*California Environmental Protection Agency*
*Department of Toxic Substances Control*

# HAZARDOUS WASTE FACILITY PERMIT

Permit Number: **02-SAC-03**

Facility Name:
Chemical Waste Management, Incorporated,
Kettleman Hills Facility

Owner Name:
Waste Management, Incorporated

Operator Name:
Chemical Waste Management, Incorporated

Facility EPA ID Number:
**CAT000646117**

Effective Date: **June 16, 2003**
Expiration Date: **June 16, 2013**

Date Modified: _____

Pursuant to Section 66270.42, title 22, division 4.5, California Code of Regulations, the Hazardous Waste Facility Permit, issued and effective June 16, 2003, is hereby modified to incorporate the permit modification described in Part VII. Permit Modification History. This cover page and the pages of the June 16, 2003 permit are affected by this modification. The revised permit consists of 42 pages including this cover page.

Office of Permitting, Hazardous Waste Management Program,
Department of Toxic Substances Control

Date:

*CHEMICAL WASTE MANAGEMENT, INCORPORATED*
*KETTLEMAN HILLS FACILITY*
*35251 OLD SKYLINE ROAD*
*POST OFFICE BOX 471*
*KETTLEMAN CITY, CA 93239*

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## PART I. DEFINITIONS

All terms used in this Permit shall have the same meaning as those terms have in the California Health and Safety Code, Division 20, Chapter 6.5 and Title 22, California Code of Regulations Division 4.5, unless expressly provided otherwise by this Permit.

1. **"DTSC"** as used in this Permit means the California Department of Toxic Substances Control.

2. **"Permittee"** as used in this Permit means the Owner and Operator.

3. **"HSC"** as used in this Permit means the Health and Safety Code.

4. **"Cal. Code of Regs."** as used in this Permit means the California Code of Regulations.

5. Unless explicitly stated otherwise, all references to items in this Permit shall refer only to items occurring within the same part.

## PART II. DESCRIPTION OF THE FACILITY AND OWNERSHIP

1. OWNER

The facility owner is WASTE MANAGEMENT, INCORPORATED (hereafter "owner").

2. OPERATOR

The facility operator is CHEMICAL WASTE MANAGEMENT, INCORPORATED (hereafter "Operator").

3. LOCATION

The Chemical Waste Management, Incorporated, Kettleman Hills Facility (Facility) is located in western Kings County, California, in the Kettleman Hills which borders the west side of the San Joaquin Valley, approximately 2.6 miles west of the Interstate 5 and State Route 41 intersection. The Facility is located at North Latitude 35° 58' 00" and West Longitude 120° 00' 45". The property includes all of Section 3, T23S, R18E, M.D.B. & M. (Assessor parcel nos. 03833001, 03833019 and 03833020), all of Section 34, T22S, R18E, M.D.B. & M. (Assessor parcel nos. 03832015, 03832020, and 03832021), and the eastern half of Section 33, T22S, R18E, M.D.B. & M. (Assessor parcel no. 03831005).

4. DESCRIPTION

The Chemical Waste Management, Inc., Kettleman Hills Facility is a commercial hazardous waste treatment, storage and disposal facility. The Facility contains 1,600 contiguous acres, approximately 696.5 of which have been approved for hazardous waste activity. The Facility accepts solid, semi-solid, and liquid hazardous and extremely hazardous wastes. It may not accept Class 1, Division 1.1 or 1.2, or forbidden explosives (Code of Federal Regulations, title 49, subchapter C, part 173, section 50); compressed gas cylinders (excluding aerosol cans); radioactive waste that is not exempt from regulation and licensing or is not expressly authorized for disposal under the Radiation Control Law, chapter 8 (commencing with section 114960) of part 9 of division 104 of the Health and Safety Code, or any successor statute that may replace the Radiation Control Law, or is prohibited from disposal under article 1 (commencing with section 114705) of chapter 5 of part 9 of division 104 of the Health and Safety Code or any successor statute that may replace article 1, or is prohibited from disposal by any government agency; biological agents or infectious wastes. The Facility also has a permit, issued by the California Integrated Waste Management Board, to receive municipal /solid wastes into the converted landfill Unit B-19. The

Facility conducts the following activities: solar evaporation in three surface impoundments; disposal into one hazardous waste landfill; PCB draining and flushing; PCB disposal and storage; and stabilization, solidification and storage of bulk and drummed wastes. The Facility is also permitted to construct and operate a neutralization/filtration unit and eight one-million gallon above ground evaporation tanks.

5. FACILITY SIZE AND TYPE FOR FEES

The Facility is categorized as a large treatment, storage and disposal facility for purposes of HSC Section 25205.19.

# PART III. GENERAL CONDITIONS

## 1. PERMIT APPLICATION DOCUMENTS

(A) The Part "A" Application dated December 12, 2008, and the Part "B" Application (Operation Plan) dated June 16, 2003, as revised December 7, 2006 (Rev 1), and December 12, 2008 (Rev 2), are hereby made a part of this Permit by reference.

## 2. EFFECT OF PERMIT

(A) The Permittee shall comply with the provisions of the California Health and Safety Code, and Cal. Code of Regs., title 22, division 4.5. The issuance of this Permit by DTSC does not release the Permittee from any liability or duty imposed by federal or state statutes or regulations or local ordinances, except the obligation to obtain this Permit. The Permittee shall obtain the permits required by other governmental agencies, including but not limited to, the applicable land use planning, zoning, hazardous waste, air quality, water quality, and solid waste management laws for the construction and/or operation of the Facility.

(B) The Permittee is permitted to treat, store and dispose of hazardous wastes in accordance with the conditions of this Permit. Any treatment, storage or disposal of hazardous wastes not specifically authorized in this Permit is strictly prohibited.

(C) Compliance with the terms of this Permit does not constitute a defense to any action brought under any other law governing protection of public health or the environment, including, but not limited to, one brought for any imminent and substantial endangerment to human health or the environment.

(D) DTSC's issuance of this Permit does not prevent DTSC from adopting or amending regulations that impose additional or more stringent requirements than those in existence at the time this Permit is issued and does not prevent the enforcement of these requirements against the Permittee.

(E) Failure to comply with any term or condition set forth in the Permit in the time or manner specified herein will subject the Permittee to possible enforcement action, including, but not limited to, penalties.

(F) In addition, failure to submit any information required in connection with the Permit, or falsification and/or misrepresentation of any submitted information, is grounds for revocation of this Permit (Cal. Code of Regs., title 22, section 66270.43).

(G) In case of conflicts between the Operation Plan and the Permit, the Permit conditions take precedence.

(H) This Permit includes and incorporates by reference any conditions of waste discharge requirements specific to hazardous waste disposal issued by the State Water Resources Control Board or any of the California Regional Water Quality Control Boards and any conditions imposed pursuant to section 13227 of the Water Code, that are specific to hazardous waste units.

3. COMPLIANCE WITH CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

The following documents were prepared to comply with the requirements of Public Resources Code section 21000 et seq. and the CEQA Guidelines, section 15070 et seq. of title 14, of the Cal. Code of Regs. and are incorporated by reference:

- Final Environmental Impact Report (EIR) dated October 1985,
- Supplemental Environmental Impact Report dated February 1988,
- Final Subsequent EIR dated November 1997,
- Draft Subsequent EIR dated November 2004,
- Final Subsequent EIR dated May 2005,
- Draft Subsequent EIR dated November 2005,
- Final Subsequent EIR dated May 2006,
- Draft Subsequent EIR dated March 2008,
- Recirculated Portions of Draft Subsequent EIR dated May 2009,
- Final Subsequent EIR dated September 2009, and
- Addendum and Initial Study/ Environmental Checklist dated May 2013.

