

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 7
11201 RENNER BOULEVARD
LENEXA, KANSAS 66219

IN THE MATTER OF:

FORMER TOWNSEND INDUSTRIES
FACILITY
4400 Vandalia Road
Pleasant Hill, Iowa
EPA RCRA I.D. IAD005277231

TH AGRICULTURE & NUTRITION,
L.L.C., ELEMENTIS CHEMICALS, INC.
and DD#1, LLC.

RESPONDENTS

EPA DOCKET NO. RCRA-07-2015-0017

Proceeding under Section 7003 of the
Resource Conservation and Recovery Act, 42
U.S.C. § 6973, et seq., as amended.

ADMINISTRATIVE ORDER ON CONSENT

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ATTACHMENTS

- A Facility Map**
- B Corrective Measures Implementation Scope of Work**
- C Final Remedy Decision and Response to Comments**
- D Draft Environmental Covenant**

I. INTRODUCTION

1. This Administrative Order on Consent ("Consent Order") is entered into voluntarily by the United States Environmental Protection Agency ("EPA") and Elementis Chemicals Inc. ("Elementis"), TH Agriculture & Nutrition, L.L.C. ("THAN") (hereafter collectively referred to as "Respondents"), and DD#1, LLC (hereafter "Titleholder Respondent"). This Consent Order provides for the performance of corrective measures by Respondents Elementis and THAN, including any Additional Work that may be required by Section XXVII (Additional Work) of this Consent Order, in connection with the Former Townsend Industries Facility ("Facility") located at 4400 Vandalia Road, Pleasant Hill, Polk County, Iowa. Respondent DD#1, LLC shall cooperate in providing access to the Facility for the performance of the Work by Elementis and THAN, and implement the other tasks assigned to it herein. In entering into this Consent Order, the mutual objectives of EPA and Respondents are to operate, monitor, and maintain the corrective measures selected by EPA to remedy the potential endangerment to human health and the environment at the Facility involving hazardous wastes or constituents of such wastes, and to insure that the Work is designed and implemented to protect human health and/or the environment. These mutual objectives and the corrective measures to be implemented are described in the Corrective Measures Implementation Scope of Work ("SOW") (Attachment B), which is hereby incorporated into this Consent Order by reference. Respondents shall finance and perform the Work in accordance with this Consent Order, plans, standards, specifications and schedules set forth in this Consent Order or developed by Respondents and approved by EPA pursuant to this Consent Order.
2. EPA alleges that Respondents Elementis and THAN have contributed to the past handling, storage, treatment, transportation or disposal of hazardous waste or constituents of such wastes at the Facility which has resulted in conditions that may present an imminent and substantial endangerment to health or the environment.
3. EPA has notified the state of Iowa of this action pursuant to Section 7003(a) of RCRA, 42 U.S.C. § 6973(a).
4. Respondents' participation in this Consent Order shall not constitute or be construed as an admission of liability. Respondents neither admit nor deny the factual allegations and legal conclusions set forth in this Consent Order (Sections V and VI, EPA's Findings of Fact and EPA's Conclusions of Law and Determinations).
5. EPA and Respondents acknowledge that this Consent Order has been negotiated by the parties in good faith and that this Consent Order is fair, reasonable, and in the public interest. The actions undertaken by Respondents in accordance with this Consent Order do not constitute an admission of liability and the Respondents neither admit nor deny EPA's Findings of Fact.

II. JURISDICTION

1. This Consent Order is issued under the authority vested in the Administrator of EPA by Section 7003 of RCRA, 42 U.S.C. § 6973, which authority has been delegated to the Director of the Air and Waste Management Division of EPA Region 7 by Delegations R7-8-022-A and R7-8-022C.
2. Respondents agree to undertake and complete all actions required by the terms and conditions of this Consent Order. In any action by EPA or the United States to enforce the terms of this Consent Order, Respondents consent to and agree not to contest the authority or jurisdiction of the Director of the Air and Waste Management Division, EPA Region 7, to issue or enforce this Consent Order, and agree not to contest the validity of this Consent Order or its terms or conditions, subject to Respondents' rights to dispute resolution as provided herein.

III. PARTIES BOUND

1. This Consent Order shall apply to and be binding upon EPA, and on Respondents and their respective officers, directors, employees, agents, successors, assigns, trustees, receivers, and upon all persons, including but not limited to contractors and consultants, acting on their behalves, as well as upon subsequent purchasers of the Facility. Any change in the ownership or corporate/business status of Respondents including, but not limited to, any transfer of assets or real or personal property shall not alter the Respondents' responsibilities under this Consent Order. Respondents shall be responsible for and liable for completing all of their respective activities required pursuant to this Consent Order, regardless of whether there has been a transfer of ownership or control of the Facility or whether said activities are to be performed by employees, agents, contractors, laboratories, or consultants of Respondents.
2. Respondents Elementis and THAN shall provide a copy of this Consent Order to all contractors, laboratories, and consultants that are retained to conduct a substantial portion of the Work performed pursuant to this Consent Order within seven (7) days of the Effective Date of this Consent Order, or of the date that such services are retained, whichever is later. Respondents shall condition all such contracts or agreements with contractors, laboratories and/or consultants in connection with this Consent Order, on compliance with the terms of this Consent Order. Respondents shall require that their contractors, laboratories, and consultants comply with this Consent Order.
3. Not later than sixty (60) days prior to any voluntary transfer by Titleholder Respondent DD#1, LLC of any interest in the Facility or the operation of the Facility, Titleholder Respondent DD#1, LLC shall give written notice: (a) to the transferee regarding the Consent Order and any Institutional Controls regarding the real property; and (b) to EPA regarding the proposed transfer, including the name and address of the transferee and the date on which the transferee was notified of this Consent Order and Institutional Controls. Titleholder Respondent DD#1, LLC shall also provide to EPA a description of the property and/or the operations being transferred. In the case of a voluntary transfer

through a bankruptcy, Titleholder Respondent DD#1, LLC shall notify EPA within twenty-four (24) hours of the decision to transfer property. Titleholder Respondent DD#1, LLC shall notify EPA of any involuntary transfers immediately upon Titleholder Respondent DD#1, LLC's initial receipt of notice of any involuntary transfer. Not later than three (3) days after any transfer, Titleholder Respondent DD#1, LLC shall submit copies of the transfer documents to EPA. Titleholder Respondent DD#1, LLC shall provide a copy of this Consent Order to any subsequent owners or successors before a controlling interest in ownership rights, stock, assets or the Facility is transferred.

IV. DEFINITIONS

1. Unless otherwise expressly provided herein, terms used in this Consent Order that are defined in the RCRA statute shall have the meaning assigned to them in that statute. Whenever the terms listed below are used in this Consent Order the following definitions apply:

"Additional Work" shall mean any activity or requirement that is not expressly covered by this Consent Order or its attachments but is determined by EPA to be necessary to fulfill the objectives of this Consent Order.

"Administrative Record" shall mean the record compiled and maintained by EPA related to the Facility.

"Best Efforts" shall mean the efforts that a reasonable person in the position of Respondents would use so as to achieve the goal in a timely manner.

"CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601, *et seq.*

"Consent Order" shall mean this Administrative Order on Consent, any amendments thereto, and any documents incorporated by reference into this Consent Order.

"Contractor" shall include any consultant or laboratory retained to conduct or monitor any portion of the Work performed pursuant to this Consent Order.

"Corrective Measures" shall mean those measures or actions necessary to control, prevent, clean up and/or mitigate the release(s) or potential release(s) of hazardous waste or hazardous constituents at or from the Facility into the environment.

"Data Quality Objectives" shall mean those qualitative and quantitative statements derived from the outputs of scientific and legally defensible data collection planning process.

The term "day" shall mean a calendar day unless expressly stated otherwise.

“Effective Date” shall be the date on which EPA signs this Consent Order following the public comment period which is held pursuant to Section XXIX (Public Comment on this Consent Order).

“EPA” or “U.S. EPA” shall mean the United States Environmental Protection Agency, and any successor departments or agencies of the United States.

“Facility” shall mean the Former Townsend Industries Facility at 4400 Vandalia Road, Pleasant Hill, Iowa, encompassing approximately twelve (12) acres of land with an industrial building approximately 45,000 square feet in size. The Facility is generally depicted on the map attached to this Consent Order as Attachment A.

“Hazardous Constituents” shall mean those constituents listed in Appendix VIII to 40 C.F.R. Part 261 or any constituent identified in Appendix IX to 40 C.F.R. Part 264.

“Hazardous Waste” shall mean hazardous waste as defined in Section 1004(5) of RCRA, 42 U.S.C. § 6903(5), or 40 C.F.R. § 260.10.

“RCRA” shall mean the Resource Conservation and Recovery Act (also known as the Solid Waste Disposal Act), as amended, 42 U.S.C. § 6901, *et seq.*

“Site” shall mean the “Facility” and areas where contamination from the Facility has migrated.

“SOW” shall mean Corrective Measures Implementation Scope of Work attached to this Consent Order as Attachment B.

“Work” shall mean all the activities and requirements specified in this Consent Order including, but not limited to the SOW to this Consent Order and in Section IX (Work To Be Performed) of this Consent Order.

V. EPA’S FINDINGS OF FACT

1. Respondent THAN, formerly known as Thompson Hayward Chemical Company (“Old THCC”), is a corporation organized under the laws of the state of Delaware, was formerly authorized to conduct business in the state of Iowa, and is a “person” as defined by Section 1004 of RCRA, 42 U.S.C. § 6903.
2. Respondent Elementis, formerly known as Harcros Chemical Company (“New THCC”), is a corporation organized under the laws of the state of Delaware, is authorized to conduct business in the state of Iowa, and is a “person” as defined by Section 1004 of RCRA, 42 U.S.C. § 6903.

3. Titleholder Respondent DD#1, LLC is a limited liability company organized under the laws of the state of Iowa, is authorized to conduct business in the state of Iowa, and is a "person" as defined by Section 1004 of RCRA, 42 U.S.C. § 6903.
4. Old THCC generated hazardous wastes at the Facility from June 1975 until June 1981.
5. Pursuant to Section 3010 of RCRA, 42 U.S.C. § 6930, Old THCC notified EPA of its hazardous waste management activities at the Facility on August 14, 1980. In its notification Old THCC identified itself as a generator of hazardous waste, a transporter of hazardous waste, and an owner/operator of a treatment, storage, and/or disposal facility. The Facility was assigned EPA identification number IAD 005277231.
6. On or about November 18, 1980, Old THCC filed a RCRA Part A Permit Application. Respondent indicated that the hazardous wastes handled at the Facility included ignitable (D001), corrosive (D002), reactive (D003), or EP toxic (D000); wastes from nonspecific sources (F001, F002, F003, F004 and F005); and commercial chemical products, manufacturing intermediates, off-specification commercial chemical products (U122, U226); and that spent solvents were stored at the Facility in containers for pickup by a reclaimer. The main exterior storage area for chemicals was located on the northern portion of the Facility inside and east of a diked area. Drums containing spent solvent were stored in the east building at the Facility (former "container storage" Area B) and outside the northeast corner of the main building.
7. Old THCC obtained RCRA Interim Status for the spent solvent storage area and authorization to operate the Facility under Section 3005 of RCRA, 42 U.S.C. § 6925, because the Facility was in existence prior to November 19, 1980, and both the notification of hazardous waste activity and the Part A Permit Application were submitted to EPA in a timely manner as required by RCRA.
8. In 1980, approximately 800 gallons of 2,4-D herbicide were spilled on the asphalt parking lot northeast of the main warehouse during transfer of the material. An earthen dike was constructed to contain the spill. Approximately 25 drums of impacted soil were excavated and transported off-site for disposal at a hazardous waste disposal facility. A concrete pad was later constructed over the area.
9. New THCC acquired and assumed operation of the Facility in June 1981 and the RCRA interim status was transferred to New THCC. New THCC submitted a Part B RCRA Permit Application in September 1982. Several months later, in 1983, New THCC discontinued accepting spent solvents from customers, requested permission to withdraw its Part B Permit Application and submitted a closure plan to EPA.
10. In 1983, soil from an off-site tank spill was transported to the Facility and temporarily placed in a lined area south of the main warehouse. The soil pile reportedly contained acetone, MEK, tetrachloroethylene (PCE), xylene, 1,1,1-trichloroethane, and mineral spirits. Approximately 60 tons of soil were subsequently removed from the Facility and disposed of at an off-site hazardous waste facility.

