May 19, 1992 with Attachment: “Approval to Operate a Chemical Waste Landfill for PCB Disposal.” U.S. EPA, Region IX. May 19, 1992.

8. “TSCA Approval Request for Landfill B-18 Phase II, Chemical Waste Management, Inc.’ Kettleman Hills Facility.” Letter, Catherine R. Pool, Chemical Waste Management, Inc. to Vince Mancus, U.S. EPA Region 9. December 27, 1993.
9. “Chemical Waste Management, Inc., Kettleman Hills Facility TSCA Approval to Operate Landfill Unit B-18 Phase II.” Letter, David P. Howekamp, U.S. EPA to Leo Stahlecker, Chemical Waste Management, Inc. December 30, 1993.
10. Letter, Edward Csira, Chemical Waste Management, Inc. to David P. Howekamp, U.S. EPA Region 9. November 14, 1995.
11. “Modification of PCB Landfill Operation Plan.” Letter, David P. Howekamp, U.S.EPA Region 9 to Robert Henry, Chemical Waste Management, Inc. February 12, 1996.
12. “Extension of Commercial Storage Approval: EPA ID CAT 000 646 117.” Letter, Paula Bisson, U.S. EPA Region IX to Paul E. Turek, Chemical Waste Management, Inc. May 28, 1997.
13. “Extension of Commercial Storage Approval: EPA ID CAT 000 646 117.” Letter, Paula Bisson, U.S. EPA Region IX to Paul E. Turek, Chemical Waste Management, Inc. July 30, 1997.
14. “TSCA PCB Permits, Chemical Waste Management Kettleman Hills Facility.” Letter, Luke Cole, Center on Race, Poverty & the Environment to Felicia Marcus, U.S. EPA Region 9. January 14, 1998.
15. “Chemical Waste Management PCB Landfills, Kettleman City, California.” Letter, Felicia Marcus, U.S. EPA Region 9, to Luke Cole, Center on Race, Poverty & the Environment. April 8, 1998.

B. FINANCIAL ASSURANCE AND LIABILITY INSURANCE

1. “Chemical Waste Management, Inc. – Kettleman Hills Facility 22 CCR Financial Assurance for Closure and Post-Closure Costs.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Julie Mullins, Department of Toxic Substances Control. December 31, 2018. With enclosures: “Performance Bond SUR0047833” Argonaut Insurance Company. Effective January 1, 2019. And “Closure/Post Closure Trust Agreement D068134NS.” U.S. Bank National Association. January 1, 2019.
2. “Chemical Waste Management, Inc. – Kettleman Hills Facility 22 CCR Financial Assurance for Closure and Post-Closure Costs.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Julie Mullins, Department of Toxic Substances Control. January 17, 2019. With enclosures: “Rider to Performance Bond SUR0047833” Argonaut Insurance Company. Effective January 1, 2019. And “Schedule A to Closure/Post Closure Trust Agreement D068134NS.” U.S. Bank National Association. Revised January 9, 2019.



3. “Chemical Waste Management, Inc. – Kettleman Hills Facility 22 CCR Sudden and Non-sudden Accidental Liability Coverage.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Permitting Branch, Department of Toxic Substances Control. June 27, 2019. With enclosure: “Liability Certificate of Insurance” Great American E&S Insurance Company. Effective July 1, 2019.

C. TECHNOCAL ASSISTANCE SERVICES FOR COMMUNITY REPORTS TO KETTLEMAN CITY RESIDENTS

1. “Memo #1 Some observations and suggestions regarding California Environmental Protection Agency’s Proposed Exposure Assessment for Kettleman City.” Memorandum, Daniel Wartenberg, Technical Assistance Services for Communities Program to Kettleman City Residents. April 6, 2010.
2. “Memo No. 1. Algunas observaciones y sugerencias sobre la propuesta de evaluación de la exposición a sustancias contaminantes en la Ciudad de Kettleman, de la Agencia de Protección Ambiental de California.” Memorandum, Daniel Wartenberg, Programa de Servicios de Asistencia Técnica a Comunidades (TASC) para Residentes de la Ciudad de Kettleman. 6 de abril de 2010.
3. “Memo #2 Some Consideration of the Reported Health Status of Residents of Kettleman City And suggestions for Next Activities.” Memorandum, Daniel Wartenberg, Technical Assistance Services for Communities Program to Kettleman City Residents. April 14, 2010.
4. “Memo #1 Brief.” Memorandum, Daniel Wartenberg, Technical Assistance Services for Communities Program to Kettleman City Residents. June 16, 2010.
5. “Memorandum Breve #1.” Daniel Wartenberg, Programa de Servicios de Asistencia Técnica a Comunidades (TASC) para Residentes de la Ciudad de Kettleman. 16 de junio de 2010.
6. “Memo #2 Brief.” Memorandum, Daniel Wartenberg, Technical Assistance Services for Communities Program to Kettleman City Residents. June 16, 2010.
7. “Memorandum Breve #2.” Daniel Wartenberg, Programa de Servicios de Asistencia Técnica a Comunidades (TASC) para Residentes de la Ciudad de Kettleman. 16 de junio de 2010.
8. “Memo #3 Brief: What can help Kettleman City residents NOW?.” Memorandum, Daniel Wartenberg, Technical Assistance Services for Communities Program to Kettleman City Residents. October 4, 2010.
9. “BREVIARIO del memorándum No. 3 ¿Qué puede ayudar a los residentes de la ciudad de Kettleman AHORA?” Daniel Wartenberg, Programa de Servicios de Asistencia Técnica a Comunidades (TASC) para Residentes de la Ciudad de Kettleman. 4 de octubre de 2010.
10. “Memo #3: What can help Kettleman City residents NOW?.” Memorandum, Daniel Wartenberg, Technical Assistance Services for Communities Program to Kettleman City Residents. October 4, 2010.



11. “Memorandum No. 3 ¿Qué puede ayudar a los residentes de la ciudad de Kettleman AHORA?” Daniel Wartenberg, Programa de Servicios de Asistencia Técnica a Comunidades (TASC) para Residentes de la Ciudad de Kettleman. 4 de octubre de 2010.
12. “Memo #4: Comments and Recommendations in Response to the California Department of Public Health (CalDPH) and California Environmental Protection Agency’s (CalEPA) INVESTIGATION OF BIRTH DEFECTS AND COMMUNITY EXPOSURES IN KETTLEMAN CITY, CA PUBLIC REVIEW DRAFT released November 22, 2010.” Memorandum, Daniel Wartenberg, Technical Assistance Services for Communities Program to Kettleman City Residents. December 1, 2010.
13. “Memorandum #4: Los comentarios y las Recomendaciones en Respuesta al Departamento de California de Sanitaria (CalDPH) y la Organización de Protección del Medio Ambiente de California (CalEPA) INVESTIGACION DE DEFECTOS de NACIMIENTO Y EXPOSICIONES de COMUNIDAD EN la CIUDAD de KETTLEMAN, CA GIRO que PUBLICO de REVISION soltó el 22 de noviembre de, CA PUBLIC REVIEW DRAFT released November 22, 2010.” Daniel Wartenberg, Programa de Servicios de Asistencia Técnica a Comunidades (TASC) para Residentes de la Ciudad de Kettleman. 1 de diciembre de 2010.
14. “Memo #4 Brief: Comments and Recommendations in Response to the California Department of Public Health (CalDPH) and California Environmental Protection Agency’s (CalEPA) INVESTIGATION OF BIRTH DEFECTS AND COMMUNITY EXPOSURES IN KETTLEMAN CITY, CA PUBLIC REVIEW DRAFT released November 22, 2010.” Memorandum, Daniel Wartenberg, Technical Assistance Services for Communities Program to Kettleman City Residents. December 27, 2010.
15. “Memorandum #4 Comentarios y las Recomendaciones BREVIARIO en Respuesta al Departamento Sanitario de California de (CalDPH) y la Agencia de Protección del Medio Ambiente de California (CalEPA) la INVESTIGACION DE DEFECTOS de NACIMIENTO Y EXPOSICIONES de COMUNIDAD EN la CIUDAD de KETTLEMAN, CA de REVISION PUBLICO soltado el 22 de noviembre de 2010.” Daniel Wartenberg, Programa de Servicios de Asistencia Técnica a Comunidades (TASC) para Residentes de la Ciudad de Kettleman. 3 de enero de 2011.
16. “Memo #5: Comments and Recommendations in Response to the California Department of Public Health (CalDPH) and California Environmental Protection Agency’s (CalEPA) INVESTIGATION OF BIRTH DEFECTS AND COMMUNITY EXPOSURES IN KETTLEMAN CITY, CA PUBLIC REVIEW DRAFT released November 22, 2010 (PART 2).” Memorandum, Daniel Wartenberg, Technical Assistance Services for Communities Program to Kettleman City Residents. November 20, 2011.
17. “Memorandum #5: Comentarios y las Recomendaciones en Respuesta al Departamento de Salud Pública del Estado de California (California Department of Public Health o Cal DPH) y de la Agencia de Protección Ambiental del Estado de California (California Environmental Protection Agency o Cal EPA) INVESTIGACION DE DEFECTOS de



NACIMIENTO Y EXPOSICIONES de COMUNIDAD EN la CIUDAD de KETTLEMAN, CA PROYECTO DE REVISIÓN PÚBLICA publicado 22 de noviembre 2010 (Segunda Parte).” Daniel Wartenberg, Programa de Servicios de Asistencia Técnica a Comunidades (TASC) para Residentes de la Ciudad de Kettleman. 20 de noviembre de 2011.

18. “Memo #6: Incidence Patterns of Birth Defects and Cancer in Kettleman City and California’s Central Valley including California Department of Public Health’s (CDPH’s) Response to Community Concerns.” Memorandum, Daniel Wartenberg, Technical Assistance Services for Communities Program to Kettleman City Residents. August 20, 2012.
19. “Memorandum #6: Modelos de incidencia de los defectos congénitos y cáncer en la ciudad de Kettleman y el Valle Central de California, incluyendo la respuesta del Departamento de Salud Pública de California (CalDPH, por sus siglas en inglés) a las preocupaciones de la Comunidad.” Daniel Wartenberg, Programa de Servicios de Asistencia Técnica a Comunidades (TASC) para Residentes de la Ciudad de Kettleman. 20 de Agosto de 2012.

D. MISCELLANEOUS DOCUMENTS

1. 40 Code of Federal Regulations Part 136 – Guidelines Establishing Test Procedures for the Analysis of Pollutants (1982 ed.).
2. “Confirmation to Include Public Notice and Comment Prior to Issuance of PCB Commercial Storage or Fixed-site Disposal Approvals.” Memorandum, Katherine Taylor, U.S. EPA Region 9, to Lynn R. Goldman, MD, Assistant Administrator, U.S. EPA. May 2, 1995. With enclosure “Region IX Public Notice Procedure for PCB Permits.” U.S. EPA Region 9, toxics Section. May 2, 1995.
3. “2002 Modification of PCB Disposal Approval for RMU-1 to add Cell 11/13 CWM Chemical Services, LLC, EPA I.D. No. NYD049836679.” Letter, Jane Kenny, U.S. EPA Region 2 to Dennis Vacco, CWM Chemical Services. December 4, 2002.
4. “Approval for Commercial Storage, Processing, and Landfill Disposal of Polychlorinated Biphenyls (PCBs) and PCB Items.” Letter, Beverly Bannister, U.S. EPA Region 4 to Roger Henson, Chemical Waste Management, Inc. April 16, 2007.
5. “PCB Mega Rule Implementation at KHF.” Email, Bob Henry, Chemical Waste Management, to Muzhda Ferouz, Department of Toxic Substances Control, and John Moody, U.S. EPA Region 9. December 16, 2015.
6. “Responses to Mr Angel Concerning CWM Kettleman Hills, March 14, 2016.” Email, Barbara Gross to Bradley Angel, Greenaction and Maricela Mares-Alatorre, El Pueblo. March 30, 2016.
7. “Agenda.” Email, Bob Henry, Waste Management to Frances Wicher, U.S. EPA Region 9. July 20, 2016.
8. “Region 9 Land Division Trip Report for TSCA approval/RCRA permit Chemical Waste Management Kettleman Hills Facility.” U.S. EPA Region 9. May 18, 2017.





**APPENDIX D –
U.S. EPA TSCA APPLICATION REVIEW CHECKLISTS**

**Appendix D-1 –
Review Checklist for 40 C.F.R. Part 761 Requirements for Chemical Waste Landfills
October 1, 2018 TSCA Renewal Application for
Chemical Waste Management Kettleman Hills Facility (EPA I.D. CAT 000 646 117)
Kettleman City, California
Toxic Substances Control Act Requirements
40 C.F.R. 761**

This Checklist documents how Chemical Waste Management Inc.'s ("CWM") application to renew and modify its Approval to dispose polychlorinated biphenyls ("PCB") waste in the Landfill B-18 at its Kettleman Hills Facility ("KHF" or "Facility") meets the requirements of the Toxic Substances Control Act ("TSCA") regulations at 40 C.F.R. Part 761. It is based on U.S. EPA's review of the renewal application, titled "TSCA Permit Renewal Application, Chemical Waste Management, Inc., Kettleman Hills Facility" Revision 3: October 1, 2018 ("Renewal Application"). This Checklist identifies if the required information is present and complete, whether the information is acceptable under the applicable regulatory requirement, and where the information can be found in the Renewal Application.

Note: This checklist addresses regulatory requirements applicable to Landfill B-18. The applicable regulatory requirements for the closed/inactive Landfills B-14, B-16, and B-19 are addressed in the review of the Facility's closure and post-closure plan.

Documents frequently referenced in the checklist are listed below. A complete list of references is provided at the end of the checklist.

Renewal Application: "TSCA Permit Renewal Application, Revision 3." CWM KHF. October 1, 2018.

TSCA Operation Plan: "TSCA Operation Plan, Landfill B-18 Phases I, II, and III; PCB Building and Outside Containment Area." Chemical Waste Management, Inc. Revision 3: October 1, 2018.

Operation Plan: "Hazardous Waste Facility Permit Renewal Application, Operation Plan." CWM KHF. Revision 3, March 16, 2018.

Phase III E&D Report: "Engineering and Design Report, B-18 Class 1 Landfill, Phase III Expansion and Final Closure, Kettleman Hills Facility, Kettleman City California, Revisions 2." Golder Associates. August 2011.

SSMP: "Revised Site-Specific Groundwater Monitoring Plan Class I Waste Management Units, Kettleman Hills Facility, Kings County California." AMEC Environmental & Infrastructure, Inc.. April 14, 2014.

TSCA Groundwater Addendum: "TSCA Groundwater Monitoring Addendum to Site-Specific Monitoring Plan, Kettleman Hills Facility, Kings County, California." AMEC Foster Wheeler. April 17, 2018. (Attachment 4 to the Renewal Application).



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.75(a) General	A chemical waste landfill used for the disposal of PCBs and PCB Items shall be approved by the Agency Regional Administrator pursuant to § 761.75(c). The landfill shall meet all of the requirements specified in § 761.75(b), unless a waiver from these requirements is obtained pursuant to § 761.75(c)(4). In addition, the landfill shall meet any other requirements that may be prescribed pursuant to § 761.65(c)(3).	N/R	—	See § 761.75(c) requirements. See § 761.75(b) requirements. KHF has requested a number of waivers (Renewal Application, Section 13.2). See below for discussion of individual waiver requests and Statement of basis, section III.C.2. A list of proposed § 761.65(c)(3) requirements (also known as “omnibus requirements”) are included in the Statement of Basis, Appendix E
761.75(b) Technical Requirements	Requirements for chemical waste landfills used for the disposal of PCBs and PCB Items are as follows:		See below	
761.75(b)(1) Soils	The landfill site shall be located in thick, relatively impermeable formations such as large-area clay pans. Where this is not possible, the soil shall have a high clay and silt content with the following parameters: (i) In-place soil thickness, 4 feet or compacted soil liner thickness, 3 feet; (ii) Permeability (cm/sec), equal to or less than 1×10^{-7};	Renewal Application, Section 5.1 Renewal Application, Section 5.1 Renewal Application, Section 5.1	Yes/Yes Yes/Yes Yes/Yes	Landfill B-18 has liner that meets the requirements of § 761.75(b)(2). Phase III E&D Report, Section 4.7.2.1. Operation Plan Table 19-1 and Phase III E&D Report, Section 4.7.2.1.



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
	(iii) Percent soil passing No. 200 Sieve, >30;	Renewal Application, Section 5.1	Yes/Yes	Phase III E&D Report, Section 3.5.2.
	(iv) Liquid Limit, >30; and	Renewal Application, Section 5.1	Yes/Yes	Phase III E&D Report, Section 3.5.2.
	(v) Plasticity Index >15	Renewal Application, Section 5.1	Yes/Yes	Phase III E&D Report, Section 3.5.2.
761.75(b)(2) Synthetic Membrane Liners	Synthetic membrane liners shall be used when, in the judgment of the Regional Administrator, the hydrologic or geologic conditions at the landfill require such a liner in order to provide at least a permeability equivalent to the soils in § 761.75(b)(1). Whenever a synthetic liner is used at a landfill site, special precautions shall be taken to insure that its integrity is maintained Whenever a synthetic liner is used at a landfill site, it is chemically compatible with PCBs. Adequate soil underlining and soil cover shall be provided to prevent excessive stress on the liner and to prevent rupture of the liner.	Renewal Application, Section 5.1 Phase III E&D Report, Section 4.7 Renewal Application, Section 5.1 Renewal Application, Section 5.1	Yes/Yes Yes/Yes Yes/Yes Yes/Yes	Operation Plan Table 19-1, Phase III E&D Report, Section 4.7. Operation Plan Table 19-1, Phase III E&D Report, Section 3.6. Phase III E&D Report, Section 4.7



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
	The liner must have a minimum thickness of 30 mils.	Renewal Application, Section 5.1	Yes/Yes	Operation Plan Table 19-1, Phase III E&D Report, Section 4.7.2.
761.75(b)(3) Hydrologic conditions	- The bottom of the landfill shall be above the historical high groundwater table as provided below. - Floodplains, shorelands, and groundwater recharge areas shall be avoided. - There shall be no hydraulic connection between the site and standing or flowing surface water. - The site shall have monitoring wells and leachate collection. - The bottom of the landfill liner system or natural in-place soil barrier shall be at least fifty feet from the historical high water table.	Renewal Application, Section 5.2 Renewal Application, Section 5.2 Renewal Application, Section 5.2 Renewal Application, Section 5.5 & Section 5.6 Renewal Application, Section 5.2	Yes/Yes Yes/Yes Yes/Yes Yes/Yes Yes/Yes	See also, Phase III E&D Report, Section 2.6. Landfill B-18 is not in a floodplain, near a shore, or in a groundwater recharge area. There is no standing or flowing surface water at the Facility. Operation Plan, Chapter 26 and 27; TSCA Groundwater Addendum. Phase III E&D Report, Section 2.6.
761.75(b)(4) Flood Protection	(i) If the landfill site is below the 100-year floodwater elevation, the operator shall provide surface water diversion dikes around the perimeter of the landfill site with a minimum height equal to two feet above the 100-year floodwater elevation.	Renewal Application, Section 5.3 & Attachment 2	N/A	Landfill B-18 is above the 100-year floodwater elevation.



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
Diversion structures	(ii) If the landfill site is above the 100-year floodwater elevation, the operators shall provide diversion structures capable of diverting all of the surface water runoff from a 24-hour, 25-year storm.	Renewal Application, Section 5.3.2 Operation Plan Section 19.2(a)(4)	Yes/Yes	2016 Stormwater Pollution Prevention Plan. 2009 Surface Water Control Program. Phase III E&D Report, Section 5.5. Note: KHF's stormwater system is designed to handle a 24-hour probably maximum. precipitation event of 10.3 inches. A 24-hour 25-year storm event at the Facility is 1.95 inches. See "Surface Water Control Program", p. 5.
761.75(b)(5) Topography	The landfill site shall be located in an area of low to moderate relief to minimize erosion and to help prevent landslides or slumping.	Renewal Application, Section 5.4	Yes/Yes	Renewal Application, Attachment 2. Operation Plan, Chapter 4. Phase III E&D Report, Section 2.3.
761.75(b)(6) Monitoring systems Water sampling	(i) (A) For all sites receiving PCBs, the ground and surface water from the disposal site area shall be sampled prior to commencing operations under an approval provided in § 761.75(c) for use as baseline data. (B) Any surface watercourse designated by the Regional Administrator using the authority provided in § 761.75(c)(3)(ii) shall be sampled at least monthly when the landfill is being used for disposal operations.	Renewal Application, Section 5.5.1; Tables 4.1 to 4.4 and 5.1 to 5.4 N/A	Yes/Yes —	There was no pre-existing surface water at the Facility. Operation Plan, section 24. The Regional Administrator has not designated any surface watercourses at or near KHF using the omnibus authority in § 761.75(c)(3)(ii).



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
Monitoring systems	(C) Any surface watercourse designated by the Regional Administrator using the authority provided in § 761.75(c)(3)(ii) shall be sampled for a time period specified by the Regional Administrator on a frequency of no less than once every six months after final closure of the disposal area.	N/A	—	The Regional Administrator has not designated any surface watercourses at or near KHF using the omnibus authority in § 761.75(c)(3)(ii).
Groundwater monitoring wells	(ii) (A) If underlying earth materials are homogenous, impermeable, and uniformly sloping in one direction, only three sampling points shall be necessary. These three points shall be equally spaced on a line through the center of the disposal area and extending from the area of highest water table elevation to the area of the lowest water table elevation on the property.	Renewal Application, Section 5.5.2 and Attachment 4	Yes/Yes	Operation Plan, Chapters 26 and 27. SSMP, section 3 and Figure 2. TSCA Groundwater Addendum.



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
Monitoring systems Water analysis	(B) All monitor wells shall be cased and the annular space between the monitor zone (zone of saturation) and the surface shall be completely backfilled with Portland cement or an equivalent material and plugged with Portland cement to effectively prevent percolation of surface water into the well bore. The well opening at the surface shall have a removable cap to provide access and to prevent entrance of rainfall or stormwater runoff. The well shall be pumped to remove the volume of liquid initially contained in the well before obtaining a sample for analysis. The discharge shall be treated to meet applicable state or federal discharge standards or recycled to the chemical waste landfill.	Renewal Application, Section 5.5.2, Section 5.5.3, & Section 13.2.1.	Yes/Yes	TSCA Operation Plan, p. 9. SSMP, Table .6 SSMP, section 6.2.4. TSCA Groundwater Addendum. Chemical Waste Management, Inc. has requested a 40 C.F.R. 761.75(c)(4) waiver from the requirement that the well shall be pumped to remove the volume of liquid initially contained in the well before obtaining a sample for analysis (i.e., purging). U.S. EPA propose to grant this waiver. See Statement of Basis, section III.C.2.
	(iii) As a minimum, all samples shall be analyzed for the following parameters, and	Renewal Application, Section 5.5.3	Yes/Yes	TSCA Operation Plan, p. 10. TSCA Groundwater Addendum.
	all data and records of the sampling and analysis shall be maintained as required in § 761.180(d)(1).	Renewal Application, Section 5.5.3	Yes/Yes	TSCA Operation Plan, p. 3.



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
	Sampling methods and analytical procedures for these parameters shall comply with those specified in 40 C.F.R. Part 136 as amended in 41 FR 52779 on December 1, 1976.	Renewal Application, Section 5.5.3, Section 13.2.2	Yes/Yes	TSCA Operation Plan, p. 9. TSCA Groundwater Addendum. Chemical Waste Management, Inc. has requested a 40 C.F.R. 761.75(c)(4) waiver from the requirement that sampling methods and analytical procedures for these parameters shall comply with those specified in 40 C.F.R. Part 136 as amended in 41 FR 52779 on December 1, 1976. U.S. EPA proposes to grant this waiver. See Statement of Basis, section III.C.2.
	(A) PCBs	Renewal Application, Section 5.5.3	Yes/Yes	TSCA Operation Plan, p. 9. TSCA Groundwater Addendum.
	(B) pH.	Renewal Application, Section 5.5.3	Yes/Yes	TSCA Operation Plan, p. 9. TSCA Groundwater Addendum.
	(C) Specific conductance.	Renewal Application, Section 5.5.3	Yes/Yes	TSCA Operation Plan, p. 9. TSCA Groundwater Addendum.
	(D) Chlorinated organics	Renewal Application, Section 5.5.3, Section 13.2.2	Yes/Yes	TSCA Operation Plan, p. 9. TSCA Groundwater Addendum. Chemical Waste Management, Inc. has requested a 40 C.F.R. 761.75(c)(4) waiver from the list of parameters required to be monitored. U.S. EPA propose to grant this waiver. See Statement of Basis, section III.C.2.



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.75(b)(7) Monitoring systems Leachate collection	A leachate collection monitoring system shall be installed above the chemical waste landfill.	Renewal Application, Section 5.6.1 TSCA Operation Plan, p. 7.	Yes/Yes	KHF uses the system described under § 761.75(b)(7). Phase III E&D Report, Section 4.8.
	Leachate collection systems shall be monitored monthly for quantity and physicochemical characteristics of leachate produced.	Renewal Application, Section 5.6.2, TSCA Operation Plan, pp. 8 - 10	Yes/Yes	Monitoring: Operation Plan Table 31-3; WAP Appendix B-1. System is monitored weekly. Leachate is tested prior to disposal and annually.
	The leachate should be either treated to acceptable limits for discharge in accordance with a state or federal permit or disposed of by another state or federally approved method.	Renewal Application, Section 5.6.2, TSCA Operation Plan, p. 8.	Yes/Yes	Operation Plan, Chapter 12 - WAP Appendix B-1.
	Water analysis shall be conducted as provided in § 761.75(b)(6)(iii).	Renewal Application, Sections 5.6.2 and 13.2.3.	Yes/Yes	Operation Plan, Chapter 12 - WAP Section 3 and Tables 3-1, 3-2 and 3-3. Chemical Waste Management, Inc. has requested a 40 C.F.R. 761.75(c)(4) waiver from the required leachate analysis (parameters and methods). U.S. EPA propose to grant this waiver. See Statement of Basis, section III.C.2.
	Acceptable leachate monitoring/collection systems shall be any of the following designs, unless a waiver is obtained pursuant to § 761.75(c)(4).	Renewal Application, Section 5.6.1;	Yes/Yes	TSCA Operation Plan, p. 7.



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.75(b)(7)(i) Monitoring systems Simple leachate collection	(i) This system consists of a gravity flow drainfield installed above the waste disposal unit liner.	N/A	—	This system design is not used at KHF.
761.75(b)(7)(ii) Monitoring systems Compound leachate collection	(ii) This system consists of a gravity flow drainfield installed above the waste disposal unit liner and above a secondary installed liner.	Renewal Application, Section 5.6.1	Yes/Yes	Phase III E&D Report, Section 4.8.
761.75(b)(7)(iii) Monitoring systems Suction lysimeters	(iii) This system consists of a network of porous ceramic cups connected by hoses/tubing to a vacuum pump. The porous ceramic cups or suction lysimeters are installed along the sides and under the bottom of the waste disposal unit liner.	N/A	—	This system design is not used at KHF.
761.75(b)(8) Prevent damage to containers or articles	(i) PCBs and PCB Items shall be placed in a landfill in a manner that will prevent damage to containers or articles.	Renewal Application, Section 5.8	Yes/Yes	Operation Plan, Chapter 34 and Chapter 19, Section 19.2(a)(2)(A).
Segregate incompatible waste	Other wastes placed in the landfill that are not chemically compatible with PCBs and PCB Items including organic solvents shall be segregated from the PCBs throughout the waste handling and disposal process.	Renewal Application, Section 5.8	Yes/Yes	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
Operation plan	(ii) An operation plan shall be developed and submitted to the Regional Administrator for approval as required in § 761.75(c). This plan shall include detailed explanations of the procedures to be used for	TSCA Operation Plan	Yes/Yes	Provided as Attachment 1 to the Renewal Application.
	Recordkeeping,	TSCA Operation Plan, p. 2	Yes/Yes	See Checklist for Recordkeeping and Reporting Requirements found in Appendix D-3.
	Surface water handling procedures	TSCA Operation Plan, p. 3	Yes/Yes	Renewal Application, Section 5.3. Operation Plan, Chapter 6 and Chapter 19, Section 19.2(a)(4). 2009 Surface Water Control Program.
	Excavation and backfilling	TSCA Operation Plan, p. 6	Yes/Yes	Operation Plan Sections 19.1 and 19.2(a)(3).
	Waste segregation burial coordinates	TSCA Operation Plan, p. 7	Yes/Yes	Operation Plan Sections 19.1.
	Vehicle and equipment movement,	TSCA Operation Plan, p. 7	Yes/Yes	Renewal Application, Section 5.9.
	Use of roadways	TSCA Operation Plan, p. 7	Yes/Yes	Renewal Application, Section 5.9.
	Leachate collection systems	TSCA Operation Plan, p. 7	Yes/Yes	Renewal Application, Section 5.6.
	Monitoring wells	TSCA Operation Plan, p. 9	Yes/Yes	Renewal Application, Section 5.5.



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
Security Disposal of liquid waste	Sampling and monitoring procedures	TSCA Operation Plan, p. 9	Yes/Yes	Renewal Application, Sections 5.5 through 5.7.
	Environmental emergency contingency plans	TSCA Operation Plan, p. 11	Yes/Yes	Operation Plan, Chapter 35.
	Security measures to protect against vandalism and unauthorized waste placement	TSCA Operation Plan, p. 11	Yes/Yes	Renewal Application, Section 5.9. Operation Plan, Chapter 30.
	If the facility is to be used to dispose of liquid wastes containing between 50 ppm and 500 ppm PCB, the operations plan must include:	TSCA Operation Plan, p. 6	Yes/Yes	KHF may dispose of liquid PCB waste from incidental sources, such as precipitation, condensation, leachate or load separation and are associated with PCB Articles or nonliquid PCB waste in the landfill provided it has determined that the liquids do not exceed 500 ppm PCB and are not an ignitable waste (see § 761.60(a)(3)) and solidified the waste.
	Procedures to determine that liquid PCBs to be disposed of at the landfill do not exceed 500 ppm PCB and	TSCA Operation Plan, p. 6	Yes/Yes	
	Measures to prevent the migration of PCBs from the landfill.	Renewal Application, Section 5	Yes/Yes	See sections in the Renewal Application on landfill design (Section 5.1), groundwater monitoring (Section 5.5), and leachate collection and monitoring (Section 5.6).



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
Ignitable wastes	Bulk liquids not exceeding 500 ppm PCBs may be disposed of provided such waste is pretreated and/or stabilized (e.g., chemically fixed, evaporated, mixed with dry inert absorbent) to reduce its liquid content or increase its solid content so that a non-flowing consistency is achieved to eliminate the presence of free liquids prior to final disposal in a landfill.	TSCA Operation Plan, p. 6	Yes/Yes	Operation Plan, Chapter 12 - WAP Sections 6.3.1; 6.3.2. and 6.3.3.1.
	PCB Container of liquid PCBs with a concentration between 50 and 500 ppm PCB may be disposed of if each container is surrounded by an amount of inert absorbent material capable of absorbing all of the liquid contents of the container.	N/A	—	Except for PCB liquids from incidental sources, liquid PCBs must be disposed of through incineration or other high-temperature thermal treatment (§ 761.60(a)). PCB liquids from incidental sources must be solidified prior to disposal. Disposal in the landfill of liquid waste or containers with free liquids is prohibited unless the liquids are stabilized/solidified or lab-packed. See RCRA Permit, p. 27 and 22 CCR § 66264.314(c).
	(iii) Ignitable wastes shall not be disposed of in chemical waste landfills.	Renewal Application, Section 13.2.5	Yes/Yes	Operation Plan, Chapter 34. Chemical Waste Management, Inc. has requested a § 761.75(c)(4) waiver from the requirement that no ignitable waste be disposed on in Landfill B-18 to allow the landfilling of small containers of hazardous waste in overpacked drums (lab packs) as allowed under § 264.316. U.S. EPA proposes to grant this waiver. See Statement of Basis, section III.C.2.



