

# Environmental Document Analysis

*Prepared for:*

**Hazardous Waste Facility Permit Renewal  
Chemical Waste Management Inc.**

Kettleman Hills Facility  
35251 Old Skyline Road  
Kettleman City, California  
(Kings County)

*Prepared by:*

**Department of Toxic  
Substances Control**



With technical assistance from  
**Aspen Environmental Group**



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**CALIFORNIA ENVIRONMENTAL QUALITY ACT**  
**Guidelines Sections 15162, 15163 and 15164**  
**Environmental Document Analysis**  
**For**  
**Hazardous Waste Management Projects**



The California Environmental Quality Act (CEQA)<sup>1</sup> applies to all discretionary actions taken by the Department of Toxic Substances Control (DTSC) that may have an impact on the environment. Many activities within the DTSC Hazardous Waste Management Program are subject to CEQA requirements. These activities include: the issuance of facility permits, permit renewals or modifications, variances, and approval of closure plans. When DTSC is the lead agency for a project, it is responsible for the preparation of the appropriate environmental documents required under CEQA. DTSC is required to determine whether a project may have a significant effect on the environment and whether the effects can be mitigated, or reduced to a level of insignificance. Generally, mitigation measures are included as conditions in the final permit.

This Environmental Document Analysis (EDA) documents an evaluation by DTSC of a proposed permitting project pursuant to CEQA section 21166 and the CEQA Guidelines<sup>2</sup> sections 15162, 15163 and 15164. This type of evaluation is conducted for hazardous waste management permitting projects that were previously evaluated pursuant to a certified Environmental Impact Report (EIR) or an adopted negative declaration. Section A of this EDA provides a description of the proposed permitting project and background information, including discussion of previous CEQA document(s). The Environmental Analysis and Checklist in Section B provides an evaluation of whether any project changes, changed circumstances and/or new information of substantial importance may result in differing environmental impact significance and/or mitigation conclusions from those found in the previous CEQA document(s). Section C provides DTSC's determination regarding the type of CEQA documentation that should be prepared for the proposed project.

### A. PROJECT DESCRIPTION

<b>Project Title:</b> Kettleman Hills Facility Hazardous Waste Facility Permit Renewal		<b>Coding:</b> 24043/100032-78/750
<b>Project Address:</b> 35251 Old Skyline Road	<b>City:</b> Kettleman City	<b>County:</b> Kings County
<b>Project Sponsor:</b> Chemical Waste Management Inc.	<b>Contact:</b> Robert G. Henry	<b>Phone and E-Mail:</b> (599) 386-6195; <a href="mailto:bhenry3@wm.com">bhenry3@wm.com</a>

**Project Background and Description:** Chemical Waste Management Inc. (CWMI) has submitted an application to the California Department of Toxic Substances Control (DTSC) for renewal of its Hazardous Waste Facility Permit for the Kettleman Hills Facility (KHF). If approved, the permit would be issued for a 10-year period, with continued authorization if facility meets certain submittal requirements. The KHF is an active hazardous waste transfer, treatment, storage, and disposal facility that contains several active, inactive, and closed Class I hazardous waste management units as well as Class II/III (non-hazardous) solid waste landfills. CWMI has operated the facility since 1979. The KHF is located in rural western Kings County, in the Kettleman Hills, approximately 3.5 miles southwest of Kettleman City. The KHF is located on an approximately 1,600-acre property in which 695 acres are permitted for management of federal and state-listed hazardous waste and municipal solid and designated wastes. See Section A.5 Facility Description and Table 1 (Hazardous Waste Management Units) for more information on the KHF.

<sup>1</sup> Pub. Resources Code, div. 13, § 21000 et seq

<sup>2</sup> Cal. Code Regs, tit. 14, § 15000 et seq

**Permitting and California Environmental Quality Act (CEQA) Background:** The KHF has existing permits and environmental review documents in place. The facility operates under a Kings County Conditional Use Permit, DTSC Hazardous Waste Facility Permit, and other state and federal agency permits (see Section A.8, Table 2 Other Facility Permits). Section A.4 (Facility/Environmental Review History) provides a summary of the environmental documents that have been prepared and certified for the KHF.

**Current Permit and Proposed Permit Activities:** The KHF has an existing facility permit, which expired in 2013. The expired permit has been continued while DTSC evaluates the permit renewal application. If granted, the renewed permit would allow CWMI to continue hazardous waste management activities for another 10-year period, with continued authorization if facility meets certain submittal requirements. See Section A.5 Facility Description and Table 1 (Hazardous Waste Management Units) for more information on the KHF and current and proposed permit activities.

**Changes from Current Permit to Proposed Permit:** The renewed DTSC permit would add new work activities at three existing/permitted operations as follows: Final Stabilization Unit (FSU) – add waste shredder and temporary storage in the FSU mixing tanks; polychlorinated biphenyl (PCB) Flushing and Storage Unit – outdoor storage and bulking/repackaging of waste in outside containment area; and Drum Storage Unit – solids/liquids bulking for onsite and offsite treatment and/or disposal. Section A.5 provides a description of the requested permit changes that would be completed in these three areas (subsection A.5.1) and describes the other existing operations, post-closure care, and corrective actions that would continue under the renewed permit.

## A.1 Project Purpose

The Department of Toxic Substances Control (DTSC) has received an application from Chemical Waste Management, Incorporated (CWMI) for renewal of its Hazardous Waste Facility Permit (HWFP) for the Kettleman Hills Facility (KHF). CWMI began the permit renewal process prior to expiration of its 2013 permit, which continues their authorization to operate. As part of the permit review process, DTSC must consider the potential environmental impacts associated with the permit renewal request. This Environmental Document Analysis considers previous environmental documents prepared for the KHF, identifies potential new impacts (if any) associated with the renewal application, and identifies if additional environmental review is needed under the California Environmental Quality Act (CEQA). The renewed HWFP would be for a 10-year period and would include terms and conditions for the operation of the KHF. The HWFP would reference the Part “A” and Part “B” Application (Operation Plan), dated March 16, 2018 (or as later amended).

The KHF is an active hazardous waste transfer, treatment, storage, and disposal facility that contains several active, inactive, and closed Class I hazardous waste management units as well as Class II/III (non-hazardous) solid waste landfills. Figure 1 (at the end of Section A) shows the locations of the various existing hazardous waste management units at the site as well as the other significant structures/facilities at the site (e.g., non-hazardous solid waste landfills, stormwater basins, and operations support facilities).

The KHF accepts most hazardous wastes, as defined by 22 CCR, Division 4.5, Chapter 11. Wastes that arrive at the facility in bulk and containerized shipments may be in the form of liquids, semi-solids, and/or solids. The KHF is not permitted to accept certain types of wastes such as radioactive materials (with the exception that the KHF is permitted to accept radioactive materials classified as naturally occurring radioactive material and Materials Released for Unrestricted Use), infectious materials, compressed gas cylinders (excluding aerosol cans), and certain types of explosives.

The KHF conducts the following activities: solar evaporation in three surface impoundments; disposal into one hazardous waste landfill; polychlorinated biphenyl (PCB) draining and flushing; PCB disposal and storage; and stabilization, solidification and storage of bulk and drummed wastes. The facility description, provided below, includes additional information regarding the hazardous waste management units subject to the HWFP.

## **A.2 Project Location**

The KHF is located in rural western Kings County, California, in the Kettleman Hills. The facility borders the west side of the San Joaquin Valley and is approximately 3.5 miles southwest of Kettleman City, 6.5 miles southeast of the city of Avenal, and about 2.5 miles west of Interstate I-5. The KHF is located on an approximately 1,600-acre property in which 695.5 acres are permitted for management of federal- and state-listed hazardous wastes, and municipal solid and designated wastes in accordance with the current Kings County Conditional Use Permit (CUP) for KHF. Of the 695.5 acres within the current CUP, 541 acres are within the fenced KHF operational area. The remainder of the KHF is open space used for cattle grazing. Interstate 5 (I-5) provides the primary north/south access to the KHF vicinity. The entrance to the site access road is located approximately 2.6 road miles west of I-5 on State Route 41. The site's physical address is 35251 Old Skyline Road, Kettleman City, California 93239.

## **A.3 Environmental Setting**

KHF is situated in a rural, remote area with rugged terrain. The nearest community to KHF is approximately 3.5 air miles away at Kettleman City. Lands adjacent to KHF are used for oil and gas production and cattle grazing.

Kettleman City and Avenal, located 3.5 and 6.5 air miles from the project site respectively, are the nearest population centers to KHF. Emergency services such as a law enforcement, fire protection, ambulance, and emergency medical response are available from these locations. A commercial area occurs on State Route 41 just east of I-5 and approximately 3 air miles away from the site.

The existing waste management units are situated within the geologic zone mapped as the San Joaquin Formation, which consists of an interbedded complex of tilted nonmarine and marine sediments comprised primarily of silty sandstone, siltstone, and claystone. The sediments generally dip to the southwest (toward and beneath the Kettleman Plain) at approximately 25° to 35° beneath the central part of the site, increasing to nearly 50° at the southwest boundary.

Groundwater occurs beneath the site in interbedded sandstone units that vary in thickness from less than 5 feet to more than 60 feet. The depth to groundwater ranges from about 300 feet to greater than 500 feet below ground surface. Groundwater in the Kettleman Plain occurs in unconsolidated alluvial sediments that were eroded from the Kettleman Hills in late Pleistocene and Holocene times, and in sands of the Tulare Formation that immediately underlie the alluvial deposits. The water-bearing Tulare Formation and alluvium are positioned stratigraphically above, and are isolated by thick layers of shale and claystone from, the members of the San Joaquin Formation.

The site is 22 miles east of the San Andreas Fault; however, it is underlain by competent bedrock materials. Per 22 CCR 66264.25, the hazardous waste management units at the KHF have been designed and constructed to withstand the maximum credible earthquake (MCE) event.

The KHF is located within the San Joaquin Valley Air Basin (SJVAB) and is under the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). While air quality has been improving slowly within the SJVAB, it is designated as non-attainment for a number of federal (ozone, PM<sub>2.5</sub>) and state (ozone, PM<sub>10</sub>, PM<sub>2.5</sub>) ambient air quality standards, and it is recognized as one of the most polluted air basins in California and the United States.

## **A.4 Facility/Environmental Review History**

The applicant, CWMI, acquired KHF in 1979. The following significant CEQA documents have been 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 Regulations:

- Final Environmental Impact Report (EIR) dated October 1985,
- Supplemental EIR 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,
- Revised Project Description and Analysis, Draft Subsequent EIR dated May 2008,
- Recirculated Portions of Draft Subsequent EIR and Revised Project Description and Analysis dated May 2009,
- Final Subsequent EIR dated September 2009, and
- Addendum and Initial Study/Environmental Checklist dated May 2013.

In April 1985, the County certified an EIR and approved a project to expand the then 1,280-acre KHF site to 1,600 acres, permitting three new waste disposal areas (B-17 Landfill, B-18 Landfill, and B-19 Landfill).

The April 1985 EIR provided the basis for approval of Conditional Use Permit (CUP) No. 1412. In 2004, the County issued a Notice of Preparation (NOP) of a Subsequent Environmental Impact Report (SEIR) for the B-18/B-20 Hazardous Waste Landfill Project, including consideration of CUP No. 05-10 for expansion of the existing B-18 Hazardous Waste Landfill by 14 acres (and closure), and construction of a new B-20 Hazardous Waste Landfill of 63 acres (and closure) through 2042 at current existing levels of operation (Pub. Resources Code, Section 21166; CEQA Guidelines, Section 15162). At that time, the then proposed B-17 Class II/III Landfill project was also included in the NOP but was later removed after the County found it to have “independent utility”<sup>3</sup> under CEQA. A Revised NOP was issued in August 2005, clarifying that, compared to the previously distributed 2004 NOP, the project had been modified to include only the Class I/II B-18 Landfill expansion and the new Class I/II B-20 Landfill.

In 2008, after circulation of the B-18/B-20 Draft SEIR, the project description was refined, a traffic mitigation measure was clarified, and information regarding toxic air emissions was added to the SEIR. This Revised Project Description and Analysis was noticed and recirculated for 45-days of public review and comment in May 2008.

In 2009, in response to comments received on the B-18/B-20 Draft SEIR, the County determined that portions of the Draft SEIR should be recirculated. In accordance with Section 15088.5(c) of the CEQA Guidelines, the Recirculated Portions of the Draft SEIR contained sections of the previously released draft document with significant new information (e.g., Section 3.1.2 – Cumulative impact analysis of the Avenal Energy Center Project; revised Section 3.8 – Hydrology and Water Quality; and revised Section 3.11 – Transportation and Traffic). The County noticed and recirculated the Recirculated Portions of the Draft SEIR for another 45-days of public review and comment in May 2009.

The County released the B-18/B-20 Final SEIR in October 2009 consisting of:

- (i) the March 2008 Draft SEIR;
- (ii) the May 2008 Revised Project Description and Analysis (Revised Project Description and Analysis);
- (iii) the May 2009 Recirculated Portions of the Draft SEIR (Recirculated SEIR); and
- (iv) the 2009 Final SEIR (Response to Comments Document), including appendices for each.

The Final SEIR was challenged in court<sup>4</sup> by a petition for writ of mandate, which was denied. The County’s decision on the certification of the Final SEIR and approval of the CUP was found to be compliant with applicable laws and regulations. In this document, the use of the term “2009 Final SEIR” implies the complete

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<sup>3</sup> The independent utility concept generally refers to allowing related projects to be evaluated separately if each has substantial utility that is irrespective of the other’s approval. Banning Ranch Conservancy v. City of Newport Beach 2012. <https://www.hthjlaw.com/articles/2013/02/20/california-court-rejects-piecemealing-argument-different-projects-share-common-access-road/>.

<sup>4</sup> El Pueblo Para El Aire Y Agua Limpio et. al. v. Board of Supervisors for the County of Kings, Case No. 10 C 0017 (CA Kings County Superior Court 2011).

final environmental report, which includes the documents listed in items i through iv, above.

In May 2013, the DTSC prepared and adopted an Addendum and Initial Study to the 2009 Final SEIR. The Addendum was prepared to address a Class 3 HWFP modification request from CWMI, which would allow for a phased build-out of the B-18 Landfill with no changes to the maximum permitted capacity as analyzed in the Final SEIR. DTSC found that the modification request would involve minor design changes, that no substantial changes were proposed that required revisions to the 2009 Final SEIR for the KHF, and that the Addendum was the appropriate CEQA document for this request.

#### A.5 Facility Description

Figure 1 shows the locations of the various existing hazardous waste management units at the site as well as the other significant structures/facilities at the site (e.g., non-hazardous solid waste landfills, stormwater basins, operations support facilities, etc.). Table 1 provides a listing of the existing hazardous waste management units at the KHF.

Waste Management Unit	Status	Proposed Major Permit Changes
Final Stabilization Unit (FSU)	Active	Add shredder for treatment by stabilization, microencapsulation, macroencapsulation, and/or solidification. Allow temporary storage of wastes in the FSU mixing tanks.
PCB Flushing/Storage Unit	Active	Allow waste storage in outside containment area. Allow bulking and repackaging of waste in outside containment area.
Drum Storage Unit (DSU)	Active	Allow bulking and repackaging of RCRA, non-RCRA, and non-hazardous wastes.
Landfill Unit B-18	Active	None
Surface Impoundment P-9	Active	None
Surface Impoundment P-14	Active	None
Surface Impoundment P-16	Active	None
Bulk Storage Unit 1	Active	None
Bulk Storage Unit 2	Active	None
Surface Impoundment P-15	Inactive	None
Landfill Unit B-13	Post-Closure Care	None
Landfill Unit B-14	Post-Closure Care	None
Landfill Unit B-15	Post-Closure Care	None
Landfill Unit B-16	Post-Closure Care	None
Landfill Unit B-19	Post-Closure Care	None
Surface Impoundment P-6	Post-Closure Care	None
Surface Impoundment P-7	Post-Closure Care	None
Surface Impoundment P-8	Post-Closure Care	None
Surface Impoundment P-10	Post-Closure Care	None
Surface Impoundment P-11	Post-Closure Care	None
Combined Closure Area and Truck Wash <sup>1</sup>	Post-Closure Care	None

<sup>1</sup> The Combined Closure Area includes several landfills, surface impoundments, and other units

Former hazardous waste management units at the KHF that have been certified clean-closed are not included in Table 1 because these units are not subject to the DTSC permit and are assumed to not affect the environmental impact assessment for the KHF. The table also does not include other structures and facilities that are not subject to the DTSC HWFP.

None of the active units listed in Table 1, or the inactive surface impoundment, are scheduled for closure during the next 10-year permit cycle.

The following sections present a brief description and historical summary for each of the existing hazardous waste management units in Table 1, in the order presented in the table. To distinguish the units that will have permit changes, the discussion below separates active units by those with proposed major permit changes and those without proposed major permit changes. Because the permit would be issued for a 10-year period, all operations included in the permit are discussed below.

### **A.5.1 Active Units with Proposed Major Permit Changes**

#### **Final Stabilization Unit**

The existing FSU is comprised of four waste processing tanks enclosed in a building. The building is a steel-framed structure with a steel-covered reinforced concrete slab floor. The building air is treated by a baghouse. The four open-top tanks are side-by-side in a concrete vault, where each tank has a concrete sump. The tanks are made of steel and are operated with an interior steel liner. The top of each tank is at ground level. Each tank is adjacent to a bay door and supplied with reagents stored outside the building.

#### Proposed Major Permit Changes

There are two primary permit revision requests for the FSU:

- 1) Add a waste shredding operation to shred RCRA waste, non-RCRA waste, and non-hazardous waste
- 2) Allow temporary storage in the FSU mixing tanks

#### *Waste Shredding Operation*

This activity would include emptying containers (i.e., rolloff containers, drums, boxes, sacks, etc.) into an existing mixing tank for subsequent loading into a shredder to release the contained liquids and/or for particle size reduction. Waste to be shredded would include waste approved for treatment by stabilization, solidification, macroencapsulation, or microencapsulation. After being shredded, the waste would then be subject to treatment prior to disposal. This activity would occur inside the FSU Building, and emissions would be controlled by the existing FSU baghouse.

A stationary shredder with an electric motor would be installed at the FSU. The proposed shredder would use existing power at the FSU and no additional power lines would be needed. Chapter 21 of the Operation Plan includes additional description of the proposed shredder and waste shredding operation.

#### *Temporary Waste Storage in Mixing Tanks*

This requested permit revision would allow wastes, being processed at the FSU, to be temporarily stored in the FSU mixing tanks for no more than 72 hours. The temporary storage would be allowed under conditions where the ongoing waste treatment in the mixing tanks cannot continue or be completed due to situations such as equipment breakdown, insufficient reagent quantity, time required for full treatment, or testing analysis delays. For example, waste subject to the two-step cyanide treatment process as described in the Operation Plan (Chapter 12.0, Waste Analysis Plan, Section 6.3.3.3) would require storage in the mixing tanks until such time that post treatment analysis can demonstrate the cyanide has been effectively treated to the applicable treatment standards. This temporary waste storage would occur within the FSU building, and the building ventilation and baghouse would remain continuously operating during these temporary storage periods.

#### *PCB Flushing/Storage Unit*

The PCB (polychlorinated biphenyl) Flushing/Storage Unit is used for the drainage and temporary storage of TSCA-regulated<sup>5</sup> (40 CFR Part 761) PCB articles and wastes. Most TSCA-regulated PCB wastes handled at the PCB Flushing/Storage Unit are drums, PCB articles (e.g., capacitors, transformers, and contaminated equipment), PCB article containers, or bulk solids. Transformers and drums containing PCB liquids are drained and flushed with a suitable solvent in accordance with 40 CFR Part 761 regulations, or sent offsite for incineration. The drained oils and the flushing agents are stored temporarily in a tank or DOT-approved metal

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<sup>5</sup> PCB Articles and Wastes, Non-RCRA PCB wastes, and TSCA-regulated wastes are used interchangeably in this discussion.

drums for eventual offsite treatment/disposal. Capacitors received at the unit, except those that are small by regulatory definition (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 40 CFR Part 761 and 22 CCR, Division 4.5 regulations. Bulk PCB-contaminated solids received at the site are taken directly to a landfill (Chapter 19.0 of the CWMI application). Other processes at the PCB Flushing/Storage Unit can include repacking and bulking of waste and solidification of waste. Repacking and bulking operations occur in the interior or exterior containment areas.

The floor of the building is epoxy-coated to provide an impervious surface, and sloped to drain away from the tank to a non-discharging sump. The floor is required to be free of cracks or gaps that could allow potential spills to migrate from the waste management unit. To allow for early detection of potential leaks from the base of the PCB liquids storage tank, it is situated on an approximately 4-inch high-round aggregate bolster. The storage unit is inspected on a regular basis, daily during operating days of the KHF, and according to the Inspection Program Plan, Chapter 31 of the Operation Plan, as approved by DTSC.

A sliding door and truck ramp are located at the southeast corner of the building for vehicle access into the containment area. Transfer of liquids between the PCB liquids storage tank and transport vehicles occurs within the containment area so that the hose connection to the truck and other potential spill elements (e.g., pump and hoses) are provided with secondary containment in the event of a spill.

#### Proposed Major Permit Changes

There are two primary permit revision requests for the PCB Flushing/Storage Unit:

- 1) Outdoor storage in outside containment area
- 2) Bulking and repackaging of waste in the outside containment area

These activities are currently only allowed within an enclosed building within this hazardous waste unit. The outdoor storage is requested to include items such as drums, transformers, rolloff containers, and vacuum tanker. The bulking and repackaging would include bulking (combining solids into a rolloff container and/or liquids into a vacuum tanker) and the consolidating and repackaging of waste from smaller containers into larger containers. If allowed, these revised activities would be conducted so they do not exceed allowable secondary containment volumes in the outside containment area.

#### **Drum Storage Unit**

The Drum Storage Unit (DSU) is an active hazardous waste container transfer and storage unit. The DSU began operating in 1989 and consists of a prefabricated steel-framed metal building that is roofed but has no walls (i.e., its sides are open). The DSU includes a drum storage area that consists of nine (9) storage bays, each with self-contained drainage, and an adjacent loading/unloading area that consists of four (4) unloading bays, with each bay being able to accommodate two (2) trucks and having self-contained drainage. The footprint of the DSU's storage area covers approximately 46,000 square feet while the footprint of the DSU's unloading area covers approximately 5,000 square feet. The rigid-frame metal roof of the DSU covers both the storage bays and the unloading bays. The floor of the DSU is constructed of cast-in-place reinforced concrete with a perimeter containment curb. A 60-mil HDPE (high-density polyethylene) geomembrane containment liner and pea gravel leak detection layer underlie the concrete floor of the DSU. The HDPE geomembrane is sloped to drain separately to nine (9) individual collection sumps, one sump for each storage bay.

Drainage is directed inward from the perimeter containment curb toward the storage bays. The cast-in-place slab includes a raised walkway separating each storage bay. Each bay is sloped to divert leaks, spills, or washdown water into a trench that drains to a separate, non-discharging sump. This prevents liquid accumulation around the bases of containers and segregates spilled materials within individual bays.

The loading/unloading area also has a rigid frame metal roof to protect loading/unloading operations from weather. The loading/unloading area has a reinforced concrete slab that is sloped to provide four (4) individual loading/unloading bays, each with self-contained drainage that flows to a non-discharging 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 truckloads of wastes (i.e., one hundred and sixty 55-gallon drums).

The drum storage building perimeter curb is elevated compared to the surrounding ground surface, so run-on does not occur. The entrance to the loading/unloading bays is graded to prevent run-on from the adjacent ground surface.

### Proposed Major Permit Changes

There are four primary permit revision requests for the DSU:

- 1) Solids bulked for onsite treatment and/or disposal
- 2) Liquids bulked for onsite treatment and/or disposal
- 3) Solids bulked for offsite treatment and/or disposal
- 4) Liquids bulked for offsite treatment and/or disposal

The bulking and repackaging is requested for RCRA, non-RCRA, and non-hazardous wastes. The following wastes would not be bulked: PCB wastes, ignitable wastes, reactive wastes, P and U-coded wastes, asbestos and beryllium containing wastes, non-infectious biological wastes, controlled substances, wastes with high human health risk factors, and highly-reactive and shock-sensitive wastes. Additionally, bulking would not be conducted on wastes that can create visible emissions above SJVAPCD regulatory limits, create nuisance odors to facility workers, or conducted on incompatible wastes (e.g. wastes subject to large temperature increases upon mixing). No wastes would be bulked when wind speeds exceed 20 miles per hour at the DSU.

