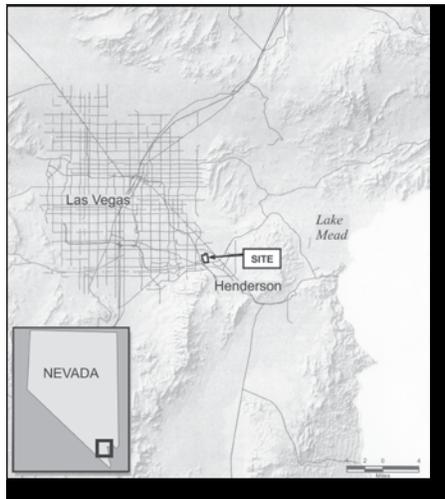


FACT SHEET

Environmental Investigation and Cleanup at the FORMER STAUFFER CHEMICAL COMPANY FACILITY

HENDERSON, NEVADA

Stauffer Chemical Company formerly operated a chemical manufacturing facility at the property (i.e., “the Site”) which is now occupied by Olin Chlor Alkali Products at the western end of the Black Mountain Industrial Complex (formerly known as the BMI Industrial Complex), in an unincorporated area of Clark County, near Henderson, Nevada. Stauffer ceased operations at the property in 1988 when the property was purchased by Pioneer Chlor Alkali, Inc. (Pioneer). Olin Corporation (Olin) purchased the property from Pioneer Americas LLC (Pioneer) in 2007. Olin, Stauffer Management Company LLC (SMC), and Syngenta Crop Protection, Inc. (Syngenta) are working in cooperation with the Nevada



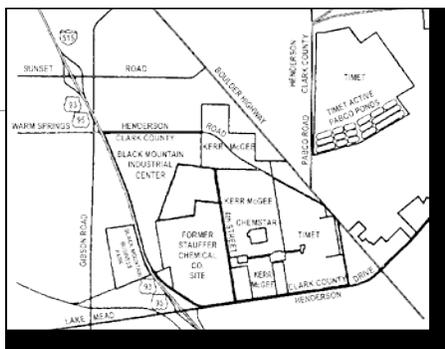
cooperation with the Nevada Division of Environmental Protection (NDEP) on continuing environmental investigation and cleanup activities at the site. This Fact Sheet, prepared on behalf of Olin and SMC/Syngenta, is

intended to keep community members informed about the status of the environmental investigation and cleanup. Other companies at neighboring properties within the Black Mountain Industrial Complex are also performing environmental work. These companies include: Nevada Environmental Response Trust (previously known as Tronox LLC; formerly Kerr-McGee Chemical Company), Titanium Metals Corporation and Basic Remediation Company. Montrose Chemical Corporation of California (Montrose) is also performing environmental work at the site in areas associated with their former operations. All of these companies have developed separate Fact Sheets related to their environmental work.

HISTORY

In 1941, approximately 5,000 acres of desert in the southwest portion of the Las Vegas Valley was deeded by the United States for use as what was to become the world’s largest magnesium plant (BMI Complex), a plant constructed for the U.S. Government that would play a critical role in World War II. The location was selected in part based on its proximity to magnesite ore and an adequate power supply (the recently completed Hoover Dam).

The western end of the original BMI Complex included a chlorine-



caustic plant which was necessary to support the U.S. Government’s production of magnesium. In 1945, Stauffer Chemical Company leased the chlorine-caustic plant from the U.S. government, and later purchased the property in 1952.

The property was ultimately sold to

Pioneer in 1988. During Stauffer Chemical Company occupancy, the manufactured products included chlorine and caustic, and later, agricultural chemicals. Additionally, portions of the property were leased to Montrose for their manufacture of chemicals.

Today, the site is operated by Olin Chlor Alkali Products for the continued production of chlorine and caustic, as well as hydrochloric acid and bleach, which are related products; all other chemical production ceased prior to 1988.

ENVIRONMENTAL WORK

As part of the 1983 Consent Order entered into between the NDEP, Stauffer and Montrose, a groundwater pump and treatment system was installed to address impacted groundwater identified at the site. The groundwater pump and treatment system continues to operate, as do other groundwater pump and treatment systems being operated by other nearby companies to address impacted groundwater.

