

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
General Motors-SC - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region VII

Subject: POLREP #3
General Motors-SC
Sioux City, IA
Latitude: 42.4930130 Longitude: -96.4321280

To: Daniel O'Connor, R7

From: Randy Schademmann, OSC

Date: 3/30/2016

Reporting Period: February 2015 through March 2016

1. Introduction

1.1 Background

Site Number:	Contract Number:
D.O. Number:	Action Memo Date:
Response Authority: CERCLA	Response Type: Time-Critical
Response Lead: EPA	Incident Category: Removal Action
NPL Status: Non NPL	Operable Unit:
Mobilization Date:	Start Date: 4/7/2011
Demob Date:	Completion Date:
CERCLIS ID: IAD00068699	RCRIS ID:
ERNS No.:	State Notification:
FPN#:	Reimbursable Account #:

1.1.1 Incident Category

Time-critical removal action.

1.1.2 Site Description

The site consists of approximately 26 acres in the Sioux City, Iowa, Tri-View Industrial Area. The site includes a 221,000 square foot warehouse that is connected to a 19,000 square foot office building. The site is currently being utilized as a distribution hub by Bomgaars, a home improvement and hardware chain.

1.1.2.1 Location

The site is located at 1805 Zenith Drive in Sioux City, Iowa.

1.1.2.2 Description of Threat

A number of chlorinated compounds, including tetrachloroethylene and trichloroethylene (TCE), have been detected in monitoring wells and on-site soils. TCE has been detected in a nearby public water well field at levels above the Maximum Contaminant Level (MCL).

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In 1965, Zenith purchased the parcels making up the Site and constructed a radio manufacturing facility. There were no industrial facilities on the Site before this time. Zenith constructed six underground storage tanks to store acetone, isopropanol, white gas, lacquer thinner, 1,1, 1-trichloroethane (1, 1, 1-TCA), and gasoline.

In 1980, General Motors (GM) purchased the Site and began testing throttle-body injection fuel systems at the Site. As part of its operations, GM used an above-ground Stoddard solvent tank farm, but did not use Zenith's underground storage tanks. In 1984, GM removed the underground storage tanks. GM stopped production at the Site in 1993, and removed the tank farm in 1994. The chemicals known to be used on Site by Zenith and GM do not coincide with the chemicals making up the groundwater contamination, except for the 1,1,1-TCA.

In 1993, the Site underwent Phase I and II assessment by GM in preparation for its sale. These assessments identified the existence of chlorinated volatile organic compounds (CVOCs) on site, which GM then reported to the Iowa Department of Natural Resources (IDNR). After completing a preliminary

assessment, the EPA deferred the site to the IDNR for cleanup oversight in 1996. Under IDNR, a remedial investigation and feasibility study were completed. These investigations revealed levels of CVOCs in the groundwater above the EPA-established MCLs for drinking water. They also revealed an area of contaminated soil that could be the source for the groundwater contamination. The soil contamination was not found at levels that pose a risk to human health from direct exposure.

In 2001 a state record of decision (ROD) was signed. In accordance with the state ROD, GM operated Municipal Well 3 (MW-3), and constructed a hydraulic capture system (HCS) and a butane biostimulation system. These systems were operational by the end of 2006. The HCS is a series of pumps designed to keep contamination from migrating off-site. MW-3 is pumped to waste, and intercepts contamination off-site before it reaches the rest of the Riverfront well field. It was formerly used as a municipal drinking water well, but was disconnected from the water supply when it was found to be contaminated. The butane biostimulation system was meant to bioremediate contaminated soil and groundwater on-site. A butane biostimulation pilot study for groundwater in the source area was initiated and showed some concentration reductions. However, the pilot study was not conducted for the source area soils and ended when GM declared bankruptcy.

In 2009, GM declared bankruptcy and sold its assets to General Motors, LLC, a separate and independent entity. At this point, GM became Motors Liquidation Company (MLC), which is responsible for settling the company's liability. MLC reached a settlement with the Department of Justice for the liability associated with the GM Sioux City Site for \$6.5 million, to be disbursed as soon as the bankruptcy order is filed. The state was unable to ensure use of the funds for the cleanup, so the money will be administered by the EPA.

GM had not maintained the HCS since it declared bankruptcy. The system was not functioning as designed, which may have allowed contamination to migrate off-site.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

Actions at the site have been conducted via a collaboration of the removal and remedial programs.