11. In 1984, EPA terminated the Facility's interim status and denied New THCC's application for a Part B RCRA permit. EPA approved the closure plan. New THCC discontinued operations at the Facility in 1985.
12. Respondents THAN and Elementis operated the Facility as a hazardous waste management facility on or after November 19, 1980 (or the date of any statutory or regulatory change rendering the facility subject to the requirement to obtain a RCRA permit), the applicable date which renders facilities subject to interim status requirements or the requirement to have a permit under §§3004 and 3005 of RCRA.
13. On July 5, 1991, Respondents THAN and Elementis entered into an Administrative Order on Consent with EPA, under Section 3008(h) of RCRA, to determine the nature and extent of any release of hazardous waste and/or hazardous constituents from the Facility by performing a RCRA Facility Investigation (RFI) and to identify and evaluate corrective action alternatives needed to address contamination identified at the site by completing a Corrective Measures Study (CMS).
14. From November 1992 through February 1994, Respondents THAN and Elementis conducted an RFI. The RFI included onsite soil sampling, installation of monitoring wells or piezometers both onsite and offsite, and surface water and sediment sampling. The RFI confirmed the presence of chlorinated and non-chlorinated volatile organic compounds at concentrations exceeding health-based levels in the soils at the Facility in the North Area, in the groundwater beneath the Facility property, and in groundwater that has migrated from beneath the Facility property to neighboring properties.
15. Remedial alternatives for the Facility were evaluated in a CMS conducted by Respondents THAN and Elementis under EPA oversight and completed in 2003.
16. The EPA created an administrative record of documents assembled during the corrective action process, including the RFI and CMS. The documents in the administrative record were the foundation for EPA's proposed corrective measures in the Statement of Basis. The administrative record, and in particular the RFI, identified the following constituents of concern in on-site soil and groundwater at the Facility: ethylbenzene, toluene, xylene, 1,1,1-TCA, PCE and TCE. The highest concentrations of contaminants occur beneath and immediately downgradient of the former tank and container storage area indicating the presence of dense non-aqueous phase liquid (DNAPL).
17. Respondents THAN and Elementis have voluntarily performed the following interim measures to address the soil and groundwater contamination at the Facility and to mitigate off-site migration of contaminated groundwater: 1) the installation of a soil-bentonite containment wall around the perimeter of the Facility; 2) installation of a Gradient Control Treatment System for the extraction and on-site treatment of contaminated groundwater; 3) collection of DNAPL in groundwater; 4) installation of a remediation well for removal of contaminants through in situ air sparging, air stripping and soil vapor extraction; 5) installation of an In Situ Hydraulic Treatment Conduit to

provide a passive means of gradient control within the soil-bentonite containment wall; and 6) construction of an asphalt cover for contaminated soils in the North Area.

18. The EPA's Statement of Basis proposed corrective measures for the Facility including continued operation of the interim measures installed by the Respondents, monitored natural attenuation for off-site groundwater, groundwater and vapor intrusion monitoring and institutional controls. The Statement of Basis was released for public comment on August 15, 2013. The public comment period ended on September 16, 2013.
19. The Final Remedy Decision and Response to Comments was issued by EPA on September 27, 2013, outlining the corrective measures selected for the Facility that are identical to those proposed in the Statement of Basis. The final corrective measures consist of continued operation of the interim measures installed by the Respondents, monitored natural attenuation for off-site groundwater, groundwater and vapor intrusion monitoring and institutional controls. The Final Remedy Decision and Response to Comments is attached to the Order and marked as Attachment C.
20. The following hazardous waste and/or hazardous constituents have been found at the Facility, which, under certain conditions of dose, duration or extent of exposure may constitute a threat to human health by ingestion and/or absorption:

Acetone

Benzene

2-Butanone (Methyl Ethyl Ketone)

1,1-Dichloroethane

1,1-Dichloroethene

1,2-Dichloroethene (cis)

1,4-Dioxane

Ethylbenzene

Methylene chloride

Tetrachloroethylene (PERC)

Toluene

1,1,1-trichloroethane (1,1,1-TCA)

Trichloroethene or Trichloroethylene (TCE)

Vinyl chloride

Xylenes

VI. EPA'S CONCLUSIONS OF LAW AND DETERMINATIONS

1. Based on the EPA's Findings of Fact set forth above, and the administrative record supporting this Consent Order, EPA has determined that:
 - a. Respondents are each a "person" as defined in Section 1004(15) of RCRA, 42 U.S.C. § 6903(15). Titleholder Respondent DD#1, LLC is the present owner of the Facility. Respondents Elementis and THAN are past owners and/or operators of the Facility.
 - b. The hazardous constituents identified in Section V, Paragraph 20, that were spilled or leaked into the soil and groundwater at the Facility are "solid wastes" as defined in Section 1004(27) of RCRA, 42 U.S.C. § 6903(27), and are listed or characteristic hazardous waste or hazardous constituents under 40 C.F.R. Part 261. Such solid wastes are also "hazardous wastes" as defined in Section 1004(5) of RCRA, 42 U.S.C. § 6903(5).
 - c. The presence of solid wastes, hazardous wastes, hazardous constituents and/or hazardous substances in soils and ground water at the Facility is the result of the past handling, storage, treatment, transportation and/or disposal of agricultural, commercial and industrial chemicals at the Facility.
 - d. Respondents Elementis and THAN have contributed to the handling, storage, treatment, and/or disposal of solid waste and/or hazardous constituents, and/or wastes at the Facility through their handling of agricultural, commercial and industrial chemicals at the Facility.
 - e. Conditions at the Site, as described in Section V of this Consent Order, may present an imminent and substantial endangerment to human health and/or the environment within the meaning of Section 7003 of RCRA, 42 U.S.C. § 6973, as 1,1-Dichloroethane, 1,1-Dichloroethene, cis-1,2-Dichloroethylene, 1,4-Dioxane, Ethylbenzene, Methylene chloride, Tetrachloroethylene, Toluene, 1,1,1-trichloroethane, Vinyl chloride, and Xylenes are present in the groundwater at the Site in concentrations exceeding health-based limits.
 - f. The actions required by this Consent Order may be necessary to protect human health and/or the environment.

VII. ORDER ON CONSENT

1. Based upon the administrative record for the Facility, EPA's Findings of Fact (Section V) and EPA's Conclusions of Law and Determinations (Section VI) set forth above, and in consideration of the promises set forth herein, the following is hereby agreed to and ordered. Respondents shall comply with all provisions of this Consent Order, including, but not limited to, all attachments to this Consent Order and all documents incorporated by reference into this Consent Order.
2. Respondents Elementis and THAN shall finance and perform their respective shares of the Work in accordance with this Consent Order, plans, standards, specifications and schedules set forth in this Consent Order or developed by Respondents and approved by EPA pursuant to this Consent Order.

VIII. CONTRACTORS AND PROJECT COORDINATORS

1. Project Coordinators. The Respondents' Project Coordinator is Shau-Luen Barker, Philips Electronics North America Corporation, 15313 West 95th Street, Lenexa, Kansas 66219, (913) 538-2357, shauluen.barker@philips.com. The EPA Project Coordinator will be Dan Gravatt, U.S. EPA, 11201 Renner Boulevard, Lenexa, Kansas, 66219, (913) 551-7324, gravatt.dan@epa.gov. EPA and Respondents may also designate an Alternate Project Coordinator. Each Project Coordinator shall be responsible for overseeing the implementation of this Consent Order. EPA and Respondents have the right to change their respective Project Coordinators. EPA retains the right to approve/disapprove of Respondents' new Project Coordinator based upon the person's qualifications and ability to effectively perform this role. If EPA disapproves of Respondents' new Project Coordinator, Respondents shall retain a different Project Coordinator and shall notify EPA of that person's name, address, phone number, electronic mail address and qualifications within two (2) days following EPA's disapproval. The qualifications of the persons undertaking the Work for Respondents shall be subject to EPA's review, for verification that such persons meet minimum technical background and experience requirements of the EPA. All persons under the direction and supervision of Respondents' Project Coordinator must possess all necessary professional licenses required by federal and state law.
2. The EPA's Project Coordinator shall be EPA's designated representative for the Facility. Unless otherwise provided in this Consent Order, all reports, correspondence, notices, or other submittals relating to or required under this Consent Order shall be in writing and shall be sent to the EPA's Project Coordinator at the address specified in the preceding Paragraph, unless notice is given in writing to Respondents of a change in address. Reports, correspondence, notices or other submittals shall be delivered by U.S. Postal Service, private courier service or electronic mail. All correspondence shall include a reference to the case caption EPA Docket No. RCRA-07-2015-0017.
3. Respondents shall undertake and complete all of the Work to the satisfaction of EPA,

pursuant to RCRA § 7003, 42 U.S.C. § 6973. All of the Work performed under this Consent Order shall be under the direction and supervision of Respondents' Project Coordinator and shall be in accordance with the terms of this Consent Order. Respondents' Project Coordinator shall have expertise in hazardous waste cleanup.

4. Selection of Contractors, Personnel. All Work performed by, or on behalf of Respondents under this Consent Order shall be under the direction and supervision of qualified personnel. Within thirty (30) days of the Effective Date of this Consent Order, Respondents shall notify EPA in writing of the names, titles and qualifications of the personnel, including contractors, consultants and laboratories, to be used in carrying out the Work. EPA reserves the right to disapprove Respondents' contractor(s), consultant(s) and laboratories and the basis for disapproval shall be provided to Respondents except where prohibited by law. If EPA disapproves a contractor, consultant or laboratory, then Respondents must, within forty-five (45) days of receipt from EPA of written notice of disapproval, notify EPA, in writing, of the name, title, and qualifications of any replacement.

IX. WORK TO BE PERFORMED

1. Respondents Elementis and THAN shall perform the corrective measures identified in the Final Remedy Decision (Attachment C) issued by EPA, in accordance with the SOW attached to this Consent Order (Attachment B) and incorporated herein, to prevent, mitigate and/or remediate the release or migration of hazardous wastes and/or hazardous constituents at and from the Facility. Respondents shall implement active operation and maintenance of all of the remedy components identified in the Final Remedy Decision (FRD) in order to achieve the remedial goals and corrective action objectives specified in the FRD.
2. All Work undertaken pursuant to this Consent Order shall be developed and performed in compliance with all applicable EPA guidance, policies and procedures, this Consent Order, and is subject to EPA approval.
3. All plans submitted to EPA for approval shall include a schedule of the Work to be performed. Following EPA's approval or modification of any plan pursuant to Section X, Respondents shall implement the plan in accordance with the schedule, as may be modified to reflect any delays resulting from EPA's review and/or subsequent modifications, and provisions approved by EPA.
4. Within fifteen (15) days after the Effective Date of this Consent Order, Respondents shall post a sign at the Facility which provides notice of the known hazardous constituents present in accordance with the requirements of Section 7003(c) of RCRA, 42 U.S.C. § 6973(c). The sign to be posted shall be at least twenty-four (24) by thirty-six (36) inches, and shall be made of weatherproof material in white or a brightly-colored background with large, clearly contrasting lettering. The sign shall be posted in a prominent place at or near the public entrance(s) to the facility, and shall state: "ATTENTION: Soil excavation and extraction or contact of groundwater may present a significant risk and is

prohibited without prior approval from the Landowner. For Information Call [xxx-xxx-xxxx]." Within thirty (30) days of the Effective Date of this Consent Order, Respondents shall provide documentation (i.e., photographs) to the EPA project manager that the sign has been posted. Failure to post the sign as directed in this paragraph will constitute a violation of this Consent Order.

5. Commencing on the Effective Date of this Consent Order, Respondents shall not use the Facility in any manner that EPA determines will: (a) pose an unacceptable risk to human health or the environment due to exposure to hazardous wastes and/or hazardous constituents; or, (b) interfere with or adversely affect the implementation, integrity or protectiveness of the corrective measures performed pursuant to this Consent Order. Titleholder Respondent DD#1, LLC shall subject the Facility property to the use and activity limitations identified as part of the EPA-approved final remedy (Attachment D), as provided under the Iowa Uniform Environmental Covenants Act summarized below:
 - Respondents shall not use the property for non-industrial purposes unless the EPA determines that the Site no longer poses risk to human health or the environment for the intended non-industrial use.
 - Titleholder Respondent DD#1, LLC shall prevent use of, and exposure to, site groundwater and shall not install any wells unless necessary for investigation or remedy implementation and approved by EPA.
6. Titleholder Respondent DD#1, LLC shall execute and record in the appropriate land records office proprietary controls that: (a) grant a right of access to conduct any activity regarding this Consent Order, including, but not limited to, those activities listed in Section XIV, Paragraph 3, and (b) grant the right to enforce the land/water use restrictions listed in the preceding paragraph and any land/water use restrictions listed in the IC Plan. The proprietary controls shall be granted to one or more of the following persons, as determined by EPA: (a) the United States, on behalf of EPA, and its representatives, (b) the State and its representatives, and/or (c) other appropriate grantees. The proprietary controls shall meet the requirements of the Iowa Code 455I entitled Uniform Environmental Covenants Act. In accordance with the schedule set forth in the IC Plan identified in Task 1 of the SOW, Titleholder Respondent DD#1, LLC shall submit to EPA for review and approval a draft proprietary control, in substantially the form attached to this Consent Order as Attachment D, and a current title insurance commitment or other evidence of title acceptable to EPA. Within forty-five (45) days of EPA's approval and acceptance of the proprietary control and the title evidence, Titleholder Respondent DD#1, LLC shall update the title search and, if it is determined that nothing has occurred since the effective date of the commitment, or other evidence, to affect the title adversely, record the proprietary control with the appropriate land records office. Within thirty (30) days of recording the proprietary control, Titleholder Respondent DD#1, LLC shall provide EPA with a certified copy of the original recorded proprietary control showing the clerk's recording stamps.

