Recirculated Portions of Draft Subsequent Environmental Impact Report

Executive Summary

B-18/B-20 Hazardous Waste Disposal Project
Kettleman Hills Facility
Chemical Waste Management, Inc.

State Clearinghouse No. 2005041064

Prepared for

Kings County Community Development Agency
Hanford, California

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ES.1 Introduction

On March 21, 2008, in accordance with the California Environmental Quality Act (CEQA), the County of Kings (County) released for public and agency review and comment the Draft Subsequent Environmental Impact Report (SEIR) for the B-18/B-20 Hazardous Waste Disposal Project at the Kettleman Hills Facility (KHF) (State Clearinghouse No. 2005041064), which is owned and operated by Chemical Waste Management, Inc. (CWMI). The Draft SEIR for the B-18/B-20 Hazardous Waste Disposal Project (proposed Project) was released for a 45-day public and agency review and comment period on March 21, 2008. Prior to the end of the public and agency review and comment period on the Draft SEIR on May 7, 2008, CMWI made revisions to the project description for the proposed Project. In accordance with CEQA, these revisions and their potential environmental impacts were analyzed as part of the "Revised Project Description and Analysis," that the County recirculated for public and agency review and comment on May 6, 2008, as part of the Draft SEIR for an additional 45-days of public and agency review and comment. The Draft SEIR and Revised Project Description and Analysis assessed the potential environmental impacts of the proposed Project, as revised.

At the end of the public and agency review and comment on June 20, 2008, comments were received on the Draft SEIR and the Revised Project Description and Analysis. The County reviewed those comments to identify specific environmental concerns and determine whether any additional environmental analysis would be required to respond to issues raised in the comments. The County subsequently determined that portions of the Draft SEIR should be recirculated in accordance with CEQA.

ES.2 Recirculation of the Draft SEIR Sections Pursuant to CEQA

The recirculation of an environmental impact report (EIR), or sections thereof, is governed by Public Resources Code (PRC) Section 21092.1. This section states that:

> *"When significant new information is added to an environmental impact report after notice has been given pursuant to Section 21092 and consultation has occurred pursuant to Sections 21104 and 21153, but prior to certification, the public agency shall give notice again*

pursuant to Section 21092, and consult again pursuant to Sections 21104 and 21153 before certifying the environmental impact report."

Significant new information is defined in the CEQA Guidelines Section 15088.5(a):

"As used in this section, the term 'information' can include changes in the project or environmental setting as well as additional data or other information. New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement."

'Significant new information' requiring recirculation includes, for example, a disclosure showing that:

1. A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
2. A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
3. A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.

Recirculation also serves the policy objectives of CEQA, even when information does not reveal a new significant impact. The California courts have repeatedly stated that the EIR is the "heart of CEQA" (*Laurel Heights Improvement Association v. Regents of the University of California*, 6 Cal. 4th, 1112, 1123 [1993]). The California Supreme Court has also indicated that "because the EIR must be certified or rejected by public officials, it is a document of accountability. . . the EIR process protects not only the environment but also informed self-government" (*Laurel Heights Improvement Association v. Regents of the University of California*, 47 Cal. 3d. 376, 392 [1988]). This reading of the CEQA process indicates that the EIR is a vehicle for making a transparent record of the basis for the lead agency's decision.

The Recirculated Draft SEIR for the proposed Project includes 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.

ES.3 Project Location

The KHF is located in rural western Kings County, 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 (see Figure ES-1). The KHF is located on a 1,600-acre property, with approximately 474 acres currently available and permitted for ongoing treatment, storage, and disposal operations for hazardous waste and designated waste, and for disposal operations for municipal solid waste.

ES.4 Proposed Project

As discussed in the Draft SEIR, the proposed Project includes a lateral and vertical expansion of the existing B-18 Landfill to provide additional hazardous waste and designated waste disposal capacity. The conceptual design for the B-18 Landfill expansion in the Draft SEIR provided an additional 4.6 million cubic yards (cy) of waste disposal capacity. The conceptual design required the relocation of an existing storm water retention basin at the B-18 Landfill and realignment of the existing onsite entrance road to KHF.

As discussed in Revised Project Description and Analysis, as part of the detailed engineering design for the B-18 Landfill expansion, it has been determined that reconfiguration of an existing cut-slope on the west side of the B-18 Landfill to allow for construction of a liner system on the reconfigured cut-slope eliminates the need to relocate the existing storm water retention basin and avoids the need to realign a portion of the existing onsite entrance road to KHF. The reconfiguration reduces the area of grading and earthwork during construction of the lateral and vertical expansion of the B-18 Landfill by approximately 8 acres. The refined configuration of the B-18 Landfill also provides 4.9 million cy of additional waste disposal capacity, an increase in capacity of 0.3 million cy (i.e., 300,000 cy) over the 4.6 million cy of waste disposal capacity provided by the conceptual design in the Draft SEIR. Therefore, the refined detailed design of the lateral and vertical expansion of the B-18 Landfill reduces the impacts associated with construction while providing a minor increase in waste disposal capacity.

Under both the conceptual design for the B-18 Landfill expansion and the refined detailed design, the B-18 Landfill vertical expansion reaches a maximum elevation of 1,018 feet above mean sea level.

Also as discussed in the Revised Project Description and Analysis, the detailed design also includes a refinement of the composite side-slope liner system for both the lateral and vertical expansion of the B-18 Landfill and the new B-20 Landfill. In addition, the design of the final cover for the B-18 and B-20 Landfills has been refined to be consistent with the 2003 renewed Resource Conservation and Recovery Act (RCRA) Part B permit issued for hazardous waste operations at KHF by the California Department of Toxic Substances Control (DTSC).

ES.5 Environmental Analysis

ES.5.1 Summary of Proposed Project Impacts

This Recirculated Draft SEIR includes new information concerning the potential impacts of the proposed Project on hydrology and water quality and on transportation and traffic. This new information is incorporated into the revised analysis contained in Section 3.8 - Hydrology and Water Quality and Section 3.11 - Transportation and Traffic. Impacts and mitigation measures for Hydrology and Water Quality and Transportation/Traffic are summarized in Table ES-1 of this Recirculated Draft SEIR.

