

Hazardous Waste Storage, Post-Closure and Corrective Action Permit U.S. Coast Guard, Base Support Unit Kodiak, Alaska

EPA No. AK9 69033 0742 February 1, 2021

This fact sheet presents the principal facts pertaining to a Resource Conservation and Recovery Act (RCRA) Permit that the U.S. Environmental Protection Agency Region 10 (EPA) proposes to reissue to the U.S. Coast Guard, Base Support Unit, Kodiak, Alaska. The reissued Permit will update the hazardous waste storage, post-closure and corrective action requirements at the Coast Guard Kodiak facility. This fact sheet was prepared by EPA in accordance with the requirements of 40 C.F.R. § 124.8. The draft Permit is based on an administrative record which is available to the public for review.

A. Purpose of the Permitting Process

The purpose of the permitting process is to design specific administrative and operational requirements under which the Permittee must operate to comply with the hazardous waste management requirements promulgated under RCRA, as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA), and regulations adopted thereunder by EPA in 40 C.F.R. Parts 124 and 260 to 270.

EPA is required to prepare a draft Permit which sets forth in one concise document all the applicable requirements that EPA intends to require the Permittee to comply with during the ten-year duration of the permit. The public is given forty-five (45) days to review and comment on the draft Permit conditions prior to the Agency taking any final action on the draft Permit.

B. Procedures for Reaching a Final Decision

Section 7004(b) of RCRA and 40 C.F.R. § 124.10 require that the public be given forty-five (45) days to comment on each draft RCRA permit. The comment period will begin on February 1, 2021 and will end March 17, 2021. Any person interested in commenting on this draft permit must do so within this forty-five (45) day comment period.

Comments on the draft permit must be submitted in writing on or before March 17, 2021 to Jan Palumbo at <u>palumbo.jan@epa.gov</u>. Comments should include all reasonable available references, factual grounds and supporting material.

If there is significant interest in holding a virtual public hearing, and a request for a public hearing is received within thirty (30) days of this notice, on or before March 2, 2021, EPA may conduct a virtual public hearing. If held, the hearing will take place on March 15, 2021 beginning at 7:00 p.m. Alaska Standard Time.

There will not be a virtual public hearing unless significant public interest in doing so is communicated to Jan Palumbo by March 2, 2021. To find out if a hearing will be held, check the EPA Website at https://go.usa.gov/xAGmX after March 2, 2021.

When making a determination regarding the issuance of this permit to the Coast Guard, EPA will consider all written comments received during the public comment period, comments received during the public hearing, the requirements of the hazardous waste regulations, and the Agency's permitting policies.

When EPA makes a final decision to either issue, deny, or modify the draft permit, if there have been comments on the draft permit, notice will be given to the applicant and each person who has submitted written comments or requested notice of the final decision. The final decision shall become effective no sooner than thirty (30) days after the notice unless a review is requested pursuant to 40 C.F.R. § 124.19.

C. Facility description

Location

The U.S. Coast Guard Base Support Unit Kodiak (BSU Kodiak) is a 23,000-acre facility located on the northeast coast of Kodiak Island, Alaska. It is located approximately 8 miles south of the city of Kodiak. During World War II, the U.S. Navy established a base on Kodiak Island to protect the Gulf of Alaska and serve as an intermediate point between installations at Cold Bay and Sitka. Navy activities on Kodiak Island were phased out in 1972, and the Coast Guard assumed operational responsibility of the property.

The BSU Kodiak employs about 1,100 uniformed and civilian Coast Guard personnel, and houses their families, bringing the total number of people on base to approximately 4,000. Uses include housing and maintaining aircraft, providing berthing for ships, and other ancillary activities. The northern and western portions of the facility are used for housing, a communications station, recreation, and watershed protection. Government Hill housing is located on the main base near the airfield. Lake Louise and Nemetz Housing are located north of Rezanof Highway. The southern portion of the base (east of Rezanof Highway and south of Cape Sarichef Street) is the main industrial area of the facility.

A large fuel storage facility (fuel farm) on Nyman Peninsula provides fuel for ships, aircraft, and steam production.

The BSU Kodiak lies in the valley of the Buskin River and along a narrow shelf of land overlooking St. Paul Harbor and Womens Bay. Much of the operational portion of the BSU Kodiak is below 200 feet in elevation and has been extensively filled and graded to create dry, level ground. Old Womens Mountain and Barometer Mountain rise steeply to the west and north of the industrial area.