The mitigation measures identified in the Final Subsequent EIR Mitigation Monitoring and Reporting Plan, and included as Exhibit B of the Draft Planning Kings County Commission Resolution No. 09-13, are incorporated by reference. The Permittee shall comply with the requirements of the Mitigation Monitoring and Reporting Plan as they pertain to the permitted activities to reduce impacts to the extent feasible or to less than significant levels as indicated in the Final SEIR. No additional mitigation measures are identified for the approval of this Permit.

4. ENVIRONMENTAL MONITORING

(A) The Permittee shall comply with the requirements of the Environmental Monitoring and Response Programs for Air and Soil-Pore Gas provided in the Cal. Code of Regs., title 22, section 66264.700, et seq. Specifically, the Permittee shall comply with the following conditions for Environmental Monitoring:

(1) (a) The Permittee submitted, and the DTSC approved, a work plan dated February 2006 describing the ambient air monitoring program as required. The ambient air monitoring program shall be designed to protect human health and the environment, using ambient air monitoring techniques, to assess releases of volatile organic compounds, semi-volatile compounds, metals and particulates.

The ambient air monitoring program shall be designed in accordance with the United States Environmental Protection Agency, 1993 (or most current version) "Air /Superfund National Technical Guidance Series, Volume IV-Guidance for Ambient Air Monitoring at Superfund Sites" (Revised), EPA-451/R-93-007, 1993, and the United States Environmental Protection Agency, March 1995, "Quality Assurance Handbook for Air Pollution Measurement Systems: Volume IV, Meteorological Measurements," EPA/600/R-94/038d, unless as otherwise specified by DTSC.

(b) The work plan includes a list of chemicals of concern (COCs) to be included in the ambient air monitoring program. The list of COCs must be representative of the incoming waste and the waste streams as stated in the Permittee's Part B Permit Application. The list of COCs shall be based on the potential to be emitted and the risk to human health and the environment. In addition, the location of the meteorological station; the proposed number, type and location of the ambient air monitoring equipment; sampling techniques; analytical methods with proposed detection limits; data evaluation method and the proposed approach and methodology for a human health risk assessment must be included in the ambient air monitoring program.

(c) Upon approval by DTSC, the ambient air monitoring work plan was implemented within 180 days. Ambient air samples shall be collected for a 24-hour period, on a 12-day cycle, unless as otherwise specified by DTSC. This sampling shall be maintained at least through the first year of monitoring. After which, certain technical specifications of the program, such as sampling frequency, monitoring locations, COCs or analytical methods, may be re-evaluated and modified based on the findings of the

previous year's data. Either DTSC, or the Permittee with DTSC approval, can initiate the re-evaluation of the ambient air monitoring program.

(d) Ambient air samples for polychlorinated biphenyls (PCBs) shall be collected for a 28-day period, on a quarterly cycle, unless as otherwise specified by DTSC.

(e) Within 90 days of the final decision on the class 3 permit modification request submitted on December 12, 2008, the Permittee shall submit for DTSC approval a proposed location for one additional ambient air monitoring location for ambient air sample collection. The additional station shall be located between the active hazardous waste landfill operations and Kettleman City to assess releases of volatile organic compounds, semi-volatile compounds, metals and particulates that are emitted when the predominant wind direction is from the facility toward Kettleman City.

(2) The Permittee shall collect the meteorological data continuously. The meteorological data shall be averaged over one-hour periods and summarized on a quarterly basis.

(3) The Permittee shall submit a report of the data collected during the ambient air sampling to DTSC for review and approval on a quarterly basis. The report shall be submitted within 90 days after the end of the reporting quarter. The quarterly report shall contain a summary of the meteorological data and the analytical results. The analytical results presented in the quarterly report shall include all COCs and any detected or estimated non-COC. In addition to the ambient air data, a brief description of the waste received during the ambient air monitoring period shall be included in the report. DTSC will work with the Permittee to establish the appropriate reporting format for the report.

(4) Based on a review of the quarterly report, DTSC may request additional information that will assist in the interpretation of the analytical data, because an investigation into an analyte's concentration may require an examination of possible sources, causes and the types of wastes received.

(5) To ensure that air emissions do not result in unacceptable risks to human health, the Permittee shall prepare a Health Risk Assessment (HRA) in accordance with the DTSC-approved ambient air monitoring program work plan.

Estimated risks are to be based on data collected during a one-year monitoring cycle and quantified at the facility boundary. The initial HRA shall be submitted 180 days after the end of the first-year monitoring cycle. Thereafter, the Permittee shall provide an annual update to the HRA based on newly-collected data. Previous HRA work may be incorporated with DTSC's prior approval.

Risk estimates are to be evaluated against a cumulative cancer risk of one in a million and a non-cancer hazard index of 1.0 for short- and long-term exposures.

(6) The Permittee shall obtain DTSC's prior approval for any proposed change to the approved ambient air monitoring program.

(7) The Permittee shall maintain all existing monitoring programs instituted under the Cal. Code of Regs., title 22, division 4.5, chapter 14, regarding soil-pore gas.

(B) The Permittee shall comply with the groundwater monitoring requirements of Cal. Code of Regs., title 22, section 66294.90 et seq., and the Waste Discharge Requirements issued by the Central Valley Regional Water Quality Control Board and any groundwater monitoring provision in subsequent Waste Discharge Requirements that are specific to hazardous waste disposal operations issued to the Permittee by the Central Valley Regional Water Quality Control Board.

(C) The Permittee shall conduct an annual meeting in Kettleman City to provide a summary of the environmental monitoring results from the prior year to the public. The summary shall include groundwater and ambient air monitoring results.

(D) The Permittee shall construct a containment system that will isolate any spills of hazardous waste constituents at the sample rack from contact with the ground surface.

5. WASTE MINIMIZATION CERTIFICATION

Pursuant to HSC Section 25202.9, the Permittee shall certify annually, by March 1 for the previous year ending December 31, that:

(A) The Facility has a program in place to reduce the volume and toxicity of all hazardous wastes (as listed in the Part A Application, Appendix A, dated December 12, 2008) generated by the Facility operations to the degree, determined by the Permittee, to be economically practicable, and

(B) The method of storage or treatment is the only practicable method or combination of methods currently available to the Facility that minimizes the present and future threat to human health and the environment.

The Permittee shall make this certification, in accordance with Cal. Code of Regs., title 22, section 66270.11. The Permittee shall submit the certification to the Office of Permitting, Hazardous Waste Management Program, DTSC, 8800 Cal Center Drive, Sacramento, California 95826 and shall record and maintain onsite such certification in the Facility Operating Record.

6. WASTE MINIMIZATION CONDITIONS

The Permittee shall comply with the Hazardous Waste Source Reduction and Management Review Act (SB 14) requirements that are specified in the HSC, sections 25244.19, 25244.20 and 25244.21, and any subsequent applicable statutes or regulations promulgated thereunder. This would include submittal of SB 14 documents to DTSC

upon request. DTSC may require the Permittee to submit a more detailed status report explaining any deviation from, or changes to, the approved waste minimization plan.

7. WASTES PROHIBITED

The Permittee is not authorized to receive, treat, store, dispose of, or otherwise manage the following:

(A) Radioactive material that is not exempt from regulation and licensing or is not expressly authorized for disposal under the Radiation Control Law, chapter 8 (commencing with section 114960) of part 9 of division 104 of the Health and Safety Code, or any successor statute that may replace the Radiation Control Law; or is prohibited from disposal under article 1 (commencing with section 114705) of chapter 5 of part 9 of division 104 of the Health and Safety Code or any successor statute that may replace article 1; or is prohibited from disposal by any governmental agency.