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
	(iv) Records shall be maintained for all PCB disposal operations and shall include information on: The PCB concentration in liquid wastes The three-dimensional burial coordinates for PCBs and PCB Items. Additional records shall be developed and maintained as required in § 761.180.	TSCA Operation Plan, p. 2 TSCA Operation Plan, p. 2 TSCA Operation Plan, pp. 3 and 7 TSCA Operation Plan, p. 3	Yes/Yes Yes/Yes Yes/Yes Yes/Yes	
761.75(b)(8) Fence	(i) A six-foot woven mesh fence, wall, or similar device shall be placed around the site to prevent unauthorized persons and animals from entering.	Renewal Application, Section 5.9	Yes/Yes	TSCA Operation Plan, p. 11. Chemical Waste Management, Inc. has requested a § 761.75(c)(4) waiver for a fence around each TSCA unit. No waiver is necessary, see Statement of Basis, section III.C.2.
Road maintenance	(ii) Roads shall be maintained to and within the site which are adequate to support the operation and maintenance of the site without causing safety or nuisance problems or hazardous conditions.	Renewal Application, Section 5.9	Yes/Yes	TSCA Operation Plan, p. 7. Operation Plan, Chapter 10.
Safety	(iii) The site shall be operated and maintained in a manner to prevent safety problems or hazardous conditions resulting from spilled liquids and windblown materials.	Renewal Application, Section 5.9	Yes/Yes	Operation Plan, Chapter 10.



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.75(c) Landfill Approval	Prior to the disposal of any PCBs and PCB Items in a chemical waste landfill, the owner or operator of the landfill shall receive written approval of the Agency Regional Administrator for the Region in which the landfill is located.	N/R	—	KHF received a TSCA PCB permit in 1992 allowing placement of nonliquid PCB waste in Landfill B-18 Phases I and II. Placement of PCB waste, unless otherwise allowed under 40 C.F.R. Part 761, in Phase III is prohibited until EPA issues a written approval.
761.75(c)(1) Initial approval application report	The owner or operator shall submit to the Regional Administrator an initial report which contains:	Renewal Application in general	Yes/Yes	The Renewal Application is the “initial report” for the purposes of § 761.75(c).
Landfill location	(i) The location of the landfill	Renewal Application, Section 2.1	Yes/Yes	Operation Plan, Chapters 3 and 4.
Landfill site and design	(ii) A detailed description of the landfill including general site plans and design drawings.	Renewal Application, Section 2.2 Operation Plan, Chapter 19	Yes/Yes	Phase III E&D Report.
Landfill engineering report	(iii) An engineering report describing the manner in which the landfill complies with the requirements for chemical waste landfills specified in § 761.75(b).	Phase III E&D Report	Yes/Yes	Other documents listed in TSCA Operation Plan, Appendix A.
Sampling and monitoring	(iv) Sampling and monitoring equipment and facilities available	Renewal Application, sections 5.5 – 5.7	Yes/Yes	2016 Site-Specific Ambient Air Monitoring Plan. Operation Plan, Chapters 12 and 26.



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
Waste volume	(v) Expected waste volumes of PCBs	Renewal Application, Section 7	Yes/Yes	TSCA Operation Plan, p. 1. Operation Plan, Chapter 19
Wastes accepted	(vi) General description of waste materials other than PCBs that are expected to be disposed of in the landfill.	Renewal Application, Section 8	Yes/Yes	
Operation plan	(vii) Landfill operations plan as required in § 761.75(b).	Renewal Application, Attachment 1	Yes/Yes	
Other permits	(viii) Any local, state, or federal permits or approvals	Renewal Application, Table 2	Yes/Yes	
Compliance schedule	(ix) Any schedules or plans for complying with the approval requirements of these regulations	Renewal Application, Section 12	Yes/Yes	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.75(c)(2) Additional information for permit decision	In addition to the information contained in the report described in § 761.75(c)(1), the Regional Administrator may require the owner or operator to submit any other information that the Regional Administrator finds to be reasonably necessary to determine whether a chemical waste landfill should be approved. Such other information shall be restricted to the types of information required in § 761.75(c)(1)(i) through (ix).	Misc. See Additional Cites/Notes	Yes/Yes	Request for additional sampling of air, soil and biota/vegetation and analysis for PCB congeners sent 12/2/08 (congeners study request); final response received November 2010 (Final congeners study report). NOD #1 issued November 14, 2009; Response received on December 22, 2009. NOD #2 issued September 22, 2011; Response received on November 21, 2011. Request for update sent December 20, 2016; Final response received on July 13, 2017. NOD issued December 21, 2017. Response received on April 19, 2018. Additional information/clarifications requested on September 7, 2018; response received on October 2, 2018. Additional information requested on July 3, 2019; response received on July 15 and 18, 2019.
761.75(c)(3) Permit decision	(i) Except as provided in § 761.75(c)(4) the Regional Administrator may not approve a chemical waste landfill for the disposal of PCBs and PCB Items, unless he finds that the landfill meets all of the requirements of § 761.75(b).	N/R	—	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
No unreasonable risk	(ii) In addition to the requirements of § 761.75(b), the Regional Administrator may include in an approval any other requirements or provisions that the Regional Administrator finds are necessary to ensure that operation of the chemical waste landfill does not present an unreasonable risk of injury to health or the environment from PCBs.	N/R	—	
Approval expiration date	Such provisions may include a fixed period of time for which the approval is valid.	N/R	—	
Notice of PCB detection during monitoring	The approval may also include a stipulation that the operator of the chemical waste landfill report to the Regional Administrator any instance when PCBs are detectable during monitoring activities conducted pursuant to § 761.75(b)(6).	N/R	—	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.75(c)(4) Waivers	An owner or operator of a chemical waste landfill may submit evidence to the Regional Administrator that operation of the landfill will not present an unreasonable risk of injury to health or the environment from PCBs when one or more of the requirements of § 761.75(b) are not met. On the basis of such evidence and any other available information, the Regional Administrator may in his discretion find that one or more of the requirements of § 761.75(b) is not necessary to protect against such a risk and may waive the requirements in any approval for that landfill. Any finding and waiver under this paragraph will be stated in writing and included as part of the approval.	Renewal Application, Section 13.2	—	Chemical Waste Management, Inc. requested waivers for five § 761.75 requirements. U.S. EPA proposes to grant four of these waivers and has determined that the fifth is unnecessary. See Statement of Basis, Section III.C.2.
761.75(c)(5) Persons approved	Any approval will designate the persons who own and who are authorized to operate the chemical waste landfill, and will apply only to such persons, except as provided by § 761.75(c)(7).	N/R	—	
761.75(c)(6) Final approval signature	Approval of a chemical waste landfill will be in writing and will be signed by the Regional Administrator.	N/R	—	
Final approval contents	The approval will state all requirements applicable to the approved landfill.	N/R	—	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.75(c)(7) Transfer	Any person who owns or operates an approved chemical waste landfill must notify EPA at least 30 days before transferring ownership in the property or transferring the right to conduct the chemical waste landfill operation. The transferor must also submit to EPA, at least 30 days before such transfer, a notarized affidavit signed by the transferee which states that the transferee will abide by the transferor's EPA chemical waste landfill approval. Within 30 days of receiving such notification and affidavit, EPA will issue an amended approval substituting the transferee's name for the transferor's name, or EPA may require the transferee to apply for a new chemical waste landfill approval. In the latter case, the transferee must abide by the transferor's EPA approval until EPA issues the new approval to the transferee.	N/R	—	

N/A – Regulatory provision does not apply to the Facility.

N/R – Regulatory provision is either optional, applies to EPA, or otherwise does not need to be addressed in the application



Documents referenced:

1. “Hazardous Waste Facility Permit - Chemical Waste Management, Inc. Kettleman Hills Facility (Permit Number: 02-SAC-03).” California Department of Toxic Substances Control. Effective June 16, 2003 (modified May 5, 2005, July 25, 2006, September 21, 2007, and May 21, 2014) (“RCRA Permit”).
2. “Request for Additional Sampling of Air, Soil, and Biota/Vegetation and Analysis for PCB Congeners.” Letter, Cheryl Nelson, U.S. EPA Region 9 to Paul Turek, Chemical Waste Management, Inc. December 2, 2008.
3. “Surface Water Control Program for Kettleman Hills Facility,” Centra Consulting, Inc. October 23, 2009.
4. “U.S. Environmental Protection Agency ("U.S. EPA") Completeness Review of Chemical Waste Management, Inc. - Kettleman Hills Facility Request to Modify Toxic Substance Control Act ("TSCA") Polychlorinated Biphenyl ("PCB") Coordinated Approval Request for Landfill B-18 (Phase III).” Letter, Cheryl Nelson, U.S. EPA Region 9 to Paul Turek, Chemical Waste Management, Inc. November 25, 2009.
5. “Chemical Waste Management, Inc. - Kettleman Hills Facility Response To Landfill B-18 Phase III Coordinated Approval Completeness Review.” Letter, Paul Turek, Chemical Waste Management, Inc. to Chip Poalinelli, U.S. EPA Region 9. December 22, 2009.
6. “Final Dioxin-Like Polychlorinated Biphenyl (PCB) Congeners Study Report, Chemical Waste Management, Inc. Kettleman Hills Facility (KHF).” Wenck Associates, Inc. November 2010.
7. “Engineering and Design Report, B-18 Class 1 Landfill, Phase III Expansion and Final Closure, Kettleman Hills Facility, Kettleman City California”, August 2011 Revisions 2011.
8. “Notice of Deficiency (“NOD”) for Toxic Substances Control Act (“TSCA”) Permit Renewal and Modification Applications dated April 1, 1997, as revised, and May 10, 2010; Chemical Waste Management Kettleman Hills Facility (CAT 000646117).” Caleb Shaffer, U.S. EPA Region 9 to Bob Henry, Chemical Waste Management, Inc. September 22, 2011.
9. Chemical Waste Management, Inc. - Kettleman Hills Facility Response To Notice Of Deficiency -TSCA Permit Renewal And Modification.” Letter, Paul Turek, Chemical Waste Management, Inc. to Chip Poalinelli, U.S. EPA Region 9. November 21, 2011.
10. “Revised Site-Specific Groundwater Monitoring Plan Class I Waste Management Units, Kettleman Hills Facility, Kings County California,” AMEC Environmental & Infrastructure, Inc., April 14, 2014.



11. “Site-Specific Ambient Air Monitoring Plan, Chemical Waste Management, Inc., Kettleman Hills Facility (KHF), Kings County, California.” Wenck Associates, Inc. January 2016.
12. “Stormwater Pollution Prevention Plan Chemical Waste Management, Inc., - Kettleman Hills Facility.” Golder Associates and SWT Engineering. March 2016.
13. Letter, Tom Huetteman, U.S. EPA Region 9 to Robert Henry, CWMI. December 20, 2016.
14. “Chemical Waste Management, Inc. – Kettleman Hills Facility Revised TSCA Permit Renewal Application – Revision 1”. Reyna Verdin, Chemical Waste Management, Inc. to Frances Wicher, U.S. EPA Region 9. July 13, 2017.
15. Letter, Barbara Gross, U.S. EPA Region 9, to Reyna Verdin, CWMI. December 21, 2017 with enclosure: “Notice of Deficiency, TSCA Permit Renewal Application (dated July 1, 2017), Chemical Waste Management, Inc. – Kettleman Hills Facility, EPA ID. NO CAT 000 646 117.” U.S. EPA Region 9. December 21, 2017.
16. “Hazardous Waste Facility Permit Renewal Application, Operation Plan, Chemical Waste Management, Inc. Kettleman Hills Facility.” Chemical Waste Management, Inc. Revision 3: March 16, 2018.
17. “TSCA Groundwater Monitoring Addendum to Site-Specific Monitoring Plan, Kettleman Hills Facility, Kings County, California.” AMEC Foster Wheeler. April 17, 2018.
18. “Chemical Waste Management, Inc. – Kettleman Hills Facility Revised TSCA Permit Renewal Application – Revision 2”. Reyna Verdin, Chemical Waste Management, Inc. to Frances Wicher, U.S. EPA Region 9. April 19, 2018.
19. “Memorandum to File (CAT 000 646 117 Chemical Waste Management, Inc. TSCA Approval), Subject: September 7, 2018 Call with Chemical Waste Management, Inc. Kettleman Hills Facility.” Frances Wicher, U.S. EPA Region 9. September 17, 2018.
20. “TSCA Permit Renewal Application, Chemical Waste Management, Kettleman Hills Facility.” Revision 3: October 1, 2018.
21. “TSCA Operation Plan, Landfill B-18 Phases I, II, and III; PCB Building and Outside Containment Area.” Chemical Waste Management, Inc. Revision 3: October 1, 2018.
22. “Chemical Waste Management, Inc. – Kettleman Hills Facility Revised TSCA Permit Renewal Application – Revision 3”. Reyna Verdin, Chemical Waste Management, Inc. to Frances Wicher, U.S. EPA Region 9. October 2, 2018.



**Appendix D-2 –
Review Checklist for 40 C.F.R. Part 761 Requirements for PCB Commercial Storage Facilities**

**October 1, 2018 TSCA Renewal Application for
Chemical Waste Management Kettleman Hills Facility (EPA I.D. CAT 000 646 117)
Kettleman City, California
Toxic Substances Control Act Requirements
40 C.F.R. Part 761**

This Checklist documents how Chemical Waste Management, Inc.’s (“CWM”) application to renew and modify its Approval (permit) to store and treat polychlorinated biphenyls (“PCB”) waste at its Kettleman Hills Facility (KHF or “Facility”) meets the requirements of the Toxic Substances Control Act (“TSCA”) regulations at 40 C.F.R. Part 761. It is based on U.S. EPA’s review of the renewal application, titled “TSCA Permit Renewal Application, Chemical Waste Management, Inc., Kettleman Hills Facility” Revision 3: October 1, 2018 (“Renewal Application”). This Checklist identifies if the required information is present and complete, whether the information is acceptable, and where the information can be found in the Renewal Application. Storage of PCB waste at KHF is currently limited to the PCB Flushing/Storage Unit (PCB F/SU) unless otherwise allowed by 40 C.F.R. Part 761.

Documents frequently referenced in the checklist are listed below. A complete list of references is provided at the end of the checklist.

Renewal Application: “TSCA Permit Renewal Application.” CWM KHF. Revision 3: October 1, 2018.

TSCA Operation Plan: “TSCA Operation Plan, Landfill B-18 Phases I, II, and III; PCB Building and Outside Containment Area.” Chemical Waste Management, Inc. Revision 3: October 1, 2018.

Operation Plan: “Hazardous Waste Facility Permit Renewal Application, Operation Plan.” CWM KHF. Revision 3, March 16, 2018.

Closure Plan: “Closure and Post-Closure Plans, Kettleman Hills Facility.” Golder Associates. March 15, 2018.

Closure Cost Estimate: “Closure and Post-Closure Cost Estimate, Kettleman Hills Facility.” Golder Associates. March 15, 2018.



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
761.65 Applicability	40 C.F.R. § 761.65 applies to the storage for disposal of PCBs at concentrations of 50 ppm or greater and PCB Items with PCB concentrations of 50 ppm or greater.	Renewal Application, Section 4	—	KHF is requesting approval to store for disposal PCB waste with concentrations of 50 ppm or greater in the enclosed building and outside containment area at the PCB F/SU.
761.65(a)(1) Storage period	<i>Storage limitations.</i> Any PCB waste shall be disposed of as required by 40 C.F.R. Part 761, Subpart D within one year from the date it was determined to be PCB waste and the decision was made to dispose of it. This date is the date of removal from service for disposal and the point at which the 1-year time frame for disposal begins.	Operation Plan Section 14.3(a)	Yes/Yes	
761.65(a)(2) Storage period extension	<i>One-year extension.</i> Any person storing PCB waste that is subject to the 1-year time limit for storage and disposal in § 761.65(a)(1) may provide written notification to the EPA Regional Administrator for the Region in which the PCB waste is stored that their continuing attempts to dispose of or secure disposal for their waste within the 1-year time limit have been unsuccessful. Upon receipt of the notice by the EPA Regional Administrator, the time for disposal is automatically extended for 1 additional year (2 years total) if the following conditions are met:	Operation Plan Section 14.3(a)	Yes/Yes	



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
761.65(a)(2) Storage period extension	(i) The notification is received by the EPA Regional Administrator at least 30 days before the initial 1-year time limit expires and the notice identifies the storer, the types, volumes, and locations of the waste and the reasons for failure to meet the initial 1-year time limit.	Operation Plan Section 14.3(a)	Yes/Yes	
	(ii) A written record documenting all continuing attempts to secure disposal is maintained until the waste is disposed of.	Operation Plan Section 14.3(a)	Yes/Yes	
	(iii) The written record required by § 761.65(a)(2)(ii) is available for inspection or submission if requested by EPA.	Operation Plan Section 14.3(a)	Yes/Yes	
	(iv) Continuing attempts to secure disposal were initiated within 270 days after the time the waste was first subject to the 1-year time limit requirement, as specified in § 761.65(a)(1). Failure to initiate and continue attempts to secure disposal throughout the total time the waste is in storage shall automatically disqualify the notifier from receiving an automatic extension under § 761.65(a)(2).	Operation Plan Section 14.3(a)	Yes/Yes	



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
761.65(a)(3) Storage period extension	<i>Additional extensions.</i> Upon written request, the EPA Regional Administrator may grant additional extensions beyond the 1-year extension authorized in § 761.65(a)(2). At the time of the request, the requestor must supply specific justification for the additional extension and indicate what measures the requestor is taking to secure disposal of the waste or indicate why disposal could not be conducted during the period of the prior extension. The EPA Regional Administrator may require, as a condition to granting any extension under this paragraph, specific actions including, but not limited to, marking, inspection, recordkeeping, or financial assurance to ensure that the waste does not pose an unreasonable risk of injury to health or the environment.	Operation Plan Section 14.3(a)	Yes/Yes	



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
761.65(a)(4) Storage at an approved facility	<i>Storage at an approved facility.</i> Increased time for storage may be granted as a condition of any TSCA PCB storage or disposal approval, by the EPA Regional Administrator for the Region in which the PCBs or PCB Items are to be stored or disposed, if EPA determines that there is a demonstrated need or justification for additional time, that the owner or operator of the facility is pursuing relevant treatment or disposal options, and that no unreasonable risk of injury to health or the environment will result from the increased storage time. In making this determination, EPA will consider such factors as absence of any approved treatment technology and insufficient time to complete the treatment or destruction process. EPA may require as a condition of the approval that the owner or operator submit periodic progress reports.	N/R	—	Optional requirement. KHF is not requesting increased storage time in its application.



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
761.65(b) Storage unit structure	Except as provided in § 761.65(b)(2), (c)(1), (c)(7), (c)(9), and (c)(10) owners or operators of any facilities used for the storage of PCBs and PCB Items designated for disposal shall comply with the following storage unit requirements:			See below for a discussion of the exceptions.
761.65(b)(1) Storage unit structure	The facilities shall meet the following criteria: (i) Adequate roof and walls to prevent rain water from reaching the stored PCBs and PCB Items; (ii) An adequate floor that has continuous curbing with a minimum 6-inch high curb. The floor and curbing must provide a containment volume equal to at least two times the internal volume of the largest PCB Article or PCB Container or 25 percent of the total internal volume of all PCB Articles or PCB Containers stored there, whichever is greater.	<i>PCB F/SU enclosed building:</i> Renewal Application, Section 10.1.1. <i>PCB F/SU outside containment area:</i> Renewal Application, Section 10.1.1. <i>PCB F/SU enclosed building:</i> Renewal Application, Section 10.1.1.	Yes/Yes Yes/No Yes/Yes	Operation Plan, Section 14.3(b.) Operation Plan, Section 14.3(b). PCB waste storage in the outside containment area of PCB F/SU will be managed per § 761.65(c)(1). Renewal Application, Attachment 6. Operation Plan, Section 14.3(b).



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
Storage unit structure	(iii) No drain valves, floor drains, expansion joints, sewer lines, or other openings that would permit liquids to flow from the curbed area; (iv) Floors and curbing constructed of Portland cement, concrete, or a continuous, smooth, non-porous surface as defined at § 761.3, which prevents or minimizes penetration of PCBs. (v) Not located at a site that is below the 100-year flood water elevation.	<i>PCB F/SU outside containment area:</i> Renewal Application, Section 10.1.1.	Yes/Yes	Renewal Application, Attachment 7. Operation Plan, Section 14.3(b).
		<i>PCB F/SU enclosed building:</i> Renewal Application, Section 10.1.1.	Yes/Yes	Operation Plan, Section 14.3(b).
		<i>PCB F/SU outside containment area:</i> Renewal Application, Section 10.1.1.	Yes/Yes	Operation Plan, Section 14.3(b).
		<i>PCB F/SU enclosed building:</i> Renewal Application, Section 10.1.1.	Yes/Yes	Operation Plan, Section 14.3(b).
		<i>PCB F/SU outside containment area:</i> Renewal Application, Section 10.1.1.	Yes/Yes	Operation Plan, Section 14.3(b).
		Renewal Application Figure 4-2-1	Yes/Yes	Operation Plan, Exhibit 5-1.



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
761.65(b)(2) Storage without TSCA permit or design	No person may store PCBs and PCB Items designated for disposal in a storage unit other than one approved pursuant to § 761.65(d) or meeting the design requirements of § 761.65(b), unless the unit meets one of the following conditions:	—	—	See below.
	(i) Is permitted by EPA under section 3004 of RCRA to manage hazardous waste in containers, and spills of PCBs are cleaned up in accordance with 40 C.F.R. Part 761, Subpart G.	N/A	—	No PCB storage units at KHF are permitted by EPA under RCRA section 3004.
	(ii) Qualifies for interim status under section 3005 of RCRA to manage hazardous waste in containers, meets the requirements for containment at 40 C.F.R. 264.175, and spills of PCBs are cleaned up in accordance with 40 C.F.R. Part 761, Subpart G.	N/A	—	No PCB storage units at KHF qualify for interim status under RCRA section 3004.
	(iii) Is permitted by a state authorized under section 3006 of RCRA to manage hazardous waste in containers, and spills of PCBs are cleaned up in accordance with 40 C.F.R. Part 761, Subpart G.	See Note	—	The enclosed building at the PCB F/SU is permitted by DTSC under section 3006 of RCRA to store waste in containers; the outside containment area is currently permitted to process but not store waste. See RCRA Permit. The RCRA permit does not require that spills of PCB be cleaned up in accordance with 40 C.F.R. Part 761 Subpart G (Spill Clean Up Policy).



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
761.65(b)(2) Storage without TSCA permit or design	(iv) Is approved or otherwise regulated pursuant to a state PCB waste management program no less stringent in protection of health or the environment than the applicable TSCA requirements found 40 C.F.R. Part 761.	N/A	—	California has a State-operated PCB waste management program; however, no evaluation of comparable stringency to 40 C.F.R. Part 761 has been made.
	(v) Is subject to a TSCA Coordinated Approval, which includes provisions for storage of PCBs, issued pursuant to § 761.77.	N/A	—	No PCB storage units at KHF have a TSCA Coordinated Approval.
	(vi) Has a TSCA PCB waste management approval, which includes provisions for storage, issued pursuant to § 761.61(c) or § 761.62(c).	N/A	—	Although KHF has a TSCA PCB waste management approval which address the storage units, the approval does not include provisions for storage issued pursuant to § 761.61(c) or § 761.62(c).
761.65(c)(1) Temporary storage	The following PCB Items may be stored temporarily in an area that does not comply with the requirements of § 761.65(b) for up to thirty days from the date of their removal from service, provided that a notation is attached to the PCB Item or a PCB Container (containing the item) indicating the date the item was removed from service:	Renewal Application, Section 4.2 and Section 10.1.1	Yes/Yes	
	(i) Non-leaking PCB Articles and PCB Equipment;	Renewal Application, Section 4.2	Yes/Yes	



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
761.65(c)(1) Temporary storage	(ii) Leaking PCB Articles and PCB Equipment if the PCB Items are placed in a non-leaking PCB Container that contains sufficient sorbent materials to absorb any liquid PCBs remaining in the PCB Items;	Renewal Application, Section 4.2	Yes/Yes	
	(iii) PCB Containers containing nonliquid PCBs such as contaminated soil, rags, and debris; and	Renewal Application, Section 4.2	Yes/Yes	
	(iv) PCB containers containing liquid PCBs at concentrations of 50 ppm, provided a Spill Prevention, Control and Countermeasure Plan has been prepared for the temporary storage area in accordance with 40 C.F.R. part 112 and the liquid PCB waste is in packaging authorized in the DOT Hazardous Materials Regulations at 49 C.F.R. parts 171 through 180 or stationary bulk storage tanks (including rolling stock such as, but not limited to, tanker trucks, as specified by DOT).	Renewal Application, Section 4.2 and Section 10.1.1	Yes/Yes	



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
761.65(c)(2) Storage adjacent to storage unit	Non-leaking and structurally undamaged PCB Large High Voltage Capacitors and PCB-Contaminated Electrical Equipment that have not been drained of free-flowing dielectric fluid may be stored on pallets next to a storage facility that meets the requirements of § 761.65(b). Storage under this paragraph will be permitted only when the storage facility has immediately available unfilled storage space equal to 10 percent of the volume of capacitors and equipment stored outside the facility [and] The capacitors and equipment temporarily stored outside the facility shall be checked for leaks weekly.	Renewal Application, Section 4.2 Renewal Application, Section 4.2	Yes/Yes Yes/Yes	Operation Plan, Table 31.2
761.65(c)(3) Storage unit marking	Any storage area subject to the requirements of § 761.65(b) or § 761.65(c)(1) shall be marked as required in 40 C.F.R. Part 761, Subpart C (§ 761.40(a)(10)).	Renewal Application, Section 10	Yes/Yes	
761.65(c)(4) Storage unit equipment decontamination	No item of movable equipment that is used for handling PCBs and PCB Items in the storage units and that comes in direct contact with PCBs shall be removed from the storage unit area unless it has been decontaminated as specified in § 761.79.	Renewal Application, Section 4.2	Yes/Yes	



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
761.65(c)(5) Storage unit monthly leak checks	All PCB Items in storage shall be checked for leaks at least once every 30 days. Any leaking PCB Items and their contents shall be transferred immediately to properly marked non-leaking containers. Any spilled or leaked materials shall be immediately cleaned up and the materials and residues containing PCBs shall be disposed of in accordance with § 761.61. Records of inspections, maintenance, cleanup and disposal must be maintained in accordance with § 761.180(a) and (b).	Operation Plan Table 31.2 Operation Plan Section 35A.2 Operation Plan Section 35A.2 TSCA Operation Plan, page 3	Yes/Yes Yes/Yes Yes/Yes Yes/Yes	



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
761.65(c)(6) Storage and transport containers	Except as provided in § 761.65(c)(6)(i) and (c)(6)(ii), any container used for the storage of liquid or nonliquid PCB waste shall be in accordance with the requirements set forth in the DOT Hazardous Materials Regulations (HMR) at 49 C.F.R. parts 171 through 180. PCB waste not subject to the HMR (i.e., PCB waste at concentrations of <20 ppm or <1 pound of PCBs regardless of concentration) must be packaged in accordance with Packaging Group III, unless other hazards associated with the PCB waste cause it to require packaging in accordance with Packaging Groups I or II. For purposes of describing PCB waste not subject to DOT's HMR on a manifest, one may use the term "Non-DOT Regulated PCBs." (i) Containers other than those meeting HMR performance standards may be used for storage of PCB/radioactive waste provided the following requirements are met (A) Containers used for storage of liquid PCB/radioactive wastes must be non-leaking.	Renewal Application, Section 4.2 N/A N/A	Yes/Yes — —	KHF does not handle nonliquid PCB/radioactive waste. KHF does not handle nonliquid PCB/radioactive waste.



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
	(B) Containers used for storage of nonliquid PCB/radioactive wastes must be designed to prevent the buildup of liquids if such containers are stored in an area meeting the containment requirements of § 761.65(b)(1)(ii), as well as all other applicable State or Federal regulations or requirements for control of radioactive materials.	N/A	—	KHF does not handle nonliquid PCB/radioactive waste.
	(ii) The following DOT specification containers that conform to the requirements of 49 40 C.F.R. chapter I, subchapter C in effect on September 30, 1991, may be used for storage and transportation activities that are not subject to DOT regulation, and may be used on a transitional basis as permitted at 49 40 C.F.R. § 171.14.	N/A	—	Obsolete provision; transition period ended.



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
761.65(c)(7)	Stationary storage containers for liquid PCBs can be larger than the containers specified in § 761.65(c)(6) provided that:	Renewal Application, Section 4.2	Yes/Yes	
Storage unit stationary container design	(i) The containers are designed, constructed, and operated in compliance with Occupational Safety and Health Standards, 29 40 C.F.R. § 1910.106, Flammable and combustible liquids. Before using these containers for storing PCBs, the design of the containers must be reviewed to determine the effect on the structural safety of the containers that will result from placing liquids with the specific gravity of PCBs into the containers (see 29 40 C.F.R. § 1910.106(b)(1)(i)(f)).	Renewal Application, Section 4.2	Yes/Yes	Operation Plan, Section 15.2(a) and Exhibits 15-1.1, 15.3-1, and 15.3-2.



