Scoping Level Ecological Risk Assessment
San Joaquin River, Little Break, and Lauritzen Yacht Harbor
at the DuPont Oakley Site

EXECUTIVE SUMMARY

INTRODUCTION

The scoping level ecological assessment characterizes ecological communities in the water bodies surrounding the site. The assessment identifies constituents of potential ecological concern (COPECs) in physical media using conservative ecological screening benchmarks and is intended to provide input for the ecological risk management decision-making process at the site. It draws from multiple investigations and data sets collected under varied hydrographic conditions and in varied locations targeting potential site-related contaminant migration pathways. Conclusions for each water body are outlined below:

San Joaquin River

The Surface Water Monitoring Program and Phase III Surface Water and Sediment Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) provide a comprehensive set of surface water and sediment data, characterizing physical media in the San Joaquin River. Surface water monitoring data demonstrate multiple years of surface water quality attainment in the river. The data sets used in the evaluation span over five years and represent a wide-ranging set of riverine habitats and environmental conditions. The investigation of sediment in the San Joaquin River proximate to the former National Pollutant Discharge Elimination System (NPDES) outfall provides a targeted and systematic evaluation of surficial sediment quality around the former outfall pipe. Analytical results indicate inorganic constituent concentrations are generally below sediment quality guidelines and 95% UCL concentrations for inorganics are at or below ambient regional sediment concentrations. The observations of biota recorded during sampling and the evaluation of constituent concentrations in sediment suggest that discharge from the former NPDES outfall has not adversely affected sediment quality. Based on these findings, there is negligible potential risk to benthic organisms and no further ecological evaluations are recommended for sediments of the San Joaquin River adjacent to the facility.

Little Break

The conceptual site model (CSM) for Little Break identified the groundwater discharge pathway as the primary contaminant migration pathway to be investigated for Little Break. The Phase II Surface water and Sediment RFI focused on the potential discharge of site-related groundwater to surface water and the flux of site-related constituents into Little Break surface water. The results of this investigation indicate that, in most instances, the site-related groundwater constituents are attenuated below measurable levels before discharging into Little Break surface water. The surface water monitoring data augment this conclusion, demonstrating multiple years of surface water quality attainment in Little Break. Collectively these investigations provide a

comprehensive evaluation, indicating the attainment of water quality objectives (WQOs) for flux samples collected on the sediment surface at the point of groundwater discharge and for surface water samples collected throughout Little Break from 2000 to the present. These data sets adequately characterize potential routes of contaminant migration to Little Break and indicate that the potential ecological risk to aquatic organisms, including organisms at the sediment / surface water interface, is negligible. Based on these results, no further ecological evaluations are recommended for Little Break.

Lauritzen Yacht Harbor

Lauritzen Yacht Harbor is a man-made feature with human uses and as such has minimal use by aquatic communities and negligible use by birds and mammals. Multiple years of surface water data collected in the marina indicate the attainment of surface water quality and *de minimus* potential risks to aquatic organisms; therefore, no further ecological evaluations are recommended for Lauritzen Yacht Harbor.