

**United States Environmental Protection Agency
Region VII
POLLUTION REPORT**

Date: Friday, December 14, 2007

From: Heath Smith

Subject: FIRST AND FINAL POLREP

Daimler Chrysler Rinse-Vat Release
1001 North Highway Drive, Fenton, MO
Latitude: 38.5460400
Longitude: -90.4585000

POLREP No.:	1	Site #:	07ZZ
Reporting Period:		D.O. #:	
Start Date:	10/2/2005	Response Authority:	CERCLA
Mob Date:		Response Type:	Emergency
Demob Date:		NPL Status:	Non NPL
Completion Date:	10/24/2005	Incident Category:	Removal Action
CERCLIS ID #:		Contract #	
RCRIS ID #:			

Site Description

On October 2, 2005, On-Scene Coordinator (OSC) Heath Smith responded to a report of a release of hazardous materials from the Daimler-Chrysler South Vehicle Production Facility (South Plant) in Fenton, Missouri. The release occurred when a steel/rubber expansion plug terminating a six-inch industrial wastewater line failed allowing industrial wastewater to flow into the facilities storm water runoff system and onto the Merrimac River.

The responsible party contact for this response is Daimler-Chrysler Environmental Coordinator Terry Tecklenburg. Tecklenburg's number is (636) 343-3320.

The release was discovered at approximately 7:45 a.m. on the morning of October 2, 2005. The incident was reported on the same day by both the Daimler-Chrysler facility at 9:06 a.m. (Incident Report #774675) and the South St. Louis Fire Department at 9:55 a.m. (Incident Report #774687).

The Daimler-Chrysler South Plant located in Fenton, Missouri, assembles the Chrysler Town and Country, Chrysler Voyager, Dodge Caravan and Dodge Grand Caravan minivan models.

As part of the pre-paint treatment process, bodies of vehicles on the plant assembly line are dipped in 7,500-gallon vats of liquid. These vats of liquid are designed to clean, rinse, and prepare the partially assembled vehicles for an electrostatic paint job. There are approximately seven vats used in this process. Some of the vats are filled with city water and used to rinse the vehicles on the assembly line. One of the vats, the last one on the assembly line, is filled with a chemical called "E-coat" that assists in the upcoming assembly line electrostatic painting process. At least two vats contain chemicals listed as hazardous wastes at 40 CFR §302.4. This information was provided to OSC Smith on Materials Data Safety Sheets that describe the constituents of chemicals used in the pre-paint treatment process. The hazardous constituents include: tribasic sodium phosphate (CAS# 7758-29-4), dibasic sodium phosphate (CAS# 7558-79-4), and Sodium Nitrite (CAS# 7632-00-0). Concentrations of these listed chemicals range from 400 parts per million (ppm) to 30,000 ppm in each of their respective vats. All of the chemicals used in this process are water soluble. It should be noted that the release incorporated liquids from several of the vats, which included both the vats with the chemicals of concern as well as vats with non-hazardous chemicals.

On a weekly basis the contents of the vats are replaced. As part of this process, the vats are drained into the facility's industrial wastewater collection system. It is not known whether the six-inch expansion plug had failed on this occasion or if it had failed sometime prior to October 2, 2005. It is known, however, that a release did occur during the October 2 dump of liquid from these vats.

An abandoned sum pit is located outside of the South Plant building. The pit measured approximately 4'x4'x10'. A six-inch line that is connected to the active industrial wastewater collection system terminated into this sump. The 6-inch line had been plugged with a steel/rubber expansion plug that was

found to be resting at the bottom of the sump on October 2. When the vats were dumped, part of the waste stream traveled down the 6 inch-line and into the sump pit.

Once the sump pit filled to capacity, it overflowed to an asphalt parking lot. The waste traveled approximately 50' to a storm water collection system inlet, and then through the storm water collection system to Outfall 002. Outfall 002 is equipped with a 1000-gallon oil water separator. The waste stream flowed into the oil water separator and was then discharged into a ditch that leads to the Merrimac River approximately 1/4 mile downstream. It is estimated that 2,000 gallons of waste were released from Outfall 002.

Current Activities

OSC Heath Smith arrived on scene at approximately 7:30 p.m. on October 2, 2005. He met with Tecklenburg and was provided a tour of the incident scene. Tecklenburg explained that upon learning of the release, notifications were made to the Emergency Response Community. The South County Fire Department responded to the incident and brought bails of straw hay that they placed downstream of Outfall 002. They also flushed the storm sewer line with an unknown amount of water. Tecklenburg indicated that Daimler-Chrysler evacuated the fluids from both the sump pit and the oil water separator. These evacuated fluids were introduced back into the facilities industrial wastewater stream. Tecklenburg also indicated that he had taken samples of the water being discharged into the ditch.

By the time OSC Smith arrived, an emergency response contractor had been mobilized to the site by Daimler-Chrysler. The contractor was concentrating on waste remaining in the creek between Outfall 002 and the confluence with the Merrimac. The method of clean-up chosen was to dam the ditch between the Merrimac River and Outfall 002. The water in the ditch would be evacuated, and then the ditch would be flushed and evacuated of water once more. All of the evacuated water would be reintroduced back into the industrial wastewater system.

This operation was completed by 8:00 a.m. on October 3, 2005. OSC Smith walked the ditch between the confluence of the Merrimac River and Outfall 002 on the morning of October 3 to look for visible signs of contamination or fish kill. The water in the ditch did not appear out of the ordinary, and fish were observed swimming in water.

As of 9:15 a.m. on October 4, 2005, the six-inch pipe leading to the sump had been permanently capped.

Planned Removal Actions

Daimler-Chrysler plans to continue sampling the water in the ditch between Outfall 002 and the confluence of the Merrimac River for the hazardous constituents that were released on October 2, 2005, to ensure the cleanup of the storm water system and the ditch was successful.

Key Issues

Key Locations:

Sump (Site of Spill)	N38.54604	W90.45850
Outfall 002	N38.55203	W90.45951
Storm Drain Location	N38.54608	W90.45815
Confluence with the Merrimac River	N38.55397	W90.45671