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
Storage unit stationary container spill prevention and response	(ii) The owners or operators of any facility using containers described in § 761.65(c)(7)(i), shall prepare and implement a Spill Prevention Control and Countermeasure (SPCC) Plan as described in 40 C.F.R. Part 112 of this title. In complying with 40 C.F.R. Part 112, the owner or operator shall read “oil(s)” as “PCB(s)” whenever it appears. The exemptions for storage capacity, 40 C.F.R. 112.1(d)(2), and the amendment of SPCC plans by the Regional Administrator, 40 C.F.R. 112.4, shall not apply unless some fraction of the liquids stored in the container are oils as defined by section 311 of the Clean Water Act.	Renewal Application, Section 4.2; Section 10.1.1	Yes/Yes	The Facility’s SPCC is found in Renewal Application, Attachment 12
761.65(c)(8) Storage items managed by date	PCB Items shall be dated on the item when they are removed from service for disposal. The storage shall be managed so that the PCB Items can be located by this date. Storage containers provided in § 761.65(c)(7), shall have a record that includes for each batch of PCBs the quantity of the batch and date the batch was added to the container. The record shall also include the date, quantity, and disposition of any batch of PCBs removed from the container.	Renewal Application, Section 10.1.1 TSCA Operation Plan, p. 2 Operation Plan Section 14.3(a)	Yes/Yes	



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
761.65(c)(9) Temporary storage	Bulk PCB remediation waste or PCB bulk product waste may be stored at the clean-up site or site of generation for 180 days subject to the [] conditions in [this section]:	N/R	—	
761.65(c)(10) Records	Owners or operators of storage facilities shall establish and maintain records as provided in § 761.180.	TSCA Operation Plan, pages 2-3	Yes/Yes	See “Recordkeeping and Reporting Requirement Checklist” in Appendix D-3.
761.65(d)(1) Approval of commercial storers of PCB waste	All commercial storers of PCB waste shall have interim approval to operate commercial facilities for the storage of PCB waste until August 2, 1990. Commercial storers of PCB waste are prohibited from storing any PCB waste at their facilities after August 2, 1990 unless they have submitted by August 2, 1990 a complete application for a final storage approval under § 761.65(d)(2). The period of interim approval shall continue until EPA makes a final decision on the storage application at which time such interim approval shall terminate.	N/A	—	KHF received a PCB storage approval under 40 C.F.R. 761.65(d)(7)(i) (Storage areas ancillary to TSCA-approved disposal facilities) on November 30, 1990.
761.65(d)(2) Agency determination required to issue final approval	The Regional Administrator for the region in which the storage facility is located shall grant written, final approval to engage in the commercial storage of PCB waste upon a determination by the Regional Administrator, that the criteria in § 761.65(d)(2)(i) through (d)(2)(vii) have been met by the applicant:	N/R	—	



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
761.65(d)(2) (i) Personnel qualifications	(i) The applicant, its principals, and its key employees responsible for the establishment or operation of the commercial storage facility are qualified to engage in the business of commercial storage of PCB waste.	N/R	—	See information under § 761.65(d)(3) below.
761.65(d)(2) (ii) Facility capacity	(ii) The facility possesses the capacity to handle the quantity of PCB waste which the owner or operator of the facility has estimated will be the maximum quantity of PCB waste that will be handled at any one time at the facility.	N/R	—	
761.65(d)(2) (iii) Certification of storage facility standards	(iii) The owner or operator of the unit has certified compliance with the storage facility standards in § 761.65(b) and (c)(7).	N/R	—	
761.65(d)(2) (iv) Storage closure plan	(iv) The owner or operator has developed a written closure plan for the facility that is deemed acceptable by the Regional Administrator under the closure plan standards of § 761.65(e).	N/R	—	
761.65(d)(2) (v) Storage financial assurance	(v) The owner or operator has included in the application for final approval a demonstration of financial responsibility for closure that meets the financial responsibility standards of § 761.65(g).	N/R	—	



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
761.65(d)(2) (vi) No unreasonable risk	(vi) The operation of the storage facility will not pose an unreasonable risk of injury to health or the environment.	N/R	—	
761.65(d)(2) (vii) Compliance history	(vii) The environmental compliance history of the applicant, its principals, and its key employees may be deemed to constitute a sufficient basis for denial of approval whenever in the judgment of the Regional Administrator that history of environmental civil violations or criminal convictions evidences a pattern or practice of noncompliance that demonstrates the applicant's unwillingness or inability to achieve and maintain compliance with the regulations.	N/R	—	
761.65(d)(3) Application content	Applicants for storage approvals shall submit a written application that includes any relevant information bearing upon the qualifications of the facility's principals and key employees to engage in the business of commercial storage of PCB waste. This information shall include, but is not limited to:	Renewal Application, Section 2.3	Yes/Yes	



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
761.65(d)(3) Application content	(i) The identification of the owner and the operator of the facility, including all general partners of a partnership, any limited partner of a partnership, any stockholder of a corporation or any participant in any other type of business organization or entity who owns or controls, directly or indirectly, more than 5 percent of each partnership, corporation, or other business organization and all officials of the facility who have direct management responsibility for the facility.	Renewal Application, Section 2.3	Yes/Yes	Chemical Waste Management, Inc. is a subsidiary of Waste Management Holdings, Inc. which is a subsidiary of Waste Management, Inc. (WM), a publicly traded corporation. The three shareholders holding more than 5% are all institutions. See WM, 2017 Annual Report, p. 23.
	(ii) The identification of the person responsible for the overall operations of the facility (i.e., a plant manager, superintendent, or a person of similar responsibility) and the supervisory employees who are or will be responsible for the operation of the facility.	Renewal Application, Section 2.3	Yes/Yes	
	(iii) Information concerning the technical qualifications and experience of the persons responsible for the overall operation of the facility and the employees responsible for handling PCB waste or other wastes.	Renewal Application, Section 2.3	Yes/Yes	



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
761.65(d)(3) Application content	(iv) Information concerning any past state or Federal environmental violations involving the same business or another business with which the principals or supervisory employees were affiliated directly that occurred within 5 years preceding the date of submission and which relate directly to violations that resulted in either a civil penalty (irrespective of whether the matter was disposed of by an adjudication or by a without prejudice settlement) or judgment of conviction whether entered after trial or a plea, either of guilt or nolo contendere or civil injunctive relief and involved storage, disposal, transport, or other waste handling activities.	Renewal Application Table 6	Yes/Yes	
	(v) A list of all companies currently owned or operated in the past by the principals or key employees identified in § 761.65(d)(3)(i) and (d)(3)(ii) that are or were directly or indirectly involved with waste handling activities.	761.65(d)(3) Application content	Yes/Yes	
	(vi) The owner's or operator's estimate of maximum PCB waste quantity to be handled at the facility.		Yes/Yes	
				<i>Enclosed building at PCB F/SU: 300 55-gallon drums (16,500 gallons) plus 7,500 gallons in one tank for a total of 24,000 gallons</i> <i>Outside containment area at PCB F/SU: 273 55-gallon drums (15,015 gallons) plus one 5000 gallon container for a total of 20,015 gallons</i>

Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
	(vii) A written statement certifying compliance with § 761.65(b) or (c) and containing a certification as defined in § 761.3.		Yes/Yes	
	(viii) A written closure plan for the facility, as described in § 761.65(e).			See review of Closure Plan requirements below.
	(ix) The current closure cost estimate for the facility, as described in § 761.65(f).			
	(x) A demonstration of financial responsibility to close the facility, as described in § 761.65(g).	Renewal Application, Section 14.2	Yes/Yes	See also, “Chemical Waste Management, Inc. - Kettleman Hills Facility, 22 CCR Financial Assurance For Closure & Post-Closure Costs.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Julie Mullins, DTSC. December 31, 2018 with enclosures. Chemical Waste Management, Inc.’s existing financial assurance mechanism is sufficient to demonstrate the required financial responsibility for closure of the PCB Flushing/Storage Unit under the Facility’s existing approvals. However, U.S. EPA (not DTSC) is the agency with authority over the closure requirements that is named in the instruments required under § 761.65(g). See Statement of Basis, section III.D.2.a.(5).



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
761.65(d)(4)	The written approval issued by EPA shall include, but not be limited to, the following:	N/R	—	
Satisfaction of requirements	(i) The determination that the applicant has satisfied the requirements set forth in § 761.65(d)(2), and a brief statement setting forth the basis for the determination.	N/R	—	
Storage closure plan	(ii) Incorporation of the closure plan submitted by the facility owner or operator and approved by EPA.	N/R	—	
Maximum storage capacity	(iii) A condition imposing a maximum PCB storage capacity which the facility shall not exceed during its PCB waste storage operations. The maximum storage capacity imposed under this condition shall not be greater than the estimated maximum inventory of PCB waste included in the owner's or operator's application for final approval.	N/R	—	
Other conditions	(iv) Such other conditions as deemed necessary by EPA to ensure that the operations of the PCB storage facility will not pose an unreasonable risk of injury to health or the environment.	N/R	—	



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
761.65(d)(5) Storage area exemption for transfer facilities	Storage areas at transfer facilities are exempt from the requirement to obtain approval as a commercial storer of PCB waste under § 761.65(d)(5), unless the same PCB waste is stored at these facilities for a period of time greater than 10 consecutive days between destinations.	N/A	—	KHF is not a transfer facility. 40 C.F.R. § 761.3 defines a transfer facility as any transportation-related facility including loading docks, parking areas, and other similar areas where shipments of PCB waste are held during the normal course of transportation.
761.65(d)(6) Possible exemption for storage areas at RCRA permitted facilities	Storage areas at RCRA-permitted facilities may be exempt from the separate TSCA storage approval requirements in § 761.65(d) upon a showing to the Regional Administrator's satisfaction that the facility's existing RCRA closure plan is substantially equivalent to this rule's closure plan standards, and that such facility's closure cost estimate and financial assurance demonstration account for maximum PCB waste inventories, and the requirements of § 761.65(d)(3)(i) through (d)(3)(v) and (d)(3)(vii) are met. A pay-in period of longer than 3 years after approval of the storage facility pursuant to this rule, will be acceptable to EPA if that pay-in period has already been established for a valid RCRA facility or previously approved TSCA facility.	N/R	—	This is an optional provision. U.S. EPA is not invoking this section. See Statement of Basis section III.D.



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
761.65(d)(7) Possible exemption for storage areas ancillary to approved disposal facilities	Storage areas ancillary to TSCA-approved disposal facilities may be exempt from a separate facility approval provided all of the following conditions are met:	N/R	—	This is an optional provision. U.S. EPA is not invoking this section. See Statement of Basis section III.D.
	(i) The current disposal approval contains an expiration date.	N/R	—	
	(ii) The current disposal approval's closure and financial responsibility conditions specifically extend to storage areas ancillary to disposal.	N/R	—	
	(iii) The current disposal approval's closure and financial responsibility conditions provide for annual adjustments for inflation, and for modification when changes in operation would affect closure costs.	N/R	—	
	(iv) The current disposal approval contains conditions on closure and financial responsibility that are at least as stringent as those in § 761.65(e) and (g). However, the provision for a 3-year closure trust pay-in period, as specified in § 761.65(g)(1)(i), would be waived in a case in which an approved TSCA facility or RCRA facility that covers PCB storage has a longer pay-in period for the trust.	N/R	—	



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
	(v) The current disposal approval satisfies the requirements of § 761.65(d)(3)(i) through (d)(3)(v).	N/R	—	
761.65(d)(8) Modification of deficient approvals for storage	The approval of any existing TSCA-approved disposal facility ancillary to a commercial storage facility that is deficient in any of the conditions of § 761.65(d)(7)(i) through (d)(7)(v) shall be called in by the Regional Administrator. The approval shall be modified to meet the requirements of § 761.65(d)(7) within 180 days of the effective date of this final rule, or a separate application for approval of the storage facility may be submitted to the Regional Administrator.	N/R	—	KHF's PCB disposal facility (Unit B-18) is not ancillary to a commercial storage facility, rather the storage facilities are ancillary to the disposal facility.
761.65(e)(1)	A commercial storer of PCB waste shall have a written closure plan that identifies the steps that the owner or operator of the facility shall take to close the PCB waste storage facility in a manner that eliminates the potential for post-closure releases of PCBs which may present an unreasonable risk to human health or the environment. An acceptable closure plan must include, at a minimum, all of the following:	Renewal Application, Section 14.1 Closure and Post-Closure Plan, section 2.7		See below. Note: Evaluation is for closure of the commercial storage unit (PCB Flushing/Storage unit). Closure and post-closure for landfills is addressed on Landfill Checklist (Appendix D-1).



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
Closure	(i) A description of how the PCB storage areas of the facility will be closed in a manner that eliminates the potential for post-closure releases of PCBs into the environment.	Renewal Application, Section 14.1 Closure and Post-Closure Plan, section 2.7		PCB F/SU will be completely demolished at time of closure. Soil will be tested and removed and backfilled if necessary to meet numerical cleanup standards. Closure Plan, Section 2.7.
Storage operations	(ii) An identification of the maximum extent of storage operations that will be open during the active life of the facility, including an identification of the extent of PCB storage operations at the facility relative to other wastes that will be handled at the facility.	Renewal Application, Section 4.1	Yes/Yes	
Maximum inventory	(iii) An estimate of the maximum inventory of PCB waste that could be handled at one time at the facility over its active life, and a detailed description of the methods or arrangements to be used during closure for removing, transporting, storing, or disposing of the facility's inventory of PCB waste, including an identification of any off-site facilities that will be used.	Closure Cost, Table A-3 (Quantities); page 6 and Table A-5 (off-site disposal facilities); Closure Plan, Section 2.7.2 (methods)	Yes/Yes	



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
Decontamination of storage facility	(iv) A detailed description of the steps needed to remove or decontaminate PCB waste residues and contaminated containment system components, equipment, structures, and soils during closure in accordance with the levels specified in the PCB Spills Cleanup Policy in 40 C.F.R. Part 761, Subpart G, including a description of the methods for sampling and testing of surrounding soils, and the criteria for determining the extent of removal or decontamination.	Closure Plan, section 2.7	Yes/Yes	PCB F/SU will be completely demolished at time of closure. Soil will be tested and removed and backfilled if necessary to meet numerical cleanup standards. Closure Plan, Section 2.7.
Other activities	(v) A detailed description of other activities necessary during the closure period to ensure that any post-closure releases of PCBs will not present unreasonable risks to human health or the environment. This includes activities such as ground-water monitoring, run-on and run-off control, and facility security.	Closure Plan, Section 4.0	Yes/Yes	
Schedule	(vi) A schedule for closure of each area of the facility where PCB waste is stored or handled, including the total time required to close each area of PCB waste storage or handling, and the time required for any intervening closure activities.	Closure Plan, Figure 3	Yes/Yes	



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
Expected year of closure	(vii) An estimate of the expected year of closure of the PCB waste storage areas, if a trust fund is opted for as the financial mechanism.	Closure Plan, section 3.0	Yes/Yes	Expected year of closure is not required because existing financial mechanism is not a trust fund that must receive payments sufficient to cover the cost of closure prior to the beginning of closure but rather a standby trust which is funded by a bond once closure commences. Should CWM opts for a trust fund as its financial mechanism, it will need to amend its application to include an estimate of the expected year of closure.
761.65(e)(2) Closure plan condition of approval	A written closure plan determined to be acceptable by EPA under § 761.65(e) shall become a condition of any approval granted under § 761.65(d).	N/R	—	
761.65(e)(3) Equivalent closure plans	A separate and new closure plan need not be submitted in cases where a facility is currently covered by a TSCA approval or a RCRA permit, upon a showing to the satisfaction of the Regional Administrator that the existing closure plan is substantially equivalent to closure plans required under § 761.65(d) through (g), and that the plan adequately accounts for PCB waste inventories.			



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
761.65(e)(4) Closure plan modifications	The commercial storer of PCB waste shall submit a written request to the Regional Administrator for a modification to its storage approval to amend its closure plan, whenever: (i) Changes in ownership, operating plans, or facility design affect the existing closure plan. (ii) There is a change in the expected date of closure, if applicable. (iii) In conducting closure activities, unexpected events require a modification of the approved closure plan.	N/R N/R N/R N/R	— — — —	
761.65(e)(5) Agency modifications of closure plans	The Regional Administrator may modify the existing closure plan under the conditions described in § 761.65(e)(4).	N/R	—	
761.65(e)(6) Closure schedule	Commercial storers of PCB waste shall comply with the following closure schedule: (i) The commercial storer shall notify in writing the Regional Administrator at least 60 days prior to the date on which final closure of its PCB storage facility is expected to begin.	Closure Plan, Figure 3	Yes/Yes	



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
	(ii) The date when a commercial storer of PCB waste “expects to begin closure” shall be no later than 30 days after the date on which the storage facility received its final quantities of PCB waste. For good cause shown, EPA may extend the date for commencement of closure for an additional 30-day period.	Closure Plan, Figure 3	Yes/Yes	
	(iii) Within 90 days after receiving the final quantity of PCB waste for storage, a commercial storer of PCB waste shall remove all PCB waste in storage at the facility from the facility in accordance with the approved closure plan. For good cause shown, EPA may approve a reasonable extension to the period for removal of the PCB waste.	Closure Plan, Figure 3	Yes/Yes	
	(iv) A commercial storer of PCB waste shall complete closure activities in accordance with the approved closure plan and within 180 days after receiving the final quantity of PCB waste for storage at the facility. For good cause shown, EPA may approve a reasonable extension to the closure period.	Renewal Application, Section 14.1; Closure Plan, Figure 3	Yes/Yes	



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
761.65(e)(7) Closure Facility cleanup	During the closure period, all contaminated system component equipment, structures, and soils shall be disposed of in accordance with the disposal requirements of 40 C.F.R. Part 761, Subpart D, or, if applicable, decontaminated in accordance with the levels specified in the PCB Spills Cleanup Policy at 40 C.F.R. Part 761, Subpart G. When PCB waste is removed from the storage facility during closure, the owner or operator becomes a generator of PCB waste subject to the generator requirements of 40 C.F.R. Part 761, Subpart J.	Closure Plan, section 2.7.2; Closure and Post-Closure Cost Estimate, Section 2.3.3.1 and Tables B-6, B-7, and B-8	Yes/Yes	
761.65(e)(8) Closure certification	Within 60 days of completion of closure of each facility for the storage of PCB waste, the commercial storer of PCB waste shall submit to the Regional Administrator, by registered mail, a certification that the PCB storage facility has been closed in accordance with the approved closure plan. The certification shall be signed by the owner or operator and by an independent registered professional engineer.	Closure Plan, Figure 3	Yes/Yes	A copy of the final closure certification report and plat map should be submitted to U.S. EPA.



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
761.65(f) Closure cost estimate	A commercial storer of PCB waste shall have a detailed estimate, in current dollars, of the cost of closing the facility in accordance with its approved closure plan. The closure cost estimate shall be in writing, be certified by the person preparing it (using the certification defined in § 761.3) and comply with all of the following criteria:	Closure Plan, p. i (certification); Closure and Post-Closure Cost Estimates	Yes/Yes	
Maximum cost of closure	(i) The closure cost estimate shall equal the cost of final closure at the point in the PCB storage facility's active life when the extent and manner of PCB storage operations would make closure the most expensive, as indicated by the facility's closure plan.	Closure and Post-Closure Cost Estimates, Section 2.3.3.1	Yes/Yes	
Third party	(ii) The closure cost estimate shall be based on the costs to the owner or operator of hiring a third party to close the facility, and the third party shall not be either a corporate parent or subsidiary of the owner or operator, or member in joint ownership of the facility.	Closure and Post-Closure Cost Estimates, Section 2.2	Yes/Yes	
Current market costs	(iii) The owner or operator shall include in the estimate the current market costs for off-site commercial disposal of the facility's maximum estimated inventory of PCB waste, except that on-site disposal costs may be used if on-site disposal capacity will exist at the facility at all times over the life of the PCB storage facility.	Closure and Post-Closure Cost Estimates, Section 2.3.3.1	Yes/Yes	



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
No salvage value	(iv) The closure cost estimate may not incorporate any salvage value that may be realized with the sale of wastes, facility structures or equipment, land, or other assets associated with the facility at the time of closure.	Closure and Post-Closure Cost Estimates, Section 2.2	Yes/Yes	
761.65(f)(2) Closure cost estimate Annual adjustment for inflation	During the active life of the PCB storage facility, the commercial storer of PCB waste shall adjust annually for inflation the closure cost estimate within 60 days prior to the anniversary date of the establishment of the financial instruments used to demonstrate financial responsibility for closure, except that owners or operators who use the financial test or corporate guarantee shall adjust their closure cost estimates for inflation within 30 days after the close of the storer's fiscal year. The adjustment may be made by recalculating the maximum costs of closure in current dollars, or by using an inflation factor derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its <i>Survey of Current Business</i> . The Implicit Price Deflator for Gross National Product is included in a monthly publication titled <i>Economic Indicators</i> , which is available from the Superintendent of Documents, Government Printing Office, Washington, DC	Renewal Application, Section 14.2	Yes/Yes	For the latest adjustment, see “Chemical Waste Management, Inc. – Kettleman Hills Facility 22 CCR Financial Assurance for Closure & Post-Closure Costs.” Letter, Reyna Verdin, CWM to Julie Mullins, DTSC. January 17, 2019.



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
	20402. The inflation factor used in the latter method is the result of dividing the latest published annual Deflator by the Deflator for the previous year. The adjustment to the closure cost estimate is then made by multiplying the most recent closure cost estimate by the latest inflation factor.			
761.65(f)(3) Closure cost estimate Adjustment for modifications	Where EPA approves a modification to the facility's closure plan, and that modification increases the cost of closure, the owner or operator shall revise the closure cost estimate no later than 30 days after the modification is approved. Any such revision shall also be adjusted for inflation in accordance with § 761.65(f)(2).	N/R	—	
761.65(f)(4) Closure cost estimate Copy at facility	The owner or operator of the facility shall keep at the facility during its operating life the most recent closure cost estimate, including any adjustments resulting from inflation or from modifications to the closure plan.	Renewal Application, Section 14.2	Yes/Yes	
761.65(g) Financial assurance for closure	A commercial storer of PCB waste shall establish financial assurance for closure of each PCB storage facility that he owns or operates. In establishing financial assurance for closure, the commercial storer of PCB waste may choose from the following financial assurance mechanisms or any combination of mechanisms:	Renewal Application, Section 14.2	Yes/Yes	



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
761.65(g)(1) Closure trust fund	The “closure trust fund,” as specified in 40 C.F.R. 264.143(a) except for §264.143(a)(3).	N/A	—	KHF does not use a closure trust fund as its financial assurance mechanism.
761.65(g)(2) Financial assurance for closure Surety bond (payment)	The “surety bond guaranteeing payment into a closure trust fund,” as specified in 40 C.F.R. §264.143(b) including the use of the surety bond instrument specified at §264.151(b) and the standby trust specified at §264.143(b)(3). The use of the surety bonds, surety bond instruments, and standby trust agreements specified in §§264.143(b) and 264.151(b) shall be deemed to be in compliance with this Subpart.	N/A	Yes/No	“Chemical Waste Management, Inc. - Kettleman Hills Facility, 22 CCR Financial Assurance For Closure & Post-Closure Costs.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Julie Mullins, DTSC. December 31, 2018 with enclosures. Chemical Waste Management, Inc.’s existing financial assurance mechanism is sufficient to demonstrate the required financial responsibility for closure of the PCB Flushing/Storage Unit under the Facility’s existing approvals. However, U.S. EPA (not DTSC) is the agency with authority over the closure requirements that is named in the instruments required under § 761.65(g). See Statement of Basis, section III.D.2.a.(5).



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
761.65(g)(3) Financial assurance for closure Surety bond (performance)	(i) The “surety bond guaranteeing performance of closure,” as specified at 40 C.F.R. §264.143(c) except for §264.143(c)(5). The submission and use of the surety bond instrument specified at §264.151(c) and the standby trust specified at §264.143(c)(3) shall be deemed to be in compliance with the requirements under this Subpart relating to the use of surety bonds and standby trust funds.	N/A	—	KHF does not use a surety bond guaranteeing performance of closure as its financial assurance mechanism.
761.65(g)(4) Financial assurance for closure Letter of credit	(i) The “closure letter of credit” specified in 40 C.F.R. §264.143(d), except for paragraph (d)(8). The submission and use of the irrevocable letter of credit instrument specified in §264.151(d) and the standby trust specified in §264.143(d)(3) shall be deemed to be in compliance with the requirements of this Subpart relating to the use of letters of credit and standby trust funds.	N/A	—	KHF does not use a closure letter of credit as its financial assurance mechanism.



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
761.65(g)(5) Financial assurance for closure Closure insurance	“Closure insurance,” as specified in 40 C.F.R. §264.143(e), utilizing the certificate of insurance for closure specified at §264.151(e). The use of closure insurance as specified in §264.143(e) and the submission and use of the certificate of insurance specified in §264.151(e) shall be deemed to be in compliance with the requirements of this Subpart relating to the use of closure insurance.	N/A	—	KHF does not use closure insurance as its financial assurance mechanism. It previously used closure insurance as its financial assurance mechanism but replaced it with surety bond guaranteeing payment into a closure trust fund as January 1, 2019. See notes under 761.65(g)(2) above.
761.65(g)(6) Financial assurance for closure Financial test	The “financial test and corporate guarantee for closure,” as described in 40 C.F.R. 264.143(f), including a letter signed by the owner's or operator's chief financial officer as specified at §264.151(f) and, if applicable, the written corporate guarantee specified at §264.151(h). The use of the financial test and corporate guarantee specified in §264.143(f), the submission and use of the letter specified in §264.151(f), and the submission and use of the written corporate guarantee specified at §264.151(h) shall be deemed to be in compliance with the requirements of this Subpart relating to the use of financial tests and corporate guarantees.	N/A	—	KHF does not use a financial test and corporate guarantee for closure as its financial assurance mechanism.



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
761.65(g)(7) Financial assurance for closure Corporate guarantee	The corporate guarantee as specified in §264.143(f)(10).	N/A	—	KHF does not use a corporate guarantee as its financial assurance mechanism.
761.65(g)(8) Financial assurance for closure Multiple mechanisms	The use of multiple financial mechanisms, as specified in §264.143(g) is permitted.	N/A	—	KHF currently uses a surety bond guaranteeing payment into a closure trust fund as its financial assurance mechanism but reserves the right to change mechanism.
761.65(g)(9) Financial assurance for closure Modifications	A modification to a facility storing PCB waste that increases the maximum storage capacity indicated in the permit requires that a new financial assurance mechanism be established or an existing one be amended. When such a modification occurs, the Director of the federal or state issuing authority must be notified in writing no later than 30 days from the completion of the modification. The new or revised financial assurance mechanism must be established and activated no later than 30 days after the Director of the federal or state issuing authority is notified of the completion of the modification, but prior to the use of the modified portion of the facility.	N/R	—	



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
761.65(h) Release of owner or operator from closure financial assurance	Within 60 days after receiving certifications from the owner or operator and an independent registered professional engineer that final closure has been completed in accordance with the approved closure plan, EPA will notify the owner or operator in writing that the owner or operator is no longer required by § 761.65(h) to maintain financial assurance for final closure of the facility, unless EPA has reason to believe that final closure has not been completed in accordance with the approved closure plan. EPA shall provide the owner or operator with a detailed written statement stating the reasons why EPA shall provide the owner or operator with a detailed written statement stating the reasons why he believed closure was not conducted in accordance with the approved closure plan.	N/R	—	
761.65(i)(1) Exemption for laboratories and samples	A laboratory is conditionally exempt from the notification and approval requirements for a commercial storer under § 761.65(d) through (h) when it stores samples held for disposal in a facility that complies with the standards in § 761.65(b)(1)(i) through (b)(1)(iv).	N/A	—	KHF is not a laboratory as defined by 40 C.F.R. 761.3.



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
761.65(i)(2) Exemption for laboratory samples	A laboratory sample is exempt from the manifesting requirements in § 761.208 when:	N/R	—	
	(i) The sample is being transported to a laboratory for the purpose of testing.	N/R	—	
	(ii) The sample is being transported back to the sample collector after testing.	N/R	—	
	(iii) The sample is being stored by the sample collector before transport to a laboratory for testing.	N/R	—	
	(iv) The sample is being stored in a laboratory before testing.	N/R	—	
	(v) The sample is being stored in a laboratory after testing but before it is returned to the sample collector.	N/R	—	
	(vi) The sample is being stored temporarily in the laboratory after testing for a specific purpose (for example, until conclusion of a court case or enforcement action where further testing of the sample may be necessary).	N/R	—	



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
761.65(i)(3) Exemption for laboratory samples – shipping	In order to qualify for the exemption in § 761.65(i)(2)(i) and (i)(2)(ii), a sample collector shipping samples to a laboratory and a laboratory returning samples to a sample collector must:	N/R	—	
	(i) Comply with applicable U.S. Department of Transportation (DOT) or U.S. Postal Service (USPS) shipping requirements, found respectively in 49 40 C.F.R. 173.345 and U.S. Postal Regulations 652.2 and 652.3.	N/R	—	
	(ii) Assure that the following information accompanies the sample:	N/R	—	
	(A) The sample collector's name, mailing address, and telephone number.	N/R	—	
	(B) The laboratory's name, mailing address, and telephone number.	N/R	—	
	(C) The quantity of the sample.	N/R	—	
	(D) The date of shipment.	N/R	—	
	(E) A description of the sample.	N/R	—	
	(iii) Package the sample so that it does not leak, spill, or vaporize from its packaging.	N/R	—	



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
761.65(i)(4) Disposal of PCB laboratory samples	When the concentration of the PCB sample has been determined, and its use is terminated, the sample must be properly disposed. A laboratory must either manifest the PCB waste to a disposer or commercial storer, as required under § 761.208, retain a copy of each manifest, as required under § 761.209, and follow up on exception reporting, as required under § 761.215(a) and (b), or return the sample to the sample collector who must then properly dispose of the sample. If the laboratory returns the sample to the sample collector, the laboratory must comply with the shipping requirements set forth in § 761.65(i)(3)(i) through (i)(3)(iii).	N/R	—	
761.65(j) Changes in storage facility ownership	The date of transfer of interim status or final approval shall be the date the EPA Regional Administrator provides written approval of the transfer. EPA will provide a final written decision within 90 days of receipt of the complete new or amended application. The Agency will approve the transfer if the following conditions are met:	N/R	—	Requirement will be a condition in any approval.
761.65(j)(1) Changes in storage facility ownership	The transferee has established financial assurance for closure pursuant to § 761.65(g) using a mechanism effective as of the date of final approval so that there will be no lapse in financial assurance for the transferred facility.	N/R	—	



Cite	Federal Toxic Substances Control Act (TSCA) Regulation	Cite in Application	Complete/ Acceptable?	Additional Cites/Notes
761.65(j)(2) Changes in storage facility ownership	The transferor or transferee has resolved any deficiencies (e.g., technical operations, closure plans, cost estimates, etc.) the Agency has identified in the transferor's application.	N/R	—	
761.65(k) Exemption for States and the Federal Government	States and the Federal Government are exempt from the requirements of § 761.65(f) and (g).	N/R	—	

N/A – REGULATORY PROVISION DOES NOT APPLY TO THE FACILITY.

N/R – REGULATORY PROVISION IS EITHER OPTIONAL, APPLIES TO EPA, OR OTHERWISE DOES NOT NEED TO BE ADDRESSED IN THE APPLICATION



Referenced Documents:

1. “Amendment to the Approvals to Operate Chemical Waste Landfill for PCB Disposal.” U.S. EPA Region 9. November 30, 1990.
2. “Hazardous Waste Facility Permit - Chemical Waste Management, Inc. Kettleman Hills Facility (Permit Number: 02-SAC-03).” California Department of Toxic Substances Control. Effective June 16, 2003 (modified May 5, 2005, July 25, 2006, September 21, 2007, and May 21, 2014)
3. “Spill Prevention Control and Countermeasure Plan (SPCC) prepared for Chemical Waste Management, Inc. Kettleman Hills Facility.” Golder Associates, Inc. and Waste Management. October 2016.
4. “Notice of Annual Meeting and Proxy Statement and Annual Report on Form 10-K for the Year Ended December 31, 2017.” Waste Management. March 27, 2018.
5. “Chemical Waste Management, Inc. - Kettleman Hills Facility, 22 CCR Financial Assurance For Closure & Post-Closure Costs.” Letter, Reyna Verdin, Chemical Waste Management, Inc. to Julie Mullins, DTSC. December 31, 2018 with enclosures.
6. “Chemical Waste Management, Inc. – Kettleman Hills Facility 22 CCR Financial Assurance for Closure & Post-Closure Costs.” Letter, Reyna Verdin, CWM to Julie Mullins, DTSC. January 17, 2019.



**Appendix D-3 –
Review Checklist for 40 C.F.R. Part 761 Requirements for Recordkeeping and Reporting
October 1, 2018 TSCA Renewal Application for
Chemical Waste Management Kettleman Hills Facility (EPA I.D. CAT 000 646 117)
Kettleman City, California
Toxic Substances Control Act Requirements
40 C.F.R. Part 761**

This Checklist documents how Chemical Waste Management’s (“CWM”) application to renew and modify its Approval (permit) to store and treat polychlorinated biphenyls (“PCB”) waste at its Kettleman Hills Facility (“Facility”) meets the requirements of the Toxic Substances Control Act (“TSCA”) regulations at 40 C.F.R. Part 761. It is based on U.S. EPA’s review of the renewal application, titled “TSCA Permit Renewal Application, Chemical Waste Management, Inc., Kettleman Hills Facility” Revision 3: October 1, 2018 (“Renewal Application”). This Checklist identifies if the required information is present and complete, whether the information is acceptable, and where the information can be found in the Renewal Application.

Documents frequently referenced in the checklist are listed below. A complete list of references is provided at the end of the checklist.

TSCA Operation Plan: “TSCA Operation Plan, Landfill B-18 Phases I, II, and III; PCB Building and Outside Containment Area.” Chemical Waste Management, Inc. Revision 3: October 1, 2018.