#### *Solids Bulking*

This activity would include emptying containers (i.e., drums, boxes, sacks, etc.) into a rolloff container. The rolloff container would then be moved onsite for treatment at the Final Stabilization Unit (FSU) and/or disposal at the Landfill (LF), or shipment offsite for treatment and/or disposal. Wastes to be bulked would include waste approved for storage at the DSU and/or treatment at the FSU and/or disposal in the LF. This activity would occur at the DSU unloading bays. The containers would be staged where a forklift would pick up the container and empty the contents into a staged rolloff container.

#### *Liquids Bulking*

This activity would include emptying containers (i.e., drums, totes, etc.) into a vacuum tanker for treatment at the FSU, and/or at the surface impoundments, or to send for offsite treatment and/or disposal. Wastes to be bulked would include: waste approved for storage at the DSU; waste approved for treatment at the FSU; and/or waste approved for treatment at the surface impoundments. This activity would occur at the DSU unloading bays. The containers would be staged for the vacuum tanker to empty the contents of the container.

Vapor minimization would be achieved by keeping containers closed unless adding or removing waste. Lids on empty containers would be closed and the containers disposed by the end of shift. Rolloffs would be covered and by the end of shift, the rolloff would be stored on the Bulk Storage Unit Phase II.

## **A.5.2 Active Units without Proposed Permit Changes**

### **Landfill Unit B-18**

Landfill B-18 (B-18) is currently the only active hazardous waste landfill unit at the KHF. B-18 is divided into three distinct phases (Phases I, II, and III) that were each permitted and constructed separately. Phases I and II were constructed in 1991 through 1992 and 1992 through 1993, respectively, while Phase III was constructed in 2014 through 2015. The entire footprint of B-18 is lined and there are no significant differences between the liner system designs of Phases I, II, and III. B-18 has a total permitted waste disposal footprint of 67 acres (see Figure 1). The total permitted waste disposal capacity of B-18 is 15,600,000 cubic yards, of which approximately 4,200,000 cubic yards remain as of February 2018.

Key components of the landfill liner are identified below:

- Bottom Liner:
  - 3-foot-thick clay layer (hydraulic conductivity  $\leq 1 \times 10^{-7}$  cm/sec)
  - 60-mil-thick HDPE geomembrane

- Leachate Collection and Removal System (LCRS)/Leak Detection System (LDS)/Vadose Zone Leak Detection, Collection and Recovery System Layer:
  - 80-mil HDPE geomembrane
  - Geotextile fabric
  - 1-foot gravel layer
  - Sideslope riser pipe
- Top Liner:
  - 1.5-foot-thick clay layer (hydraulic conductivity  $\leq 1 \times 10^{-7}$  cm/sec)
  - 60-mil-thick HDPE geomembrane

Landfill B-18 has primary and secondary leachate collection and removal systems that drain to one of four sump locations on the floor of the landfill. Riser pipes run from the primary and secondary leachate sumps up to one of four concrete leachate riser pads located around the perimeter of the landfill. Each leachate riser pad is equipped with a 5,500-gallon dual-walled HDPE leachate tank. Landfill B-18 also has a vadose monitoring system that consists of lined trenches under the secondary liner system that drain to the leachate sump locations. A vadose riser pipe runs from each sump location up the side slope of the landfill to the corresponding leachate riser pad.

#### **Surface Impoundments P-9, P-14, and P-16**

Surface Impoundments P-9, P-14, and P-16 were all constructed in 1986 and are currently active. These impoundments are constructed with a double-composite liner and a leachate collection and recovery system between the top and bottom composite liners. The LCRS is also a leak detection system in accordance with 22 CCR 66264.221(c)(2).

Liner components at each of the active impoundments include, from bottom to top:

- Bottom Liner:
  - 3-foot-thick clay layer (hydraulic conductivity  $\leq 1 \times 10^{-7}$  cm/sec)
  - 60-mil-thick HDPE geomembrane
- LCRS/LDS Layer:
  - Geosynthetic drainage net
  - Geotextile fabric
- Top Liner:
  - 1.5-foot-thick clay layer (hydraulic conductivity  $\leq 1 \times 10^{-7}$  cm/sec)
  - 60-mil-thick HDPE geomembrane

The LCRS/LDS layer in each active impoundment drains to sumps designed for the collection and removal of liquids to avoid the development of hydraulic head<sup>6</sup> on the bottom liner.

#### **Bulk Storage Unit 1**

BSU 1 is an outdoor area with a single geosynthetic liner overlain by an aggregate liner protection layer, and is less than an acre in size. It is typically used to temporarily store containerized hazardous waste (e.g., in roll-off boxes, tanks, containers) following stabilization at the FSU. After confirmation that stabilized waste meets the appropriate treatment standard(s) based on the site's post-treatment analysis program, the stabilized waste is transported to an onsite landfill or to another off-site permitted facility for treatment and/or disposal.

Approximately 7,000 square feet (18 percent) of BSU 1 includes a bermed asphalt pad above the aggregate layer. The asphalt pad may be used for sealing, but not filling, of bulk containers for macroencapsulation of land disposal restricted debris. The asphalt pad includes a roofed structure for sealing of bulk containers (no foundation other than the asphalt floor) for macroencapsulation. The roofed structure provides weather

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<sup>6</sup> Hydraulic head refers to a measure of liquid pressure above a specific point.

protection for workers.

### **Bulk Storage Unit 2**

BSU 2 consists of a double-geosynthetic liner overlain by an aggregate layer and is used for temporary storage of stabilized waste, unstabilized waste waiting for treatment, or waste that does not require treatment but is placed in storage for future processing on site or subsequent transfer off site for treatment and/or disposal. Wastes stored at the BSU 2 are containerized in rolloffs, tanks, and containers (i.e., drums, totes, sacks, boxes, etc.). Containers are stored on trailers and are not placed on the aggregate surface.

### **A.5.3 Inactive Unit**

#### **Surface Impoundment P-15**

Surface Impoundment P-15 (P-15) is an inactive impoundment that was used as a hazardous waste unit to temporarily hold stormwater and leachate under an emergency permit in 1995. Since 1995, P-15 has been inactive as a hazardous waste unit and is in interim closure in accordance with a plan submitted to DTSC (CWMI, April 28, 1995, amended by CWMI, November 28, 1995 and CWMI, April 25, 1996). The interim closure plan included removing stormwater and leachate from the impoundment and LCRS/LDS system, decontaminating the top liner surface, and leaving the double liner in place to prevent rainfall infiltration. This unit has been interim-closed because its proximity to impoundments P-14 and P-16 makes permanent closure grading measures impractical. CWMI proposes to permanently close impoundment P-15 in combination with the future closure of P-14 and P-16, according to the closure plan provided as part of the permit application. However, this closure would not occur within the 10-year period of the renewed HWFP permit evaluated herein. P-15 is currently used to store clean water for dust control and other purposes.

The existing liner in P-15 includes, from bottom to top:

- 40-mil-thick HDPE geomembrane
- Geocomposite (geonet/geotextile) LCRS/LDS layer (pond bottom only)
- 60-mil-thick HDPE geomembrane

### **A.5.4 Post-Closure Care Units**

The KHF includes units or areas in post-closure care. Each of these units and the closure dates are summarized below:

- **Landfill Unit B-13** (B-13) is an existing closed hazardous waste landfill that includes burial areas B-12, B-13, and the B-13 Expansion. Landfill Units B-12 (B-12) and B-13 received approximately 80,000 drums of liquid waste composed of acid and oxidizers. B-12 operated from 1977 until mid-1979, while B-13 (and the B-13 Expansion) operated from mid-1979 until 1983. B-13 received empty crushed acid drums, soil contaminated with acids, and excavated animal rendering wastes. This unit also incorporated an organic acid solidification trench. The original B-13 and B-12 together received approximately 80,000 drums of acids and oxidizers. DTSC provided a written acknowledgement of closure in 1996.
- **Landfill Unit B-14** (B-14) is an existing closed hazardous waste landfill that includes a base clay liner and LCRS. B-14 received PCB solids, including transformers, small capacitors and PCB spill materials. Closure activities such as a soil and vegetative cover were completed in 1984/1985. This landfill unit has been closed.
- **Landfill Unit B-15** (B-15) is an existing closed hazardous waste landfill that consists of two waste management units, B-15 and Landfill Unit B-15C. B-15 is unlined and has a LCRS comprised of a sideslope riser located on the northeastern side of the unit. B-15 was completed and began accepting waste in late 1981. Until early 1983, it was used exclusively for disposal of liquid waste drums. After this time, it began accepting other types of solid waste until 1985.

B-15 received approximately 150,000 drums of liquid waste consisting of solvents, paint, sludge, phenolics, formaldehyde, resins, oils, inks, PCBs, pesticides, and some laboratory wastes. In addition, between 1983 and 1985, some solid wastes consisting of strontium nitrate, potassium perchlorate, antimony, asbestos, sulfur, carbon black, and some laboratory wastes were placed in the landfill. Cyanides and caustics were placed in the segregated cell (B-15C) to prevent intermixing of potentially incompatible wastes. The types of

wastes, including chemical analyses, are maintained in the operating records. DTSC provided a written acknowledgement of closure in 1999.

- **Landfill Unit B-16** (B-16) is an existing closed hazardous waste landfill. B-16 is lined with a clay liner spray coated with an emulsified asphalt seal and has a leachate monitoring system. The first stage of landfill construction was completed in 1983 and it accepted hazardous waste until 1988. B-16 received bulk and containerized PCB solids. The final ~50,000-cy was nonhazardous, nonputrescible, industrial solid waste. DTSC provided a written acknowledgement of closure in 2005.
- **Landfill Unit B-19** (B-19) is an existing landfill that is comprised of a closed hazardous waste area and an inactive municipal solid waste area. A separation liner is installed between the Class I waste and the Class II/III waste and serves as the final closure cover for that portion of the Class I landfill. The separation liner has been covered by Class II/III wastes. All types of solid hazardous waste were received at B-19 including noncontainerized bulk wastes (e.g. contaminated soils), containerized wastes (e.g. macroencapsulation vaults, drums, lab-packs), and debris (e.g. depressurized cylinders, dismantled tank pieces). Closure of the Class I portion of the landfill was completed in 2006; written closure confirmation is pending from DTSC until closure of the non-hazardous waste portion of the landfill has been completed.

The landfill covers approximately 40 acres, is comprised of four development phases (referred to as Phases IA, IB, II, and III), and contains a total of approximately 3 million cy of Class I wastes. Ultimately, B-19 will contain approximately 4.4 million cy of Class II/III wastes.

- **Surface Impoundments P-6, P-7, and P-8** (P-6, P-7, and P-8) are existing hazardous waste surface impoundments that were all closed under a single continuous final cover system. The closure of P-6, P-7, and P-8 was performed as required by the Consent Agreement and Final Order among the US Environmental Protection Agency (USEPA), the Department of Health Services (now known as DTSC), and CWMI, dated November 8, 1985. These surface impoundments received pesticide rinse water (P-6), ferric chloride and waste acids (P-7), and waste acids, including hydrofluoric acid (P-8). These impoundments were closed in 1993.
- **Surface Impoundments P-10 and P-11** (P-10 and P-11) are existing hazardous waste surface impoundments that were closed under a single continuous final cover system. P-10 and P-11 cover a total area of approximately 2 acres. Surface impoundment P-9 received dilute pesticide waste, spent plating solutions and caustic liquids and P-10 received dilute pesticide waste and high pH liquids, including treated effluent from the Cyanide Treatment Unit. These impoundments were closed in 1993.
- The **Combined Closure Area and Truck Wash** consists of several hazardous waste landfills, surface impoundments, and spreading areas that were all closed under a single continuous final cover system. The Combined Closure Area includes Landfill Units B-1, B-4, B-5, B-6, B-7, B-8, B-9, B-9 Expansion, B-9 Extension, B-10, and B-11; Surface Impoundments P-1, P-2, P-3, P-4, P-4.5, P-5, P-12, P-12A, P-13, and P-17; and Spreading Areas S-1, S-2, and S-3. Together these units handled all types of solid, liquid, and containerized wastes that were permitted to be managed at the facility. The full list of the specific waste types handled at each of these waste management units is provided in the March 2018 Hazardous Waste Facility Permit Renewal Application Operation Plan (Section 42, Table 42-2) This area was closed in 1997.

Post-closure activities for the facilities noted above will be carried out according to the approved Post-Closure Plan for the KHF. Post-closure includes the following activities:

- Maintaining and monitoring groundwater and soil-gas monitoring wells for compliance with groundwater and soil-gas monitoring plans
- Maintaining and monitoring the leak detection systems
- Inspection and maintenance of the soil cover or cap including reseeding to reduce erosion and repair from erosion, subsidence or settlement
- Cleaning or repair of drainage controls to mitigate erosion, silting or debris accumulation
- Maintaining adequate grades on unit surface to promote controlled runoff and avoid ponding
- Repair of slope cracking or other conditions

- Clearing vegetation at survey benchmarks and other activities to maintain benchmarks
- Surveying final closure covers and appurtenant structures on an annual basis
- Maintaining fencing and gates to ensure restricted access
- Clearing of site's perimeter firebreak as required to maintain its effectiveness.

The Permit requires a professional engineer to certify annually, in a report to DTSC, that post closure maintenance activities have been completed.

## **A.6 Site-Specific Plans**

The KHF is subject to submittal, approval, and implementation of several site-specific work plans and environmental monitoring plans. These plans are required as conditions of the KHF's permits. As part of the current permit renewal request, revisions will be made to the Closure and Post-Closure Plans and Site-Specific Water Quality and Soil-Gas Monitoring Plan. A summary of the changes to these plans is presented below.

### **Requested Changes to Specific Plans**

#### *Closure and Post-Closure Plans*

CWMI implements and reports on closure and post-closure of hazardous waste units consistent with the DTSC approved Closure and Post-Closure Plans. KHF is considered to be in partial closure because some regulated units (landfills, surface impoundments etc.) have been closed and others remain active. When the last regulated unit closes, KHF will be in final closure, at which time the 30-year minimum post-closure care period (CCR Title 22 Section 66264.117(B)) would begin. CWMI submitted an amended Closure and Post-Closure Plan, dated March 15, 2018, along with its request to renew the HWFP. The amended plan includes the following changes:

- Update Landfill B-18 Phase III and Final Cover construction and closure documents to reflect revised peak ground acceleration calculation (no physical change to final cover design or specifications)
- Preparation of Surface Impoundment P-9, Surface Impoundment P-14, Surface Impoundment P-15, and Surface Impoundment P-16 closure documents
- Site Monitoring Network changes for new Site-Specific Water Quality and Soil-Gas Monitoring Plan

#### *Site-Specific Water Quality and Soil-Gas Monitoring Plan*

CWMI implements and reports on the groundwater and soil-gas monitoring at the KHF consistent with the DTSC approved Site-Specific Groundwater and Soil-Gas Monitoring Plan. CWMI submitted an amended plan, dated March 12, 2018, for DTSC approval with the following key changes:

1. Monitoring Program changes (Detection/Evaluation Monitoring/Corrective Action)
  - a. Detection Monitoring Program for soil-gas monitoring wells
  - b. Compliance Monitoring Program for soil-gas monitoring wells
  - c. Revisions to existing Detection Monitoring Program for groundwater monitoring wells
  - d. Revisions to existing Corrective Action Monitoring Program for groundwater monitoring wells
  - e. Corrective Action Program for groundwater remedy is Monitored Natural Attenuation (MNA)
2. Monitoring Points (number of wells and well locations)
  - a. Potential installation of additional groundwater monitoring wells (install 5 groundwater monitoring wells to existing 46 active groundwater monitoring wells)
  - b. Installation of soil-gas monitoring wells (install 30 soil-gas monitoring wells to existing 8 active soil-gas monitoring wells)
3. Constituents of Concern (revise criteria for hexavalent chromium testing)
4. Concentration Limits (update based on current test method limits)
5. Monitoring Frequency (from quarterly to annual)
6. Reporting Frequency (from quarterly to annual)

## **A.7 Corrective Actions**

CWMI prepared an Engineering Feasibility Study (EFS), May 2018, to evaluate options to address groundwater

contamination at the KHF. The EFS recommended the adoption of MNA as the final remedy for all groundwater impacts. The groundwater monitoring well network for the MNA remedy is described in the amended Site-Specific Groundwater and Soil-Gas Monitoring Plan.

Pursuant to 22 CCR Section 67391.1, the selection of MNA as the groundwater remedy would require the recording of a land use covenant (LUC) that restricts future installation of groundwater wells on the site. Specifically, the LUC would require prior approval from DTSC for any drilling within the Existing Operations Area boundary. The LUC would also ensure that Post-Closure units would not be disturbed and prohibit land uses with sensitive receptors, such as schools, residences and hospitals.

Preliminary investigation at KHF has indicated that soil vapor impacts to unsaturated soil may be present. The investigation of soil vapor impact is in progress and is ongoing. The soil-gas monitoring network, which is set to be expanded through the subject permit decision, would aid in the characterization of soil vapor impacts. A separate EFS focusing on the unsaturated soils would be prepared at a future date once the characterization activities are complete. If it is determined that a remedy is required, the remedy would be the subject of a separate permit decision and CEQA evaluation at that time.

### A.8 Other Facility Permits

CWMI has obtained and is required to comply with several local, regional, state and federal permits. Table 2 lists these additional permits.

Permit	Issuing Agency	Description	Permit No.
Air Pollution	San Joaquin Valley Air Pollution Control District	Facility-Wide Requirements Emergency Generator ICE Landfill B-18 Impoundment P-9 Impoundment P-14 Impoundment P-16 Final Stabilization Unit 10,000 Gallon Gasoline Underground Tank Landfill B-19 Bioreactor Reagent "guppy" Landfill B-17	C-283-0 C-283-8 C-283-11 C-283-14 C-283-15 C-283-17 C-283-19 C-283-20 C-283-22 C-283-24 C-283-25
Waste Discharge Requirements	Central Valley Regional Water Quality Control Board	Waste Discharge Requirements Waste Discharge Requirements (Class II/III landfills)	R5-2014-0003 R5-2006-0122
TSCA Approvals <sup>1</sup>	U.S. Environmental Protection Agency	Approval to Operate Landfill B-18 (Phase I & II) Approval to Operate Ancillary Storage	Approval dated 5/19/92 Approval dated 12/3/90
Underground Storage Tank Permits	Kings County Department of Public Health	12,000 Gallon Diesel (Equipment Shop) 12,000 Gallon Diesel (Equipment Shop) 10,000 Gallon Unleaded Gasoline	020001 020002 020003
Land Use Permits and Approvals	Kings County Planning Department	Various Conditional Use Permits, Administrative Approvals, etc.	Various
Solid Waste Facility Permit	CalRecycle	Class II/III wastes in Landfill B-19	16-AA-0021
Registration Permit	CalRecycle	NNISW in Landfill B-18	16-AA-0023
Solid Waste Facility Permit	CalRecycle	Class II/III wastes in Landfill B-17	16-AA-0027
Permit to Receive Soil	United States Department of Agriculture – Animal and Plant Health Inspection Service	Permit to Receive Soil Regulated by 7 CFR 330	P330-17-00334

<sup>1</sup> CWMI has submitted a revised application to renew and modify its USEPA permit to store and landfill PCB containing wastes.

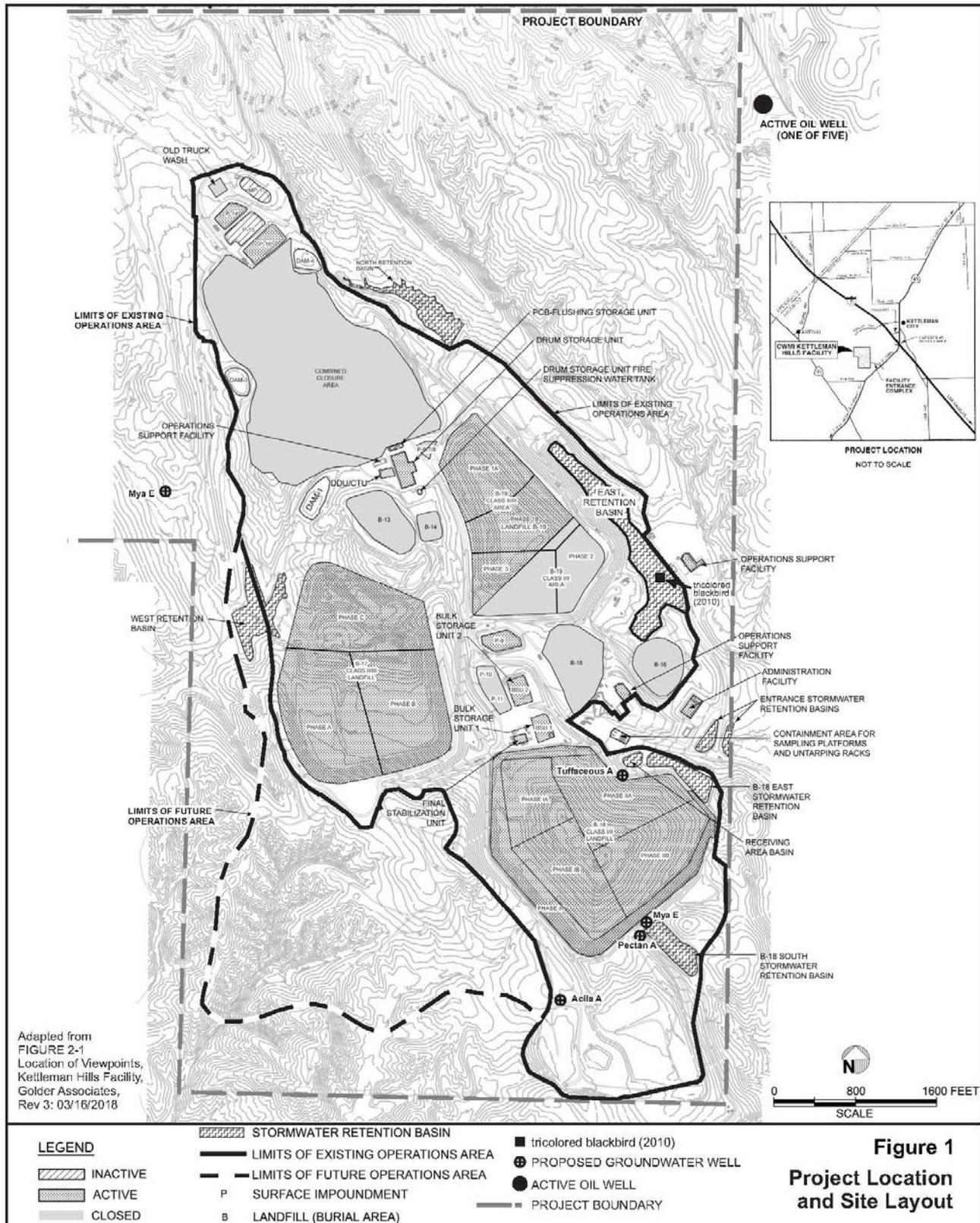


Figure 1: Project Location and Site Layout

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## B. ENVIRONMENTAL ANALYSIS AND CHECKLIST

### Explanation of Checklist Evaluation Categories

The purpose of this checklist is to evaluate the Environmental Resource categories in terms of any “changed condition” (i.e., project changes, changed circumstances, or new information of substantial importance) that may result in environmental impact significance conclusions different from those found in a previously certified Environmental Impact Report (EIR) or an adopted Initial Study/Negative Declaration, hereinafter referred to as the “prior CEQA Document”. The row titles of the checklist include the full range of environmental topics and questions, as presented in Appendix G of the State CEQA Guidelines. The column titles of the checklist have been modified from the Appendix G presentation to help answer the questions to be addressed pursuant to Public Resources Code section 21166 and State CEQA Guidelines section 15162. A “no” answer in one of the columns does not necessarily mean that there are no potential impacts relative to the environmental resource category. A “no” answer could indicate that there is no change in the condition (i.e. no change in the project, no new circumstance or no new information connected to significant impacts). A “no” answer could also indicate no change in status of the impact because it was analyzed and addressed (with mitigation measures, if any) in the prior CEQA Document. For instance, the environmental categories might be answered with a “no” in the checklist because the impacts associated with the proposed project were adequately addressed in the prior CEQA Document. In that case, the environmental impact significance conclusions of that document remain applicable. If a question was not specifically addressed in the prior CEQA Document, then the Discussion section for each category updates the information/analysis for that question and the checklist could include a “no” or “yes” as a result of that analysis. A “yes” indicates that further analysis is needed. The purpose of each column of the checklist is described below.

