Phase 3 Surface Water and Sediment RFI for DuPont Oakley Site

EXECUTIVE SUMMARY

INTRODUCTION

This document summarizes the work performed by E. I. du Pont de Nemours and Company (DuPont) in accordance with the Phase III Surface Water and Sediment RFI Work Plan. The report fulfills the Phase III Surface Water and Sediment Investigation requirements for the Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) at the DuPont Oakley Site. As part of this investigation, two sets of data (surface water and sediment) were utilized to meet the investigation objectives. Surface water data was collected in the San Joaquin River as part of the ongoing surface water monitoring program from 2000 through 2006 (including historical sampling in 2000 and 2001). The sediment data was collected from the area surrounding the former National Pollutant Discharge Elimination System (NPDES) permitted outfall. These data sets are presented to meet the following investigation objectives:

- Characterize the surface water in the San Joaquin River and in the vicinity of the former permitted outfall
- Characterize sediment in the San Joaquin River in the vicinity of the former NPDES permitted outfall in the San Joaquin River
- Satisfy requirements for closure of the former NPDES outfall in accordance with California State Lands Commission requirements
- Develop data to support scoping-level ecological risk evaluations and the RCRA investigation for surface water and sediment in the San Joaquin River
- Gather information and provide data to focus potential future phases of investigation, where necessary

Surface water monitoring data in the San Joaquin River provide a comprehensive evaluation of surface water and demonstrate multiple years of surface water quality attainment in the San Joaquin River. The data sets used in the evaluation span six years of sampling, include near-shore and river channel locations, and represent a wide-ranging set of environmental conditions in the river. The evaluation of inorganic constituents shows conditions in the San Joaquin River proximate to the site are comparable to regional surface water conditions in the Delta. Surface water data collected for site-related organic constituents indicate the attainment of surface water quality objectives in the river.

The investigation of sediment in the San Joaquin River proximate to the former NPDES outfall provides a targeted and systematic evaluation of surficial sediment quality around the former outfall pipe. Analytical results indicate constituent concentrations are generally below sediment quality guidelines, and the 95% upper confidence limit concentrations for site inorganic data sets are at or below ambient regional sediment concentrations. The observations of biota recorded

during sampling and the evaluation of constituent concentrations in sediment suggest the former NPDES outfall has not adversely affected sediment quality around the former outfall pipe.

Based on the conclusions drawn from surface water and sediment data sets, no additional investigations are proposed for surface water or sediment in the San Joaquin River. The sediment data collected around the former outfall pipe adequately characterize this potential contaminant migration pathway and meet the requirements of the State Lands Commission. The surface water monitoring program will continue to provide surface water data regarding the site-related groundwater contaminant migration pathway to the river, and subsequent monitoring reports will evaluate these data assessing surface water quality in the river. A scoping-level ecological risk assessment will be developed for the San Joaquin River to include surface water and sediment data as presented in this report and additional surface water data collected in 2007.