The main body of BSU Kodiak lies entirely within the Buskin River watershed and collects all of its potable water from this watershed. Buskin Lake (250 acres) is located at the head of the Buskin River and provides drinking water for the base. The Buskin River flows approximately 4 miles to St. Paul Harbor, fed by Buskin Lake and a series of small, mostly unnamed tributaries. Bordering the base are the marine waters of Womens Bay and St. Paul Harbor, part of the larger Chiniak Bay. Inner Womens Bay, south of the BSU Kodiak, has restricted water exchange with the outer bay and St. Paul Harbor, due to a sill on the east side of Nyman Peninsula. The average tidal range is 8.8 feet.

Natural vegetation cover on northern Kodiak Island includes alpine tundra and barren ground, coastal forest and high grass and shrub communities. Wildlife includes the Kodiak brown bear, Sitka black-tailed deer, red fox, river otter, beaver, Dall sheep, rabbits, mountain goats, and various small rodents. Kodiak Island supports numerous species of terrestrial birds. The waters around the BSU Kodiak support numerous species of seabirds and marine mammals and aquatic species.

The Buskin River supports large runs of pink, sockeye, chum, and silver salmon, as well as Dolly Varden trout. The river serves as the primary sport and subsistence fishery on Kodiak Island.

Hazardous Waste Storage

Hazardous wastes are generated during maintenance and logistics support activities for Coast Guard activities. Waste streams from these activities include paint-related wastes, solvents and degreasers, and various types of batteries. Large volumes of fuel are also stored at the Coast Guard Kodiak facility. Occasional spills associated with fuel transfer and storage also results in the generation of hazardous waste. Hazardous waste is temporarily stored at the hazardous waste storage building, until such time that it is transported offsite to a RCRA facility for treatment and/or disposal. Some nonregulated hazardous material is also stored in the storage building until it can be sent offsite for recycling or disposal.

The storage unit consists of a totally enclosed building, with dimensions of 28 feet x 100 feet. It is centrally located on the Nyman Peninsula, within the boundaries of the main part of the Coast Guard property. The maximum capacity of the storage building is 14,080 gallons. Storage is primarily in 55-gallon drums. The building is specially designed for waste management, with spill containment, a fire suppression system, storage bays for separation of incompatible wastes, and safety equipment.

Closed Hazardous Waste Landfills

In addition to the hazardous waste storage building, three closed regulated hazardous waste landfill units are subject to the requirements of the draft Permit, Sites 3, 6A and 7A. These units are located on Nyman Peninsula, within the boundaries of the main part of the Coast Guard property. These units managed hazardous waste in the past but are no longer actively managing hazardous or solid waste.

They are now closed and subject to the permit requirements for post-closure care and corrective action. These requirements include maintenance of a protective cover over the unit, monitoring to ensure contaminants are not being released from the units into the environment, and cleanup of the contamination at Site 3 and 7A.

Site 3 (Laundry)

Dry cleaning solvent still bottoms were disposed of outside the Coast Guard Laundry during the years of its operation beginning in the 1940s and continuing to 1987, resulting in soil and groundwater contamination. The unit was closed in 1995 by installation of an asphalt cap with runon/runoff controls. Underlying the asphalt cap is an air sparge/vapor extraction (AS/SVE) remediation system to remediate the contaminated soil and groundwater. The captured vapors are treated by a granular activated carbon treatment system and exhausted to the atmosphere.

The corrective action and post closure monitoring at this unit has been ongoing under the original 1998 RCRA Permit and the 2011 reissued Permit. Monitoring conducted under the Permit shows that the AS/SVE remediation system is no longer removing a significant amount of contamination from the groundwater. Therefore, the draft Permit allows temporary shutdown of the AS/SVE remediation system and requires continued monitoring and evaluation of data to determine appropriate corrective measures.

Site 6A (MOGAS)

The MOGAS unit consisted of a set of eighteen 25,000-gallon steel underground storage tanks, installed in 1951 or 1952 and removed on closure in 1995. The tanks were used for storage of aviation fuel and motor gasoline, used oil and waste solvents. Leaks from these tanks resulted in soil and groundwater contamination. The unit was closed in 1995 by removing and disposing of the tank contents, cleaning, excavation and removal of the tanks and ancillary piping, and disposal of waste residues and cleaning fluids. The unit was then covered with an asphalt cap with runon/runoff controls.

