

NOTICE OF EXEMPTION

To: Office of Planning and Research
State Clearinghouse
P.O. Box 3044, 1400 Tenth Street, Room 212
Sacramento, CA 95812-3044

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

Project Title: The Dow Chemical Company, Hazardous Waste Treatment, Storage and Disposal Facility, Monofill Landfill Postclosure Permit

Project Location: 901 Loveridge Road, Pittsburg, California 94565-2811

County: Contra Costa

Project Description: The project is the issuance of a Postclosure permit for the Monofill Landfill (Monofill) at The Dow Chemical Company, Pittsburg, Contra Costa County. This project consists of administratively converting the Monofill from Interim Status to Postclosure Permit status. No physical changes to the monofill unit are proposed. In 1987, six evaporation ponds were closed in accordance with 22 CCR 66264.112. The pond waste was placed in the Monofill, covered, capped with asphalt, and closed. Since that time, Postclosure care has been ongoing. State and federal regulations require that a postclosure plan for a 30 -year period be developed and implemented by the facility. The Postclosure Permit outlines the procedures to fulfill the regulatory requirements which consist of three primary functions: a) maintenance of the closed Monofill cover, b) environmental monitoring; and c) maintenance of financial mechanisms to fund the Postclosure activities.

BACKGROUND

The Dow Chemical Company in Pittsburg, California, consists of an industrial section of approximately 450 acres, about half of which is undeveloped. In addition, Dow converted 200 acres of land to wetlands preserve and wildlife habitat, and owns another 350 acres of open fields to the south and east of the facility. The facility develops and produces products for agricultural operations, pest control services, pulp and paper manufacturers, carpet and flooring mills and personal care products. The facility is also the location of a bulk chemical storage terminal for the distribution of Dow-produced chemicals.

The solar evaporation ponds were constructed between 1968 and 1981, and were comprised of double-lined impoundments that received wastewater discharges from the facility. Wastes directed into the impoundments included spent air pollution scrubber solutions, process structure washdown water, storm water, and sink washings from the Dow research laboratory. The ponds were regulated under RCRA, The Toxic Pits Cleanup Act of 1984, and Title 23, Subchapter 15 of the California Administrative Code.

The ponds stopped receiving process wastewater prior to June 1987. Closure operations began in 1988 in accordance with a closure plan approved jointly by the San Francisco Regional Water Quality Control Board (RWQCB) and DTSC. Closure activities consisted of removing the pond water and dewatering the sediments to remove free liquids. The remaining material was solidified with cement. In addition, the liner system beneath the ponds was upgraded and extended as needed to create the liner system beneath the Monofill footprint. All solidified sediment and contaminated soil, liners, and the leachate collection system were removed and placed in the Monofill. The Monofill contains approximately 50,000 cubic yards of solidified waste and soil.

A containment wall was constructed around the solidified sediments and other waste materials from the Ponds, forming the Monofill. Waste in the ponds was compacted and an impervious cap was constructed. The cap consists of an impermeable liner, gravel and an asphalt cover. Leachate collection sumps were installed in the Monofill. A shallow groundwater extraction system consisting of a French drain and sumps was constructed around the Monofill. The French drain/shallow groundwater extraction system remains operational. Formal acceptance of the impoundment closure from the U.S. EPA and local agencies was achieved in 1988.

There is no evidence to indicate that the Monofill is leaking hazardous constituents into the groundwater. However, the Monofill was constructed in an area of pre-existing groundwater contamination associated with other site activities. Postclosure activities are performed to minimize the potential that chemicals contained in the solidified wastes in the Monofill will be released to the environment and to allow for detection of a release from the unit. These activities include

1. Sampling and analysis of leachate from the drainage layer between the bottom liners of the Monofill is required quarterly or whenever there is sufficient leachate for removal. The primary chemicals of concern in the Monofill area are carbon tetrachloride and tetrachloroethene. Concentrations of these solvents in leachate extracted from the Monofill have been reported as non-detect to 200 ug/l for carbon tetrachloride and non-detect to 4,900 ug tetrachloroethene.
2. Extraction of shallow groundwater from the french drain system installed around the Monofill with the purpose of maintaining a 5-foot separation between the base of the waste in the Monofill and the water table interval elevation in accordance with the Waste Discharge Requirements. Approximately 1.5 to 2 million gallons are extracted monthly. This water is treated and reused at the Dow facility or discharged to a Publicly-Owned Treatment Works.

PROJECT ACTIVITIES

This project consists of converting the Monofill from Interim Status to Postclosure Permit status. With the exception of periodic environmental monitor sampling, cover inspections, and minor repairs of cover to maintain proper drainage, no physical changes to the site are proposed. Control measures that will limit environmental effects to insignificant levels include the following:

Name of Public Agency Approving Project: Department of Toxic Substances Control

Name of Person or Agency Carrying Out Project: Peter Bailey

Exemption Status: (check one)

- Ministerial [PRC, Sec. 21080(b)(1); CCR, Sec. 15268]
- Declared Emergency [PRC, Sec. 21080(b)(3); CCR, Sec.15269(a)]
- Emergency Project [PRC, Sec. 21080(b)(4); CCR, Sec.15269(b)(c)]
- Categorical Exemption: [State type and section number]
- Statutory Exemptions: [State code section number]
- General Rule [CCR, Sec. 15061(b)(3)]

Exemption Title: Title 14, California Code of Regulations, section 15061(b)(3). With certainty, no possibility of a significant effect on the environment.

Reasons Why Project is Exempt:

- Solidified wastes were placed in the Monofill, capped with an impermeable liner, gravel, and asphalt cover, and the unit was closed. Formal acceptance of the impoundment closure from the United State Environmental Protection Agency (U.S. EPA) and local agencies was achieved in 1988(RWQCB, 1989).
- Postclosure care and monitoring of the Monofill has been ongoing since 1987.
- The Postclosure permit does not propose changes to the Monofill or the Dow Facility.
- The site is secured from unauthorized entry by fence and 24 hour security.
- Groundwater and surface water monitoring requirements at and surrounding the Monofill are specified in the Waste Discharge Requirement Order No. R2-2002-007 and Order Nos.97-123 and 98-059.
- Recent inspections and monitoring revealed no leaks of the Monofill cover or failures or malfunctions in the monitoring system.

Peter Bailey	Engineering Geologist	915-255-3602
Project Manager Name	Project Manager Title	Phone #
<i>//Original signed by//</i>		
Permit Renewal Team Leader Signature		12/13/07 Date
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