ES.5.1.1 Hydrology and Water Quality

The KHF site is located in the San Joaquin Valley Groundwater Basin, which is divided into seven subbasins. The Kettleman Hills form a groundwater divide between the Tulare Lake Groundwater Subbasin to the east and the Pleasant Valley Groundwater Subbasin to the west. Groundwater near KHF varies from about 413 to 480 feet above mean sea level (msl). This groundwater is considered stagnant due to its age, velocity, and elevated concentrations of total dissolved solids (TDS). Water beneath KHF lies approximately 350 to 540 feet below ground surface. This water ranges from 16,000 to more than 30,000 years old; has poor quality due to its hardness, TDS, and mineralization; and is calculated to travel 1 to 10 feet per year.

Natural lakes or other surface waters do not occur at or near KHF. The nearest surface water is the California Aqueduct, located approximately 3 miles east of KHF. The aqueduct is isolated from the underlying groundwater basin by its concrete liner. Stormwater at KHF is controlled to prevent runoff from flowing off the site. In accordance with requirements of CCR Title 23, the stormwater control system is designed to accommodate peak flows from the probable maximum precipitation (PMP) event.

The proposed Project will be designed to meet state and federal requirements to assure that impacts will not occur to groundwater or surface water as a result of Project activities. These regulatory requirements include, but are not limited to, protection from the PMP; installation of liner systems and leachate management systems; drainage control; groundwater monitoring; installation of final cover; and closure and post-closure monitoring and maintenance.

Based on public and agency comments received on the Draft SEIR, additional information regarding KHF's existing and proposed water usage for the proposed Project and the source of potable water and non-potable water for KHF as part of the proposed Project has been

included in the analysis of the proposed Projects potential impacts on hydrology and water quality.

Historically KHF has received up to an average of approximately 8,000 gallons per day (gpd) of potable water from the City of Avenal. Potable water is supplied to KHF from various sources including via a pipeline from the City of Avenal, and via truck from the Kettleman City Community Services District (CSD). Based on the City of Avenal's comments on the Draft SEIR, it is understood that in the future the City may have to reduce the amount of water it supplies to KHF and that the City cannot guarantee a continuous potable water supply. If the potable water supply is reduced from the City of Avenal, other providers in the area have sufficient capacity to continue to provide the potable water required for the operation at KHF. To secure a backup supply of potable water, CWMI discussed its potable water needs with Hewitson Enterprises, Inc. (Hewitson). Hewitson has indicated that if in the future KHF requires potable water to meet all or part of the 8,000 gpd for operations of KHF, that Hewitson is able and willing to provide the required 8,000 gpd of potable water to KHF.

ES.5.1.1.1 Potable Water and Non-Potable Water

KHF currently receives potable water via pipeline from the City of Avenal, and non-potable water via pipeline from a private Hewitson well located west of Kettleman City. The non-potable water use at KHF for current and future activities supports two components: 1) regular operations and 2) construction.

For regular operations, non-potable water is used primarily for dust control at the site in accordance with the rules and regulations of the San Joaquin Unified Air Pollution Control District (SJVUAPCD). The dust control demand for non-potable water is estimated at 60,000 gpd. For construction activities, non-potable water is used for soil moisture conditioning (construction of liners, berms, etc.). Based on prior experience at KHF, the peak demand during construction of the vertical expansion of the B-18 Landfill and during the construction of the three phases of the new B-20 Landfill is estimated at 500,000 gpd over a 10-day period. Construction is expected to last approximately 100 days and will occur in discrete phases starting in 2010 for the expansion of the B-18 Landfill, and then three phases (A to C) for the new B-20 Landfill. Construction of B-20 Phase A is expected to start in 2017, with subsequent phases B and C occurring in 7 to 8 year intervals depending on the rate of hazardous waste disposal at KHF.

This periodic use of additional non-potable water at KHF has occurred various times during the construction of landfills at KHF, including the initial construction of the B-19 Landfill and subsequent construction at the B-19 Landfill, the initial construction of the existing B-18 landfill, and the recent construction of the first phase of the B-17 Landfill. Therefore, the use

of an estimated 60,000 gpd of non-potable water for daily dust control and the periodic use of the additional non-potable water during construction represents the baseline conditions at KHF.

ES.5.1.1.2 Supplemental Groundwater Analysis

A supplemental analysis was commissioned and prepared by Luhdorff & Scalmanini Consultant Engineers, to consider whether any new significant adverse impacts could result from ongoing use of the Hewitson well. The analysis offers additional evidence in support of the findings and conclusions in Section 3.8 of the Draft SEIR, that the continued use of non-potable water from the private Hewitson well for the proposed Project will not impact water supplies for Kettleman City or other neighboring groundwater users.

Pumping from the private Hewitson well located in Kettleman City, 3.5 miles northeast of the KHF, will meet the non-potable water demands of the project. The nearest local wells examined for the assessment are operated by CSD that serves the residents of Kettleman City and local businesses. The analysis found the potential drawdown effects by pumping to support the proposed Project would be minor with little to no effect from interference with the operation of other local municipal or private wells in the area.

The analysis also considered the proposed Project's pumping in terms of local and regional groundwater resources and, specifically, whether the project pumping has the potential to adversely affect water supplies for other users such as the local CSD. The analysis found the pumping to support the proposed Project would have no measurable effect on regional resources due to the scale and volume of the regional groundwater system and the magnitude of project pumping. Locally, the assessment determined that the aquifer system would remain more than sufficient to support groundwater pumping to meet municipal demand, private uses, and the non-potable demands of the proposed Project.

The evaluation determined the local groundwater levels are shallower than groundwater levels projected from adjacent regional groundwater sub-basins. The evaluation interprets the shallower groundwater levels as an indication that local pumping has not depleted the local aquifer system or induced steep declines in the groundwater table to the extent that groundwater pumping has limited the local water demand.

