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## SWMU 4.2 Soil Investigation and Evaluation Report for DuPont Oakley Site

### REPORT SUMMARY

#### INTRODUCTION

E.I. du Pont de Nemours and Company (DuPont) owns 378 acres at 6000 Bridgehead Road in Oakley, Contra Costa County, California (Oakley Site). Approximately 155 acres of the property were used for chemical manufacturing of chlorofluorocarbons (CFCs), fuel-additive anti-knock compounds (AKCs), and titanium dioxide (TiO<sub>2</sub>) and for manufacturing support activities (e.g., parking) until operations were discontinued in 1998. This portion of the Oakley Site is undergoing investigation and remediation activities in accordance with the Resource Conservation and Recovery Act (RCRA) and contains solid waste management units (SWMUs), areas of concern (AOCs), areas of potential concern (AOPCs), and other areas where no manufacturing activities occurred (i.e., "open areas"). One of the SWMUs in the former manufacturing area is SWMU 4.2 (formerly known as the West Basin), which is the subject of this report.

#### BACKGROUND

SMWU 4.2 (originally designated as the West Basin) was built in the early 1960s as an earthen basin that was used as part of the facility's wastewater treatment process and received wastewater from the CFC Manufacturing Area, the AKC Manufacturing Area, and the TiO<sub>2</sub> Manufacturing Area. In 1985, the West Basin was certified as closed after DuPont removed and disposed of sludge and contaminated soil with more than 13 milligrams per kilogram (mg/kg) tetraethyl lead and 1,000 mg/kg lead. Unlike the other two adjacent earthen basins that were closed and backfilled with soil, SMWU 4.2 was allowed to remain in service for storage of non-hazardous wastewater and storm water, which were subsequently discharged through a National Pollutant Discharge Elimination System (NPDES) permitted outfall. SWMU 4.2 was removed from service in 2000, when all storm-water inlets and discharge outlets were plugged. The NPDES permit was rescinded on June 14, 2001, by Order #5-01-137.

In 2005, DuPont collected and analyzed surface and subsurface soil samples in SWMU 4.2 to determine the nature and extent of constituents of interest. The purpose of collecting these samples was to determine what actions, if any, should be taken at SWMU 4.2 to achieve regulatory closure with the DTSC. This work was completed in accordance with the SWMU 4.2 Redevelopment Soil Sampling Work Plan submitted to DTSC on November 30, 2004, and approved by DTSC on March 4, 2005. A draft report was submitted to DTSC on December 8, 2005. DTSC provided comments in 2007 to which DuPont responded and that are reflected in this report.

## REPORT OVERVIEW

This report was prepared to provide the results of a soil sampling program undertaken in 2005 to characterize soil in SWMU 4.2 and request approval from DTSC that no corrective action is required. Once regulatory closure is approved by DTSC, the unit will be backfilled and may be used for future recreational purposes, such as a walking path. No other redevelopment activities are planned for this area.

DTSC comments identified a potential issue for SWMU 4.2 stemming from the possible vapor intrusion of constituents present in groundwater. This is not an issue because no buildings will be constructed in this area. In addition, site groundwater is being evaluated as part of the ongoing Groundwater Corrective Measures Study. This report presents the results of the sampling and analyses conducted at SWMU 4.2, a risk evaluation based on these results, and the conclusions drawn.