# TSD File Inventory Index

Date: July 2, 2002

Initial: CMKenerko

Facility Name: American Axle & Manufacturing, Inc. (Three Rivers - One Field Site)

Facility Identification Number: MID 000 718 551

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|---|---|---|---|
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Note: Transmittal Letter to Be Included with Reports.
Comments: Documents do not justify individual folder per schedule

A.2 Part A/
Interim Status

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION V
111 West Jackson Blvd.
CHICAGO, ILLINOIS 60604

REPLY TO ATTENTION OF:
RCRA ACTIVITIES

JUN 8 1982

Jerry Timmer, Sr., Env. Engr.
GMC Hydra Matic Div.
Three Rivers
One Hydra-Matic Drive
Three Rivers, Michigan 49093

RE: Interim Status Acknowledgement USEPA ID No. MID000718551
FACILITY NAME: GMC Hydra Matic Div.

Dear Mr. Timmer:

This is to acknowledge that the U.S. Environmental Protection Agency (USEPA) has completed processing your Part A Hazardous Waste Permit Application. It is the opinion of this office that the information submitted is complete and that you, as an owner or operator of a hazardous waste management facility, have met the requirements of Section 3005(e) of the Resource Conservation and Recovery Act (RCRA) for Interim Status. However, should USEPA obtain information which indicates that your application was incomplete or inaccurate, you may be requested to provide further documentation of your claim for Interim Status. Our opinion will be reevaluated on the basis of this information.

As an owner or operator of a hazardous waste management facility, you are required to comply with the interim status standards as prescribed in 40 CFR Parts 122 and 265, or with State rules and regulations in those States which have been authorized under Section 3006 of RCRA. In addition, you are reminded that operating under interim status does not relieve you from the need to comply with all applicable State and local requirements.

The printout enclosed with this letter identifies the limit(s) of the process design capacities your facility may use during the interim status period. This information was obtained from your Part A Permit application. If you wish to handle new wastes, to change processes, to increase the design capacity of existing processes, or to change ownership or operational control of the facility, you may do so only as provided in 40 CFR Sections 122.22 and 122.23.

As stated in the first paragraph of this letter, you have met the requirements of 40 CFR Part 122.23; your facility may operate under interim status until such time as a permit is issued or denied. This will be preceded by a request from this office or the State (if authorized) for Part B of your application. Please contact Arthur Kawatachi of my staff at (312) 886-7449, if you have any questions concerning this letter or the enclosure.

Sincerely yours,

Karl J. Klepitsch, Jr., Chief
Waste Management Branch

GRH 6/7/82

Enclosure
cc: George W. Griffith

FACILITY NAME

GMC HYDRA MATIC DIV THREE RIVERS MI

EPA ID NUMBER

MID000718551

FACILITY OPERATOR

GMC HYDRA-MATIC THREE RIVERS

FACILITY OWNER

GMC HYDRA-MATIC THREE RIVERS

FACILITY LOCATION

ONE HYDRA-MATIC DR
THREE RIVERS MI 49093

| PROCESS CODE | DESIGN CAPACITY | UNIT OF MEASURE |
|---|---|---|
| S01 | 10000.00000 | G |

---------- KEY ----------

| PROCESS | PROCESS CODE | APPROPRIATE UNITS OF MEASURE |
|---|---|---|
| STORAGE: | | |
| CONTAINER | S01 | G or L |
| TANK | S02 | G or L |
| WASTE PILE | S03 | Y or C |
| SURFACE IMPOUNDMENT | S04 | G or L |
| DISPOSAL: | | |
| INJECTION WELL | D79 | G,L,U, or V |
| LANDFILL | D80 | A or F |
| LAND APPLICATION | D81 | B or Q |
| OCEAN DISPOSAL | D82 | U or V |
| SURFACE IMPOUNDMENT | D83 | G or L |
| TREATMENT: | | |
| TANK | T01 | U or V |
| SURFACE IMPOUNDMENT | T02 | U or V |
| INCINERATOR | T03 | D,W,E, or H |
| OTHER | T04 | U,V,J,R,N, or S |