In 1991, Pioneer and SMC entered into a Consent Agreement with the NDEP to jointly conduct a Phase I Environmental Conditions Assessment (ECA) of the site. The purpose of the ECA was to identify areas of potential environmental concern. Pioneer and SMC submitted their ECA report to the NDEP in 1993 and thereafter agreed to the terms of the 1994 Phase II Letter of Understanding (LOU) with the NDEP. The LOU identified issues of potential environmental concern (Study Items) to be addressed in the next phase of investigation. In 1996, Pioneer and SMC entered into a subsequent Consent Agreement with NDEP requiring them to jointly conduct a Phase II Environmental Conditions Investigation (ECI) and to prepare Remedial Alternative Study (RAS) work plans for those Study Items, as

necessary. Since 1996, several phases of environmental characterization and a series of reports have been completed by Pioneer and SMC to assess soil and groundwater conditions, and RAS work plans have been prepared and remedial actions implemented, including the construction of asphalt caps (in 2003 and 2004) over the former agricultural chemical manufacturing plant areas.

The focus of recent environmental work activities has been developed based upon the review of historical site operations, submittal of additional work plans, preparation of reports and correspondence with the NDEP, and development of a list of site related chemicals (SRCs) to assist in additional sampling activities. Additionally, annual groundwater monitoring is performed to assess the occurrence of chemicals in groundwater at the site and areas downgradient of the existing groundwater pump and treatment system, and to demonstrate compliance for operation of the groundwater pump and treatment system in accordance with the terms of the 1983 Consent Order. The information and data from previous reports and investigations

have been integrated into a comprehensive Conceptual Site Model (CSM) that was prepared by Olin, SMC/Syngenta and Montrose in July 2008. The CSM presents the current understanding of site conditions, describes potential exposure pathways related to soil and groundwater conditions, and identifies areas where future environmental characterization may be appropriate. The companies are currently in the process of completing a Groundwater Remedial Alternatives Study for the evaluation of possible remedial actions.

FUTURE WORK

Olin and SMC/Syngenta will continue to perform environmental investigations as described above in cooperation with the NDEP. Additional environmental cleanup work will be conducted as appropriate based on the results of these investigations and the CSM. The groundwater pump and treatment system will continue to be operated and monitored to maintain its effectiveness.

ADDITIONAL INFORMATION AND COMMUNITY INVOLVEMENT

The NDEP oversees all aspects of the environmental work at the Site.

Additional information from the NDEP can be obtained by contacting James (JD) Dotchin, at 702-486-2850 x 235.

The companies welcome community input for this project and recognize the need to respond to community concerns. Previous reports related to the environmental work at the Site can be obtained from NDEP's offices in Las Vegas or Carson City.

OSSM Companies Selected Site Assessment Areas Status Update
Updated October 15, 2014

Description	LOU Item No.	Background Documents	Current Status
Inactive CAPD Ponds 1,3,4 and Associated Process Piping	17	5	Completed: RI SAP & CSM
Inactive CAPD Pond 2 and Associated Process Piping	18		
Inactive CAPD Pond 6	20		
Inactive CAPD Pond 8	22		
CAPD Pond 5	19	5	Projected Activity: Remedial Alternative Study
CAPD Ponds 6A and 9	Non-LOU		
CAPD Pond 7	21		
ACD Drum Burial Waste Management Area	5	1,2,5,6,7	Completed: Revised Work Plan for Vadose Zone Characterization (accepted by NDEP Feb 2013). Revised EDD and DVSR (accepted by NDEP April 2014). Vadose Zone Data Gap Analysis and Characterization Completed. Projected Activity: RI Report (CSM & DUE) Third Quarter 2014
Phosphoric Acid Pond, Three Trenches (LOU 4), Leach Beds (LOU 9) and Assoc Conveyance	4 and 9	1,2,5,6,7	Completed: Revised Work Plan for Vadose Zone Characterization (accepted by NDEP Feb 2013). Revised EDD and DVSR (accepted by NDEP April 2014). Vadose Zone Data Gap Analysis and Characterization Completed. Projected Activity: RI Report (CSM & DUE) Fourth Quarter 2014
Geophysical Anomaly South of Phosphoric Acid Pond	Non-LOU		Completed: Vadose Zone Data Gap Analysis and Characterization Completed. Projected Activity: RI Report (CSM & DUE) Fourth Quarter 2014
Former ACD Plant Area (Asphalt-Concrete Cap Covered Area) Including: Former ACD Plant Site (LOU 8), Former Lindane Plant Area (LOU 10), Former BHC Cake Piles 1 & 2 and Capped Area of Former BHC Loader Haul Route (LOU 12) and Former Vapor Incinerator Area (LOU 14)	8,10, 12 and 14	1,3,5	Completed: Revised Work Plan for Vadose Zone Characterization (accepted by NDEP Feb 2013). Revised EDD and DVSR (accepted by NDEP April 2014). Excepting for Soil Gas, Vadose Zone Characterization Completed. Projected Activity: RI Report (CSM & DUE) First Quarter 2015
Non-Capped Area of Former BHC Loader Haul Route (LOU 12) and Nearby Surface Soils	12	4	Completed: Revised Work Plan for Vadose Zone Characterization (accepted by NDEP Feb 2013). Revised EDD and DVSR (accepted by NDEP April 2014). Vadose Zone Data Gap Analysis and Characterization Completed. Projected Activity: RI Report (CSM & DUE) Fourth Quarter 2014
BHC Cake Pile 3	12	1,5,6,7	Completed: Vadose Zone Data Gap Analysis and Characterization Completed. Projected Activity: RI Report (CSM & DUE) Second Quarter 2015
Former HCL/BCME Release Area	29	1,2,5	Completed: Vadose Zone Data Gap Analysis and Characterization Completed (SRCs <BCLs). Projected Activity: RI Report (CSM & DUE) First Quarter 2015
Inactive Trithion USTs	Non-LOU	6,7	Projected Activity: Data Gap Analysis and Vadose Zone Characterization. Third Quarter 2014
Inactive ACD Ponds 1 and 2	7	1,2,5,6,7	Projected Activity: RI SAP
Former Wastewater Ponds 1 & 2 and CAPD Ponds 7 and 8	6, 21 & 22	1,5	Completed: Revised Work Plan for Vadose Zone Characterization (accepted by NDEP January 2013). Revised EDD and DVSR (accepted by NDEP November 2013). Submitted Recommendation for Project Closeout Process September 4, 2014 (accepted by NDEP September 12, 2014).
Former Cell Renewal Building and Associated Conveyance Facilities	11	5	Completed: RI SAP (Approved by NDEP) & CSM (Approved by NDEP) Projected Activity: Remedial Alternative Study
Site-Wide Groundwater	Non-LOU	1	Projected Activity: Annual Groundwater Monitoring Program & RAS

