Revised Project Description and Analysis: Executive Summary

> Draft Subsequent Environmental Impact Report

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

State Clearinghouse No. 2005041064

Prepared for

Kings County Planning Agency Hanford, California

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Prepared by



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ES-1 Project Location Map

Executive Summary

ES.1 Introduction

Under the direction of the Kings County Planning Agency (the County), CH2M HILL prepared a Revised Project Description and Analysis to 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). In accordance with the California Environmental Quality Act (CEQA) (California Public Resources Code [PRC], Section 21000 *et seq.*), 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. The 45-day public and agency review and comment period on the Draft SEIR for the proposed Project ends on May 7, 2008.

The purpose of the Revised Project Description and Analysis is to inform and provide full disclosure to the decision-makers, responsible and trustee agencies, and the public regarding refinements to the proposed B-18/B-20 project that are a result of detailed engineering and design of the proposed Project, which began after the release of the Draft SEIR for the Project. The detailed design builds upon the conceptual design in the Draft SEIR. The Revised Project Description and Analysis also analyzes these refinements to determine whether they may have any environmental impacts that may differ from the impacts analyzed in the Draft SEIR, and determines if additional mitigation measures are required for the Project as refined. As discussed in the Revised Project Description and Analysis, the refinements to the Project do not result in new significant environmental impacts and no new mitigation measures are required as a result of the Project refinements.

The KHF is located as shown in Figure ES-1. The proposed Project will occur within the existing 1,600-acre KHF site of which 474 acres are currently permitted for waste operations, and to which the proposed Project will add 221.5 acres of new waste operations area (for a total of 695.5 acres of operations area). The proposed Project will involve the same waste transport and disposal activities as currently occur for waste disposal at the Class I/II B-18 Landfill. The proposed Project involves the expansion, continued operation, and closure of the existing Class I/II B-18 Landfill and construction, operation, and closure of a new Class I/II B-20 Landfill. The B-20 Landfill will provide for continued disposal of hazardous waste at KHF as the existing Class I/II B-18 Landfill reaches capacity. The two Class I/II landfills may be operated concurrently for a limited period of time as the B-18 Landfill nears

its final grades and disposal operations begin to be shifted to the B-20 Landfill (e.g., B-20 may be needed for the disposal of bulkier waste items, while B-18 may still have capacity for soil type wastes).

ES.2 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.3 Project Refinements

The following refinements of the proposed B-18/B-20 project build upon the conceptual design for the project and are a result of detailed engineering and design of the proposed Project:

• 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 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.

The existing waste footprint of the B-18 Landfill is 53 acres. A storm water retention basin, soil buttresses and perimeter road for the existing B-18 Landfill totals 16 acres, bringing the total area of disturbance for the existing B-18 Landfill to 69 acres. The conceptual design in the Draft SEIR added 11 acres to the waste footprint of the existing B-18 Landfill (i.e., 53 acres), for a total waste footprint of 64 acres. In addition, the conceptual design included additional soil buttresses, a new storm water retention basin on the south side of the B-18 Landfill, relocation of an existing storm water basin, and realignment of a portion of the onsite entrance road to KHF that together would have resulted in an additional 23 acres of disturbance. Under the conceptual design for the expansion of the B-18 Landfill, the existing B-18 Landfill and the proposed lateral and vertical expansion results in a combined total area of disturbance of 87 acres as compared to the existing 69 acres of disturbance for the existing B-18 Landfill.

The refined detailed design addressed in the Revised Project Description and Analysis would add 14 acres to the waste footprint of the existing B-18 Landfill (3 acres more than the conceptual design), for a total of 67 acres. The additional 3 acres, as compared to the conceptual design, results from the reconfiguration of the existing cut-slope on the west side of the B-18 Landfill. However, by avoiding the need to relocate the existing storm water retention basin and by avoiding the realignment of a portion of the onsite KHF entrance road, the refined detailed design would reduce the total area of disturbance of the B-18 Landfill expansion to 79 acres, a reduction of 8 acres from the conceptual design's 87 acres analyzed in the Draft SEIR.

