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

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region VII

Subject: **POLREP #2**
General Motors-SC

Sioux City, IA
Latitude: 42.4930130 Longitude: -96.4321280

To:
From: Randy Schademann, OSC
Date: 2/3/2015
Reporting Period:

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 currenlty 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 CVOCs on Site, which GM then reported to the Iowa Department of

Natural Resources (IDNR). After completing a preliminary assessment, 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 maximum contaminant levels (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 wellfield. 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 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.

In the early spring of 2014, 22 monitoring wells were abandoned due to the construction activities associated with the warehouse expansion.

In the summer of 2014 several components of the HCS were replaced including pumps, motors, and electronic monitoring equipment. The system has remained largely fully operational since that time.

The water from the HCS is being discharged--untreated--to the city's municipal wastewater treatment system. The EPA is being charged approximately $5,000 per month. Efforts were made to develop an National Pollutant Discharge Elimination System (NPDES) permit to allow treated water to be discharged to the Missouri River. Those efforts hit an impasse due to the high iron content.

Samples have been collected on an irregular basis from the city's well field. Samples from the past several years have indicated very limited CVOC concentrations--the most recent (in December 2014) had no CVOCs above the method detection limit.

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).

Waste Stream	*Medium*	*Quantity*	*Manifest #*	*Treatment*	*Disposal*
Ground water		22gpd	None	None	199 lbs

2.2 Planning Section

2.2.1 Anticipated Activities

The expansion of the warehouse will be completed in 2015. Zenith Drive is also to be expanded in 2015.

The nearby Interstate 29 is scheduled for an additional lane in the near future.

2.2.1.1 Planned Response Activities

Operation of the HCS will be done under the removal program through 2015.

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.

If the HCS will be operational for years, the NPDES issue may need to be revisited.

2.3 Logistics Section

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

2.4 Finance Section

No information available at this time.

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 Involvement Corridinator (CIC) has been established for this site.

3. Participating Entities

3.1 Unified Command

A Unififed Command has not been established for this site.

3.2 Cooperating Agencies

Iowa Department of Natural Resources

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 is required by the employees.

5. Definition of Terms

CIC	Community Involvement Coordinator
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 Ellimination 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 SitRep will be developed as significant activities occur.

7. Situational Reference Materials

No information available at this time.