(B) Compressed gases (not including aerosol containers).

(C) Class 1, Division 1.1 or 1.2, or forbidden explosives (Code of Federal Regulations, title 49, subchapter C, part 173, section 50).

(D) Biological agents or infectious wastes.

## PART IV. PERMITTED UNITS AND ACTIVITIES

This Permit authorizes operation only of the units and activities listed below. The Permittee shall not treat or store hazardous waste in any unit other than those specified in this part. Any modifications to a unit or activity authorized by this Permit require the written approval of DTSC in accordance with the permit modification procedures set forth in Cal. Code of Regs., title 22, section 66270.42.

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UNIT NAME

Drum Storage Unit

LOCATION

The Drum Storage Unit is located between the Combined Closure Area, the Landfill B-13, and the Landfill B-19, in the approximate center of the active portion of the Facility.

ACTIVITY TYPE

Storage in containers.

ACTIVITY DESCRIPTION

At the Drum Storage Unit, containers are unloaded, inspected, segregated and temporarily stored for subsequent processing at another onsite waste management unit or for shipment to an offsite Facility. After containers have been evaluated and inspected, they are placed within a storage bay with other compatible wastes. When enough containers of a given waste category have accumulated and/or the storage time limit is being approached, the containers are transferred to the appropriate onsite waste management unit or offsite Facility via flatbed trucks or other suitable vehicles.

PHYSICAL DESCRIPTION

The Drum Storage Unit includes a main building and an adjacent loading/unloading area. A rigid frame metal roof covers the drum storage building. The floor of the unit is constructed of cast-in-place reinforced concrete with a perimeter containment curb. A 60-mil thick high density polyethylene (HDPE) containment liner and pea gravel leak detection layer underlie the concrete floor. The HDPE liner is sloped to separately collect potential leakage beneath each storage bay.

There are nine individual container storage bays, each with self-contained drainage. Containers are placed in the storage bays with aisles between the rows for access. Containers may be stacked to 72 inches in total container height, not including any pallet between the stacked containers. Unstacked containers may exceed 72 inches in total container height.

Drainage is directed inward from the perimeter containment curb toward the storage bays. The cast-in-place concrete slab includes a raised walkway separating each storage bay. Each of the bays is sloped to divert leaks, spills, or wash down water into a trench that drains to a separate, nondischarging sump. This prevents liquid accumulation around the base of containers and segregates spilled materials within individual bays. Each storage bay has containment capacity to hold at least 10 percent of the total volume of containers stored within the bay.

The loading\unloading area also has a metal roof to protect operations from inclement weather. The area has a reinforced concrete slab that is sloped to provide four individual bays, each with self-contained drainage that flows to a nondischarging sump. Each loading\unloading bay can accommodate two trucks and has the capacity to hold at least 10 percent of the maximum volume of two truck loads of wastes (i.e. one hundred sixty 55-gallon drums).

The drum storage unit perimeter curb is raised in relation to the surrounding topography, therefore run-on does not occur. The entrance to the loading\unloading area is graded to prevent run-on from the adjacent ground surface.

MAXIMUM CAPACITY OF UNIT

9,000 drums (55 gal. /drum), or an equivalent volume.

WASTE TYPES ALLOWED

As Listed in the Part A Application, Appendix A.

RCRA HAZARDOUS WASTE CODES ALLOWED

As listed in the Part A Application, Appendix A.

AIR EMISSION STANDARDS SUBPART CC

This unit is subject to 40 CFR, Part 264, Subpart CC, Air Emission Standards.

UNIT NAME

PCB Flushing/Storage Unit

LOCATION

The PCB Flushing/Storage Unit is located to the immediate north of the Drum Storage Unit, in the approximate center of the Facility.

ACTIVITY TYPE

Transfer/Storage of liquid PCB wastes from bulk containers to the 10,000 gallon storage tank, or to DOT-approved metal drums for eventual off-site treatment/disposal.

ACTIVITY DESCRIPTION

Most PCB wastes handled at the PCB Flushing/Storage Unit are drums, PCB article containers, PCB articles (e.g., capacitors, transformers, contaminated equipment) or bulk solids. Transformers and drums containing PCB liquids are drained and flushed with a solvent and subsequently stored temporarily for eventual offsite treatment/disposal. Capacitors received at the unit, except those defined as being small (40 CFR Part 761), are shipped offsite for disposal. PCB solids, drained/flushed PCB contaminated drums and articles, and small capacitors are placed in an onsite landfill in accordance with the requirements of 40 CFR Part 761 and Cal. Code of Regs., title 22, division 4.5, or may be shipped offsite for disposal.

The PCB Flushing/Storage Unit also includes a PCB article draining area outside of the building. The draining of PCB liquids occurs here while the PCB articles are within containment trays. The trays are managed as clean and are lined with plastic material. Absorbent material is generally placed in the containment tray to contain drips or spills that may occur during the processing. After the processing is completed, the absorbent and lining materials are taken out of the tray and properly disposed. If the trays or other movable equipment become contaminated, thorough decontamination is required.

Repackaging of PCB wastes may also occur at the unit.

PHYSICAL DESCRIPTION

The PCB Flushing/Storage Unit consists of an enclosed building with a roof and walls to prevent the entrance of precipitation or run-on. There is a continuous concrete curb one and one half feet high inside and adjacent to the walls of the building to contain spills that may occur within the building. The reinforced concrete floor has a vinyl epoxy resin surface and is sloped to drain

spilled liquids away from stored articles and containers to a nondischarging sump. A vehicle access door is provided at the southeast corner of the building.

One 10,000 gallon aboveground storage tank is located within the building for the storage of PCB liquid and flushing solution. One 1,000 gallon aboveground storage tank is located outside the building for the storage of flushing solution.

MAXIMUM CAPACITY OF UNIT

10,000 gallons (One waste tank) plus 300 55-gallon drums, or an equivalent volume.

WASTE TYPES ALLOWED

Transformers and drums containing PCB liquids, PCB articles (e.g. capacitors, transformers, contaminated equipment) or bulk solids.

RCRA HAZARDOUS WASTE CODES ALLOWED

As listed in the Part A Application, Appendix A.

AIR EMISSION STANDARDS SUBPART CC

This unit is not subject to 40 CFR, Part 264, Subpart CC, Air Emission Standards.

UNIT NAME

Bulk Storage Units 1 and 2

LOCATION

Bulk Storage Units 1 and 2 are located adjacent to the Final Stabilization Unit directly to the east and north, respectively.

ACTIVITY TYPE

Temporary storage of stabilized/unstabilized waste prior to land disposal, treatment, or shipment offsite.

ACTIVITY DESCRIPTION

Bulk Storage Unit 1 is primarily used for temporary storage of stabilized waste. After confirmation that the stabilized waste meets the appropriate treatment standard(s), the stabilized waste is then disposed in an onsite landfill. Bulk Storage Unit 1 contains a bermed asphalt pad that may be used to temporarily stage land disposal restricted wastes (i.e. unstabilized wastes). The asphalt pad is also used for sealing bulk containers for macro-encapsulation of land disposal restricted debris waste.

Bulk Storage Unit 2 is used for temporary storage of both stabilized and unstabilized waste.

PHYSICAL DESCRIPTION

Bulk Storage Unit 1 is lined with a 60-mil thick HDPE geomembrane, and is overlain by a geocomposite drainage layer and an 18-inch aggregate liner protection layer. There is also an area of approximately 6,000 square feet with asphalt overlying the aggregate liner protection layer.

Bulk Storage Unit 2 is overlain with two 60-mil thick HDPE geomembranes overlain and separated by geocomposite drainage layers. These liners are then overlain with an aggregate liner protection layer.