The analysis and findings support the findings and conclusions of Section 3.8 of the Draft SEIR (see Draft SEIR p. 3-8-16) that the continued use of non-potable water from the private Hewitson well for the proposed Project will not impact water supplies for Kettleman City or other neighboring users. This information does not alter the findings or conclusions of the Draft SEIR or the Revised Project Description and Analysis.

ES.5.1.1.3 Water Usage by Proposed Project

A comment received on the Draft SEIR claimed that California Water Code Section 10910 requires the preparation of a water supply assessment for the proposed Project. Senate Bill 610 (Water Code Sections 10910-10915), applies to cities and counties, and requires the preparation of a water supply assessment when a project is both subject to environmental review under CEQA and falls within the definition of a "project" as defined by Water Code Section 10912. (Water Code Section 10910, subd. (a).) None of these provisions are deemed applicable to the proposed project. The only arguably relevant provisions include subdivision (a)(5) and (a)(7).

As noted above, however, the proposed Project would not result in any increase in potable water demands from the City of Avenal. While the potable water demand is not expected to increase under the KHF B-18/B-20 project because no structures or employees are added under the project, even if the baseline demand of 8,000 gpd of potable were to double under the project such increase in water use would still not qualify it as a "project" under subdivision (a)(7). The use of an additional 8,000 gpd only amounts to 9.0 acre-feet per year (afy), well under the 150 to 250 afy equivalent demand of a 500 dwelling-unit project.

The proposed Project anticipates the continued use of the same amount of non-potable private well water from Hewitson that has historically been used on a periodic basis for construction phases. The use of non-potable water for dust control (approximately 60,000 gpd) is approximately 48 afy, which is a continuation of the use at KHF. In addition, during each phase of construction for the proposed Project approximately 42 acre-feet of non-potable water will be used (approximately 500,000 gpd for 10 days, and approximately 100,000 gpd for 90 days). Therefore, during the four phased construction periods for the proposed Project, a combined total of approximately 90 afy of non-potable water will be used. However, for the majority of the years, the non-potable water usage is 48 afy for routine dust control.

Based on the proposed Project's use of non-potable water, the use of 48 to 90 afy per year on non-potable water would be less than the requirements of SB 610, which only applies to potable water, the proposed project would not result in a demand for water equivalent to, or greater than, the amount of water required to serve a 500 dwelling unit project (See also Draft SEIR, pp. 3.8-15 to 3.8-16).

Based on the above, preparation of a water supply assessment for the proposed Project's non-potable water supply is not required by Water Code Section 10910. This information does alter the findings or conclusions of the Draft SEIR or the Revised Project Description and Analysis.

ES.5.1.2 Transportation and Traffic

The major roadways near the Project site that are used for existing KHF operations and that will continue to be used by Project-related traffic are I-5 and SR-41. Existing waste transport traffic associated with all operations at KHF is 568 waste transport truck round-trips per day, Monday through Friday/Saturday (an average of 400 truck round-trips for hazardous waste) and a maximum of 168 truck round-trips to the B-19/B-17 Class II/Class III landfills. The proposed Project would not result in an increase in existing traffic from KHF over existing levels and would not exceed 400 truck trips per day.

The traffic study for the proposed Project analyzed traffic conditions on SR-41 from the KHF entrance to I-5, and I-5 north and south of SR-41 over time, both with and without the proposed Project, and with cumulative projects (TPG 2008). The traffic analysis for the proposed Project considered various time periods between 2009 and 2043 corresponding with the anticipated phased construction and phased closure period for the proposed Project. Most truck round-trips for the proposed Project would travel to the Project site via I-5 to its interchange with SR-41, then southbound on SR-41 to the KHF entrance. With or without the proposed Project, the level of service (LOS) on I-5 in this area of the San Joaquin Valley will continue to operate at an acceptable level through 2013 (i.e., LOS of C or better). However, by 2017 and through the projected closure date for the B-20 Landfill in 2043, the LOS on SR-41 and I-5 in this area of the San Joaquin Valley would operate at LOSs ranging from D to F with or without the proposed Project if roadway improvements are not implemented. Therefore, impacts to traffic on SR-41 and I-5 after 2017 are considered cumulatively significant.

As discussed above, transportation and traffic impacts related to the proposed Project would not be significant through 2013, but the proposed Project would contribute to a significant impact on SR-41 from the KHF entrance to I-5 and on I-5 by 2017 and through 2043. Based on the proposed Project's contribution to a significant impact, two traffic mitigation measures are included in this Draft SEIR and shown in Table ES-1 (TT-MM.1 and TT-MM.2). Measure TT-MM.2, the preparation of a construction traffic control plan (TCP), is within the control of CWMI and will be implemented as part of the proposed Project. However, measure TT-MM.1 is not within the control of CWMI or the County. This measure indicates CWMI will pay its prorated fair-share to contribute to improvements of specific segments of SR-41 and I-5, which would reduce the proposed Project's contribution to traffic impacts to less than significant. However, the implementation of the roadway improvements is not within the control of CWMI. Therefore, for the purpose of this Draft SEIR, the reduction of the LOS to D or below on SR-41 from the KHF entrance to I-5, and the reduction of the LOS to D or below on I-5 north and south bound of its interchange with SR-41 will be considered a cumulatively significant and unavoidable impact, as roadway

improvements are controlled by Caltrans, and neither CWMI or the County have the authority to guarantee that such improvements will occur. Therefore, if the proposed Project is approved, a statement of overriding considerations would be required by the Kings County Planning Commission.

Based on comments received from Caltrans on the Draft SEIR and Revised Project Description and Analysis, a Addendum to Traffic Study (TPG 2009) has been prepared to analyze the proposed Project's ongoing contribution of truck traffic trips to the I-5 on- and off-ramps at State Route (SR)-41, and to the intersections of SR-41 and the Interstate (I)-5 ramps.