X. EPA APPROVAL OF DELIVERABLES

1. Deliverables required by this Consent Order shall be submitted to EPA for approval. All deliverables must be received at EPA by the due date specified in this Consent Order, SOW (Attachment B), or by schedules developed and approved by EPA pursuant to this Consent Order. Any due date that falls on a weekend, or State or Federal holiday, shall automatically be extended to the next business day.
2. After review of any deliverable that is required pursuant to this Consent Order, EPA will in writing: (a) approve, in whole or in part, the submission; (b) approve the submission upon specified conditions; (c) disapprove, in whole or in part, the submission, directing that Respondents modify the submission; or (d) any combination of the above. However, EPA will not disapprove all or any part of a submission without first providing Respondents at least one (1) written notice of deficiency and an opportunity to cure within ten (10) days of receipt, or an alternate timeframe approved by EPA, except where EPA determines that to do so would cause serious disruption to the Work or where EPA has disapproved previous submission(s) due to material defects and EPA determines that the deficiencies in the submission under consideration indicate a bad faith lack of effort to submit an acceptable deliverable.
3. In the event of approval, or approval upon conditions by EPA, pursuant to the preceding paragraphs (a), (b), or (c), Respondents shall proceed to take any action required by the deliverable, as approved by EPA subject only to Respondents' right to invoke the Dispute Resolution procedures set forth in Section XVII (Dispute Resolution) with respect to the conditions made by EPA.
4. Resubmission of Deliverable. Upon receipt of a notice of disapproval, in whole or in part, pursuant to Section X, Paragraph 2, (d), Respondents shall, within thirty (30) days or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the deliverable for approval. Any stipulated penalties applicable to the submission, as provided in Section XVIII (Penalties), shall accrue during the 30-day opportunity to cure period or otherwise specified period but shall not be payable unless the resubmission is disapproved due to a material defect.
5. Notwithstanding the receipt of a notice of disapproval pursuant to Section X, Paragraph 2, (d), Respondents shall proceed, at the direction of EPA, to take any action required by any non-deficient portion of the submission. Implementation of any non-deficient portion of a submission shall not relieve Respondents of any liability for stipulated penalties for the deficient portion of the deliverable under Section XVIII (Penalties).
6. In the event that a resubmitted deliverable, or portion thereof, is disapproved by EPA, EPA may again require Respondents to correct the deficiencies, in accordance with the preceding Paragraphs.
7. If upon resubmission, a deliverable is disapproved or modified by EPA due to a material defect, Respondents shall be deemed to have failed to submit such deliverable timely and

adequately unless Respondents invoke the dispute resolution procedures set forth in Section XVII (Dispute Resolution) and EPA's action to disapprove or modify a deliverable is overturned pursuant to that Section. The provisions of Section XVII (Dispute Resolution) and Section XVIII (Penalties) shall govern the implementation of the Work and accrual and payment of any stipulated penalties during Dispute Resolution. If EPA's disapproval or modification is upheld, stipulated penalties shall accrue for such violation from the date on which the initial submission was originally required, as provided in Section XVIII (Penalties).

8. All deliverables required to be submitted to EPA under this Consent Order, shall, upon approval by EPA, be incorporated into and be enforceable under this Consent Order. In the event EPA approves a portion of a deliverable required to be submitted to EPA under this Consent Order, the approved portion shall be enforceable under this Consent Order.

XI. MODIFICATION OF WORK PLANS

1. If at any time during the implementation of the Work, Respondents identify a need for a compliance date modification or revision of a work plan, Respondents shall submit a written request documenting the need for the modification or revision to the EPA's Project Coordinator. EPA, in its discretion, will determine if the modification or revision is warranted and may provide written approval or disapproval. Any approved modified compliance date or plan modification is incorporated by reference into this Consent Order. Any disapproval by EPA under this Paragraph shall be subject to review under Section XVII (Dispute Resolution) of this Consent Order.
2. Emergency Response. In the event of any action or occurrence during the performance of the Work that constitutes an emergency situation or may present an immediate threat to human health and the environment, Respondents shall immediately take all appropriate action to minimize such emergency or threat, and shall immediately notify the EPA's Project Coordinator. Respondents shall take such immediate and appropriate actions in consultation with EPA's Project Coordinator. Respondents shall then submit to EPA written notification of such emergency or threat at the Site within three (3) calendar days of such discovery. Respondents shall thereafter submit to EPA for approval, within twenty (20) days, a plan to mitigate this threat. Respondents shall implement this plan as approved by EPA. In the case of an emergency, Respondents may act as they deem appropriate, at their own risk, to protect human health or the environment.

XII. QUALITY ASSURANCE

1. As part of the Work to be Performed, Respondents shall submit a Quality Assurance Project Plan (QAPP)/Sampling and Analysis Plan (SAP). The combined QAPP/SAP shall address quality assurance, quality control, and chain of custody procedures for all sampling, monitoring and analytical activities including MNA performance monitoring and vapor intrusion monitoring. The QAPP/SAP will also provide information regarding field sampling procedures and equipment, decontamination procedures, analytical methods, and laboratory reporting limits. Respondents shall follow "EPA Requirements

for Quality Assurance Project Plans" (QA/R5)" (EPA/240/B-01/003, March 2001), "Guidance for Quality Assurance Project Plans (QA/G-5)" (EPA/240/R-02/009, December 2002), and "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01/002, March 2001) and subsequent revisions of these documents, as well as other applicable guidance documents identified by EPA.

2. As part of the Work to be Performed, Respondents shall include Data Quality Objectives for any data collection activity in order to obtain data of known and appropriate quality sufficient to support their intended use as required by this Consent Order.
3. Respondents shall require that laboratories used by Respondents for analysis perform such analysis according to the latest approved edition of "Test Methods for Evaluating Solid Waste (SW-846)" or other methods approved by EPA. If methods other than EPA methods are to be used, Respondents shall propose all such protocols in the applicable plan. EPA may reject any data that does not meet the requirements of the approved plan and EPA analytical methods and may require resampling and additional analysis in the event of such a rejection.
4. Respondents shall ensure that all laboratories used for analyses participate in a quality assurance/quality control (QA/QC) program equivalent to the program that EPA follows. Respondents shall, upon EPA's request, make arrangements for EPA to conduct a performance and QA/QC audit of the laboratories chosen by Respondents, whether before, during, or after sample analyses. Upon EPA's request, Respondents shall have their laboratories perform analyses of samples provided by EPA to demonstrate laboratory QA/QC and performance. If the audit reveals deficiencies in a laboratory's performance or QA/QC, Respondents shall submit a plan to address the deficiencies, which may include a change in laboratory, and EPA may require resampling and additional analysis.
5. EPA reserves the right to require a change in laboratories for reasons which may include, but shall not be limited to, QA/QC, performance, conflict of interest, or confidential agency audit information. In the event EPA requires a laboratory change, Respondents shall propose an alternative laboratory within thirty (30) days. Once EPA approves of the laboratory change, Respondents shall ensure that laboratory service shall be made available within thirty (30) calendar days.

XIII. DOCUMENT CERTIFICATION

1. Any report or other document submitted by Respondents pursuant to this Consent Order for purposes of documenting compliance with the terms of this Consent Order and approved work plans, and, which makes recommendations as to whether or not further actions are necessary, or makes any representation concerning Respondents' compliance or noncompliance with any requirement of this Consent Order shall be certified by Respondents' Project Coordinator, on behalf of Respondents.
2. The certification required by the preceding Paragraph, shall be in the following form:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

Signature: _____

Name: _____

Title: _____

Date: _____

XIV. SAMPLING, DATA AVAILABILITY, ACCESS AND INSTITUTIONAL CONTROLS

1. All results of sampling, testing, modeling or other data generated (including raw data if requested) by Respondents, or on Respondents' behalf, as part of the implementation of this Consent Order shall be submitted to EPA. Data validation will be performed as described in the QAPP/SAP prepared pursuant to Section XII (Quality Assurance) and the SOW. EPA will make available to Respondents data generated by EPA for the purposes of oversight of the Work unless it is prohibited from disclosure by any federal or state law or regulation.
2. Respondents shall orally notify EPA at least ten (10) business days prior to conducting field sampling. EPA may, at its sole discretion, waive the notification requirement on a case-by-case basis. At EPA's request, Respondents shall allow split or duplicate samples to be taken by EPA or EPA's representative.
3. Access. Respondent Titleholder DD#1, LLC shall provide access to the Facility at reasonable times to EPA, EPA's contractors and oversight officials and State representatives to conduct any activity regarding this Consent Order including, but not limited to, the following:
 - a. Monitoring the Work;
 - b. Verifying any data or information submitted to EPA or the State;
 - c. Conducting investigations regarding contamination at or near the Facility;
 - d. Obtaining samples;

- e. Assessing the need for, planning or implementing additional response action at the Facility;
 - f. Assessing implementation of quality assurance and quality control practices as defined in the approved QAPP;
 - g. Inspecting and copying non-privileged records, operating logs, or other documents maintained or generated by Respondents or their agents consistent with this Section;
 - h. Determining whether the Facility or other real property is being used in a manner that is prohibited or restricted, or that may need to be prohibited or restricted under this Consent Order; and,
 - i. Implementing, monitoring, maintaining, reporting on, and enforcing any Institutional Controls and the requirements of the IC Plan.
4. Pursuant to this Section, any denial of access at reasonable times by Titleholder Respondent DD#1, LLC to any portion of the Facility property where a request for access was made for the purposes of enforcing the requirements of RCRA or this Consent Order shall be construed as a violation of the terms of this Consent Order subject to the penalty provisions outlined in Section XVIII (Penalties) of this Consent Order.
5. Access Agreements. Where action under this Consent Order is to be performed in areas owned by, or in possession of, someone other than Respondents, Respondents Elementis and THAN shall use their Best Efforts to obtain all necessary access agreements within sixty (60) days of approval of any plan, in writing, by the EPA Project Coordinator for properties where access has not been previously secured. Any such access agreement shall provide for access by EPA and its representatives to move freely in order to conduct actions that EPA determines to be necessary. Respondents Elementis and THAN shall immediately notify EPA if after using their Best Efforts they are unable to obtain such agreements within the time required. Respondents Elementis and THAN shall, within ten (10) days of its receipt of a denial of access, submit in writing, a description of their efforts to obtain access. EPA may, at its discretion, assist Respondents in obtaining access. In the event EPA obtains access, Respondents Elementis and THAN shall undertake the Work on such property.
6. Confidential Business Information. Respondents may assert a claim of business confidentiality covering part or all of the information submitted to EPA pursuant to the terms of this Consent Order under 40 C.F.R. § 2.203 in the manner described at 40 C.F.R. § 2.203(b) and substantiated with the information described at 40 C.F.R. §2.204(e)(4). Information EPA determines is confidential will be given the protection specified in 40 C.F.R. Part 2. If no such claim or substantiation accompanies the information when it is submitted to EPA, it may be made available to the public by EPA or the state without further notice to Respondents. Respondents agree not to assert confidentiality claims

with respect to any technical data related to Site conditions, sampling, monitoring or the Work performed pursuant to this Consent Order.

7. Privileged Records. Respondents may assert that certain records (which includes records in electronic form) and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Respondents assert such a privilege in lieu of providing records, Respondents shall provide EPA with the following: (a) the title of the record or information; (b) the date of the record or information; (c) the author's name and title; (d) the name and title of each addressee and recipient; (e) a description of the subject matter; and (f) the privilege asserted by Respondents. However, no reports or other technical information created or generated pursuant to the requirements of this Consent Order shall be withheld on the grounds that they are privileged.
8. All data, information, and non-financial records, excluding private contracts between Respondents and their contractors, consultants, laboratories, or others, created or maintained directly relating to any Hazardous Waste found at the Site shall be made available to EPA upon request unless Respondents assert a claim that such documents are legally privileged from disclosure. Respondents shall have the burden of demonstrating to EPA that such privilege exists.
9. No claim of confidentiality shall be made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, or engineering data, or any other documents or information developed pursuant to this Consent Order evidencing conditions at or around the Site.
10. Nothing in this Consent Order shall be construed to limit EPA's right of access, entry, inspection, and information gathering pursuant to applicable law, including but not limited to RCRA and CERCLA.

XV. COMPLIANCE WITH OTHER LAWS

1. Respondents shall perform all actions required pursuant to this Consent Order in accordance with all applicable local, state, and federal laws and regulations. Respondents shall use their Best Efforts to obtain or cause their representatives to obtain all permits and approvals necessary under such laws and regulations in a timely manner so as not to delay the Work required by this Consent Order.

XVI. RECORD RETENTION

1. Respondents shall use their Best Efforts to preserve all records (which includes records in electronic form) relating to the Work performed under this Consent Order, or relating to any Hazardous Waste found at the Site, for six (6) years following completion of the Work required by this Consent Order.

2. Respondents shall retain copies of all records generated as part of the Work that relate to submissions to EPA required under this Consent Order that are in the possession of their respective employees, agents, or contractors.
3. After the six (6) year retention period and ninety (90) days before any record is destroyed, Respondents shall notify EPA that such records are available to EPA for inspection, and upon request, shall provide the records (at no extra cost) to EPA. Notification shall be in writing and shall reference the Effective Date, caption, and docket number of this Consent Order and shall be addressed to the Director of the Air and Waste Management Division, EPA Region 7. In addition, Respondents shall provide records retained under this Section at any time before expiration of the six (6) year retention period at the written request of EPA. At the end of the record retention period, Respondents may cease retention of such records.
4. All records pertaining to this Consent Order shall be stored by Respondents at a centralized location mutually approved by Respondents and EPA, where access by EPA or its representatives may be obtained with reasonable notice.

XVII. DISPUTE RESOLUTION

1. Respondents shall raise any disputes concerning the Work required under this Consent Order to EPA, in writing, within thirty (30) days after receiving written notice from EPA regarding any aspect of the Work required under this Consent Order that any Respondent disputes. EPA and Respondents shall expeditiously and informally attempt to resolve any disagreements. EPA's and Respondents' Project Coordinators shall first confer in an effort to resolve the dispute. If the Project Coordinators are unable to informally resolve the dispute within ten (10) days of the first conference, Respondents shall notify EPA, within fifteen (15) days, in writing of their objections. Written objections shall identify Respondents' objections, state the basis for those objections, and provide all data, analyses and information relied upon by Respondents. EPA and Respondents then have an additional fourteen (14) days from EPA's receipt of the objections to reach agreement. If an agreement is not reached within the fourteen (14) days, Respondents may request in writing, within ten (10) days, a determination resolving the dispute by EPA Region 7's Waste Remediation and Permitting Branch Chief, Air and Waste Management Division (Branch Chief). If such request is submitted, the Branch Chief shall issue a determination in writing. EPA's final decision shall be incorporated into and become an enforceable part of this Consent Order and shall no longer be subject to dispute pursuant to this Consent Order. Respondents shall proceed in accordance with the Branch Chief's decision regarding the matter in dispute, regardless of whether Respondents agree with the decision. If Respondents do not agree to perform or do not actually perform the Work in accordance with EPA's decision, EPA reserves the right in its sole discretion to conduct the Work itself, seek reimbursement from Respondents, seek enforcement of this Consent Order, seek stipulated penalties, and/or any other appropriate relief. Any disputes arising under this Consent Order are not subject to judicial review until such time as EPA seeks to enforce this Consent Order.