- 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. The conceptual liner system design in the Draft SEIR includes a composite, side-slope liner system consisting of the following components:
 - 2-foot operations layer
 - Geocomposite drainage layer
 - 60-mil textured flexible membrane liner (FML)
 - Geosynthetic clay liner (GCL) (equivalent to hydraulic conductivity K ≤ 1x10-7 centimeters per second [cm/sec] prescriptive clay liner)
 - Geocomposite drainage layer/Geotextile
 - 60-mil textured FML
 - 3-foot soil liner ($K \le 1x10-7 \text{ cm/sec}$)

– Prepared Subgrade

As part of the refined detailed design for the vertical and lateral expansion of the B-18 Landfill, it has been determined that, to maintain the maximum flow rate within the secondary leachate collection system between the primary and secondary FML liner, that the geosysthetic clay liner (GCL) will be eliminated from the side-slope liner design for both the expansion of the B-18 Landfill and for the new B-20 Landfill. The refined side-slope liner system is the same as the existing side-slope liner at the B-18 Landfill. The elimination of the GCL from the side-slope liner system for the expansion of the B-18 Landfill and for the new B-20 Landfill does not result in an increase risk to the environment as the primary and secondary FML components of the side-slope liner provide full containment. Based on this refined design, the composite, side-slope liner system for the expansion of the B-18 Landfill and the new B-20 Landfill will consist of the following components:

- 2-foot operations layer
- Geocomposite drainage layer
- 60-mil textured flexible membrane liner (FML)
- Geocomposite drainage layer/Geotextile
- 60-mil textured FML
- 3-foot soil liner ($K \le 1x10^{-7} \text{ cm/sec}$)
- Prepared Subgrade

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). The conceptual final cover system design in the Draft SEIR consisted of the following components:

- 2.5-foot vegetative cover
- Geocomposite drainage layer (or equivalent)
- 40-mil textured FML
- 1-foot foundation layer
- Waste

As part of the refined detailed design, the final cover for the B-18 and B-20 Landfills has been refined to eliminate the geocomposite drainage layer (or equivalent). This refinement is consistent with the 2003 renewed RCRA Part B permit issued for hazardous waste operations at KHF by DTSC. The refined detailed design final cover system design consisted of the following components:

- 2.5-foot vegetative cover
- Geotextile drainage layer (transmisstivity ≥ 0.03 gal/min/ft)
- 40-mil textured FML
- 1-foot foundation layer ($K \le 1 \times 10^{-5} \text{ cm/sec}$)
- 1-foot intermediate soil cover
- Waste

In addition to the above design refinements, the Revised Project Description and Analysis also provides clarification of mitigation measure TT-MM.1 for Transportation and Traffic in the Draft SEIR, and also provides additional information regarding toxic air emissions from the proposed Project.

The refinements to the proposed Project, the inclusion of the clarification of mitigation measure TT-MM.1, and the additional information provided regarding toxic air emissions do not alter the findings or conclusions of the Draft SEIR.

ES.4 CEQA Process

The refinement of a project, as it proceeds from conceptual design to detailed design, is not unusual. When project refinements occur during the CEQA process, the lead agency is required to identify the refinements, analyze their potential environmental impacts, and provide the public, responsible and trustee agencies with an opportunity to review and comment on the refinements. The refinements in the project description, the clarification of mitigation measure TT-MM.1, and the additional information provided regarding toxic air emissions described in the Revised Project Description and Analysis are incorporated into and made part of the Draft SEIR to ensure that the public, agencies and the decision-makers are able to consider the information as part of the CEQA process.

Although the information contained in the Revised Project Description and Analysis does not change the findings and conclusions of the Draft SEIR, the County has determined that the Revised Project Description and Analysis also should be made available for public and agency review and comment for a 45-day period, beginning on May 6, 2008, and ending on June 20, 2008.

As noted above, the Draft SEIR was made available for public and agency review and comment for a 45-day review and comment period, beginning on March 21, 2008, and ending on May 7, 2008. Because the information contained in the Revised Project Description and Analysis is incorporated into and made part of the Draft SEIR, the County will accept written comments on both the Draft SEIR and the Revised Project Description and Analysis until 5:00 P.M. on June 20, 2008. Comments may be addressed to the attention of Mr. Chuck Kinney, Kings County Planning Agency, 1400 West Lacey Boulevard, Government Center, Building No. 6, Hanford, California 93230.



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