Groundwater contamination has not migrated beyond the unit itself. Due to the subsurface topography, it is not expected to migrate, and contaminant levels are low. Therefore, no corrective action has been required for this unit. An extensive monitoring program to ensure contaminants do not migrate beyond the unit will continue to be required under the Permit. During the 22 years of monitoring under the RCRA Permit there have been no detections of contaminants in any of the monitoring wells surrounding the unit above any of the required cleanup levels.

Site 7A (Barrel Storage Area One)

This barrel storage area was used by the Navy during the 1940s for used oil storage and later, until 1990, by the Coast Guard for storage of hazardous materials and used oil products. The barrels were stored on gravel pads with no secondary containment. Over the years, releases of contaminants to soil and groundwater occurred. The unit was closed in 1996 by removal of surface soils and installation of an asphalt cap, with runon/runoff controls. Underlying the cap is an AS/SVE remediation system to remediate the contaminated soil and groundwater. The captured vapors are treated by a granular activated carbon treatment system and then exhausted to the atmosphere.

The corrective action and post closure monitoring at this unit has been ongoing under the original 1998 RCRA Permit and the 2011 reissued Permit. Monitoring conducted under the Permit has shown that the AS/SVE remediation system is no longer removing a significant amount of contamination. Therefore, the draft Permit allows temporary shutdown of the AS/SVE remediation system and requires continued monitoring and evaluation of data for use in developing additional corrective measures.

Solid Waste Management Units (SWMUs)

In addition to the three closed hazardous waste landfills and the active storage facility, there are thirty-six (36) SWMUs on the Coast Guard Kodiak facility which were subject to corrective action requirements specified in the 1998 RCRA Permit. Requirements under that Permit and under the 2011 reissued Permit have resulted in cleanup of 23 of these SWMUs, and selection and construction of remedies at six of them. Requirements for these six ongoing remedies, the remaining seven SWMUs where remedies have not yet been selected, and one new SWMU which was discovered in 2020, are addressed under the draft Permit.

D. Contents of the Permit

The draft permit updates the previously issued permit, dated April 1, 2011, as modified in October 21, 2019, which expires on March 30, 2021. Under the terms of the 2011 permit, the conditions of the expired permit continue to be in effect until the permit is reissued.

The 2011 permit included requirements for storage of hazardous waste in Building N-48, the Hazardous Waste Storage Building. It required post-closure monitoring and maintenance for three hazardous waste units which closed leaving waste in place. It also required corrective action for twenty known SWMUs located on Coast Guard property and required corrective action for any newly discovered or newly created SWMUs.

Most of the requirements of the 2011 permit remain in the draft permit. A few major changes are being proposed in the draft permit, as well as numerous changes to reflect current conditions at the facility and to account for the investigational and remedial activities that have been accomplished during the term of the 2011 permit.

Requirements for Hazardous Waste Storage

The requirements for operation of the hazardous waste storage building are contained in Parts I through III and in Attachments 1 through 3, 4B, 5 and 6 of the draft permit. These parts of the draft permit include specifications for what wastes may be managed at the unit, how they are to be managed, including waste analysis requirements, and how the unit will be closed to ensure that no contamination remains once operation of the unit ceases. They also include requirements for security and training, all designed to ensure that the unit will operate in a manner which does not pose a threat to human health and the environment.

Proposed Changes to Requirements for Hazardous Waste Storage

Attachment 1. Part A.

Minor updates to Part A and Facility description to reflect current status.

Attachment 2. Waste Analysis Plan.

Minor updates to waste codes and management and updated hazardous waste profile sheets.

Attachment 5. Storage Building Plans and Specifications.

Minor updates to layouts and configuration of hazardous waste storage building.

Attachment 6. Preparedness and Prevention Plan.

Minor updates.

Requirements for Closed Hazardous Waste Landfills - Site 3, 6A and 7A Post-Closure

The requirements for post-closure maintenance and monitoring of the hazardous waste landfills are contained in Part IV and Attachment 4A of the draft permit. These requirements include long term maintenance and monitoring of the landfill covers and groundwater monitoring. The maintenance and monitoring period is thirty (30) years and may be extended if necessary to protect human health or the environment.

Contaminated Groundwater Remediation and Monitoring

The requirements for contaminated groundwater remediation and monitoring at the hazardous waste landfills are contained in Parts V, VI, VII and Attachment 4A of the draft permit. The following changes are proposed in the draft permit:

Groundwater Remediation at Sites 3 and 7A

The groundwater remediation requirements for Sites 3 and 7A are contained in Part V and Attachment 4A of the draft permit. The draft permit proposes to allow temporary shutdown of the AS/SVE remediation systems, as discussed below.