2. If EPA and Respondents reach agreement on the dispute at any stage, the agreement shall be set forth in writing and shall, upon signature of both parties, be incorporated into and become an enforceable part of this Consent Order.
3. The existence of a dispute and EPA's consideration of matters placed in dispute shall not excuse, toll, or suspend any compliance obligation or deadline that is independent of the dispute, as determined by EPA, and required pursuant to this Consent Order during the pendency of the dispute resolution process except as agreed to by EPA in writing. The invocation of dispute resolution does not stay the accrual of stipulated penalties under this Consent Order. However, the Branch Chief retains his/her authority in resolving the matter in dispute to waive stipulated penalties in whole or in part. Also, the parties agree that if judicial review of the matter in dispute occurs, the court resolving such matter may, in addition to determining the application and amount of statutory penalties to be imposed (if any), also determine the application and amount of stipulated penalties to be imposed (if any).

XVIII. PENALTIES

1. Stipulated Penalties. Any time that any Respondent fails to comply with any requirement of this Consent Order, that Respondent shall be liable for stipulated penalties in the amounts set forth in this Section unless a Force Majeure event has occurred as defined in Section XIX (Force Majeure) and EPA has approved the extension of a deadline as required by Section XIX (Force Majeure). Compliance with this Consent Order by Respondents shall include completion of an activity or any matter under this Consent Order in accordance with this Consent Order to the satisfaction of EPA, and within the specified time schedules approved under this Consent Order.
 - a) \$250 per day for the first through seventh days of non-compliance
 - b) \$500 per day for the eighth through thirtieth days of non-compliance;
and
 - c) \$1000 per day for the thirty-first and each succeeding day of non-compliance thereafter.
2. Penalties shall begin to accrue on the day after EPA notifies such Respondent in writing of the alleged non-compliance, and shall continue to accrue through the final day of correction of the violation or completion of the activity. Payment shall be due within ninety (90) days of receipt of a demand letter from EPA. Nothing herein shall prevent the simultaneous accrual of separate stipulated penalties for separate violations of this Consent Order following written notification to the Respondent, even where those violations concern the same event (e.g., submission of a plan that is late and is of unacceptable quality).
3. If payment is not made within ninety (90) days of the date of Respondents' receipt from EPA of a written demand for payment of the penalties or of the date of agreement or decision resolving the dispute, interest shall begin to accrue on any unpaid stipulated penalty balance beginning on the first day after Respondents' receipt of EPA's demand

letter, or the date of the agreement or decision resolving the dispute, and will accrue until such penalties and interest have been paid in full. Interest shall accrue at the Current Value of Funds Rate established by the Secretary of the Treasury. The applicable rate of interest shall be the rate in effect at the time the interest accrues pursuant to 31 U.S.C. § 3717.

4. Respondents shall make payments by money order, certified check, company check, electronic funds transfer, or cashier's check payable to the Treasurer of the United States within ninety (90) days of Respondent's receipt of EPA's request, and shall be submitted to the following address:

U.S. Environmental Protection Agency
Region 7
Fines and Penalties
P.O. Box 979077
St. Louis, Missouri 63197-9000.

5. Any payment made pursuant to this Section shall reference EPA Docket No. RCRA-07-2015-0017. Respondents shall send simultaneous notices of such payments, including copies of the money order certified check, company check, electronic funds transfer, or cashier's check to EPA's Project Coordinator.
6. Respondents may dispute an EPA determination that it failed to comply with this Consent Order by invoking the dispute resolution procedures under Section XVII (Dispute Resolution) unless the matter has already been in or is the subject of dispute resolution. Penalties shall accrue but need not be paid during the dispute resolution period. If Respondents do not prevail upon resolution, all penalties imposed under the resolution shall be due to EPA within thirty (30) days of resolution of the dispute. If Respondents prevail upon resolution, no penalties shall be paid. In the event that Respondents prevail in part, penalties shall be payable only with respect to those matters in which Respondents did not prevail if imposed under the resolution.
7. Neither the invocation of dispute resolution nor the payment of penalties shall alter in any way Respondents' obligation to comply with the terms and conditions of this Consent Order. The stipulated penalties set forth in this Section do not preclude EPA from pursuing any other remedies or sanctions which may be available to EPA by reason of any Respondent's failure to comply with any of the terms and conditions of this Consent Order applicable to such Respondent.
8. Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Consent Order.
9. Civil Penalties. Violation of this Consent Order may subject Respondents to civil penalties as provided for in Section 7003(b) of RCRA, 42 U.S.C. § 6973(b), as adjusted pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990, as amended by

the Debt Collection Improvement Act of 1996, 28 U.S.C. § 2461. Should Respondents violate this Consent Order or any portion hereof, EPA may carry out the required actions unilaterally, pursuant to any applicable authorities, and/or may seek judicial enforcement of this Consent Order, subject to Respondents' rights to Dispute Resolution under Section XVII of this Consent Order.

XIX. FORCE MAJEURE

1. Respondents agree to perform all requirements under this Consent Order within the time limits established under this Consent Order, unless the performance is delayed by a *force majeure*. For purposes of this Consent Order, a *force majeure* is defined as any event arising from causes beyond the control of Respondents through the exercise of Best Efforts, or any entity controlled by Respondents or Respondents' contractors, which delays or prevents performance of any obligation under this Consent Order despite Respondents' Best Efforts to fulfill the obligation. The requirement that the Respondents exercise Best Efforts to fulfill the obligation includes using Best Efforts to anticipate any potential *force majeure* event and best efforts to address the effects of any potential *force majeure* event: (a) as it is occurring, and (b) following the potential *force majeure* event, such that the delay is minimized to the greatest extent possible. *Force majeure* may not include financial inability to complete the Work, increased cost of performance, changes in Respondents' business or economic circumstances, or inability to attain media cleanup standards, but may include EPA or other governmental delay or inaction, denial of access by third parties, adverse weather conditions, malfunctions, contractual defaults by third parties and the like.
2. If any event occurs or has occurred that may delay the performance of any obligation under this Consent Order, caused by a *force majeure* event, Respondents shall orally notify EPA within seven (7) days of when Respondents knew, or through the exercise of Best Efforts should have known, that the event might cause a delay. Such notice shall: (a) identify the event causing the delay, or anticipated to cause delay, and the anticipated duration of the delay; (b) provide Respondents' rationale for attributing such delay to a *force majeure* event; (c) state the measures taken or to be taken to prevent or minimize the delay; (d) estimate the timetable for implementation of those measures; and (e) state whether, in the opinion of Respondents, such event may cause or contribute to an endangerment to public health or the environment. Respondents shall undertake Best Efforts to avoid and minimize the delay. Failure to comply with the notice provision of this paragraph and to undertake Best Efforts to avoid and minimize the delay may be grounds for EPA to deny any claim of *force majeure* by Respondents. Respondents shall be deemed to have notice of any circumstances of which its contractors had notice.
3. If EPA determines that a delay in performance or anticipated delay in fulfilling a requirement of this Consent Order is or was attributable to a *force majeure*, then the time period for performance of that requirement will be extended as deemed necessary by EPA. If EPA determines that the delay or anticipated delay has been or will be caused by a *force majeure*, then EPA will notify Respondents, in writing, of the length of the extension, if any, for performance of such obligations affected by the *force majeure*. Any

such extensions shall not alter Respondents' obligation to perform or complete other tasks required by this Consent Order which are not directly affected by the *force majeure*.

4. If EPA disagrees with Respondents' assertion of a *force majeure*, then Respondents may elect to invoke the dispute resolution provision, and shall follow the procedures set forth in Section XVII (Dispute Resolution). In any such proceeding, Respondents shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a *force majeure*, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that Respondents' Best Efforts were exercised to avoid and mitigate the effects of the delay, and that Respondents complied with the requirements of this Section. If Respondents satisfy this burden, then EPA will extend the time for performance as EPA determines is necessary.

XX. COVENANTS BY EPA

1. Except as provided in Section XXI (Reservation of Rights), EPA covenants not to sue or take administrative action against Respondents pursuant to Section 7003 of RCRA, 42 U.S.C. § 6973, for the Work. This covenant shall take effect upon the Effective Date. This covenant is conditioned upon the complete and satisfactory performance by Respondents of their obligations under this Consent Order. This covenant extends only to Respondents and does not extend to any other person.

XXI. RESERVATION OF RIGHTS

1. Notwithstanding any other provisions of this Consent Order, the United States retains all of its authority to take, direct, or order any and all actions necessary to protect public health or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants, or constituents, or hazardous or solid waste or constituents of such wastes, on, at, or from the Site, including but not limited to the right to bring enforcement actions under RCRA, CERCLA, and any other applicable statutes or regulations.
2. EPA reserves all of its statutory and regulatory powers, authorities, rights, and remedies, both legal and equitable, which may pertain to Respondents' failure to comply with any of the requirements of this Consent Order, including without limitation the assessment of penalties under Section 7003 of RCRA, 42 U.S.C. § 6973.
3. Except as otherwise provided herein, this Consent Order shall not be construed as a covenant not to sue, release, waiver, or limitation of any rights, remedies, powers, claims, and/or authorities, civil or criminal, which EPA has under RCRA, CERCLA, or any other statutory, regulatory, or common law authority of the United States.
4. This Consent Order is not intended to be nor shall it be construed to be a permit. Compliance by Respondents with the terms of this Consent Order shall not relieve

Respondents of their obligations to comply with RCRA or any other applicable local, state, or federal laws and regulations.

5. Notwithstanding any other provision of this Consent Order, no action or decision by EPA pursuant to this Consent Order, including without limitation, decisions of the Regional Administrator, the Director of the Air and Waste Management Division, or any authorized representative of EPA, shall constitute final agency action giving rise to any right of judicial review prior to EPA's initiation of a judicial action to enforce this Consent Order, such as an action for penalties or an action to compel Respondents' compliance with the terms and conditions of this Consent Order.

XXII. OTHER CLAIMS

1. By issuance of this Consent Order, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondents. The United States or EPA will not be deemed a party to any contract, agreement or other arrangement entered into by Respondents or their officers, directors, employees, agents, successors, assigns, trustees, receivers, contractors, or consultants in carrying out actions pursuant to this Consent Order.
2. In any subsequent administrative or judicial proceeding initiated by the United States for injunctive or other appropriate relief relating to the Site, Respondents shall not assert, and may not maintain, any defense or claim based upon any contention that the claims raised by the United States in the subsequent proceeding were or should have been raised in the present matter.

XXIII. INSURANCE

1. Respondents or their contractors or consultants shall secure, and shall maintain in force for the duration of this Consent Order, comprehensive general liability insurance and automobile insurance with limits of \$1 million dollars, combined single limit. Annually, on the anniversary of the Effective Date of this Consent Order, Respondents shall provide EPA with certificates of such insurance or other acceptable assurance of coverage, if requested by EPA. If Respondents demonstrate by evidence satisfactory to EPA that their contractors maintain insurance equivalent to that described above, or insurance covering some or all of the same risks but in an equal or lesser amount, then Respondents need provide only that portion of the insurance described above which is not maintained by the contractors, or other acceptable assurance of coverage.
2. For the duration of this Consent Order, Respondents shall satisfy, or shall require that their contractors satisfy, all applicable laws and regulations regarding the provision of employer's liability insurance and worker's compensation insurance for all persons performing the Work on behalf of Respondents, in furtherance of this Consent Order.

XXIV. COST ESTIMATES AND FINANCIAL ASSURANCE

1. Cost Estimates. Within ninety (90) days after the Effective Date of this Consent Order Respondents shall provide a detailed estimate to include all costs related to the preparation of documents required under this Consent Order as necessary, and submit to EPA the detailed written initial estimate, in current dollars, of the cost of hiring a third party to perform the Work described in Section IX (Work to Be Performed) of this Consent Order and the attached SOW. A third party is a party who: (a) is neither a parent nor a subsidiary of Respondents, and (b) does not share a common parent or subsidiary with Respondents. The initial cost estimate must account for the total costs of the Work described in Section IX (Work to Be Performed) and the SOW for the entire period of this Consent Order, including any necessary long term costs, such as operation and maintenance costs, monitoring costs, and institutional controls. The cost estimate must not incorporate any salvage value that may be realized from the sale of wastes, site structures or equipment, land or other assets associated with the Site.
2. Respondents must annually review, and adjust the cost estimate(s) by March 31st of each year following the first year of work required by this Consent Order until the Work is completed. The cost estimate will consider future tasks required by the SOW and significant changes in projected future expenditure as compared to the initial estimate. In addition, Respondents must adjust the cost estimate if EPA determines that any additional work is required, pursuant to Section XXVII (Additional Work), or if any other conditions increase the cost of the Work to be performed under this Consent Order.
3. Respondents shall submit each annual cost estimate to EPA for review pursuant to Section X (EPA Approval of Deliverables).
4. Assurances of Financial Responsibility for Completing the Work. In order to secure the full and final completion of the Work in accordance with the Consent Order, Respondents shall establish and maintain financial assurance using one of the mechanisms provided by 40 C.F.R. Part 264.
5. Within sixty (60) days of the Effective Date of this Consent Order, Respondents shall submit a draft summary of the financial assurance mechanism they select to EPA for review pursuant to Section X (EPA Approval of Deliverables). The financial assurance shall be in the form and substance satisfactory to EPA.
6. Within sixty (60) days after EPA's approval of both the initial cost estimate and the draft financial assurance mechanism, whichever is later, Respondents shall finalize the financial assurance mechanism approved by EPA and send a copy to EPA.
7. If the annually adjusted cost estimate for the cost of completing the remaining Work exceeds the amount of financial assurance already provided pursuant to this Section, Respondents shall, within ninety (90) days thereafter, increase the amount of the financial assurance to cover such cost increase. In addition, in the event that EPA determines at any time that the financial assurances provided pursuant to this Consent Order are

inadequate, Respondents shall, within ninety (90) days after receipt of notice of EPA's determination, correct the inadequacy. Furthermore, if at any time EPA notifies Respondents that the anticipated cost of completing the Work has increased above the established level of financial assurance and provides the basis for such determination, then, within ninety (90) days of receipt of such notification, Respondents shall increase the amount of financial assurance to cover such cost increase. Any such annually adjusted cost estimate required under this paragraph may be used by Respondents to adjust the amount of financial assurance utilized to secure completion of the Work.