### Where was the Impact Analyzed?

This column provides a cross-reference to the pages of the prior CEQA Document where information and analysis may be found relative to the environmental issue listed under each topic. If the question was not specifically addressed in the previous CEQA documents, the checklist column states, “not addressed,” and the question is analyzed based on current information in the Discussion section below the checklist.

### Are Substantial Changes Proposed in the Project that Require Major Revisions Due to New Significant Effects?

Pursuant to CEQA Guidelines section 15162 (a)(1), this column indicates whether there are changes in the proposed project compared to the previously approved project that require major revisions to the prior CEQA Document due to new significant effects. Examples of such changes could be whether a new permit would result in changes in a facility’s operations, such as allowing new waste streams or new activities that would have a significant effect. Mere changes in a project do not automatically require major revisions to previous CEQA documents unless there are significant effects associated with those changes.

### Do Any Substantial Changes in Circumstances Require Major Revisions in the Environmental Document Due to New Significant Effects or Substantial Increases in Severity of Previously Identified Significant Effects?

Pursuant to Section 15162(a)(2) of the CEQA Guidelines, this column indicates whether there have been changes in the vicinity of the Project (circumstances under which the project is undertaken) that have occurred subsequent to the prior CEQA Document, which would result in approval of the proposed Project having new significant environmental impacts that were not considered in the prior environmental document or having substantial increases in the severity of previously identified significant impacts.

### Does Any New Information of Substantial Importance Show Significant Effects Not Previously Discussed or More Severe than Previously Shown Requiring Reevaluation of Mitigation Measures or Alternatives?

Pursuant to Section 15162(a)(3)(A-D) of the CEQA Guidelines, this column indicates whether new information of substantial importance which was not known and could not have been known with the exercise of reasonable diligence at the time the previous environmental documents were certified as complete (or adopted) is available, requiring an update to the analysis of the previous environmental documents to verify that the environmental conclusions and mitigation measures remain valid.

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If the new information shows that: (A) the project will have one or more significant effects not discussed in the prior environmental documents; or (B) significant effects previously examined will be substantially more severe than shown in the prior environmental documents; or (C) mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or (D) mitigation measures or alternatives which are considerably different from those analyzed in the prior environmental documents would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative, the question would be answered 'Yes' requiring the preparation of an Environmental Impact Report. However, if the additional analysis completed as part of this Environmental Checklist review finds that the conclusions of the prior CEQA Document remain the same and no new significant impacts are identified, or identified significant environmental impacts are not found to be substantially more severe, the question would be answered 'No' and no additional documentation would be required.

### **Do the Prior Environmental Document's Mitigation Measures Address/Resolve Impacts?**

This column indicates whether the prior CEQA Document provided mitigation measures to address effects in the related impact category. The prior mitigation will be identified, if any. If the prior CEQA documents did not specifically address the impact category, then this column provides updated mitigation conclusions.

### **Discussion Section and Conclusions**

A discussion of the elements of the checklist is provided under each Environmental Resource category to clarify the answers in the checklist. The discussion provides information about the particular environmental issue, how the project relates to the issue, and the status of any mitigation that may be required or that has already been implemented. When the prior CEQA Document did not specifically address a question from Appendix G of the CEQA Guidelines, the Discussion section provides that analysis based on relevant material in the previous environmental document and current information. Mitigation measures (if any) from the prior CEQA Document that have already been implemented to reduce identified impacts at the Facility or mitigation measures that would continue to apply to the proposed Project are listed under each environmental category (if applicable).

The Discussion section for each Environmental Resource Category closes with DTSC's analysis of whether the conclusions of the prior CEQA Document for that Environmental Resource Category remain the same or whether changes in the project, changed circumstances or new information indicate there are new or more severe significant impacts that should be further evaluated (along with mitigation measures and/or alternatives).

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### C. ENVIRONMENTAL ANALYSIS AND CHECKLIST

ENVIRONMENTAL RESOURCE	Where Was the Impact Analyzed in Prior Environmental Document(s)?	Are Substantial Changes Proposed in the Project that Require Major Revisions in the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Do Any Substantial Changes in Circumstances Require Major Revisions in the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Does Any New Information of Substantial Importance Show Significant Effect(s) Not Previously Discussed or More Severe than Previously Shown, or That Mitigation Measures or Alternatives Should be Reevaluated?	Do Prior Environmental Document(s) Include Mitigation to Address/Resolve Effects?
<b>1. AESTHETICS. Except as provided in Public Resources Code Section 21099, would the project:</b>					
a. <i>Have a substantial adverse effect on a scenic vista?</i>	2013 Addendum & Initial Study, Section 6, p. 45 2009 Final SEIR (Draft SEIR, Chapter 3.2)	No	No	No	No prior mitigation measures were required and no mitigation is required
b. <i>Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?</i>	2013 Addendum & Initial Study, Section 6, p. 45 2009 Final SEIR (Draft SEIR, Chapter 3.2)	No	No	No	No prior mitigation measures were required and no mitigation is required
c. <i>In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?</i>	2013 Addendum & Initial Study, Section 6, p. 45 2009 Final SEIR (Draft SEIR, Chapter 3.2)	No	No	No	No prior mitigation measures were required and no mitigation is required

<p>d. <i>Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?</i></p>	<p>2013 Addendum &amp; Initial Study, Section 6, p. 45 2009 Final SEIR (Draft SEIR, Chapter 3.2)</p>	<p>No</p>	<p>No</p>	<p>No</p>	<p>No prior mitigation measures were required and no mitigation is required</p>
<p><b>Discussion:</b> The 2009 Final SEIR concluded that (1) the project site and surrounding area do not fall within any of the “scenic lands” areas identified in the Open Space Element of the County General Plan and the only scenic route identified is a segment of SR-41 that lies approximately 8 miles southwest of the project site; (2) there is no designated scenic vista or state scenic highway within the area that would be affected by the B-18/B-20 Hazardous Waste Disposal Project so it would not have an adverse effect on a scenic vista and would not damage scenic resources within a state scenic highway; (3) based on analysis of the views from three representative offsite viewing areas, although project-related changes would be discernible, the changes would have relatively little effect on the existing character and visual quality of these views; and (4) nighttime lighting would be installed, but would be similar to the lighting that is already in use and would be phased; thus, a substantial increase in the overall level of lighting at the site would not be expected.</p> <p>New features/activities associated with the proposed renewal of the KHF permit for the Class I waste area (additional shredder, bulking of certain wastes within the covered Drum Storage Unit, and outdoor bulking and storage at the PCB flushing/storage unit) would be located completely within the KHF footprint and would conform with existing uses and visual appearance of the KHF. These proposed new facilities/activities would not be visible from public view points within Kettleman City, the portions of I-5 close to Kettleman City, or from other inhabited areas to the northeast, north, and northwest. The KHF is screened by the ridges of the Kettleman Hills. Additionally, these proposed new features/activities would primarily occur within the center of the KHF. The existing appearance of all other features on the KHF site, only visible directly adjacent to the facility, would be unaffected by the proposed permit renewal. There would be no change to the appearance of the facility entrance, and there will be no changes to existing structures such as the administration building, maintenance building, or scale area. In general, physical changes associated with the proposed permit renewal would not be visible from offsite areas used by the public.</p> <p><b>Conclusion:</b> The proposed renewal of the KHF HWFP would not result in new aesthetic impacts and would not increase the severity of a previously identified impact as analyzed in the 2009 Final SEIR or 2013 Addendum.</p> <p><b>References:</b></p> <p>CH2MHill, 2009. Final Subsequent Environmental Impact Report, B-18/B-20 Hazardous Waste Disposal Project, Kettleman Hills Facility, Chemical Waste Management, Inc. September.</p> <p>Department of Toxic Substances Control (DTSC), 2013. Addendum and Initial Study Environmental Checklist to the Final Subsequent Environmental Impact Report. Prepared for the Existing B-18 Class I/Class II Landfill Expansion Project, Kettleman Hills Facility, Chemical Waste Management, Inc. May.</p>					

<p><b>Environmental Resource</b></p>	<p><b>Where Was the Impact Analyzed in Prior Environmental Document(s)?</b></p>	<p><b>Are Substantial Changes Proposed in the Project that Require Major Revisions in</b></p>	<p><b>Do Any Substantial Changes in Circumstances Require Major Revisions in the</b></p>	<p><b>Does Any New Information of Substantial Importance Show Significant Effect(s)</b></p>	<p><b>Do Prior Environmental Document(s) Include Mitigation to</b></p>
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		the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Not Previously Discussed or More Severe than Previously Shown, or That Mitigation Measures or Alternatives Should be Reevaluated?	Address/Resolve Effects?
<p><b>2. AGRICULTURE AND FORESTRY RESOURCES.</b> In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:</p>					
a. <i>Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?</i>	2013 Addendum & Initial Study, Section 6, p. 46 2009 Final SEIR (Draft SEIR, Chapter 3.9; Land Use and Planning, p. 3.9-4, -5, -16, -17) 1985 Final EIR, Section 2.13 Public Plans and Policies	No	No	No	No prior mitigation measures were required and no mitigation is required
b. <i>Conflict with existing zoning for agricultural use, or a Williamson Act contract?</i>	2009 Final SEIR (Draft SEIR, Chapter 3.9; Land Use and Planning, p. 3.9-5, -6, -16, -17)	No	No	No	No prior mitigation measures were required and no mitigation is required
c. <i>Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?</i>	2009 Final SEIR (Draft SEIR, Chapter 3.9; Land Use and Planning, p. 3.9-4, -5, -16, -17)	No	No	No	No prior mitigation measures were required and no mitigation is required
d. <i>Result in the loss of forest land or conversion of forest</i>	2013 Addendum & Initial Study, Section 6, p. 46	No	No	No	No prior mitigation measures were required

<i>land to non-forest use?</i>					and no mitigation is required
e. <i>Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?</i>	2013 Addendum & Initial Study, Section 6, p. 46 2009 Final SEIR (Draft SEIR, Chapter 3.9; Land Use and Planning, p. 3.9-4, -5, -16, -17) 1985 Final EIR, Section 2.13 Public Plans and Policies	No	No	No	No prior mitigation measures were required and no mitigation is required

**Discussion:** Previous environmental documents included an evaluation of the project consistency with Kings County plans and ordinances and concluded that the KHF is consistent with the County General plan designation of General Agriculture and zoning of AG-40 (General Agricultural District). No forest lands were identified on the project site. The 2009 Final SEIR included a discussion of agricultural resources in Section 3.9 Land Use. As noted in this document, the County General Plan designates the project site as a “waste disposal and treatment site” and specifies that a hazardous waste facility is an allowable use within an AG-40 zoning designation with the approval of a Conditional Use Permit. This document also acknowledges that most of the farmland in the county is considered prime farmland, farmland of statewide importance, unique farmland or farmland of local importance (page 3.9-12). Previous environmental documents considered the agricultural designations of the project site and surrounding area. The 2009 Final SEIR determined that the project would not impact agricultural uses and that the hazardous waste facility was compatible with County plans and ordinances. The proposed project would include new activities within the approved footprint of the facility and would not expand into areas that have not been reviewed by existing environmental reports. The Farmland Mapping and Monitoring Program (FMMP) lists the project site as Urban and Built-up Land with grazing land surrounding the project site (FMMP, 2018). Therefore, the project would not result in new impacts to agriculture or Prime or Unique Farmland, would not increase the severity of impacts to agriculture, and would continue to be compatible with existing project site zoning (Impacts 2.a., 2.d. and 2.e.).

Impacts 2.b. and 2.c. – As noted above, the 2009 Final SEIR analyzed impacts to existing zoning and found the KHF to be compatible with the County General Plan and zoning. At one time, the project site included three parcels that were under Williamson Act contracts, but the County approved a Notice of Non-Renewal of Williamson Act contract for these parcels in 1999 and these contracts are now terminated. The proposed Project would not expand outside the approved project boundary and, therefore, would not introduce new or more severe impacts to Williamson Act contracted lands.

**Conclusion:** The proposed Project would not introduce new impacts to agriculture and forestry resources associated with the permit renewal. The proposed Project would also not increase the severity of a previously identified agriculture or forest resources impact as analyzed in previously adopted environmental documents.

**References:**

CH2MHill, 2009. Final Subsequent Environmental Impact Report, B-18/B-20 Hazardous Waste Disposal Project, Kettleman Hills Facility, Chemical Waste Management, Inc. September.

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FMMP, 2018. 2016 FMMP map data. Accessed FMMP website on April 27, 2018. <ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/2016/>

Environmental Resource	Where Was the Impact Analyzed in Prior Environmental Document(s)?	Are Substantial Changes Proposed in the Project that Require Major Revisions in the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Do Any Substantial Changes in Circumstances Require Major Revisions in the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Does Any New Information of Substantial Importance Show Significant Effect(s) Not Previously Discussed or More Severe than Previously Shown, or That Mitigation Measures or Alternatives Should be Reevaluated?	Do Prior Environmental Document(s) Include Mitigation to Address/Resolve Effects?
<b>3. AIR QUALITY.</b> Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:					
a. <i>Conflict with or obstruct implementation of the applicable air quality plan?</i>	2009 Final SEIR (Draft SEIR, Chapter 3.3)	No	No	No	No prior mitigation measures were required and no mitigation is required
b. <i>Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?</i>	2009 Final SEIR (Draft SEIR, Chapter 3.3; Revised Project Description and Analysis, p. 3-3)	No	No	No	<b>AQ-MM.1</b> <b>AQ-MM.2</b>
c. <i>Expose sensitive receptors to substantial pollutant concentrations?</i>	2009 Final SEIR, p. 3-173 to -175 (Draft SEIR, Chapter 3.3; Revised Project Description and Analysis, p. 3-4,5)	No	No	No	<b>AQ-MM.1</b> <b>AQ-MM.2</b>

<p>d. <i>Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?</i></p>	<p>2009 Final SEIR (Draft SEIR, Chapter 3.3)</p>	<p>No</p>	<p>No</p>	<p>No</p>	<p>No prior mitigation measures were required and no mitigation is required</p>
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**Discussion:** CWMI’s permit renewal request includes new and revised operations at three existing hazardous waste management units and installation of groundwater and soil- vapor wells as part of the site’s monitoring program, as discussed in the project description. These new and revised operations will not substantially affect the facility emissions, where the primary activities that require fueled equipment, including waste delivery trucks trips, would not change. The new well installation activities would create additional temporary air pollutant emissions from the well-pad clearing and well-drilling activities, and there would be a small amount of temporary construction activity/emissions associated with installation of the new shredder.

No substantial new criteria air pollutant air quality review or updates have been conducted since completion of the 2009 Final SEIR. Annual health risk assessments (HRAs) are completed by CWMI for certain on-site pollutants, however, these HRAs do not include all on-site and off-site air toxics emissions sources. Additionally, a third-party air quality assessment for Kettleman City was completed in 2010 by the California Air Resources Board (CARB) as part of a larger investigation of birth defects and community exposures in Kettleman City. Therefore, this discussion focuses on the analysis and findings conducted and documented in the 2009 Final SEIR, and evaluates CARB’s Kettleman City Air Quality Assessment in relation to KHF emissions sources.

Impact 3.a. – The 2009 Final SEIR included an analysis of air quality attainment plans (AQAP) project conformance (Impact AQ-7). The project was found to have less than significant air quality impacts and was found to be consistent with the AQAP. This conclusion was based on the finding that the facility would continue to comply with applicable APCD rules and regulations that are part of the AQAP and that the emissions from the transport and disposal of hazardous wastes at landfills in the San Joaquin Valley Air Basin (SJVAB), which factor in future population growth in California, are included in the AQAPs. The SJVAPCD has updated their air quality planning documents several times since the completion of the 2009 Final SEIR. These revisions include: updating the PM<sub>2.5</sub> attainment plans four times (2012, 2015, 2016 and 2018),; updated their ozone attainment plans twice (2013 and 2016); and provided two updates to the Reasonably Available Control Technology (RACT) demonstration for the ozone State Implementation Plan (SIP). Under the proposed permit renewal, the impacts would remain less than significant as the facility would continue to be required to comply with all applicable rules and regulations, and the permit renewal would not cause growth or other conditions not evaluated in the current AQAPs.

The 2009 Final SEIR included an air quality impact analysis with air dispersion modeling of criteria air pollutants to determine if the facility creates violations or substantially contributes to existing violations in air quality standards (part of Impact AQ-2). The modeling analysis, which was restricted to ongoing operation emissions, found that the facility’s operation activities did not cause air quality violations and did not substantially contribute to existing air quality violations, with the exception of PM<sub>10</sub>. Mitigation measures AQ-MM.1 and AQ-MM.2 (see the full mitigation measure text below) were approved in the 2009 Final SEIR to reduce both fugitive dust and tailpipe PM<sub>10</sub> emissions. The ongoing facility operations and related criteria air pollutant emissions, evaluated in the 2009 Final SEIR, would not be substantially affected by the proposed permit renewal, including the approval of the requested operation unit changes or new monitoring well installation activities. An updated criteria pollutant air dispersion analysis does not appear to be necessary. The facility PM<sub>10</sub> impacts would remain significant and mitigation measure AQ-MM.1 would continue to be applicable to reduce facility NOx and PM emissions impacts.

Impact 3.b. – The 2009 Final SEIR evaluated project impacts based on the SJVAPCD criteria pollutant thresholds of significance provided below. These thresholds were based on the SJVAPCD Guide for Assessing and Mitigating Air Quality Impacts (GAMAQI) in existence at the time the analysis was completed.

#### Ozone precursor emissions

- ROG: 10 tons/year (55 pounds per day [lbs/day])
- NO<sub>x</sub>: 10 tons/year (55 lbs/day)

#### PM<sub>10</sub> emissions

- Complying with SJVAPCD Regulation VIII reduces the potential impacts to less than significant.

#### CO emissions

- Project causes or contributes to an exceedance of state or federal ambient CO standards, which is determined by screening or modeling.

The facility emissions estimates were evaluated in the 2009 Final SEIR under Impacts AQ-1 and AQ-2. The 2009 Final SEIR found that the construction (temporary) and operation impacts (Impact AQ-1) for NO<sub>x</sub>, ROG, PM<sub>10</sub>, and PM<sub>2.5</sub> were significant. This finding noted that PM<sub>10</sub> and PM<sub>2.5</sub> were found significant, regardless of compliance with Regulation VIII, due to the non-attainment status of the SJVAB for federal and state PM<sub>10</sub> and PM<sub>2.5</sub> standards. The temporary activities evaluated in the 2009 Final SEIR were one-time activities that have been completed. The 2009 Final SEIR also included analysis of the long-term operations impacts (Impact AQ-2) and found that the long-term operations impacts for NO<sub>x</sub>, ROG, PM<sub>10</sub>, and PM<sub>2.5</sub> were significant.

SJVAPCD has updated the thresholds of significance for criteria pollutant emissions; the table below includes these updated thresholds in the units of tons per year (tpy). These updates add emissions thresholds for CO, SO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>, and add criteria for construction emissions and separate operation emissions into SJVAPCD permitted and non-permitted activities.

**Table 3. Air Quality Thresholds of Significance – Criteria Pollutants**

Pollutant/Precursor	Construction Emissions <i>Emissions (tpy)</i>	Operation Emissions	
		Permitted Equipment and Activities	Non-Permitted Equipment and Activities
		<i>Emissions (tpy)</i>	<i>Emissions (tpy)</i>
CO	100	100	100
NO <sub>x</sub>	10	10	10
ROG	10	10	10
SO <sub>x</sub>	27	27	27
PM <sub>10</sub>	15	15	15
PM <sub>2.5</sub>	15	15	15

Source: SJVAPCD, 2015a

For this permit renewal (proposed Project), there would be temporary emissions related to the installation of new groundwater and soil-gas monitoring wells. However, the emissions associated with these temporary emission sources would be much lower than the emissions sources evaluated in the 2009 Final EIR under Impact AQ-1. Given the number of proposed groundwater and soil-gas wells and the existing CARB emissions standard requirements for portable equipment, these temporary construction emissions are expected to remain well below the SJVAPCD annual construction emissions significance thresholds.

The proposed permit renewal would have a minor effect on the long-term operation emissions because no major changes to the quantity of waste or hazardous waste unit operations (from an air quality emissions perspective) are being proposed. Additionally, the long-term operations emissions would be substantially reduced over time as the on-site equipment fleet and off-road truck fleet are modernized. The emissions reductions from fleet modernization are also being hastened by the ongoing applicable air quality mitigation measure (AQ-MM.1) that reduces emissions from on-site off-road equipment replacement, and from the HWFP Special Condition 6.(A) that requires that all trucks delivering hazardous waste, after January 1, 2018, meet 2010 model year or better emissions standards.

Impact 3.c. – The 2009 Final SEIR evaluation used the SJVAPCD toxic air contaminant (TAC) thresholds of significance for Cancer Risk of 10 in a million and health effect index of 1 for chronic and acute air toxics impacts. The 2009 Final SEIR included an HRA that determined that the risks from the hazardous waste facility operations were significant at the fence line, but not at receptor locations (Impact AQ-5). The May 2008 Revised Project Description and Analysis Draft SEIR included a revised HRA, which determined that the hazardous waste facility impacts were less than significant at the fence line; however, the onsite cumulative KHF impacts were significant at the fence line and not at receptor locations. These HRAs include an assessment of the off-site impacts from the determined emissions of 38 different hazardous constituents (25 different volatile hazardous compounds and 13 different hazardous metals), where 15 are known carcinogens and 24 are known to have other chronic health impacts, which are constituents that are included in the ongoing Ambient Air Monitoring Program at the Kettleman Hills Facility.

In 2010, CARB completed the Kettleman City Air Quality Assessment (CARB, 2010). This assessment included a Regional and a Local Diesel Exhaust Exposure Assessment (Appendix D and E, respectively). These assessments estimated that the overall population-weighted annual average concentration of diesel particulate matter (DPM) in Kings County was  $0.9 \mu\text{g}/\text{m}^3$ , and that the annual average concentration of DPM in Kettleman City from local sources was  $0.09 \mu\text{g}/\text{m}^3$ . The local DPM emissions sources estimated and modeled included DPM emissions from I-5 traffic, Highway 41 traffic, the Con-way Freight cross-dock, the OnTrac cross-dock, truck refrigeration unit (TRU) overnight at the 1-5/Highway 41 interchange, and from agricultural sources. The CARB report did not relate these exposure levels to health risk values, where using current California Office of Environmental Health Hazard Assessment (OEHHA) and SJVAPCD recommended risk calculations methods the local sources exposure would equate to a cancer risk of approximately 94 in a million. The CARB report did not address the KHF facility contributions to the I-5 and Highway 41 DPM emissions.

Since the completion of 2009 Final SEIR and the 2010 CARB Kettleman City Air Quality Assessment, the OEHHA updated their air toxics risk assessment guidelines (OEHHA 2015). SJVAPCD updated their Guidance for Assessing and Mitigating Air Quality Impacts and air toxics significance thresholds to address the OEHHA guideline updates. The table below provides the updated SJVAPCD thresholds.