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
Subpart J—General Records and Reports				
761.180 Records and monitoring.	40 C.F.R. § 761.180 contains recordkeeping and reporting requirements that apply to PCBs, PCB Items, and PCB storage and disposal facilities that are subject to the requirements of 40 C.F.R. Part 761.			
761.180(a) Records and monitoring.	PCBs and PCB Items in service or projected for disposal at facilities other than commercial storer or disposer of PCB waste.	N/A	—	The Kettleman Hills Facility is a disposer and commercial storer of PCBs; therefore, this section does not apply.
761.180(b) Records and monitoring for disposers and commercial storers of PCB waste.	<i>Disposers and commercial storers of PCB waste.</i> Beginning February 5, 1990, each owner or operator of a facility used for the commercial storage or disposal of PCBs and PCB Items shall: - Maintain annual records on the disposition of all PCBs and PCB items at the facility - The annual records shall be maintained for at each facility for at least 3 years after the facility is no longer used for the storage or disposal of PCBs and PCB Item.	TSCA Operation Plan, p. 2 TSCA Operation Plan, p. 2 TSCA Operation Plan, p. 2	Yes/Yes Yes/Yes Yes/Yes	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.180(b) Records and monitoring for disposers and commercial storers of PCB waste.	○ The annual records shall be available at the facility for inspection by authorized representatives of the EPA.	TSCA Operation Plan, p. 2	Yes/Yes	
	● Prepare and maintain a written annual document log that includes the information required by § 761.180(b)(2) for PCBs and PCB Items that were handled as PCB waste at the facility.	TSCA Operation Plan, p. 2	Yes/Yes	
	○ The written annual document log shall be prepared by July 1 for the previous calendar year (January through December).	TSCA Operation Plan, p. 2	Yes/Yes	
	○ The written annual document log shall be maintained at each facility for at least 3 years after the facility is no longer used for the storage or disposal of PCBs and PCB Items [.]	TSCA Operation Plan, p. 2	Yes/Yes	
	● The written annual document log shall be available at the facility for inspection by authorized representatives of the EPA.	TSCA Operation Plan, p. 2	Yes/Yes	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.180(b) Records and monitoring for disposers and commercial storers of PCB waste.	From the written annual document log the owner or operator of a facility must prepare the annual report containing the information required by § 761.180(b)(3)(i) through (b)(3)(vi) for PCBs and PCB Items that were handled as PCB waste at the facility during the previous calendar year (January through December).	TSCA Operation Plan, p. 2	Yes/Yes	
	The annual report must be submitted by July 15 of each year for the preceding calendar year.	TSCA Operation Plan, p. 2	Yes/Yes	
	If the facility ceases commercial PCB storage or disposal operations, the owner or operator of the facility shall provide at least 60-days advance written notice to the Regional Administrator for the region in which the facility is located of the date the facility intends to begin closure.	TSCA Operation Plan, p. 2	Yes/Yes	
761.180(b)(1) Annual Records	The annual records shall include the following:	TSCA Operation Plan, p. 2	Yes/Yes	
	(i) All signed manifests generated or received at the facility during the calendar year.	TSCA Operation Plan, p. 2	Yes/Yes	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.180(b)(1) Annual Records	(ii) All Certificates of Disposal that have been generated or received by the facility during the calendar year.	TSCA Operation Plan, p. 2	Yes/Yes	
	(iii) Records of inspections and cleanups performed in accordance with § 761.65(c)(5).	TSCA Operation Plan, p. 2	Yes/Yes	
761.180(b)(2) Annual Log	The written annual document log shall include the following:	TSCA Operation Plan, p. 2	Yes/Yes	
	(i) The name, address, and EPA identification number of the storage or disposal facility covered by the annual document log and the calendar year covered by the annual document log.	TSCA Operation Plan, p. 2	Yes/Yes	
	(ii) For each manifest generated or received by the facility during the calendar year, the unique manifest number and the name and address of the facility that generated the manifest and the following information:	TSCA Operation Plan, p. 2	Yes/Yes	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.180(b)(2) Annual Log	(A) For bulk PCB waste (<i>e.g.</i> , in a tanker or truck), its weight in kilograms, the first date PCB waste placed in the tanker or truck was removed from service for disposal, the date it was received at the facility, the date it was placed in transport for off-site disposal (if applicable), and the date of disposal, (if known).	TSCA Operation Plan, p. 2	Yes/Yes	
	(B) The serial number or other means of identifying each PCB Article, not in a PCB Container or PCB Article Container, the weight in kilograms of the PCB waste in the PCB Article, the date it was removed from service for disposal, the date it was received at the facility, the date it was placed in transport for off-site disposal (if applicable), and the date of disposal (if known).	TSCA Operation Plan, p. 2	Yes/Yes	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.180(b)(2) Annual Log	(C) The unique number assigned by the generator identifying each PCB Container, a description of the contents of each PCB Container, such as liquid, soil, cleanup debris, etc., including the total weight of the PCB waste in kilograms in each PCB Container, the first date PCB waste placed in each PCB Container was removed from service for disposal, the date it was received at the facility, the date each PCB Container was placed in transport for off-site storage or disposal (as applicable), and the date the PCB Container was disposed of (if known).	TSCA Operation Plan, p. 2	Yes/Yes	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.180(b)(2) Annual Log	(D) The unique number assigned by the generator identifying each PCB Article Container, a description of the contents of each PCB Article Container, such as pipes, capacitors, electric motors, pumps, etc., including the total weight in kilograms of the PCB waste in each PCB Article Container, the first date a PCB Article placed in each PCB Article Container was removed from service for disposal, the date it was received at the facility, the date each PCB Article Container was placed in transport for off-site storage or disposal (as applicable), and the date the PCB Article Container was disposed of (if known).	TSCA Operation Plan, p. 2	Yes/Yes	
	(E) Disposers of PCB waste shall include the confirmed date of disposal for items in § 761.180(b)(2)(ii)(A) through (b)(2)(ii)(D).	TSCA Operation Plan, p. 2	Yes/Yes	
	(iii) For any PCB waste disposed at a facility that generated the PCB waste or any PCB waste that was not manifested to the facility, the information required under § 761.65(b)(2)(ii)(A) through (b)(2)(ii)(E).	TSCA Operation Plan, p. 2	Yes/Yes	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.180(b)(3)	The owner or operator of a PCB disposal facility (including an owner or operator who disposes of his/her own waste and does not receive or generate manifests) or a commercial storage facility shall submit an annual report, which briefly summarizes the records and annual document log required to be maintained and prepared under § 761.180(b)(1) and (b)(2) to the EPA Regional Administrator of the Region in which the facility is located by July 15 of each year, beginning with July 15, 1991. The annual report shall contain no confidential business information. The annual report shall consist of the information listed in § 761.180(b)(3)(i) through (b)(3)(vi).	TSCA Operation Plan, p. 2	Yes/Yes	CWMI submitted its most recent annual report for the Kettleman Hills Facility on July 11, 2019. See “Re: Chemical Waste Management, Inc., (CWMI) Kettleman Hills Facility (KHF) CAT 000 646 117 2017 PCB Annual Report.” Letter, Tracy Reddick, Waste Management, Inc. to Regional Administrator Region 9, July 11, 2019.
	(i) The name, address, and EPA identification number of the facility covered by the annual report for the calendar year.	TSCA Operation Plan, p. 2	Yes/Yes	
	(ii) A list of the numbers of all signed manifests of PCB waste initiated or received by the facility during that year.	TSCA Operation Plan, p. 2	Yes/Yes	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.180(b)(3)	(iii) The total weight in kilograms of bulk PCB waste, PCB waste in PCB Transformers, PCB waste in PCB Large High or Low Voltage Capacitors, PCB waste in PCB Article Containers, and PCB waste in PCB Containers in storage at the facility at the beginning of the calendar year, received or generated at the facility, transferred to another facility, or disposed of at the facility during the calendar year. The information must be provided for each of these categories, as appropriate.	TSCA Operation Plan, p. 2	Yes/Yes	
	(iv) The total number of PCB Transformers, the total number of PCB Large High or Low Voltage Capacitors, the total number of PCB Article Containers, and the total number of PCB Containers in storage at the facility at the beginning of the calendar year, received or generated at the facility, transferred to another facility, or disposed of at the facility during the calendar year. The information must be provided for each of these categories, as appropriate.	TSCA Operation Plan, p. 2	Yes/Yes	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.180(b)(3)	(v) The total weight in kilograms of each of the following PCB categories: bulk PCB waste, PCB waste in PCB Transformers, PCB waste in PCB Large High or Low Voltage Capacitors, PCB waste in PCB Article Containers, and PCB waste in PCB Containers remaining in storage for disposal at the facility at the end of the calendar year.	TSCA Operation Plan, p. 2	Yes/Yes	CWMI submitted its most recent annual report for the Kettleman Hills Facility on July 11, 2019. See “Re: Chemical Waste Management, Inc., (CWMI) Kettleman Hills Facility (KHF) CAT 000 646 117 2017 PCB Annual Report.” Letter, Tracy Reddick, Waste Management, Inc. to Regional Administrator Region 9, July 11, 2019.
	(vi) The total number of PCB Transformers, the total number of PCB Large High or Low Voltage Capacitors, the total number of PCB Article Containers, and the total number of PCB Containers remaining in storage for disposal at the facility at the end of the calendar year.	TSCA Operation Plan, p. 2	Yes/Yes	
	(vii) The requirement to submit annual reports to the Regional Administrator continues until the submission of the annual report for the calendar year during which the facility ceases PCB storage or disposal operations. Storage operations have not ceased until all PCB waste, including any PCB waste generated during closure, has been removed from the facility.	TSCA Operation Plan, p. 2	Yes/Yes	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.180(b)(4)	Whenever a commercial storer of PCB waste accepts PCBs or PCB Items at his storage facility and transfers the PCB waste off-site to another facility for storage or disposal, the commercial storer of PCB waste shall initiate a manifest under Subpart K 40 C.F.R. Part 761, for the transfer of PCBs or PCB Items to the next storage or disposal facility.	TSCA Operation Plan, p. 2	Yes/Yes	
761.180(b)(5)	For purposes of § 761.180(b)(5), PCB Voltage Regulators shall be recorded and reported as PCB Transformers.	N/R	—	
761.180(c)	40 C.F.R. § 761.180(c) pertain to records for incinerators	N/A	—	
761.180(d) Records for Chemical Waste Landfills	Each owner or operator of a PCB Chemical Waste Landfill facility shall collect and maintain until at least 20 years after the Chemical Waste Landfill is no longer used for the disposal of PCBs the following information in addition to the information required in § 761.180(b) of this section:	TSCA Operation Plan, p. 3	Yes/Yes	
761.180(d)(1)	(1) Any water analysis obtained in compliance with § 761.180(b); and	TSCA Operation Plan, p. 3	Yes/Yes	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.180(d)(2)	(2) any operations records including burial coordinates of wastes obtained in compliance with § 761.75(b)(8)(ii).	TSCA Operation Plan, p. 3	Yes/Yes	
761.180(e)	40 C.F.R. § 761.180(e) pertain to records for high efficiency boiler facilities.	N/A	—	
761.180(f)	Retention of special records by storage and disposal facilities. In addition to the information required to be maintained under § 761.180(b), (c), (d) and (e), each owner or operator of a PCB storage or disposal facility (including high efficiency boiler operations) shall collect and maintain for the time period specified in § 761.180(b) the following data:	TSCA Operation Plan, p 3	Yes/Yes	
761.180(f)(1)	All documents, correspondence, and data that have been provided to the owner or operator of the facility by any state or local government agency and that pertain to the storage or disposal of PCBs and PCB Items at the facility.	TSCA Operation Plan, p 3	Yes/Yes	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.180(f)(2)	All documents, correspondence, and data that have been provided by the owner or operator of the facility to any state or local government agency and that pertain to the storage or disposal of PCBs and PCB Items at the facility.	TSCA Operation Plan, p 3	Yes/Yes	
761.180(f)(3)	Any applications and related correspondence sent by the owner or operator of the facility to any local, State, or federal authorities in regard to waste water discharge permits, solid waste permits, building permits, or other permits or authorizations such as those required by § 761.70(d) and 761.75(c).	TSCA Operation Plan, p 3	Yes/Yes	
Subpart K—PCB Waste Disposal Records and Reports				
761.202(a) EPA Identification Numbers.	<i>General.</i> Any Generator, Commercial Storer, Transporter, or Disposer of PCB waste who is required to have an EPA Identification Number under Subpart K must notify EPA of his/her PCB waste handling activities, using the notification procedures and form described in § 761.205. EPA will confirm the EPA Identification Number of facilities already assigned one, and will assign an EPA Identification Number to facilities that do not have one.	—	Yes/Yes	CWMI filed the required EPA Notification Form 7710–53 for the Facility on February 22, 1990 and listed its type of PCB activities as generator, storer, and disposer. The Facility’s EPA ID number is CAT 000 646 117.



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.202(b)	<i>Prohibitions.</i> After June 4, 1990:	—	Yes/Yes	CWMI obtained the PCB EPA ID number for the Kettleman Hills Facility prior to June 4, 1990. See note for § 761.202(a).
761.202(b)(1) EPA Identification Numbers.	A Generator of PCB waste shall not: (i) Process, store, dispose of, transport, or offer for transportation PCB waste without having received an EPA Identification Number from the Agency. A Generator of PCB waste who is exempted from notification under § 761.205(c)(1) or who notifies EPA in a timely manner under § 761.205(c)(2)(i), but has not yet received a unique identification number, shall be regarded as having received from EPA the identification number “40 CFR. PART 761.” (ii) Offer the PCB waste to Transporters, Disposers, or Commercial Storers of PCB waste who have not received an EPA Identification Number.	N/R N/R	Yes/Yes —	CWMI obtained the PCB EPA ID number for the Kettleman Hills Facility prior to June 4, 1990. See note for § 761.202(a).
761.202(b)(2)	A Transporter of PCB waste shall not: (i) Transport PCB waste without having received an EPA Identification Number from EPA.	N/A N/A	— —	CWMI is not a transporter of PCB waste



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
	(ii) Deliver PCB waste to Transporters, Disposers, or Commercial Storers of PCB waste that have not received an EPA Identification Number.	N/A	—	
761.202(b)(3)	A Commercial Storer of PCB waste shall not accept any PCB waste for storage without having received an EPA Identification Number from EPA.	N/R	Yes/Yes	CWMI obtained the PCB EPA ID number for the Kettleman Hills Facility prior to June 4, 1990. See note for § 761.202(a).
761.202(b)(4)	A Disposer of PCB waste shall not accept any PCB waste for disposal without having received an EPA Identification Number from EPA. A Disposer of PCB waste who owns more than one disposal facility or mobile treatment unit shall not accept waste unless the Disposer has received an EPA Identification Number for each facility or mobile unit.	N/R	Yes/Yes	CWMI obtained the PCB EPA ID number for the Kettleman Hills Facility prior to June 4, 1990. See note for § 761.202(a).



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.202(c)	<i>PCB waste handled prior to effective date of Subpart K. Generators (other than Generators exempt from notification under § 761.205(c)(1)), Commercial Storers, Transporters, and Disposers of PCB waste who are required to have EPA Identification Numbers under Subpart K, and who were engaged in PCB waste handling activities on or prior to February 5, 1990, are not subject to the prohibitions of § 761.202(b) if they have applied for an EPA Identification Number in accordance with the applicable notification procedures of § 761.205. Such persons shall use the EPA Identification Number “40 CFR PART 761,” or a number assigned to the persons by EPA or a state under RCRA, until EPA issues to such persons a specific identification number under § 761.205(a), (b), or (c).</i>	N/R	—	Obsolete provision



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.202(d)	<i>PCB waste first handled after effective date of Subpart K. Generators (other than Generators exempt from notification under § 761.205(c)(1)), Commercial Storers, Transporters, and Disposers of PCB waste who are required to have EPA Identification Numbers under Subpart K, and who first engage in PCB waste activities after February 5, 1990, are subject to the prohibitions in § 761.202(b).</i>	—	Yes/Yes	CWMI obtained the PCB EPA ID number for the Kettleman Hills Facility prior to June 4, 1990. See note for § 761.202(a).
761.205(a)(1) Notification of PCB Waste Activity (EPA Form 7710–53).	All Commercial Storers, Transporters, and Disposers of PCB waste who were engaged in PCB waste handling activities on or prior to February 5, 1990 shall notify EPA of their PCB waste activities by filing EPA Form 7710–53 with EPA by no later than April 4, 1990. Upon receiving the notification form, EPA will assign an EPA Identification Number to each entity that notifies.	—	Yes/Yes	CWMI filed the required EPA Notification Form 7710–53 for the Facility on February 22, 1990 and listed its type of PCB activities as storer and disposer. The Facility's EPA ID number is CAT 000 646 117.



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.205(a)(2)	All Generators (other than Generators exempt from notification under § 761.205(c)(1)), Commercial Storers, Transporters, and Disposers of PCB waste who first engage in PCB waste handling activities after February 5, 1990, shall notify EPA of their PCB waste activities by filing EPA Form 7710–53 with EPA prior to engaging in PCB waste handling activities.	N/A	—	CWMI began PCB waste handling operations at the Kettleman Hills Facility prior to February 5, 1990.
761.205(a)(3)	Any person required to notify EPA under this section shall file with EPA Form 7710–53. Copies of EPA Form 7710–53 are available from t EPA’s website at http://www.epa.gov/pcb , or from the Program Management, Communications, and Analysis Office, Office of Resource Conservation and Recovery (5305P), 1200 Pennsylvania Ave., NW., Washington, DC 20460-0001. Descriptive information and instructions for filling in the form are included in § 761.205(a)(4)(i) through (vii).	—	Yes/Yes	CWMI filed the required EPA Notification Form 7710–53 for the Facility on February 22, 1990 and listed its type of PCB activities as storer and disposer. The Facility’s EPA ID number is CAT 000 646 117.
761.205(a)(4)	All of the following information shall be provided to EPA on Form 7710–53: [List removed from checklist]	—	Yes/Yes	CWMI filed the required EPA Notification Form 7710–53 for the Facility on February 22, 1990 and listed its type of PCB activities as storer and disposer. The Facility’s EPA ID number is CAT 000 646 117.



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.205(b)	Generators (other than those Generators exempt from notification under § 761.205(c)(1)), Commercial Storers, Transporters, and Disposers of PCB waste who have previously notified EPA or a state of hazardous waste activities under RCRA shall notify EPA of their PCB waste activities under Part 761 by filing EPA Form 7710–53 with EPA by no later than April 4, 1990. The notification shall include the EPA Identification Number previously issued by EPA or the state and upon receipt of the notification, EPA shall verify and authorize the use of the previously issued identification number for PCB waste activities.	—	Yes/Yes	CWMI filed the required EPA Notification Form 7710–53 for the Facility on February 22, 1990 and listed its type of PCB activities as storer and disposer. The Facility’s EPA ID number is CAT 000 646 117.
761.205(c)(1)	Generators of PCB waste need not notify EPA and receive unique EPA Identification Numbers under this section, unless their PCB waste activities are described in § 761.205(c)(2). Generators exempted from notifying EPA under § 761.205(c)(1) shall use the generic identification number “40 C.F.R. PART 761” on the Manifests, records, and reports which they shall prepare under Subpart K, unless such Generators elect to use a unique EPA Identification Number previously assigned to them under RCRA by EPA or a State.	—	Yes/Yes	CWMI filed the required EPA Notification Form 7710–53 for the Facility on February 22, 1990 and listed its type of PCB activities as storer and disposer. The Facility’s EPA ID number is CAT 000 646 117



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.205(c)(2)	Generators of PCB waste who use, own, service, or process PCBs or PCB Items shall notify EPA of their PCB waste activities only if they own or operate PCB storage facilities subject to the storage requirements of § 761.65(b) or (c)(7). Such Generators shall notify EPA in the following manner:	—	Yes/Yes	CWMI filed the required EPA Notification Form 7710–53 for the Facility on February 22, 1990 and listed its type of PCB activities as storer and disposer. The Facility’s EPA ID number is CAT 000 646 117
	(i) Generators storing PCB waste subject to the storage requirements of § 761.65(b) or (c)(7) shall notify EPA by filing EPA Form 7710–53 with EPA by no later than April 4, 1990.	—	Yes/Yes	CWMI filed the required EPA Notification Form 7710–53 for the Facility on February 22, 1990 and listed its type of PCB activities as storer and disposer. The Facility’s EPA ID number is CAT 000 646 117
	(ii) Generators who desire to commence storage of PCB waste after February 5, 1990 shall notify EPA and receive an EPA Identification Number before they may commence storage of PCBs at their facilities established under § 761.65(b) or (c)(7).	—	Yes/Yes	CWMI filed the required EPA Notification Form 7710–53 for the Facility on February 22, 1990 and listed its type of PCB activities storer and disposer. The Facility’s EPA ID number is CAT 000 646 117
	(iii) A separate notification shall be submitted to EPA for each PCB storage facility owned or operated by Generators of PCB waste. Upon receiving these notifications, EPA will assign Generators unique EPA Identification Numbers for each storage facility notifying EPA under this section.	—	Yes/Yes	CWMI filed the required EPA Notification Form 7710–53 for the Facility on February 22, 1990 and listed its type of PCB activities as storer and disposer. The Facility’s EPA ID number is CAT 000 646 117



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.205(d)	Persons required to notify under this section shall file EPA Form 7710–53 with EPA by mailing the form to the following address: Documents Control Officer, Office Resource Conservation and Recovery (5305P), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460.	—	Yes/Yes	CWMI filed the required EPA Notification Form 7710–53 for the Facility on February 22, 1990 and listed its type of PCB activities as storer and disposer. The Facility's EPA ID number is CAT 000 646 117
761.205(e)	The requirements under this section to notify EPA and obtain EPA Identification Numbers shall in no case excuse compliance by any person subject to the 1-year limit on storage prior to disposal under § 761.65(a).	N/R	—	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.205(f)	When a facility has previously notified EPA of its PCB waste handling activities using EPA Form 7710–53 and those activities change, the Facility must resubmit EPA Form 7710-53 to reflect those changes no later than 30 days from when a change is made. Examples of when a PCB waste handler must renotify the Agency include, but are not limited to the following: the company changes location of the Facility; or the company had notified solely as engaging in a certain type of PCB waste handling activity and now wishes to engage in another PCB waste activity (e.g., previously only commercially stored PCB waste and now wishes to transport PCB waste).	N/R	—	
761.207(a) The manifest-general requirements.	A Generator who transports, or offers for transport PCB waste for commercial off-site storage or off-site Disposal, and Commercial Storage or disposal Facility who offers for transport a rejected load of PCB waste, must prepare a Manifest on EPA Form 8700-22, and, if necessary, a continuation sheet, according to the instructions included in the Appendix of 40 C.F.R. Part 262. The Generator shall specify:	TSCA Operation Plan, p. 2	Yes/Yes	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.207(a)(1)	For each bulk load of PCBs, the identity of the PCB waste, the earliest Date of Removal from Service for Disposal, and the weight in kilograms of the PCB waste. (Item 15-Special Handling Instructions box)	TSCA Operation Plan, p. 2	Yes/yes	
761.207(a)(2)	For each PCB Article Container or PCB Container, the unique identifying number, type of PCB waste (<i>e.g.</i> , soil, debris, small capacitors), earliest Date of Removal from Service for Disposal, and weight in kilograms of the PCB waste contained. (Item 15-Special Handling Instructions box)	TSCA Operation Plan, p. 2	Yes/Yes	
761.207(a)(3)	For each PCB Article not in a PCB Container or PCB Article Container, the serial number if available, or other identification if there is no serial number, the Date of Removal from Service for Disposal, and weight in kilograms of the PCB waste in each PCB Article. (Item 15-Special Handling Instructions box)	TSCA Operation Plan, p. 2	Yes/Yes	
761.207(b)	A Generator must designate on the Manifest one Facility which is approved to handle the PCB waste described on the Manifest.	TSCA Operation Plan, p. 2	Yes/Yes	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.207(c)	A Generator may also designate on the Manifest one Alternate Facility which is approved to handle his PCB waste in the event an emergency prevents delivery of the waste to the primary Designated Facility.	TSCA Operation Plan, p. 2	Yes/Yes	
761.207(d)	If the Transporter is unable to deliver the PCB waste to the Designated Facility or the Alternate Facility, the Generator must either designate another Facility or instruct the Transporter to return the PCB waste.	TSCA Operation Plan, p. 2	Yes/Yes	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.207(e)	The requirements § 761.207(e) apply only to PCB waste as defined in § 761.3. This includes PCB waste with PCB concentrations below 50 ppm where the PCB concentration below 50 ppm was the result of dilution; these PCB waste are required under § 761.1(b) to be managed as if they contained PCB concentrations of 50 ppm and above. An example of such a PCB waste is spill cleanup material containing <50 ppm PCBs when the spill involved material containing PCBs at a concentration of 50 ppm. However, there is no Manifest requirement for material currently below 50 ppm which derives from pre-April 18, 1978 spills of any concentration, pre-July 2, 1979 spills of <500 ppm PCBs, or materials decontaminated in accordance with § 761.79.	TSCA Operation Plan, p. 2	Yes/Yes	
761.207(f)	The requirements of Subpart K do not apply to the transport of PCB waste on a public or private right-of-way within or along the border of contiguous property under the control of the same person, even if such contiguous property is divided by a public or private right-of-way.	TSCA Operation Plan, p. 2	Yes/Yes	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.208(a)(1) Obtaining manifests.	A Generator may use Manifests printed by any source so long as the source of the printed form has received approval from EPA to print the Manifest under 40 C.F.R. 262.21(c) and (e). A registered source may be a [list removed from checklist]	TSCA Operation Plan, p. 2	Yes/Yes	
761.208(a)(2)	A Generator must determine whether the Generator state or the consignment state for a shipment regulates PCB waste as a State-regulated hazardous waste. Generators also must determine whether the consignment state or Generator state requires the Generator to submit any copies of the Manifest to these states. In cases where the Generator must supply copies to either the Generator's state or the consignment state, the Generator is responsible for supplying legible photocopies of the Manifest to these states.	TSCA Operation Plan, p. 2	Yes/Yes	
761.209 Number of copies of a manifest.	The Manifest consists of at least the number of copies which will provide the Generator, each Transporter, and the owner or operator of the Designated Facility with one copy each for their records and another copy to be returned to the Generator.	TSCA Operation Plan, p. 2	Yes/Yes	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.210(a) Manifest-Generator requirements	The Generator must:	TSCA Operation Plan, p. 2	Yes/Yes	
761.210(a)(1)	Sign the Manifest certification by hand; and	TSCA Operation Plan, p. 2	Yes/Yes	
761.210(a)(2)	Obtain the handwritten signature of the initial Transporter and date of acceptance on the Manifest; and	TSCA Operation Plan, p. 2	Yes/Yes	
761.210(a)(3)	Retain one copy, in accordance with § 761.214(a)(1).	TSCA Operation Plan, p. 2	Yes/Yes	
761.210(b)	The Generator must give the Transporter the remaining copies of the Manifest.	TSCA Operation Plan, p. 2	Yes/Yes	
761.210(c)	For shipments of PCB waste within the United States solely by water (bulk shipments only), the Generator must send three copies of the Manifest dated and signed in accordance with this section to the owner or operator of the Designated Facility. Copies of the Manifest are not required for each Transporter.	N/A	—	The Kettleman Hills Facility does not ship solely by water.



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.210(d)	For rail shipments of PCB waste within the United States which originate at the site of generation, the Generator must send at least three copies of the Manifest dated and signed in accordance with this section to:	N/A	—	The Kettleman Hills Facility does not receive waste by rail.
761.210(e) Rejected Shipments	For rejected shipments of PCB waste that are returned to the Generator by the Designated Facility (following the procedures of § 761.215(f)), the Generator must:	TSCA Operation Plan, p. 2	Yes/Yes	
761.210(e)(1)	Sign either: (i) Item 20 of the new Manifest if a new Manifest is used for the returned shipment; or (ii) Item 18c of the original Manifest if the original Manifest is used for the returned shipment;	TSCA Operation Plan, p. 2	Yes/Yes	
761.210(e)(2)	Provide the Transporter a copy of the Manifest;	TSCA Operation Plan, p. 2	Yes/Yes	
761.210(e)(3)	Within 30 days of delivery of the rejected shipment, send a copy of the Manifest to the Designated Facility that returned the shipment to the Generator; and	TSCA Operation Plan, p. 2	Yes/Yes	
761.210(e)(4)	Retain at the Generator's site a copy of each Manifest for at least three years from the date of delivery.	TSCA Operation Plan, p. 2	Yes/Yes	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.211(a)(1) Manifest system-Transporter requirements.	A Transporter shall not accept PCB waste from a Generator unless it is accompanied by a Manifest signed by the Generator in accordance with § 761.210(a)(1), except that a Manifest is not required if any one of the following conditions exists:	N/A	—	The Kettleman Hills Facility is not a transporter of PCB waste as defined in 40 C.F.R. § 761.3.
761.211(b)	Before transporting the PCB waste, the Transporter must sign and date the Manifest acknowledging acceptance of the PCB waste from the Generator. The transporter must return a signed copy to the Generator before leaving the Generator's property.	N/A	—	The Kettleman Hills Facility is not a transporter of PCB waste as defined in 40 C.F.R. § 761.3.
761.211(c)	The Transporter shall ensure that the Manifest accompanies the PCB waste.	N/A	—	The Kettleman Hills Facility is not a transporter of PCB waste as defined in 40 C.F.R. § 761.3.
761.211(d)	A Transporter who delivers PCB waste to another Transporter or to the Designated Facility must:	N/A	—	The Kettleman Hills Facility is not a transporter of PCB waste as defined in 40 C.F.R. § 761.3.
761.211(e) Water transport	The requirements of § 761.211(c), (d) and (f) do not apply to water (bulk shipment) Transporters if: [subsection removed from checklist]	N/A	—	The Kettleman Hills Facility does not receive PCB waste by water transportation
761.211(f) Rail transport	or shipments involving rail transportation, the requirements of § 761.211(c), (d) and (e) do not apply and the following requirements do apply: [subsection removed from checklist]	N/A	—	The Kettleman Hills Facility does not receive PCB waste by rail transportation



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.212(a) Transporter compliance with the Manifest.	The Transporter must deliver the entire quantity of PCB waste which he has accepted from a Generator or a transporter to:	N/A	—	The Kettleman Hills Facility is not a transporter of PCB waste as defined in 40 C.F.R. § 761.3.
761.212(b)(1)	If the PCB waste cannot be delivered in accordance with § 761.212(a) because of an emergency condition other than rejection of the waste by the Designated Facility, then the Transporter must contact the Generator for further directions and must revise the Manifest according to the Generator's instructions.	N/A	—	The Kettleman Hills Facility is not a transporter of PCB waste as defined in 40 C.F.R. § 761.3.
761.212(b)(2)	If PCB waste is rejected by the Designated Facility while the Transporter is on the Facility's premises, then the transporter must obtain the following:	N/A	—	The Kettleman Hills Facility is not a transporter of PCB waste as defined in 40 C.F.R. § 761.3.
761.213(a)(1) Use of Manifest-Commercial storage and disposal facility requirements	If a Commercial Storage or Disposal Facility receives PCB waste accompanied by a Manifest, the owner, operator or his/her agent must sign and date the Manifest as indicated in § 761.213(a)(2) to certify that the PCB waste covered by the Manifest was received, that the PCB waste was received except as noted in the discrepancy space of the Manifest, or that the PCB waste was rejected as noted in the Manifest discrepancy space.	TSCA Operation Plan, p. 2	Yes/Yes	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.213(a)(2)	If a commercial storage or disposal Facility receives an off-site shipment of PCB waste accompanied by a Manifest, the owner or operator, or his agent, shall: (i) Sign and date, by hand, each copy of the Manifest; (ii) Note any discrepancies (as defined in § 761.215(a)) on each copy of the Manifest; (iii) Immediately give the Transporter at least one copy of the Manifest; (iv) Within 30 days of delivery, send a copy of the Manifest to the Generator; and (v) Retain at the Facility a copy of each Manifest for at least three years from the date of delivery.	TSCA Operation Plan, p. 2 — — — — —	Yes/Yes — — — — —	
761.213(b)	If a commercial storage or disposal Facility receives, from a rail or water (bulk shipment) Transporter, PCB waste which is accompanied by a shipping paper containing all the information required on the Manifest (excluding the EPA Identification Numbers, Generator's certification, and signatures), the owner or operator, or his agent, must... [subsection of § 761.213(b) omitted from checklist]	N/A	—	The Kettleman Hills Facility does not receive PCB waste by rail or water transportation



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.213(c)	Whenever an off-site shipment of PCB waste is initiated from a commercial storage or disposal Facility, the owner or operator of the commercial storage or disposal Facility shall comply with the Manifest requirements that apply to Generators of PCB waste (§ 761.207).	TSCA Operation Plan, p. 2	Yes/Yes	
761.214(a)(1) Retention of Manifest records.	A Generator must keep a copy of each Manifest signed in accordance with § 761.210(a) for three years or until he receives a signed copy from the Designated Facility which received the PCB waste. This signed copy must be retained as a record for at least three years from the date the waste was accepted by the initial Transporter. A Generator subject to annual document requirements under § 761.180 shall retain copies of each Manifest for the period required by § 761.180(a).	TSCA Operation Plan, p. 2	Yes/Yes	
761.214(a)(2)	A Transporter of PCB waste must keep a copy of the Manifest signed by the Generator, himself, and the next designated Transporter or the owner or operator of the Designated Facility for a period of three years from the date the PCB waste was accepted by the initial Transporter.	N/A	—	The Kettleman Hills Facility is not a transporter of PCB waste as defined in 40 C.F.R. § 761.3.