| UNIT OF MEASURE | CODE |
|---|---|
| GALLONS | G |
| LITERS | L |
| CUBIC YARDS | Y |
| CUBIC METERS | C |
| GALLONS PER DAY | U |
| LITERS PER DAY | V |
| TONS PER HOUR | D |
| METRIC TONS/HOUR | W |
| GALLONS/HOUR | E |
| LITERS/HOUR | H |
| ACRE-FEET | A |
| HECTARE-METER | F |
| ACRES | B |
| HECTARES | Q |
| POUNDS/HOUR | J |
| KILOGRAMS/HOUR | R |
| TONS PER DAY | N |
| METRIC TONS/DAY | S |

**United States Environmental Protection Agency**
**Region 5**

**Date:** May 9, 2002 and May 17, 2002 Addendum

**Subject:** Review of Region 5 Files on General Motors Corporation Facility (Now Known as American Axle & Manufacturing, Inc.), Three Rivers Michigan - MID 000 718 551

**From:** Gale R. Hruska
Corrective Action Project Manager

**To:** GMC Three Rivers Facility/American Axle & Manufacturing, Inc. Files

## Introduction

This facility file review is done to address the need for corrective action at this high priority, non-GPRA facility. The Company changed ownership from GMC to AA&M in 1994, but the only information we have related to this in the files is an updated notification of hazardous waste activity, in which AA&M identifies itself as a small quantity generator. The Company apparently is continuing the last GM activities, as was evidenced by viewing its web site during my review. GM owned the property from 1980 until the sale to AA&M. Everything in our files relevant to releases of hazardous wastes and constituents dates from the time GM owned and operated the facility. Therefore, in this memo everything discussed will only refer to GM operations, unless otherwise specified. (GM bought the facility from Continental Can Corporation. Nothing is known about their operations.)

## General Information

| | |
|---|---|
| **Facility Name:** | American Axle & Manufacturing, Inc.<br>(Formerly GM Hydramatic Division and GM Saginaw Division) |
| **Address:** | One Manufacturing Drive<br>Three Rivers, Michigan 49032 |
| **Telephone:** | (616) 278-0211 [2002 telephone number from internet]<br>(616) 278-0251 [Jerry Timmer - Contact in 1994] |
| **U.S. EPA ID No.** | MID 000 718 551 |

GM purchased this property from Continental Can sometime prior to the original 1980 notification date. No information is known about Continental's operations. From 1980 to 1990,

GM manufactured automotive transmission systems at this facility, then known as the Hydra-Matic Division. Their Part A Permit Application identified a 10,000 gallon container storage capacity for RCRA-regulated hazardous wastes. They identified paint wastes and solvents (FOO1 - F003, F005, D001, D002, and several P- and U- listed wastes), as well as a number of non-hazardous wastes, as being generated. In 1988, Michigan DEQ (then MDNR) approved a closure plan for the container storage area. This plan appears to have been implemented, but there is no information in our files specifically certifying the closure was formally completed. (See SWMU 17 write up below.)

In 1990, the facility changed operations, and its name was changed to the Saginaw Division. The operations of this new division were similar to the Hydra-Matic Division operations, in that it manufactured vehicle drive shafts. The RCRA closure operations identified in the previous paragraph must have been completed at least by May of 1990, when a revised notification form was received, identifying the facility as a 100 - 1,000 kg/mo. generator submitted and presumably approved. The wastes identified in the revised notification were virtually identical to those previously identified.

In 1994, a revised notification form was received, identifying American Axle & Manufacturing as the new owner. They also identified their status as a 100 - 1,000 kg/mo. generator. The wastes generated were listed as: F002, F003, F005, and D001-D004. I checked the internet, and it appears that AA&M are still in operation at the Three Rivers Site today.

The GM Part A application contains a topographical map of the region. It shows the facility property (130 acres) as a narrowish parcel of land bordering the town of Three Rivers, MI, which is located to the south and east of the facility. The bordering areas appear to be residential on the south end and business/commercial on the east border. Along the western border is the Rocky River, which one would suppose would be the receptor for any surface run-off or groundwater contamination. Most of the land to the west seems to be unused. (Note: The USGS map is dated 1972, and could be seriously out of date.)

