

Fact Sheet

Former Montrose Facility Henderson, Nevada

UPDATED MARCH 2016

The Montrose Chemical Corporation of California (Montrose) formerly operated a chemical manufacturing plant on various leased parcels located within what is now the Olin Chlor Alkali Products. (Olin) facility in the southwestern portion of the BMI Complex, Henderson, Nevada. The Montrose plant ceased operations in 1983 and the manufacturing facilities were demolished. Various closure activities, including the closure of former evaporation ponds, continued until 1989.

Administrative History

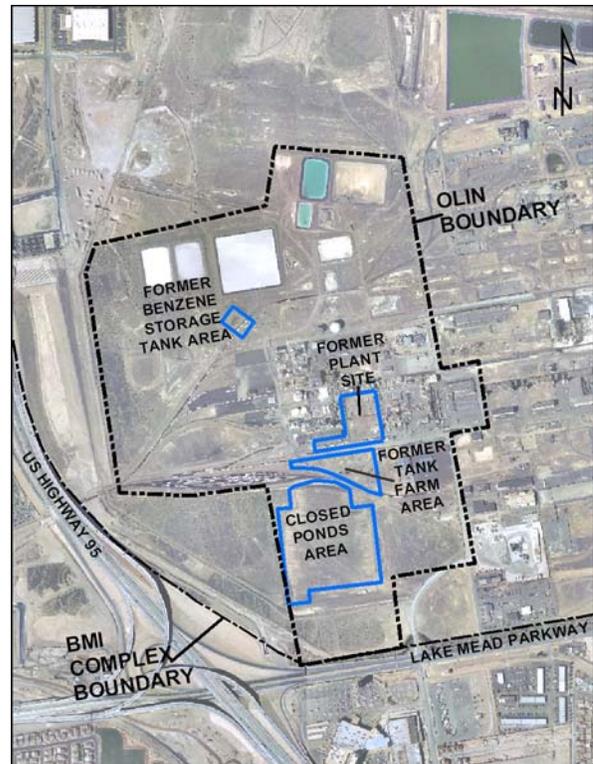
In 1991, Montrose entered into a Consent Agreement with the Nevada Division of Environmental Protection (NDEP) requiring Montrose to conduct a Phase I Environmental Conditions Assessment (ECA) of the former Montrose facility to identify areas of potential environmental concern. Montrose submitted its ECA report to NDEP in 1993.

In 1994, NDEP issued a Phase II Letter of Understanding (LOU) that outlined specific environmental issues to be investigated by Montrose. Subsequently, Montrose entered into another Consent Agreement with the NDEP in 1996 to conduct a Phase II Environmental Conditions Investigation (ECI) of areas of potential environmental concern at the former Montrose facility as identified in the LOU.

Site Investigations

Since completion of the 1996 Consent Agreement, Montrose has completed a series of soil and groundwater investigations at the former Montrose parcels under the oversight of the NDEP. This work was conducted during the time period of approximately 1996 to 2010 which resulted in the submittal of a series of reports and other correspondence to NDEP. These efforts defined areas of chemical presence at the former Montrose leased properties and laid the foundation for future preparation of risk assessments and/or close-out activities.

Also during the time period of approximately 2000 to 2008, Montrose in collaboration with parties involved in the Stauffer Management site (co-located on the Olin plant site), completed a series of additional groundwater and soil investigations which resulted in the publication of a Site Conceptual Model (CSM) document in July 2008. That comprehensive document defined the regional geology and hydrogeology, source area locations and the magnitude and mechanism of chemical migration at the combined sites. The CSM also identified outstanding data gaps for which further investigation was required.



Former Montrose Facility Locations

Since 2008, further investigations have proceeded at targeted geographical areas such as the former Wastewater Ponds 1&2 and for specific issues such as soil vapor. All activities tend to follow a process where the objectives of a program are defined with NDEP, a workplan that defines the work necessary to resolve the data gaps is submitted for NDEP's review, the field or research work is completed, and a report of the findings is published. Review of these reports by NDEP determines if the work has met the stated objectives or if a further phase of work is required.

Current Investigations and Document Development

As of March 2016, the Montrose program is in the process of finalizing investigation reports and data quality evaluations. Future work will include completion of human health risk assessments, evaluation of soil remedial alternatives (if remedial action is required), and/or close-out of the investigation process with a finding of No Further Action (NFA). Notable current work includes:

- Submitted legal description to NDEP in January 2016 to complete NFA Package for the DCB Warehouse.
- Submitted NFA package for the Former Underground Benzene Storage Tank Area to NDEP in March 2016.
- Preparation of a Conceptual Site Model (CSM) and Data Usability Evaluation (DUE) for the completed investigation work at the Former Plant Site (FPS) parcel.
- Preparation of a CSM for the completed investigation at the Former Benzene Storage Tank Area and address NDEP comments regarding the Screening Risk Assessment.
- Evaluating NDEP Comments to the DNAPL Investigation Data Summary Report MC-MW-18 Mobility Test and Monitoring and Purge Program Update.

Additionally, Montrose and the former Stauffer site Companies are currently developing a Groundwater Remedial Alternatives Study (RAS) to assess alternative methods of groundwater contaminant migration control to that currently in operation as noted below.

Remedial Operations

Starting in 2004, Montrose implemented a soil vapor extraction (SVE) remedial program at the Former Plant Site. The purpose was to remove volatile organic compounds from soils identified by the previous investigation programs. At the conclusion of the program in 2010, over 278,000 pounds of volatile organic compound had been removed by this successful program.

Additionally, Montrose, Olin (formerly Pioneer), and Stauffer Management Company, LLC (SMC) collectively operate a groundwater treatment system (GWTS) near Warm Springs Road to prevent the off-site migration of contaminated groundwater. The system was first installed in 1983 and consists of a series of extraction wells to capture chemicals migrating within groundwater moving downgradient from the former plant sites. The groundwater is treated by a combination of air-stripping and activated carbon adsorption to remove chemicals and the treated groundwater is then returned to the aquifer system.



Upgraded Groundwater Treatment System

The system has been upgraded over the past several years to improve the capture of groundwater by the installation of additional extraction



wells. The system operates continuously, on-line at over 99% of the time. Routine ongoing evaluations are conducted to maintain the system's groundwater contaminant capture efficiency.

INFORMATION AND COMMUNITY INVOLVEMENT

NDEP oversees all aspects of the environmental work at the former Montrose facility. Additional information can be obtained from Carlton Parker (702-486-2870 ext. 228) at NDEP. Montrose welcomes community input to this project and recognizes 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.