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.214(b)	For shipments delivered to the Designated Facility by water (bulk shipment), each water (bulk shipment) Transporter must retain a copy of the shipping paper containing all the information required in § 761.211(e)(2) for a period of three years from the date the PCB waste was accepted by the initial transporter.	N/A	—	The Kettleman Hills Facility does not receive PCB waste by water transportation
761.214(c)	For shipments of PCB waste by rail within the United States:	N/A	—	The Kettleman Hills Facility does not receive PCB waste by rail transportation
761.214(c)(1)	The initial rail Transporter must keep a copy of the Manifest and shipping paper with all the information required in § 761.211(f)(2) for a period of three years from the date the PCB waste was accepted by the initial transporter; and	N/A	—	The Kettleman Hills Facility does not receive PCB waste by rail transportation
761.214(c)(2)	The final rail Transporter must keep a copy of the signed Manifest (or the shipping paper if signed by the Designated Facility in lieu of the Manifest) for a period of three years from the date the PCB waste was accepted by the initial transporter.	N/A	—	The Kettleman Hills Facility does not receive PCB waste by rail transportation
	NOTE TO § 761.214(c): Intermediate rail Transporters are not required to keep records pursuant to these regulations.	N/A	—	The Kettleman Hills Facility does not receive PCB waste by rail transportation



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.214(d)	A Generator must keep a copy of each Exception Report for a period of at least three years from the due date of the report.	TSCA Operation Plan, p. 2	Yes/Yes	
761.214(e)	The periods of retention referred to in this Section are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Administrator.	TSCA Operation Plan, p. 2	Yes/Yes	
761.215(a) Manifest discrepancies.	Manifest discrepancies are:	—	—	
761.215(a)(1)	Significant differences (as defined by § 761.215(b)) between the quantity or type of PCB waste designated on the Manifest or shipping paper, and the quantity and type of PCB waste a Facility actually receives; or	TSCA Operation Plan, p. 2	Yes/Yes	
761.215(a)(2)	Rejected wastes, which may be a full or partial shipment of PCB waste that the Designated Facility cannot accept.	TSCA Operation Plan, p. 2	Yes/Yes	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.215(b)	Significant differences in quantity are: For bulk waste, variations greater than 10 percent in weight or variations greater than 10 percent in weight of PCB waste in containers; for batch waste, any variation in piece count, such as a discrepancy of one PCB Transformer or PCB Container or PCB Article Container in a truckload. Significant differences in type are obvious differences which can be discovered by inspection or waste analysis, such as the substitution of solids for liquids or the substitution of high concentration PCBs (above 500 ppm) with lower concentration materials.	TSCA Operation Plan, p. 2	Yes/Yes	
761.215(c)	Upon discovering a significant difference in quantity or type, the owner or operator must attempt to reconcile the discrepancy with the waste Generator or Transporter (e.g., with telephone conversations). If the discrepancy is not resolved within 15 days after receiving the waste, the owner or operator must immediately submit to the Regional Administrator a letter describing the discrepancy and attempts to reconcile it, and a copy of the Manifest or shipping paper at issue.	TSCA Operation Plan, p. 2	Yes/Yes	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.215(d)(1)	Upon rejecting the PCB waste, the Facility must consult with the Generator prior to forwarding the waste to another Facility that can manage the waste. If it is impossible to locate an alternative Facility that can receive the waste, the Facility may return the rejected waste to the Generator. The Facility must send the waste to the alternative Facility or to the Generator within 60 days of the rejection identification.	TSCA Operation Plan, p. 2	Yes/Yes	
761.215(d)(2)	While the Facility is making arrangements for forwarding rejected wastes to another Facility under this section, it must ensure that either the delivering Transporter retains custody of the waste, or, the Facility must provide for secure, temporary custody of the waste, pending delivery of the waste to the first transporter designated on the Manifest prepared under § 761.215(e) or (f).	TSCA Operation Plan, p. 2	Yes/Yes	
761.215(e)	Except as provided in § 761.215(e)(7), for full or partial load rejections that are to be sent offsite to an Alternate Facility, the Facility is required to prepare a new Manifest in accordance with § 761.207(a) and the following instructions:	TSCA Operation Plan, p. 2	Yes/Yes	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.215(e)(1)	Write the Generator's U.S. EPA ID number in Item 1 of the new Manifest. Write the Generator's name and mailing address in Item 5 of the new Manifest. If the mailing address is different from the Generator's site address, then write the Generator's site address in the designated space for Item 5.	TSCA Operation Plan, p. 2	Yes/Yes	
761.215(e)(2)	Write the name of the alternate Designated Facility and the Facility's U.S. EPA ID number in the Designated Facility block (Item 8) of the new Manifest.	TSCA Operation Plan, p. 2	Yes/Yes	
761.215(e)(3)	Copy the Manifest tracking number found in Item 4 of the old Manifest to the Special Handling and Additional Information Block of the new Manifest, and indicate that the shipment is a rejected waste from the previous shipment.	TSCA Operation Plan, p. 2	Yes/Yes	
761.215(e)(4)	Copy the Manifest tracking number found in Item 4 of the new Manifest to the Manifest reference number line in the Discrepancy Block of the old Manifest (Item 18a).	TSCA Operation Plan, p. 2	Yes/Yes	
761.215(e)(5)	Write the DOT description for the rejected load in Item 9 (U.S. DOT Description) of the new Manifest and write the container types, quantity, and volume(s) of waste.	TSCA Operation Plan, p. 2	Yes/Yes	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.215(e)(6)	Sign the Generator's/Offendor's Certification to certify, as the offeror of the shipment, that the waste has been properly packaged, marked and labeled and is in proper condition for transportation, and mail a signed copy of the Manifest to the Generator identified in Item 5 of the new Manifest.	TSCA Operation Plan, p. 2	Yes/Yes	
761.215(e)(7)	For full load rejections that are made while the Transporter remains present at the Facility, the Facility may forward the rejected shipment to the Alternate Facility by completing Item 18b of the original Manifest and supplying the information on the next destination Facility in the Alternate Facility space. The Facility must retain a copy of this Manifest for its records, and then give the remaining copies of the Manifest to the Transporter to accompany the shipment. If the original Manifest is not used, then the Facility must use a new Manifest and comply with § 761.215(e)(1), (2), (3), (4), (5), and (6).	TSCA Operation Plan, p. 2	Yes/Yes	
761.215(f)	Except as provided in § 761.215(f)(7), for rejected wastes that must be sent back to the Generator, the Facility is required to prepare a new Manifest in accordance with § 761.207(a) and the following instructions:	TSCA Operation Plan, p. 2	Yes/Yes	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.215(f)(1)	Write the Facility's U.S. EPA ID number in Item 1 of the new Manifest. Write the Facility's name and mailing address in Item 5 of the new Manifest. If the mailing address is different from the Facility's site address, then write the Facility's site address in the designated space for Item 5 of the new Manifest.	TSCA Operation Plan, p. 2	Yes/Yes	
761.215(f)(2)	Write the name of the initial Generator and the Generator's U.S. EPA ID number in the Designated Facility block (Item 8) of the new Manifest.	TSCA Operation Plan, p. 2	Yes/Yes	
761.215(f)(3)	Copy the Manifest tracking number found in Item 4 of the old Manifest to the Special Handling and Additional Information Block of the new Manifest, and indicate that the shipment is a rejected waste from the previous shipment.	TSCA Operation Plan, p. 2	Yes/Yes	
761.215(f)(4)	Copy the Manifest tracking number found in Item 4 of the new Manifest to the Manifest reference number line in the Discrepancy Block of the old Manifest (Item 18a).	TSCA Operation Plan, p. 2	Yes/Yes	
761.215(f)(5)	Write the DOT description for the rejected load in Item 9 (U.S. DOT Description) of the new Manifest and write the container types, quantity, and volume(s) of waste.	TSCA Operation Plan, p. 2	Yes/Yes	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.215(f)(6)	Sign the Generator's/Offendor's Certification to certify, as offeror of the shipment, that the waste has been and is in proper condition for transportation.	TSCA Operation Plan, p. 2	Yes/Yes	
761.215(f)(7)	For full load rejections that are made while the Transporter remains at the Facility, the Facility may return the shipment to the Generator with the original Manifest by completing Item 18a and 18b of the Manifest and supplying the Generator's information in the Alternate Facility space. The Facility must retain a copy for its records and then give the remaining copies of the Manifest to the transporter to accompany the shipment. If the original Manifest is not used, then the Facility must use a new Manifest and comply with § 761.215(f)(1), (2), (3), (4), (5), (6), and (8).	TSCA Operation Plan, p. 2	Yes/Yes	
761.215(f)(8)	For full or partial load rejections that are returned to the Generator, the Facility must also comply with the exception reporting requirements in § 761.217(a).	TSCA Operation Plan, p. 2	Yes/Yes	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.215(g)	If a Facility rejects a waste after it has signed, dated, and returned a copy of the Manifest to the delivering Transporter or to the Generator, the Facility must amend its copy of the Manifest to indicate the rejected wastes in the discrepancy space of the amended Manifest. The Facility must also copy the Manifest tracking number from Item 4 of the new Manifest to the Discrepancy space of the amended Manifest, and must re-sign and date the Manifest to certify to the information as amended. The Facility must retain the amended Manifest for at least three years from the date of amendment, and must within 30 days, send a copy of the amended Manifest to the transporter and Generator that received copies prior to their being amended.	TSCA Operation Plan, p. 2	Yes/Yes	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.216(a) Unmanifested waste report.	If a Facility accepts for storage or disposal any PCB waste from an offsite source without an accompanying Manifest, or without an accompanying shipping paper as described by § 761.211(e), and the owner or operator of the commercial storage or disposal Facility cannot contact the Generator of the PCB waste, then he shall notify the Regional Administrator of the EPA region in which his Facility is located § 761.217 of the unmanifested PCB waste so that the Regional Administrator can determine whether further actions are required before the owner or operator may store or dispose of the unmanifested PCB waste, and additionally the owner or operator must prepare and submit a letter to the Regional Administrator within 15 days after receiving the waste. The unmanifested waste report must contain the following information:	TSCA Operation Plan, p. 2	Yes/Yes	
761.216(a)(1)	The EPA Identification Number, name and address of the Facility;	TSCA Operation Plan, p. 2	Yes/Yes	
761.216(a)(2)	The date the Facility received the waste;	TSCA Operation Plan, p. 2	Yes/Yes	
761.216(a)(3)	The EPA Identification Number, name and address of the Generator and the Transporter, if available;	TSCA Operation Plan, p. 2	Yes/Yes	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.216(a)(4)	A description and the quantity of each unmanifested PCB waste the Facility received;	TSCA Operation Plan, p. 2	Yes/Yes	
761.216(a)(5)	The method of storage or disposal for each PCB waste;	TSCA Operation Plan, p. 2	Yes/Yes	
761.216(a)(6)	Signature of the owner or operator of the Facility or his authorized representative; and,	TSCA Operation Plan, p. 2	Yes/Yes	
761.216(a)(7)	A brief explanation of why the waste was unmanifested, if known.	TSCA Operation Plan, p. 2	Yes/Yes	
761.216(a)(8)	The disposition made of the unmanifested waste by the commercial storage or disposal Facility, including: (i) If the waste was stored or disposed by that Facility, was the Generator identified and was a Manifest subsequently supplied. (ii) If the waste was sent back to the Generator, why and when.	TSCA Operation Plan, p. 2	Yes/Yes Yes/Yes Yes/Yes	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.217(a)(1) Exception reporting.	A Generator of PCB waste, who does not receive a copy of the Manifest with the handwritten signature of the owner or operator of the Designated Facility within 35 days of the date the waste was accepted by the initial Transporter, shall immediately contact the transporter and/or the owner or operator of the Designated Facility to determine the status of the PCB waste.	TSCA Operation Plan, p. 2	Yes/Yes	
761.217(a)(2)	A Generator of PCB waste subject to the manifesting requirements shall submit an Exception Report to the EPA Regional Administrator for the Region in which the Generator is located if the Generator has not received a copy of the Manifest with the handwritten signature of the owner or operator of the Designated Facility within 45 days of the date the waste was accepted by the initial Transporter. The exception report shall be submitted to EPA no later than 45 days from the date on which the Generator should have received the Manifest. The Exception Report shall include the following: (i) A legible copy of the Manifest for which the Generator does not have confirmation of delivery;	TSCA Operation Plan, p. 2 TSCA Operation Plan, p. 2	Yes/Yes Yes/Yes	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
	(ii) A cover letter signed by the Generator or his authorized representative explaining the efforts taken to locate the PCB waste and the results of those efforts.	TSCA Operation Plan, p. 2	Yes/Yes	
761.217(b)	For rejected shipments of PCB waste that are forwarded to an Alternate Facility by a Designated Facility using a new Manifest (following the procedures of § 761.215(e)(1) through (6)), the Generator must comply with the requirements of § 761.217(a), as applicable, for the shipment forwarding the material from the Designated Facility to the Alternate Facility instead of for the shipment from the Generator to the Designated Facility. For purposes of § 761.217(a) for a shipment forwarding such waste to an Alternate Facility by a Designated Facility:	TSCA Operation Plan, p. 2	Yes/Yes	
761.217(b)(1)	The copy of the Manifest received by the Generator must have the handwritten signature of the owner or operator of the Alternate Facility in place of the signature of the owner or operator of the Designated Facility, and	TSCA Operation Plan, p. 2	Yes/Yes	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.217(b)(2)	The 35- and 45-day timeframes begin the date the waste was accepted by the initial Transporter forwarding the PCB waste shipment from the Designated Facility to the Alternate Facility.	TSCA Operation Plan, p. 2	Yes/Yes	
761.218(a) Certificate of disposal.	For each shipment of manifested PCB waste that the owner or operator of a disposal Facility accepts by signing the Manifest, the owner or operator of the disposal Facility shall prepare a Certificate of Disposal for the PCBs and PCB Items disposed of at the Facility, which shall include:	TSCA Operation Plan, p. 2	Yes/Yes	
761.218(a)(1)	The identity of the disposal Facility, by name, address, and EPA Identification Number.	TSCA Operation Plan, p. 2	Yes/Yes	
761.218(a)(2)	The identity of the PCB waste affected by the Certificate of Disposal including reference to the manifest number for the shipment.	TSCA Operation Plan, p. 2	Yes/Yes	
761.218(a)(3)	A statement certifying the fact of disposal of the identified PCB waste, including the date(s) of disposal, and identifying the disposal process used.	TSCA Operation Plan, p. 2	Yes/Yes	
761.218(a)(4)	A Certification as defined in § 761.3.	TSCA Operation Plan, p. 2	Yes/Yes	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.218(b)	The owner or operator of the disposal Facility shall send the Certificate of Disposal to the Generator identified on the Manifest which accompanied the shipment of PCB waste within 30 days of the date that disposal of each item of PCB waste identified on the Manifest was completed unless the Generator and the disposer contractually agree to another time frame.	TSCA Operation Plan, p. 2	Yes/Yes	
761.218(c)	The disposal Facility shall keep a copy of each Certificate of Disposal among the records that it retains under § 761.180(b).	TSCA Operation Plan, p. 2	Yes/Yes	
761.218(d)(1)	Generators of PCB waste shall keep a copy of each Certificate of Disposal that they receive from disposers of PCB waste among the records they retain under § 761.180(a).	TSCA Operation Plan, p. 2	Yes/Yes	
761.218(d)(2)	Commercial Storers of PCB waste shall keep a copy of each Certificate of Disposal that they receive from disposers of PCB waste among the records they retain under § 761.180(b).	TSCA Operation Plan, p. 2	Yes/Yes	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.219(a) One-year exception reporting.	A disposer of PCB waste shall submit a One-year Exception Report to the EPA Regional Administrator for the Region in which the disposal Facility is located no later than 45 days from the end of the 1-year storage for disposal date when the following occurs:	N/R	—	
761.219(a)(1)	The disposal Facility receives PCBs or PCB Items on a date more than 9 months from the date the PCBs or PCB Items were removed from service for disposal, as indicated on the Manifest or continuation sheet; and	N/R	—	
761.219(a)(2)	Because of contractual commitments or other factors affecting the Facility's disposal capacity, the disposer of PCB waste could not dispose of the affected PCBs or PCB Items within 1 year of the date of removal from service for disposal.	N/R	—	
761.219(b)	A Generator or Commercial Storer of PCB waste who manifests PCBs or PCB Items to a disposer of PCB waste shall submit a One-year Exception Report to the EPA Regional Administrator for the Region in which the Generator or Commercial Storer is located no later than 45 days from the date the following occurs:	N/R	—	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.219(b)(1)	The Generator or Commercial Storer transferred the PCBs or PCB Items to the disposer of PCB waste on a date within 9 months from the date of removal from service for disposal of the affected PCBs or PCB Items, as indicated on the Manifest or continuation sheet; and	N/R	—	
761.219(b)(2)	The Generator or Commercial Storer either has not received within 13 months from the date of removal from service for disposal a Certificate of Disposal confirming the disposal of the affected PCBs or PCB Items, or the Generator or Commercial Storer receives a Certificate of Disposal confirming disposal of the affected PCBs or PCB Items on a date more than 1 year after the date of removal from service.	N/R	—	
761.219(c) One-year Exception Report Contents	The One-year Exception Report shall include:	N/R	—	
761.219(c)(1)	A legible copy of any Manifest or other written communication relevant to the transfer and disposal of the affected PCBs or PCB Items.	N/R	—	



CITE	FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) REGULATION	CITE IN APPLICATION	COMPLETE/ACCEPT-ABLE?	ADDITIONAL CITES/NOTES
761.219(c)(2)	A cover letter signed by the submitter or an authorized representative explaining: (i) The date(s) when the PCBs or PCB Items were removed from service for disposal. (ii) The date(s) when the PCBs or PCB Items were received by the submitter of the report, if applicable. (iii) The date(s) when the affected PCBs or PCB Items were transferred to a designated disposal Facility. (iv) The identity of the Transporters, Commercial Storers, or disposers known to be involved with the transaction. (v) The reason, if known, for the delay in bringing about the disposal of the affected PCBs or PCB Items within 1 year from the date of removal from service for disposal.	N/R N/R N/R N/R N/R N/R	— — — — — —	
761.219(d)	PCB/radioactive waste that is exempt from the 1-year storage for disposal time limit pursuant to § 761.65(a)(1) is also exempt from the exception reporting requirements of § 761.219(a), (b), and (c).	N/A	—	The Kettleman Hills Facility does not handle PCB/radioactive waste.

N/A – Regulatory provision does not apply to the Facility.

N/R – Regulatory provision is either optional, applies to EPA, or otherwise does not need to be addressed in the application



Referenced Documents:

1. “Kettleman Hills Facility CAT 0000646 117 Notification of PCB Waste Activity” Christopher W. Hansen, Chemical Waste Management, Inc. to Chief, Chemical Regulations Branch, U.S. EPA. February 22, 1990. With attached EPA Form No.7710-53 for Chemical Waste Management, Inc. Kettleman Hills Facility, dated February 22, 1990 and signed by Mark A. Langowski, Chemical Waste Management, Inc.
2. “Re: Chemical Waste Management, Inc., (CWMI) Kettleman Hills Facility (KHF) CAT 000 646 117 2017 PCB Annual Report.” Letter, Tracy Reddick, Waste Management, Inc. to Regional Administrator Region 9, July 11, 2019.
3. “TSCA Operation Plan, Landfill B-18 Phases I, II, and III; PCB Building and Outside Containment Area.” Chemical Waste Management, Inc. Revision 3: October 1, 2018.



**APPENDIX E –
JUSTIFICATIONS FOR USE OF OMNIBUS PROVISIONS**

**JUSTIFICATION FOR USE OF 40 CFR § 761.65(D)(4)(IV) AND § 761.75(C)(3)(II) OMNIBUS PROVISIONS IN CHEMICAL WASTE MANAGEMENT KETTLEMAN HILLS FACILITY
PROPOSED TSCA APPROVAL**

CONDITION	JUSTIFICATION
III. Scope and Limitations of the Approval	
C. – Expiration date	Providing a fixed term for the approval allows for the regular review and updating of the approval to reflect current facility operations and the most current regulatory requirements and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
D. – Required use of approval modification procedures	Requiring the use of specific procedures to modify the approval allows changes to the Facility's operations to be incorporated into the approval and that the approval contains the terms and conditions necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
IV. General Approval Conditions	
B.1. – Maintain a printed copy of the Approval on-site	Maintaining a copy of the Approval on site is required so that Facility personnel have ready access to the information necessary for compliance with the Approval. Compliance with the Approval is necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
B.3. – Comply with the conditions of the FWS's Biological Assessment	Complying with the conditions of the FWS's Biological Assessment is necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to the environment in the form of endangered species and their habitat.
B.9. – Duty to correct any missing or incorrect application or submittal	Accurate information about the Facility and its operations is required to assure the Approval contains the necessary conditions and terms to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
B.10. – Closure plan for chemical waste landfill B-18	An adequate closure plan for Landfill B-18 is required so that the landfill is closed in a manner that will limit the possibility of future PCB releases and therefore is necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
B.11. – Post-closure plan for chemical waste landfills B-14, B-16, B-18, and B-19	A post-closure care plan is required so that the landfills are adequately maintained after closure. Continued maintenance of the landfill covers, leachate collection system and groundwater monitoring network is needed to prevent/mitigate releases of PCBs from the closed landfills into the environment and therefore are necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
B.12. – Notice of planned noncompliance	Timely notification of planned noncompliance with the terms and conditions of the Approval is necessary for U.S. EPA's oversight of the Facility. U.S. EPA's oversight monitors whether operations are carried out in a manner consistent with the Approval and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.



CONDITION	JUSTIFICATION
B.13. – Report noncompliance that endangers health or the environment	Timely notification of noncompliance that may endanger health or the environment is important so that appropriate actions are taken to minimize or prevent the endangerment and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment. Condition similar to 40 C.F.R. § 270.30(l)(6)
B.14. – Duty to minimize release of PCB and risk of noncompliance	Requiring that all reasonable steps are taken to minimize releases of PCBs is necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
B.15. – Revisions to PCB operations in case of imminent hazard	Requiring changes to PCB waste operations at the Facility that are creating an imminent hazard is necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
C.8. Management of reactive and incompatible waste	Appropriate management of reactive and incompatible waste is necessary to avoid explosions, fires, spills, and other potential releases of PCBs to the environment and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
C.9. Prevention of vaporization of PCBs	Preventing the heating of PCB-containing materials when processing reduces the vaporization and release of PCBs to the environment and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
D.1 – Waste acceptance procedures	Adequate waste acceptance procedures provide that only PCB waste types that can be safely managed and/or disposed of at the Kettleman Hills Facility will be accepted at the Facility. Safe management and disposal of PBC Waste is required to prevent releases of PCBs to the environment and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
D.2. – Ban on acceptance of PCB/Radioactive Waste	Kettleman Hills Facility is not designed to store or dispose of PCB/Radioactive Waste and therefore cannot routinely provide for its safe management. In addition, the proposed Approval does not include conditions required by the PCB regulations for the storage of PCB/Radioactive Waste. Because the Facility does not have the ability to handle such waste, banning the acceptance of PCB/Radioactive Waste is necessary to prevent potential releases to the environment and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
E.1. and E.2. – Employee training/annual refresher	Appropriate employee training, including regular refresher classes, assists Facility employees to safely handle PCB waste, to respond to emergencies, and to prevent or minimize exposure to themselves and releases to the environment and therefore is necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
F.1. – Hazardous prevention procedures	Establishing and implementing hazard prevention procedures is necessary to minimize potential accidents, spills, and other releases of PCBs to the environment and therefore is necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
F.2. – Comply with OSHA regulations	Conducting operations in compliance with applicable OSHA regulations helps to protect the health and safety of workers and to prevent releases to the environment and therefore is necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.



CONDITION	JUSTIFICATION
F.4. – Report injuries due to PCB exposure	Notifying U.S. EPA of any injuries or sickness due to PCB exposure allows U.S. EPA to timely evaluate the extent of risk to health and the environment of the incident and determine if additional remediation or changes to Facility operations or Approval are necessary to ensure that operations of the Facility do not pose an unreasonable risk of injury to health and the environment.
G.2. – Comply with Facility Contingency Plan in emergencies or spills	Implementing the KHF's submitted contingency plan in case of an emergency or spills provides for timely and adequate responses to emergencies occur which will help prevent, minimize, and mitigate releases and therefore is necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
G.3. – Verbal report if Contingency Plan is implemented G.4. – Written report if Contingency Plan is implemented	Notifying U.S. EPA of any incident involving PCB that requires implementation of the contingency plan and submitting a written report to U.S. EPA with details of the incident and response actions allows U.S. EPA to timely evaluate the risk to health and the environment of the incident and determine if additional remediation or changes to the contingency plan or Approval are necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
G.5. – Certify emergency readiness prior to resuming operations	Certifying emergency readiness and implementation of corrective actions prior to resuming operations provides that CWM is ready to respond to another emergency and that the likelihood of another similar incidence is reduced, both of which will reduce potential releases and therefore are necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
G.6. – Written investigation report for PCB spill > 1 lb G.7. – Written investigation report on PCB spill > 10 lb	Investigation and documentation of causes of spills allows for effective changes to operations thereby reducing the likelihood of such spills in the future and therefore is necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
G.8. – Annual update of Contingency Plan	Annually updating the contingency plan accounts for any changes to Facility's operations, improves the effectiveness of the plan in emergencies, and reduces the risk of injury and releases and therefore is necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
G.9. – Post list of emergency contacts	Posting of emergency contacts and annual updates of the contact list allows employees to rapidly contact on- and off-site emergency services in case of emergency reducing the risk of injury and releases and therefore is necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
G.10. – Required list of emergency response equipment G.11. – Annual test of emergency response equipment	Requiring that certain emergency equipment be provided and maintained assures that basic emergency equipment is available during the initial response to emergencies, reducing the risk of injury and releases and therefore is necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
G.12. – Availability of emergency communication equipment	Requiring the availability of emergency communications device during PCB operations provides that, if needed, emergency assistance can be obtained rapidly reducing the risk of injury and releases and therefore is necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.



CONDITION	JUSTIFICATION
G.13. –Emergency Coordinator	Requiring the availability of a responsible emergency coordinator with the authority to respond as needed to emergencies provide for rapid and appropriate response in case of emergencies to reduce the risk of injury and releases and therefore is necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
G.14. – Written report if unauthorized entry, etc. results in release of PCBs	Requiring timely notification of unauthorized entry or other incidences that cause PCB discharges allows U.S. EPA to timely evaluate the risk to health and the environment of the incident and determine if additional remediation or changes to the contingency plan or Approval are necessary to ensure that operations of the Facility do not pose an unreasonable risk of injury to health and the environment.
G.15. – Required revisions to the Contingency Plan	Requiring revisions to the Contingency Plan if any of the listed events occurs provides that an adequate Contingency Plan is in place in case of an emergency to reduce the risk of injury and releases and therefore is necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
H.1. – Inspector access to the Facility	Requiring that U.S. EPA representatives have access to the Facility in order to determine compliance with applicable statutes, regulations and the Approval conditions allows U.S. EPA to monitor that Facility operations are conducted in compliance with applicable requirements and therefore is necessary to ensure do not pose an unreasonable risk of injury to human health and the environment.
I.1. – Monthly Facility inspection and documentation	Regular inspections of the Facility are necessary to identify and correct potential problems as soon as possible so that they do not result in PCB releases and therefore are necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
I.2. – Monthly perimeter fence inspection and documentation	Regular inspections and follow-up repairs of the perimeter fence are necessary to prevent entry to the Facility of unauthorized persons and endangered species that could be harmed by contact with PCBs stored or disposed at the Facility and therefore are necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment. Documentation of the monthly inspections and any necessary repairs allows U.S. EPA to monitor activities at the Facility and check compliance with the Approval and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
I.3. – Correction of deficiencies identified during inspections	Correction of any deficiencies found during a Facility inspection prevents or minimizes PCB releases and therefore is necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.



CONDITION	JUSTIFICATION
I.4. – Use of Facility inspection forms for Inspection documentation	The Facility's inspection forms document that CWM has performed the required inspections of the Facility. Regular inspections of the Facility are necessary to identify and correct potential problems as soon as possible so that they do not result in PCB releases. Documentation of inspections facilitates action by the Facility and effective regulatory oversight and therefore is necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment. Documentation of inspections is also part of the recordkeeping requirements that allow U.S. EPA to monitor activities at the Facility and check compliance with the Approval. U.S. EPA's oversight monitors that operations are carried out in a manner consistent with the Approval and these documentation requirements are therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
J.1. – Operation of a Security System	Operation of a security system at the Facility is necessary to prevent unauthorized access and prevent vandalism which may result in PCB releases and therefore is necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
K.1. – Closure cost estimate for the Landfill B-18	Maintenance of a cost estimate for closure of Landfill B-18 is necessary so that there is adequate funding available for a third party to close the landfill if Chemical Waste Management, Inc. is unable to do so. Proper closure is necessary to prevent future releases of PCBs and therefore maintenance of a cost estimate is necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
K.2. – Annual adjustment to closure cost estimate for Landfill B-18	Maintenance of a cost estimate for closure of Landfill B-18 that reflect current costs is necessary so that there is adequate funding available for a third party to close the landfill. Proper closure is necessary to prevent future releases of PCBs and therefore this requirement is necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
K.3. – Modification to closure cost estimate for Landfill B-18 if Closure Plan changes	Revisions to the cost estimate for closure of Landfill B-18 if there are any approved changes to the closure plan that increases closure cost is necessary so that there is adequate funding available for a third part to close the landfill. Proper closure is necessary to prevent future releases of PCBs and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
K.4. – Maintain closure cost estimate for Landfill B-18 on site	Maintaining the cost estimate onsite is part of the recordkeeping requirements that allow U.S. EPA to monitor activities at the Facility and check compliance with the Approval, and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
L.1. – Post-closure cost estimate for Landfills B-14, B-16, B-18, and B-19	Maintenance of a cost estimate for post-closure care of the chemical waste landfills units is part of the process for providing adequate funding for post-closure care of these units. Post-closure care includes regular inspection, maintenance, and operation of the landfill covers, leachate collection systems and groundwater monitoring network, all of which are necessary to prevent future releases of PCBs and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.



CONDITION	JUSTIFICATION
L.2. – Annual adjustment to post-closure cost estimate for Landfills B-14, B-16, B-18, and B-19	Requiring that the post-closure care cost estimate for the chemical waste landfills be annually adjusted for inflation provides that the cost estimates reflect current costs for post-closure care. Proper post-closure care is necessary to prevent future releases of PCBs and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
L.3. – Modification to post-closure cost estimates for Landfills B-14, B-16, B-18, and B-19	Revisions to the cost estimate for post-closure care of chemical waste Landfills if there are any approved changes to their post-closure care plan that increases post-closure care cost is necessary so that there is adequate funding available for a third part to provide post-closure care for the units. Proper post-closure care is critical to prevent future releases of PCBs and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
L-4 – Maintain post-closure cost estimate for Landfills B-14, B-16, B-18, and B-19 on site	Maintaining the cost estimate onsite is part of the recordkeeping requirements that allow U.S. EPA to monitor activities at the Facility and check compliance with the Approval, and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
M.1. – Maintain adequate financial assurance for closure and post-closure care for the TSCA Units and Landfills	Maintaining adequate funding for closure and post-closure care is necessary in order to ensure that all units that manage PCBs at the Kettleman Hills Facility will be closed and maintained in a manner that that reduces or eliminates the potential for future releases of PCBs and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
M.2. –Financial assurance mechanisms for closure/post-closure care of TSCA Landfills.	The proposed Approval limits the type of financial assurance mechanism that can be used for closure/post-closure care of the TSCA Landfills to those allowed under TSCA (40 C.F.R. § 761.65(g) or RCRA (40 C.F.R. Part 264 Subpart H, or California's authorized hazardous waste program, Title 22, Division 4.5, Chapter 14, Article 8 of the California Code of Regulations, 22 C.C.R. §§ 66264.140 <i>et seq.</i>). U.S. EPA has determined through regulation or authorization that these mechanisms provide the best methods for assuring adequate funds are available for closure and post-closure care. Proper closure and post-closure care are necessary to reduce or eliminate the potential for future releases of PCBs and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
M.3. – Financial assurance mechanisms for closure of TSCA Units	The proposed Approval limits the type of financial assurance mechanism that can be used for closure of TSCA Units to those listed at 40 C.F.R. § 761.65(g). U.S. EPA has determined through regulation that these mechanisms provide the best methods for assuring adequate funds are available for closure. Proper closure care is necessary to reduce or eliminate the potential for future releases of PCBs and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
M.4. – Approval of revisions to financial assurance mechanism	Provision of an appropriate financial assurance mechanism is necessary to assure that adequate funding is available for closure and post-closure care of the Facility. Proper closure and post-closure care are necessary to prevent future releases of PCBs and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.