**Table 4 Air Quality Thresholds of Significance – Toxic Air Contaminants**

Carcinogens	Maximally Exposed Individual risk equals or exceeds 20 in one million
Non-Carcinogens	Acute: Hazard Index equals or exceeds 1 for the Maximally Exposed Individual
	Chronic: Hazard Index equals or exceeds 1 for the Maximally Exposed Individual

Source: SJVAPCD, 2015b

The latest annual screening risk assessment performed for the KHF (Wenck, 2018) identifies a maximum cancer risk of health risk of 0.03 in a million for Kettleman City residents and 0.06 for Kettleman Junction residents. This risk assessment does not appear to include the onsite DPM emissions, and would not include the off-site truck traffic DPM emissions. A conservative attribution of the off-site truck DPM emissions can be made using the analysis of hazardous waste truck trips as a percentage of local truck trips completed in 2012 (CH2M Hill, 2012). This truck-trip analysis found that maximum KHF attribution of I-5 truck trips (5+ axle trucks) was 5.3 percent and maximum attribution of Highway 41 truck trips from Quail Avenue to I-5 was 2.6 percent. Using this to establish a very conservative average attribution of 5 percent of the total DPM concentrations from the CARB report would result in a total DPM cancer risk of approximately 4.7 in a million (94 in a million x 5 percent). The off-road equipment DPM cancer risk impacts, when evaluated over a 70-year exposure period, due to their greater distance to receptors and much lower numbers, would be expected to be substantially lower than the haul truck risk, meaning that the total cancer risk from all HWFP permitted source types would be expected to be well under 10 in a million, well below the current SJVAPCD significance threshold of 20 in a million for a 70-year exposure. A similar analysis of the KHF attributable non-cancer risks finds they are also well below the SJVAPCD significance thresholds.

As noted above, the KHF off-road equipment and on-road haul truck emissions, including the DPM emissions have been and would continue to be reduced over time due to fleet turnover and the emissions reductions caused by **AQ-MM.1** and HWFP Special Permit Condition 6.(A). Therefore, considering that the primary source of the KHF cancer health risk would be reduced substantially over time, and the proposed project would temporarily increase TAC emissions by a very limited amount, the permit renewal would not result in new significant air toxic health risks.

Impact 3.d. – The 2009 Final SEIR determined that the facility had less-than-significant odor impacts (Impact AQ-4). This finding was primarily due to the distance from the site to residences, but was also based on the types of waste accepted at the hazardous waste landfill, practices used to reduce odors, and the ongoing odor complaint response program. In addition, cumulative odor impacts were found to be less than significant, including from onsite sources such as the B-17 Class III landfill. The proposed Project (permit renewal) would not add or increase the severity of potential odor impacts identified in 2009 Final SEIR.

The 2009 Final SEIR also addressed impacts related to:

Local mobile source carbon monoxide impacts (SEIR Impact AQ-3) – Local carbon monoxide impacts from facility transportation were determined to have less than significant impacts based on the project not increasing traffic or affecting the level of service (LOS) at intersections within one-quarter mile of residences; and that CO “Hot Spots” intersection modeling analysis was not required.

Naturally occurring asbestos (SEIR Impact AQ-6) – The 2009 Final SEIR noted that the facility was not located in an area with naturally occurring asbestos, so impacts were determined to be less than significant.

#### **2009 Final SEIR Mitigation Measures:**

**AQ-MM.1**

For the proposed Project, the Project proponent shall implement the following:

- All landfill operational equipment purchased shall meet applicable model year emission standards, and the emission standards shall be at least equivalent to the emission standards for the equipment being replaced. This measure does not apply to contractor provided construction equipment.
- Onsite vehicles and equipment shall be properly maintained.
- Fugitive dust emissions from the B-18 Landfill expansion and the B-20 Landfill shall be controlled to meet the requirements of SJVUAPCD Regulation VIII, as applicable, to include, but not be limited to, the following:
  - Watering active construction/disposal areas
  - Watering active unpaved roads
  - Watering of daily cover stockpiles and the unpaved roads used to access the daily cover stockpiles
  - Track-out controls would be installed at the transition of dirt roads to paved roads that provide access to B-18 and B-20 landfills.
  - Vehicles and equipment shall be restricted to specific onsite roads.
  - Vehicle speed on onsite roads to/from the landfill shall be limited to 15 miles per hour on paved and unpaved roads.

**AQ-MM.2**

For the purchase of primary heavy duty, diesel powered landfill equipment (dozer) at the B-18 Landfill expansion and the B-20 Landfill, if equipment meeting Tier 4 emission standards for off-highway, heavy duty diesel equipment is commercially available prior to 2014, CWMI shall purchase such equipment. Alternatively, rather than purchase new equipment, CWMI may: retrofit its existing primary heavy duty, diesel powered landfill equipment (dozer) at the B-18 Landfill, implement the use of low emission diesel products, alternative fuels, advanced exhaust gas after-treatment products and/or implement other options, or combinations thereof, as they become available to achieve early compliance. In the event equipment meeting Tier 4 emission standards for off-highway, heavy duty diesel equipment or a retrofit kit are not commercially available prior to 2014, CWMI shall purchase such equipment or retrofit kit once they become commercially available in California (Draft SEIR, pp. 3.3-16 to 3.3-18; Final SEIR, p. 2-8).

Mitigation measure **AQ-MM.2** was a temporary mitigation measure, effective through 2014, that allowed a certain flexibility from the rigid standards of the mitigation measure AQ-MM.1 new equipment requirements. This measure is no longer applicable.

Conclusion: The proposed Project (permit renewal) would not create new significant air quality impacts and would not substantially add to or increase the severity of previously-identified significant air quality impacts as analyzed in the 2009 Final SEIR.

References:

CARB (California Air Resources Board). 2010. Report to the Office of Environmental Health Hazard Assessment, Kettleman City Air Quality Assessment. December. [online]: <http://kettlemanhillslandfill.wm.com/pdfs/Trucks-->

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CH2MHill, 2012. Revised Analysis: Hazardous Waste Truck Trips as Percentage of Total Truck Trips on I-5 at State Route 41 and on State Route 41 from Quail Avenue to I-5. March 1, 2012.

\_\_\_\_\_, 2009. Final Subsequent Environmental Impact Report, B-18/B-20 Hazardous Waste Disposal Project, Kettleman Hills Facility, Chemical Waste Management, Inc., September.

OEHHA (Office of Environmental Health Hazard Assessment). 2015. Air Toxics Hot Spots Program Risk Assessment Guidelines. [online]: <https://oehha.ca.gov/air/cmr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0>. Accessed April 18, 2018.

SJVAPCD (San Joaquin Valley Air Pollution Control District). 2015a. Air Quality Thresholds of Significance – Criteria Pollutants. March 19, 2015. [online]: <http://www.valleyair.org/transportation/0714-GAMAQI-Criteria-Pollutant-Thresholds-of-Significance.pdf>. Accessed March 29, 2018.

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Wenck. 2018. Annual Screening Level Health Risk Assessment October 2016-September 2017. March 2018.

Environmental Resource	Where Was the Impact Analyzed in Prior Environmental Document(s)?	Are Substantial Changes Proposed in the Project that Require Major Revisions in the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Do Any Substantial Changes in Circumstances Require Major Revisions in the Environmental (s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Does Any New Information of Substantial Importance Show Significant Effect(s) Not Previously Discussed or More Severe than Previously Shown, or That Mitigation Measures or Alternatives Should be Reevaluated?	Do Prior Environmental Document(s) Include Mitigation to Address/Resolve Effects?
<b>4. BIOLOGICAL RESOURCES. Would the project:</b>					
a. <i>Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?</i>	2009 Final EIR (Draft SEIR, Chapter 3.4; Revised Project Description and Analysis, p. 3-6)	No	No	No	<b>BR-MM.1</b> <b>BR-MM.2</b> <b>BR-MM.3</b> <b>BR-MM.4</b> <b>BR-MM.5</b> <b>BR-MM.6</b> <b>BR-MM.7</b> <b>BR-MM.8</b> <b>BR-MM.9</b> <b>BR-MM.10</b> <b>BR-MM.11</b> <b>BR-MM.12</b>
b. <i>Have a substantial adverse</i>	2009 Final EIR (Initial	No	No	No	No prior mitigation

<p><i>effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?</i></p>	<p>Study - Appendix A in Draft SEIR); Draft SEIR, Chapter 3.4</p>				<p>measures were required and no mitigation is required</p>
<p>c. <i>Have a substantial adverse effect on state or federally protected (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?</i></p>	<p>2009 Final EIR (Initial Study - Appendix A in Draft SEIR); Draft SEIR, Chapter 3.4</p>	<p>No</p>	<p>No</p>	<p>No</p>	<p>No prior mitigation measures were required and no mitigation is required</p>
<p>d. <i>Interfere substantially with the movement of any native resident or migratory fish and wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?</i></p>	<p>2009 Final EIR (Initial Study Appendix A in Draft SEIR)</p>	<p>No</p>	<p>No</p>	<p>No</p>	<p>No prior mitigation measures were required and no mitigation is required</p>
<p>e. <i>Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?</i></p>	<p>2009 Final EIR (Initial Study - Appendix A in Draft SEIR); Draft SEIR, Chapter 3.4</p>	<p>No</p>	<p>No</p>	<p>No</p>	<p>No prior mitigation measures were required and no mitigation is required</p>
<p>f. <i>Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?</i></p>	<p>2009 Final EIR (Initial Study - Appendix A in Draft SEIR); Draft SEIR, Chapter 3.4</p>	<p>No</p>	<p>No</p>	<p>No</p>	<p>No prior mitigation measures were required and no mitigation is required</p>

**Discussion:** The 2009 Final EIR examined the biological resources impacts of the B-18/B-20 Hazardous Waste Landfill Project and determined that the development of the B-18/B-20 Hazardous Waste Landfill Project would have less-than-significant impacts on biological resources. Specifically, it concluded that (1) based on botanical surveys of the Project areas in 2002 and 2004, and updated in 2012, the potential adverse effects to listed plant species was found to be less than significant; (2) the project could result in potential significant direct and indirect effects to the San Joaquin kit fox, which would be a less than significant impact with mitigation measures; (3) the project may degrade suitable blunt-nosed leopard lizard habitat, which would be a less-than-significant impact with mitigation measures; (4) the project could disturb loggerhead shrike nesting/breeding habitat, which would be a less-than-significant impact with mitigation measures; (5) the project would result in the potential for direct and indirect effects to the badger from general human activities at KHF associated with the periodic construction and long-term operation of the B-18 and B-20 landfills, which would be a less-than-significant impact with mitigation measures; and (6) the project would result in a cumulatively considerable contribution to impacts to biological resources that would be reduced to a less-than-significant level with mitigation measures. The Initial Study, Appendix A of the Draft SEIR, concluded the project would not result in impacts to riparian habitat, wetlands, wildlife movement or migration, local policies or ordinances protecting biological resources, or a Habitat Conservation Plan or other adopted conservation plans.



**Figure 2: East Retention Basin (May 22, 2018)**

New information has become available since publication of the previous CEQA documents. Based on a field study conducted in March 2010, the tricolored blackbird (*Agelaius tricolor*) was recorded nesting along the western border of the east retention basin within the project site (California Natural Diversity Database (CNDDDB), 2018). This species was designated a threatened species under the California Endangered Species Act on August 23, 2018. It was not addressed in previous CEQA documents. As noted in the CNDDDB, the tricolored blackbird requires open water and protected nesting areas as well as foraging areas with insect prey nearby. At the time the tricolored blackbird was recorded, the survey identified a large number of grasshoppers in the on-site grasslands near the nesting colony (Spring 2010). The basin does not currently (May 2018) contain water.

The proposed permit renewal would not involve construction near the east retention basin. The only activity that involves some ground disturbance would be the installation of the groundwater monitoring wells. The nearest proposed well to the east retention basin would be installed approximately .3 miles away (~1,666 feet) (see Tuffaceous A on Figure 1). Although the well installation would create noise and ground disturbance, the well installation would not result in new or more severe impacts from those impacts identified in previously certified environmental documents because of the distance between the proposed well and the retention basin and the east retention basin is within an active portion of the KHF with existing and continuous operations. In addition, mitigation measures such as BR-MM.1 require protection of sensitive biological resources and facility permits require monitoring and reporting to the US Fish and Wildlife Service and the CA Department of Fish and Wildlife.

One of the groundwater wells is proposed outside of the fence line of the operations area, but within the KHF property. Figure 1 shows the location of this well (Mya E) on the eastern portion of the KHF property. Previous environmental documents have identified and mitigated for potential sensitive biological resources on the KHF property. In addition, previous mitigation measures, such as BR-MM.1 and BR-MM.4, require protection of sensitive biological resources and preconstruction surveys prior to disturbance and reporting of these surveys to the US Fish and Wildlife Service and CA Department of Fish and Wildlife. All of the mitigation measures (BR-MM.1 to BR-MM.12) would protect for potential

sensitive species encountered outside of the fence line of operations area. Therefore, the permit renewal would not result in new or more severe impacts from the impacts identified in previously-certified environmental documents.

The 2010 record of tricolored blackbird on site, and its status as a threatened species under the California Endangered Species Act, is new information that was not considered in the 2009 Final SEIR and the 2013 Addendum. While this is new information, the proposed permit renewal would continue existing operations and is not anticipated to impact tricolored blackbirds on the project site. In addition, CWMI must continue to implement mitigation measures for monitoring and submit an annual report to the US Fish and Wildlife Service and CA Department of Fish and Wildlife regarding biological resources on the project site. All other biological resources impacts would also be consistent with the previously prepared CEQA documentation.

### **2009 Final SEIR Mitigation Measures:**

#### **BR-MM.1:**

- To minimize wildlife disturbance, lighting at the landfill working faces shall be downcast and shielded to minimize reflection, and shall be directed inward toward the landfill. Night lighting used on the landfills shall be of a low-intensity, low-glare design.
- No firearms shall be allowed on the Project site, except in the possession of authorized personnel (e.g., sheriff, county agricultural commissioner, and other law enforcement personnel).
- Upon completion of the Project, areas subject to temporary ground disturbance, including storage and staging areas, temporary roads, pipeline corridors, etc., shall be recontoured and revegetated, if necessary, to promote restoration of the area to pre-Project conditions. An area subject to "temporary" disturbance means any area that is disturbed during the Project, but would not be subject to further disturbance after Project completion and has the potential to be revegetated. Appropriate methods and plant species used to revegetate such areas shall be determined in consultation with the USFWS and CDFG.
- Employees and construction supervising personnel shall be required to attend a Listed Species Education Program. These personnel shall participate in the program prior to initiation of construction activity, and new employees shall receive the training prior to working on the active site. At a minimum, the program shall cover the general behavior and ecology of the pertinent listed species, legal protection, penalties for state and federal law violations, and protective measures. Construction supervisors shall train their respective personnel in this program. A fact sheet conveying this information shall be made available to onsite personnel, construction workers, and anyone else who may enter the disposal site.
- Permanent and temporary construction disturbances and other types of project-related disturbance to habitat lands shall be minimized to the extent feasible. To minimize temporary disturbances, Project-related vehicle traffic shall be restricted to established roads, construction areas, and other designated onsite roads. These areas shall also be included in pre-construction surveys and, to the extent practicable, shall be established in locations disturbed by previous activities to prevent further impacts.
- CWMI employees and construction workers shall be instructed to dispose of food-related trash in closed containers or remove the trash from the Project area.

- Vehicles in active site areas shall observe a 15-mph speed limit except on County roads and state and federal highways; this is particularly important at night when San Joaquin kit foxes are most active. To the extent practicable, nighttime construction shall be minimized.
- To prevent harassment or mortality of San Joaquin kit fox, or destruction of dens by dogs or cats, no pets shall be permitted on the active areas of KHF. Pets or guide dogs brought to the administrative areas of the site shall be restrained on a leash or otherwise confined.

**BR-MM.2:**

Prior to the commencement of construction activities for the expansion of the B-18 Landfill outside of the existing 474-acre operational area, the Project Proponent shall dedicate in perpetuity land that the USFWS and CDFG agree is of similar type and habitat value as that affected by the Project, to a non-profit conservation or federal, state or local government conservation management entity, or purchase habitat credits in an approved offsite land mitigation bank, or a combination of dedication and purchase of habitat credit to compensate for the direct and indirect effects of the Project to suitable habitat for the rare, threatened and endangered wildlife species, including the San Joaquin kit fox. The land may be dedicated in fee or as part of a perpetual conservation easement. The amount of land dedicated or habitat credit purchased will be at a ratio of 3:1 (3 acres of dedicated land for each 1 acre of habitat loss) for permanent disturbance and 1.1:1 for area subject to temporary disturbance, or at a compensation ratio agreed upon by the USFWS and CDFG.

As part of the TSCA permitting process, the US EPA will consult with the USFWS regarding impacts to the San Joaquin kit fox, as required under Section 7 of the federal Endangered Species Act, and will obtain, prior to issuing the TSCA permit, a biological opinion with an incidental take permit. The Project Proponent shall comply with such terms and conditions outlined in the biological opinion and shall provide the County with proof that the conditions have been satisfied.

**BR-MM.3:**

The Project proponent shall appoint a representative who will be the onsite contact person for any landfill employee or contractor who might inadvertently kill or injure a San Joaquin kit fox, or who finds a dead, injured, or entrapped animal. The representative will be identified during the education program for employees and construction supervising personnel. The representative's name and telephone number shall be provided to the USFWS and CDFG.

**BR-MM.4:**

Any planned Project disturbance in areas outside the existing 474-acre operational area shall be subject to a pre-construction survey. The survey, conducted by a Qualified Biologist, shall occur no more than 30 days prior to the beginning of ground disturbance and/or construction activities. A record of such construction or disturbance events, and the results of the pre-construction surveys, shall be submitted to the USFWS, CDFG, and Kings County annually, or at other frequency approved by the two wildlife agencies. Methods employed during these surveys shall follow the USFWS and CDFG approved techniques:

- Surveys shall evaluate use by kit fox and, if possible, assess potential impacts to the kit fox by the proposed activity. The status of active/inactive dens shall be determined and recorded.

For the purpose of these mitigation measures, a “Trained Biologist” is a person who is either a direct employee of the project proponent or a person retained by the project proponent who is very familiar with the wildlife in the area and who has been trained by a Qualified Biologist. CWMI shall submit the names, credentials and contact information of the Qualified Biologist that will conduct preconstruction protocol surveys and/or construction monitoring to the USFWS and CDFG. A Trained Biologist may conduct future routine surveys, monitoring and reporting consistent with the final biological analysis completed for the Project under Section 7.

**BR-MM.5:**

Limited destruction of unoccupied San Joaquin kit fox dens and potential kit fox dens may be allowed if avoidance is infeasible provided the following procedures are observed:

- A Trained Biologist shall monitor the den for a minimum of three (3) days prior to disturbance to determine if the den is actually being used by kit fox. After the first three (3) days of monitoring, the den shall be partially filled a minimum of three (3) additional days to allow the animal to move to another den during its normal activities.
- After the den is determined to be unoccupied (i.e., no kit fox are inside), it can be destroyed by careful excavation. The den shall be fully excavated, filled with dirt, and compacted to ensure that San Joaquin kit fox cannot use the den during the construction period. USFWS and CDFG encourage hand excavation, but realize that soil conditions may necessitate the use of excavating equipment. Excavation and compaction efforts shall be conducted or overseen by a Trained Biologist.
- If, at any point, a kit fox is thought to be using the den, the plugging or excavation activity shall stop and USFWS and CDFG shall be contacted immediately.
- Natal or pupping dens that are occupied shall not be destroyed until the pups and adults have vacated, and then only after consultation with the USFWS and CDFG. Therefore, Project activities at some den sites shall be postponed if the dens are occupied.
- If excavation of a den thought to be active (but not a natal or pupping den) is unavoidable, the Qualified Biologist shall notify USFWS and CDFG in writing, before plugging or excavation activities may begin, of the intent to destroy subject dens and of the reasons why alternative courses of action are not possible. If given permission by these agencies, excavation plans may proceed as outlined below under the direction and supervision of the Qualified Biologist. If the animal does not change dens, excavation of the den may have to occur when it is temporarily vacant (e.g., at night). Plugging and excavation activities shall be avoided to the extent feasible during the breeding season (January 15 through June 1), when most active dens are being used as reproductive or pupping dens.
  - The den shall be monitored for at least five (5) consecutive days in addition to the three (3) initial observation times. This time period will allow any resident animal to move to another den during its normal activity. This monitoring shall be conducted by a Trained Biologist.
  - Use of the den can be discouraged during this five-day period by partially plugging its entrance(s) with soil in such a manner that any resident animal can escape easily. This monitoring and plugging shall be conducted by a Trained Biologist.
  - When signs of activity at the den cease and the USFWS and CDFG (or a Qualified Biologist) deem it safe to do so, the den can be dug out by hand tools to a point where it is certain no kit fox is using the den. The den shall be fully excavated and then filled with dirt and compacted to ensure that the kit fox cannot reenter the den during the construction period. USFWS and CDFG encourage hand excavation, but realize that soil conditions may necessitate the use of excavating equipment. This den destruction shall be conducted or overseen by a Trained Biologist. CWMI shall submit the names, credentials and contact information of the Qualified

Biologist that will conduct preconstruction protocol surveys and/or construction monitoring to the USFWS and CDFG. A Trained Biologist may conduct future routine surveys, monitoring and reporting consistent with the final biological analysis completed for the Project under Section 7.

- A Trained Biologist shall document and report den monitoring and plugging activities in writing to USFWS, CDFG, and Kings County annually, or at other frequency approved by the two wildlife agencies.
- If a take authorization/permit has been obtained from the USFWS and CDFG, active den destruction may proceed consistent with the terms of the incidental take permit. If no take authorization/permit has been issued, then potential dens shall be monitored in accordance with the procedures included this mitigation measure.

**BR-MM.6:**

To prevent inadvertent entrapment of San Joaquin kit foxes during the construction phase of the Project, excavated, steep-walled holes or trenches more than two (2) feet deep that are located outside of the chain-link fence shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they shall be thoroughly inspected for trapped animals. In the case of trapped animals, escape ramps or structures shall be installed immediately to allow the animals to escape, or the USFWS and/or CDFG shall be contacted for advice. If at any time a trapped or injured San Joaquin kit fox is discovered, the procedures for notifying the proper authorities set forth below in BR-MM.7 shall be followed.

**BR-MM.7:**

Any Project personnel who inadvertently kills or injures a San Joaquin kit fox or blunt-nosed leopard lizard or other protected wildlife, or who discovers a dead or injured San Joaquin kit fox or blunt-nosed leopard lizard or other protected wildlife, shall immediately report the incident to their representative or designee. This representative or designee shall contact the State Dispatch at (916) 445-0045 for immediate assistance in the case of a dead, injured, or entrapped San Joaquin kit fox or blunt-nosed leopard lizard. The Sacramento office of the USFWS and CDFG must be notified in writing within three (3) working days of the accidental death or injury to a San Joaquin kit fox or blunt-nosed leopard lizard during Project-related activities. Notification shall include the date, time, and location of the incident or the finding of a dead or injured animal, and any other pertinent information. The USFWS Sacramento office contact is the Chief of the Division of Endangered Species, Susan Jones, or her successor, at 2800 Cottage Way, Room W2605, Sacramento, California 95825, (916) 414-6630. The CDFG contact for the written notification is Mr. Ron Schlorff, or his successor, at 1416 9th Street, Sacramento, California 95814, (916) 654-4262.

**BR-MM.8:**

Construction pipes, culverts, or similar structures with a diameter of four (4) inches or greater that are stored at a construction site at less than two feet aboveground, and that are located outside of the chain-link fence for one or more overnight periods, shall be thoroughly inspected for San Joaquin kit fox before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a San Joaquin kit fox is discovered inside a pipe, that section of pipe shall not be moved until the USFWS or CDFG has been consulted, or the animal has fled. If necessary, and under the direct supervision of a Qualified Biologist, the pipe may be moved once to remove it from the path of construction activity, where it shall remain until the fox has escaped. CWMI shall submit the names, credentials and contact information of the Qualified Biologist that will conduct preconstruction protocol surveys and/or construction monitoring to the USFWS and CDFG. A Trained Biologist may conduct future routine

surveys, monitoring and reporting consistent with the final biological analysis completed for the Project under Section 7.