The Part A application provides the locations of hazardous waste activities circa 1980. It shows heat treating and vapor degreasing operations located inside of the manufacturing building. Outside in a small area are a series of storage tanks, a small container storage area, and a wastewater treatment facility. Photographs show: The buildings were relatively new at that time; The tanks were all USTs; The container storage area was a concrete pad; and The entire area appears to be very clean.

State enforcement inspection forms in our files dating from 1982 through 1987 show no serious problems. All of the violations seem to be minor paperwork infractions.

**Preliminary Assessment/Visual Site Inspection (PA/VSI)**

Almost everything we know about the facility with respect to the need for corrective action is found in a PA/VSI report done for the U.S. EPA (Preliminary Assessment/Visual Site Inspection - General Motors Corporation, Three Rivers Facility, Three Rivers Michigan - MID 000 718 551 - Final Report (dated December 11, 1992). This report identifed 18 SWMUs and 3 AOCs. It was done while GM still owned and operated the facility, and does not address AA&M operations.

In addition to the information I found in our files which I discussed previously in this memo, the PA/VSI found information in the MDEQ files that a closure inspection for the container storage area was conducted in April of 1988, and the closure itself was approved in September 1988. Nothing is mentioned as to whether or not there was a final closure report.

Wastes generated at the facility at the time of the PA/VSI were paint related wastes containing solvents (MEK, F003, F005, D001, D035), and various non-hazardous wastes (paint filters, wastewater, treatment sludge, grinder sludge, scrap metal, oil sludge, etc.). Wastes generated by GM prior to the various notifications and the Part A application identified the same basic waste codes.

Eighteen SWMUs and 3 AOCs were identified in the PA/VSI:

| SWMU | Description |
|---|---|
| 1. | Scrap Metal Gondolas. There were estimated to be up to 150 metal gondolas around the facility. Scrap metal was stored in them prior to transportation to the scrap metal shredder. They were judged to be in good condition. No releases from them have been documented. The PA/VSI recommends no further action. |
| 2. | Scrap Metal Collection Areas. These are two indoor docking areas adjacent to the scrap metal shredders. Open top dump trucks are stationed there to collect the shredded metal directly from the shredder for off-site recycling. Floor drains collect any liquids, which are sent to the WWTP. At the time of the PA/VSI no releases had been reported and the concrete floor was in good condition. The PA/VSI recommends no further action. |
| 3. | Grinder Sludge Gondola. This unit is used to manage non-hazardous grinder sludge prior to off-site disposal. It consists of a 1 cubic yard steel container on wheels, which is located indoors. Any liquid spilled would go into floor drains and would go to the WWTP. No releases have been documented, and the PA/VSI recommends no further action. |
| 4. | Grinder Sludge Roll-Off Area. This is an in-ground tank used to manage non-hazardous grinder sludge (grinding fines and some oil residues). A steel tank with a screened bottom collects grinder sludge. The non-liquid material is caught by |

the screen, while any liquid in the sludge drains into a concrete sump, from which it is pumped to the WWTP. At the time of the PA/VSI, the concrete in the sump area appeared to be in good condition. The PA/VSI recommended no further action.

5. Steel Peen Gondola. This is yet another steel, 4-wheeled 1 cubic yard container. It is used to contain waste steel peen granules, which is the material used to "shot blast" metal (sort of equivalent to metal grinding). The peen material is nonhazardous. There have been no reported releases from this unit, and the PA/VSI recommends no further action.

6. Weld Slag Drums. These are 2 55-gallon drums which sit on the floor in the manufacturing building. They are part of a welding operation, and are attached to the welding booth. They collect the slag from the welding operations. There have been no reported releases and the PA/VSI recommends no further action.

7. Paint Room Bucket. This is a lidded 10-gallon steel bucket in which paint waste from maintenance painting operations is disposed. It is located indoors. There have been no known releases from this unit, and the PA/VSI recommends no further action.