Both bulk storage units have a perimeter containment berm that prevents runoff or run-on. Inside the perimeter containment berms, the underlying liners are sloped toward sumps, which allows for removal of any standing water.

MAXIMUM CAPACITY OF UNIT

70 bulk containers in each unit, for a total of 140 bulk containers.

WASTE TYPES ALLOWED

As listed in the Part A Application, Appendix A.

RCRA HAZARDOUS WASTE CODES ALLOWED

As listed in the Part A Application, Appendix A.

AIR EMISSION STANDARDS SUBPART CC

This unit is subject to 40 CFR, Title 264, Subpart CC, Air Emission Standards.

UNIT NAME

Final Stabilization Unit (FSU)

LOCATION

The Final Stabilization Unit (FSU) is located south of closed Surface Impoundments P-10/11, between P-10/11 and Landfill B-18. The FSU is adjacent to Bulk Storage Units 1 and 2.

ACTIVITY TYPE

Processing of various solid, semi-solid, and selected liquid wastes not suitable for direct landfilling, solar evaporation, or other management method employed at the Facility, by mixing with stabilization reagents.

ACTIVITY DESCRIPTION

Waste processing occurs in four mixing bins. Bulk containers are emptied directly into the bins, and stabilization reagents are added from the storage silos via an automated feed system of conveyors, surge bins, and ducting, or are added from other dry reagents in bags or containers. Smaller containers are held over the bins and their contents poured out, or the containers are pierced with a spike while over the bins. Mixing is accomplished by the use of an excavator moving its bucket back and forth through the waste mixture.

Macroencapsulation is performed within the FSU on certain Land Disposal Restricted wastes (i.e. debris). When loads of debris are received at the FSU, the loads are either directly loaded into roll-off bins fitted with a high density polyethylene vault, or transferred from the waste processing bins to the Macroencapsulation vault. The Macroencapsulation vault is then capped and sealed prior to transport to a landfill.

PHYSICAL DESCRIPTION

The FSU building is a 120' x 80' steel framed structure with a reinforced concrete slab, indoor tanks for waste processing, recessed in the floor, and outdoor reagent storage tanks and appurtenant systems. The reinforced concrete floor is sloped inward to prevent runoff from occurring during waste loading/unloading and processing. The building enclosure prevents precipitation onto the FSU floor and in the waste processing tanks. Perimeter curbing and grading adjacent to the building prevents run-on to the building except from the inward sloping wash down aprons.

MAXIMUM CAPACITY OF UNIT

Each of the four existing waste processing tanks can hold 20,000 gallons, for an aggregate total of 80,000 gallons; however, the batch processes in each tank typically incorporate 5,000 gallons or less of incoming waste. The FSU has the capacity to be expanded by two additional waste processing tanks, an exterior tank farm consisting of six tanks each with a capacity of 20,000 gallons, and two above ground storage tanks of 20,000 gallon capacity each.

WASTE TYPES ALLOWED

As listed in the Part A Application, Appendix A.

RCRA HAZARDOUS WASTE CODES ALLOWED

As listed in the Part A Application, Appendix A.

AIR EMISSION STANDARDS SUBPART CC

This unit is subject to 40 CFR, Title 264, Subpart CC, Air Emission Standards.

UNIT NAME

Surface Impoundments P-9, P-14, P-15, and P-16

LOCATION

There are three active and one inactive surface impoundments on the KHF. The active impoundments are P-9, P -14, and P -16; the inactive impoundment is P-15. Unit P-9 is located immediately to the north of the Final Stabilization Unit, adjacent to the Landfill Unit B-19, Phase 3. Units P-14, P-15, and P-16 are located at the extreme north end of the active portion of the Facility adjacent to the Combined Closure as described under the landfill units.

ACTIVITY TYPE

Treatment by solar evaporation.

ACTIVITY DESCRIPTION

The surface impoundments are used to treat low solid, low organic content aqueous wastes by solar evaporation. Wastes treated at the impoundments may be generated offsite, or from onsite operations (e.g. leachate).

Wastes may be transferred to the impoundments from bulk liquid transport vehicles or from containers (e.g. drums).

PHYSICAL DESCRIPTION

Each of the active impoundments is designed with a reinforced concrete pad for unloading wastes. The unloading pads are sloped and curbed to direct spillage into the respective impoundment. Each of the active impoundments is constructed with a double-composite liner and a Leachate Collection and Recovery System (LCRS) between the top and bottom composite liners. The LCRS is also a Leak Detection System (LDS).

Liner components at each of the active impoundments include: bottom liner consisting of a 3-foot thick layer of clay (hydraulic conductivity $\leq 1x10^{-7}$ cm/sec), and a 60-mil thick high density polyethylene (HDPE) geomembrane liner; LCRS/LDS layer consists of: a geosynthetic drainage net; and a geotextile fabric, to prevent clogging; The top liner consists of a 1½ foot thick clay layer (hydraulic conductivity $\leq 1x10^{-7}$ cm/sec), and a 60-mil thick HDPE geomembrane liner.

The inactive surface impoundment P-15 is constructed of the following elements: a 40-mil thick HDPE geomembrane, a geocomposite (geonet/geotextile) LCRS/LDS layer, and a 60-mil thick HDPE geomembrane.

MAXIMUM TREATMENT CAPACITY

| Unit | Area (acres) | Unit Capacity Volume (gallons) |
|---|---|---|
| P-9 | 1.5 | 4,400,000 |
| P-14 | 0.9 | 2,100,000 |
| P-15 | 1.5 | 0* |
| P-16 | 1.6 | 3,900,000 |

*Unit is inactive, and therefore cannot receive any wastes.

WASTE TYPES ALLOWED

As listed in the Part A Application, Appendix A, with the following exceptions:

- Reactive wastes, including wastes with cyanide concentrations greater that 250 ppm or sulfide concentrations greater than 500 ppm.
- Wastes with total organic carbon concentration greater than 10,000 ppm.
- Wastes with an oil and grease concentration greater than 20,000 ppm.
- RCRA waste codes K044, K045, K046, K047, P056, P063, P076, P078, P081, P095, P096, and U135 as defined in Title 40 Code of Federal Regulations Part 261.
- Wastes with a total halogenated organic concentration of greater than 1,000 ppm.
- PCB wastes regulated under the federal Toxic Substances Control Act.
- Wastes prohibited from treatment in surface impoundments by Cal. Code of Regs., title 22, division 4.5, chapter 18, unless treated to meet land disposal restriction regulatory requirements.
- Radioactive waste that is not exempt from regulation and licensing or is not expressly authorized for disposal under the Radiation Control Law, chapter 8 (commencing with

section 114960) of part 9 of division 104 of the Health and Safety Code, or any successor statute that may replace the Radiation Control Law; or is prohibited from disposal under article 1 (commencing with section 114705) of chapter 5 of part 9 of division 104 of the Health and Safety Code or any successor statute that may replace article 1; or is prohibited from disposal by any government agency.

RCRA HAZARDOUS WASTE CODES ALLOWED

As listed in the Part A Application, Appendix A.

UNIT SPECIFIC SPECIAL CONDITIONS

1. The Permittee shall test all components of surface impoundment liners for waste/leachate compatibility using EPA Method 9090 or other more appropriate methods approved by DTSC. The liner components include seamed portions of 60-mil high density polyethylene, high density polyethylene geomembrane material, high density polyethylene geonet, geotextile fabric, graded gravel used as drainage material, and the high density polyethylene piping used in the leachate collection systems.