8. Respondents' inability to post financial assurance for completion of the Work shall in no way excuse performance of any other requirements of this Consent Order, including, without limitation, Respondents' obligation to complete the Work in accordance with the terms of this Consent Order.
9. Reduction of Amount of Financial Assurance. If Respondents believe that the estimated cost to complete the remaining Work has diminished below the amount covered by the existing financial assurance provided under this Consent Order, Respondents may submit a written proposal to EPA to reduce the amount of the financial assurance provided under this Section to the estimated cost of the remaining Work to be performed. The written proposal shall specify, at a minimum, the cost of the remaining Work to be performed and the basis upon which such cost was calculated. The decision whether to approve a proposal to reduce the amount of financial assurance shall be within EPA's sole discretion and EPA shall notify Respondents of its decision regarding such proposal in writing. Respondents may reduce the amount of the financial assurance only after receiving EPA's written decision and only in accordance with and to the extent permitted by such written decision. In the event of a dispute, Respondents may reduce the amount of the financial assurance required by this Section only in accordance with a final administrative decision resolving such dispute under Section XVII (Dispute Resolution) of this Consent Order.
10. Release of Financial Assurance. Respondents may submit a written request to the Director of Air and Waste Management Division of EPA Region 7 requesting that EPA release Respondents from the requirement to maintain financial assurance under this Section at such time as EPA has provided written notice, pursuant to Section XXVIII (Termination and Satisfaction) that Respondents have demonstrated that all the terms of this Consent Order have been addressed to the satisfaction of EPA or that such financial assurance otherwise must be released under applicable law. The Division Director shall notify Respondents, and the Trustee if there is a financial assurance Trust, in writing the Respondents are released from all financial assurance obligations under this Consent Order.

XXV. INDEMNIFICATION

1. Respondents agree to indemnify, save and hold harmless the United States, its officials, agents, contractors, employees, and representatives from any and all claims or causes of action: (a) arising from, or on account of, acts or omissions of Respondents,

Respondents' directors, officers, employees, agents, successors, assigns, trustees, receivers, contractors, or consultants in carrying out actions pursuant to this Consent Order; and (b) for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between Respondents and any persons for performance of the Work on or relating to the Site, including claims on account of construction delays. In addition, Respondents agree to pay the United States all costs incurred by the United States, including litigation costs arising from or on account of claims made against the United States based on any of the acts or omissions referred to in the preceding sentence. Respondents shall not be responsible for indemnifying any party for claims or causes of action arising from or on account of acts or omissions of that party.

XXVI. MODIFICATION OF THIS CONSENT ORDER

1. Except for modification of work plans as provided in Section XI (Modification of Work Plans), this Consent Order may only be modified by the mutual agreement of EPA and Respondents. Any agreed modifications shall: be in writing; be signed by both parties; have as their effective date the date on which they are signed by EPA; and be incorporated into this Consent Order.
2. No informal advice, guidance, suggestion, or comment by EPA regarding reports, plans, specifications, schedules, or any other writing submitted by Respondents shall relieve Respondents of their obligation to obtain such formal approval as may be required by this Consent Order, and to comply with all requirements of this Consent Order unless it is formally modified. Any approved deliverables, plans, technical memoranda, reports, specifications, schedules and attachments required by this Consent Order and any resolution of any disputes hereunder are incorporated into and enforceable under this Consent Order.

XXVII. ADDITIONAL WORK

1. EPA may determine or Respondents may propose that certain tasks are necessary in addition to or in lieu of the tasks included in any EPA-approved work plan when such Additional Work is necessary to meet the objectives set forth in Section I (Introduction). EPA may determine that Respondents shall perform any Additional Work and EPA will specify, in writing, the basis for its determination that any Additional Work is necessary. Within fifteen (15) days after the receipt of such determination, Respondents shall have the opportunity to request to meet or confer with EPA to discuss any Additional Work. If after any such meeting EPA determines that the Additional Work is still necessary, Respondents shall submit for EPA approval a work plan for any Additional Work. Such work plan shall be submitted within sixty (60) days of Respondents' receipt of EPA's determination that any Additional Work is necessary, or according to an alternative schedule established by EPA. Upon EPA's approval of a work plan for any Additional Work, Respondents shall implement the work plan for any Additional Work in accordance with the schedule and provisions contained therein. The work plan for any Additional Work shall be incorporated by reference into this Consent Order.

XXVIII. TERMINATION AND SATISFACTION

1. The provisions of this Consent Order shall be deemed terminated and satisfied by Respondents upon written notice from EPA that Respondents have demonstrated that all of the terms of this Consent Order, including any Additional Work as may be performed pursuant to Section XXVII (Additional Work) and any stipulated penalties demanded by EPA under Section XVIII (Penalties), have been addressed to the satisfaction of EPA. Termination of this Consent Order shall not terminate Respondents' respective obligations to comply with: Sections XIV (Sampling, Data Availability, Access and Institutional Controls); XVI (Record Retention); XXI (Reservation of Rights); and XXV (Indemnification) of this Consent Order and to maintain institutional and engineering controls.

XXIX. PUBLIC COMMENT ON THIS CONSENT ORDER

1. EPA shall provide public notice, opportunity for a public meeting and a reasonable opportunity for public comment on this proposed settlement. After consideration of any comments submitted during a public comment period of not less than thirty (30) days (which EPA may extend), EPA may withhold consent or seek to amend all or part of this Consent Order if EPA determines that comments received disclose new facts or considerations which indicate that this Consent Order is inappropriate, improper, or inadequate.

XXX. SEVERABILITY

1. If a court issues an order that invalidates any provision of this Consent Order or finds that Respondents have sufficient cause not to comply with one or more provisions of this Consent Order, Respondents shall remain bound to comply with all provisions of this Consent Order not invalidated or determined to be subject to a sufficient cause or other defense by the court's order.

XXXI. EFFECTIVE DATE

1. This Consent Order shall be effective when EPA signs this Consent Order after the public comment period as specified in Section XXIX (Public Comment on This Consent Order) above. Within two (2) business days of signing this Consent Order, EPA will provide Respondents with a copy of the signature page of this Consent Order signed by the Director of the Air and Waste Management Division, EPA Region 7. The undersigned representative of each Respondent certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Order and to bind the parties he or she represents to this document. Respondents agree not to contest the validity or terms of this Consent Order, or the procedures underlying or relating to it in any action brought by the United States, including EPA, to enforce its terms or seek penalties for its violation. Respondents retain its right to assert claims against any third parties with respect to this Facility.

Agreed this ____ day of _____, 2015.

Elementis Chemicals, Inc.

By: _____
Signature

Print Name

Title

DD#1 LLC

By: _____
Signature


Print Name

Title

T H Agriculture & Nutrition, LLC

By: Philips North America Corporation as attorney-in-fact for T H Agriculture &
Nutrition, LLC

By:



Signature

JOSEPH E. INNAMORATI
SENIOR VICE PRESIDENT

Print Name

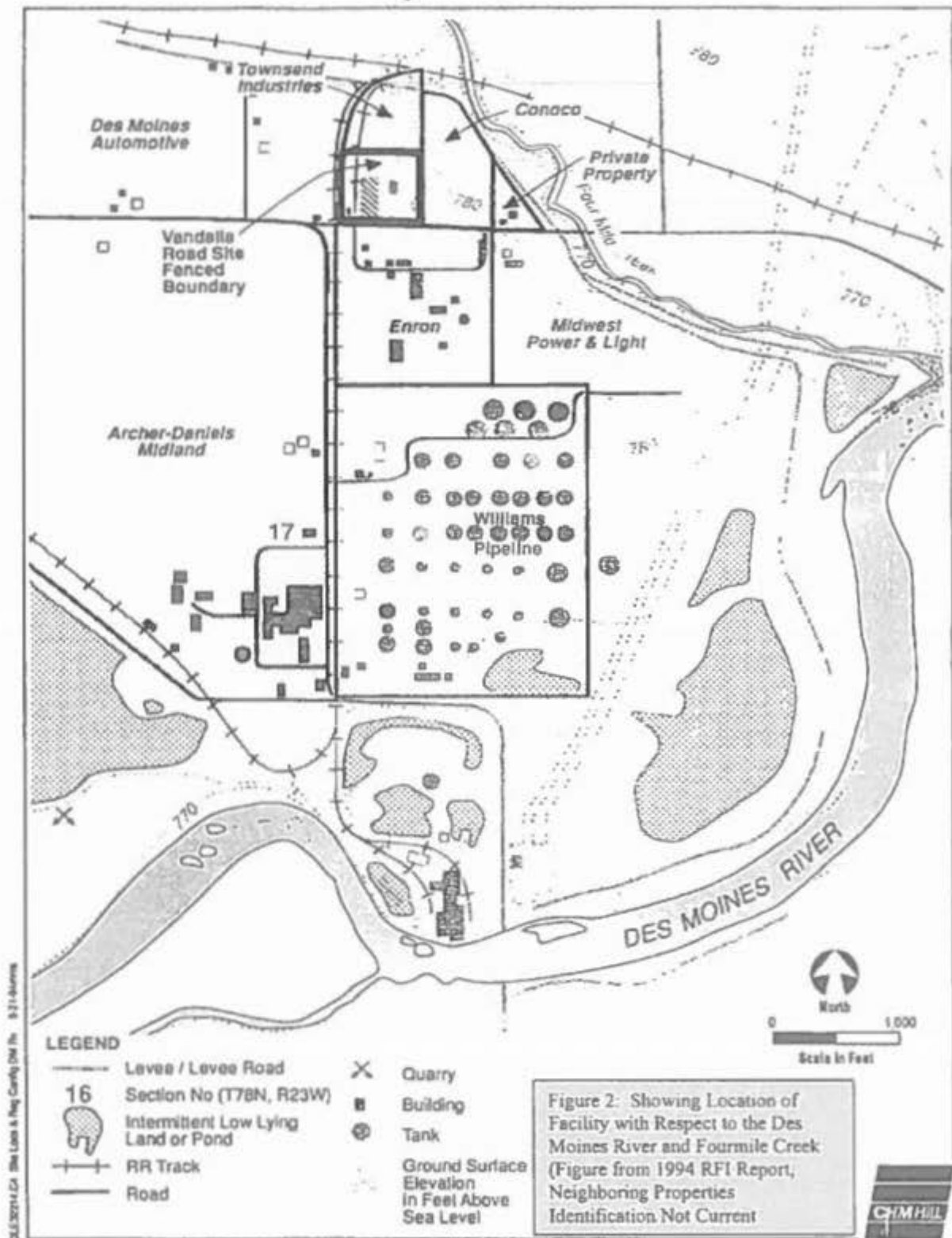
Title

It is so ORDERED and Agreed this ____ day of _____, 2015.

By: _____
Becky Weber
Director, Air and Waste Management Division
Region 7, U.S. Environmental Protection Agency

EFFECTIVE DATE: _____

Attachment A



ATTACHMENT B

Corrective Measures Implementation Scope of Work, Former Townsend Industries Facility, 4400 Vandalia Road, Pleasant Hill, Polk County, Iowa

Introduction and Purpose

This Scope of Work (SOW) is incorporated into and made a part of the Administrative Order on Consent ("Consent Order") entered into by Elementis Chemicals Inc., T H Agriculture & Nutrition, L.L.C. ("Respondents") and DD#1, LLC ("Titleholder Respondent"), and the United States Environmental Protection Agency Region 7 for implementation of corrective measures at the Townsend Industries facility ("Facility"), 4400 Vandalia Road, Pleasant Hill, Polk County, Iowa ("Facility").

The Respondents shall perform a Corrective Measures Implementation (CMI) Program that implements the remedy selected by the EPA to prevent, mitigate and/or remediate migration or release of solid and/or hazardous wastes and/or hazardous constituents at, and/or from, the Facility.

The purpose of the CMI Program is to operate, maintain and/or monitor the performance of the corrective measures selected in the Final Remedy Decision and Response to Comments (FRD/RTC), dated September 27, 2013, and/or any additional or modified corrective measures deemed necessary by the EPA. Details of these corrective measures were presented in the EPA-approved Corrective Measures Study (CMS) Report, dated January 2003, as amended by the Addendum to the CMS Report dated May 2010.