8. Former Metal Lab Satellite Accumulation Area. This SWMU consists of 2 steel cabinets located inside the building, which are used to store wastes generated in the metal/prototype laboratory. The cabinets each held 1 55-gallon drum and 2 5-gallon containers. The units had not been used since 1990. No releases from them have been identified, and the PA/VSI recommends no further acion.

9. Steam Booth Catch Basin. This is a unit which manages non-hazardous oil sludge generated by steam cleaning operations. It is a 900 cubic foot concrete pit located beneath the steam cleaning booth. It is covered by a steel grate. The sludge is put in containers for treatment/disposal off-site. While the condition of the bottom of the pit was not observed, the PA/VSI did say that the above ground portion of the pit looked to be in good shape. It recommended no further action.

10. Coal Pad and Run-Off Lagoon. The coal pad is a 10,000 square foot concrete pad on which coal used to fire boilers is stored. Run-off from the pad is directed to an adjacent 960 cubic foot capacity concrete surface impoundment. Pictures of the SWMU indicate that it was in good condition at the time of the PA/VSI. No releases from the SWMU have been documented. The PA/VSI recommends no further action.

11. Wastewater Treatment System. This SWMU incorporates the facility's wastewater treatment process. It consists primarily of 4 covered inground

concrete tanks. The principle treatment consists of a DAF system to de-emulsify soluble oils in the wastewater. The 4 holding tanks are made of epoxy-coated concrete. The wastewater is non-hazardous and the treated water is sent to the Three Rivers WTP. The PA/VSI included the observation that WWTS appeared to be in good shape, and that no releases have been documented. It recommended no further action.

12. Stormwater Treatment System. This SWMU is a 7 million gallon retention basin which collects stormwater run-off from the facility. The only contaminants that would be expected in the water would be petroleum constituents from the parking lot. The retention basin is constructed of concrete and is lined with some sort of fabric liner. Treatment of the water consists of removal of any solids, after which it is discharged to the Rocky River. The sludge is disposed off-site. No releases from this SWMU have been documented, and the PA/VSI recommends no further action.

13. Former Treatment Sludge UST Area. This is an area immediately east of the Waste Water Treatment System building. At one time, 4 12,000-gallon fiberglass USTs were located there. They were used to store non-hazardous sludges from the wastewater and stormwater treatment systems. In 1990, 3 of the tanks had been removed, and a fourth was expected to be closed in place. Sampling in the soils had detected some low levels of lead and chromium, but the concentrations appear to have been at least an order of magnitude below Region 5. Screening levels. According to the report, MDEQ was going to meet with the company to discuss the requirements for finalizing closure. For some unknown reason the PA/VSI identifies a high potential for soil and groundwater contamination. However, it does not provide any supporting reason for this determination, while the facts as presented suggest only minor (if even any) contamination. It recommends complying with the MDEQ final determinations. I assume that by this time, MDEQ has approved closure (although I am sure that this would not be a RCRA closure). I will contact MDEQ to find out exactly how this closure was resolved.

14. Treatment Sludge ASTs. Two 10,000-gallon aboveground fiberglass storage tanks are located within the wastewater treatment building on a diked concrete pad. They are used to temporarily store sludges from the stormwater and wastewater treatment systems. No releases from the tanks have been documented. It the photos, the tanks look clean and in good condition. The PA/VSI recommends no further action.

15. Outdoor Roll-Off Area. This SWMU is an outdoor concrete pad with roof under which a roll-off box is located. The pad is curbed and sloped to a run-off sump. It is used to manage non-hazardous wastes such as paint filters, construction

debris, damaged products, etc.) for off-site disposal or reclamation. No releases have been documented at this unit, and the PA/VSI recommends no further action.

16. Coal Ash Silo. This is an aboveground steel silo used prior to 1990 to store coal ash from the facility boiler operations. The silo sits above the ground on a steel frame, which allowed dump trucks to be gravity loaded with the fly ash for disposal. The area looks clean in the pictures, and there have been no documented releases from the unit. The PA/VSI recommends no further action.