**BR-MM.9:**

Use of rodenticides and herbicides in Project areas shall be restricted to those included on a list of acceptable rodenticides and herbicides provided by the USFWS. Use of such compounds shall observe label and other restrictions mandated by the United States Environmental Protection Agency (EPA), California Department of Food and Agriculture (CDFA), and other state and federal legislation, as well as additional Project-related restrictions deemed necessary by USFWS or CDFG. If rodent control must be conducted, zinc phosphide, or other rodenticide approved by the USFWS and CDFG at that time, may be used because of proven lower risk to San Joaquin kit fox (USFWS, 1999).

**BR-MM.10:**

Flashing 24-inches in height, with at least 18-inches aboveground and 3-inches belowground, shall be installed around the area of the B-20 Landfill to deter blunt-nosed leopard lizards from entering that part of the Project area in future years. This flashing shall be inspected annually to ensure its integrity remains in place.

**BR-MM.11:**

If blunt-nosed leopard lizards are observed at the work site during construction, construction shall cease within a 100-foot radius and the USFWS and CDFG shall be consulted to ensure no take will occur. After the USFWS and CDFG determine that no take will occur, construction will be allowed to resume in that area.

**BR-MM.12:**

To minimize potential nesting/breeding disturbance to the loggerhead shrike during construction, dense stands of saltbush or other shrubs shall be removed prior to the nesting/breeding season (February 1 through September 1). This removal process shall include areas in and within 50 feet of the construction zone.

Conclusion: The proposed project (permit renewal) would not create new significant biological resources impacts and would not substantially add to or increase the severity of previously-identified biological resources impacts as analyzed in the 2009 Final SEIR.

References:

CDFW (California Department of Fish and Wildlife), 2015. Staff Guidance Regarding Avoidance of Impacts to Tricolored Blackbird Breeding Colonies on Agricultural Fields in 2015. March 19.

CH2MHill, 2009. Final Subsequent Environmental Impact Report, B-18/B-20 Hazardous Waste Disposal Project, Kettleman Hills Facility, Chemical Waste Management, Inc. September.

CWMI, 2018. Chemical Waste Management Inc. -Kettleman Hills Facility 2017 Endangered Species Annual Report. May 10.

CNDDDB (California Natural Diversity Database). 2018. RareFind 5 [Internet]. California Department of Fish and Wildlife. Commercial Version - April 1, 2018 - Biogeographic Data Branch.

Environmental Resource	Where Was the Impact Analyzed in Prior Environmental Document(s)?	Are Substantial Changes Proposed in the Project that Require Major Revisions in the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Do Any Substantial Changes in Circumstances Require Major Revisions in the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Does Any New Information of Substantial Importance Show Significant Effect(s) Not Previously Discussed or More Severe than Previously Shown, or That Mitigation Measures or Alternatives Should be Reevaluated?	Do Prior Environmental Document(s) Include Mitigation to Address/Resolve Effects?
<b>5. CULTURAL RESOURCES. Would the project:</b>					
a. <i>Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?</i>	2009 Final SEIR (Draft SEIR, Chapter 3.5)	No	No	No	No prior mitigation measures were required and no mitigation is required
b. <i>Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?</i>	2009 Final SEIR (Draft SEIR, Chapter 3.5; Revised Project Description and Analysis, p. 3-7)  1985 Final EIR, Section 2.9 Cultural Resources	No	No	No	<b>CR-MM.1</b> <b>CR-MM.2</b>
c. <i>Disturb any human remains, including those interred outside the formal cemeteries?</i>	2009 Final SEIR (Draft SEIR, Chapter 3.5; Revised Project Description and Analysis, p. 3-7)  1985 Final EIR, Section 2.9 Cultural Resources	No	No	No	<b>CR-MM.2</b>

**Discussion:** Previous environmental documents evaluated the potential for cultural and paleontological resources on the KHF site. Section 2.9 of the 1985 EIR evaluated cultural and paleontological resources. An archeological and paleontological resources survey conducted in 1988 determined that invertebrates and occasional vertebrate rodent and plant fossils found on site were not unique or of regional significance (DTSC, 2003). Based on studies conducted in 2002 and 2004 (TRC 2004), the project site was found to be absent of potentially significant historical

resources, archaeological resources, or burials. However, because there was the potential for unidentified archaeological resources to be discovered below the ground surface, two archaeological resource mitigation measures CR-MM.1 and CR-MM.2 were identified.

The 2009 Final SEIR determined that potential impacts to cultural of the B-18/B-20 Hazardous Waste Landfill Project would be less than significant with the implementation of mitigation measures (see below).

The proposed permit renewal includes new activities with limited construction. All activities would occur entirely within the existing KHF property and only the installation of the monitoring wells would result in limited ground disturbance during installation. One of the groundwater monitoring wells is proposed outside the fenced operations area, but would still be located within the KHF property (see Figure 1). Given the prior findings for archeology for the project site, the permit renewal would have similar findings as those noted in prior environmental studies of the project site. However, the mitigation measures noted below would need to continue to be implemented to reduce the potential for impacts.

**CR-MM.1:**

If unique archaeological resources are encountered during Project construction activities, earth-moving activity in the immediate area shall cease until a qualified archaeologist is contacted, and the archaeologist has examined the findings, determined their significance, and recommended appropriate measures per CEQA Guidelines Section 15064.5. The archaeologist shall prepare a final written report of his or her investigation, findings and recommendations and shall submit the final report to the County within 30 calendar days after the investigation is completed.

**CR-MM.2:**

If human remains or bone of unknown origin are found during the conduct of the proposed Project, work in the vicinity shall stop, and the County Coroner shall be contacted, per California Health and Safety Code (HSC), Section 7050.5, and CEQA Guideline Section 15064.5. If the remains were determined to be Native American, the Coroner shall notify the Native American Heritage Commission, which would notify the person considered the most likely descendant. KHF personnel will then work with the most likely descendant to arrange for the remains to be reinterred. Work near the find shall resume after the human remains have been removed.

Conclusion: The installation of monitoring wells and other permit renewal activities are not anticipated to result in new or more severe cultural and paleontological impacts from those analyzed and addressed in previous environmental documents.

References:

- Archaeological Consulting, 1984. Preliminary Archaeological Reconnaissance and Paleontological Overview of a Parcel in the Kettleman Hills, Kings County, California. Prepared for CH2M HILL.
- CH2MHill, 2009. Final Subsequent Environmental Impact Report, B-18/B-20 Hazardous Waste Disposal Project, Kettleman Hills Facility, Chemical Waste Management, Inc. September.
- \_\_\_\_\_, 1985. Final Environmental Impact Report. Chemical Waste Management, Inc. Kettleman Hills Hazardous Waste Treatment, Storage, and Disposal Facility. October.
- DTSC, 2003. Statement of Findings. Hazardous Waste Storage and Disposal Permit Renewal and Use of Previous Environmental Impact Reports. June.
- TRC, 2004. Supplemental Cultural Resource Survey, Proposed Expansion Kettleman Hills Facility – Chemical Waste Management, Inc., Kings

County, California. Prepared for Chemical Waste Management, Inc.

Environmental Resource	Where Was the Impact Analyzed in Prior Environmental Document(s)?	Are Substantial Changes Proposed in the Project that Require Major Revisions in the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Do Any Substantial Changes in Circumstances Require Major Revisions in the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Does Any New Information of Substantial Importance Show Significant Effect(s) Not Previously Discussed or More Severe than Previously Shown, or That Mitigation Measures or Alternatives Should be Reevaluated?	Do Prior Environmental Document(s) Include Mitigation to Address/Resolve Effects?
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**6. ENERGY. Would the project:**

a. <i>Result in potentially significant impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?</i>	2009 Final SEIR (Draft SEIR, Chapter 1.7.3.3)	No	No	No	No prior mitigation measures were required and no mitigation is required
b. <i>Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?</i>	2009 Final SEIR (Draft SEIR, Chapter 1.7.3.3)	No	No	No	No prior mitigation measures were required and no mitigation is required

**Discussion:**

Effective December 28, 2018, the CEQA Guidelines (California Code of Regulations (CCR) Sections 15000 – 15387) and the initial study checklist (Appendix G) were amended to include Energy as a new resource category. Current energy usage includes the office and laboratory, FSU and emissions control equipment, and landfill equipment. Section 1.7.3.3 of the 2009 Final EIR (March 2008 Draft SEIR), discussed energy use of landfill equipment and waste transportation and found no significant effects.

a) The proposed permit renewal includes the addition of a shredder as part of the hazardous waste treatment process in the FSU. This would be an optional step to improve the quality of the treatment for some waste streams by homogenization and size reduction. The shredder will be an electric-powered stationary unit. A mobile diesel option was considered but the electric option was chosen because of diesel emissions concerns. The electric shredder has lower power consumption rating than the diesel shredder by 150hp, or 112 kW-hr per hour runtime. The power will be provided through the existing power supply at the FSU. Operation of the shredder may extend the overall treatment time, and require baghouse operation. The shredder is a rotary shear style, which is an efficient and effective choice for the purpose.

b) The California Energy Commission publishes maps on its website for renewable energy sources (i.e. geothermal, solar, and wind). These maps show that the Kettleman Hills Facility is not located in an area where renewable energy sources are optimally produced. The County of Kings 2035 General Plan Appendix F, Objective G1.2, states a goal to “promote the development of sustainable and renewable alternative energy sources, including wind, solar, hydroelectric and biomass energy.” The General Plan does not identify potential locations of renewable energy sources at the KHF area.

**Conclusion:**

The proposed activities in the permit renewal would not result in wasteful or inefficient energy consumption, and would not obstruct the implementation of a renewable energy policy, or increase the severity of a previously identified impact potential as analyzed in the 2009 Final SEIR and 2013 Addendum.

**References:**

CH2MHill, 2009. Final Subsequent Environmental Impact Report, B-18/B-20 Hazardous Waste Disposal Project, Kettleman Hills Facility, Chemical Waste Management, Inc. September.  
 DTSC, 2013. Addendum and Initial Study Environmental Checklist to the Final Subsequent Environmental Impact Report. Prepared for the Existing B-18 Class I/Class II Landfill Expansion Project, Kettleman Hills Facility, Chemical Waste Management, Inc. May.  
 Kings County Board of Supervisor, 2010. County of Kings 2035 General Plan. January.  
<https://www.countyofkings.com/home/showdocument?id=3134>.

Environmental Resource	Where Was the Impact Analyzed in Prior Environmental Document(s)?	Are Substantial Changes Proposed in the Project that Require Major Revisions in the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Do Any Substantial Changes in Circumstances Require Major Revisions in the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Does Any New Information of Substantial Importance Show Significant Effect(s) Not Previously Discussed or More Severe than Previously Shown, or That Mitigation Measures or Alternatives Should be Reevaluated?	Do Prior Environmental Document(s) Include Mitigation to Address/Resolve Effects?
<b>7. GEOLOGY AND SOILS. Would the project:</b>					
a. <i>Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Rupture of a known</i>	2009 Final SEIR (Draft SEIR, Chapter 3.6) 1985 Final EIR, Section 2.3 Geology and Soils	No	No	No	No prior mitigation measures were required and no mitigation is required

<p><i>earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.</i></p> <p><i>i. Strong seismic ground shaking?</i>  <i>ii. Seismic-related ground failure, including liquefaction?</i>  <i>iii. Landslides?</i></p>					
<p><i>b. Result in substantial soil erosion or the loss of topsoil?</i></p>	<p>2009 Final SEIR (Draft SEIR, Chapter 3.6, Chapter 3.8)                  1985 Final EIR, Section 2.3 Geology and Soils</p>	<p>No</p>	<p>No</p>	<p>No</p>	<p>No prior mitigation measures were required and no mitigation is required</p>
<p><i>c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?</i></p>	<p>2009 Final SEIR (Draft SEIR, Chapter 3.6)                  1985 Final EIR, Section 2.3 Geology and Soils</p>	<p>No</p>	<p>No</p>	<p>No</p>	<p>No prior mitigation measures were required and no mitigation is required</p>
<p><i>d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?</i></p>	<p>2009 Final SEIR (Draft SEIR, Chapter 3.6)                  1985 Final EIR, Section 2.3 Geology and Soils</p>	<p>No</p>	<p>No</p>	<p>No</p>	<p>No prior mitigation measures were required and no mitigation is required</p>
<p><i>e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where</i></p>	<p>2009 Final SEIR (Draft SEIR, Chapter 3.6. Initial Study)</p>	<p>No</p>	<p>No</p>	<p>No</p>	<p>No prior mitigation measures were required and no mitigation is required</p>

<i>sewers are not available for the disposal of waste water?</i>					
f. <i>Directly or indirectly destroy a unique paleontological resources or site unique feature?</i>	2009 Final SEIR (Draft SEIR, Chapter 3.5; Revised Project Description and Analysis, p. 3-7)  1985 Final EIR, Section 2.9 Cultural Resources	No	No	No	<b>CR-MM.3</b> <b>CR-MM.4</b> <b>CR-MM.5</b>

**Discussion:** The 1985 EIR prepared by the County of Kings included an evaluation of geology and soils and found that no measures were needed to reduce potential impacts from these resources. The 2009 Final SEIR evaluated four potential impacts related to geology and soils. SEIR Impact GS-1 (Potential Excessive or Differential Landfill Settlement), related to Impact 6.c., was determined to be less than significant due (mainly) to the lack of non-seismic geological hazards identified for the site. SEIR Impact GS-2 (Potential to Encounter Naturally Occurring Asbestos) was determined to be less than significant due to the lack of naturally-occurring asbestos on the site. SEIR Impact GS-3 (Faulting and Seismic Shaking), related to Impact 6.a. was determined to be less than significant because California regulations require landfill construction that withstands the Maximum Credible Earthquake. SEIR Impact G-4 (Slope Stability), related to Impacts 6.b. and 6.d., was determined less than significant based on static stability and seismic stability analyses. The SEIR did not include an evaluation for a septic system because it was not part of the project being evaluated and a new or modified sewage system was not needed (Impact 6.e.).

The permit renewal includes updates to site-specific plans as described in the project description (Section A). Additional studies were conducted to support the updated Closure and Post Closure Plan for the KHF. CWMI completed a seismic hazard assessment for the facility. Title 22 of the California Code of Regulations requires all constructed features that contain hazardous waste materials must be able to withstand the maximum credible earthquake without significant damage to foundations, structure and waste containment features (Golder, 2018b). The seismic hazard assessment includes an updated description of site geology and potential seismic hazards in the project area and updates the maximum credible event for the 1,600-acre KHF. The peak ground acceleration was recalculated and decreased from 0.62 to 0.47, which adds additional safety to the design and no physical change would be needed to the specification of the final cover as described in the Closure and Post Closure Plan. CWMI also recently completed a slope stability study that confirms the hazardous waste management units at the KHF comply with the requirements of Title 22 (Golder 2018a).

As documented in the 2009 Final SEIR, agricultural lands consisting of grazing surround the project site. The only development near the site are roads and oil extraction facilities. There are five active oil wells located north and east of the project site boundary (see Figure 2).

As described in the project description (Section A), new features/activities associated with the proposed permit renewal would be located completely within the footprint of the KHF. In addition, most of the new activities would not involve construction and would not include an activity that affects geologic or soils resources. Potential installation of additional groundwater monitoring wells and soil-gas monitoring wells would not change determinations of geology and soil impacts made in prior environmental documents. Also, see discussion in Section 10 Hydrology and Water Quality.

Paleontological studies conducted in 1984 and 2002 determined that the project had moderate to high potential to cause impacts to paleontological resources. Prior to recent changes to the CEQA Checklist, paleontological resources were considered as a subsection of cultural resources, but has since been moved to the geology and soils section. For paleontological resources, mitigation measures CR-MM.3, CR-MM.4, and CR-MM.5 were identified to reduce potential impacts. The 2009 Final SEIR determined that potential impacts to cultural and paleontological resources of the B-18/B-20 Hazardous Waste Landfill Project would be less than significant with the implementation of mitigation measures (see below).

The proposed permit renewal includes new activities with limited construction. All activities would occur entirely within the existing KHF property and only the installation of the monitoring wells would result in limited ground disturbance during installation. One of the groundwater monitoring wells is proposed outside the fenced operations area, but would still be located within the KHF property (see Figure 1). Given the prior findings for archeology and paleontology for the project site, the permit renewal would have similar findings as those noted in prior environmental studies of the project site. However, the mitigation measures noted below would need to continue to be implemented to reduce the potential for impacts.

#### 2009 Final SEIR Mitigation Measures:

##### CR-MM.3:

For every 20,000 cubic yards (cy) of soil excavated as part of the Project, CWMI will have a qualified paleontologist conduct a detailed paleontological investigation that will document exposed geological formations, their potential for containing fossil remains, and direct observation of fossils and an assessment of their significance. The paleontologist shall prepare a final written report of his or her investigation, findings and recommendations, and shall submit the final report to the County within 30 calendar days after the investigation is completed.

##### CR-MM.4:

CWMI shall provide 4 hours of training to equipment operators and field engineers on the identification of paleontological remains. The training shall be provided before the commencement of excavation activities in undisturbed areas and shall be conducted at the excavation site by a qualified paleontologist.

##### CR-MM.5:

CWMI shall notify the County by letter if CWMI staff or paleontologists encounter significant remains during excavation and shall provide for a paleontological investigation. The paleontologist shall prepare a final written report of his or her investigation, findings and recommendations, and shall submit the final report to the County within 30 calendar days after the investigation is completed.

Conclusion: The permit renewal would not result in a new impact that has not been previously addressed or cause an increase in impact severity as evaluated in the 2009 Final SEIR and other past environmental documents. The installation of monitoring wells and other permit renewal activities

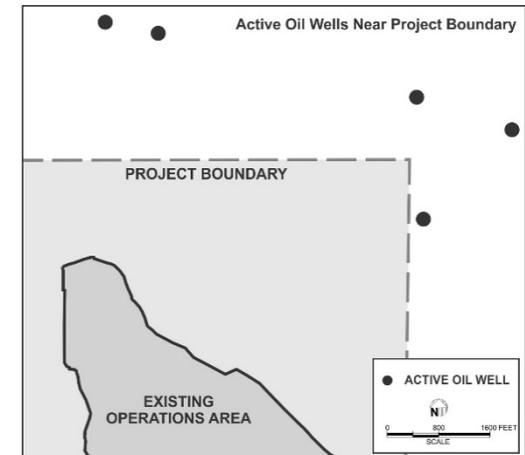


Figure 3. Active Oil Wells Near Project Boundary

are not anticipated to result in new or more severe paleontological impacts from those analyzed and addressed in previous environmental documents.

References:

Archaeological Consulting, 1984. Preliminary Archaeological Reconnaissance and Paleontological Overview of a Parcel in the Kettleman Hills, Kings County, California. Prepared for CH2M HILL.  
 CH2MHill, 2009. Final Subsequent Environmental Impact Report, B-18/B-20 Hazardous Waste Disposal Project, Kettleman Hills Facility, Chemical Waste Management, Inc. September.  
 \_\_\_\_\_, 1985. Final Environmental Impact Report. Chemical Waste Management, Inc. Kettleman Hills Hazardous Waste Treatment, Storage, and Disposal Facility. October.  
 DTSC, 2003. Statement of Findings. Hazardous Waste Storage and Disposal Permit Renewal and Use of Previous Environmental Impact Reports. June.  
 Golder, 2018a. Seismic Slope Stability of the Hazardous Waste Management Units Currently in Post-Closure Units. April.  
 \_\_\_\_\_, 2018b. Seismic Hazard Assessment for the Kettleman Hills Facility. March.  
 PaleoResource Consultants, 2002. Paleontological Resource Survey and Impact Assessment for Kettleman Hills Facility Borrow-Source Area B-17. Unpublished Report Prepared for Chemical Waste Management, Inc. July.

Environmental Resource	Where Was the Impact Analyzed in Prior Environmental Document(s)?	Are Substantial Changes Proposed in the Project that Require Major Revisions in the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Do Any Substantial Changes in Circumstances Require Major Revisions in the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Does Any New Information of Substantial Importance Show Significant Effect(s) Not Previously Discussed or More Severe than Previously Shown, or That Mitigation Measures or Alternatives Should be Reevaluated?	Do Prior Environmental Document(s) Include Mitigation to Address/Resolve Effects?
<b>8. GREENHOUSE GAS EMISSIONS. Would the project:</b>					
a. <i>Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?</i>	2009 Final SEIR (Draft SEIR, Chapter 3.12; Revised Project Description and Analysis, p. 3-12,13)	No	No	No	<b>AQ-MM.1</b> <b>AQ-MM.2</b>
b. <i>Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of greenhouse gases?</i>	2009 Final SEIR (Draft SEIR, Chapter 3.12; Revised Project Description and Analysis, p. 3-12,13)	No	No	No	No

Discussion: The 2009 Final SEIR analyzed three separate GHG impacts:

1. Result in a substantial project-specific increase in GHG emissions relative to existing conditions.
2. Conflict with or obstruct implementation of the goals and/or strategies of Executive Order S-03-05 or the California Global Warming Solutions Act of 2006.
3. Result in increased exposure of the proposed project to one or more of the potential adverse effects of global warming identified in the California Global Warming Solutions Act of 2006, Health and Safety Code Section 38501(a).

The first impact relates to checklist Impact 7.a. The second item is how Kings County evaluated checklist Impact 7.b. impacts. The third item relates to how the project is affected by the environment and not how the project affects the environment, and while these effects should be evaluated as a project design/engineering issue, California CEQA case law has determined this type of impact is not required to be evaluated under CEQA.

Impact 8.a. – There would be new direct and indirect GHG emissions from the requested changes to the permit, including: the new shredding operation that would require more electricity consumption; and temporary diesel use from the completion of additional groundwater monitoring wells and soil-gas monitoring wells. However, those emissions increases are minor in comparison to the facility baseline and they should be compensated by reductions to the facility baseline that would occur due to the following ongoing programs:

- Direct and indirect GHG emissions reductions that are occurring over time from State and federal car and truck regulations that will increase fuel efficiency, as well as, the similar emissions reductions, including black carbon emissions reductions, that would occur from complying with Mitigation Measure AQ-MM.1 and the HWFP Special Condition 6.(A). (see the air quality discussion for more information)
- California's Low Carbon Fuel Standards (LCFS) impacts on facility direct transportation GHG emissions, and
- The 50 percent Renewable Portfolio Standard (RPS) that will reduce the indirect GHG emissions from facility electricity consumption.

Direct and indirect GHG emissions from the DTSC permitted activities should not substantially increase over the permit period, and actually would likely decrease slightly over time. Therefore, no new impacts or substantially more severe GHG emissions impacts would occur (Impact 7.a.) and this impact, which has already been identified as significant and unavoidable, does not require substantial new analysis.

Impact 8.b. – The impact analysis performed for identification of conflicts with applicable plans, policies, and regulations was based on whether the project would conflict with the emissions reduction measures associated with the Global Warming Solutions Act of 2006 (AB 32) and associated emissions reduction plans (ARB Climate Change Scoping Plans), which addressed California's 2020 GHG emissions reductions goal of GHG emissions being reduced to 1990 emission levels. The new HWF permit would be valid beyond 2020, and the applicable plans, policies, and regulations have changed since the certification of the 2009 Final SEIR. The current appropriate state regulation for statewide GHG emissions planning is SB 32 (California Global Warming Solutions Act of 2006: emissions limit) that was approved in 2016 and set into law the GHG interim 2030 GHG emissions reduction target as written into Executive Order (EO) B-30-15. The associated 2017 Climate Change Scoping Plan sets the policies for California's 2030 interim GHG emissions reduction goal (40 percent below 1990 levels). While EO S-03-05 has set forth a long-term reduction target to reduce GHG emissions to 80 percent below 1990 levels by 2050, there are currently no published plans or strategies for meeting this goal. Therefore, given the lack of plans and policies related to the EO S-03-05 2050 goals, the most appropriate plan and policies are those contained in the 2017 Climate Change Scoping Plan.