Performance Standards

The performance standards require demonstration that the plume is not migrating, and that contamination is being reduced. These standards, found in permit condition V.F.1, specify that (1) the remediation system must continue to remove contaminants from the groundwater, as measured by the total mass of contaminants removed by the treatment system; (2) uncontaminated monitoring wells that are near the boundary of the plume remain uncontaminated; and (3) the contaminated wells must show declining levels of contamination over time, as measured by a trend analysis procedure described in the draft permit. If at any point the facility is unable to demonstrate compliance with these performance standards, a permit modification will be required to modify the remediation system to come into compliance with the performance standards. While the AS/SVE system is shut down, the first standard will not apply, but the second and third standards will continue to be required, as discussed below.

Groundwater Monitoring

There are three categories of groundwater monitoring requirements in the draftpermit: corrective action monitoring, compliance monitoring and detection monitoring, found in Parts VI, VII, and VIII respectively. Sites 3 and 7A are required to conduct corrective action monitoring; Site 6A is required to conduct detection monitoring. Corrective action monitoring at Sites 3 and 7A is required quarterly. Detection monitoring at Site 6A was required annually for chemical monitoring and semi-annually for water level monitoring. The constituents to be monitored consist of all contaminants that have been detected at each unit based on many years of monitoring prior to and under the 2011 permit. The Groundwater Protection Standards are based on the federal drinking water standards maximum contaminant levels (MCLs), or, if MCLs do not exist, on EPA's human-health based levels.

In addition to the monitoring for previously detected contaminants, the 2011 permit required the Coast Guard to sample every three years certain wells, located in areas where contamination is expected to be the highest and the most easily detected, for all the constituents found in Appendix IX of 40 C.F.R. Part 264, which is a complete list of all hazardous constituents, as defined in the federal hazardous waste regulations. If any constituents are detected that have not previously been detected, they are required to be added to the quarterly monitoring program. If a groundwater protection standard is necessary for the constituent, EPA will initiate a permit modification to add a groundwater protection standard to the permit for that constituent. Monitoring conducted over the last ten years under the permit has not detected any new constituents.

Reporting

The permit requires reporting throughout the post-closure period on the activities conducted under the permit. These reporting requirements in the draft permit are the same as those in the 2011 permit except for the change in water level reporting from semi-annual to annual at Site 6A as discussed below. Quarterly reports are required to include all groundwater monitoring data and a discussion of all corrective action activities conducted during the quarter. Semi-annual reports are required to include demonstrations that the performance standards for the corrective action systems are being met and to include proposed modification to the system if the performance standards are not being met. Annual reports are required for the detection groundwater monitoring data at Site 6A. Every three years the annual report must include the Appendix IX monitoring data.

Proposed Changes to Requirements for Sites 3, 6A and 7A Post-Closure

- The 30-year post-closure maintenance and monitoring period is being extended ten (10) years with this reissuance so that the monitoring period extends thirty (30) years from the date of the reissued permit.
- The Quality Assurance Project Plan is being revised to update analytical methods and data validation procedures to align with industry standards and updates to the RCRA permit text.
- A new Vapor Intrusion Monitoring Plan is being been added.

Contaminated Groundwater Remediation and Monitoring

Remediation System

The draft permit allows the Coast Guard to temporarily shut down the AS/SVE systems at Sites 3 and 7A. The AS/SVE systems must be maintained in a state of readiness to be restarted if necessary, and monitoring continues to be required to ensure the contamination does not increase or expand and to provide data to measure the impact of the shutdown on groundwater contamination. If monitoring data shows an increase or expansion of the groundwater contamination, the AS/SVE system must be restarted. At Site 7A, if monitoring data demonstrates that natural attenuation may be an effective remedy at the site, the Coast Guard may request a permit modification to propose modification of the existing remedy.

At Site 3 the permit contains several requirements for further investigation, evaluation and implementation of alternate remediation systems.

Performance Standards

The Performance Standards contained in the 2011 permit for these units have been included in the draft permit, except for the following proposed change: for Sites 3 and 7A, the Coast Guard will not be required to demonstrate mass removal from the AS/SVE system while that system is shut down. The other two performance standards, no expansion of the groundwater contamination and no increasing trend in contamination levels, must continue to be met at all times.