   The Permittee may propose the use of alternative test methods, existing test data from similar studies, and manufacturer supplied specifications as an alternative to the requirement above. The alternative methods and information must be submitted by the Permittee as a comprehensive plan designed to meet the goals of EPA Method 9090.

2. The Permittee shall not use drilling muds as a soil conditioner in the clay component of liners or cap/covers in any surface impoundment at the Facility.

3. The Permittee shall submit a detailed schedule of the major project milestones to DTSC, and the Regional Water Quality Control Board prior to any surface impoundment construction or closure project. The Permittee shall keep DTSC and the Regional Water Quality Control Board apprised of any changes to the planned dates and events associated with the construction or closure project.

4. The Permittee shall reject all high density polyethylene geomembrane liner materials that are damaged during installation under windy conditions. The definition of "wind damage," and the required remediation necessary for both preventing and repairing wind damaged geomembrane liner materials, are to be addressed by the Permittee and submitted for DTSC's review and approval within the text of the Construction Quality Assurance Plan sections 66270.41 and 66271.4 for approval.

AIR EMISSION STANDARDS SUBPART CC

This unit is subject to 40 CFR, Part 264, Subpart CC, Air Emission Standards.

UNIT NAME

Landfill units B-18 and B-19

LOCATION

There is one active hazardous waste landfill on the Facility, Unit B-18, which is located at the southern-most point of the active portion of the Facility, immediately south of the Final Stabilization Unit. There is one inactive unit, Unit B-19, which is located immediately north of the closed landfill Unit B-15, and southeast of the Drum Storage Unit.

ACTIVITY TYPE

Land disposal.

ACTIVITY DESCRIPTION

Landfills are operated as the final depositories of solid wastes. Materials that may be landfilled include noncontainerized bulk wastes, containerized wastes, and debris. Some wastes require stabilization/solidification prior to disposal in the landfill. Off loading and burial activities are overseen by trained employees. Containers of solid and lab-pack wastes are placed upright in the disposal area. Noncontainerized bulk wastes are placed in layers and compacted. Except for closed containers and waste materials not prone to wind erosion, daily cover material is placed on the wastes. The approximate midpoint of each shipment of wastes is recorded and documented and kept on file at the Facility in case the wastes must be exhumed.

As noted above, there is one active landfill, Unit B-18, permitted to accept hazardous wastes. The hazardous waste portion of Unit B-19 has undergone delayed closure and the remaining unused portion of the landfill has been converted to accept municipal solid wastes/designated wastes only in accordance with Cal. Code of Regs., title 22, section 66264.113(d). DTSC retains authority over closure of the entire unit.

PHYSICAL DESCRIPTION

Construction of a landfill unit, such as B-18 or B-19, consists of a secondary liner system; primary liner system; leachate collection and recovery system; leachate detection system; and a vadose zone detection collection and recovery system. These systems are constructed of the following components:

**Secondary Liner System**: 3-foot minimum clay layer ($k \leq 1x10^{-7}$ cm/sec), and a 60-mil textured high density polyethylene geomembrane.

**Primary Liner System**: 1.5 foot thick clay layer ($k \leq 1x10^{-7}$ cm/sec), and a 60-mil textured high density polyethylene geomembrane.

**Leachate Collection and Recovery System**: On the side slopes, a geotextile, and a single-sided geocomposite drainage layer; on the base, a geotextile, single-sided geocomposite drainage layer, 1-foot gravel layer ($k \geq 1x10^{-2}$ cm/sec), a geotextile, stainless steel/carbon steel side slope riser pipe, and a steel/high density polyethylene pipe vertical riser.

**Leachate Detection System**: On the side slopes, geotextile, and a single-sided geocomposite drainage layer; on the base, geotextile, single-sided geocomposite drainage layer, 1 foot gravel layer ($k \geq 1x10^{-2}$ cm/sec), geotextile, stainless steel/carbon steel side slope riser pipe, and a high density polyethylene side slope riser pipe.

**Vadose Zone Detection, Collection, and Recovery System**: 80-mil smooth high density polyethylene geomembrane, geotextile, 1 foot-thick gravel layer, geotextile, and a stainless steel/carbon steel side slope riser pipe.

Older landfills at the Facility, such as B-16, have been constructed to lesser standards (prior to the current requirements of the federal Resource Conservation and Recovery Act (RCRA)). However, these units have been closed with covers equivalent to current RCRA standards. The Permittee has conducted an extensive field study on the effects of an arid climate on various cover sections of a clay test fill. This study revealed that significant drying and cracking of cover soils, especially clays, will occur in as little as three years when exposed to the arid conditions experienced at the Kettleman Hills Facility. In response to this study, the Permittee submitted an alternative cover system as the standard for landfills at this Facility. The following is a breakdown of the components included in this alternative cover system:

- 2.5 feet of vegetative soil cover;
- Geotextile drainage layer (transmissivity ≥0.03 gal/min/ft);

- 40-mil thick textured high density polyethylene geomembrane;
- 1 foot (minimum) of compacted foundation layer (hydraulic conductivity $\leq 1x10^{-5}$ cm/sec);
- 1 foot (minimum) of intermediate soil cover over the last lift of waste.

MAXIMUM CAPACITY

| Unit | Operational Status | Wastes Managed | Unit Area (acres) | Total Capacity (cubic yards) | Net Disposal Volume Remaining (cubic yards)[1] |
|---|---|---|---|---|---|
| B-18 | Active | All types of solid hazardous wastes as described in the Part A application Appendix A, including TSCA-regulated wastes, except those that are restricted as listed in this permit. | 67 | 15,700,000 | 6,189,000 |
| B-19 | Converted to Subtitle D unit | n/a | 40 | 7,000,000 | 0 |
| Total | | | 107 | 22,700,000 | 6,189,000 |

[1]Approximate values are current as of September 30, 2008, including waste and intermediate soil cover, as well as the additional airspace with the expansion.

WASTE TYPES ALLOWED

As listed in the Part A Application, Appendix A, with the exception of the following:

- Reactive wastes, unless rendered nonreactive (except for lab-packed cyanides or sulfides as allowed under Cal. Code of Regs., title 22, section 66264.316(e)).
- Ignitable wastes, unless rendered nonignitable or lab-packed as allowed under Cal. Code of Regs., title 22, section 66264.316.
- Liquid waste or containers with free liquids, unless stabilized/solidified or lab-packed, except as allowed under Cal. Code of Regs., title 22, section 66264.314.

- Waste prohibited from disposal in landfill by Cal. Code of Regs., title 22, division 4.5, chapter 18, unless treated to meet land disposal regulatory requirements.

- Radioactive waste that is not exempt from regulation and licensing or is not expressly authorized for disposal under the Radiation Control Law (chapter 8 (commencing with section 114960) of part 9 of division 104 of the Health and Safety Code, or any successor statute that may replace the Radiation Control Law; or is prohibited from disposal under article 1 (commencing with section 114705) of chapter 5 of part 9 of division 104 of the Health and Safety Code or any successor statute that may replace article 1; or is prohibited from disposal by any government agency.

RCRA HAZARDOUS WASTE CODES ALLOWED

As listed in the Part A Application, Appendix A.

UNIT SPECIFIC CONDITIONS

1. During construction of any new proposed waste management units, the Permittee shall test all components of landfill liners for waste/leachate compatibility using EPA Method 9090 or other more appropriate methods approved by DTSC. The liner components include seamed portions of 60-mil high density polyethylene, high density polyethylene geomembrane material, high density polyethylene geonet, geotextile fabric, graded gravel used as drainage material, and the high density polyethylene piping used in the leachate collection systems.

   The Permittee may propose the use of alternative test methods, existing test data from similar studies, and manufacturer supplied specifications as an alternative to the requirement above. The alternative methods and information must be submitted by the Permittee as a comprehensive plan designed to meet the goals of EPA Method 9090.