The 2017 Climate Change Scoping Plan, completed to set the GHG emissions reduction planning strategy policies for SB 32, relies on several policies that may be relevant to the KHF, including slashing potent “super pollutants” from landfills, cleaner freight and goods movement, use of more clean/renewable fuels, cleaner zero or near zero emissions trucks, and continuation of the Cap and Trade program. Specific plans already approved related to these policies include the Sustainable Freight Action Plan, the Diesel Risk Reduction Plan, and the Low Carbon Fuel Standard. There are no major changes to the permitted project operations related to the SEIR’s impact analysis nor related to SB 32 GHG emissions reductions strategies, so a major new analysis of impacts does not appear to be warranted.

**2009 Final SEIR Mitigation Measures:**

**AQ-MM.1**, which would have a minor effect on GHG emissions reductions, is applicable to the current permit renewal request. **AQ-MM.2** was a temporary measure that is no longer applicable. (Please see full listing of the Air Quality mitigation measures under item 3. Air Quality.)

Conclusion: The proposed project (permit renewal) would not substantially add to or increase the severity of greenhouse gas emissions impacts identified in the 2009 Final SEIR.

References:

California Air Resources Board (ARB), 2017. California’s 2017 Climate Change Scoping Plan. [online]: [https://www.arb.ca.gov/cc/scopingplan/scoping\\_plan\\_2017.pdf](https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf). Accessed March 29, 2018.  
 CH2MHill, 2009. Final Subsequent Environmental Impact Report, B-18/B-20 Hazardous Waste Disposal Project Kettleman Hills Facility Chemical Waste Management, Inc. September.

Environmental Resource	Where Was the Impact Analyzed in Prior Environmental Document(s)?	Are Substantial Changes Proposed in the Project that Require Major Revisions in the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Do Any Substantial Changes in Circumstances Require Major Revisions in the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Does Any New Information of Substantial Importance Show Significant Effect(s) Not Previously Discussed or More Severe than Previously Shown, or That Mitigation Measures or Alternatives Should be Reevaluated?	Do Prior Environmental Document(s) Include Mitigation to Address/Resolve Effects?
<b>9. HAZARDS AND HAZARDOUS MATERIALS. Would the project:</b>					
a. <i>Create a significant hazard to the public or the environment through the routine transport, use, or</i>	2009 Final SEIR (Draft SEIR, Chapter 3.7)	No	No	No	No prior mitigation measures were required and no mitigation is required

<i>disposal of hazardous materials?</i>					
b. <i>Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?</i>	2009 Final EIR (Draft SEIR, Chapter 3.7) 2013 Addendum & Initial Study	No	No	No	No prior mitigation measures were required and no mitigation is required
c. <i>Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?</i>	2009 Final EIR (Draft SEIR, Chapter 3.7)	No	No	No	No prior mitigation measures were required and no mitigation is required
d. <i>Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?</i>	2009 Final EIR (Draft SEIR, Chapter 3.7)	No	No	No	No prior mitigation measures were required and no mitigation is required
e. <i>For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?</i>	2009 Final EIR (Draft SEIR, Chapter 3.7)	No	No	No	No prior mitigation measures were required and no mitigation is required
f. <i>Impair implementation of or physically interfere with an adopted emergency response plan or</i>	2009 Final EIR (Draft SEIR, Chapter 3.7)	No	No	No	No prior mitigation measures were required and no mitigation is required

<i>emergency evacuation plan?</i>					
<i>g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?</i>	2009 Final EIR (Draft SEIR, Chapter 3.7) 2013 Addendum & Initial Study	No	No	No	No prior mitigation measures were required and no mitigation is required

**Discussion:** Impacts 9.a. and 9.b. – Previous environmental documents have evaluated the routine transport, use, or disposal of hazardous materials for facility construction and operation. The 1985 EIR (facility expansion) and 2009 Final SEIR (B-18/B-20 landfill) both addressed hazardous materials usage. The 1987 Supplemental EIR also addressed landfill units, drum storage unit, and stabilization unit. These documents all identified hazardous materials transport, use, and disposal as less than significant and no mitigation was identified for this issue area. However, the facility is required to have a number of approved operational/facility design plans that address management of hazardous materials, procedures to address potential spills, and ongoing coordination and oversight by state and federal regulatory agencies. The proposed activities under the permit renewal would not change the type of hazardous materials/wastes that would be handled at the facility. The permit renewal would include: Final Stabilization Unit (FSU) – add waste shredder and temporary storage in the FSU mixing tanks; PCB Flushing and Storage Unit – outdoor storage and bulking/repackaging of waste in outside containment area; and Drum Storage Unit – solids/liquids bulking for onsite and offsite treatment and/or disposal. The other changes (revisions to site-specific plans and corrective action monitoring (monitoring wells)) would also not change the type of materials handled at the KHF. While drilling to install monitoring wells would include use of equipment that would use hazardous materials, the use of vehicle fuels and other materials was considered in previous environmental documents. Therefore, the proposed permit renewal would not introduce a new impact that has not been evaluated in previously adopted environmental reports and is not expected to increase the severity of previously identified hazardous materials impacts.

Impact 9.c.– As documented in the 2009 Final SEIR, the nearest school is the Kettleman City Elementary School, located approximately 3.5 miles from KHF. Given the school’s distance from the KHF, the finding of no impact to the school or persons at the school would not change with the permit renewal.

Impact 9.d. – The KHF is not on the Cortese list of “identified hazardous waste sites” for Kings County (Government Code Section 65962.5). The Cortese list identifies properties that are hazardous materials release sites. The proposed permit renewal would not affect or be affected by any existing hazardous waste site.

Impacts 9.e. – As documented in the 2009 Final SEIR, the project site is not within an airport land use plan, or within 2 miles of a public airport or public use airport. The proposed project would be carried out within the approved footprint of the facility and, therefore, would not change this finding or require any additional environmental analysis on this issue.

Impact 9.f. –The Project would not impair implementation of or interfere with the existing KHF Contingency Plan. The permit renewal includes new activities that would not substantially change emergency response or evacuation plan procedures. These plans may be modified as a result of this permit renewal, but substantial changes that need further environmental review or analysis are not anticipated.

Impact 9.g. – The 2009 Final SEIR evaluated the potential for fires for the B-18/B-20 Hazardous Waste Landfill Project. It addressed fire protection, design of buildings and structures to meet fire prevention standards, fire extinguishers and water supply to respond to fires, storage of materials and supplies, and emergency response procedures, as examples. The 2013 Addendum addressed surface fires and concluded that the project would not expose people or structures to a significant risk of fire. Both reports found that impacts from surface fires would be less than significant and no mitigation was identified. While the permit renewal includes new activities as identified in the Section A Project Description and above, the proposed project would not result in a new impact that has not been previously evaluated or change the severity of an identified impact. The facility has emergency response (Contingency Plan) and other plans and protocols in place to address emergency situations at the KHF.

**Conclusion:** The newly proposed work activities would not result in a change to the impact conclusions for hazards and hazardous materials. These permit renewal activities would be conducted so they do not exceed allowable secondary containment volumes in the outside containment areas and would operate under required business and operation plans that are periodically reviewed and updated with oversight by state and federal agencies.

**References:**

CH2MHill, 2009. Final Subsequent Environmental Impact Report, B-18/B-20 Hazardous Waste Disposal Project, Kettleman Hills Facility, Chemical Waste Management, Inc. September.  
 DTSC, 2013. Addendum and Initial Study Environmental Checklist to the Final Subsequent Environmental Impact Report. Prepared for the Existing B-18 Class I/Class II Landfill Expansion Project, Kettleman Hills Facility, Chemical Waste Management, Inc. May.

Environmental Resource	Where Was the Impact Analyzed in Prior Environmental Document(s)?	Are Substantial Changes Proposed in the Project that Require Major Revisions in the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Do Any Substantial Changes in Circumstances Require Major Revisions in the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Does Any New Information of Substantial Importance Show Significant Effect(s) Not Previously Discussed or More Severe than Previously Shown, or That Mitigation Measures or Alternatives Should be Reevaluated?	Do Prior Environmental Document(s) Include Mitigation to Address/Resolve Effects?
<b>10. HYDROLOGY AND WATER QUALITY. Would the Project:</b>					
a. <i>Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?</i>	2009 Final SEIR (Draft SEIR, Chapter 3.8: Revised Project Description and Analysis, p.3.8, 3.9)	No	No	No	No prior mitigation measures were required and no mitigation is required
b. <i>Substantially decrease groundwater supplies or interfere substantially with</i>	2009 Final EIR, p. 1-8; (Draft SEIR, Chapter 3.8)	No	No	No	No prior mitigation measures were required and no mitigation is

<i>groundwater recharge such that the project may impede sustainable groundwater management or the basin?</i>					required
c. <i>Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces in a manner which would:</i> i. <i>result in substantial erosion or siltation on- or off-site;</i>	2009 Final SEIR (Draft SEIR, Chapter 3.8)	No	No	No	No prior mitigation measures were required and no mitigation is required
ii. <i>substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or offsite;</i>	2009 Final SEIR (Initial Study - Appendix A in Draft SEIR; Draft SEIR, Chapter 3.8)	No	No	No	No prior mitigation measures were required and no mitigation is required
iii. <i>create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or</i>	2009 Final SEIR (Initial Study - Appendix A in Draft SEIR; Draft SEIR, Chapter 3.8)	No	No	No	No prior mitigation measures were required and no mitigation is required
iv. <i>impede or redirect flood flows?</i>	2009 Final SEIR (Initial Study - Appendix A in Draft SEIR; Draft SEIR, Chapter 3.8)	No	No	No	No prior mitigation measures were required and no mitigation is required
d. <i>In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?</i>	2009 Final SEIR (Initial Study - Appendix A in Draft SEIR; Draft SEIR, Chapter 3.8)	No	No	No	No prior mitigation measures were required and no mitigation is required
e. <i>Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?</i>	2009 Final SEIR (Draft SEIR, Chapter 3.8: Revised Project Description and Analysis, p.3.8, 3.9)	No	No	No	No prior mitigation measures were required and no mitigation is required

**Discussion:** The 2009 Final SEIR and earlier environmental documents prepared for the project have included detailed analyses and background

supporting studies of the KHF's potential to impact surface and groundwater, and erosion in the project area. Given the design (e.g. drainage and erosion control, design for Probable Maximum Precipitation event, collector ditches and swales, detention basins) and operational reporting/controls on the project, these documents found that potential impacts from the KHF facility on hydrology and groundwater would be less than significant. In addition, these documents identified the project site as outside the floodplain and not above a potential groundwater source of drinking water, and concluded that there would be no significant adverse impact to water supply or water quality.

CWMI recently completed an Engineering Feasibility Study (EFS) for the KHF (Amec Foster Wheeler 2018). This study provides a comprehensive and current discussion of the site hydrogeology. As noted in this study, the groundwater beneath the site occurs in saturated portions of multiple dipping sandstone beds that are separated by intervening siltstone and claystone units. These saturated sandstones beds do not qualify as aquifers based on their yields and are described in the report as water-bearing zones with both saturated and unsaturated portions. Based on site-specific data, this report concludes that the "groundwater is geographically and hydraulically isolated from regional groundwater resources and potential receptors" and that no aquifers underlie the site, among other findings (Ibid, page 6). The report also concludes that the groundwater has no beneficial uses given the significant depth to groundwater and low sustainable yields (Ibid, page 9).

The EFS evaluated releases from facility waste cells and recommends groundwater corrective action measures. The waste cells evaluated include: the combined closure area, closed Landfill B-13 Expansion, closed Landfill B-15, former pond P-9, and former pond P-18. As noted in the EFS, documented releases are from former, unlined surface impoundments containing liquid wastes and former unlined landfills with buried containers of liquid wastes; no releases have been detected from lined waste management units (page 18 of EFS). The VOCs in groundwater have been identified as the only constituents of concern that have the potential to affect human health and the environment. The VOCs in groundwater do not have a complete pathway to receptors because of the geographic/geologic isolation of the groundwater, however the VOCs in the vadose zone may have a complete pathway to on-site receptors through surface emissions. The EFS evaluated four alternatives for corrective action with the objective of achieving water quality protection standards in Title 22 and 23 of the California Code of Regulations. These alternatives are summarized below.

- **Alternative 1: No Further Action.** This alternative assumed that no corrective action or groundwater or soil-gas monitoring would be necessary because known or future releases from active and closed waste management units would not have the potential to affect human health or the environment. No corrective action or monitoring would be needed under this alternative.
- **Alternative 2: Monitored Natural Attenuation.** This alternative relies on natural attenuation processes to achieve site-specific remediation or cleanup objectives. The important consideration for this remedy would be whether the contaminants are likely to be effectively addressed by natural attenuation processes. This alternative includes monitoring to evaluate ongoing effectiveness of these measures.
- **Alternative 3 Groundwater Extraction and Treatment.** In this alternative VOC-impacted groundwater would be extracted, treated, and discharged to an on-site surface impoundment. Two groundwater extraction wells would be utilized at each affected release from a water-bearing zone. This alternative would also include monitoring to evaluate effectiveness of these measures. The EFS notes that groundwater extraction and treatment was implemented previously at the KHF. It was found to be ineffective at removing the VOC mass from the

groundwater and had a limited effect on hydraulics of the water bearing zone. Therefore, this alternative was not considered as useful for corrective action at the KHF (pg. 53, EFS).

- **Alternative 4: Soil Vapor Extraction.** This alternative would be designed to remove VOCs from the vadose zone through use of vacuum to vapor extraction wells and routing vapors to a treatment system. This alternative would include ongoing monitoring to evaluate the effectiveness of these measures. The EFS determined that soil vapor extraction was not needed to protect groundwater because VOC concentrations in groundwater from soil gas are low and stable or show a downward trend.

The alternatives were evaluated based on nine DTSC criteria (Appendix E of DTSC'S Guidance Document, Monitoring Requirements for Permitted Hazardous Waste Facilities). EFS concluded that because of the nature of the releases to groundwater and site-specific hydrogeologic conditions, Monitored Natural Attenuation (MNA) met all nine criteria and was identified as the preferred corrective action alternative. MNA would protect human health and the environment because groundwater is isolated from potential receptors and would reduce VOC concentrations in the long term. The groundwater in the project area also has no beneficial use, is of poor quality and has natural barriers to groundwater flow, which make the groundwater immobile.

Pursuant to 22 CCR Section 67391.1, the selection of MNA as the groundwater remedy would require CWMI to record a land use covenant (LUC) that restricts future installation of groundwater wells on the site. Specifically, the LUC would require prior approval from DTSC for any drilling within the Existing Operations Area boundary. The LUC would also ensure that Post-Closure units would not be disturbed and prohibit land uses with sensitive receptors, such as schools, residences and hospitals.

New features/activities associated with the proposed permit renewal (additional shredder and temporary storage, bulking of certain wastes within the covered Drum Storage Unit, and outdoor bulking and storage at the PCB flushing/storage unit) would be located completely within the KHF footprint, would not involve substantial construction, and would be implemented in conformance with existing regulations as described in Section A. With the exception of the potential new wells, the activities proposed in the permit renewal would be conducted within existing approved facilities and would not change current surface water systems. The project also includes the potential installation of new wells to support the facility's ongoing monitoring program. The facility has had a monitoring program in place for approximately 30 years, it includes 46 groundwater monitoring wells (~10-inch diameter wells) and 8 soil-gas wells (~8-inch diameter wells) for the Class I units (CWMI, 2018a; DTSC, 2018). The permit renewal would add 5 new groundwater monitoring wells and 30 soil-gas monitoring wells to the existing facility monitoring program (Amec, 2018; CWMI, 2018b). Drilling of these wells could potentially result in local temporary construction-related impacts that could affect surface water quality. However, well drilling would be completed within the project footprint and would be temporary, over a period of anywhere from 11 to no more than 30 days per groundwater monitoring well. As part of the project, CWMI has submitted an updated Site-Specific Water Quality and Soil-Gas Monitoring Plan (March 2018) that includes the soil-gas wells, but does not include the proposed groundwater monitoring wells. The plan will require compliance with existing regulations in the installation and operation of these wells; this plan will be reviewed as part of the DTSC's decision on the permit renewal.

Conclusion: Aside from temporary impacts from installation of new monitoring wells, there would be no new impact or increase in impact severity as evaluated in previous environmental documents from the proposed permit renewal.

**References:**

Amec, 2018. Sufficiency of Monitoring System Class I Management Units. Location of groundwater monitoring wells. Figure prepared by Amec Foster Wheeler. February.

Amec Foster Wheeler, 2018. Engineering Feasibility Study 2018. Class I Waste Management Units. May 10.

CH2MHill, 2009. Final Subsequent Environmental Impact Report, B-18/B-20 Hazardous Waste Disposal Project, Kettleman Hills Facility, Chemical Waste Management, Inc. September.

CWMI, 2018a. Response to Second Notice of Deficiency. Response to GSU 2017 Site Specific Monitoring Program, page 245 of pdf.

\_\_\_\_\_, 2018b. Site-Specific Water Quality and Soil-Gas Monitoring Plan 2018 Class I Waste Management Units, page 16. March.

DTSC, 2018. Email from Rob Irving to Aspen Environmental Group regarding estimated duration of well drilling.

\_\_\_\_\_, 2001. Guidance Document, Monitoring Requirements for Permitted Hazardous Waste Facilities, prepared for Hazardous Waste Management Program. July.

Environmental Resource	Where Was the Impact Analyzed in Prior Environmental Document(s)?	Are Substantial Changes Proposed in the Project that Require Major Revisions in the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Do Any Substantial Changes in Circumstances Require Major Revisions in the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Does Any New Information of Substantial Importance Show Significant Effect(s) Not Previously Discussed or More Severe than Previously Shown, or That Mitigation Measures or Alternatives Should be Reevaluated?	Do Prior Environmental Document(s) Include Mitigation to Address/Resolve Effects?
<b>11. LAND USE AND PLANNING. Would the project:</b>					
a. <i>Physically divide an established community?</i>	2013 Addendum & Initial Study, Section 6.0, p. 66	No	No	No	No prior mitigation measures were required and no mitigation is required
b. <i>Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?</i>	2009 Final SEIR (Draft SEIR, Chapter 3.9; Land Use and Planning, p. 3.9-16, -17, -18)  2013 Addendum & Initial Study, Section 6.0, p. 66	No	No	No	TT-MM.1 TT-MM.2

**Discussion:** Impact 11.a. – The 2009 Final SEIR concluded that as an existing hazardous waste transfer, treatment, storage, and disposal facility the KHF would not have the potential to physically divide an established community. This determination was supported in the 2013 Addendum. None of the activities in the permit renewal would occur outside of the existing facility, and therefore the project would not result in a new impact or

cause a more severe impact than the determinations in these prior environmental documents.

Pursuant to 22 CCR Section 67391.1, the selection of MNA as the groundwater remedy would require the recording of a land use covenant (LUC) that restricts future installation of groundwater wells on the site. Specifically, the LUC would require prior approval from DTSC for any drilling within the Existing Operations Area boundary. The LUC would also ensure that Post-Closure units would not be disturbed and prohibit land uses with sensitive receptors, such as schools, residences and hospitals.

Impact 11.b. – The 2009 Final SEIR determined the project was consistent with the General Plan designation and site zoning. Hazardous waste disposal is a conditional use within the site’s AG-40 zone. The County of Kings has issued five Conditional Use Permits (CUP) for the KHF; the most recent CUP (County CUP 05-10) was issued for the B-18/B-20 Hazardous Waste Disposal Project evaluated in the 2009 Final SEIR. The SEIR also found that the project would be consistent with the County’s Hazardous Waste Management Plan, given that the project site is identified in that plan as a hazardous waste management facility. The SEIR Land Use analysis described the effects of the project on the transportation system, and the subsequent conflict with the Kings County Regional Transportation Plan (Impact LU-5). This impact analysis referred the reader to the full traffic analysis provided in the SEIR and the traffic-related mitigation measures that would be implemented to minimize impacts (See TT-MM.1 and TT-MM.2 in Section 17). However, the current permit renewal would not result in an increase in truck traffic beyond the 400 trips/day limit and therefore, these measures are not required for this permit renewal project (although they would still be required for the KHF). The project would be consistent with all applicable plans and policies and would not result in a new or more severe impact than what has been identified in previously certified environmental documents. As evaluated in the 2009 Final EIR (Appendix A Initial Study) and in the 2013 Addendum, the operation of the KHF would not conflict with any applicable habitat conservation plan or natural community plan. The proposed permit renewal would involve new activities within approved KHF operations, and within the project boundary. Only the installation of one well (Mya E, see Figure 1) would be located outside the fence of the operations area of the KHF, but would be within the project boundary. Therefore, the permit renewal is not expected to conflict with any applicable habitat conservation plan or natural community conservation plan.

Conclusion: No new impacts to land use and planning associated with the permit renewal are anticipated, and it is also anticipated that there would not be an increase in the severity of a previously identified impact as analyzed in the 2013 Addendum and the 2009 Final SEIR.

References:

- CH2MHill, 2009. Final Subsequent Environmental Impact Report, B-18/B-20 Hazardous Waste Disposal Project, Kettleman Hills Facility, Chemical Waste Management, Inc. September.
- County of Kings, 2009. Resolution No. 09-073, Kings County Board of Supervisors. December 22.
- DTSC, 2013. Addendum and Initial Study Environmental Checklist to the Final Subsequent Environmental Impact Report. Prepared for the Existing B-18 Class I/Class II Landfill Expansion Project, Kettleman Hills Facility, Chemical Waste Management, Inc. May.

Environmental Resource	Where Was the Impact Analyzed in Prior Environmental Document(s)?	Are Substantial Changes Proposed in the Project that Require Major Revisions in the Environmental Document(s) Due to New	Do Any Substantial Changes in Circumstances Require Major Revisions in the Environmental Document(s) Due to New Significant	Does Any New Information of Substantial Importance Show Significant Effect(s) Not Previously Discussed	Do Prior Environmental Document(s) Include Mitigation to Address/Resolve Effects?
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		Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	or More Severe than Previously Shown, or That Mitigation Measures or Alternatives Should be Reevaluated?	
<b>12. MINERAL RESOURCES. Would the Project:</b>					
a. <i>Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?</i>	2009 Final SEIR (Draft SEIR, Page ES-4; Appendix A, Initial Study) 2013 Addendum & Initial Study	No	No	No	No prior mitigation measures were required and no mitigation is required
b. <i>Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?</i>	2009 Final SEIR (Draft SEIR, Page ES-4; Appendix A, Initial Study) 2013 Addendum & Initial Study	No	No	No	No prior mitigation measures were required and no mitigation is required
<p><b>Discussion:</b> The 2009 Final SEIR and 2013 Addendum concluded that the project site was not in a known area for mineral resources. The Kings County General Plan states that the county has limited excavation of soil, sand, and gravel for commercial use and some historical mines have been closed. The County general plan did not identify any particular areas for mineral resource development, although it is an allowed use. The project would not have the potential to affect mineral resources as there are no known mineral resources on the project site. See Section 6 Geology and Soils and Figure 1 for information on the active oil wells near the project site.</p> <p><b>Conclusion:</b> Because there are no known mineral resources on the site and the project would be conducted within the existing KHF footprint, there would be no new impacts or the potential for a more severe impact on mineral resources.</p> <p><b>References:</b>                      CH2M Hill, 2009. Final Subsequent Environmental Impact Report, B-18/B-20 Hazardous Waste Disposal Project, Kettleman Hills Facility, Chemical Waste Management, Inc. September.                      DTSC, 2013. Addendum and Initial Study Environmental Checklist to the Final Subsequent Environmental Impact Report. Prepared for the Existing B-18 Class I/Class II Landfill Expansion Project, Kettleman Hills Facility, Chemical Waste Management, Inc. May.                      Kings County, 2010. 2035 Kings County General Plan. Resource Conservation Element. January.</p>					

Environmental Resource	Where Was the Impact Analyzed in Prior Environmental Document(s)?	Are Substantial Changes Proposed in the Project that Require Major Revisions in the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Do Any Substantial Changes in Circumstances Require Major Revisions in the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Does Any New Information of Substantial Importance Show Significant Effect(s) Not Previously Discussed or More Severe than Previously Shown, or That Mitigation Measures or Alternatives Should be Reevaluated?	Do Prior Environmental Document(s) Include Mitigation to Address/Resolve Effects?
<b>13. NOISE. Would the project result in:</b>					
a. <i>Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?</i>	2009 Final SEIR (Draft SEIR, Chapter 3.10; Revised Project Description and Analysis Draft SEIR, p. 3-10)	No	No	No	No prior mitigation measures were required and no mitigation is required
b. <i>Generation of excessive ground borne vibration or ground borne noise levels?</i>	2009 Final SEIR (Appendix A - Initial Study; Draft SEIR, Chapter 3.10)	No	No	No	No prior mitigation measures were required and no mitigation is required
c. <i>For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?</i>	2009 Final SEIR (Appendix A - Initial Study; Draft SEIR, Chapter 3.10)	No	No	No	No prior mitigation measures were required and no mitigation is required

**Discussion:** Impact 13.a. – Previous environmental documents evaluated noise from KHF construction and operation based on the County’s 2004 Noise Element. However, the General Plan Noise Element was updated in 2010 (2038 Kings County General Plan). As noted in the 2010 Noise Element, typical facility operation is from 8am to 6pm Monday through Friday. The landfill is surrounded by mostly undeveloped rolling terrain. Significant noise sources include bulldozers, backup warning devices, compactors, excavators, garbage trucks, and commercial traffic using the landfill. While noise measurements at the facility were not taken, measurements at a similar facility yielded average noise levels of 71 dBA 100

feet from the main landfill activity area. Per Policy B1.1.3, noise associated with construction activities is considered temporary, but is still required to adhere to the applicable County Noise Element standards. Per Table N-8 (Non-Transportation Noise Standards), noise levels for all residential land uses and transient lodging shall not exceed 55 dBA Leq or 75 dBA Lmax daytime outdoors and 50 dBA Leq or 70 dBA Lmax nighttime. Agricultural lands are not considered a sensitive use. Nighttime noise thresholds may only apply to groundwater and soil-gas monitoring well installation activities, which may be conducted on a temporary basis for a 10-hour day.