The work will be performed in general accordance with the EPA's *RCRA Corrective Action Plan*, EPA/520-R-94-004, OSWER Directive 9902.3-2A, May 1994, and all other applicable EPA guidance, including but not limited to the EPA's *Handbook of Groundwater Protection and Cleanup Policies for RCRA Corrective Action* (EPA 530-R-04-030), April 2004, other EPA guidance documents referenced herein, and subsequent revisions and additions to those documents. The selected corrective measures must be implemented and maintained until the Remedial Action Objectives (RAOs) and Remedial Action Goals specified herein and the conditions of the Consent Order have been met.

Scope

Four deliverables, as outlined below, will be required as part of the CMI Program: (1) Operation, Monitoring and Maintenance Plan; (2) periodic Remedy Performance Reports; (3) periodic 5-Year Remedy Reviews; and (4) Corrective Measures Completion Report.

Task 1: Operation, Monitoring and Maintenance Plan

Detailed implementation of the actions required for the CMI Program will be documented in the Operations, Monitoring and Maintenance Plan (OMMP). The OMMP shall be developed within 90 days of the effective date of this Consent Order and shall include, at a minimum, the following components. The OMMP is envisioned as a "living" document that will be modified as needed to address changed circumstances and/or new data developed in the future.

Item 1: Background

The background section of the OMMP will include the following information:

- a. Project team roles, lines of communication, and responsibilities
- b. Site description of current conditions and overview of the site conceptual model
- c. Overview of the EPA-selected remedy
- d. Operation, monitoring, maintenance and reporting schedule
- e. Remedial Action Objectives
- f. Data and document management procedures
- g. Waste generation, management and disposal procedures
- h. Cost estimate for implementation of the corrective measures

Item 2: Long-Term Groundwater Monitoring Plan

The long-term groundwater monitoring section of the OMMP will identify data quality objectives for groundwater sampling as it relates to (1) monitoring the nature and extent of the impacts to groundwater; (2) evaluating the effectiveness of the EPA-selected groundwater corrective measures implemented at the Facility, including additional monitoring wells to evaluate SBCW effectiveness; and (3) evaluating the effectiveness of the off-site Monitored Natural Attenuation (MNA) corrective action. This section will also include the following information:

- a. Purpose of monitoring, monitoring wells, analytes and analytical methods, detection limits, sampling frequency and schedule
- b. Data quality assurance (QA)/quality control (QC) procedures
- c. Well inspection and maintenance procedures and schedule
- d. Sampling methods summary (complete details are provided in the Quality Assurance Project Plan [QAPP]/Sampling and Analysis Plan [SAP])
- e. Criteria for modifying the monitoring program
- f. Performance standards, criteria for documenting attainment of RAOs and evaluating achievement of cleanup standards, and methodology for data evaluation
- g. Reporting frequency

The sampling and reporting frequency shall be no less than annually, unless otherwise approved by the EPA. Respondents shall provide the EPA with quality-assured laboratory results from all sampling events within 60 days of Respondents' receipt of such data, regardless of the reporting frequency. MNA evaluations shall conform to the EPA guidance documents *Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Ground Water* (EPA/600/R-98/128), September 1998 and *Performance Monitoring of MNA Remedies for VOCs in Ground Water* (EPA/600/R-04/027), April 2004.

Item 3: On-site Remediation System Operations Plan

This section of the OMMP will present the procedures and standards governing startup, operation, inspection and required maintenance, and shutdown of the on-site groundwater remediation system components, including the Gradient Control And Treatment System (GCTS), the In Situ Hydraulic Treatment Conduit (IHTC), the Accelerated Remediation Technologies (ART) Well and free-product solvents (dense non-aqueous phase liquid [DNAPL]) removal. Operation and maintenance of the remedy components identified in the Final Decision Document will be required to the extent practicable and necessary in order to achieve the remedial goals and corrective action objectives specified in the Statement of Basis. Performance standards for the remediation system components will also be specified. A contingency plan will be prepared that describes the data and statistical evaluations necessary to evaluate these performance standards, and specifies activation of the GCTS if a

contingency is triggered. Following the contingent activation of the GCTS, technologies to address the site conditions that triggered the contingency will be evaluated and implemented as necessary. Finally, inspection and required maintenance of the asphalt cap/cover over the former tank area must be included in this Plan.

Item 4: Vapor Intrusion (VI) Sampling, Analysis and Long-Term Monitoring

Respondents shall prepare a Vapor Intrusion Monitoring Plan. The VIMP will detail the investigation approach to evaluate the potential for VI from site-related VOCs at occupied buildings on the Facility and at off-site properties. The VI Monitoring Plan will present the following:

- Indoor air and sub-slab soil gas sample collection methodology
- A schedule for long-term VI monitoring
- The criteria to be used for indoor air exposure screening

Indoor air and sub-slab soil gas sample analytical methodology will be presented in the QAPP. Results of VI sampling/monitoring shall be included in the submittal required in Item 7, Task 2 below titled "Remedy Performance Reports."

The VIMP and QAPP and subsequent sampling program shall be conducted in a manner consistent with the EPA's final vapor intrusion guidance (or updates), including but not limited to *OSWER Final Guidance for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Sources to Indoor Air* (June, 2015).

Item 5: Health and Safety Plan

This section of the OMMP will present health and safety protocols for all field activities. The Health and Safety Plan (HASP) will include site-specific personnel training requirements. The HASP must, at a minimum, comply with all applicable Occupational Safety and Health Act (OSHA) requirements. The HASP is a required submission, but is not subject to EPA approval.

Item 6: Quality Assurance Project Plan and Sampling and Analysis Plan

Respondents shall submit a QAPP/SAP. The combined QAPP/SAP shall address QA, QC and chain-of-custody procedures for all sampling, monitoring and analytical activities in this SOW, including but not limited to monitored natural attenuation (MNA) performance monitoring and VI sampling. The QAPP/SAP will also provide information regarding field sampling procedures and equipment, decontamination procedures, analytical methods and laboratory reporting limits. Respondents shall follow the *EPA Requirements for Quality Assurance Project Plans (QA/R-5)* (EPA/240/B-01/003, March 2001), the *Guidance for Quality Assurance Project Plans (QA/G-5)* (EPA/240/R-02/009, December 2002), and the *EPA Requirements for Quality Management Plans (QA/R-2)* (EPA/240/B-01/002, March 2001) and subsequent revisions of these documents, as well as other applicable documents identified by the EPA.

Item 7: Institutional Controls Plan

This section of the OMMP will include the following information:

- a. Detailed description of all institutional controls (ICs) required by the EPA-approved final remedy
- b. Implementation procedures
- c. Schedule for implementation

- d. Procedures to verify the ICs are in place and the party responsible for implementing monitoring and verifying IC effectiveness
- e. Documentation of ICs once they have been put into place (recorded deed restriction, environmental covenant or other device)

Task 2: Remedy Performance Reports

Remedy Performance Reports (RPRs) will be submitted to the EPA on a frequency identified in the OMMP until the EPA provides written notice that the Respondents have demonstrated that the terms of the Consent Order have been satisfied. Each RPR shall include at a minimum the following components:

- a. Identification of the reporting timeframe
- b. Summary of the work performed, including but not limited to sampling, inspections, maintenance and any deviations from the OMMP
- c. Discussion of site conditions during sampling
- d. Forecast of work to be performed during the next reporting period
- e. Presentation of data collected, an evaluation of data quality, including tables, figures and charts
- f. Comparison of data collected with the established cleanup goals, natural attenuation criteria, etc.
- g. Evaluation of data trends, including statistical analysis, if appropriate
- h. Summary of the impact of new data on site conceptual model
- i. Summary of progress towards achieving RAOs
- j. Evaluation and verification that ICs are in place and effective
- k. Recommendations and rationale for proposed monitoring changes, implementation of contingencies, etc.

Performance Objectives

Performance objectives under this Consent Order consist of attainment of all the RAOs and Remedial Action Goals for on-site and off-site groundwater, soil and indoor air using the current version and any updates for the MCLs and RSLs. The RAOs are identified as either an MCL or RSL in the table below, as specified in the Statement of Basis. Respondents may choose to perform a risk assessment and propose site-specific risk-based levels as an alternative to the RAOs that are set at the RSL values. The risk assessment and any proposed site-specific risk-based levels would be subject to EPA review and approval.

On-site Groundwater

Performance monitoring shall consist of groundwater sampling and analysis in accordance with the OMMP described in Task 1. Analytical data shall be evaluated in accordance with EPA guidance to review constituent trends over time with respect to overall decrease in contaminant mass and individual constituent concentrations. Data evaluation tools may include statistical analysis and parent/daughter product ratio trends. Additional evaluation tools will be added as necessary. If necessary, and upon EPA approval, operational parameters for the GCTS may be adjusted to optimize groundwater treatment. In addition, Respondents shall, on an annual basis, conduct visual inspections of the Facility and review of pertinent records regarding the Facility to verify that the ICs are being properly maintained. Evaluation of ICs shall be documented in the IC Plan, developed in accordance with Task 1 of the SOW.

Off-site Groundwater

Analytical data from off-site monitoring wells shall be evaluated in accordance with EPA guidance to review contaminant trends over time with respect to overall decrease in contaminant mass and individual constituent concentrations. Data evaluation tools may include statistical analysis, parent/daughter product ratio trends and graphical trend analysis. Additional evaluation tools will be added as necessary. In addition, the nature and extent of constituents in groundwater will be evaluated to ensure that the plume is not migrating into previously unaffected areas and properties, and to verify that geochemical and geologic conditions are still favorable for natural attenuation of all constituents.

Task 3: 5-Year Corrective Measures Performance Evaluation Reports

A 5-Year Corrective Measures Performance Evaluation (CMPE) Report will be submitted to the EPA on or before each fifth year anniversary date of the effective date of the Consent Order. The CMPE Report will document the evaluation of the effectiveness and performance of all remedy components, including but not limited to, the on-site Soil-bentonite Containment Wall (SBCW)/GCTS corrective measures, off-site MNA corrective measures, the asphalt cap/cover and the ICs in preventing unacceptable human or environmental exposure and meeting the RAOs. This evaluation shall be consistent with the *CERCLA Comprehensive Five-Year Review Guidance*, OSWER 9355.7-03B-P, and any subsequent revisions or additions, and shall include, at a minimum, the following:

- a. A description of its purpose
- b. A summary of the objectives of on-site and off-site contaminated groundwater treatment
- c. A synopsis of the objectives of the ICs
- d. A discussion on the effectiveness of the corrective measures and ICs in protecting human health and the environment using sampling and analysis results
- e. A discussion on the progress toward attaining site-specific media cleanup goals, an estimate of the time remaining to attain those goals, and identification of limiting factors in attaining those goals
- f. Any changed circumstances that render the remedy, including engineered and institutional controls, ineffective
- g. Proposed modifications to the corrective measures to meet the goals of the approved remedy

Task 4: Corrective Measures Completion Report

A Corrective Measures Completion Report (CMCR) will be developed when the Respondents obtain information demonstrating that the completion criteria, which are described in the OMMP, have been achieved for all of the corrective measures, and the EPA concurs with the Respondents' evaluation. The purpose of the CMCR is to fully document how the RAOs, goals and corrective measure completion criteria have been satisfied, and to justify why the corrective measure and/or monitoring may cease. The CMCR will be submitted within 90 days of receipt of the notice of completion from the EPA. The CMCR shall, at a minimum, include the following elements:

- a. A synopsis of the corrective measures implemented.
- b. The corrective measures completion criteria: Describe the process and criteria for determining when the corrective measures and maintenance and monitoring may cease. Corrective measure completion criteria are described in the EPA-approved OMMP.

- c. A demonstration that the completion criteria have been met. The Respondents shall include results of testing and/or monitoring, indicating how operation of the corrective measures satisfy the completion criteria.
- d. A summary of work accomplishments (e.g., performance levels achieved, total treated and/or excavated volumes, nature and volume of wastes generated, etc.).
- e. A summary of significant activities that occurred during operations, including activities undertaken to resolve significant problems.
- f. A discussion of the potential impacts that cessation of maintenance and monitoring could have on the future effectiveness of the corrective measure and/or potential receptors.

Remedial Action Objectives and Goals

The remedial goals for on-site soil, indoor air and groundwater are: (1) the protection of on-site workers and any potential off-site receptors from unacceptable exposure to contaminated media including soils, groundwater and indoor air; (2) the containment of groundwater contamination and the prevention of off-site migration of groundwater contaminants at concentrations above RAOs; and (3) the reduction of contaminant mass.

The remedial goal for off-site groundwater contamination is to restore it to drinking water standards, represented by Safe Drinking Water Act (SDWA) maximum contaminant levels (MCLs) and any updates. If a contaminant present in off-site groundwater does not have a final MCL, then an EPA Regional Screening Level (RSL), and any updates, or site specific risk based levels shall be used. The contaminants are listed below and the Remedial Action Objectives for each contaminant are identified as either an MCL or RSL/site-specific risk based level.

The remedial goal for indoor air is to protect people occupying buildings over contaminated soil and/or groundwater from contaminants in indoor air. The current residential or industrial air RSL values, as appropriate for the use of each building, and any updates will be used as the cleanup standards. The remedial goal for on-site soils will be site-specific risk-based contaminant levels to be calculated in a future risk assessment.