CONDITION	JUSTIFICATION
M.5. – Annual submittal of financial assurance mechanism documents	Requiring the annual submittal of documentation of the current closure and post-closure care financial assurance allows U.S. EPA to determine that an adequate financial assurance mechanism continues to be in place to provide for proper closure and post-closure care of the PCB units at KHF. Proper closure and post-closure care are necessary to prevent future releases of PCBs and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
M.6. – Revised financial assurance mechanism if maximum storage capacity at the PCB F/SU increases	The amount of financial assurance is based in part on the disposal costs for the maximum amount of PCB waste that is allowed to be stored at the PCB F/SU. Requiring update of the financial assurance mechanism if the maximum storage capacity increases assures that sufficient funding is available for closure of the unit in a manner that does not pose an unreasonable risk of injury to health and the environment and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
M.7. – Maintain current closure and post-closure care financial assurance documents on site	Requiring that the current closure and post-closure care financial assurance documents be kept on site is necessary because the financial assurance mechanism is part of the recordkeeping requirements that allow U.S. EPA to monitor activities at the Facility and check compliance with the Approval, and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
M.8. – Notification of bankruptcy proceeding	Requiring that U.S. EPA be notified if CWM is involved in a bankruptcy proceeding allows U.S. EPA to take timely steps to assure operations at the Facility will continue in a manner that does not pose an unreasonable risk of injury to health and the environment.
M.9. – Replacement of financial assurance/liability insurance in case of bankruptcy of issuing company	Bankruptcy of the company that provides the closure/post-closure care financial assurance and liability insurance for the Kettleman Hills Facility makes the future availability of funds for these required activities uncertain. Requiring timely establishment of replacement financial assurance and liability insurance assures the continuing availability of these funds. Adequate funding for closure/post-closure care and response to any major accidents or releases involving PCBs or other hazardous waste at the Facility is necessary to limit releases of PCBs and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
M.10. – Revised financial assurance mechanism if U.S. EPA deems existing mechanism inadequate	Requiring timely establishment of revised financial assurance and liability insurance if the existing mechanism is inadequate assures the continuing availability of the funds necessary to close and provide post-closure care the Facility. Adequate funding for closure and post-closure care is necessary to limit releases of PCBs and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
N.1. – Liability Insurance	Maintaining the existing liability insurance. Liability insurance is important so that proper funding is available for responding to any major accidents or releases involving PCBs or other hazardous waste at the Facility, and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.



CONDITION	JUSTIFICATION
N.2. – Copy of liability insurance policy be kept on site	Requiring that a copy of liability insurance be kept on site is part of the recordkeeping requirements that allow U.S. EPA to monitor activities at the Facility and check compliance with the Approval. U.S. EPA's oversight ensures that operations are carried out in a manner consistent with the Approval and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
O.2. – Maintain records as provided for in Operation Plans O.3. – Maintain records as needed to determine compliance with maximum storage limitations O.4. – PCB material tracking system O.5. – Maintenance of records/operations during power/network outages O.8. – PCB waste sampling, analysis and data quality assurance records O.9. – PCB spill cleanup records and reports sampling	Implementation of the recordkeeping requirements described in the Renewal Application and some additional information to supplement what is required in the regulations is important to allow U.S. EPA to monitor activities at the Facility and check compliance with the Approval. U.S. EPA's oversight ensures that operations are carried out in a manner consistent with the Approval and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
O.11. – Monthly report on PCB remediation waste receipts and unusual occurrences	Monthly reports on the PCB remediation waste receipts and unusual occurrences at the Facility allow U.S. EPA to monitor proper disposal of waste from PCB cleanup sites and timely oversight of events at the Facility that may not otherwise require reporting. U.S. EPA's oversight ensures that operations are carried out in a manner consistent with the Approval and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
V. CONDITIONS FOR COMMERCIAL STORAGE AND TREATMENT	
B.2. – Comply with Operation Plan	Implement of the Facility's Operation Plan provides procedures for the appropriate handling and storage of PCB waste at the PCB F/SU reducing or eliminating PCB releases to the environment and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
B.3. – Implementation of SPCC Plan	Implement of the Facility's spill prevention controls and countermeasures plan will help reduce or prevent spills of PCBs at the PCB F/SU and thus reduce or eliminate PCB releases to the environment and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
C.1. – Maximum storage capacity C.2. – Assumptions for calculating storage volumes C.3. – Prohibition on Unit modifications	Establishing maximum storage capacities for each portion of the PCB F/SU, identifying assumptions that must be used to calculate the amount of PCB waste stored at the PCB F/SU, and prohibiting changes to the PCB F/SU that may reduce its containment capacity are all necessary to prevent PCB releases to the environment that may result if the amount of PCB waste stored at the Unit exceeds its containment capacity. Prevention of PCB releases to the environment is necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.



CONDITION	JUSTIFICATION
C.4. – Temporary storage in outside containment area	Requiring storage in a curbed area with a sealed/impervious floor greatly reduces the potential release of PCB to the environment and therefore is necessary to ensure that operations of the Facility do not pose an unreasonable risk of injury to health and the environment.
C.5. – Adjacent storage - recordkeeping	Implementation of the recordkeeping requirements to track waste stored adjacent to the PCB F/SU is necessary to allow U.S. EPA to monitor activities at the Facility and check compliance with the requirements of the PCB regulations and the Approval, and therefore this requirement is necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
D.2. – Aisle spacing D.3. – Drum storage D.4. – Storage on pallets	Prescribing a minimum aisle spacing, maximum number of drums that may be stacked, and the use of pallets is needed to allow for inspection of the containers for possible leaks and safe retrieval and to assure that drums are not stacked to heights that would be dangerous if drums fell. These requirements reduce or eliminate the potential for spills and releases of PCB and therefore are necessary to ensure the operations at the Facility do not pose an unreasonable risk of injury to health and the environment.
D.5. – Closed containers	Requiring containers be kept closed unless waste is being added or removed is necessary to prevent accidental spills and evaporative emissions from the containers. These requirements reduce or eliminate spills and releases of PCB and therefore are necessary to ensure the operations at the Facility do not pose an unreasonable risk of injury to health and the environment.
E.1. – Draining and flushing operations	U.S. EPA is approving the draining and flushing of PCB-containing transformers and other PCB items but is requiring such operations to be done only within the curbed and sealed containment areas at the PCB F/SU. Requiring the operations be performed only with these areas will reduce or eliminate the potential for releases of PCB and therefore is necessary to ensure the Facility's operations do not pose an unreasonable is protective of health and the environment.
E.2. – Repacking and bulking operations	U.S. EPA is approving the repacking and bulking of PCB waste to facilitate storage and disposal but is requiring such operations to be done only within the curbed and sealed containment areas at the PCB F/SU. Requiring the operations be performed only with these areas will reduce or eliminate the potential for releases of PCB and therefore is necessary to ensure the Facility's operations do not pose an unreasonable is protective of health and the environment.
E.3. – Bin and drum top solidification operations	U.S. EPA is approving the bin top and drum top solidification of PCB waste provided that the PCB waste meets the requirements of the PCB regulations for solidification (e.g., non-ignitable, incidental liquids < 500 ppm) and such operations are done only within the curbed and sealed containment areas at the PCB F/SU. Requiring the operations be performed only within these areas will reduce or eliminate the potential for releases of PCB and therefore is necessary to ensure the Facility's operations do not pose an unreasonable is protective of health and the environment.
E.4. – Spill prevention and cleanup	Establishing and implementing spill prevention procedures is necessary to minimize potential accidents, spills, and other releases of PCBs releases and therefore is necessary to ensure that operations at the Facility do not pose an unreasonable is protective of health and the environment.



CONDITION	JUSTIFICATION
E.8. – Recordkeeping for drained PCB Items and Liquids	Implementation of the recordkeeping requirements to tracking disposal of drained PCB Items and the drained Liquids allows U.S. EPA to monitor activities at the Facility and to check compliance with the Approval, and therefore is necessary to ensure that operations at the Facility do not pose an unreasonable is protective of health and the environment.
F.1. – PCB liquid storage	The PCB Tank at the PCB F/SU is the only tank at the Facility that U.S. EPA is approving for the storage of regulated PCB liquids. U.S. EPA has not evaluated the adequacy of any other tank at the Facility for the storage of PCB liquids, therefore, prohibiting storage in other tanks is necessary to prevent accidental releases of PCB Liquids from tanks that are not designed and approved to handle PCB Liquids and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
F.2. to F.6. – Tank operation requirements	Tank operation requirements are necessary to reduce or prevent accidental releases of PCB liquids from the PCB Tank to the environment and therefore are necessary to ensure that the Tank is operated in a manner that does not pose an unreasonable risk of injury to health and the environment.
F.7. – Tank carbon filter	Maintenance of a carbon filter on the PCB Tank's roof vent reduces or prevents release of PCB to the atmosphere and therefore is necessary to ensure that the Tank is operated in a manner that does not pose an unreasonable risk of injury to health and the environment.
G. – Quarterly wipe sampling of the PCB F/SU	The proposed Approval requires quarterly random wipe sampling of surfaces in the PCB F/SU so accidental spills of PCBs are detected and adequately cleaned up to reduce potential exposure of workers and the environmental to PCBs and is therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
H.1. to H.3. – Inspection of the PCB F/SU	Regular inspections of the PCB F/SU are necessary to identify and correct potential problems as soon as possible so that they do not result in PCB releases to the environment and is therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
H.4. – Maintenance of the PCB F/SU structure	Maintenance of the PCB F/SU structure is necessary to correct potential problems as soon as possible so that they do not lead to PCB releases to the environment and is therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
H.5. – Inspection, removal and testing of liquids in sumps	Requiring inspection and removal of liquids from the non-discharging sumps at the PCB F/SU assure that contaminated liquids do not accumulated in the sumps and potentially overflow contaminating the Unit and are therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment. Testing of the liquids is necessary to assure appropriate disposal and is therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.



CONDITION	JUSTIFICATION
I.3., I.4. & I.6.d. – Updated closure plan	A current and comprehensive closure plan is necessary to assure that the PCB F/SU is closed in a manner that prevents any future release of PCBs and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment. Requiring submittal of a revised closure plan 90 days prior to the beginning of closure activities allows U.S. EPA to make sure that the plan reflects the most current operations at the Unit and therefore adequately provides for closure of the unit in a manner that is protective of health and the environment.
VI. CONDITIONS FOR CHEMICAL WASTE LANDFILLS	
B.2.– Maximum capacity and height	Setting a maximum capacity and height for Landfill B-18 prevents waste amounts being disposed in the landfill that would exceed the amount the landfill was designed to safely contain which could result in the potential failure of the landfill and release of PCB to the environment and therefore necessary to ensure that operations of the Facility do not pose an unreasonable risk of injury to health and the environment.
B.3. – Annual survey and report of remaining capacity	Tracking the amount of remaining capacity in Landfill B-18 provides that the maximum capacity that the landfill can safely contain is not exceeded and is therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
D.2. – Comply with Operation Plan	Appropriate management of Landfill B-18 is required to prevent releases of PCBs and is therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
D.4. – Minimum separation distance for incompatible waste	Appropriate management of incompatible wastes, including keeping a minimum separation between them, is necessary to avoid explosions, fires, spills, and other potential releases of PCBs to the environment and is therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
D.6. – Container disposal requirements	Requiring containers either to be full or crushed prevents their future collapse in the landfill which could result in uneven settling and damage to the final cover. An intact final cover prevents releases of waste from a landfill and is therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
D.7. – Daily cover requirement	Limiting VOC content of soil used for daily cover limits VOC emissions to the air. VOC emissions may contribute to ozone formation and is therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
E.2.– Leachate management as hazardous waste	Requiring leachate to be managed as a hazardous waste containing PCBs restricts its storage and disposal to units that are designed to handle hazardous waste and thus reduces the likelihood of releases and is therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.



CONDITION	JUSTIFICATION
E.3. and 4. – Leachate Collection and Removal System operations	Requiring the LRCS to be operated according to the procedures and protocols established in the Operation Plan, Response Action Plan, and Vadose Zone Action Plan greatly reduces the likelihood of releases of PCBs to groundwater. In addition, monitoring the leachate fluid levels, meeting the action response rates, and limiting the leachate fluid levels to a maximum of 1 foot provides that excessive hydraulic pressure does not build up on the protective landfill liner systems which could cause them to fail, leading to potential releases of PCBs to groundwater. These requirements are therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
E.5.b. – Leachate sampling and analysis - notification	Notification to U.S. EPA of any detection of PCBs in leachate allows U.S. EPA to timely evaluate any potential risk to health and the environment and to determine if any additional actions or changes to Facility operations are necessary to ensure that continuing operations of the Facility do not pose an unreasonable risk of injury to health and the environment.
E.5.c. – Leachate sampling and analysis - report	Regular reports on environmental monitoring results allows U.S. EPA to evaluate whether that the Facility's Approval continues to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment or if revisions are necessary to prevent any unreasonable risk.
G.1. – Inspection	Regular inspections of the landfill and its supporting structures is necessary to identify and correct potential problems as soon as possible so that they do not result in PCB releases to the environment and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
G.2. – Correction of deficiencies	Correction of deficiencies found during an inspection of the landfill and its supporting structures prevents or minimizes potential problems so that they do not result in PCB releases to the environment and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
G.3. – Recordkeeping for inspections	The Facility's inspection forms document that the required inspections have been performed and allow U.S. EPA to monitor compliance with the Approval. U.S. EPA's oversight monitors that operations are carried out in a manner consistent with the Approval and this requirement is therefore necessary to ensure that operations at the Facility do not pose an unreasonable is protective of health and the environment.
H.1. – Closure Plan for Landfill B-18	Proper closure is necessary to prevent future releases of PCBs and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
H.2. – Notification of closure	Notification to U.S. EPA prior to beginning closure of Landfill B-18 allows U.S. EPA to monitor implementation with the closure plan and that closure occurs in a manner that will prevent future releases of PCBs, and therefore necessary to ensure that operations at the Facility do not pose an unreasonable is protective of health and the environment.



CONDITION	JUSTIFICATION
H.3. – Reservation of space for closure debris	The current closure plan and cost estimate for the PCB F/SU assumes debris from that closure will be disposed of in Landfill B-18. If disposal space is not reserved in the landfill for this debris, then cost for closure of the PCB F/SU may exceed the available funds leading to inadequate closure and potential future releases of PCBs; therefore, reservation of space in Landfill B-18 is necessary to ensure that operations at the Facility do not pose an unreasonable risk of injury to health and the environment.
H.4. – Implementation of closure plan	Proper closure is necessary to prevent future releases of PCBs and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
H.5. – Inspection and maintenance during closure	Regular inspections of the landfill and its supporting structures is necessary to identify and correct potential problems as soon as possible so that they do not result in PCB releases to the environment and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment. This remains true even during the closure process which can take several months or longer.
H.6., 7., & 8. – Revisions to the closure plan	A current and comprehensive closure plan is necessary to assure that Landfill B-18 is closed in a manner that prevents any future release of PCBs and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment. Requiring submittal of a revised closure plan 90 days prior to the beginning of closure activities allows U.S. EPA to assure the plan adequately reflects the most current operations at the landfill and therefore provides for closure of the unit in a manner that does not pose an unreasonable risk of injury to health and the environment.
I.1. – Post-closure care for Landfill B-18	Maintenance of a post-closure care plan that includes establishes requirements for regular inspections, maintenance, and operation of the landfill covers, leachate collection systems, surface water controls, and groundwater monitoring network is necessary to prevent future releases of PCBs and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
I.2. – Implementation of post-closure care	Implementation of a post-closure care plan that includes regular inspection, maintenance, and operation of the landfill covers, leachate collection systems, surface water controls, and groundwater monitoring network is necessary to prevent future releases of PCBs and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
I.3. – Post-closure care period	PCBs will remain in Landfills B-14, B-16, and B-19 indefinitely. Long-term implementation of post-closure care is necessary to prevent future releases of PCBs and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
I.4. – Revisions to and renewal of post-closure care plan	PCBs will remain in Landfills B-14, B-16, and B-19 indefinitely. Long-term implementation of post-closure care is necessary to prevent future releases of PCBs and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment. Requiring a new post-closure plan at the end of each post-closure care period until such time that the U.S. EPA determines that post-closure care is no longer necessary will ensure that adequate post-closure care is maintained over the long-term.



CONDITION	JUSTIFICATION
I.5 – Discontinuation of post-closure care	Requiring the submittal of a demonstration that no additional post-closure care is necessary to prevent an unreasonable risk of injury to health and the environment and requiring U.S. EPA to approve it before discontinuing post-closure care is necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
VII. CONDITIONS FOR CLOSED CHEMICAL WASTE LANDFILLS B-14, B-16, AND B-19	
B.1. – Inspection of Landfills B-14, B-16, and B-19	Regular inspections of closed PCB units at the Facility are necessary to identify and correct potential problems as soon as possible so that they do not result in PCB releases and therefore are necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
B.2. – Post-closure care for Landfills B-14, B-16, and B-19	Maintenance of a post-closure care plan that includes requirements for regular inspections, maintenance, and operation of the landfill covers, leachate collection systems, surface water controls, and groundwater monitoring network is necessary to prevent future releases of PCBs and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
B.3. – Implementation of post-closure care	Implementation of a post-closure care plan that includes regular inspection, maintenance, and operation of the landfill covers, leachate collection systems, surface water controls, and groundwater monitoring network is necessary to prevent future releases of PCBs and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
B.4. – Post-closure care period	PCBs will remain in Landfills B-14, B-16, and B-19 indefinitely. Long-term implementation of post-closure care is necessary to prevent future releases of PCBs and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
B.5. – Revisions to and renewal of post-closure care plan	PCBs will remain in Landfills B-14, B-16, and B-19 indefinitely. Long-term implementation of post-closure care is necessary to prevent future releases of PCBs and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment. Requiring a new post-closure plan at the end of each post-closure care period until such time that the U.S. EPA determines that post-closure care is no longer necessary will ensure that adequate post-closure care is maintained over the long-term.
B.6 – Discontinuation of post-closure care	Requiring the submittal of a demonstration that no additional post-closure care is necessary to prevent an unreasonable risk of injury to health and the environment and requiring U.S. EPA to approve it before discontinuing post-closure care is necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
VIII. ENVIRONMENTAL MONITORING	
A.1. – Implement air monitoring program	One of the potential exposure routes of the public and the environment to PCBs from the Kettleman Hills Facility is through air emissions. Monitoring this route with a well-run air monitoring program is necessary to identify any emissions of PCBs from the Facility and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.



CONDITION	JUSTIFICATION
A.2. – Revise air monitoring program to incorporate existing 4 th monitoring station	Updates to the existing air monitoring Plan as incorporated into the Approval to reflect the current air monitoring program, including the fourth air monitoring site, is necessary to ensure that the site is managed and data from that site is reported consistent with the quality assurance requirements in the existing Plan. Good quality data is necessary to reliably identify potential emissions of PCBs from the Facility and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
A.3. – Air monitoring reports	Regular reports on environmental monitoring results allows U.S. EPA to evaluate whether that the Facility's Approval continues to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment or if revisions are necessary to prevent any unreasonable risk and therefore necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
B.2. – Groundwater well sampling and testing	Testing of groundwater from closed landfills B-14, B-16, and B-19 is needed to ensure that any releases of PCBs to groundwater under the chemical waste landfills at the Facility are quickly found. Early identification of PCB releases allows for early corrective action and therefore is necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
B.3. – Groundwater well operation and maintenance	Correct well operations and maintenance is needed to assure groundwater samples are available for testing. Testing of groundwater from closed landfills B-14, B-16, and B-19 is needed to ensure that any releases of PCBs to groundwater under the chemical waste landfills at the Facility are quickly found. Early identification of PCB releases allows for early corrective action and therefore is necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
B.4. – Groundwater well abandonment	An adequate groundwater monitoring network is needed so that any releases of PCBs to groundwater under the chemical waste landfills at the Facility are quickly found. Early identification of PCB releases allows for early corrective action and therefore this requirement is necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
B.5. – New groundwater wells	An adequate groundwater monitoring network is needed to ensure that any releases of PCBs to groundwater under the chemical waste landfills at the Facility are quickly found. Early identification of PCB releases allows for early corrective action and therefore is necessary to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment.
B.6. – Notification of PCB detection	Notification to U.S. EPA of any detection of PCBs in groundwater allows U.S. EPA to timely evaluate the risk to health and the environment from the PCB release and to determine if remediation or changes to Facility operations are necessary to ensure that continuing operations of the Facility do not pose an unreasonable risk of injury to health and the environment.
B.7. – Groundwater monitoring report	Regular reports on environmental monitoring results allows U.S. EPA to evaluate whether that the Facility's Approval continues to ensure the Facility's operations do not pose an unreasonable risk of injury to health and the environment or if revisions are necessary to prevent any unreasonable risk.



CONDITION	JUSTIFICATION
IX. PROCEDURES TO MODIFY, TRANSFER OWNERSHIP OR OPERATIONAL CONTROL, REVOKE, SUSPEND, DENY, CONTINUE, OR RENEW APPROVAL	
A. – Procedures for modifications C.1. – Revocation or suspension of Approval	Specifying the administrative procedures to modify, revoke, or suspend an approval assures that the Facility continues to operate under an approval that reflects current operating procedures and contains the terms and conditions necessary to ensure that the Facility's operations to do not pose an unreasonable risk of injury to health and the environment. Procedures to revoke and suspend an Approval are necessary if U.S. EPA determines that the Facility cannot operate in a manner that does not pose an unreasonable an unreasonable risk of injury to health and the environment. Requiring public notice and comment for certain types of modifications is necessary because public participation helps ensure that all issues related to operations of the Facility that affect the surrounding community are known and approval conditions to address these issues and prevent an unreasonable risk of injury to health and the environment are included. Finally, while the PCB regulations at 40 C.F.R. § 761.65 and § 761.75 do not explicitly include provisions covering how to modify, revoke, or suspend, the Approval, U.S. EPA interprets its authority under these provisions to issue an Approval as also providing authority to undertake these associated permit processing actions.
E.1. – Renewal or closure	Establishing deadlines for submittal of renewal application or notice of closure prior to the expiration of the Approval allows U.S. EPA to provide appropriate oversight of the Facility which is necessary to ensure that the Facility operates in a manner that does not pose an unreasonable an unreasonable risk of injury to health and the environment. Update of the closure plan prior to the closure beginning assures that the closure plan reflects current Facility operations and therefore appropriate closure procedures are followed. Notification to U.S. EPA prior to closure beginning allows U.S. EPA to monitor implementation with the closure plan. U.S. EPA's oversight ensures that closure occurs in a manner that will prevent future releases of PCBs and therefore necessary to ensure that the Facility's operations do not pose an unreasonable is protective of health and the environment.



**APPENDIX F –
REPORTING, NOTIFICATION, AND SUBMITTAL REQUIREMENTS IN THE
KETTLEMAN HILLS FACILITY PROPOSED TSCA APPROVAL**

PROPOSED REPORTING, NOTIFICATIONS, AND SUBMITTALS REQUIREMENTS IN THE KETTLEMAN HILLS FACILITY

REPORT NAME	APPROVAL CONDITION	AGENCY CONTACT	FREQUENCY	DUE DATE	CONTENT/OTHER INFORMATION
Routine Reports					
WASTE REPORTS AND LANDFILL CAPACITY					
PCB Annual Report	Condition IV.O.7.d 40 CFR 761.180(b)(3)	U.S. EPA	Annually	July 15	Amount of PCB waste by category received, stored, transferred, disposed, and remaining at the Facility
TSCA Monthly Report	Condition IV.O.11.	U.S. EPA Project Manager	Monthly	By 25 th day of the following month	PCB Waste received that resulted from spills, leaks, or other uncontrolled discharges of PCBs; unusual events at the Facility
Survey of landfill capacity	Condition VI.B.3.	U.S. EPA Project Manager	Annually	No later than April 30	Survey report on remaining capacity in Landfill B-18
GROUNDWATER, SOIL GAS, STORMWATER, AND LCRS MONITORING					
Groundwater monitoring report	Condition VIII.B.7.	U.S. EPA Project Manager	Annually	By March 31	Summary report of groundwater monitoring results and soil gas monitoring results. Facility may substitute Groundwater and Unsaturated Zone Monitoring Report for Class I Waste Management Unit and Annual Monitoring Summary Report required by the MRP provided the report includes PCB analysis results.
LCRS sampling results	Condition VI.E.5.c.	U.S. EPA Project Manager	Annually	By March 1	Results of the annual leachate sampling and analysis required by Conditions IV.E.5.a. and VII.B.3.b. CWM may substitute the Annual Leachate Collection and Removal System Report required by MRP R5-2014-0003 to meet this requirement
LCRS integrity report	Condition VI.E.5.c.	U.S. EPA Project Manager	Annually	By March 1	Results of testing for proper operation of LCRS and comparison of results with earlier tests under comparable conditions.



REPORT NAME	APPROVAL CONDITION	AGENCY CONTACT	FREQUENCY	DUE DATE	CONTENT/OTHER INFORMATION
AIR MONITORING					
Air program monitoring report	Condition VIII.A.3.	U.S. EPA Project Manager	Quarterly	90 days after end of reporting quarter	Summary report of the PCB Aroclors data collected during the ambient air sampling and meteorological data and description of waste received. Facility may substitute State report.
CLOSURE AND POST-CLOSURE					
Post-closure report	Conditions VI. I.2.h. and VII.B.3.g.	U.S. EPA Project Manager	Annually	By September 30	Documentation of post-closure inspections, maintenance activities, and survey results.
Annual documentation of Financial Assurance	Condition IV.M.4.	U.S. EPA Project Manager	Annually	March 1	Written documentation of continued financial assurance for the PCB units at the Facility including the current closure and post-closure cost estimates for the PCB units and the level of funding contained in the closure and post-closure financial assurance mechanism.
OTHER					
PCB Storage Facility Sampling	Condition V.G.2.	U.S. EPA Project Manager	Annually	July 15	Results from quarterly testing of the PCB F/SU (See Proposed TSCA Approval, Appendix B-4.1 for details)
INCIDENT REPORTS					
EMERGENCIES, SPILLS, AND OTHER RELEASES					
Emergency incident	Condition IV.G.3.	U.S.EPA Program Manager	When required	ASAP but no later than 24 hours of becoming aware of the incident	Verbal report on any incident involving PCBs that requires implementation of the Contingency Plan.



REPORT NAME	APPROVAL CONDITION	AGENCY CONTACT	FREQUENCY	DUE DATE	CONTENT/OTHER INFORMATION
Follow up to emergency incident	Condition VI.G.4.	U.S.EPA Project Manager	When required	15 days after formal or informal implementation of the contingency plan	Written report detailing incident involving PCBs, response, assessment of hazard to human health and environment, and other information listed in section VI.F.4.
Operations after implementation of the Contingency Plan	Condition IV.G.5.	U.S. EPA Project Manager	When required	Prior to resuming operations	Notifications that emergency equipment is ready for use and corrective measures have been implemented
Spill report – PCB quantities over 10 lbs	Condition VI.G.7.	U.S. EPA Project Manager	When required	Within 24 hours of knowledge of release	Verbal report to U.S. EPA Project Manager
				Within 15 days of knowledge of release	Detailed written report to U.S. EPA Project Manager of full investigation of cause and response
Spill report – PCB quantities over 1 lb in 24 hour period	Condition VI.G.6.	U.S. EPA Project Manager	When required	Verbal: Within 24 hours of knowledge of release Written: Within 15 days of knowledge of release	Verbal report to National Emergency Response Center and U.S. EPA Project Manager Written report to U.S. EPA Project Manager on the full investigation of cause and response
Unauthorized entry, tampering, destruction or loss	Condition VI.G.1 4.	U.S. EPA Project Manager	When required	Within 5 days of becoming aware of the incident	Written report of unauthorized entry, tampering, destruction, or loss which caused PCBs to be discharged. The report includes date of incident, a description, effect, and any corrective actions taken.



REPORT NAME	APPROVAL CONDITION	AGENCY CONTACT	FREQUENCY	DUE DATE	CONTENT/OTHER INFORMATION
Injury/illness caused by PCB exposure	Condition IV.F.4.	U.S. EPA Project Manager	When required	Within 7 days	Written report of incident to include date, time, and type of incident; number of persons affected; type and extent of injury; and actions taken or planned to prevent future injuries
Exceedance of the action leakage rate (leachate)	Condition VI.E.4.	U.S. EPA Project Manager	When required	Within 7 days of determination Within 14 days of determination Within 30 days of notification	Written notification that action leakage rate (ALR) has been exceeded (see 1992 ARP, p. 30) Preliminary written assessment of amount of liquids, likely sources of liquid, possible location, size, and cause of any leaks, and short term actions taken and planned Results of analysis and results of actions taken and actions planned.
Detection of PCBs in Media					
PCB Storage Facility sampling	Condition V.G.3.	U.S. EPA Project Manager	When required	Within days 5 of test result showing $\geq 10 \text{ ug}/100 \text{ cm}^2$	Verbal report of incident
				Within 30 days of test result showing $\geq 10 \text{ ug}/100 \text{ cm}^2$	Documentation of building decontamination
PCBs detected in leachate	Condition VI.E.5.b.	U.S. EPA Project Manager	When required	Within 24 hours of becoming aware of incident	Written report on source of leachate and detected levels
PCB detected in stormwater	Condition VI.F.4.	U.S. EPA Project Manager	When required	Within 24 hours of becoming aware of detection	Written report with location the sample was taken and the PCB levels detected



REPORT NAME	APPROVAL CONDITION	AGENCY CONTACT	FREQUENCY	DUE DATE	CONTENT/OTHER INFORMATION
PCBs detected in groundwater	Condition VIII.B.6.	U.S. EPA Project Manager	When required	Within 7 days of becoming aware of detection	The report shall include information on the levels of PCBs detected and identify the affected groundwater monitoring well and landfill affected.
PCB detected in air	Condition VIII.A.4.	U.S. EPA Project Manager	When required	Within 7 days of becoming aware of detection	Written report with levels of each PCB Aroclor detected, the location of the monitor at which the PCBs were detected, and available information that may explain the detection (e.g., high winds, unusual PCB Waste disposal rates).
Manifests					
Manifest discrepancy	Condition IV.P.1.h.	PCB Inspector, Enforcement Division (ENF-4)	When required	Immediately if discrepancy is not resolved within 15 days	Description of the manifest discrepancy and efforts to reconcile it, and a copy of the manifest or shipping paper at issue
Unmanifested waste	Condition IV.P.1.i.	PCB Inspector, Enforcement Division (ENF-4)	When required	Immediately with follow up written report within 15 days	Information on waste, source, and disposition (full list at 40 CFR § 761.216(a))
Exception reporting	Condition IV.P.1.j.	PCB Inspector, Enforcement Division (ENF-4)	When required	Within 45 days of triggering event	Required when a generator has not received a signed manifest from the facility to which it sent PCB waste for storage or disposal. Report requires copy of manifest and information on efforts to located waste.



REPORT NAME	APPROVAL CONDITION	AGENCY CONTACT	FREQUENCY	DUE DATE	CONTENT/OTHER INFORMATION
One-year exception reporting	Condition IV.P.1.1.	PCB Inspector, Enforcement Division (ENF-4)	When required	45 days from the end of the 1-year storage for disposal date	Required when PCB waste transferred from or received at a disposal more than 9 months from the date the waste was removed from service, the disposer could not dispose of the affected PCBs or PCB Items within 1 year of the date of removal from service, or a certificate of disposal is not received or is received more than 1 year after the date of removal from service. Report should include a copy of the manifest, date of removal from service, and other information required 40 CFR § 761.219
Non-Compliance and Other					
Notification of noncompliance which may endanger health or the environment	Condition IV.B.13	U.S. EPA Project Manager	When required	24 hours after becoming aware of incident 15 days after becoming aware of incident	Date, time, and type of incident, name and quantity of material involved, extent of injuries, if any; assessment of hazard to human health and environment, and estimated quantity and disposition of recovered materials Written report. a description of the noncompliance and its cause; the period of noncompliance including exact dates and times, and, if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
Endangered species	Condition IV.B.3.	U.S. Fish and Wildlife Service	When Required	Within 3 days of finding any dead or injured endangered species	Report should include the date, time, and location of the incident or of the finding of a dead or injured endangered species, and any other pertinent information.