The closest residences to the facility/property boundary are located approximately 1.9 air miles west on Tehama Avenue (new - not analyzed previously), and 2.5 air miles northeast on Milham Avenue, east of the I-5 freeway, near Kettleman City (Google Earth, 2018). The Best Western Kettleman City Inn & Suites is located approximately 2.4 miles east on Powers Drive, south of Kettleman City (new - not analyzed previously). Operations associated with the requested permit changes would generally occur at internal areas of the KHF (i.e., FSU, PCB Flushing and Storage Unit, DSU), which would increase these distances by an additional approximately 0.8 mile.

A waste shredder and temporary storage would occur inside the FSU building, which is a steel-framed structure. As such, noise from these activities would be effectively controlled. The building's ventilation may run during temporary storage periods; however, HVAC system noise is part of the baseline condition and would not be produced at a level that would exceed the County noise threshold at the closest sensitive receptors. Bulking, consolidating, and repackaging of waste from small to larger containers at the PCB Flushing and Storage Unit would occur outside. These types of activities are consistent with current operations. Similarly, solids and liquids bulking at the DSU would involve use of a forklift and vacuum tanker, which would produce noise levels similar to other equipment already in use at the facility. No increase in daily truck trips is anticipated from these activities; current permit conditions allow for 400 hazardous waste truck trips per day. Other new activities, such as installing 5 new groundwater monitoring wells and 30 soil-gas monitoring wells would produce temporary high-noise levels during installation, but minimal noise during operations. Groundwater wells would be installed within the KHF property fenceline, with the exception of one well that would be installed outside the fenceline but within the KHF property (see Figure 1). Based on the Installation Report for Well K71R, installation of a groundwater well would take approximately 11 days. Assuming concurrent use of a drill rig truck (100% use factor), generator (100% use factor), excavator (40% use factor), and dump truck (40% use factor) for well installation, noise levels would reach 50 dBA Leq at approximately 2,600 feet (FHWA, 2006). Including a noise level reduction of 5 dB for receptors not having line-of-site of the KHF, further reduces anticipated noise levels and the distance to reach 50 dBA Leq to approximately 1,460 feet. These distances are considerably less than the 1.9 miles (10,032 feet) to the nearest residence. In general, noise levels at the KHF would need to be on the order of 101 dBA Leq before there is a potential to exceed the nighttime noise level (50 dBA Leq) at the closest residence, which is not anticipated based on the proposed activities. As such, noise levels generated by the proposed permit changes would not exceed the County noise thresholds.

The 2010 County Noise Element recognizes the KHF as one of several "Fixed Noise Sources" in the county. According to the 2010 Noise Element, any sensitive land uses planned near Fixed Noise Sources needs to consider noise from these sources in the development proposal. The element also states: "Site-specific noise analyses should be performed where noise sensitive land uses are proposed in proximity to these [Fixed Noise Sources] or similar noise sources..." While previous environmental evaluations evaluated noise in the context of the 2004 Noise Element and not the updated 2010 element, the permit renewal project is thought to be in compliance with the 2010 element for the following reasons:

- the permit renewal includes limited new noise sources as most of the activities would include use of equipment similar to current equipment

- use at the facility;
- well installation activities would introduce a new temporary noise source, but noise generated from different locations within the approved facility property would not reach nearest residential receptors;
- the County's 2010 Noise Element acknowledges the KHF as a noise source in the county as discussed above; and
- although new sensitive receptors were identified in this analysis, these new receptors are located approximately 1.9 miles and 2.5 miles from the boundary of the facility and noise levels within the facility are not expected to exceed the County's noise standard for agricultural areas (70 dBA).

Periodic noise levels, such as during the installation of the groundwater monitoring wells and soil-gas monitoring wells, would not exceed current County noise thresholds at the closest sensitive receptors, as described above for Impact 13.a. Due to the large distances between the KHF and sensitive receptors (1.9 miles or more), as well as intervening topography, noise generated by the proposed permit activities would dissipate to around 33 dBA Leq and blend in the background noise levels, which based on the Community Noise Survey completed for the General Plan Noise Element would range between 33-36 dBA Leq (Kings County, 2010 - Figure N-1; Table N-5, Site 7). As such, temporary or periodic increases in ambient noise levels (increases of 3 dB or more) would not occur.

The new activities associated with the permit renewal are consistent with current operations and would not increase truck trips to/from the KHF. As discussed in the 2009 Final SEIR (Draft SEIR p. 3.10-4), ambient noise measurements at the KHF site were conducted by CH2M Hill on June 8, 2004, and showed a noise level of 47 dBA Leq at the site boundary, which is well below the County daytime noise limit of 55 dBA Leq (and the nighttime noise limit of 50 dBA Leq).

Impact 13.b and 13.c. – As determined in the 2009 Final SEIR (Appendix A - Initial Study) prepared for the B-18/B-20 Hazardous Waste Landfill Project, because of the nature of the location of the project site, the project site would not expose persons to or generate excessive groundborne vibration or groundborne noise levels, the project site is not located within an airport land use plan, and the site is not in the vicinity of a public airport or private airstrip (checklist items 13.b and 13.c). The permit renewal would be conducted within the facility property and therefore the permit renewal would not add to or increase the severity of previously-identified impacts.

Conclusion: The permit renewal would not result in a new impact or change the severity of identified noise or groundborne vibration impacts as presented in previously certified or adopted environmental documents.

#### References:

- AMEC Geomatrix, Inc. 2009. Installation Report for Well K71R, Kettleman Hills Facility, Kings County, CA. September 10.
- CH2MHill, 2009. Final Subsequent Environmental Impact Report, B-18/B-20 Hazardous Waste Disposal Project, Kettleman Hills Facility, Chemical Waste Management, Inc. September.
- County of Kings. 2010. 2035 General Plan Noise Element. Adopted by the Kings County Board of Supervisors on January 26, 2010. Accessed April 16 and 27, 2018. [online]: <https://www.countyofkings.com/departments/community-development-agency/information/2035-general-plan>
- U.S. Department of Transportation Federal Highway Administration (FHWA). 2006. FHWA Highway Construction Noise Handbook. Final Report. August. Accessed April 17, 2018. [online]: [https://www.fhwa.dot.gov/environment/noise/construction\\_noise/handbook/](https://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/)

Environmental Resource	Where Was the Impact Analyzed in Prior Environmental Document(s)?	Are Substantial Changes Proposed in the Project that Require Major Revisions in the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Do Any Substantial Changes in Circumstances Require Major Revisions in the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Does Any New Information of Substantial Importance Show Significant Effect(s) Not Previously Discussed or More Severe than Previously Shown, or That Mitigation Measures or Alternatives Should be Reevaluated?	Do Prior Environmental Document(s) Include Mitigation to Address/Resolve Effects?
<b>14. POPULATION AND HOUSING. Would the Project:</b>					
a. <i>Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?</i>	2013 Addendum & Initial Study 2009 Final SEIR (Draft SEIR, Appendix A - Initial Study)	No	No	No	No prior mitigation measures were required and no mitigation is required
b. <i>Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?</i>	2013 Addendum & Initial Study 2009 Final SEIR (Draft SEIR, Appendix A - Initial Study)	No	No	No	No prior mitigation measures were required and no mitigation is required
<p><u>Discussion:</u> The 2009 Final SEIR concluded that the B-18/B-20 Hazardous Waste Landfill Project would have no impact on population and housing and did not carry it forward in the SEIR analysis. This finding was based on the project using the existing work force at KHF. The 2013 Addendum made a similar conclusion for the B-18 Class I/II Landfill expansion. The no impact conclusion applies to the permit renewal project. Activities related to the permit renewal would occur within the existing KHF property. As there would be no increase in the KHF workforce, the permit renewal would not induce population growth in the area or displace existing housing or existing residents. The proposed project is not growth inducing and would not directly or indirectly affect area housing, population or infrastructure.</p> <p><u>Conclusion:</u> The permit renewal would not result in new impacts to population and housing and there would not be an increase in the severity of a previously identified impact potential as analyzed in the 2009 Final SEIR and 2013 Addendum.</p> <p><u>References:</u> CH2Mhill, 2009. Final Subsequent Environmental Impact Report, B-18/B-20 Hazardous Waste Disposal Project, Kettleman Hills Facility, Chemical Waste Management, Inc. September.</p>					

DTSC, 2013. Addendum and Initial Study Environmental Checklist to the Final Subsequent Environmental Impact Report. Prepared for the Existing B-18 Class I/Class II Landfill Expansion Project, Kettleman Hills Facility, Chemical Waste Management, Inc. May.

Environmental Resource	Where Was the Impact Analyzed in Prior Environmental Document(s)?	Are Substantial Changes Proposed in the Project that Require Major Revisions in the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Do Any Substantial Changes in Circumstances Require Major Revisions in the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Does Any New Information of Substantial Importance Show Significant Effect(s) Not Previously Discussed or More Severe than Previously Shown, or That Mitigation Measures or Alternatives Should be Reevaluated?	Do Prior Environmental Document(s) Include Mitigation to Address/Resolve Effects?
<b>15. PUBLIC SERVICES. Would the project:</b>					
a. <i>Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:</i>					
<i>Fire protection?</i>	2013 Addendum & Initial Study 2009 Final SEIR (Draft SEIR, Appendix A - Initial Study)	No	No	No	No prior mitigation measures were required and no mitigation is required
<i>Police protection?</i>	2013 Addendum & Initial Study 2009 Final SEIR (Draft	No	No	No	No prior mitigation measures were required and no mitigation is required

	SEIR, Appendix A - Initial Study)				
<i>Schools?</i>	2013 Addendum & Initial Study  2009 Final SEIR (Draft SEIR, Appendix A - Initial Study)	No	No	No	No prior mitigation measures were required and no mitigation is required
<i>Parks?</i>	2013 Addendum & Initial Study  2009 Final SEIR (Draft SEIR, Appendix A - Initial Study)	No	No	No	No prior mitigation measures were required and no mitigation is required
<i>Other public facilities?</i>	2013 Addendum & Initial Study  2009 Final SEIR (Draft SEIR, Appendix A - Initial Study)	No	No	No	No prior mitigation measures were required and no mitigation is required

**Discussion:** The 2009 Final SEIR (Appendix A Initial Study) concluded that the B-18/B-20 Hazardous Waste Landfill Project would have no impact on public services and did not carry it forward in the SEIR analysis. This finding was based on the project not requiring new or supplemental government services (fire protection, police protection, schools, and parks). The 2013 Addendum made a similar conclusion for the B-18 Class I/II Landfill expansion. The no impact conclusion applies to the permit renewal project. Activities related to the permit renewal would occur within the existing KHF property and would not require an increase the KHF workforce. Therefore, the permit renewal is not expected to require new or supplemental government services.

**Conclusion:** The new proposed activities would not result in a public services impact as construction and operation would not require new or supplemental government services. The proposed project would not result in a new impact to public services and would not change the severity of the identified impact in previously adopted environmental documents.

**References:**

- CH2MHill, 2009. Final Subsequent Environmental Impact Report, B-18/B-20 Hazardous Waste Disposal Project, Kettleman Hills Facility, Chemical Waste Management, Inc. September.
- DTSC, 2013. Addendum and Initial Study Environmental Checklist to the Final Subsequent Environmental Impact Report. Prepared for the Existing B-18 Class I/Class II Landfill Expansion Project, Kettleman Hills Facility, Chemical Waste Management, Inc. May.

<b>Environmental Resource</b>	<b>Where Was the Impact Analyzed in Prior Environmental</b>	<b>Are Substantial Changes Proposed in the Project that Require Major Revisions in</b>	<b>Do Any Substantial Changes in Circumstances Require Major Revisions in the</b>	<b>Does Any New Information of Substantial Importance Show Significant Effect(s)</b>	<b>Do Prior Environmental Document(s) Include</b>
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	Document(s)?	the Environ-mental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Not Previously Discussed or More Severe than Previously Shown, or That Mitigation Measures or Alternatives Should be Reevaluated?	Mitigation to Address/Resolve Effects?
<b>16. RECREATION.</b>					
a. <i>Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?</i>	2013 Addendum & Initial Study, p. 70 2009 Final SEIR (Draft SEIR, Appendix A - Initial Study)	No	No	No	No prior mitigation measures were required and no mitigation is required
b. <i>Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?</i>	2013 Addendum & Initial Study, p. 70 2009 Final SEIR (Draft SEIR, Appendix A - Initial Study)	No	No	No	No prior mitigation measures were required and no mitigation is required
<p><b>Discussion:</b> The 2009 Final SEIR (Appendix A Initial Study) concluded that the B-18/B-20 Hazardous Waste Landfill Project would have no impact on recreation resources because the project would not increase population and result in the need for new recreational facilities. Therefore, this issue was not carried forward for analysis in the SEIR analysis. The 2013 Addendum made a similar conclusion for the B-18 Class I/II Landfill expansion, but added that the expansion project would not directly affect existing recreational facilities. The no impact conclusion applies to the permit renewal project. The proposed permit renewal would not expand project activities outside of the existing KHF footprint. In addition, the proposed project would not affect the use of or cause the need to expand existing recreational facilities nor require the construction of new recreational facilities. CWMI has previously funded improvements to local school facilities, which has contributed to local recreational facilities. Since 2015, CWMI has provided funding to Reef Sunset Unified School District for soccer field lighting, walking track, pavilion, and parking lot at local schools.</p> <p><b>Conclusion:</b> The permit renewal would not cause a new impact to recreation and would not increase the severity of previously identified impacts as analyzed in adopted environmental documents.</p> <p><b>References:</b> CH2MHill, 2009. Final Subsequent Environmental Impact Report, B-18/B-20 Hazardous Waste Disposal Project, Kettleman Hills Facility, Chemical Waste Management, Inc. September.</p>					

DTSC, 2013. Addendum and Initial Study Environmental Checklist to the Final Subsequent Environmental Impact Report. Prepared for the Existing B-18 Class I/Class II Landfill Expansion Project, Kettleman Hills Facility, Chemical Waste Management, Inc. May.

Environmental Resource	Where Was the Impact Analyzed in Prior Environmental Document(s)?	Are Substantial Changes Proposed in the Project that Require Major Revisions in the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Do Any Substantial Changes in Circumstances Require Major Revisions in the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Does Any New Information of Substantial Importance Show Significant Effect(s) Not Previously Discussed or More Severe than Previously Shown, or That Mitigation Measures or Alternatives Should be Reevaluated?	Do Prior Environmental Document(s) Include Mitigation to Address/Resolve Effects?
<b>17. TRANSPORTATION. Would the project:</b>					
a. <i>Conflict with a program plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, including transit, roadway, bicycle and pedestrian facilities?</i>	2013 Addendum & Initial Study 2009 Final SEIR (Draft SEIR Chapter 3.11)	No	No	No	<b>TT-MM.1</b> <b>TT-MM.2</b> (2008 SEIR) <b>TT-MM.3</b> (2009 Recirculated SEIR)
b. <i>Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?</i>	2013 Addendum & Initial Study 2009 Final SEIR (Draft SEIR Chapter 3.11)	No	No	No	No prior mitigation measures were required and no mitigation is required
c. <i>Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?</i>	2013 Addendum & Initial Study 2009 Final SEIR (Draft SEIR Chapter 3.11)	No	No	No	No prior mitigation measures were required and no mitigation is required
d. <i>Result in inadequate emergency access?</i>	2013 Addendum & Initial Study 2009 Final SEIR (Draft SEIR Chapter 3.11)	No	No	No	No prior mitigation measures were required and no mitigation is required

**Discussion:** The 2009 Final SEIR for the B-18/B-20 Hazardous Waste Landfill project determined, because of the nature of the site, the landfill project would not result in impacts related to air traffic patterns; hazards due to a design feature or incompatible use; emergency access; parking capacity; or adopted policies, plans, or programs supporting alternative transportation. Similar findings were made in the 2013 Addendum for the project site. The permit renewal would include new activities that would be conducted within the approved KHF footprint and would therefore result in similar findings as presented in these two environmental documents.

With respect to trip generation, Chapter 3.11 of the Draft SEIR and Chapter 3 of the Recirculated Draft SEIR concluded that (1) project traffic conditions on SR 41 west of I-5 to the KHF entrance and on I-5 north and south-bound of SR 41 from 2009 to 2013, both with and without the project, and with cumulative growth in the region, remain at LOS B to C, depending on the segment, and remain acceptable, which would be a less-than-significant impact; (2) the traffic volumes for the landfill project and the cumulative traffic volumes on SR-41 from I-5 to the KHF entrance, and on I-5 northbound and southbound from its interchange with SR-41 from 2017 through 2043, result in level of service (LOS) D, E or F on SR-41 and I-5, depending on the segment, which would be a cumulative significant and unavoidable impact after mitigation; (3) the project, with cumulative growth in the region, would contribute to a reduction in the LOS at the intersection of the I-5 northbound on- and off-ramps and SR-41 in 2026 to LOS D or below during weekday afternoon and Friday afternoon peak traffic hour, which would be a significant and unavoidable cumulative impact even after implementation of mitigation.

The permit renewal would not alter the allowed/existing daily throughput of 400 hazardous waste truck trips per day. This baseline throughput (and daily trip generation) was evaluated within the traffic impact analysis of the 2009 Final SEIR. The proposed project would not increase the KHF workforce and, therefore, would not increase trip volumes associated with the KHF. The proposed permit renewal would be consistent with the findings of the previous traffic analyses that found that traffic would be less than significant with mitigation.

#### **2009 SEIR Mitigation Measures:**

##### **TT-MM.1**

CWMI shall pay to Caltrans its prorated fair-share for the following traffic improvement projects on SR-41 and on I-5, including improvements that may be required to the I-5 on-and off- ramps from/to SR-41 and the intersections of the I-5 on- and off-ramps and SR-41, through a fair-share mechanism defined by Caltrans.

SR-41: add one lane in each direction from I-5 to the KHF entrance (2 lanes to 4 lanes total). Required for 2026.

I-5 – Northbound and Southbound: add two lanes in each direction in the vicinity of the I-5 interchange with SR-41. Required for 2034.

##### **TT-MM.2**

CWMI shall prepare a construction traffic management plan (TMP) for approval by the County and Caltrans to apply temporary traffic controls on SR-41 at the entrance to KHF when Project-related construction activities occur in 2009 and during periodic Project-related construction and closure periods through 2043. (Draft SEIR, pp. 3.11-23 to 3.11-24; Revised Project Description and Analysis, p. 3-11.)

##### **TT-MM.3:**

CWMI shall enter into an agreement with Caltrans to pay its pro rata fair share fees for the following roadway improvements on SR-41 at its intersections with the northbound I-5 on- and off-ramps, and on the northbound I-5 off-ramp, in accordance with the findings of the 2009

Addendum to the Traffic Impact Study for the Project:

- **TT-MM.3A** 2026 – CWMI shall pay its pro rata fair share for signalization of the intersection at the I-5 northbound on- and off-ramps and SR-41.
- **TT-MM.3B** 2026 – CWMI shall pay its pro rata fair share for adding a second through lane on southbound SR-41, for approximately 1,000 feet, south of the I-5 on- and off-ramps.
- **TT-MM.3C** 2026 –CWMI shall pay its pro rata fair share for adding a new lane to the I-5 northbound off-ramp for the total length of the off-ramp (a distance of approximately 1,630 feet) or add a weaving lane on northbound SR-41 at the I-5 northbound off-ramp to Bernard Drive. In addition, CWMI shall pay its pro rata fair share for the addition of a 1,300-foot auxiliary lane to the northbound I-5 south of the northbound off-ramp.

**TT-MM.3D** 2034 –CWMI shall pay its pro rata fair share for adding an additional lane on the northbound SR-41 for a distance of 1,000 feet from the SR-41 intersection with the I-5 northbound on and off-ramps. CWMI shall also pay its pro rata fair share for adding a stripe to dedicate a left turn lane from SR-41 onto the I-5 northbound on-ramp, for a total of two through lanes and one dedicated left turn lane. CWMI shall enter into an agreement with Caltrans to pay its pro rata fair share for the identified roadway improvements to Caltrans in accordance with Caltrans’ *Guide For the Preparation of Traffic Impact Studies* (December 2002), Appendix B (Methodology for Calculating Equitable Mitigation Measures), and shall include a tracking mechanism for the funds.

Conclusion: The permit renewal would not require the facility to exceed the county CUP condition of 400 hazardous waste truck round-trips per day (County CUP 05-10). Therefore, the project would not result in a new traffic impact or increase the severity of a previously identified impact potential as analyzed in the 2009 Final SEIR or 2013 Addendum.

References:

County of Kings, 2009. Resolution No. 09-073, Kings County Board of Supervisors. December 22.  
 CH2MHill, 2009. Final Subsequent Environmental Impact Report, B-18/B-20 Hazardous Waste Disposal Project, Kettleman Hills Facility, Chemical Waste Management, Inc., September.  
 DTSC, 2013. Addendum and Initial Study Environmental Checklist to the Final Subsequent Environmental Impact Report. Prepared for the Existing B-18 Class I/Class II Landfill Expansion Project, Kettleman Hills Facility, Chemical Waste Management, Inc. May.