2.1.2 Response Actions to Date

The site's current owners are nearing completion of a warehouse annex that has covered approximately 2 acres of the site. The improvement is located immediately west of the existing warehouse building.

The water from the HCS is being discharged, untreated, to the city's municipal wastewater treatment system. The EPA had been charged approximately \$5,000 per month until the early spring of 2015. At that time, the city was allowed to install an automatic chemical feed system in the treatment building in an effort to reduce odors in the wastewater system (not associated with the site). The monthly charge was dropped. The city's wastewater treatment employees also provide near-daily monitoring of the system.

Samples have been collected on an irregular basis from the city's well field. Samples from 2013 indicated very limited CVOC concentrations. No CVOC concentrations have been detected since early 2014.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

Because of the settlement, no further PRP activities are planned.

2.1.4 Progress Metrics

The removal of chlorinated solvents represented below is based on biannual combined effluent samples from the HCS and generalized pumping rates and operation of the HCS since September 2011. The concentrations of all chlorinated solvents were combined (the highest concentrations were from 1,2-dichloroethane, cis-1,2-dichloroethene, and trichloroethene, respectively).

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
Ground water		22 gpd	None	None	237 lbs

2.2 Planning Section

2.2.1 Anticipated Activities

Continued operation of the pumping system and biannual sampling of the extraction wells and city well field.

2.2.1.1 Planned Response Activities

A meeting was held at the EPA Region 7 offices in March 2016 to discuss, among other things, the special account that was established for the site. It was decided to continue operation of the system within the

removal program. It was also decided to expand on the EPA's Office of Research and Development (ORD) modeling efforts from 2013/2014. That effort assisted with the decision to not excavate the contaminated soil as modeling indicated that it would not impact down gradient groundwater concentrations. The proposed modeling effort will assist with determining to what degree the HCS is reducing the down gradient concentrations.

2.2.1.2 Next Steps

See above.

2.2.2 Issues

Both remedial and removal program representatives have been in contact with the current owners on expansion issues and with the city on improvements to Zenith Drive.

2.3 Logistics Section

Logistics are being completed by the remedial and removal project managers.

2.4 Finance Section

2.4.1 Narrative

There were some errors with the financial reporting in the previous PolRep. The ceiling on the Action Memorandum is \$917,315 of which approximately \$570,000 has been expended in extramural funds.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$349,528.08	\$349,528.08	\$0.00	0.00%
TAT/START	\$350,000.00	\$220,609.05	\$129,390.95	36.97%
Intramural Costs				
USEPA - Direct	\$200,000.00	\$125,763.19	\$74,236.81	37.12%
USEPA - InDirect	\$500,000.00	\$348,645.00	\$151,355.00	30.27%
Total Site Costs	\$1,399,528.08	\$1,044,545.32	\$354,982.76	25.36%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

The Site Safety Officer position is only staffed when site activities are ongoing. No site safety issues have been identified.

2.5.2 Liaison Officer

The Liaison Officer position is unfilled.

2.5.3 Information Officer

A Community Engagement Specialist (CES) has been established for this site. No issues were identified during this reporting period.

3. Participating Entities

3.1 Unified Command

A Unified Command has not been established for this site.

3.2 Cooperating Agencies

Iowa Department of Natural Resources

City of Sioux City

Bomgaars

4. Personnel On Site

Personnel on site varies greatly. The site has a functioning warehouse that operates 24/7. No precautionary measures due to on-site contamination are required for the employees.

5. Definition of Terms

CES	Community Engagement Specialist
CVOC	Chlorinated volatile organic compounds
EPA	Environmental Protection Agency
GM	General Motors
gpd	Gallons per day
HCS	Hydraulic Capture System
IDNR	Iowa Department of Natural Resources
lbs	Pounds
MCL	EPA's Maximum Contaminant Level
NPDES	National Pollutant Discharge Elimination System
ORD	EPA's Office of Research and Development
PRP	Potentially Responsible Party
START	Superfund Technical Assessment and Response Team

6. Additional sources of information

6.1 Internet location of additional information/report

6.2 Reporting Schedule

A POLREP will be developed as significant activities occur.

7. Situational Reference Materials

No information available at this time.

POLREP #3 Last Updated 4/12/2016