REPORT NAME	APPROVAL CONDITION	AGENCY CONTACT	FREQUENCY	DUE DATE	CONTENT/OTHER INFORMATION
Updated Closure Cost Estimate	Condition IV.K.3.	U.S. EPA Project Manager	When Required	Within 30 days of approval of a modification to the Closure Plan that increase closure costs	Updated closure cost estimate.
Updated Post-Closure Care Cost Estimate	Condition IV.L.3.	U.S. EPA Project Manager	When Required	Within 30 days of approval of a modification to the Closure Plan that increase post-closure costs	Updated post-closure care cost estimate.
Updated Financial assurance	Condition IV.M.6	U.S. EPA Project Manager	When Required	30 days after increase in maximum storage capacity	Written notification that a modification that increases the maximum storage capacity has been completed.
Bankruptcy	Condition IV.M.8.	U.S. EPA Project Manager	When Required	Within 10 days of bankruptcy procedures commencing	Written notification by certified mail of the commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code.
EPA Notification	Condition IV.P.1.a.	As required on Form 7710-53	When Required	30 days from when a change is made	Resubmit EPA Form 7710-53 when PCB Waste handling operations change
Closure	Condition V.I.2.	U.S. EPA	When Required	At least 60 days prior to beginning closure of PCB F/SU	Written notification of intent to close the PCB F/SU.



REPORT NAME	APPROVAL CONDITION	AGENCY CONTACT	FREQUENCY	DUE DATE	CONTENT/OTHER INFORMATION
Closure	Condition VI.H.2.	U.S. EPA	When Required	At least 60 days prior to beginning closure of Landfill B-19	Written notification of intent to close Landfill B-18.
Renewal	Condition IX.E.1.	U.S. EPA	When Required	At least 180 days prior to expiration	Either a written notice of its intent to seek renewal of the Approval or a revised Closure Plan to initiate the closure process for the TSCA Units and active TSCA Landfills at the Kettleman Hills Facility and necessary supporting documents (e.g., an renewal application).

NOTE: This table is for informational and summary purposes only. It does not alter any condition of the proposed Approval. The omission of a required report, notification, or submittal from this table does not eliminate the requirement for that report, notification, or submittal. The table does not include notification requirements for approval modifications contained in Subsection IX.A. of the proposed Approval.



**APPENDIX G –
DRAFT ENVIRONMENTAL JUSTICE ANALYSIS**

Bound Separately



**APPENDIX H –
NATIONAL HISTORIC PRESERVATION ACT DETERMINATION**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

September 17, 2018

Mr. Tristan Tozer
California Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816

Dear Mr. Tozer:

The U.S. Environmental Protection Agency (EPA) is considering an application from Chemical Waste Management, Inc. (CWM) to renew and modify its Approval (Permit) under the Toxic Substances Control Act (TSCA) to store, manage, and dispose of wastes containing polychlorinated biphenyls (PCBs) at its Kettleman Hills Facility (KHF), located at 35251 Old Skyline Road, Kettleman City, CA 93239 (T22S & T23S, R18E, S33, S34, & S3). EPA has not yet acted on this application for renewal of the Permit. As part of our decision-making process, EPA has determined that the issuance of such a Permit renewal is an "Undertaking" subject to the review process set forth in Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended, (54 U.S.C. §100101 *et seq.*) and its implementing regulations at 36 C.F.R. Part 800.

This letter is to inform the California Office of Historical Preservation (OHP) about the requested Permit's Undertaking and initiate consultation under 36 C.F.R. Part 800. The Undertaking includes: 1) Continue to store and process PCB waste at the PCB Flushing/Storage Unit; 2) Continue to dispose of non-liquid PCB waste in Landfill B-18 Phases I and II; and 3) Dispose of non-liquid PCB waste in the Phase III expansion of Landfill B-18.

The 1,600-acre property includes a 555-acre operations area used for the disposal of federal and state-only hazardous waste. Within this operations area, the Undertaking's area of potential effect (APE) is defined as the 81 acres where PCBs will be disposed of in Landfill B-18 and the 4200-square foot (0.1 acre) PCB Flushing/Storage Unit building where PCBs will be stored and managed prior to disposal, for a total APE of 81.1 acres (Attachment 1).

EPA previously consulted with OHP in 2011 for a prior consideration of a CWM TSCA Permit renewal that consisted of a similar APE and Undertaking as mentioned above (OHP# EPA091223A). EPA did not move forward with the 2011 Permit renewal; however, an OHP letter dated October 28, 2011, concurred with EPA's finding of No Effect to Historic Properties. The 2011 Undertaking included the 14-acre expansion of Landfill B-18 (Phase III), which was later permitted and constructed through the California Department of Toxic Substances Control's 2014 Resource Conservation and Recovery Act permit modification (#EPA120509A). As a result of this completed expansion, no ground disturbing activities will occur as part of the 2018 Undertaking.



Past field surveys and a literature review of the APE were completed by TRC in 2002 and 2003, which included the Phase III expansion of Landfill B-18 (TRC 2004 - Confidential Survey Report). The surveys identified one non-significant isolated occurrence within the Facility boundary with no archaeological materials nearby, and no previously unrecorded cultural resources. No shovel test probes were conducted. Based on this information and the fact that no ground disturbing activities will occur, EPA determines that the 2018 Undertaking will have No Effect to Historic Properties.

The updated Native American Heritage Commission (NAHC) *Sacred Lands File* record search completed for the APE on October 16, 2017, yielded no results. As requested by NAHC, the Tule River Indian Tribe, Wukache Indian Tribe/Eshom Valley Band, Santa Rosa Indian Community of the Santa Rosa Rancheria, Kings River Choinumni Farm Tribe, and the Table Mountain Rancheria of California are being consulted concurrently regarding this 2018 Undertaking.

EPA is requesting that OHP concur with our finding of No Effect to Historic Properties for this Undertaking. Thank you in advance for your timely attention to our request. If you have any questions or comments, please contact Sarah Bielski at (415) 972-3961 or by email at bielski.sarah@epa.gov.

Sincerely,



Barbara Gross, Manager
Permits Section
Land Division

cc:
Ryan Batty, DTSC





State of California • Natural Resources Agency

Edmund G. Brown Jr., Governor

OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
1725 23rd Street, Suite 100, Sacramento, CA 95816-7100
Telephone: (916) 445-7000 FAX: (916) 445-7053
calshpo@parks.ca.gov www.ohp.parks.ca.gov

Julianne Polanco, State Historic Preservation Officer

October 8, 2018

SHPO Reference #: EPA_2018_0927_001

Barbara Gross
Manager, Permits Section, Land Division
US EPA, Region IX
75 Hawthorne Street
San Francisco, CA 94105

RE: Toxic Substances Control Act Permit Renewal, Kettleman Hills Facility, 35251 Old
Skyline Road, Kettleman City, Kings County, California

Dear Ms. Gross:

The United States Environmental Protection Agency, Region IX (EPA) is consulting with the State Historic Preservation Officer (SHPO) in an effort to comply with Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. 470f), as amended, and its implementing regulation at 36 CFR Part 800. The EPA is requesting concurrence with a finding of no historic properties affected.

The EPA is considering an application from Chemical Waste Management, Inc. to renew and modify its Approval (Permit) under the Toxic Substances Control Act. The Permit will allow for the continued storage and processing of PCB waste at the PCB Flushing/Storage Unit, continued disposal of non-liquid PCB waste in Landfill B-18 Phases I and II and in the Phase II expansion of Landfill B-18. No ground disturbance is required to renew the permit.

Having reviewed your submittal, SHPO concurs that the undertaking will not affect historic properties. Please be reminded that the event of change in the scale or scope of the project, EPA may have additional responsibilities under 36 CFR Part 800.

Thank you for considering historic resources during project planning. If you have any questions or comments, please contact Tristan Tozer of my staff at (916) 445-7027 or email at tristan.tozer@parks.ca.gov.

Sincerely,

A handwritten signature in blue ink, appearing to be "Julianne Polanco".

Julianne Polanco
State Historic Preservation Officer



National Historic Preservation Act Determination Index of Documents

1. “Primary Archaeological Reconnaissance and Paleontological Overview of a Parcel in the Kettleman Hills, Kings County, California.” Archaeological Consulting. September 4, 1984.
2. “Supplemental Cultural Resources Survey, Proposed Expansion, Kettleman Hills Facility – Chemical Waste Management, Inc., Kings County, California.” TRC Companies, Inc. May 2004 (confidential – file not included).
3. “Order #EP079000258: CWM Kettleman Hills Facility Project.” Adele Baldwin, California Historical Resources Information System to Max Weintraub, U.S. EPA Region 9. November 23, 2007.
4. “Sacred Lands file & Native American Contacts List Request: Kettleman Hills – Chemical Waste Management B-18 Expansion.” Fax, Edwin Poalinelli, U.S. EPA to Native American Heritage Commission. August 26, 2008.
5. “Compliance with Section 106 of the National Historic Preservation Act for the Renewal and Modification of Toxic substance Control Act (“TSCA” Polychlorinated Biphenyls (“PCBs”) B-18 Permit – Kettleman Hills Facility.” Letter, Cheryl Nelson, U.S. EPA Region 9 to Tristan Tozer, State Historian, Office of Historic Preservation. December 21, 2009.
6. “Modification of TSCA PCB B-18 Permit – Kettleman Hills Facility.” Email, Edwin Poalinelli, U.S. EPA Region 9 to Tristan Tozer, State Historian, Office of Historic Preservation. January 11, 2010.
7. “Request for a Sacred Lands File Search and Native American Contacts List for a Proposed “Kettleman Hills Chemical Waste Management – B-18 Expansion Project, under a TSCA Permit to Store and Dispose of Waste Containing PCBs” located in western Kings County, California 2.6 miles west of Interstate 5 where it intersects with State Route 41.” Letter, Dave Singleton, Native American Heritage Commission to Edwin Poalinelli, U.S. EPA Region 9. March 4, 2010.
8. “Request for Information on Culturally Significant Areas; Compliance with Section 106 of the National Historic Preservation Act for the Renewal and Modification of Toxic Substance Control Act (“TSCA”) Polychlorinated Biphenyls (“PCBs”) B-18 Permit - Kettleman Hills Facility.” Letter, Cheryl Nelson, U.S. EPA Region 9 to John Davis, Chairman, Kings River Choinumni Tribe. March 10, 2010.
9. “Request for Information on Culturally Significant Areas; Compliance with Section 106 of the National Historic Preservation Act for the Renewal and Modification of Toxic Substance Control Act (“TSCA”) Polychlorinated Biphenyls (“PCBs”) B-18 Permit - Kettleman Hills Facility.” Letter, Cheryl Nelson, U.S. EPA Region 9 to Director – Cultural Department, San Rosa Rancheria. March 10, 2010.



10. “Request for Information on Culturally Significant Areas; Compliance with Section 106 of the National Historic Preservation Act for the Renewal and Modification of Toxic Substance Control Act (“TSCA”) Polychlorinated Biphenyls (“PCBs”) B-18 Permit - Kettleman Hills Facility.” Letter, Cheryl Nelson, U.S. EPA Region 9 to Bob Pennell, Table Mountain Rancheria. March 10, 2010.
11. “Request for Information on Culturally Significant Areas; Compliance with Section 106 of the National Historic Preservation Act for the Renewal and Modification of Toxic Substance Control Act (“TSCA”) Polychlorinated Biphenyls (“PCBs”) B-18 Permit - Kettleman Hills Facility.” Letter, Cheryl Nelson, U.S. EPA Region 9 to Chairperson, Tule River Indian Tribe. March 10, 2010.
12. “Request for Information on Culturally Significant Areas; Compliance with Section 106 of the National Historic Preservation Act for the Renewal and Modification of Toxic Substance Control Act (“TSCA”) Polychlorinated Biphenyls (“PCBs”) B-18 Permit - Kettleman Hills Facility.” Letter, Cheryl Nelson, U.S. EPA Region 9 to Kenneth Woodrow, Esom Valley Band of Indians/Wuksache Tribe. March 10, 2010.
13. “Memo to Admin Record.” Email, Edwin Poalinelli, U.S. EPA to Edwin Poalinelli. March 18, 2010.
14. “Re: Kettleman Hills Facility.” Letter, Bob Pennell, Table Mountain Rancheria to Chip Poalinelli, U.S. EPA Region 9. April 7, 2010.
15. “Re: Compliance with Section 106 of the National Historic Preservation Act for Potential Renewal and Modification of Toxic Substance Control Act (“TSCA”) Polychlorinated Biphenyls (“PCBs”) B-18 Permit- Chemical Waste Management Kettleman Hills Facility- Response to Additional Information Request.” Letter, Caleb Shaffer, U.S. EPA Region 9 to Tristan Tozer, State Historian, Office of Historic Preservation. September 20, 2011.
16. “Re: Landfill B-18 Permit Renewal and Expansion of Chemical Waste Management Kettleman Hills Facility, Kettleman Hills, California.” Letter, Milford Wayne Donaldson, State Historic Preservation Officer to Caleb Shaffer, U.S. EPA Region 9. October 28, 2011.
17. “Sacred Lands File and Native American Contacts List Request for Kettleman Hills Facility.” Letter, Sarah Bielski, U.S. EPA Region 9 to Native American Heritage Commission, September 28, 2017.
18. “Chemical Waste Management Kettleman Hills Facility Permit and Expansion, Kings County.” Letter, Sharaya Souza, Native American Heritage Commission. October 17, 2017. With enclosure: Native American Contacts. Native American Heritage Commission. October 16, 2017.
19. Letter, Barbara Gross, U.S. EPA to Stan Alec, Chairman, Kings River Choinumni Tribe. July 25, 2018.



20. Letter, Barbara Gross, U.S. EPA to Ruben Barrios, Chairman, Santa Rosa Indian Community of the Santa Rosa Rancheria. July 25, 2018.
21. Letter, Barbara Gross, U.S. EPA to Neil Peyron, Chairman, Tule River Indian Tribe. July 25, 2018.
22. Letter, Barbara Gross, U.S. EPA to Leanne Walker-Grant, Chairwoman, Table Mountain Rancheria of California. July 25, 2018.
23. Letter, Barbara Gross, U.S. EPA to Kenneth Woodrow, Chairman, Wuksache Indian Tribe/Eshom Valley Band. July 25, 2018.
24. Letter, Barbara Gross, U.S. EPA to Tristan Tozer, California Office of Historic Preservation. July 25, 2018.
25. Letter, Barbara Gross, U.S. EPA to Tristan Tozer, California Office of Historic Preservation. September 17, 2018.
26. “Toxic Substances Control Act Permit Renewal, Kettleman Hills Facility, 35251 Old Skyline Road, Kettleman City, Kings County, California.” Letter, Julianne Polanco, State Historic Preservation Officer, California Office of Historic Preservation to Barbara Gross, U.S. EPA Region 9. October 8, 2018.



**APPENDIX I –
ENDANGERED SPECIES ACT DETERMINATION**

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

October 11, 2018

Ms. Jennifer Norris
Field Supervisor
Sacramento Fish & Wildlife Office
2800 Cottage Way
Room W-2605
Sacramento, California 95825

Re: Kettleman Hills PCB Approval Review – FWS Biological Opinion 81420-2012-F-0044

Dear Ms. Norris:

I am writing on behalf of the U.S. Environmental Protection Agency ("USEPA") to request your concurrence that the federal action of a proposed USEPA approval for the Kettleman Hills Facility ("KHF" or "Facility") is addressed by the existing Fish & Wildlife ("FWS") biological opinion ("BO") numbered 81420-2012-F-0044.

USEPA is currently reviewing an application that would allow the KHF to accept waste containing polychlorinated biphenyls ("PCBs") in a new section of its hazardous waste landfill. Specifically, an approval would allow the KHF to dispose of non-liquid PCB waste in Landfill Unit B-18 Phase III, which is a section of the landfill permitted and constructed under the Resource Conservation and Recovery Act ("RCRA"). All three sections of Landfill Unit B-18, Phases I-III, are already constructed and accepting RCRA hazardous waste. Phase I and II are also approved to accept Toxic Substances Control Act ("TSCA") non-liquid PCB waste. The approval would also authorize KHF to use the existing PCB Flushing/Storage Unit for PCB waste storage and treatment.

In a letter dated September 20, 2011, USEPA requested formal consultation on an application for the renewal and modification of an approval for KHF, which included the expansion and modification of Unit B-18 to dispose of non-liquid PCB waste in Phase III. FWS responded with a final BO dated August 15, 2012, which was amended on September 5, 2012 and July 23 and 30, 2014.

The description of the proposed action in the BO included:

- addition of 81 contiguous acres (to be enclosed by exclusionary fencing) to KHF's existing 474-acre permitted operational area, resulting in 555 operational acres;
- vertical and lateral expansion of the existing and expanded B-18 landfill unit (i.e., the construction of Phase III);
- operation and closure of the existing and expanded B-18 landfill unit;
- transport of PCB-containing material within the 555 operational acres; and
- operation of ancillary buildings within the 555 operational acres.

Expansion of the operational area and construction of Phase III occurred in 2014-2015 after the California Department of Toxic Substances Control issued a permit modification under RCRA. Waste disposal in Phase III also began in 2015. USEPA's proposed approval would allow disposal of PCB waste in the B-18 landfill including Phase III, eventual closure of the B-18 landfill unit, transport of PCB-containing material within the operational area and PCB waste operations at one ancillary building within the operations area. No other construction activities are included in the proposed approval.

The BO proposed avoidance, minimization, and conservation measures for listed species for on-going operation



of the facility and eventual closure of the B-18 landfill. All of these measures have been incorporated as conditions of the proposed USEPA approval.

The BO provides four conditions for reinitiation of formal consultation. As provided in 50 C.F.R. § 402.16, reinitiation of formal consultation is required where discretionary federal agency involvement or control over the action has been maintained (or is authorized by law) and if:

- (1) the amount or extent of incidental take is exceeded;
- (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or an extent not considered in the BO;
- (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the BO; or
- (4) a new species is listed or critical habitat designated that may be affected by the action.

None of these four conditions has been met, and therefore reinitiation of formal consultation is not needed. On September 27, 2018, I obtained a list of threatened and endangered species and designated critical habitat for the area of the proposed approval. I have reviewed that list and determined that no new species have been listed nor critical habitat designated that may be affected by the proposed approval.

USEPA understands that the scope of the proposed approval has been addressed by the 2012 BO. Please provide concurrence the FWS agrees with this understanding, or clarification as needed. USEPA appreciates your assistance with this project. If you have any questions, please contact me at (415) 972-3536 or ziff.sara@epa.gov.

Sincerely,



Sara Ziff, P.E.
Environmental engineer, Land Division

cc (electronic): Justin Sloan, FWS





United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Suite W-2605
Sacramento, California 95825-1846



In Reply Refer to:
08ESMF00-2012-
F-0044

DEC 07 2018

Sara Ziff
Environmental Engineer, Land Division
U.S. Environmental Protection Agency, Region 9
75 Hawthorne Street
San Francisco, California 94105

Subject: Kettleman Hills PCB Approval Review

Dear Ms. Ziff:

This letter is in response to the U.S. Environmental Protection Agency's (EPA) request for concurrence that potential impacts associated with EPA's future approvals at the Kettleman Hills Facility have already been addressed in a biological opinion previously issued by the U.S. Fish and Wildlife Service (Service). Based on your letter, the EPA's proposed approval would allow disposal of polychlorinated biphenyl (PCB) waste in the B-18 landfill including Phase III, eventual closure of the B-18 landfill unit, transport of PCB-containing material within the operational area and PCB waste operations at one ancillary building within the operations area. All of the proposed activities would occur within the Kettleman Hills Facility.

The Service issued a biological opinion to EPA on August 15, 2012, that addressed Chemical Waste Management's application to EPA for the renewal and modification of a permit under the Toxic Substances Control Act, which included the expansion and modification of the Kettleman Hills Facility's Cell B-18 landfill to manage, store, and dispose of PCB waste. The project description in the biological opinion included all of the activities described in your letter. Therefore, the Service concurs with your determination that the potential impacts associated with EPA's proposed approval at the Kettleman Hills Facility, as described in your letter, were addressed in the Service's 2012 biological opinion.

If you have questions regarding this letter, please contact Justin Sloan (justin_sloan@fws.gov) or at the letterhead address or at (559) 221-1828.

Sincerely,

Patricia Cole
Chief, San Joaquin Valley Division



U.S. EPA Endangered Species Act Determination

Index of Documents

1. “Request for Formal Consultation Under Section 7 of the Endangered Species Act on TSCA Permit Application for Chemical Waste Management Kettleman Hills Facility.” Letter, Caleb Shaffer, U.S. EPA to Thomas Leeman, U.S. Fish and Wildlife Service. September 20, 2011. With enclosures: “CWM Kettleman Hills Facility, B-18 Landfill Expansion Project, Section 7 Biological Assessment.” Berryman Ecological. July 2011.
2. “Request for Formal Consultation and Receipt of Initiation Package for the Toxic Substances Control Act Permit Application for Chemical Waste Management’s Kettleman Hills Facility Landfill expansion.” Letter, Daniel Russell, U.S. Fish and Wildlife Service to Caleb Shaffer, U.S. EPA Region 9. December 7, 2011.
3. “Re: Summary of Surface Water Controls for Landfill B-18.” Letter, Robert Henry, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. December 14, 2011.
4. “Chemical Waste Management, Inc. – Kettleman Hills Facility Section 7 Biological Assessment – January 2012 Revision.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. January 24, 2012. With Attachment: “CWM Kettleman Hills Facility, B-18 Landfill Expansion Project, Section 7 Biological Assessment.” Berryman Ecological. July 2009. Rev: January 2012.
5. “Re: Initiation of Formal Consultation – Kettleman Hills PCB Facility Expansion.” Email, Kevin Aceituno, U.S. FWS to Edwin Poalinelli, U.S. EPA Region 9. January 26, 2012.
6. “Re: FW: RE: Questions.” Email, Kevin Aceituno, U.S. FWS to Edwin Poalinelli, U.S. EPA Region 9. January 31, 2012.
7. “Re: Biological Opinion Revision.” Email, Edwin Poalinelli, U.S. EPA to Kevin Aceituno, U.S. Fish and Wildlife Service. February 3, 2012.
8. “Follow-up Re: Kettleman Hills PCB Facility Expansion Consultation.” Email, John Beach, U.S. EPA, to Kevin Aceituno, U.S. Fish and Wildlife Service. February 9, 2012.
9. “Re: Follow-up Re: Kettleman Hills PCB Facility Expansion Consultation.” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to John Beach, U.S. EPA Region 9. February 9, 2012. With Attachment: “General Rare Plant Survey Guidelines.” Ellen A. Cypher, California State University, Stanislaus, Revised July 2002.
10. “Chemical Waste Management, Inc. – Kettleman Hills Facility Section 7 Biological Assessment – February 2012 Revision.” Letter, Paul Turek, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. February 21, 2012. With enclosure: “Section 7 Draft Biological Assessment B-18/B-20 Hazardous Waste Disposal Project, CWM Kettleman Hills Facility, Berryman Ecological. February 2012



11. “Re: Follow-up Re: Kettleman Hills PCB Facility Expansion Consultation.” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to John Beach, U.S. EPA Region 9. February 13, 2012.
12. “Re: Follow-up Re: Kettleman Hills PCB Facility Expansion Consultation.” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to Edwin Poalinelli, U.S. EPA Region 9. February 17, 2012.
13. “Chemical Waste Management, Inc. – Kettleman Hills Facility Section 7 Biological Assessment – February 2012 Revision.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. February 21, 2012. With Attachment: “CWM Kettleman Hills Facility, B-18 Landfill Expansion Project, Section 7 Biological Assessment.” Berryman Ecological. July 2009. Rev: February 2012
14. “Chemical Waste Management, Inc. – Kettleman Hills Facility Section 7 Biological Assessment – March 2012 Revision.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. March 6, 2012. With Attachment: “CWM Kettleman Hills Facility, B-18 Landfill Expansion Project, Section 7 Biological Assessment.” Berryman Ecological. July 2009. Rev: March 2012
15. “Kettleman Hills Facility B-18 Landfill Expansion Project Section 7 Biological Assessment (Revision dated March 2012).” Letter, Caleb Shaffer, U.S. EPA to Thomas Leeman, U.S. FWS. March 9, 2012. With Attachment: “CWM Kettleman Hills Facility, B-18 Landfill Expansion Project, Section 7 Biological Assessment.” Berryman Ecological. July 2009. Rev: March 2012.
16. “Re: Chemical Waste Management, Inc. – Kettleman Hills Facility Section 7 Biological Assessment – March 2012 Revision 2.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9. March 13, 2012. With Attachment: “CWM Kettleman Hills Facility, B-18 Landfill Expansion Project, Section 7 Biological Assessment.” Berryman Ecological. July 2011. Rev: March 2012.
17. “Kettleman Hills Facility Landfill Expansion Project Section 7 Biological Assessment (Revision dated March 2012).” Letter, Caleb Shaffer, U.S. EPA to Thomas Leeman, U.S. Fish and Wildlife Service. March 13, 2012. With attachment: “CWM Kettleman Hills Facility, B-18 Landfill Expansion Project, Section 7 Biological Assessment.” Berryman Ecological. July 2011. Rev: March 2012.
18. “Rare Plant Survey Results for the Proposed Chemical Waste Management, Inc. B-18 Landfill Expansion, Kings County, California.” McCormick Biological, Inc. April 2012.
19. “Draft Biological Opinion for Toxic Substances Control Act Permit Application for Chemical Waste Management’s Kettleman Hills Facility (modification and expansion of PCB disposal Cell B-18), Kings County, California.” Letter, Susan K. Moore, U.S. Fish and Wildlife Service to Caleb Shaffer, U.S. EPA Region 9. June 29, 2012.



20. “Draft Biological Opinion for Toxic Substances Control Act Permit Application for Chemical Waste Management’s Kettleman Hills Facility (modification and expansion of PCB disposal Cell B-18), Kings County, California.” Letter, Susan K. Moore, U.S. Fish and Wildlife Service to Caleb Shaffer, U.S. EPA Region 9. August 15, 2012. With attachment: “U.S. Fish And Wildlife Service Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance.” [U.S. Fish and Wildlife Service] Sacramento Office. January 2011
21. “Request for Formal Consultation Under Section 7 of the Endangered Species Act on TSCA Permit Application for Chemical Waste Management Kettleman Hills Facility. (Biological Opinion Revision Request).” Letter, Edwin Poalinelli, U.S. EPA to Thomas Leeman, U.S. Fish and Wildlife Service. August 30, 2012.
22. “Amendment to the Biological Opinion for Toxic Substances Control Act Permit Application for Chemical Waste Management’s Kettleman Hills Facility (modification and expansion of PCB disposal Cell B-18), Kings County, California.” Letter, Thomas Leeman, U.S. Fish and Wildlife Service to Chip Poalinelli, U.S. EPA Region 9. September 5, 2012.
23. “First Amendment to Kreyenhagen Hills Conservation Bank Agreement for Sale of Conservation Credits (Service File No. 81420-2012-F-0044 and 81420-2012-F-004402). Wildlife Inc. March 27, 2013.
24. Re: Chemical Waste Management, Inc. – Kettleman Hills Facility.” Email, Bob Henry, Chemical Waste Management, Inc. to Edwin Poalinelli, U.S. EPA Region 9.. June 5, 2014. With Attachment: “Possible Re-Alignment – Maintain 81 Acres – Draft.”
25. “Endangered Species Survey – B18III Fence.” Email, Paul Turek, Chemical Waste Management, Inc. to John Moody, U.S. EPA, June 16, 2014. With attachments: 1) “Chemical Waste Management, Inc. – Kettleman Hills Facility TSCA Permit Renewal. Biological Opinion – B18III Preconstruction Survey –Fence.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to John Moody, U.S. EPA, June 16, 2014; and 2) Letter, Michael Bumgardner, Bumgardner Biological Consulting to Paul Turek, Chemical Waste Management, Inc. June 15, 2014.
26. “FW: KHF B-18 Landfill Expansion Security Fence SJKE Potential Den Clearance Monitoring.” Email, Paul E. Turek, Chemical Waste Management, Inc. to John Moody, U.S. EPA Region 9. June 25, 2014.
27. “USFWS Biological Opinion for Toxic Substances Control Act Permit Application for Chemical Waste Management's Kettleman Hill Facility (modification and expansion of PCB disposal Cell B-18), Kings County, California, dated August 15, 2012 as amended September 5, 2012 (2012 BO).” Letter, Barbara Gross, U.S. EPA to Steven Hubbert, CA Department of Fish and Wildlife. June 27, 2014. With Attachment: Letter, Michael Bumgardner, Bumgardner Biological Consulting to Paul Turek, Chemical Waste Management, Inc. June 15, 2014.



28. “USFWS Biological Opinion for Toxic Substances Control Act Permit Application for Chemical Waste Management's Kettleman Hill Facility (modification and expansion of PCB disposal Cell B-18), Kings County, California, dated August 15, 2012 as amended September 5, 2012 (2012 BO).” Letter, Barbara Gross, U.S. EPA to Kevin Aceituno, U.S. Fish and Wildlife Service. June 27, 2014. With Attachment: Letter, Michael Bumgardner, Bumgardner Biological Consulting to Paul Turek, Chemical Waste Management, Inc. June 15, 2014.
29. “Re: CWM (Kettleman) Letter Report Submittal under 2012 BO.” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to John Moody, U.S. EPA Region 9. June 30, 2014.
30. “Re: CWM Kettleman’s response to our Para 4 (SJKF) dens) question.” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to John Moody, U.S. EPA Region 9. June 30, 2014.
31. “USFWS Biological Opinion for Toxic Substances Control Act Permit Application for Chemical Waste Management's Kettleman Hill Facility (modification and expansion of PCB disposal Cell B-18), Kings County, California, dated August 15, 2012 as amended September 5, 2012 (2012 BO).” Letter, Barbara Gross, U.S. EPA to Robert G. Henry. July 3, 2014. With Attachments: 1) “Re: CWM (Kettleman) Letter Report Submittal under 2012 BO.” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to John Moody, U.S. EPA Region 9. June 30, 2014; and 2) “Re: CWM Kettleman’s response to our Para 4 (SJKF) dens) question.” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to John Moody, U.S. EPA Region 9. June 30, 2014.
32. “Chemical Waste Management, Inc. – Kettleman Hills Facility TSCA Permit Renewal. Biological Opinion – B18III Preconstruction Survey – Fence, Response to EPA-IX Letter Dated July 3, 2014.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to Barbara Gross, U.S. EPA, July 7, 2014. With attachment: Letter, Michael Bumgardner, Bumgardner Biological Consulting to Paul Turek, Chemical Waste Management, Inc. July 7, 2014.
33. “Response from Chemical Waste Management regarding 2012 Biological Opinion.” Email, Barbara Gross, U.S. EPA to Kevin Aceituno, U.S. Fish and Wildlife Service. July 9, 2014. With Attachments: Letter, Michael Bumgardner, Bumgardner Biological Consulting to Paul Turek, Chemical Waste Management, Inc. July 7, 2014.
34. “Re: Response from Chemical Waste Management regarding 2012 Biological Opinion.” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to John Moody, U.S. EPA Region 9. July 9, 2014.
35. “Re: Response from Chemical Waste Management regarding 2012 Biological Opinion.” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to Barbara Gross, U.S. EPA Region 9. July 10, 2014.
36. “Kettleman Hills Fence Re-alignment: Modification of Biological Opinion # 81420-2012-F-0044-2.” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to Bob Henry, Chemical Waste Management, Inc. July 14, 2014.