Based on the Addendum to Traffic Study, the proposed Project is found to contribute to a cumulatively considerable amount of traffic in the future at the following locations:

- The northbound off-ramp from I-5 to SR-41 (by 2026)
- At the intersection of the northbound I-5 on- and off-ramps and SR-41 (by 2026 and 2028)
- On SR-41 at the intersection with the northbound I-5 on- and off-ramps (by 2034)

Because the proposed Project would not result in an increase of truck round-trips over baseline conditions, no project specific significant impacts were identified in any of the future near term scenarios to the I-5 northbound off-ramp to SR-41 and at the intersection of the northbound on- and off-ramps and SR-41. Significant impacts were identified, however, under cumulative plus project future conditions as explained below. Specific improvements necessary to mitigate the ongoing level of future project related traffic trips are identified for the I-5 northbound on- and off-ramps at SR- 41, and at the intersection of these ramps with SR-41.

Based on this analysis, Recirculated Draft SEIR Table 3.11-42 provides the Project's pro rata fair share percentage for improvements required on the 1-5 ramps and SR-41 intersections. The traffic analysis for the proposed Project focused on key years in the Project such as years during which periodic construction or landfill closure and construction are anticipated to occur, including the year when operations shift from the B-18 Landfill to the B-20 Landfill. These years occur between 2009-2010 and 2043. The Project's pro rata fair share percentage is calculated for each of the key years, and roadway improvements that may be required are identified for the key years when the level of service (LOS) decreases from LOS C to LOS D, E or F. This change in LOS from C to D, E or F reflects the significance criteria for Kings County and Caltrans used in the Draft SEIR.

ES.5.2 Avenal Energy Project Cumulative Impact Summary

This Recirculated Draft SEIR adds the Avenal Energy Project to the list of cumulative projects which may have related impacts and are analyzed pursuant to State CEQA Guidelines section 15130 to determine whether the proposed Project may have a cumulative significant impact on the environment.

On February 21, 2008, Avenal Power Center, LLC (Avenal Power) filed an Application for Certification (AFC) for the Avenal Energy Project (Avenal Energy) to construct and operate a 600-megawatt (MW) power plant in the City of Avenal in Kings County under the California Energy Commission's (CEC) licensing process. Avenal Power plans to begin construction in April of 2010, with commercial operation beginning June 1, 2012. Although the proposed project is within City of Avenal town limits in an area zoned for industrial use, the site is located approximately 6 miles from residential and commercial districts. The project would be built on 25 acres of a 148-acre site located south of the Fresno County line, and about two miles east of Interstate 5, and approximately 8 miles from the site of the proposed Project. Current land use at the Avenal Energy project site and surrounding area is irrigated agriculture (TRC 2008).

The California Energy Commission (CEC) staff's preliminary conclusions are that the Avenal Energy Project may have significant adverse direct and cumulative impacts related to air quality, greenhouse gas (GHG) and global climate change, biological resources, cultural resources, land use, and traffic and transportation.

The inclusion of the Avenal Energy Project does not result in a new significant cumulative impact or a substantially more severe cumulative impact to aesthetics, geology and soils, hazards and hazardous materials, and noise. The additional analysis of the cumulative impacts of the Avenal Energy Project does not alter the findings or conclusions of the Draft SEIR.

ES.5.2.1 Avenal Energy Project Air Quality Cumulative Impact Analysis

Although CEC staff has found that with the adoption of specific conditions of certification, the proposed Avenal Energy Project would likely conform with applicable federal, state and SJVUAPCD air quality laws, ordinances, regulations, and standards, and that the proposed Avenal Energy project would not result in significant air quality related impacts, there still remains the unresolved issue of the inter-pollutant trade ratios to be resolved between the staff, the applicant and the SJVUAPCD (CEC 2009).

As discussed in Section 3.3.4.3 of the Draft SEIR (pp. 3.3-29 and 3.3-30), the proposed B-18/B-20 Landfill Project contributes to criteria pollutants on a regional basis. Therefore, as the San Joaquin Valley Air Basin (SJVAB) is in federal nonattainment for ozone and

nonattainment for federal $PM_{2.5}$, and nonattainment for state ozone and PM_{10}, and $PM_{2.5}$. For the purposes of this Recirculated Draft SEIR, the proposed B-18/B-20 Landfill Project is considered to have a cumulatively significant impact for those criteria pollutants. In September 2008, the United States Environmental Protection Agency (US EPA) announced that the area in which KHF is located has been determined to be attainment of the federal PM_{10} 24-hours standard (US EPA 2008). The Avenal Energy Project would not cause a substantial increase in the severity of the previously identified cumulative impact and would not change the findings in the Draft SEIR for cumulative impacts to air quality.

Health risks for the Avenal Energy Project were found to be less than significant at the site boundary (CEC 2009). Due to the distance between KHF and the Avenal Energy and related dispersion, health risks of the proposed Project and Avenal Energy Project would not be cumulatively significant.

ES.5.2.2 Avenal Energy Project Greenhouse Gas and Global Climate Change Cumulative Impact Analysis

Although the Avenal Energy Project is designed to reduce GHG emissions of the project generally, the project has the potential to increase regional and global GHG emissions. As stated in the Draft SEIR, although the proposed B-18/B-20 Landfill Project represents a continuation of the emissions from the existing transport of hazardous waste to KHF, the proposed Project makes an incremental contribution to the cumulatively significant impact of global climate change. Because all GHG emissions are considered significant, the impacts of the proposed B-18/B-20 Landfill project are considered cumulatively significant. The Avenal Energy Project would not cause a new significant cumulative impact or substantial increase in the severity of the cumulative impact and would not change the findings in the Draft SEIR for cumulative impacts to GHG and global climate change.

ES.5.2.3 Avenal Energy Project Biological Resources Cumulative Impact Analysis

The Avenal Energy Project site is located on agricultural land zoned for industrial development. This land has marginal wildlife habitat value and provides only low-quality foraging opportunities for local wildlife species. The removal of row crops at the site will incrementally reduce the amount of low productivity agricultural habitat available to common and special-status wildlife species throughout the region. Since the Avenal Energy Project will not impact wetlands, riparian vegetation, or other sensitive natural communities, and will not conflict with any local biological resource protection policies or ordinances or habitat conservation plans, there will be no related cumulative impacts. The Avenal Energy Project also does not affect any natural or particularly productive non-natural habitat, which further limits the potential for cumulative impacts. Considering this, other projects are too geographically distant to have substantial cumulative impacts to

wildlife movement or habitat modification. Based on these considerations, no substantial cumulative impact on wetlands, sensitive species, wildlife movement or habitat modification will occur as a result of the Avenal Energy Project. Therefore, cumulative impacts related to biological resources will be less than significant (TRC 2008).

