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Department of Toxic Substances Control

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NOTICE OF EXEMPTION

To: Office of Planning and Research
1400 Tenth Street, Room 212
Sacramento, CA 95814

From: Department of Toxic Substances Control
8800 Cal Center Drive
Sacramento, CA 95826

Project Title: CHEMICAL WASTE MANAGEMENT, COALINGA FACILITY (CAT000646125),
CLOSURE PLAN APPROVAL

Project Location: One mile north of Palmer Road and one mile west of Monterey Avenue,
approximately seven miles northwest of the City of Coalinga

City: Coalinga **County:** Fresno

Description of Project: Approval of a Closure Plan (CP) dated May 1, 2003 for Chemical Waste Management, Coalinga Facility prepared and submitted following guidelines contained in California Code of Regulations (CCR) Title 22, Section 66264.112. The facility is currently inactive and all units will be closed. Closure activities will follow guidelines contained under CCR, Title 22, Chapter 15, Articles 7, 11, and 13. These activities include:

- Excavation, removal and off-site transport of approximately 5,000 cubic yards of soil from various waste management units located at the facility;
- Confirmation sampling to assure that residual levels are consistent with the decision limits for various constituents as set by a site risk assessment;
- Backfill of all excavated areas with clean fill material acquired from on-site sources;
- Reworking and covering all barren and/or sparsely vegetated areas with clean fill material acquired from on-site sources and installation of a vegetative cover layer; and
- Construction of drainage ditches and other surface water control systems.
- Decommissioning of all groundwater monitoring wells;
- Construction of new fencing and access roads;

The area subject to closure encompasses approximately 125 acres. The planned end use of the facility is a non-irrigated open space, graded to harmonize with the surrounding and landscaped with native shrubbery or low maintenance ground cover.

Background

The facility was in operation from 1973-1984. Between 1973 and 1979, the facility was owned and operated by Environmental Disposal Services (EDS), a division of McKay Trucking Company of Bakersfield, California. In late 1979, CWMI acquired the facility from EDS and operated the facility until 1984. The facility primarily accepted and treated wastes from oil field development. Waste treatment operations were terminated by CWM on September 18, 1984.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at www.dtsc.ca.gov.

The following waste management units are subject to this closure permit:

- Spreading Area 1 (S-1);
- Spreading Area 2 (S-2);
- Central Ridge;
- Northern Knoll;
- Broad Swale Ponds Pond 1, Pond 2, Pond 3, Pond 4, and Pond 99; and
- Several other Miscellaneous Treatment Areas.

Attachment A provides a more thorough description of these inactive past operations.
Attachment B provides a list of constituents disposed of in these units.

Name of Public Agency Approving Project: Department of Toxic Substances Control
Sacramento Permitting and Corrective Action Branch

Name of Person or Agency Carrying Out Project: Chemical Waste Management, Inc.

Exempt Status: Title 14, California Code of Regulations, section 15061(b) (3).
With Certainty, No Possibility of a Significant Environmental Effect.

Reasons Why Project is Exempt:

The project will not have potential for significant impacts on environment because the following are included in the closure plan or are a condition of its approval:

1. Cleanup levels set for removal confirmation sampling (Attachment C) will assure that the site is within industrial exposure scenarios as established by a health risk assessment. This is consistent with the adjacent oil field land uses and no residential uses are in the vicinity.
2. Groundwater in the area has a high level of Total Dissolved Solids (TDS). At over 5,000 part per million, this makes the use of the water extremely limited, even in areas not affected by site operations. The Central Valley Regional Water Board found in 1995 that natural groundwater at the site has no beneficial uses and is of very poor quality. It further found that any contamination leaving the site would not contaminate other aquifers with beneficial uses which are two (2) miles from the site to the south. It further found that further groundwater characterization is not justified. Thirty years of groundwater monitoring during facility operation did not identify any compounds from the facility reaching the facility boundary. No post closure groundwater monitoring will be required and any wells installed by the facility during operation will be properly abandoned.
3. The health risk assessment approved by DTSC concluded that there is no offsite risk to human health associated with the inorganic constituents found in groundwater that can be identified or quantified because, lacking the use of groundwater, there was not a complete exposure pathway. A biological risk assessment determined that the cleanup criteria proposed will achieve a cumulative hazardous index less than the benchmark of 1.0 for the indicator species.
4. The primary purposes of site grading is to provide level and slope the site for drainage to avoid ponding, to provide a surface barrier of clean soil and to provide a vegetative barrier to erosion. Borrow and backfill will be from onsite sources. A full RCRA cap is not required because:
 - a. No protection of groundwater is required at this location;
 - b. Chemical levels in soil will be reduced to levels set by an health risk based industrial exposure scenario prior to placement of the vegetative layer; and
 - c. No future use of site is proposed other than open space and no use of the site for food chain crops will be allowed. Following Closure Plan Certification, a deed restriction will be required by the Post Closure Permit to limit site uses and require specific approval for any future use of the site from DTSC. Conditions of the post closure permit approval will also require annual inspection of the site to maintain the vegetative layer and fencing to prevent public access.