37. “CWM’s Kettleman Hills Fence Realignment: Modification of Biological Opinion # 81420-2012-F-0044-2.” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to John Moody, U.S. EPA Region 9. July 23, 2014.
38. “Modification of Kettleman Hills Facility Biological Opinion (81420-2012-F-0044-2).” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to John Moody, U.S. EPA Region 9. July 23, 2014.
39. “Re: FYI-USFWS to EPA FW: CWM’s Kettleman Hills Fence Realignment: Modification of Biological Opinion # 81420-2012-F-0044-2.” Email, Paul Turek, Chemical Waste Management, Inc. to John Moody, U.S. EPA Region 9. July 29, 2014.
40. “Re: CWM’s Kettleman Hills Fence Realignment: Modification of Biological Opinion # 81420-2012-F-0044-2.” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to John Moody, U.S. EPA Region 9. July 30, 2014.
41. “Re: KHF Fence Survey- Take 2.” Email, Paul Turek, Chemical Waste Management, Inc. to John Moody, U.S. EPA Region 9. August 11, 2014. With Attachments: 1) “Chemical Waste Management, Inc. – Kettleman Hills Facility TSCA Permit Renewal. Biological Opinion – B18III Preconstruction Survey – Fence” Letter, Paul E. Turek, Chemical Waste Management, Inc. to John Moody, U.S. EPA, August 11, 2014; 2) Letter, Michael Bumgardner, Bumgardner Biological Consulting to Paul Turek, Chemical Waste Management, Inc. August 10, 2014; and 3) “New Perimeter Map, Kettleman Hills, California.” Golder Associates. No date.
42. “Re: KHF Fence Survey – Take 2.” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to John Moody, U.S. EPA Region 9. August 18, 2014.
43. “Waste Management Letter to US EPA, dated August 11, 2014; USFWS Biological Opinion for Toxic Substances Control Act Permit Application for Chemical Waste Management's Kettleman Hill Facility (modification and expansion of PCB disposal Cell B-18), Kings County, California, dated August 15, 2012, as amended (2012BO).” Letter, John R. Moody, U.S. EPA to Paul E. Turek, Chemical Waste Management, Inc. August 21, 2014.
44. “KHF B-18 Stockpile Survey.” Email, Paul Turek, Chemical Waste Management, Inc. to John Moody, U.S. EPA Region 9. September 9, 2014. With Attachment: “Chemical Waste Management, Inc. – Kettleman Hills Facility TSCA Permit Renewal. Biological Opinion – B18III Preconstruction Survey – B-18 Stockpile.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to John Moody, U.S. EPA, September 9, 2014; with attachment: Letter, Michael Bumgardner, Bumgardner Biological Consulting to Paul Turek, Chemical Waste Management, Inc. September 8, 2014.
45. “Re: Kettleman Pre-construction Survey, B-18 Soil Stockpile.” Email, John Moody, U.S. EPA to Paul Turek, Chemical Waste Management, Inc. September 23, 2014.
46. “Re: Kettleman Pre-construction Survey, B-18 Soil Stockpile.” Email, Kevin Aceituno, U.S. Fish and Wildlife Service to John Moody, U.S. EPA Region 9. September 23, 2014.



47. “KHF 81 Acre Survey.” Email, Paul Turek, Chemical Waste Management, Inc. to John Moody, U.S. EPA Region 9. October 13, 2014. With Attachment: “Chemical Waste Management, Inc. – Kettleman Hills Facility TSCA Permit Renewal. Biological Opinion – B18III Preconstruction Survey – 81 Acres.” Letter, Paul E. Turek, Chemical Waste Management, Inc. to John Moody, U.S. EPA, October 13, 2014. With attachment: Letter, Michael Bumgardner, Bumgardner Biological Consulting to Paul Turek, Chemical Waste Management, Inc. October 10, 2014.
48. “EPA Response to CWM Letter Report, 10/10/14.” Email, John Moody, U.S. EPA to Paul Turek, Chemical Waste Management, Inc. October 27, 2014.
49. “Waste Management Letter to US EPA, dated October 13, 2014; USFWS Biological Opinion for Toxic Substances Control Act Permit Application for Chemical Waste Management's Kettleman Hill Facility (modification and expansion of PCB disposal Cell B-18), Kings County, California, dated August 15, 2012, as amended (2012BO).” Letter, John R. Moody, U.S. EPA to Paul E. Turek, Chemical Waste Management, Inc. October 30, 2014.
50. “Kettleman Hills PCB Approval Review – FWS Biological Opinion 81420-2012-F-0044” Letter, Sara Ziff, U.S. EPA, to Jennifer Norris, U.S. Fish and Wildlife Service to . October 11, 2018.
51. “Kettleman Hills PCB Approval Review.” Letter, Patricia Cole, U.S. Fish and Wildlife Service to Sara Ziff, U.S. EPA Region 9. December 7, 2018.
52. “Kettleman Hills PCB Permit Application Review – EPA Endangered Species Act Determination.” Memorandum, Sara Ziff, U.S. EPA to Frances Wicher, U.S. EPA Region 9. April 30, 2019.
53. Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project.” Letter. Fish and Wildlife Service. April 30, 2019.



**APPENDIX J –
CLEAN AIR ACT CONFORMITY APPLICABILITY ANALYSIS**

This Appendix documents the U.S. EPA analysis that no Clean Air Act general conformity determination is required for its proposed Approval for the storage, treatment for disposal, and disposal of PCB waste at Chemical Waste Management, Inc.’s Kettleman Hills Facility.

A. GENERAL CONFORMITY UNDER THE CLEAN AIR ACT

Section 176(c) of the Clean Air Act (CAA) [42 U.S.C. § 7506(b)] requires all federal agencies ensure their actions conform to states’ plans to attain and maintain the National Ambient Air Quality Standards (NAAQS). Conformity to a state’s air quality plan means that a federal activity will not cause new violations of the NAAQS, increase the frequency or severity of NAAQS violations, or delay timely attainment of the NAAQS or any interim milestone toward attainment. The conformity process ensures that emissions of air pollutants from planned federal activities would not affect the state’s ability to attain and maintain the NAAQS.

A general conformity determination is based on emissions from the federal action. Federal agencies must evaluate and address both direct and indirect emissions that are likely to occur from an action. More information on general conformity requirements can be found at <https://epa.gov/general-conformity>.

1. GENERAL CONFORMITY RULES APPLICABLE TO THIS FEDERAL ACTION

U.S. EPA has adopted regulations at 40 C.F.R. Part 93, Subpart B to implement the CAA’s general conformity requirements. The requirements of Part 93, Subpart B apply in areas where U.S. EPA has not approved a state (or tribal) General Conformity rule. See 40 C.F.R. § 93.151. Where U.S. EPA has approved a state conformity rule, a conformity evaluation is governed by the approved state criteria and procedures. The federal conformity regulations apply only for the portions, if any, of the Part 93 requirements not contained in the state’s approved conformity rules.

The Kettleman Hills Facility is located in jurisdictional boundaries of the San Joaquin Valley Air Pollution Control District (“SJVAPCD”). U.S. EPA approved the SJVAPCD’s general conformity rule, Rule 9110 (adopted October 20, 1994), on April 23, 1999 (64 FR 19916). Rule 9110 incorporates U.S. EPA’s 1993 general conformity regulations in 40 C.F.R. Part 51, Subpart W.¹ We have, therefore, followed Rule 9110 for the purposes of this conformity analysis except for the PM_{2.5} analysis for which we used the provisions of 40 C.F.R. Part 93. Rule 9110

¹ These regulations as promulgated in 1993 no longer exist. As required by CAA section 176(c)(4)(C), U.S. EPA promulgated general conformity regulations at 40 C.F.R. part 51, subpart W (58 FR 63214 (November 30, 1993)). These regulations required States to adopt and submit rules for general conformity and established the required contents of those rules. In the same rulemaking action, we also promulgated a federal general conformity regulation at 40 C.F.R. part 93, subpart B. In August 2005, Congress passed legislation which eliminated the requirement for States to adopt and submit general conformity rules. In response, we revised our regulations to make State general conformity rules optional by removing all of subpart W except for § 51.851. Section 51.851 lists requirements for State general conformity regulations for those States that choose to develop and submit such rules. See 75 FR 17272, 17256 (April 5, 2010).



does not contain requirements for the PM_{2.5} NAAQS.² We note, however, that the requirements of Rule 9110 and Part 93 are otherwise almost identical.

B. GENERAL CONFORMITY APPLICABILITY ANALYSIS

The first step in the general conformity process is to determine if there is a federal action that requires a general conformity determination under Rule 9110 and 40 C.F.R. Part 93, Subpart B. This is the “applicability analysis” as defined in 40 C.F.R. § 93.152³ and contemplated by Rule 9011 § 51.853 and 40 C.F.R. § 93.153.

General conformity applies to a “federal action” which is defined in Rule 9110 § 51.852 and 40 C.F.R. § 93.152 as any activity (except for certain transportation plans, programs, and projects) that is engaged in, supported in any way, provided financial assistance, licensed, permitted, or approved by a federal agency, department or instrumentality. The definition of “federal action” also states that where the federal action is a permit, license, or other approval for some aspect of a non-federal undertaking, the relevant activity is the part, portion, or phase of the non-federal undertaking that requires the federal permit, license, or approval.

In the proposed TSCA Approval for the Kettleman Hills Facility, U.S. EPA is proposing to approve or require the following activities:

- storage and treatment for disposal of TSCA-regulated PCB Waste at the PCB Flushing/Storage Unit;
- disposal of certain TSCA-regulated PCB Waste in Landfill Unit B-18;
- eventual closure and implementation of post-closure care of Landfill Unit B-18;
- eventual closure of the PCB Flushing/Storage Unit (“PCB F/SU”);
- continuation of post-closure care of Landfill Units B-14, B-16, and B-19; and
- various supporting activities (groundwater, leachate, and ambient air quality monitoring; inspections, recordkeeping and reporting, training, etc.)

The activities listed in the last four bullets above (closure, post-closure care, and supporting activities) will take place whether or not U.S. EPA finalizes the proposed Approval because they are existing requirements of the Facility’s State RCRA permit. Because the activities do not need federal approval, they are not part of the federal action for the purposes of this general conformity applicability analysis and any emission generated by these activities are not included in calculating emissions from the federal action. Therefore, the “federal action” for the this general conformity applicability analysis is the approval of storage and treatment for disposal of TSCA-regulated PCB waste at the PCB F/SU and disposal of certain TSCA-regulated PCB Waste in Landfill Unit B-18.

² The first PM_{2.5} NAAQS was promulgated in 1997 (62 FR 38652 (July 18, 1997)), three years after the adoption of Rule 9011.

³ This definition is not included in Rule 9110. It was added to Part 93 in 2010 to describe the process of determining if a conformity determination must be conducted for a federal action.



The general conformity applicability analysis addresses three questions in regards to the federal action:

- Does the federal action take place in an area that is designated nonattainment or maintenance for a NAAQS?
 - If no, the action is not subject to a general conformity determination under Rule 9110 § 51.853(b) or 40 C.F.R. § 93.153(b).
- Is the federal action (or portion thereof) a specific type of federal action exempt from general conformity under Rule 9110 § 51.853(a), (c)(2)-(4), (d), or (e) or 40 C.F.R. § 93.153(a), (c)(2)-(4), (d), or (e) or presumed to conform under Rule 9110 § 51.853(f) or § 93.153(f)?
 - If yes, the action is not subject to a general conformity determination.
- Do the potential direct and indirect emissions attributable to the federal action exceed the applicable de minimis levels?
 - If no, the action is not subject to a general conformity determination under Rule 9110 § 51.853(c)(1) or § 93.153(c)(1). However, under Rule 9011, if the emissions represent 10 percent or more of a nonattainment or maintenance area's total emissions of that pollutant then a general conformity determination is required under Rule 9011 § 51.853(i).⁴

We apply each of these questions to our proposed federal action for the Kettleman Hills Facility.

2. DOES THE FEDERAL ACTION TAKE PLACE IN A NONATTAINMENT OR MAINTENANCE AREA?

Yes. The Kettleman Hills Facility is located in Kings County which is part of the San Joaquin Air Basin. The San Joaquin Valley Air Basin is currently designated as nonattainment and classified as extreme for all ozone NAAQS, designated nonattainment and classified as serious for all fine particulate matter (PM_{2.5}) NAAQS and designated as a maintenance area for coarse particulate matter (PM₁₀) NAAQS [40 C.F.R. § 81.305].

3. IS THE FEDERAL ACTION OR PORTION OF THE ACTION EXEMPT FROM GENERAL CONFORMITY?

The General Conformity applicability requirements in Rule 9110 § 51.853 and 40 C.F.R. § 93.153 lists several types of projects that are exempted from the requirement for a general conformity determination. The most germane exemption for this general conformity determination is in 40 C.F.R. § 93.153(c)(ii)/Rule 9011 § 51.853(c)(2)(ii) which addresses continuing and recurring activities such as permit renewals where activities conducted will be similar in scope and operation to activities currently being conducted. The proposed PCB Approval for the Kettleman Hills Facility includes approval of both continuing and new activities, therefore, some portions of the proposed Approval can be exempted from this general conformity applicability. However, we have

⁴ There is no equivalent to this Rule 9110 § 51.853(i) requirement in the part 93 regulation; therefore, this requirement does not apply for PM_{2.5} and its unique precursors (i.e., SO_x).



chosen to include emissions from both continuing and new activities in this applicability analysis to be conservative in our estimate of potential emissions.

4. DO THE POTENTIAL EMISSIONS FROM THE FEDERAL ACTION EXCEED THE APPLICABLE DE MINIMIS THRESHOLDS?

A conformity determination is not required for a federal action if the total of direct and indirect emissions of a relevant pollutant or precursor pollutant is less than the de minimis levels in Rule 9110 § 51.853(c)(1) and § 93.153(c)(1). Under general conformity, the attainment designations and classifications of the area in which the federal action takes place establish which pollutants and precursor must be analyzed and the de minimis emission levels for each pollutant. We have listed these pollutants and levels for the San Joaquin Valley in Table J-1.

Rule 9110 subjects any otherwise exempt federal actions whose emissions are 10 percent or great of the nonattainment or maintenance area's total emissions to a general conformity determination. We have listed these pollutants and levels for the San Joaquin Valley in Table J-2.⁵

⁵ U.S. EPA removed this requirement from the federal conformity regulations because its thresholds in most cases were greatly in excess of the de minimis thresholds and therefore unlikely to ever trigger by itself a conformity determination. See 75 FR 17254, 17264.



TABLE J-1
POLLUTANTS AND SIGNIFICANCE LEVELS BY NAAQS FOR THE SAN JOAQUIN VALLEY

NAAQS	Pollutant to Be Analyzed	Significance Level
Ozone – extreme area	VOC and NO _x	10 tons per year
PM _{2.5} – serious area	Direct PM _{2.5} ; SO _x , NO _x , VOC, and Ammonia	70 tons per year
PM ₁₀ – maintenance area	Direct PM ₁₀	100 tons per year

Source: Ozone and PM₁₀: Rule 9110, § 51.853(b)(1) & (2); PM_{2.5}: 40 C.F.R. § 93.153(b)(1)

TABLE J-2
TEN PERCENT OF REGIONAL EMISSIONS LEVELS

		NO _x	VOC	SO _x	PM ₁₀	PM _{2.5}	CO	
1	Total regional emissions (<i>tons per day</i>)	214	298	N/A	265	--	460	Table 1. Note 1
2	10% of regional emissions (<i>tons per day</i>)	21.4	29.8	N/A	26.5	--	4.60	Line 1 *0.10
3	10% of regional emissions (<i>tons per year</i>)	7,811	10,877	N/A	9,673	--	1,679	Line 2*365

¹ Values retrieved from CARB’s CEPAM data base (<https://www.arb.ca.gov/app/emsinv/fcemssumcat/fcemssumcat2016.php>) on April 11, 2019 and represent average annual day emissions for the San Joaquin Valley air basin for the year 2019 [U.S. EPA 2019]. To derive annual emissions, multiply average annual day figure by 365.

To analyze if the Kettleman Hills Facility’s PCB approval is exempt from a general conformity determination, we have calculated the total direct and indirect emissions that could be emitted as a consequence of a final approval.

“Total direct and indirect emissions” is defined as:⁶

[T]he sum of direct and indirect emissions increases and decreases caused by the federal action; i.e., the “net” emissions considering all direct and indirect emissions. The portion of emissions which are exempt or presumed to conform under section 51.853, paragraphs (c), (d), (e), and (f) [§ 93.153(c), (d), (e), or (f)] are not included in the “total of direct and indirect emissions.” The “total of direct and indirect emissions” includes emissions of criteria pollutants and emissions of precursors of criteria pollutants.

⁶ Definitions can be found at 40 C.F.R. § 93.152 and Rule 9110 § 51.852.



Direct emissions are caused or initiated by the federal action itself and occur at the same time and place as the action, such as the emissions from the construction or operation of a facility. Indirect emissions are also caused or initiated by the federal action but are removed from the action in either time or space. For indirect emissions, the emissions must be of the type that “the agency can practically control” and for which “the agency has continuing program responsibility.” A continuing program responsibility means that the agency has an oversight role over the activities generating the emissions or has the ability to limit the emissions. For example, an agency would have the ability to limit the emissions by specifying requirements or by conditioning a permit. In addition, indirect emissions that are already accounted for in a transportation conformity determination need not be included in a general conformity determination.

“Caused by,” as used in the both the definitions for direct and indirect emissions, means emissions that would not otherwise occur in the absence of the federal action. Under Ruel 9110 and the general conformity regulations, both direct and indirect emissions have to be reasonably foreseeable, meaning that the emissions can be estimated based on acceptable techniques using reasonable assumptions about the type and quantity of equipment used.

Only the net change in emissions between the previous allowed operations and the new allowed operations need to be including in determining total direct and indirect emissions. The Kettleman Hills Facility currently operates under TSCA approvals that allow storage and some types of treatment of PCB waste at the PCB Flushing/Storage Unit and disposal of PCB waste in Landfill B-18 Phases I and II. However, to be conservative in our potential emission estimates, we have not distinguished between existing and new operations and have used the historical rate at which PCB waste is accepted at the Kettleman Hills Facility.

Emissions from truck traffic and employee commute traffic to and from the Facility are not included in this general conformity applicability analysis. These emissions are included in the transportation conformity analysis for Kings County regional transportation plan and most recent transportation improvement program prepared by the Kings County Association of Governments [KCAG 2019] This plan and program have been found to conform to the applicable SIP pursuant to 40 C.F.R. Part 93, Subpart A [KCAG 2018].

a. EMISSIONS FROM PCB FLUSHING/STORAGE UNIT OPERATIONS

The proposed Approval limits the amount of PCB waste that may be stored at the PCB Flushing/Storage Unit at any one time, but does not limit the rate at which PCB waste may be brought to or from the unit or the rate at which operations occur at the Unit. To identify potential emissions, U.S. EPA reviewed historical operations at the Unit as indicated in the PCB Annual Reports filed by the Facility to identify the types of PCB waste likely to be stored at the PCB F/SU and the maximum rate at which each type of waste is received and stored at the unit. These values are given in Table J-3. We then used the maximum rate to calculate potential emissions. Potential sources of emissions at PCB F/SU are on-site truck traffic to and from the PCB F/SU and use of utility equipment (e.g., forklifts) there. Evaporative emissions from operations at the unit are likely to be negligible given the very low vapor pressure of PCBs and the Approval requirements to prevent evaporative emissions (e.g., closed containers, carbon filter on tank).



For these calculations we assumed that each article, item, or container is delivered to the PCB F/SU on a heavy-duty diesel truck by itself (that is, one truck trip per article, item or container) for a total of 122 trips per year and that the each truck travels round trip on the Facility's dirt roads for a total of 1.5 miles (from the entry racks to the PCB F/SU and return). These calculations are conservative (that is, higher than will likely occur) given it is very unlikely that a PCB item such as a container, which is most commonly a 55-gallon drum, would arrive at or leave the PCB F/SU on a truck by itself. They are also conservative because some of these operations are already allowed by the existing Approvals. Emission factors for truck emissions and unpaved road emissions are taken from Tables B-6 and B-7 in Shaw 2008.

Emissions-generating equipment used at the PCB F/SU are a 2015 model year diesel fork lift which is used on average less than 1 hour per day [CWM 2019; U.S. EPA 2019c]. The annual emission rate for this piece of equipment was calculated using California Air Resource Board's 2017 Off-road diesel emission factors spreadsheet found at <https://ww3.arb.ca.gov/msei/ordiesel.htm>.

Based on this information and the assumptions discussed above, we estimated annual emissions from the PCB operations at the PCB F/SU. See Table J-4.

TABLE J-3
PCB ITEMS STORED AT THE PCB FLUSHING/STORAGE UNIT – KETTLEMAN HILLS FACILITY

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Max
Voltage Capacitor	0	0	0	0	0	0	0	0	0	0	0	0
Transformer	8	1	1	0	0	0	0	0	0	0	0	8
Container	108	94	35	59	56	25	45	21	110	41	31	110
Article	0	0	0	4	0	1	0	0	0	0	0	4
Total	116	95	36	63	56	26	45	21	110	41	31	122

Source: CMW 2008-2018a



TABLE J-4
ESTIMATED EMISSIONS FROM PCB OPERATIONS AT PCB FLUSHING/STORAGE UNIT – KETTLEMAN HILLS FACILITY

Landfill B-18 Operations	Units	NO _x	VOC ¹	SO _x	PM ₁₀	PM _{2.5}	CO	Source/Comments
1 traffic - diesel truck	tons/yr	0.0038	0.0003	0.0000	0.0002	0.0002	0.0012	Table J-4a
2 traffic – road travel fugitive dust	tons/yr	—	—	—	0.0183	0.0038	—	Table J-4a
3 PCB F/SU operations (forklift) ²	tons/yr	0.0131	0.0006	—	0.0002	0.0002	—	U.S. EPA 2019
4 total PCB F/SU operations emissions	tons/yr	0.0169	0.0009	—	0.0187	0.00622	—	sum of rows 1 to 3

¹ For the purposes of this analysis, ROC (reactive organic gases) and THC (total hydrocarbons) will be considered the same as VOC.

2. Emission calculations assume a 4-year old 2015 model year, 59-hp diesel-powered fork lifts used 1 hour per operational day for a total of 260 hours per year [CWM 2019a and 2019c].



b. EMISSIONS FROM THE PCB OPERATIONS AT THE LANDFILL B-18

The proposed Approval will increase the total disposal capacity in Landfill B-18 but does not limit the daily, monthly, or annual rate at which PCB waste may be disposed. Disposal rates for Landfill B-18 are limited by conditions of the Kettleman Hills Facility's air permit at 7,200 cubic yards of waste per day [SJVAPCD Permit to Operate C-283-11-8, condition 18]. In addition, daily cover is limited to 1,800 cubic yards per day and total exposed area for waste disposal is limited to 0.64 acres at any one time [SJVAPCD Permit to Operate C-283-11-8, conditions 19 and 26].

For the purposes of this general conformity applicability determination, we calculated potential emissions from operations of Landfill B-18 attributable to the proposed Approval to be proportional to the percentage of total waste disposed on in Landfill B-18 that is PCB waste. Based on available information, TSCA-regulated PCB waste accounts for 5 percent of the total annual waste disposed of in Landfill B-18 [CWM 2018b]. Using this figure, we can contribute 5 percent of annual operational emissions from Landfill B-18

To estimate emissions from Landfill B-18, we used emission factors and certain assumptions from "Air Quality Technical Analysis, Kettleman Hills Facility B-18/B-20 Landfill Disposal Project," Shaw Environmental, Inc., November 2007 [Shaw 2008] in Appendix F to the "Draft Subsequent Environmental Impact Report," CH2MHill, March 2008. Specifically, we used the Analysis' emission factors for diesel emissions for heavy duty diesel trucks delivering waste to the Landfill and emission factors for fugitive dust from on-site travel on paved and unpaved roads by these trucks to and from the Landfill (see Tables I-5a and I-5b below). We also used information on trip length and truck weight and load information from the Analysis. We, however, used a higher number of truck trips than assumed in the Analysis. Using the maximum allowed waste disposal rate of 7,200 cubic yards (equivalent to 8000 tons) from the Kettleman Hills Facility's air permit, we calculated the maximum number of truck trips for all types of waste disposal to Landfill B-18 at 400 per day (20 tons per truck trip).

Based on this information and the assumptions discussed above, we estimated annual emissions from the PCB operations at Landfill B-18. See Table J-5.



TABLE J-5
ESTIMATED EMISSIONS FROM PCB OPERATIONS AT LANDFILL B-18 – KETTLEMAN HILLS FACILITY

Landfill B-18 Operations		Units	NO _x	VOC ¹	SO _x	PM ₁₀	PM _{2.5}	CO	Source/Comments
1	waste placement- diesel equipment ²	lbs/day	149.32	13.79	0.15	8.54	8.54	70.78	table B1 ³ (emissions lbs/day)
2	waste placement - landfill surface fugitive dust	lbs/day	—	—	—	1.19	0.595	—	table B2 ³ (controlled emissions lbs/day)
3	waste placement – earthmoving fugitive dust	lbs/day	—	—	—	45.94	21.7	—	table B2 ³ (controlled emissions lbs/day)
4	traffic - diesel truck	lbs/day	39.12	3.09	0.04	1.87	1.68	11.98	Table J-5a – row 4
5	traffic – road travel fugitive dust	lbs/day	—	—	—	104.04	21.85	—	Table J-5b – row 8
6	total Landfill B-18 operations emissions	lbs/day	188.44	16.88	0.19	161.58	54.37	82.76	sum of rows 1 to 5
7	Total Landfill B-18 operations annual emissions – all waste	tons/year	24.50	2.19	0.02	21.01	7.07	10.8	calculated as row 6 x 260 days per year (5 days/week, 52 weeks/year)/2000 lbs/ton
8	Landfill B-18 operations annual emissions – PCB Waste	tons/year	1.22	0.11	0.00	1.05	0.35	0.5	calculated as row 7 x 5%

¹ For the purposes of this analysis, ROC (reactive organic gases) will be considered the same as VOC.

² For the purposes of this analysis, PM_{2.5} emissions from diesel equipment used to place waste will be considered equivalent to PM₁₀ emissions from this diesel equipment.

³ Shaw 2007.



TABLE J-5A
ESTIMATED DIESEL EMISSIONS FROM TRUCK TRAFFIC TO LANDFILL B-18 – KETTLEMAN HILLS FACILITY

	Landfill Operations	Units	NO_x	VOC¹	SO_x	PM₁₀	PM_{2.5}	CO	Source/Comments
1	heavy duty diesel trucks - diesel emissions	lbs/mile	0.0418	0.0033	0.00004	0.002	0.0018	0.0128	table B5 ²
2	number of miles per trip	miles	2.34	2.34	2.34	2.34	2.34	2.34	table B5 ²
3	number of trips	Trips/day	400	400	400	400	400	400	8000 tons per day max/20 tons per truck (table B6) ²
4	traffic - diesel emissions	lbs/day	39.12	3.09	0.04	1.87	1.68	11.98	calculated as row 1 x row 2 x row 3

¹ For the purposes of this analysis, ROC (reactive organic gases) will be considered the same as VOC.

² Shaw 2007.



TABLE J-5B
ESTIMATED FUGITIVE DUST EMISSIONS FROM TRUCK TRAFFIC TO LANDFILL B-18 – KETTLEMAN HILLS FACILITY

		Units	NO _x	VOC ¹	SO _x	PM ₁₀	PM _{2.5}	CO	Source/Comments
1	heavy duty diesel trucks - fugitive dust paved road emission factor	lbs/mile	—	—	—	0.065	0.0136 5	—	table B6 ² paved road emission factor, 90% control factor, PM _{2.5} fraction of PM ₁₀ is 21%
2	heavy duty diesel trucks - fugitive dust unpaved road emission factor	lbs/mile	—	—	—	0.2	0.042	—	table B6 ²⁰ unpaved road emission factor, 90% control factor, PM _{2.5} fraction of PM ₁₀ is 21%
3	number of miles per trip - paved road	Miles	—	—	—	1.54	1.54	—	table B5 ²
4	number of miles per trip - unpaved road	Miles	—	—	—	0.8	0.8	—	table B5 ²
5	number of trips	trips/ day	—	—	—	400	400	—	8000 tons per day max/20 tons per truck (table B6) ²
6	traffic - paved road emissions	lbs/day	—	—	—	40.04	8.41	—	calculated as row 1 x row 3 x row 5
7	traffic - unpaved road emissions	lbs/day	—	—	—	64	13.44	—	calculated as row 2 x row 4 x row 5
8	total road fugitive dust emissions	lbs/day	—	—	—	104.04	21.85	—	calculated as sum of rows 6 and 7

¹ For the purposes of this analysis, ROC (reactive organic gases) will be considered the same as VOC.

² Shaw 2007



c. CONCLUSION

To analyze if the Kettleman Hills Facility's PCB approval is exempt from a general conformity determination, we conservatively estimated the emissions that could be emitted as a consequence of a final approval. As shown in Table J-6, total estimated emissions are well below the applicable de minimis emissions thresholds. In addition, Rule 9110 subjects any otherwise exempt federal project whose emissions are 10 percent or greater of the nonattainment or maintenance area's total emissions to a general conformity determination. Total emissions from a final approval are also well below 10 percent of the San Joaquin Valley air basin's total emission inventories. Based on our emission calculations, U.S. EPA's proposed TSCA approval for Chemical Waste Management, Inc.'s Kettleman Hills Facility is exempt from a conformity determination under CAA section 176(c), Rule 9110, and 90 C.F.R. Part 93, Subpart B.

TABLE J-6
ESTIMATED EMISSIONS FROM PCB OPERATIONS COMPARED TO APPLICABLE DE MINIMIS
LEVELS – KETTLEMAN HILLS FACILITY

		NO _x	VOC	SO _x	PM ₁₀	PM _{2.5}	CO	
		<i>tons per year</i>						
1	PCB F/SU operations	0.017	0.007	—	0.019	0.006	—	Table J-4, row
2	Landfill B-18 PCB waste operations	1.22	0.11	0.00	1.05	0.35	0.5	Table J-5, row 8
3	Total PCB operations	1.237	0.117	0.00	1.069	0.356	0.5	Sum of lines 1 and 2
4	De minimis level	10	10	70	100	70	70	Table J-2A, using lowest de minimis value
5	Above de minimis level?	No	No	No	No	No	No	Line 3 divided by line 4
7	10% of regional emissions	7,811	10,877	N/A	9,673	N/A	1,679	Table J-2, row 3
9	Above 10% of regional emissions?	No	No	N/A	No	N/A	No	
10	Subject to general conformity determination?	No	No	No	No	No	No	



Referenced Documents for Appendix J:

CWM 2008	“Chemical Waste Management, Inc. Kettleman Hills Facility CAT 000 646 117 Revised 2007 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. August 4, 2008.
CWM 2009	“Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2008 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 15, 2009.
CWM 2010	“Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2009 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 8, 2010.
CWM 2011	“Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2010 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 13, 2011.
CWM 2012	“Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2011 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 6, 2012.
CWM 2013	“Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2012 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 8, 2013.
CWM 2014	“Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2013 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 9, 2014.
CWM 2015	“Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2014 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 8, 2015.
CWM 2016	“Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2015 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 20, 2016.
CWM 2017	“Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2016 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 5, 2017.
CWM 2018a	“Chemical Waste Management, Inc., (CWMI)-Kettleman Hills Facility (KHF) CAT 000 646 117 2017 PCB Annual Report.” Letter, Tracy Reddick, CWM to Regional Administrator, U.S. EPA Region 9. July 9, 2018.
CWM 2018b	“Business Confidential - Percentage TSCA Disposal to Total Disposal 2002-2017.” Chemical Waste Management, Inc. October 2, 2019.



CWM 2019a	“CWM-KHF Information Request.” Email, Reyna Verdin, Chemical Waste Management, Inc. to Frances Wicher, U.S. EPA Region 9. July 15, 2019.
CWM 2019b	“Re: CWM-KHF Information Request.” Email, Reyna Verdin, Chemical Waste Management, Inc. to Frances Wicher, U.S. EPA Region 9. July 18, 2019.
KCCOG 2018	“In the Matter of Adopting the 2018 Regional Transportation Plan/Sustainable transportation Plan/Sustainable Communities Strategy, 2019 Federal Transportation Improvement Program, and Corresponding Air Quality Conformity Analysis. Resolution No. 18-12. Kings County Association of Governments Transportation Policy Committee. August 22, 2018.
KCCOG 2019	“Re: truck and commute traffic to and from Kettleman Hills Waste Disposal Facility.” Email, Christopher Xiong, Kings County Association of Governments to Frances Wicher, U.S. EPA, Region IX. January 28, 2019.
SJVAPCD 1994	“Rule 9110 General Conformity.” San Joaquin Valley Air Pollution Control District. October 20, 1994.
SJVAPCD 2016	“Permit to Operate C-283--0-3.” San Joaquin Valley Air Pollution Control District. Expiration Date: August 31, 2022.
Shaw 2007	“Air Quality Technical Analysis, Kettleman Hills Facility B-18/B-20 Landfill Disposal Project,” Shaw Environmental, Inc., November 2007 [Appendix F to the “Draft Subsequent Environmental Impact Report,” CH2MHill, March 2008].
U.S. EPA 2019a	“San Joaquin Valley Air Basin, Annual Average Day Emissions 2019.” U.S. EPA Region 9. April 11, 2019. Data obtained from CARB CEPAM.
U.S. EPA 2019b	“U.S. EPA calculation of emissions from diesel-powered fork lift used at the PCB F/SU at KHF” U.S. EPA Region 8, July 19, 2019.
U.S. EPA 2019c	“July 3, 2019 Call with Chemical Waste Management, Inc. Kettleman Hills Facility.” Memorandum, Frances Wicher, U.S. EPA to File (CAT 000 646 117 Chemical Waste Management, Inc. TSCA Approval). July 24, 2019.