The impacts to biological resources from the proposed B-18/B-20 Landfill Project can also be mitigated to below a level of significance, and thus, the proposed B-18/B-20 Landfill Project and the Avenal Energy Project do not result in cumulatively significant impacts to biological resources. Accordingly, the inclusion of the Avenal Energy Project on the list of cumulative projects does not result in a new significant cumulative impact or a substantially more severe cumulative impact to biological resources.

ES.5.2.4 Avenal Energy Project Cultural and Paleontological Resources Cumulative Impact Analysis

The assessment of cultural resources for the Avenal Energy Project indicated that there are no potentially significant cultural resources known or anticipated in the project area. Since the Avenal Energy Project is not expected to impact cultural resources, no cumulative impact is expected (TRC 2008). The impacts to cultural resources from the proposed B-18/B-20 Landfill Project can also be mitigated to below a level of significance, and thus, the proposed B-18/B-20 Landfill Project and the Avenal Energy Project do not result in cumulatively significant impacts to cultural resources. Accordingly, the inclusion of the Avenal Energy Project on the list of cumulative projects does not result in a new significant cumulative impact or a substantially more severe cumulative impact to cultural and paleontological resources.

ES.5.2.5 Avenal Energy Project Land Use and Planning Cumulative Impact Analysis

The Avenal Energy Project is located in an industrial district in the City of Avenal. The site and surrounding lands in the City of Avenal have been zoned industrial since at least 1992 when the previous General Plan was adopted. Based on the consistency of the Avenal Energy Project with long-established zoning and land use designations, the low level of land development occurring in the area, there will be no significant cumulative land use impact (TRC 2008).

As the Avenal Energy Project will be limited within its respective boundary, the potential land use impacts will not affect the proposed B-18/B-20 Landfill Project. Therefore, there will be no cumulative land use impacts with the proposed B-18/B-20 Landfill Project and the Avenal Energy Project. Accordingly, the inclusion of the Avenal Energy Project on the list of cumulative projects does not result in a new significant cumulative impact or a substantially more severe cumulative impact to land use and planning.

ES.5.2.6 Avenal Energy Project Traffic Cumulative Impact Analysis

The Avenal Energy site is located approximately 8 miles north of KHF and approximately 2 miles east of I-5. It is located adjacent to Avenal Cutoff Road away from developed urban areas and surrounded by agricultural lands. The proposed Avenal Energy site has access to I-5 and other highways and arterials that allow for access for construction and operations. Construction traffic control procedures will be implemented addressing timing of heavy equipment and building materials deliveries to avoid congestion at the I-5 ramps west of the site (CEC 2009). Construction work will be scheduled with two work shifts to reduce peak worker traffic counts. A traffic monitor will be provided at the intersection of Avenal Cutoff Road and SR-198 when construction workers leaving the Site pass through this area so that there will be no reduction in level of service for the minor street traffic on the SR-198 eastbound ramps at this location. These project design features, result in no cumulatively significant impacts on traffic and transportation from construction and operation of the Avenal Energy Project, therefore, no mitigation measures are required (TRC 2008).

CEC staff identified a potential safety issues regarding bus service for the Reef-Sunset School District. The Reef-Sunset School District provides school bus service between the city of Avenal and Kettleman City. The bus route includes Avenal Cutoff Road at 7 a.m., 3:15 p.m., and 3:30 p.m. CEC staff is concerned that construction worker and truck traffic scheduled in two shifts from 6:30 a.m. to 3:00 p.m. and 7:30 a.m. to 4:00 p.m. could interfere with the school bus service or compromise the safety of the bus or school children.

CEC staff conclude that other than the bus service issue, the Avenal Energy Project with the staff proposed Conditions of Certification would be consistent with all applicable LORS related to traffic and transportation, and would not degrade the LOS levels on Avenal Cutoff Road, I-5, or SR-198, SR-269, and SR-41. Therefore, traffic impacts related to Avenal Energy Project are less than significant.

However the proposed B-18/B-20 Landfill Project results in a cumulatively significant increase in traffic volumes on I-5 and SR-41. For the purposes of this Recirculated Draft SEIR, the proposed B-18/B-20 Landfill Project and the offsite Avenal Energy Project are considered to have a cumulatively significant impact for traffic.

The Avenal Energy Project would not cause a substantial increase in the severity of the cumulative impact and would not change the findings in the Draft SEIR for cumulative impacts to traffic and transportation.

ES.6 Relationship to the Draft SEIR, Revised Project Description and Analysis, and Final SEIR

Consistent with the requirements of the CEQA, this Recirculated Draft SEIR is being made available on June 1, 2009, for public and agency review and comment for a period of 45 days. The public review period ends on July 17, 2009. During this period, the general public, agencies, and organizations may submit written comments on this Recirculated Draft SEIR to the attention of Mr. Chuck Kinney, Kings County Community Development Agency, 1400 West Lacey Boulevard, Government Center, Building No. 6, Hanford, California 93230.

Copies of this Recirculated Draft SEIR, the Draft SEIR and Revised Project Description and Analysis are available for public review at the following locations:

- Kings County Community Development Agency

  1400 West Lacey Boulevard
  Government Center, Building No. 6
  Hanford, California 93230

- Kings County Libraries
  - Hanford Branch Library
    401 North Douty Street
    Hanford, California 93230
  - Kettleman City Branch Library
    104 Becky Pease Street
    Kettleman City, California 93239
  - Avenal Branch Library
    501 East King Street
    Avenal, California 93204

Pursuant to procedures set forth in Section 15088.5(f)(2) of the CEQA Guidelines, reviewers are requested to limit their comments to the materials contained in this Recirculated Draft SEIR. (See CEQA Guidelines, 15088.5, subd. (f)(2): *"When EIR is revised only in part and the lead agency is recirculating only the revised chapters or portions of the EIR, the lead agency may request that reviewers limit their comments to the revised chapters or portions of the recirculated EIR; lead agencies need only respond to comments received during the recirculation period that relate to the recirculated information."*

As required under Sections 15087(a) and 15088.5(d) of the CEQA Guidelines, the County has sent a Notice of Availability to all those who submitted comments on the Draft SEIR and/or the Revised Project Description and Analysis, to the extent their addresses are known, and to all organizations, members of the public, and agencies who were on the County's

distribution list for the Draft SEIR and Revised Project Description and Analysis, and those organizations and individuals who previously requested such notice in writing.