Notes:

- Hargis + Associates, Inc. (2008). Conceptual Site Model, Former Montrose and Stauffer Facilities and Downgradient Areas to Las Vegas Wash. Henderson, Clark County, Nevada. September 21.
 - PES Environmental, Inc. (2008). Area-Specific Conceptual Site Models: BHC Cake Pile 2 (Component of LOU No. 12); ACD Drum Burial Waste Management Area (LOU No. 5); Former Leach Beds and Phosphoric Acid Pond (LOU No. 4) and Trenches (LOU No. 9); Inactive ACD Ponds 1 & 2 (LOU No. 7); and Former HCl/BCME Release Area (LOU No. 29). Former Stauffer Chemical Company Facility. Henderson, Nevada. April 11.
 - PES Environmental, Inc. (2008). Area-Specific Conceptual Site Models: Former ACD Plant (LOU No. 8); Former Lindane Plant (LOU No. 10); and Former BHC Cake Piles 1 and 2 and Former BHC Loader Haul Route (LOU No. 12). Former Stauffer Chemical Company Facility. Henderson, Nevada. June 12.
 - PES Environmental, Inc. (2008). Area-Specific Conceptual Site Model for Shallow Soil. Former Stauffer Chemical Company Facility. Henderson, Nevada. July 1.
 - Stauffer Management Company, Pioneer Chlor Alkali Company, Inc. (1997). Response to LOU Information Request. August 8.
 - PES Environmental, Inc. (2009). Field Activities Summary Report, Subsurface Reconnaissance and Collection of Waste Characterization Samples, Former Stauffer Chemical Company Facility. Henderson, Nevada. July 1.
 - PES Environmental, Inc. (2010). Waste Analysis Plan, Corrective Action Management Unit (CAMU), Former Stauffer Chemical Company Facility. Henderson, Nevada. July 19.
- ACD - Agricultural Chemical Division
BCME - Bischloromethylether
BHC - Benzene Hexachloride
CAPD - Chlor Alkali Products Division
Companies - Pioneer Americas, LLC, Stauffer Management Company, LLC/Syngenta Crop Protection, Inc., and Montrose Chemical Corporation of California
CSM - Conceptual Site Model
Geosyntec - Geosyntec Consultants, Inc.
Hargis - Hargis + Associates, Inc.
HCL - Hydrochloric Acid
LOU - Letter of Understanding
MACTEC - MACTEC, Inc.
NDEP - Nevada Division of Environmental Protection
PES - PES Environmental, Inc.
RAS - Remedial Alternative Study
RI - Remedial Investigation
SAP - Sampling & Analysis Plan
USTs - Underground Storage Tanks
WP - Work Plan