2. The Permittee shall not use drilling muds as a soil conditioner in the clay component of liners or cap/covers in any landfill at the Facility.

3. The Permittee shall submit a detailed schedule of the major project milestones to DTSC, and the Regional Water Quality Control Board prior to any landfill construction or closure project. The Permittee shall keep DTSC and the Regional Water Quality Control Board apprised of any changes to the planned dates and events associated with the construction or closure project.

4. The Permittee shall reject all high density polyethylene geomembrane liner materials that are damaged during installation under windy conditions. The definition of "wind damage," and the required remediation necessary for both preventing and repairing wind

damaged geomembrane liner materials, are to be addressed by the Permittee and submitted for DTSC's review and approval within the text of the Construction Quality Assurance Plan (or plan addenda) required for each new landfill construction or closure construction project. These plans (or addenda) require a permit modification in accordance with Cal. Code of Regs., title 22, sections 66270.41 and 66271.4 for approval.

5. The Permittee shall apply a daily cover soil over exposed wastes to control wind dispersal of particulate matter within the landfill operations area, as required by Cal. Code of Regs., title 22, section 66264.301(i). The Permittee may use other appropriate materials (such as polymeric soil sealers or foaming agents) that have been specifically approved through a permit modification in accordance with Cal. Code of Regs., title 22, sections 66270.41 and 66271.4.

6. The Permittee shall ensure that all containers are either at least 90 percent full when placed in a landfill or are crushed, shredded, or similarly reduced in volume to the maximum practical extent prior to burial in a landfill, as required by Cal. Code of Regs, title 22, section 66264.315. This condition does not apply to containers that are very small, such as ampules or to containers designed to hold free liquids for use other than storage, such as a battery or capacitor.

7. The Permittee shall maintain all units that are closed as partial closures, prior to the ultimate Facility closure, in accordance with the Post-Closure Plan submitted by the Permittee, which has been approved. The 30-year minimum post-closure care period specified in Cal.Code of Regs., title 22, section 66264.117(b) will not begin until the ultimate Facility closure.

8. For purposes of waste analysis pursuant to Cal. Code of Regs., title 22, section 66264.13, leachate from the Leachate Collection and Removal Systems at the B-18 landfill shall be sampled and analyzed quarterly for a period of one year for Constituents of Concern as defined in the Monitoring and Reporting Program issued by the Central Valley Regional Water Quality Control Board. Thereafter, leachate sampling and analysis shall be conducted annually. Sampling shall be conducted from the sampling ports at the risers.

9. The Permittee shall conduct an aerial or land survey of active hazardous waste landfills annually. The Permittee shall submit the digital data from the aerial or land survey and a summary of the data by March 1 of each year. The summary shall include the content required in Cal. Code of Regs., title 22, section 66264.309. The Permittee shall submit an estimate of the airspace consumed for the month for each active hazardous waste landfill to DTSC on a monthly basis.

## AIR EMISSION STANDARDS SUBPART CC

These units are not subject to the requirements of 40 CFR, Part 264, Subpart CC.

## LIST OF CLOSED, INACTIVE, AND NON-CONSTRUCTED UNITS

| NAME OF UNIT | STATUS | PERIOD OF OPERATION |
|---|---|---|
| Drum Decant Unit | Clean-closed December 2006. DTSC approved closure on February 26, 2007. | 1983-1996 |
| Future PCB Flushing/Storage Unit | Not yet constructed. | N/A |
| Neutralization Filtration Unit | Not yet constructed. | N/A |
| Evaporative Tank System | Not yet constructed. | N/A |
| Temporary Container Storage Area | Closed June 1997, Combined Closure Area. | 1984-1989 |
| Interim Stabilization Unit | Closed June 1997, Combined Closure Area. | 1985-1990 |
| Old Truck Wash | Closed June 1997, Combined Closure Area. | 1977-1992 |
| Cyanide Treatment Unit | Clean-closed December 2006. DTSC approved closure on February 26, 2007. | 1983-1993 |
| Former Drum Staging Area (Central Processing Area) | Closed June 1996, Landfill B-13 Closure. | 1983-1989 |
| Landfill B-1 | Closed June 1997, Combined Closure Area. | 1978 |
| Landfill B-2 | Closed August 1988. | 1978 |
| Landfill B-3 | Closed August 1988. | 1978 |
| Landfill B-4 | Closed June 1997, Combined Closure Area. | 1978-1980 |
| Landfill B-5 | Closed June 1997, Combined Closure Area. | 1978-1979 |
| Landfill B-6 | Closed June 1997, Combined Closure Area. | 1979-1983 |
| Landfill B-7 | Closed June 1997, Combined Closure Area. | 1978-1979 |
| Landfill B-8 | Closed June 1997, Combined Closure Area. | 1979 |
| Landfill B-9 | Closed June 1997, Combined Closure Area. | 1978-1982 |
| Landfill B-9 Extension | Closed June 1997, Combined Closure Area. | 1982-1983 |

| NAME OF UNIT | STATUS | PERIOD OF OPERATION |
|---|---|---|
| Landfill B-9 Expansion | Closed June 1997, Combined Closure Area. | 1983-1987 |
| Landfill B-10 | Closed June 1997, Combined Closure Area. | 1978-1980 |
| Landfill B-11 | Closed June 1997, Combined Closure Area. | 1978-1980 |
| Landfill B-12 | Closed June 1996, Landfill B-13 Closure. | 1977-1980 |
| Landfill B-13 | Closed June 1996, Landfill B-13 Closure. | 1979-1983 |
| Landfill B-13 Expansion | Closed June 1996, Landfill B-13 Closure. | 1979-1987 |
| Landfill B-14 | Closed. | 1982-1984 |
| Landfill B-15 | Closed December 1997. | 1981-1985 |
| Landfill B-16 | Closed December 2004. DTSC accepted closure on June 30, 2005. | 1983-2004 |
| Landfill B-19 | Partially closed (hazardous waste portion closed December 2006), converted to a Municipal/Solid Waste Landfill. Final closure will occur upon completion of the Municipal/Solid Waste Landfill in accordance with Cal. Code of Regs., title 22, section 66264.113. | 1987-present |
| Surface Impoundment P-1 | Closed June 1997, Combined Closure Area. | 1978-1983 |
| Surface Impoundment P-2 | Closed June 1997, Combined Closure Area. | 1978-1983 |
| Surface Impoundment P-3 | Closed June 1997, Combined Closure Area. | 1978-1983 |
| Surface Impoundment P-4 | Closed June 1997, Combined Closure Area. | 1978-1981 |
| Surface Impoundment P-5 | Closed June 1997, Combined Closure Area. | 1978-1980 |
| Surface Impoundment P-6 | Closed June 1993, P-6/7/8 Closure. | 1978-1983 |
| Surface Impoundment P-7 | Closed June 1993, P-6/7/8 Closure. | 1978-1983 |
| Surface Impoundment P-8 | Closed June 1993, P-6/7/8 Closure. | 1978-1983 |
| Surface Impoundment P-10 | Closed June 1993, P-10/11 Closure. | 1979-1986 |
| Surface Impoundment P-11 | Closed June 1993, P-10/11 Closure. | 1978-1986 |