After the close of the public and agency review and comment period on July 17, 2009, the County will consider all comments received on this Recirculated Draft SEIR, prepare responses as required, and prepare the Final SEIR. The Final SEIR will be made available to commenting agencies and organizations, and any member of the public, upon request, at least 10 days prior to the County taking any action to certify the SEIR. If the County certifies the Final SEIR, the County will consider the proposed Project for approval.

TABLE ES-1
Summary of Impacts and Mitigation Measures

Environmental Resource/Impact	Level of Significance	Mitigation Measure	Level of Significance After Mitigation
Hydrology and Water Quality (3.8)			
WQ-1: Increased Erosion Potential The proposed Project would include drainage and erosion control features that would be designed to accommodate the peak storm water flows in accordance with applicable regulations.	Less than significant	No mitigation is required.	Less than significant
WQ-2: Surface Water Quality The proposed Project would include drainage and erosion control features that would be designed to accommodate the peak storm water flows in accordance with applicable regulations.	Less than significant	No mitigation is required.	Less than significant
WQ-3: Groundwater Quality The proposed Project would be designed to meet state and federal requirements for hazardous waste and designated waste landfills, including but not limited to: landfill liner and leachate management systems, drainage control, groundwater monitoring, and installation of final cover.	Less than significant	No mitigation is required.	Less than significant
Impact WQ-4: Groundwater Supplies Impact **The *continued use of non-potable water from the private Hewitson well for the proposed Project will not impact water supplies for Kettleman City or other neighboring groundwater users.***	***Less than significant***	***No mitigation is required.***	***Less than significant***
Transportation and Traffic (3.11)			
TT-1: LOS *of C or better* for 2009 to 2013 on I-5 north and south-bound of SR-41, and SR-41 west of I-5 to/from the KHF entrance 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 Proposed Project, and with cumulative growth in the region, remain at LOS B to C, depending on the segment, and remain acceptable.	Less than significant	**TT-MM.2** CWMI shall prepare a construction 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 ~~2042~~ ***2043***. **Responsibility for Compliance**: Project Proponent **Timing:** ***After*** issuance of CUP and ~~updated as necessary during the Project's periodic~~ ***prior to Project's periodic*** construction and closure phases from 2009 to ~~2042~~ ***2043, and updated as necessary***.	Less than significant

Note: Bold Italics indicates new or revised mitigation measures

TABLE ES-1
Summary of Impacts and Mitigation Measures

Environmental Resource/Impact	Level of Significance	Mitigation Measure	Level of Significance After Mitigation
Transportation and Traffic (3.11) (continued)			
TT-2: LOS *reduced to D or below* ~~for~~ *by* 2017 and 2018 on I-5 north and south-bound of SR-41, and SR-41 west of I-5 to/from the KHF entrance 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 in 2017 and 2018, both with and without the Proposed Project, and with cumulative growth in the region, remain at LOS B to C during the weekday afternoon peak traffic hour, depending on the segment, and remain acceptable. However, the LOS on SR-41 from I-5 to the KHF entrance decreases to LOS D during the Friday afternoon peak hour, with and without the Project. This decrease to LOS D represents a significant impact. However, specific roadway improvements based solely on the Friday afternoon peak hour condition are not expected to occur as the traffic engineering profession has adopted a standard that roadway designs are based on the roadway to handle normal peak traffic volumes rather than peak volumes that may occur periodically. Therefore, it is reasonable to assume that Caltrans would not implement a roadway improvement to handle this Friday afternoon peak hour condition.	Less than significant on a Project basis; cumulatively significant based on growth in the region	Roadway improvements not expected to occur to mitigate the Friday afternoon peak hour condition.	Cumulatively significant and unavoidable The timing and implementation of roadway improvements are subject to Caltrans jurisdiction. Therefore, CWMI has no authority to implement or guarantee that roadway improvements will occur.
		TT-MM.2 CWMI shall prepare a construction 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 ~~2042~~ ***2043***. **Responsibility for Compliance**: Project Proponent **Timing:** ***After*** issuance of CUP and ~~updated as necessary during the Project's periodic~~ ***prior to Project's periodic*** construction and closure phases from 2009 to ~~2042~~ ***2043, and updated as necessary***.	Less than significant

Note: Bold Italics indicates new or revised mitigation measures

TABLE ES-1
Summary of Impacts and Mitigation Measures

Environmental Resource/Impact	Level of Significance	Mitigation Measure	Level of Significance After Mitigation
Transportation and Traffic (3.11) (continued)			
TT-3: LOS *reduced to D or below* for 2026 and 2028 on I-5 north and south-bound of SR-41, and SR-41 west of I-5 to/from the KHF entrance 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 in 2026 and 2028, both with and without the Proposed Project, and with cumulative growth in the region, decrease to LOS D, E or F weekday afternoon and Friday afternoon peak traffic hour, depending on the segment.	Less than significant on a Project basis; cumulatively significant based on growth in the region	**TT-MM.1** CWMI shall pay to Caltrans its pro rated fair share for traffic improvement projects on SR-41 and I-5, including improvements that may be required to the I-5 on- and off-ramps to SR-41 and the intersections of the I-5 on- and off-ramps and SR-41, through a pro rata 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. **Responsibility for Compliance:** Project Proponent to pay prorated fair-share ***toward the above improvements based on consultation with Caltrans and consistent with the Methodology for Calculating Equitable Mitigation Measures (Appendix B) of Caltrans' Guide For the Preparation of Traffic Impact Studies (December 2002).*** **Timing:** ***After issuance of the CUP and*** at the time that specific highway capital improvement projects for these segments of SR-41 and I-5 are defined by Caltrans and Caltrans implements a specific fair-share mechanism for the capital improvement projects for these segments of SR-41 and I-5, depending on whether the Project is still operating.	Significant and unavoidable. The timing and implementation of roadway improvements are subject to Caltrans jurisdiction. Therefore, CWMI has no authority to implement or guarantee that roadway improvements will occur
		TT-MM.2 CWMI shall prepare a construction 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 ~~2042~~ ***2043***. **Responsibility for Compliance**: Project Proponent **Timing:** ***After*** issuance of CUP and ~~updated as necessary during the Project's periodic~~ ***prior to Project's periodic*** construction and closure phases from 2009 to ~~2042~~ **2043,** ***and updated as necessary***.	Less than significant