RAOs specific to this Facility are the EPA Maximum Contaminant Levels (MCLs) and any updates, and the EPA Regional Screening Levels (RSLs) and any updates or site-specific risk based levels, for off-site groundwater constituents that do not have an established MCL. The EPA RSLs and any updates to the RSLs or site-specific risk based levels will also be used for soils and indoor air. When using RSLs, Respondents will be required to use the most current version of the RSLs, which are updated twice a year, when evaluating the RAOs. It is expected that RSLs for industrial scenarios will be appropriate; however, if site-related off-site contamination in residential areas are discovered, residential RSLs will be used in those areas. The table below presents the currently-identified COPCs and may be revised in the future if additional site-related constituents are identified.

Table 1 - Remedial Action Objectives for Groundwater, Soil and Indoor Air

Compound	Source of RAO*
Acetone	RSL/site-specific risk based level
Benzene	MCL (groundwater); RSL/site-specific risk based level (soil/air)
2-Butanone (Methyl Ethyl Ketone)	RSL/site-specific risk based level

Compound	Source of RAO*
1,1 Dichloroethane	RSL/site-specific risk based level
1,1 Dichloroethene	MCL (groundwater); RSL/site-specific risk based level (soil/air)
cis-1,2 Dichloroethene	MCL (groundwater); RSL/site-specific risk based level (soil/air)
trans-1,2 Dichloroethene	MCL (groundwater); RSL/site-specific risk based level (soil/air)
1,4-Dioxane	RSL/site-specific risk based level
Ethylbenzene	MCL (groundwater); RSL/site-specific risk based level (soil/air)
Methylene Chloride	MCL (groundwater); RSL/site-specific risk based level (soil/air)
Tetrachloroethylene	MCL (groundwater); RSL/site-specific risk based level (soil/air)
Toluene	MCL (groundwater); RSL/site-specific risk based level (soil/air)
1,1,1-Trichloroethane	MCL (groundwater); RSL/site-specific risk based level (soil/air)
Trichloroethene or Trichloroethylene	MCL (groundwater); RSL/site-specific risk based level (soil/air)
Vinyl Chloride	MCL (groundwater); RSL/site-specific risk based level (soil/air)
Xylenes (Total)	MCL (groundwater); RSL/site-specific risk based level (soil/air)

*MCL - Maximum Contaminant Levels from EPA's Safe Drinking Water Act Regulations and Health Advisories (EPA current version, and any updates). RSL - Regional Screening Levels (EPA current version, and any updates).

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 7**

FINAL REMEDY DECISION and RESPONSE TO COMMENTS

**FORMER TOWNSEND INDUSTRIES FACILITY
4400 VANDALIA ROAD PLEASANT HILL, Iowa
EPA I.D. Number IAD005277231**

INTRODUCTION

This Final Remedy Decision and Response to Comments (FRD/RTC) is issued by the U.S. Environmental Protection Agency. The purpose of the FRD/RTC is to present issues and concerns raised during the public comment period on the remedy proposed for the Former Townsend Industries Facility ("Facility"); to provide responses to those issues and concerns; and, to identify the remedy the EPA has selected for the site.

BACKGROUND

The Facility is located southeast of Des Moines at 4400 Vandalia Road in an industrial area in the city of Pleasant Hill, Iowa. The Facility consists of an industrial building approximately 45,000 square feet in size on approximately twelve (12) acres of land. From 1944 until 1972, the Facility was owned by Phillips Petroleum Company. In 1972, the Facility was acquired by Jacobson Warehouse Company. From 1975 until 1985, the Facility was leased first by TH Agriculture & Nutrition (THAN) and then by Elementis, each operating under the name Thompson Hayward Chemical Company. During this period, the Facility was used to store and distribute agricultural, industrial, and laundry and dry cleaning chemicals, and to store and manage spent solvents generated by customers. During the time periods when THAN and Elementis operated at the Facility, soil and groundwater contamination occurred. The nature of this contamination was primarily chlorinated and non-chlorinated solvents. In 1987, the Facility was acquired by Townsend Industries, which manufactured acrylic tubing, and in 2012, the Facility was acquired by and is currently owned by DD #1, LLC.

In July 1991, a RCRA 3008(h) Order on Consent was issued to Harcros Chemicals, Incorporated (now Elementis), TH Agriculture & Nutrition, and Townsend Industries, Incorporated ("Respondents"). Corrective action at the Facility has been performed under this Order, consisting of a RCRA Facility Investigation (RFI), interim measures to stabilize site contamination, and a Corrective Measures Study (CMS). The soil and groundwater contamination at the Facility resulted from leakage and spillage of chlorinated and non-chlorinated solvents during transfers involving the former above-ground storage tanks that were located immediately north of the Facility main building. These solvents migrated through the surface soils down to the shallow aquifer, resulting in significant soil and groundwater contamination.

Upon completion of the first phase of RFI fieldwork in 1993, the Respondents began planning and implementing interim measures in order to control the off-site migration of groundwater contamination.

These interim measures included the installation of a soil-bentonite containment wall (SBCW), which enclosed the areas of the highest levels of soil and groundwater contamination, and the installation of a pump and treat system designed to maintain an inward gradient from the outside of the SBCW to the inside, which was referred to as the gradient control treatment system (GCTS). Subsequent to the initial interim measures, additional remediation efforts have included intermittent removal of accessible free-product solvents, referred to as dense non-aqueous phase liquids (DNAPL), from below the water table, a field scale pilot test of a proprietary remediation system known as an ART® (Accelerated Remediation Technologies, LLC) well system, and another proprietary system developed by the Respondents, referred to as an *in situ* hydraulic treatment conduit (IHTC).

The Respondents completed a corrective measures study (CMS) in 2003, in which the performance of the initial interim measures, the soil-bentonite containment wall and the gradient control treatment system, were evaluated and recommended for inclusion in the final remedy for the site. The 2003 CMS also evaluated monitored natural attenuation as a long-term remedy for the off-site groundwater contamination plume, ultimately recommending it as part of the final remedy. Because the *in situ* hydraulic treatment conduit was constructed in 2005 and subsequently evaluated for performance, a CMS report addendum was submitted in 2010, which added the IHTC to the final proposed remedy. Finally, both the 2003 CMS and the 2010 CMS Report Addendum evaluated and recommended use of an impermeable cover for the contaminated soils in the area referred to as the North Area of the site, where above-ground tanks had been located, which were the source of the soil and groundwater contamination.

PUBLIC PARTICIPATION ACTIVITIES

A thirty (30) day public comment period was held from August 15, 2013 through September 16, 2013. A public notice announcing the availability for public review of the Statement of Basis and the associated Administrative Record documents was published in the local newspaper, *The Des Moines Register*. Fact sheets were mailed to congressional contacts and persons having previously expressed interest in environmental issues at the Facility as well as residents and property owners near the Facility. The Statement of Basis and Administrative Record were available throughout the public comment period at the Pleasant Hill Public Library, 5151 Maple Drive, Pleasant Hill, Iowa, the EPA Regional Records Center, 11201 Renner Boulevard, Lenexa, Kansas, and on the EPA Region 7 website at www.epa.gov/region7/public_notices.

The EPA elected not to hold a public hearing in conjunction with the public review of the Statement of Basis. The EPA expressed that it would evaluate the need for a hearing if one was requested, in writing, with a statement of issues to be raised at the hearing. The EPA received no requests for a public hearing during the public comment period.

The following summarizes the comments that were received during public review of the Statement of Basis and Administrative Record for the Former Townsend Industries Facility and provides the EPA's responses to these comments.

COMMENT 1: The *2011 Annual Groundwater Sampling Summary* (CH2M Hill, 2012) indicates the mass of the constituents of concern in the offsite groundwater plume has been reduced significantly as a result of interim corrective measures implemented at the Site. However, the southwest edge of the plume is poorly defined.

The installation of an additional well cluster south and west of the MW-20 cluster and the sampling of all monitoring wells associated with offsite groundwater would be beneficial to help define the extent of impacts to offsite properties with respect to volatile organic compound concentrations in groundwater and the potential vapor intrusion pathway associated with impacted groundwater.

RESPONSE 1: Although an RFI, interim stabilization measures, and field-scale pilot testing of several remedial measures have been completed at the Former Townsend Industries Facility, groundwater monitoring on a regular basis has not been performed at the facility to date. With this Final Remedy Decision, the Respondents to the original RCRA 3008(h) Order on Consent and the EPA will soon begin negotiating a new 3008(h) Order on Consent for Corrective Measures Implementation (CMI). Under this new order, a CMI Work Plan will be developed, and on-site and off-site groundwater monitoring on a periodic regular basis will be included in this work plan in order to assess remedy performance. Adequacy of the monitoring well network in assessing remedy performance and in defining the extent of contamination will also be evaluated over time, and if it becomes necessary to expand or alter the monitoring well network, this issue will be reviewed and considered by the Respondents and EPA.

COMMENT 2: The *USEPA Statement of Basis, Former Townsend Industries Facility* (USEPA, 2013) indicates the potential health risks associated with the Site include onsite and offsite vapor intrusion. Indoor air samples have been collected at the former Townsend Facility; however, no indoor air samples have been collected from any buildings associated with the offsite groundwater plume. Based on the defined horizontal extent of the offsite groundwater plume, indoor air and sub-slab air samples should be collected to assess the vapor intrusion pathway at all potentially affected buildings. The sampling should be scheduled during the heating season or conducted in a manner to mimic the heating season when buildings are closed and not open to ambient air.

RESPONSE 2: Indoor air sampling within the Former Townsend Industries main building has indicated that there are currently no issues related to vapor intrusion in that building from soil and groundwater contamination. With regard to vapor intrusion, this is encouraging because the main building is sited within the soil-bentonite containment wall where there is confirmed free-product solvent contamination, representing the highest concentrations of solvents in groundwater, and is also adjacent to areas of the highest concentrations of vadose zone soil contamination. However, the EPA agrees with the commenter in that potential vapor intrusion into buildings, which are over the off-site groundwater, must be considered. After periodic groundwater monitoring allows a more refined assessment of the off-site plume, evaluation of the potential for vapor intrusion into off-site buildings will be one of the issues assessed.

COMMENT 3: The *Corrective Measures Study Report Addendum* (CH2M Hill, 2010) presents the monitored natural attenuation (MNA) as the offsite groundwater remedy, noting reductions in calculated mass of volatile organic compounds in the offsite groundwater plume as the current basis to indicate MNA will be an effective remedy at the Site. However, a review of the monitoring data indicates several monitoring wells located along the centerline transect of the plume were not consistently used (ex. MW-20) to calculate the total mass of the offsite plume as stated above (Comment 1), the southwest edge of the offsite plume is poorly defined.

The implementation description for MNA should include a detailed process to monitor and evaluate the effectiveness of the MNA remedy into the future. Proper monitoring and evaluation of MNA is necessary to demonstrate viability of MNA, to assure MNA continues to be effective through the estimated project timeframe to achievement of the corrective action objectives, and to assure offsite properties are remediated in an acceptable timeframe.

To understand the proposed on-going MNA evaluation process, it would be beneficial for the MNA implementation description to include the specific monitoring wells and analytical methods to be utilized to evaluate the offsite groundwater plume, and a detailed description of the MNA data evaluation process including the technical basis that will be used to demonstrate the effectiveness of MNA. The monitoring and evaluation process should take into account improved plume definition and mass calculations as noted above, and both primary (concentrations versus time) and secondary (geochemical) lines of evidence along the plume path to evaluate MNA and the processes acting on contaminants within the groundwater system.

RESPONSE 3: As stated in previous Response 1, a comprehensive CMI Work Plan will be developed, and one of the components of this Plan will be the evaluation of the effectiveness of monitored natural attenuation to effect remediation of off-site groundwater contamination. Included will be the specific wells to be sampled, the analytes needed to perform the assessment, and the site-specific criteria and methodologies that will be used to assess the effectiveness of natural attenuation.

COMMENT 4: Data presented in the *2011 Annual Groundwater Sampling Summary* (CH2M Hill, 2012) indicate the primary constituents of concern in offsite groundwater are *cis*-1,2-dichloroethene and vinyl chloride. Both *cis*-1,2-dichloroethene and vinyl chloride are intermediate products in the natural degradation process. These compounds are produced during the natural attenuation process and do not further degrade without the presence of a specific subsurface environment. The MNA offsite groundwater remedy should include a corrective measure contingency and time to attain corrective action objectives for offsite groundwater should the MNA evaluation indicate that *cis*-1,2-dichloroethene and vinyl chloride are not naturally attenuating, or MNA is not effectively reducing constituents of concern at a rate to achieve corrective action objectives in the estimated project timeframe.

RESPONSE 4: As stated in previous Response 3, the CMI Work Plan will include comprehensive details regarding the monitoring and evaluation of natural attenuation of off-site groundwater contamination.

SELECTED FINAL REMEDY

The selected final remedy for the Former Townsend Industries Facility is the same as that proposed in the Statement of Basis and consists of the following:

The selected remedy for on-site soil contamination will consist of the asphalt cover which was completed in November 2012, institutional controls to prevent exposure to contaminated soils during potential future subsurface construction or excavation work, periodic operation of the ART® remediation well system in an effort to remove contaminant mass, and periodic sampling of indoor air within the main building to evaluate potential vapor intrusion.

The selected remedy for on-site groundwater will consist of the previously constructed and installed soil-bentonite containment wall, gradient control treatment system, *in situ* hydraulic treatment conduit, ART® remediation well, and periodic removal of contaminant mass in the form of free-product solvents (DNAPL) from below the water table when possible. Institutional controls will be employed to prevent exposures to contaminated groundwater by restricting use of on-site groundwater.

The selected remedy for off-site groundwater will consist of monitored natural attenuation and groundwater monitoring. Institutional controls will be utilized when and where possible to prevent potential exposure to contaminated groundwater located off-site.

Because all of the components of the selected final remedy have been previously constructed and installed as either interim measures or for field-scale pilot testing, the EPA hereby acknowledges that construction of the final remedy has been completed for the Former Townsend Industries Facility.