| NAME OF UNIT | STATUS | PERIOD OF OPERATION |
|---|---|---|
| Surface Impoundment P-12/12A | Closed June 1997, Combined Closure Area. | 1981-1985 |
| Surface Impoundment P-13 | Closed June 1997, Combined Closure Area. | 1981-1985 |
| Surface Impoundment P-17 | Closed June 1997, Combined Closure Area. | 1982-1984 |
| Surface Impoundment P-18 | Closed June 1989, during Landfill B-19, Phase II/III construction. | 1977-1985 |
| Surface Impoundment P-19 | Closed June 1989, during Landfill B-19, Phase II/III construction. | 1983-1985 |
| Surface Impoundment P-20 | Closed June 1989, during Landfill B-19, Phase II/III construction. | 1985-1988 |
| Spreading Area 1 | Closed June 1997, Combined Closure Area. | 1975-1983 |
| Spreading Area 2 | Closed June 1997, Combined Closure Area. | 1977-1980 |
| Spreading Area 3 | Closed June 1997, Combined Closure Area. | 1977-1985 |
| Spreading Area 4 | Underlies the P-14, 15, & 16 site. Certification of closure is required with the closure of these impoundments. | 1977-1982 |
| Spreading Area 5 | Closed June 1989, during Landfill B-19, Phase II/III construction. | 1979-1985 |
| Spreading Area 6 | Closed June 1989, during Landfill B-19, Phase II/III construction. | 1979-1983 |
| Mud Pond 1 | Inactive. Currently under RCRA Facility Investigation. | 1982-1984 |

## PART V. SPECIAL CONDITIONS THAT APPLY TO ALL OF THE FACILITY'S UNITS

1. Waste Analysis

(A) The Permittee shall require a generator to provide on the "Generator's Waste Material/Profile Sheet" described in the Waste Analysis Plan, or on an equivalent form, a description of the contents of an over-packed drum a.k.a. lab pack and certify that the over-packed drum meets the requirements of Cal. Code of Regs., title 22, section 66264.316. For the purposes of this permit, over-packed drum, or lab pack means a drum which contains small individual containers of hazardous waste which are over packed and surrounded by absorbent material.

The "Generator's Waste Material/Profile Sheet" described in the Waste Analysis Plan, or an equivalent form, shall include specific listings for total halogenated organic compounds greater than one thousand (1000) mg/l [ppm] as identified in Cal. Code of Regs., title 22, division 4.5, chapter 18, Appendix III and III-A;

(B) The Permittee shall repeat the pre-acceptance evaluation described in the Waste Analysis Plan for each waste stream that is a candidate for delivery to the Facility either:

(1) every 24 months, or

(2) when a generator notifies the Permittee that the process generating the waste has changed, or

If the Permittee has reason to suspect that the waste is not in conformance with pre-acceptance documentation, a profile reevaluation may occur.

(C) The Permittee shall conduct the appropriate "Supplemental Analyses" described in the Waste Analysis Plan to ensure that waste received at a hazardous waste management unit meets the acceptance criteria for that unit, listed in Table 3-1 in the Waste Analysis Plan, and any other criteria specified in the Operation Plan for the unit. Waste that does not meet any acceptance criteria for a unit may be accepted at the unit on a case-by-case basis provided that: the Permittee conducts all of the "Supplemental Analyses" applicable to the unit; the results of the analyses indicate that the waste may be accepted at the unit without violating any other condition of the permit; and the results of the analyses and the decision to accept the waste at the unit are documented in the operating record on the "Special Waste Management Decision Form" described in the Waste Analysis Plan or an equivalent form.

(D) The Permittee shall not change the acceptance criteria in Table 3-1 of the Waste Analysis Plan without prior approval by DTSC. This approval will require a permit modification in accordance with Cal. Code of Regs., title 22, sections 66270.41 and 66271.4.

2. Unless otherwise specified, all information required to be submitted to DTSC pursuant to this Permit, shall be submitted as follows:

(A) The original document shall be submitted to: Office of Permitting, Hazardous Waste Management Program, Department of Toxic Substances Control, 8800 Cal Center Drive, Sacramento, California 95826. Oral notices and reports shall be made to the Office of Permitting project manager for the Facility and to the Clovis Compliance Unit at (559) 297-3943

(B) One copy shall be submitted to: Clovis Compliance Unit, Department of Toxic Substances Control, 1515 Tollhouse Road, Clovis, California 93612.

(C) One copy shall be submitted to: Executive Officer, Regional Water Quality Control Board, Central Valley Region, 1685 E Street, Fresno, California 93706-2025.

(D) One copy shall be submitted to: Director, Waste Management Division, U.S. Environmental Protection Agency, Region IX, Mail Code WST-1, 75 Hawthorne Street, San Francisco, California 94105.

(E) One copy shall be submitted to: Director, Division of Environmental Health Services, Kings County Department of Public Health, 330 Campus Drive, Hanford, California 93230.

DTSC will notify the Permittee of changes in this distribution list.

3. Site Construction Activities

(A) The Permittee shall follow the unit-specific construction procedures and design specifications that have been approved by DTSC when performing any new unit construction or closure construction related activity at the Facility.

(B) DTSC will allow the Permittee to make minor modifications to design plans, specifications, and QA/QC procedures for any new unit construction or closure construction related activity, without prior approval by DTSC, provided that the minor modifications meet the following three conditions:

(1) The modification will in no way affect the performance standard or the original intent of the plans and specifications approved by DTSC.

(2) The modifications will in no way reduce the effectiveness of the QA/QC effort used to ensure the quality and consistency of the materials and workmanship used to meet the performance standards in the plans and specifications approved by DTSC.

(3) All minor modifications to the plans, specifications, and QA/QC documents are clearly identified, described and justified in the construction certification report and as-built drawings submitted for DTSC's approval following completion of the construction activities.

When minor modifications are necessary, the Permittee shall notify DTSC of these minor modifications not later than seven (7) days after such minor modifications are determined by the Permittee to be necessary.

4. Requirements to Mitigate Disturbance to Endangered Species

(A) The Permittee shall implement the Mitigation and Monitoring Plan for the Chemical Waste Management, Inc., Kettleman Hills Facility in Kings County, California (BioSystems Analysis, Inc. January 11, 1990, revised May 1, 1990, September 6, 1990, March 15, 1991, April 1, 1991, and April 26, 1991, hereinafter called the "Mitigation Plan.") This Mitigation Plan describes methods the Permittee will use to mitigate disturbance of endangered species during construction, operation, and maintenance of the Facility. The following measure shall be incorporated into the Mitigation Plan:

The Permittee shall designate a contact representative to keep the U.S. Fish and Wildlife Service, Sacramento Endangered Species Office, and the California Department of Fish and Game, apprised of the status of ongoing efforts to protect listed species during construction, operation and maintenance of the Facility.

(B) If the established limit of incidental take of the San Joaquin kit fox or blunt-nosed leopard lizard is exceeded, the Permittee shall cease the causative action and within five days of the most recent mortality, the Permittee shall reinitiate consultation with the U.S. Fish and Wildlife Service. The limit of incidental take is established in the "Formal Endangered Species Consultation on the Chemical Waste Management, Inc., Kettleman Hills Hazardous Waste Facilities Operation, Kings County, California," U.S. Fish and Wildlife Service, May 2, 1991.

(C) The Permittee shall notify the U. S. Fish and Wildlife Service, Sacramento Endangered Species Office, and the California Department of Fish and Game, in writing within three days of finding any dead or injured endangered species. This notification must include the date, time, and location of the incident or of the finding of a dead or injured animal, and any other pertinent information. Any endangered species found dead or injured must be turned over to the California Department of Fish and Game for care or analysis.

(D) The Permittee shall comply with all the terms of the September 5, 2012 Biological Opinion (81420-2012-F-0044-2) issued by the U. S. Fish and Wildlife Service to the United States Environmental Protection Agency for the Chemical Waste Management Kettleman Hills Facility, including without limitation, the Reasonable and Prudent Measures, Terms and Conditions and Reporting Requirements of the Incidental Take Statement included in the Biological Opinion.