Note: Bold Italics indicates new or revised mitigation measures

TABLE ES-1
Summary of Impacts and Mitigation Measures

Environmental Resource/Impact	Level of Significance	Mitigation Measure	Level of Significance After Mitigation
Transportation and Traffic (3.11) (continued)			
TT-4: LOS *reduced to D or below* for 2034 and 2036 on I-5 north and south-bound of SR-41, and SR-41 west of I-5 to/from the KHF entrance 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 in 2034 and 2036, both with and without the Proposed Project, and with cumulative growth in the region, decrease to LOS D, E or F weekday afternoon and Friday afternoon peak traffic hour, depending on the segment.	Less than significant on a Project basis; cumulatively significant based on growth in the region	**TT-MM.1 – Same Mitigation as Required for 2026 and 2028** CWMI shall pay to Caltrans its pro rated fair share for traffic improvement projects on SR-41 and I-5, including improvements that may be required to the I-5 on- and off-ramps to SR-41 and the intersections of the I-5 on- and off-ramps and SR-41, through a pro rata 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. **Responsibility for Compliance:** Project Proponent to pay prorated fair-share ***toward the above improvements based on consultation with Caltrans and consistent with the Methodology for Calculating Equitable Mitigation Measures (Appendix B) of Caltrans' Guide For the Preparation of Traffic Impact Studies (December 2002).*** **Timing:** ***After issuance of the CUP and*** at the time that specific highway capital improvement projects for these segments of SR-41 and I-5 are defined by Caltrans and Caltrans implements a specific fair-share mechanism for the capital improvement projects for these segments of SR-41 and I-5, depending on whether the Project is still operating.	Significant and unavoidable. The timing and implementation of roadway improvements are subject to Caltrans jurisdiction. Therefore, CWMI has no authority to implement or guarantee that roadway improvements will occur.
		TT-MM.2 CWMI shall prepare a construction 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 ~~2042~~ ***2043***. **Responsibility for Compliance**: Project Proponent **Timing:** ***After*** issuance of CUP and ~~updated as necessary during the Project's periodic~~ ***prior to Project's periodic*** construction and closure phases from 2009 to ~~2042~~ ***2043, and updated as necessary***.	Less than significant

Note: ***Bold Italics*** indicates new or revised mitigation measures

TABLE ES-1
Summary of Impacts and Mitigation Measures

Environmental Resource/Impact	Level of Significance	Mitigation Measure	Level of Significance After Mitigation
Transportation and Traffic (3.11) (continued)			
TT-5: LOS *reduced to D or below* for ~~2042 and~~ 2043 on I-5 north and south-bound of SR-41, and SR-41 west of I-5 to/from the KHF entrance 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 in ~~2042 and~~ 2043, both with and without the Proposed Project, and with cumulative growth in the region, decrease to LOS D, E or F weekday afternoon and Friday afternoon peak traffic hour, depending on the segment.	Less than significant on a Project basis; cumulatively significant based on growth in the region	**TT-MM.1** CWMI shall pay to Caltrans its pro rated fair share for traffic improvement projects on SR-41 and I-5, including improvements that may be required to the I-5 on- and off-ramps to SR-41 and the intersections of the I-5 on- and off-ramps and SR-41, through a pro rata 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. **Responsibility for Compliance:** Project Proponent to pay pro rata fair **s**hare. **Timing:** ***After issuance of the CUP and*** at the time that specific highway capital improvement projects for these segments of SR-41 and I-5 are defined by Caltrans and Caltrans implements a specific fair-share mechanism for the capital improvement projects for these segments of SR-41 and I-5, depending on whether the Project is still operating.	Significant and unavoidable. The timing and implementation of roadway improvements are subject to Caltrans jurisdiction. Therefore, CWMI has no authority to implement or guarantee that roadway improvements will occur.
		TT-MM.2 CWMI shall prepare a construction 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 ~~2042~~ ***2043***. **Responsibility for Compliance**: Project Proponent **Timing:** ***After*** issuance of CUP and ~~updated as necessary during the Project's periodic~~ ***prior to Project's periodic*** construction and closure phases from 2009 to ~~2042~~ ***2043, and updated as necessary.***	Less than significant

Note: Bold Italics indicates new or revised mitigation measures

TABLE ES-1
Summary of Impacts and Mitigation Measures

Environmental Resource/Impact	Level of Significance	Mitigation Measure	Level of Significance After Mitigation
Transportation and Traffic (3.11) (continued)			
Impact TT-6A: LOS reduced to D or below by 2026 at the intersection of the I-5 northbound on- and off-ramps and SR-41 (less than significant on a Project basis, but cumulatively significant without mitigation based on growth in the region). The proposed Project's contribution is 2.53 percent in 2026. ***Impact TT-6B: LOS reduced to D or below by 2026 on the southbound SR-41 at the I-5 northbound on- and off-ramps (less than significant on a Project basis, but cumulatively significant without mitigation based on growth in the region). The proposed Project's contribution is 2.53 percent in 2026.*** ***Impact TT-6C: LOS reduced to D or below by 2026 on the I-5 northbound off-ramp to SR-41 (less than significant on a Project basis, but significant without mitigation based on growth in the region). The proposed Project's contribution is 2.19 percent of total anticipated traffic in 2028.*** ***Impact TT-6D: LOS reduced to D or below by 2034 on the northbound SR-41 at the I-5 northbound on- and off-ramps (less than significant on a Project basis, but significant without mitigation based on growth in the region). The proposed Project's contribution is 1.76 percent in 2034.***	***Significant***	***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.***	***Significant and unavoidable.*** ***The timing and implementation of roadway improvements are subject to Caltrans jurisdiction. Therefore, CWMI has no authority to implement or guarantee that roadway improvements will occur.***