Groundwater Monitoring

The groundwater monitoring requirements specified in the draft permit are the same as in the 2011 permit with the following two exceptions:

- 1. The draft permit proposes to change water level monitoring from semi-annually to annually at Site 6A so that both chemical and water level monitoring are performed annually. During the 22 years of extensive monitoring of this unit there have been no contaminants detected in any of the monitoring wells surrounding the unit above any of the required cleanup levels. Because most of the contamination has been removed from the unit, and during the entire history of monitoring for this unit there has never been a release detected above a cleanup level, EPA has determined that annual monitoring at this unit is protective of human health and the environment.
- 2. The draft permit proposes to change the designated Appendix IX well at Sites 3 and 7A. These wells are sampled every three years in order to detect any new constituents which need to be included in the groundwater monitoring program. Based on recent groundwater monitoring data the new designated wells are more likely than the previously designated wells to be able to detect any new contaminants in the groundwater at Sites 3 and 7A.

Reporting

The only change in reporting in the draft permit from the 2011 permit is the change in water level reporting from semi-annual to annual at Site 6A.

Corrective Action Requirements for SWMUs

The requirements for corrective action at SWMUs are contained in Part IX and Attachments 8, 9, 11 and 12 of the draft permit. The corrective action section of the draft permit includes requirements for a RCRA Facility Investigation (RFI) to investigate the extent of the contamination, a Corrective Measures Study (CMS) to investigate cleanup alternatives, and interim measures (IM) to immediately cleanup any releases that pose an imminent threat to human health or the environment.

Following completion and approval by EPA of the CMS a remedy is selected by EPA, and the permit will be modified to require implementation of the selected remedy. The public will have the opportunity to review and comment on the proposed remedy before the permit modification is approved.

The draft permit contains a schedule of compliance for cleanup of all the SWMUs at the facility for which final remedies have not yet been selected. Under the 1998 permit there were 36 SWMUs. Under the RCRA permit corrective action has been completed at twenty-three SWMUs, remedies have been selected, and constructed, and are ongoing at six SWMUs, leaving seven SWMUs and one new SWMU, discovered in 2020, remaining for further investigation and cleanup. These are addressed under the schedule of compliance in the draft permit.

The draft permit also includes ongoing requirements for notification, investigation, remediation and reporting when a new SWMU or a new release is discovered, and requirements for adding new SWMUs or releases to the RCRA permit.

Proposed Changes to Corrective Action Requirements for SWMUs

The draft permit includes an updated enforceable Schedule of Compliance, Attachment 7 of the draft permit, for investigation and selection of remedies at the seven existing SWMUS where final remedies have not been selected, plus one additional SWMU discovered during 2020. **Updates are based** on the work performed since the 2011 permit was issued and current status of the ongoing work at each of the sites.

The draft permit includes an updated Land Use Control Assurance Plan, Attachment 10 of the draft permit, to impose monitoring and maintenance of selected remedies and to impose land use restrictions where necessary to control potential exposures. The updates are based on current status of the sites, including the addition of one site, AvGas Hill.

E. Permit organization

The draft permit is divided into nine parts and eleven attachments, as described below:

Parts

Part I Standard Conditions

Part II General Facility Standards
Part III Storage in Containers

Part IV Post-Closure

Part V Corrective Action for Contaminated Groundwater

Part VI Corrective Action Groundwater Monitoring
Part VI I Compliance Groundwater Monitoring

Part VIII Detection Groundwater Monitoring

Part IX Corrective Action for Solid Waste Management Units

Attachments

Attachment 1 Part A Application
Attachment 2 Waste Analysis Plan

Attachment 3 Personnel Training Outline

Attachment 4A Post Closure Plans for Sites 3,6A and 7A
Attachment 4B Closure Plan for Container Storage Building
Attachment 5 Container Storage Area Plans and Specifications

Attachment 6 Procedures to Prevent Hazards

Attachment 7 Solid Waste Management Units Schedule of Compliance

Attachment 8 EPA Corrective Action Plan
Attachment 9 Well Decommissioning Plan
Attachment 10 Land Use Control Assurance Plan

Attachment 11 Summaries of Existing Remedies for Solid Waste Management Units

For Information, Contact:

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If you need materials in an alternative format, please contact Laura Knudsen at 206-553-1838 B TDD or TTY users, please call 1-800-877-8339 and give the operator Laura's phone number.



Hazardous Waste Storage, Post-Closure and Corrective Action Permit U.S. Coast Guard, Base Support Unit Kodiak, Alaska



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