5. The primary sources of the 5,000 cu. yds. of soil to be removed are areas that were formerly ponds and had higher concentrations of residue. These materials will be handled and shipped in covered trucks as hazardous waste using licensed hazardous waste haulers to the Kettleman Hills facility, approximately 40 miles south of the site. This transportation will occur on major freeways and will not result in a significant transportation risk. All trucks will be inspected and will receive exterior decontamination if needed prior to leaving then site.
6. During closure operations, measures will be taken to control surface water run-off and wind erosion. To minimize dispersal of soil particulates during grading activities, a water truck will be utilized to moisten the work areas. The facility surrounded by oilfield industry activities and is more than two miles from any residential or sensitive offsite receptor. No air quality management permits or grading permits will be required from local jurisdictions for the closure activities.
7. Conditions of the closure plan approval assure that decommissioning of the monitoring wells will occur in a manner consistent regulatory standards and will be reported to DTSC. Final confirmation sampling will be sent to DTSC to verify that decision limits in the risk assessment has been met.
8. Any additional removal above the 5,000 cu. yds. will be reported to DTSC. If significant additional volume is required to be removed, a revised closure plan and new environmental analysis will be conducted.

Lead Agency Contact Person: Tony Hashemian

Telephone: (916) 255-3587

Signature: _____

James M Pappas, P.E., Chief
Sacramento Permitting and Corrective Action Branch

Date: _____

Attachment A
Description of Units from Previous Operations

Spreading Area 1 (S-1) – This area consists of the western flank of the central ridge and the eastern slope of a smaller ridge which lies along the western perimeter of the facility property. This area was used for land farming brine, formation waters, scrubber wastes, oily wastes, tank bottoms, solvents and various acid wastes resulting from oil well reconditioning. Residual materials removed from the drilling mud evaporation ponds were also treated in this area.

Treatment operations were conducted in a similar manner as on the eastern flank of the central ridge. During the initial use of the area, fluids were prevented from migrating to the existing, natural drainage in the southwest corner of the facility through construction of a small earth fill dam across the swale drainage way. Occasionally, runoff would exceed the dam capacity, and some contaminated fluids migrated into the drainage. This dam was subsequently replaced by engineered ponds for waste disposal and basins.

Due to the routing of the disposal trucks and the location of the truck wash facility at the end of the treatment route, the western side of this treatment area is thought to be the area which received the greatest amount of waste.

Spreading Area 2 (S-2) – The eastern flank of the central ridge, between the ridge top roadway and the eastern drainage, was used for land farming of brine, drilling mud, formation water and some scrubber wastes. Waste in this area was placed by discharging the fluids at the top of the slope and allowing the material to flow down slope. Occasionally, the slope surface would be tilled or ripped to enhance absorption of the fluids. To prevent waste flow into the eastern drainage, a low soil berm was constructed near the base of the slope. This slope was used for waste disposal from 1973 to 1984.

Central Ridge – The central ridge development consisted of main access road to the facility and ponds for drilling mud treatment. The main access road was also used as the discharge route for the spreading areas on the flanks of the central ridge.

Northern Knoll – The northern Knoll consist of an extension of the central ridge with a peak elevation approximately 80 feet higher than the average ridge elevation. A loop road was constructed around the ridge top for discharge of waste fluids down the slopes of the knoll. Waste discharged at this location consisted of formation waters and scrubber wastes. The area was used from 1977 to 1981.

Broad Swale Ponds – In 1982, the small earth fill dam at the lower end to the broad swale at the base of S-1 was replaced with engineered, unlined and lined ponds(Pond 5 and Pond 6, respectively) and lined basins (Basin A and Basin B). The unlined pond, Pond 5, was not used. The lined pond, Pond 6, was used for evaporation of scrubber wastes. The basins were used to retain contaminated runoff from the spreading area. The basins were periodically emptied using tank trucks and the liquid discharged in spreading area S-1.

Pond 1, Pond 2, Pond 3, Pond 4, and Pond 99 – These unlined ponds were constructed by excavating pits along the central ridge. These ponds were rectangular in shape, approximately 20 feet by 40 feet in plan dimension and 10 feet deep. These ponds were in operation from 1973 to 1984. Waste treated in these ponds consisted of drilling fluid/mud.