Note: Bold Italics indicates new or revised mitigation measures

TABLE ES-1
Summary of Impacts and Mitigation Measures

Environmental Resource/Impact	Level of Significance	Mitigation Measure	Level of Significance After Mitigation
Transportation and Traffic (3.11) (continued)			
		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. ***Responsibility for Compliance: Project Proponent toward the above improvements based on consultation with Caltrans and consistent with the Methodology for Calculating Equitable Mitigation Measures (Appendix B) of Caltrans' Guide For the Preparation of Traffic Impact Studies (December 2002).*** ***Timing: After issuance of CUP, CWMI shall enter into an agreement with Caltrans to identify the specific amount of pro rata fair share fees to be paid as required by this SEIR for the identified improvements. The agreement shall specify the pro rata fair share fee amounts to be paid by CWMI and ensure that the improvements will be incorporated into Caltrans' improvement plan so that they are constructed when needed. If Caltrans does not identify the above improvements as being necessary prior to completion of the proposed Project's operations, no mitigation will be required.***	

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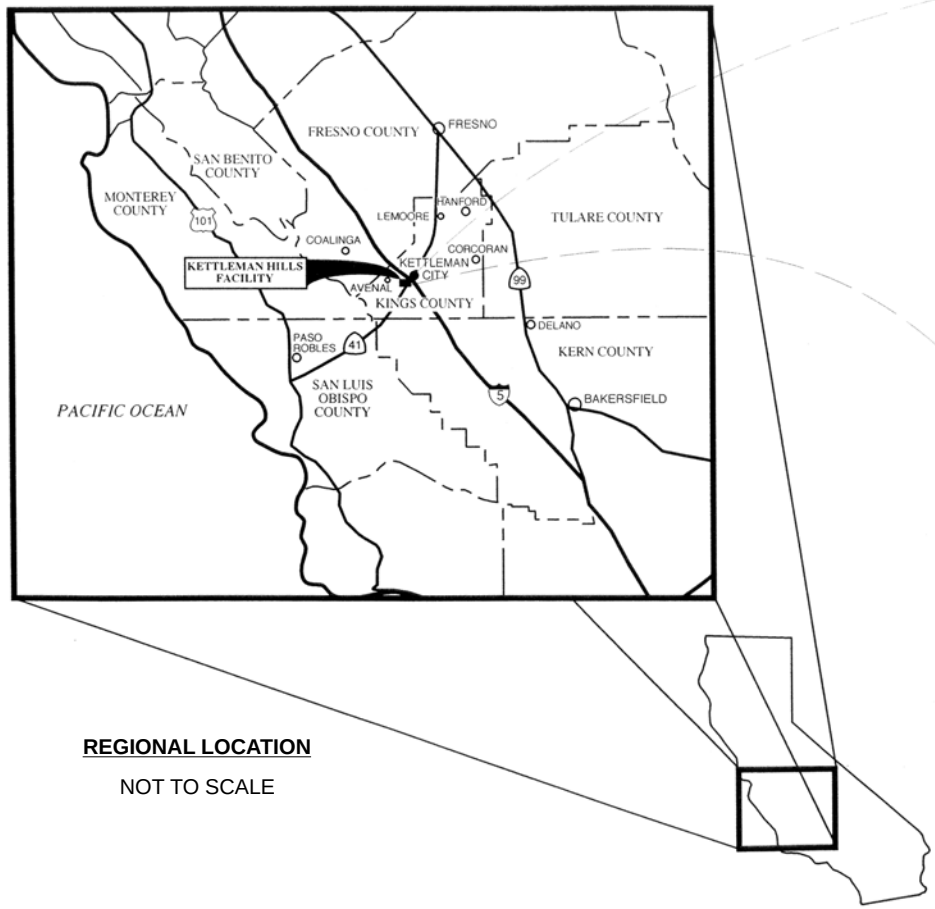
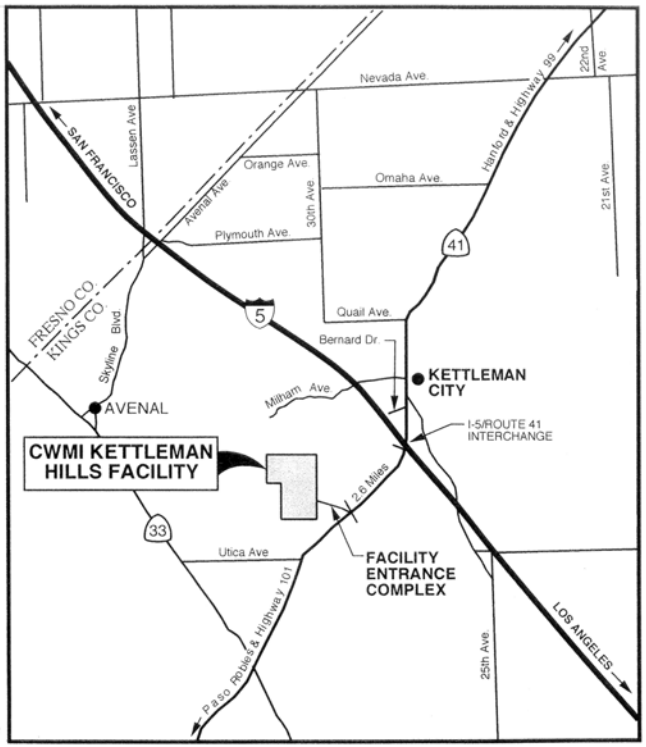


REGIONAL LOCATION

NOT TO SCALE



PROJECT LOCATION

NOT TO SCALE

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Figure ES-1
Project Location Map
B-18/B-20 Hazardous Waste Disposal Project
Kettleman Hills Facility

CH2MHILL