Environmental Resource	Where Was the Impact Analyzed in Prior Environmental Document(s)?	Are Substantial Changes Proposed in the Project that Require Major Revisions in the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Do Any Substantial Changes in Circumstances Require Major Revisions in the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Does Any New Information of Substantial Importance Show Significant Effect(s) Not Previously Discussed or More Severe than Previously Shown, or That Mitigation Measures or Alternatives Should be Reevaluated?	Do Prior Environmental Document(s) Include Mitigation to Address/Resolve Effects?
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<b>18. TRIBAL CULTURAL RESOURCES.</b>					
<p>a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:</p>					
<p>a) <i>Listed or eligible for listing in the California Register of Historical Resources, or in local register of historical resources as defined in Public Resources Code section 5020.1(k), or</i></p>	Not analyzed.	No	No	No	No prior mitigation measures were required and no mitigation is required
<p>b) <i>A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</i></p>	Not analyzed.	No	No	No	No prior mitigation measures were required and no mitigation is required
<p><u>Discussion:</u> Assembly Bill (AB) 52 and related Public Resources Codes took effect on July 1, 2015. As such, prior environmental documents for the KHF did not include a study of tribal cultural resources or undertake government-to-government tribal consultation per AB 52. AB 52 does not apply to projects where the Notice of Preparation for an EIR was published prior to July 1, 2015. The KHF permit and environmental review process began prior to July 1, 2015.</p> <p>AB 52 changes sections of the Public Resources Code with the goal of promoting the involvement of California Native American tribes in the decision-making process when it comes to identifying and developing mitigation for impacts to resources of importance to their culture. The bill establishes a formal role for tribes in the CEQA process. CEQA lead agencies are required to consult with tribes that have requested to be notified of projects about tribal cultural resources, the development of project alternatives, and the type of environmental document that should be</p>					

prepared. AB 52 specifically states that a project that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment (PRC Section 21084.2). A tribal cultural resource is defined by the CEQA, Section 21074(a)(1)-(2) as:

1. Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
  - a. Included or determined to be eligible for inclusion in the California Register of Historical Resources.
  - b. Included in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in Public Resources Code Section 5024.1(c). In applying the criteria set forth in 5024.1(c) for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

Furthermore, tribal representatives are considered experts appropriate for providing substantial evidence regarding the locations, types, and significance of tribal cultural resources within their traditionally and culturally affiliated geographic area (PRC Section 21080.3.1[a]). CEQA (PRC Section 21073) defines a California Native American tribe as a "Native American tribe located in California that is on the contact list maintained by the Native American Heritage Commission."

Because DTSC is not the lead agency for CEQA on this project, notification to California Native American tribe that is traditionally and culturally affiliated with the geographic area of this project is not required pursuant to PRC Section 21080.3.1(b). If DTSC was the lead agency for this project, AB 52 consultation would not be required because no California Native American tribe has requested, in writing, to be informed of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe. The proposed permit renewal includes activities that will be conducted within the active operations of the KHF and in areas that have been generally developed or are part of the facility operations. The only activities that would include any ground disturbance would be associated with the well installations. However, these wells would be placed in active areas of the facilities to monitor already disturbed areas or near disturbed areas.

Although AB 52 does not apply to this project, DTSC contacted the Native American Heritage Commission (NAHC) to request a Sacred Lands records search for the KHF property. No Sacred Lands records were identified for the KHF and NAHC provided contact information for tribes that may have confidential or protected information about the project site. DTSC sent letters to the tribes identified by NAHC including: Kings River Choinumni Farm Tribe, Santa Rosa Rancheria Tachi Yokut Tribe, Table Mountain Rancheria, Tule River Indian Tribe, and the Wuksache Indian Tribe/Eshom Valley Band. DTSC only received a response from the Table Mountain Rancheria stating, "this project site is beyond of area of interest."

Conclusion: Based on the information discussed above, an analysis of tribal cultural resources pursuant to AB 52 is not applicable to this project.

References:

CH2MHill, 2009. Final Subsequent Environmental Impact Report, B-18/B-20 Hazardous Waste Disposal Project, Kettleman Hills Facility, Chemical Waste Management, Inc. September.

Environmental Resource	Where Was the Impact Analyzed in Prior Environmental Document(s)?	Are Substantial Changes Proposed in the Project that Require Major Revisions in the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Do Any Substantial Changes in Circumstances Require Major Revisions in the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Does Any New Information of Substantial Importance Show Significant Effect(s) Not Previously Discussed or More Severe than Previously Shown, or That Mitigation Measures or Alternatives Should be Reevaluated?	Do Prior Environmental Document(s) Include Mitigation to Address/Resolve Effects?
<b>19. UTILITIES AND SERVICE SYSTEMS. Would the project:</b>					
a. <i>Require or result in the relocation or construction of new or expanded water or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?</i>	2013 Addendum & Initial Study  2009 Final SEIR (Draft SEIR, Appendix A - Initial Study)	No	No	No	No prior mitigation measures were required and no mitigation is required
b. <i>Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?</i>	2013 Addendum & Initial Study  2009 Final SEIR (Draft SEIR, Appendix A - Initial Study)	No	No	No	No prior mitigation measures were required and no mitigation is required
c. <i>Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?</i>	2013 Addendum & Initial Study  2009 Final SEIR (Draft SEIR, Appendix A - Initial Study)	No	No	No	No prior mitigation measures were required and no mitigation is required
d. <i>Generate solid waste in excess of State or local standards, or in excess of</i>	2013 Addendum & Initial Study  2009 Final SEIR (Draft	No	No	No	No prior mitigation measures were required and no mitigation is

<i>the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?</i>	SEIR, Appendix A - Initial Study)				required
e. <i>Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?</i>	2013 Addendum & Initial Study  2009 Final SEIR (Draft SEIR, Appendix A - Initial Study)	No	No	No	No prior mitigation measures were required and no mitigation is required

Discussion: The 2009 Final SEIR for the B-18/B-20 Hazardous Waste Landfill project determined the landfill project would not result in impacts to utilities and service systems and did not carry forward this analysis in the SEIR. This finding was based on the KHF having existing systems in place that could accommodate the project. Similar findings were made in the 2013 Addendum for the project site.

(Impacts 19.a-e) The permit renewal would include new activities conducted within the approved KHF footprint and that would involve limited construction. The proposed activities in the permit renewal would not substantially increase the demand for utilities and service systems as the renewal would not increase the permanent workforce at the KHF. The project includes installation of a stationary shredder with an electric motor at the FSU Building. The shredder would use existing electrical service at the FSU Building and would not require any additional power lines. The proposed permit changes would generate waste from well-drilling activities, but these activities would not require upgrades to utilities or service systems. During well installation, minimal additional potable water use would occur as needed for general construction workers use (drinking, washing hands, etc.) and for dust control, which would not require additional or new water supply entitlements. Minimal wastewater would be generated by construction workers or would be offset through the use of portable toilets. The quantities anticipated during construction would not exceed wastewater treatment requirements of the RWQCB. or require construction or expansion of wastewater treatment facilities. The KHF has 46 existing groundwater and 8 existing soil-gas monitoring wells in place at the KHF. Installation of the 30 new soil-vapor wells would follow requirements in the updated Site-Specific Water Quality and Soil-Gas Monitoring Plan (March 2018), as approved by DTSC. This plan does not currently include the 5 new groundwater monitoring wells, although they would be part of the permit renewal.

The permit renewal would not change the stormwater drainage at the facility. The proposed permit changes would generate minimal volumes of waste from incidental activities, but would not be expected to exceed landfill capacity and would be disposed of in accordance with applicable laws, regulations, and permits.

Conclusion: The permit renewal did not identify new impacts or change the impact determination for utilities and service systems based on prior environmental evaluations. Therefore, the permit renewal project would result in similar findings to those presented in prior adopted environmental documents.

References:

CH2MHill, 2009. Final Subsequent Environmental Impact Report, B-18/B-20 Hazardous Waste Disposal Project, Kettleman Hills Facility, Chemical Waste Management, Inc. September.

DTSC, 2013. Addendum and Initial Study Environmental Checklist to the Final Subsequent Environmental Impact Report. Prepared for the Existing B-18 Class I/Class II Landfill Expansion Project, Kettleman Hills Facility, Chemical Waste Management, Inc. May.

Environmental Resource	Where Was the Impact Analyzed in Prior Environmental Document(s)?	Are Substantial Changes Proposed in the Project that Require Major Revisions in the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Do Any Substantial Changes in Circumstances Require Major Revisions in the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Does Any New Information of Substantial Importance Show Significant Effect(s) Not Previously Discussed or More Severe than Previously Shown, or That Mitigation Measures or Alternatives Should be Reevaluated?	Do Prior Environmental Document(s) Include Mitigation to Address/Resolve Effects?
<b>20. WILDFIRE.</b> If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:					
a. <i>Substantially impair an adopted emergency response plan or emergency evacuation plan?</i>	2009 Final EIR (Draft SEIR, Sections 3.7.4.8, 3.7.5.2.6 & 3.7.7)	No	No	No	No prior mitigation measures were required and no mitigation is required
b. <i>Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?</i>	2009 Final EIR (Draft SEIR, Sections 3.7.4.8, 3.7.5.2.6 & 3.7.7)	No	No	No	No prior mitigation measures were required and no mitigation is required
c. <i>Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?</i>	2009 Final EIR (Draft SEIR, Sections 3.7.4.8, 3.7.5.2.6 & 3.7.7)	No	No	No	No prior mitigation measures were required and no mitigation is required
d. <i>Expose people or structures to significant risks, including</i>	2009 Final EIR (Draft SEIR, Sections	No	No	No	No prior mitigation measures were required

<p><i>downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?</i></p>	<p>3.7.4.8, 3.7.5.2.6 &amp; 3.7.7)</p>				<p>and no mitigation is required</p>
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**Discussion:**  
 Effective December 28, 2018, the CEQA Guidelines (California Code of Regulations (CCR) Sections 15000 – 15387) and the initial study checklist (Appendix G) were amended to include Wildfire as a new resource category.

Section 3.7.4.8 of the 2009 Final EIR (March 2008 Draft SEIR), includes discussion of Fire Hazards for this Facility. A firebreak that surrounds the 1,600-acre KHF site is routinely maintained in accordance with Fire District requirements. Within the site, much of the area is graded, disturbed by ongoing operations, limiting the potential for a brush fire to spread uncontrolled. The area outside the firebreak is open space, with grass that becomes dry seasonally. Roads (e.g., I-5 and SR-41), power lines, and human presence provide potential ignition sources that could result in brush fires during dry conditions.

Existing fire protection systems are maintained onsite. These systems include a 250,000-gallon water storage tank, fire engine, water truck, heavy equipment, and fire extinguishers. The Contingency Plan for existing waste operations at KHF includes preparation and response measures for minimizing the risk of fire at the site.

There is little potential for fire to occur from wastes disposed of at the B-18 Landfill expansion or the B-20 Landfill. As described in Chapter 2.0, these landfills are for the disposal of containerized and bulk solid wastes, and for disposal of residue from wastes that are treated at the site that meet applicable land disposal regulations. The KHF does not accept for disposal any ignitable wastes, reactive wastes, or wastes with a temperature greater than 150 degrees Fahrenheit (°F) in accordance with CCR Title 22, Sections 66261.21 and 66261.23. The B-18 Landfill expansion and the B-20 Landfill would be permitted to accept combustible wastes, such as construction debris, as is currently permitted. However, due to the characteristics of these wastes, the potential for fire is low, because the wastes generally do not decompose, generate heat, or generate landfill gas.

The existing Contingency Plan ensures quick response for containment and control of fires. The Contingency Plan describes the actions that facility personnel shall take to comply with CFR Title 40, Sections 264.50-264.56; and CCR Title 22, Sections 66264.50-66264.56 and CCR Title 22, Sections 66264.51 and 66264.56, in response to fires at the facility. The Contingency Plan describes the measures implemented at KHF to coordinate emergency services, pursuant to CFR Title 40, Sections 264.50-264.56 and CCR Title 22, Sections 66264.50-66264.56. To facilitate emergency response procedures, KHF maintains an inventory of operating equipment, emergency response equipment, and supplies that are maintained and inspected regularly. A designated KHF Emergency Coordinator is responsible for implementing the Contingency Plan. The plan includes coordination with local emergency response personnel to facilitate rapid and appropriate response to incidents. Such rapid response procedures serve to control and minimize the potential for human exposure to hazardous constituents in the event of a hazardous waste upset condition.

Section 3.7.7 of the 2009 Final EIR (March 2008 Draft SEIR), includes discussion of Operational Procedures and Regulatory Requirements. The

following procedures are required by regulations for the proposed Project and/or are part of current operations at KHF. They would continue to be implemented to reduce or eliminate Project-related impacts of potential hazards and hazardous materials in accordance with regulatory and permit requirements:

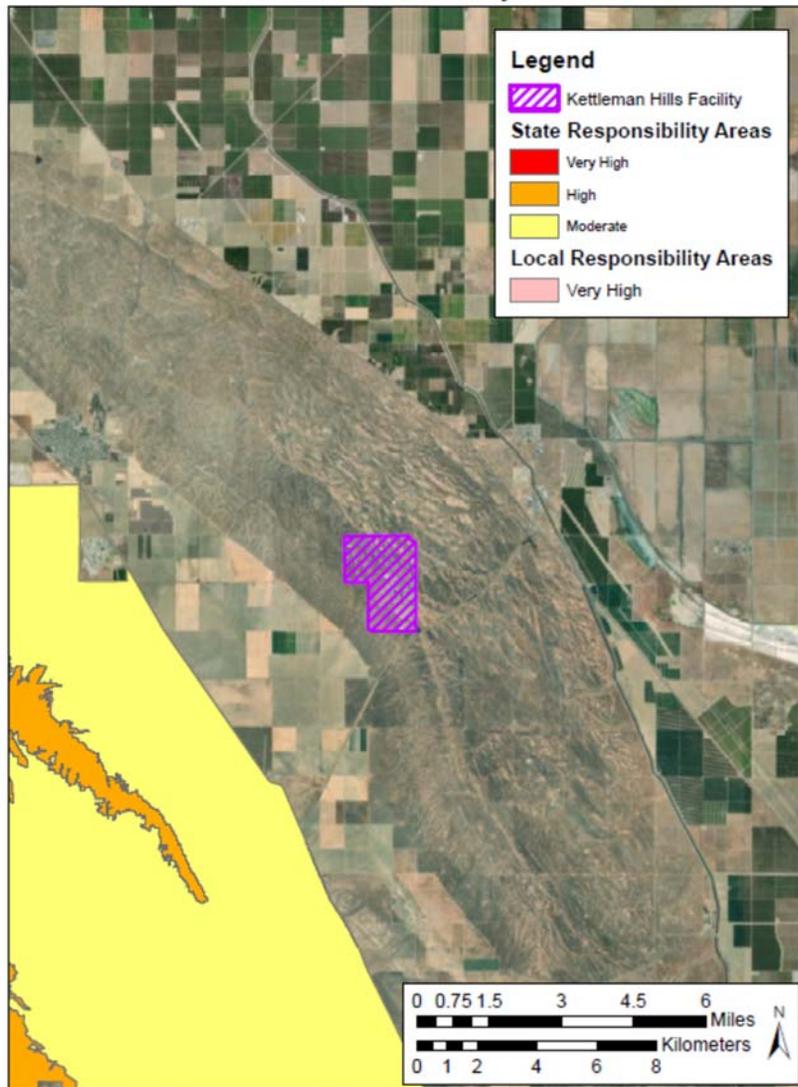
- Provision of fire suppression equipment, such as fire extinguishers and dedicated water storage.
- Adherence to the KHF Contingency Plan to assure prompt response to fire or other upset.
- Maintenance of a firebreak at the property boundary.
- Maintenance of soil stockpiles accessible for fire control.
- Cleaning and inspection of landfill equipment on a regular basis to reduce the potential for vehicle fires.
- Maintenance of water trucks and other heavy equipment that could be used to suppress a fire.
- Strict enforcement of a “no smoking” policy in the Project area.

On August 6, 2018, there was a grass fire in the Kettleman Hills located just south of Interstate 5 near Millham Road. The fire was reported at approximately 5:00 pm and at approximately 6:40 pm, the Cal Fire Battalion Chief requested KHF employees be on standby at the facility in case the fire jumped the facility’s perimeter fire break. KHF had employees on standby with the fire truck and equipment. The employees were released from standby by 11:00 pm after the fire was contained by Cal Fire. According to media reports, the fire was 100% contained by 11:45 am. The fire was over a mile away from the facility property lines and therefore there was no impact to the facility. The contingency plan was not formally implemented.

On October 3, 2018, there were two fires near the Kettleman Hills Facility. One fire was at an oil well approximately 0.5 miles from the facility. The other fire was near Highway 41, which burnt approximately 5 acres.

(Impacts 20.a-c) According to the California Fire Hazard Severity Zone Map by CalFire, the Kettleman Hills Facility is not located in state responsibility areas or lands classified as very high fire hazard severity zones. The nearest area of State responsibility is a moderate severity area more than 3 miles to the southwest of the facility boundary.

### Fire Hazard Severity Zones



Note: No Very High Fire Hazard Severity Zones within either State Responsibility Areas or Local Responsibility Areas occur within the map's extent

**Figure 4: Fire Hazard Severity Zones**

Conclusion: The permit renewal did not identify new impacts or change the impact determination for wildfire based on prior environmental evaluations. In addition, the the Kettleman Hills Facility is not located in state responsibility areas or lands classified as very high fire hazard severity zones. Therefore, the permit renewal project would result in similar findings to those presented in prior adopted environmental documents.

References:

CH2MHill, 2009. Final Subsequent Environmental Impact Report, B-18/B-20 Hazardous Waste Disposal Project, Kettleman Hills Facility, Chemical Waste Management, Inc. September.

DTSC, 2013. Addendum and Initial Study Environmental Checklist to the Final Subsequent Environmental Impact Report. Prepared for the Existing B-18 Class I/Class II Landfill Expansion Project, Kettleman Hills Facility, Chemical Waste Management, Inc. May.

Environmental Resource	Where Was the Impact Analyzed in Prior Environmental Document(s)?	Are Substantial Changes Proposed in the Project that Require Major Revisions in the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Do Any Substantial Changes in Circumstances Require Major Revisions in the Environmental Document(s) Due to New Significant Effects or a Substantial Increase in Severity of Previously Identified Significant Effects?	Does Any New Information of Substantial Importance Show Significant Effect(s) Not Previously Discussed or More Severe than Previously Shown, or That Mitigation Measures or Alternatives Should be Reevaluated?	Do Prior Environmental Document(s) Include Mitigation to Address/Resolve Effects?
<b>21. MANDATORY FINDINGS OF SIGNIFICANCE.</b>					
a) <i>Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?</i>	2013 Addendum & Initial Study  2009 Final SEIR (Draft SEIR; Revised Project Description and Analysis)  1985 Final EIR, Section 2.9 Cultural Resources	No	No	No	<b>BR-MM.1 to BRMM.12</b> <b>CR-MM.1 to CRMM.5</b>
b) <i>Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current</i>	2013 Addendum & Initial Study  2009 Final SEIR	No	No	No	<b>AQ-MM-1</b> <b>AQ-MM-2</b> <b>TT-MM.1</b> <b>TT-MM.2</b> (2008 SEIR) <b>TT-MM.3</b> (2009 Recirculated SEIR)

<i>projects, and the effects of probable future projects)?</i>					
c) <i>Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</i>	2013 Addendum & Initial Study 2009 Final SEIR 1985 Final EIR	No	No	No	All measures noted above

**Discussion:** Impact 21a. – The permit renewal includes activities that would all occur within the approved footprint of the KHF facility and that would involve limited construction. The KHF is a permitted facility for the treatment, storage, transfer, and disposal of hazardous waste. While the tricolored blackbird (*Agelaius tricolor*) was recently identified on the project site, the facility is overseen by multiple regulatory agencies and must report any impacts to biological resources within the facility boundary. As noted in the Biological Resources discussion, no activities would be conducted near the east retention basin where the tricolored blackbird was recorded in 2010. The closest activity is the well installation, which would take place approximately 0.3 miles (~1,666 feet) away. The tricolored blackbird was sited in 2010 in an active area of the KHF. Therefore, the permit renewal would not change previously identified impacts for biological resources. With regard, to cultural resources, past environmental documents have included archeological and paleontological studies of the project site and have found no evidence of significant archeological or paleontological resources on the project site. The permit renewal would not cause any new impacts or change this impact finding as the project would be carried out within existing operations and within the approved property boundary. One of the proposed groundwater monitoring wells (see Figure 1) would be installed outside the fenced operations area of the KHF property. Mitigation measures identified in previously certified environmental documents would reduce potential for impacts to cultural and paleontological resources.

Impact 21b. – Four projects were identified as cumulative projects for the KHF. These projects include recently approved and proposed projects within a five-mile radius of the KHF, as summarized below:

- **Tesla Supercharger Project.** This facility was completed in November 2017. It includes covered solar parking shelters with 40 superchargers parking slots for recharging Tesla vehicles. The facility includes a private customer lounge with restroom facilities and other amenities. This facility is located at 27675 Bernard Drive in Kettleman City.
- **Kettleman City Community Services District Surface Water Treatment Plant Project.** This facility is currently under construction and is expected to be complete by June 30, 2019. It will include a surface water treatment plant on a five-acre site located on the southwest intersection of 1<sup>st</sup> street and General Petroleum Avenue in Kettleman City.
- **Site Plan Review No. 15-13.** This project is currently under review by the County of Kings Planning Division. This project would include a 4,128 square-foot restaurant and drive-thru coffee shop. No estimate for construction was provided for this project.
- **Oil Wells.** The project area includes oil extraction facilities. As noted in the Geology and Soils discussion, there are five wells near the north and northeast project boundary. Figure 1 illustrates the location of the recently drilled well. As oil development is expected to continue in the project area, oil well drilling is considered a cumulative project.

Because the project would involve limited construction, the renewal of the permit would not cause a new cumulative impact or change the severity of a cumulative impact as identified in previously adopted environmental reports. This finding would also apply to operation of the facility, as the permit renewal activities are similar to existing activities conducted at the KHF, they would occur within the property boundary, and would not cause a permanent increase in the KHF workforce. In addition, mitigation measures associated with prior project site analyses would reduce the potential for cumulative impacts.

Impact 21c. – The proposed project includes limited construction and would not substantially change existing operations or increase the KHF workforce. Prior analyses conducted in adopted environmental documents have comprehensively addressed impacts that could have effects on human beings either directly or indirectly. While some changes have occurred in the project area as discussed in this analysis, none of these changes identify a new impact that has not been previously evaluated nor do these changes cause an increase in the severity of a previously identified environmental impact.

Conclusion: As noted in this analysis, the permit renewal is not anticipated to significantly change prior findings in adopted environmental documents for all issue areas. Mitigation measures identified in prior environmental documents would be applied to the permit renewal project to reduce potential impacts.

References:

- CH2MHill, 2009. Final Subsequent Environmental Impact Report, B-18/B-20 Hazardous Waste Disposal Project, Kettleman Hills Facility, Chemical Waste Management, Inc. September.
- CH2MHill, 1985. Final Environmental Impact Report. Chemical Waste Management, Inc. Kettleman Hills Hazardous Waste Treatment, Storage, and Disposal Facility. October.
- County of Kings. 2017. Project Review – Consultation Notice. Revised Site Plan Review No. 15-13 (Jackson/Lewis).
- \_\_\_\_\_. 2009. Kettleman City Community Plan. [online]: <http://www.countyofkings.com/home/showdocument?id=3130>. Accessed April 20, 2018.

## D. DETERMINATION

On the basis of the information and analysis provided above, the following findings are made:

A Subsequent EIR is required to be prepared for the proposed project pursuant to CEQA Guidelines section 15162(a) and (b) based on the following determination(s):

- Substantial changes are proposed in the project which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, showed the following:
  - The project will have one or more significant effects not discussed in the previous EIR or Negative Declaration;
  - Significant effects previously examined will be substantially more severe than shown in the previous EIR;
  - Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
  - Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.
  - Changes to the project or its circumstances occurred or new information became available after adoption of the Negative Declaration, and a Subsequent EIR is required under CEQA Guidelines section 15162 (a).

A Supplement to an EIR is required to be prepared for the proposed project pursuant to CEQA Guidelines section 15163(a)(1) and (2) based on the following determination(s):

- One or more of the conditions described in Section 15162 required the preparation of a subsequent EIR, and
- Only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation.

An Addendum to a previously certified Environmental Impact Report is required to be prepared for the proposed project pursuant to CEQA Guidelines section 15164(a) based on the following determination(s):

- Some changes or additions are necessary but none of the conditions described in CEQA Guidelines section 15162 calling for the preparation of a subsequent EIR have occurred.

An Addendum to an adopted Negative Declaration is required to be prepared for the proposed project pursuant to CEQA Guidelines section 15164(b) based on the following determination(s):

- Only minor technical changes or additions are necessary; or
- None of the conditions described in CEQA Guidelines section 15162 calling for the preparation of a subsequent EIR or Negative Declaration have occurred.

No additional documentation is required to be prepared for the proposed project pursuant to CEQA Guidelines

section 15162(b).

**E. APPROVAL SIGNATURES**

CEQA Environmental Planner	Title	Phone #
Signature		Date
CEQA Unit Supervisor	Title	Phone #
Signature		Date