An additional treatment process that occurred within the Central Ridge included oil recovery in two ponds (ORP-1 and ORP-2) which were constructed along the north edge of Spreading Area S-1.

Miscellaneous Treatment Areas – In addition to the treatment areas described, additional treatment occurred for limited times in the following locations:

- In the lower reaches of the board swale in the southwest corner of the facility and in the flat areas adjacent to the eastern drainage, large agricultural sprinklers were used to discharge formation water piped to the facility from the Texaco (now Chevron USA) oil fields. These sprinklers created circular areas approximately 240 feet in diameter;

- In the eastern drainage in the southern part of the facility, a small agricultural sprinkler system was used for the discharge of additional formation water. This system consisted of small sprinklers connected by irrigation pipe, which distributed the formation water in strips approximately 80 feet wide by 640 feet long. The sprinkler systems were set up such that three of these strips lay adjacent to one another south of the facility, with a fourth strip immediately to the north on the facility;
- South of Spreading Area S-1, an additional unlined mud pond (Pond 8) was constructed for the treatment of drilling fluid/mud;
- West of and adjacent to the oil recovery ponds, creosote-contaminated soils were treated according to a CWM employee recollection obtained during the final hydrogeologic investigation; however, soil sampling in this area indicated no evidence of creosote contamination; and
- Opposite the drum burial area (excavated in 1984) east and west of the former entrance gate, additional unlined mud ponds were developed. These ponds were in operation for about two years. A small part of this area was also used as a rubbish pit for facility generated waste. This area was subsequently backfilled and regarded prior to 1979.

Attachment B
Units by Area of Concern and Potential Constituents Present

AOCs 1 and 2 (Spreading Areas 1 and 2, respectively)
These areas will be closed in place, with no excavation.

AOC 3 (Pond 8)

Chromium
Methylene chloride

AOC 4 (Ponds 99, 1 and 2)

1,2,4-Trimethylbenzene
1,3,5-Trimethylbenzene
Chloroform
Chrysene
Isopropyl Toluene
Ethyl Benzene
Mercury
Methylene Chloride
Naphthalene
Phenanthrene
Toluene
Methyl Naphthalene
Xylenes (mixed)

AOC 5 (Ponds 3, 4, ORP -1, ORP-2, and soil spoils)

1,2,4-Trimethylbenzene
Acetone
Chloroform
Chromium
Chrysene
Isopropyl Benzene
Fluoranthene
Methylene chloride
Naphthalene
Phenanthrene
Phenol
Pyrene
Toluene

AOC 6 (Ponds 5, 6, and 7 and Retention Basins A and B)

Benzo (a) Anthracene
Benzo (a) Pyrene
Benzo (b) Fluoranthene
Benzo (k) Fluoranthene
Bis 2 Ethyl Hexyl Phthalate
Chromium
Chrysene
Di n-butyl Phthalate
Fluoranthene
Methylene chloride
Phenol
Pyrene

Attachment C
Cleanup Levels by Constituent by Area of Concern
from Appendix G of the Closure Plan

Table G-1 SUMMARY OF DECISION LIMITS				
	AOC 3	AOC 4	AOC 5	AOC 6
	Soil	Soil	Soil	Soil
	µg/kg	µg/kg	µg/kg	µg/kg
1,2,4-Trimethylbenzene	x	619	3.56	x
1,3,5-Trimethylbenzene	x	626	x	x
Acetone	x	x	363	x
Benzo (a) Anthracene	x	x	x	725
Benzo (a) Pyrene	x	x	x	289
Benzo (b) Fluoranthene	x	x	x	933
Benzo (k) Fluoranthene	x	x	x	362
Bis 2 Ethyl Hexyl Phthalate	x	x	x	916
Chloroform	x	67.5	4.40	x
Chromium (Total)	192,000	x	69,400	63,100
Chrysene	x	2,270	6,800	962
Cumene (isopropyl benzene)	x	x	6.09	x
Cymene (isopropyl toluene)	x	127	x	x
Di n-butyl Phthalate	x	x	x	930
Ethyl Benzene	x	238	x	x
Fluoranthene	x	x	2,150	399
Mercury	x	129	x	x
Methylene Chloride	38.7	7,030	12,600	13,300
Naphthalene	x	549	517	x
Phenanthrene	x	892	10,200	x
Phenol	x	x	127	66.3
Pyrene	x	x	9,730	2,230
Toluene	x	425	403	x
Methyl Naphthalene	x	1.18	x	x
Xylenes (mixed)	x	1,040	x	x

(x means no limit set)