DECLARATION

Based on information contained in the facility files, the EPA Region 7 has determined that the selected final remedy for the Former Townsend Industries Facility is appropriate and will be protective of human health and the environment.


Becky Weber, Director
Air and Waste Management Division
EPA Region 7

9/27/13
Date

ATTACHMENT D

(ABOVE SPACE RESERVED FOR RECORDER'S USE)

Document Title: Environmental Covenant

Document Date: _____, 2015

Grantor: DD #1, LLC
c/o Daryl E. Dinkla, Registered Agent
9801 Valdez Drive
Urbandale, Iowa 50322

Grantee: DD #1, LLC
c/o Daryl E. Dinkla, Registered Agent
9801 Valdez Drive
Urbandale, Iowa 50322

Agency: U.S. Environmental Protection Agency, Region 7
c/o Air and Waste Management Division
11201 Renner Boulevard
Lenexa, Kansas 66219

Legal Description: [See legal description attached hereto as Exhibit B]

ENVIRONMENTAL COVENANT

This Environmental Covenant ("Covenant") is established pursuant to Iowa Code chapter 455I entitled Uniform Environmental Covenants Act. DD #1, LLC, an Iowa corporation, enters into this Covenant as both the "Grantor" and "Holder" for the purpose of subjecting the property described below to certain activity and use limitations in accordance with the terms and conditions as specified below, pursuant to Iowa Code section 455B.103(7) and 455I.

1. **Affected Property.** Grantor is the fee title owner of certain real property located at 4400 Vandalia Road, Pleasant Hill, Iowa, which is legally described as:

[Insert Legal Description]

the "Property."

2. **Risk Management and Institutional Controls.** Pursuant to Administrative Orders entered into with, and issued by, the U.S. Environmental Protection Agency ("EPA" or "Agency"), certain investigations and corrective action (collectively, "environmental response projects") have been, and will be, conducted at the Property to investigate and remediate contamination. It is expected that remaining contamination at the Property may present an unreasonable risk to public health and the environment if certain activities occur on the Property. As such, EPA has determined that this Covenant is necessary to manage the risk of future exposure by limiting specified activities at this Property and establishing affirmative obligations.

3. **Reopening.** The signatories acknowledge that the failure of the activity and use limitations to serve their intended purpose, including the prevention of exposure to contamination, could result in EPA reopening its review and regulation of the contaminant conditions on the Property as provided under the terms of this Covenant.

4. **Identity of Grantor and Holder.**

GRANTOR: DD #1, LLC, an Iowa corporation

HOLDER: DD #1, LLC, an Iowa corporation

AGENCY: U.S. Environmental Protection Agency, and its successor agencies and departments, if any.

5. **Representations and Warranties.** Grantor warrants to the other signatories to this Covenant that:

- a. the Grantor is the sole fee title owner of the Property;
- b. the Grantor holds sufficient fee title to the Property to grant the rights and interests described in this Covenant free of any conflicting legal and equitable claims;

- c. the Grantor has identified all other persons holding legal or equitable interests, including, but not limited to, contract buyers, mortgage holders, other consensual lienholders and lessees, and secured their consent either by signatures on this covenant or by a separate subordination and consent agreement attached as Exhibit [INSERT Exhibit]].

6. **Running with the Land.** This Covenant is perpetual and runs with the land as provided in Iowa Code section 4551.9 until modified or terminated. This Covenant is binding on Grantor and all successors in interest, assigns and all transferees acquiring or owning any right, title, lien or interest in the Property and their heirs, successors, assigns, grantees, executors, administrators and devisees. The term "Transferee," as used in this Covenant, shall mean any future owner of any interest in the Property or any portion thereof, including, but not limited to, owners of an interest in fee simple, contract buyers, mortgagees, easement holders, and/or lessees.

7. **Activity and Use Limitations and Terms.** The Property is subject to the following activity and use limitations:

- (a) **No Residential Land Use:** Based on records on file at EPA's Regional office the Property meets applicable standards for non-residential use. Therefore, contaminants of concern that may be remaining at the Property do not pose a significant current or future risk to human health or the environment so long as the activity and use limitations imposed hereby remain in place. The Property shall not be used for residential purposes, which for purposes of this Covenant include, but are not limited to: single family homes, duplexes, multiplexes, apartments, condominiums, schools, child-care facilities, or any land use where persons can be expected to reside on the Property.
- (b) **Maintenance of Cap/No Disturbance of Soil:** Based on records on file at EPA's Regional office contaminants of concern in the soils at the Property exceed standards for non-residential use, but do not pose a significant current or future risk to human health or the environment with respect to non-residential uses of the Property so long as the soil is not disturbed such that exposure would result. In November 2012 an asphalt cap was installed at the Property over an area of soil contamination to prevent exposures to that contamination. Therefore, soil and the asphalt cap on the Property shall not be excavated or otherwise disturbed in any manner without the prior written approval of EPA. In addition, the Owner/Transferee shall properly maintain the cap. If an Owner/Transferee desires to disturb soil or the cap at the Property, then such Owner/Transferee shall request permission to do so from the EPA at least 30 days before such activities are scheduled to begin. Based on the potential hazards associated with these activities, EPA may deny the request to disturb the soils or cap or may require specific protective or remedial actions before allowing such activities to occur. Contaminated soil may be disturbed if necessary during an emergency (such as water or gas main break, fire, explosion or natural disaster), in which case the Owner/Transferee shall ensure that notification is provided to EPA and Holder orally or in writing as soon as practicable, but no later than 48 hours after the disturbance. Any contaminated soil disturbed as part of an emergency response action must be returned to its original location and depth, or be properly

characterized, managed and disposed of, in accordance with all applicable local, state, and federal requirements. Within 30 days after such emergency has been abated, the Owner/Transferee shall provide a written report to the Agency describing such emergency and any response actions.

- (c) **No Drilling or Use of Groundwater:** Based on records on file at EPA's Regional office, contaminants of concern remain in groundwater in one or more zones beneath the Property at levels exceeding standards for groundwater use. Therefore, in addition to any applicable state or local well use restrictions, the following restrictions shall apply to the Property:
- a. groundwater from the Property shall not be consumed or otherwise used for any purpose, except for the collection of samples for environmental analysis, collection, treatment or disposal of groundwater for remedial purposes, or collection, treatment or disposal of groundwater as part of excavation or construction activities;
 - b. there shall be no drilling or other artificial penetration of any contaminated groundwater-bearing unit(s), unless performed in accordance with an Agency-approved work plan; and
 - c. the installation of any new groundwater wells on the Property is prohibited, except for wells used for investigative, monitoring and/or remediation purposes installed in accordance with an Agency-approved work plan.
- (d) If any person desires in the future to use the Property for any purpose or in any manner that is prohibited by this Covenant, the Agency and the Holder must be notified in advance so that a Modification, Temporary Deviation, or Termination request can be considered as described below. Further analyses and/or response actions may be required prior to any such use.

8. Notice of Non-Compliance. Any owner of the Property or Transferee of an interest in the Property shall notify the Agency as soon as possible of conditions which would constitute a breach of the activity and use limitations in paragraph 7 above if they have actual knowledge of these conditions or would reasonably be deemed to have knowledge within the normal course of administration of their property interest.

9. Notice to Lessees. Grantor, any holder with a Property interest sufficient to grant a lease of the Property, and any Transferee shall incorporate the activity and use limitations of this Covenant either in full or by reference to this instrument in any lease, license, or other instrument granting a right to possession of the Property.

10. Access to Property. Owner, on behalf of itself and any Transferees, hereby grants to the Holder and the Agency and their respectively authorized agents, contractors, and employees, the right to access the Property at all reasonable times for implementation, monitoring, inspection, or enforcement of this Covenant and the related environmental response project. Nothing herein shall be deemed to limit or otherwise impede the Agency's right of access and entry under federal law, state law, or agreement.

11. Groundwater Hazard Statement Notice. Iowa Code section 558.69 requires the submission of a groundwater hazard statement and disclosure if "hazardous waste" exists on property as defined in Iowa Code subsections 455B.411(3), 455B.412(2) or section 455B.464 or if it is determined that solid waste exists on property that is potentially hazardous. If hazardous waste is present, the groundwater hazard statement must state that the condition is being managed in accordance with State requirements. The signatories and all subsequent transferees required to submit a groundwater hazard statement under Iowa Code section 558.69 shall make reference to this environmental covenant in substantially the following form:

THE INTEREST CONVEYED HEREIN IS SUBJECT TO AN ENVIRONMENTAL COVENANT DATED *[date month, day, year]* RECORDED IN THE OFFICE OF THE POLK COUNTY, IOWA RECORDER'S OFFICE ON *[date month, day, year]* IN *[document, book and page, or parcel number]*.

THE ENVIRONMENTAL COVENANT CONTAINS THE FOLLOWING ACTIVITY AND USE LIMITATIONS: *[insert the language that describes the activity and use limitations as set forth in paragraph 7 above.]*

NOTE: do not insert the activities and use limitations here; it is only necessary to do so when you submit the groundwater hazard statement notice, which this section is simply a model of. **DELETE THIS INFORMATIONAL "NOTE" BEFORE SUBMITTING THE ENVIRONMENT COVENANT FOR REVIEW.**

12. Amendments, Termination, and Temporary Deviations. This Covenant may be amended or terminated by approval of the Agency and the then owner/Transferee of record at the time of such amendment or termination, pursuant to Iowa Code section 455I.10. Any other Parties to this Covenant hereby waive the right to consent to any amendment to, or termination of, this Covenant. Following signature by all requisite persons or entities on any amendment or termination of this Covenant, the then owner/Transferee shall record and distribute such documents as described below.

Temporary deviations from the obligations or restrictions specified in this Covenant may be approved by the Agency in lieu of a permanent amendment to this Covenant. The then owner/Transferee may submit a written request to the Agency to temporarily deviate from specified requirements described herein for a specific purpose and timeframe, which, unless extended by the Agency, shall not exceed ninety (90) days. Any such request shall be transmitted to the Holder and the Agency as described below. The request must specifically invoke this paragraph of this Covenant, fully explain the basis for such temporary deviation, and demonstrate that protection of human health and the environment will be maintained. The Agency will evaluate the request and convey approval or denial in writing. The then owner/Transferee may not deviate from the requirements of this Covenant unless and until such approval has been obtained.

13. **Enforcement.** The Covenant may be enforced in a civil action for injunctive or other equitable relief by the signatories and those persons authorized by and in accordance with Iowa Code section 455L.11.

14. **Severability.** If any provision of this Covenant is found to be unenforceable in any respect, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired.

15. **Governing Law.** This Covenant shall be governed by and interpreted in accordance with the laws of the State of Iowa.

16. **Recordation.** Within thirty (30) days after the Agency provides the original executed Covenant to the Grantor, the Grantor shall record the fully executed Covenant in the same manner as a deed to the property with the Polk County, Iowa Recorder's Office.

17. **Effective Date.** The effective date of this Covenant shall be the date upon which the fully executed environmental covenant has been properly recorded with the Polk County, Iowa Recorder's Office.

18. **Notice.** Unless otherwise notified in writing by the Agency, any document or communication required by this environmental covenant shall be submitted to:

U.S. Environmental Protection Agency, Region 7
Air and Waste Management Division
11201 Renner Boulevard
Lenexa, Kansas 66219

19. **Subordination and Consent.** By signing this Covenant the signatories knowingly and intelligently acknowledge their consent to the terms of this Covenant and agree to subordinate their interest in the Property. The following persons have expressly consented and subordinated interests:

[INSERT: Identify persons and entities that are consenting and subordinating their interests such as mortgagees and other consensual lienholders, lessees, etc. Identify the nature of the subordinated interest.]

ACKNOWLEDGMENTS

INSERT property acknowledgments in accordance with Iowa Code section 558.20 and Iowa Code chapter 9E, and specific to individuals, partnerships, corporate entities, municipalities, State agencies and political subdivisions, etc.

GRANTOR
DD #1, LLC

By: _____
Name (print): _____
Title: _____
Address: _____

Date: _____

STATE OF _____)

COUNTY OF _____)

On this day of ____, 2015, before me a Notary Public in and for said state, personally appeared _____ (Name) _____, (Title) _____ of DD #1, LLC, an Iowa corporation, known to me to be the person who executed the within Covenant on behalf of said corporation and acknowledged to me that he/she executed the same for the purposes therein stated.

Notary Public

**FOR HOLDER
DD #1, LLC**

By: _____
Name (print): _____
Title: _____
Address: _____

Date: _____

STATE OF _____)
COUNTY OF _____)

On this day of ____, 2015, before me a Notary Public in and for said state, personally appeared
_____, (Name) _____, (Title) _____
of DD #1, LLC, an Iowa corporation, known to me to be the person who executed the within
Covenant on behalf of said corporation and acknowledged to me that he/she executed the same
for the purposes therein stated.

Notary Public

**FOR AGENCY
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY:**

By: _____
Becky Weber, Director
Air and Waste Management Division

Date: _____

STATE OF KANSAS)
)
COUNTY OF JOHNSON)

On this ____ day of _____, 2015, before me a Notary Public in and for said state, personally appeared Becky Weber, Director of the Air and Waste Management Division of the U.S. Environmental Protection Agency, Region 7, or her designee, known to me to be the person who executed the within Covenant on behalf of the U.S. Environmental Protection Agency, and acknowledged to me that she executed the same for the purposes therein stated.

Notary Public

SUBORDINATED INTERESTS:

[INSERT signature blocks and appropriate acknowledgements for all subordinated interests]

DRAFT