5. Response to and reporting of spills, leaks or releases of hazardous waste

(A) The Permittee shall comply with California Code of Regulations, title 22, section 66264.175(b)(5) in response to any spill or leak of hazardous waste or accumulated precipitation within the containment system in the container transfer or storage areas.

(B) The Permittee shall comply with California Code of Regulations, title 22, section 66264.196(b) in response to any spill or leak of hazardous waste or accumulated precipitation within a tank system or its secondary containment.

(C) For any spill or leak of hazardous waste not covered by subsection (A) or (B) above, the Permittee shall comply with the following requirements:

(1) The Permittee shall remove the spilled or leaked hazardous waste at the Facility from, and shall clean, the affected surface within eight hours of discovery of the spill or leak, regardless of whether such a spill or leak requires the Permittee to implement its contingency plan or any emergency procedures, or whether the hazardous waste is released into the environment as a result of the spill or leak.

(2) The Permittee shall record any spill or leak of hazardous waste at the Facility and steps taken to address it, regardless of whether such a spill or leak requires the Permittee to implement its contingency plan or any emergency procedures, or whether the hazardous waste is released into the environment as a result of the spill or leak, in its operating record within 24 hours of the discovery of the spill or leak and shall make the operating record available for review upon DTSC's request.

(D) In the event the Permittee discovers a release or a threat of a release of hazardous waste or constituents, or identifies an immediate or potential threat to human health or the environment, the Permittee shall notify DTSC orally within 24 hours of discovery and notify DTSC in writing within 10 days of discovery summarizing the findings, including the immediacy and magnitude of any potential threat to human health or the environment. The written summary of the findings shall include but not be limited to an identification of the material, the amount released, the location of the release, a description of how the release occurred, how practices will be adjusted to prevent future similar releases, the name of the person responsible for the cleanup, photo documentation of the location and an evaluation of the potential for threat to human health or the environment. For the purpose of Section V.5.(D), the term "constituent" means: (a) a constituent identified in Appendix VIII to chapter 11 of division 4.5 of title 22 of California Code of Regulations which is a component of a hazardous waste or leachate and which has a physical or chemical property that causes the waste or leachate to be identified as a hazardous waste; or (b) any other element, compound, or mixture of compounds which is a component of a hazardous waste or leachate and which has a physical or chemical property that causes the waste or leachate to be identified as a hazardous waste.

(E) The requirements in sections (A) through (D) above are in addition to, and do not replace, any other response or reporting requirements or corrective action requirements imposed by applicable laws, regulations, orders, agreements, or this Permit, including the requirements of California Code of Regulations, title 22, section

66264.56 regarding emergency procedures and Health and Safety Code section 25359.4 regarding a release of reportable quantity of hazardous substances.

6. Heavy-duty diesel trucks

(A) Upon initial placement of waste in Landfill B-18 Phase IIIA and through December 31, 2017, the Permittee shall prohibit entry to the facility of any heavy-duty diesel truck delivering material with a hazardous waste manifest if that truck is equipped with a pre-2007 model year emission equivalent engine. However, the Permittee may allow a heavy-duty diesel truck equipped with a pre-2007 model year emission equivalent engine to enter the facility once, provided that the Permittee shall notify the driver of these requirements, and that access by that truck and by trucks equipped with a pre-2007 model year emission equivalent engine and owned or operated by the same entity shall thereafter be prohibited. On or after January 1, 2018, the Permittee shall prohibit entry to the facility of any heavy-duty diesel truck delivering material with a hazardous waste manifest if that truck is powered by a pre-2010 model year emission equivalent engine.

(B) Record keeping and DTSC notification responsibilities of the Permittee.

(1) The Permittee shall record the date, identity of the trucking company, the Vehicle Identification Number, and engine model year emission standard information for each heavy-duty diesel truck allowed access to the facility and maintain that information on file at the facility for three years.

(2) The Permittee shall notify DTSC in writing within 30 days of allowing access to the facility by any heavy-duty diesel truck equipped with a prohibited model year emission equivalent engine. The notification shall include the date, identity of the trucking company and the Vehicle Identification Number of the truck.

(3) The Permittee shall notify DTSC in writing within 30 days of refusing access to the facility by any heavy-duty diesel truck equipped with a prohibited model year emission equivalent engine. The notification shall include the date, identity of the trucking company and the Vehicle Identification Number of the truck.

(C) This condition shall not apply in the event of a California declared State of Emergency that requires disposal of hazardous waste.

7. Schedule of Compliance

(Reserved.)

# PART VI. CORRECTIVE ACTION

The Permittee shall conduct corrective action at the Facility pursuant to Health and Safety Code section 25200.10. Corrective action will be carried out either under a Corrective Action Consent Agreement or an Enforcement Order for Corrective Action pursuant to Health and Safety Code section 25187.

1. In the event the Permittee identifies an immediate or potential threat to human health and/or the environment, discovers new releases of hazardous waste and/or hazardous constituents, or discovers new Solid Waste Management Units (SWMUs) not previously identified, the Permittee shall notify DTSC orally within 24 hours of discovery and notify DTSC in writing within 10 days of such discovery summarizing the findings including the immediacy and magnitude of any potential threat to human health and/or the environment. For the purpose of Section VI.1, the term "constituent" means: (a) a constituent identified in Appendix VIII to chapter 11 of division 4.5 of title 22 of California Code of Regulations which is a component of a hazardous waste or leachate and which has a physical or chemical property that causes the waste or leachate to be identified as a hazardous waste; or (b) any other element, chemical compound, or mixture of compounds which is a component of a hazardous waste or leachate and which has a physical or chemical property that causes the waste or leachate to be identified as a hazardous waste.

2. DTSC may require the Permittee to investigate, mitigate and/or take other applicable action to address any immediate or potential threats to human health and/or the environment and any identified releases of hazardous waste and/or hazardous constituents. For any identified SWMUs, the Permittee is required to conduct corrective action.

## PART VII. PERMIT MODIFICATION HISTORY

This modification incorporated a facility initiated Class 3 permit modification application to authorize the following changes in the design of landfill B-18:

- increase the footprint of B-18 from 53 to 67 acres,
- increase the total capacity of B-18 from 10,700,000 to 15,700,000 cubic yards,
- increase the maximum elevation of B-18 from 965 to 1018 feet above mean sea level,
- add a second surface water run-off containment basin,
- extend the sideslope liner system with a 3-foot clay thickness for the secondary composite liner,
- alteration of the final closure configuration to include 25-foot wide benches at a maximum vertical interval of 50 feet with a 3.5H:1V slope between benches.

DTSC has added the following permit conditions to this modification:

Part III, section 4(A)(1)(d),
Part III, section 4(A)(1)(e),
Part III, section 4(C),
Part III, section 4(D),
Part IV, Landfill Units B-18 and B-19, Unit Specific Conditions, section 8,
Part IV, Landfill Units B-18 and B-19, Unit Specific Conditions, section 9,
Part V, section 4(D)
Part V, section 5, and
Part V, section 6.

This modification has resulted in an updated Part A application dated December 12, 2008. This modification has resulted in changes to the following sections of the Part B Application (Operation Plan) effective June 16, 2003: Chapter 15, pages 1 – 9, 11 – 13, and 15; Table 31-1, pages 1 – 8; Chapter 40, pages 1 – 6; Chapter 46, pages 1 – 9.

This modification corrected typographical and grammatical errors that were present in the prior permit and updated office names and phone numbers. The modification also added a chronology of CEQA documents to Part III, section 3 for clarity and a definition of the term "constituent" in Part VI.

**Header modified to show revision date.**