17. Hazardous Waste Storage Building. This was/is the only RCRA-regulated unit at the facility. It is a 15' by 20' steel building with a bermed and sloped concrete floor leading to a sump. It was used for container storage of hazardous wastes. It went through RCRA closure in 1988, which was approved by MDEQ. At the time of the PA/VSI it was being used for product storage, but was expected to eventually be used as generator-regulated storage area for hazardous wastes. The wastes managed in the unit were basically the same hazardous wastes previously identified in this memo - spent solvents. The PA/VSI visit found the building and the concrete pad to be in good condition. No spills have been documented at the unit. The PA/VSI recommends no further action.

18. Oil Storage Barn. This is a 150' by 50' steel building with a bermed concrete floor and no floor drains. Drums of product oils and non-hazardous oil sludges are stored here. The VSI and pictures indicate the concrete to be in good condition. No releases have been documented, and the PA/VSI report recommends no further action.

AOC

1. UST Area A. This is an area between the WWTS and the Manufacturing Building at which there were 10 30,000-gallon steel underground tanks. They were used to store mineral spirits, oils, lubricants, soap, and transmission fluid. They were constructed in 1979, and were removed in 1990. During removal, visible contamination was observed, although it is not stated which tank(s) were determined/suspected of causing the releases. The removal of 5,000 cubic yards of visibly contaminated soil was removed. After verification sampling indicated the continuing presence of hazardous constituents, more soil was excavated. [Note: It is not known whether the sampling analysis included PCBs as constituents, and it appears that there was no groundwater monitoring.] At the time of the PA/VSI, MDEQ was overseeing the remediation, and had scheduled a meeting to discuss the completion of remediation. (GMC had apparently sent in a subsequent sampling report indicating that the remaining soils did not show "any detectable contamination." However, U.S. EPA files do not have a copy of this report, nor any information as to what was the final outcome of the remediation.)

The PA/VSI recommends continuation of the remediation under MDEQ guidance.

2. UST Area B. This is an area east of the Manufacturing Building which formerly contained 2 30,000-gallon underground fuel oil storage tanks. During their removal, contamination was observed near the associated piping. Visually contaminated soil was removed from the SWMU, and the unexcavated soil was sampled (but not the groundwater). According to the facility, no detectable contamination was found. (However, the report documenting this determination has not been supplied.) Because there was a release, the MDEQ was monitoring the remediation, and was to discuss the remediation in a future meeting. The PA/VSI recommends continued remediation under MDEQ guidance.

3. Transmission Fluid Leak Area. This area is related to a sump inside the Manufacturing Building. The sump was used to collect transmission fluid overflows which occur during assembly operations. The release at a joint in the sump was uncovered during a remodeling project. The total amount of fluid released is not known. MEK and PNAs were detected, but actual concentrations were not reported. [Note: It is never mentioned whether or not the transmission fluids used at the facility ever contained PCBs. All that they are described as is hydraulic oils and mineral oils.] Soil was removed down to the groundwater, and the area backfilled with sand. No groundwater sampling was done and no after-removal soil verification was done either. This AOC was expected to be addressed by MDEQ in a meeting scheduled after the PA/VSI investigation was done. The PA/VSI recommended that remediation be continued under MDEQ oversight.

**Miscellaneous Information**

The PA/VSI provided additional information about the site. Some pertinent items are:

4. The facility is located outside of the 500-year floodplain.

5. Treated storm water is discharged to the Rocky River.

6. The soils are classified as sandy loam, which are well drained and are "moderately rapidly permeable." The bedrock is shale.

7. The depth to groundwater is approximately 20', and it flows to the south-southwest toward the Rocky river. There are 3 monitoring wells which are downgradient from the facility. [However, no groundwater monitoring results are documented in the PA/VSI.] The City of Three Rivers withdraws its water from this aquifer, but the report does not identify the location of the wells. The report

does mention that there is a potable water well approximately 500' south of the facility boundary. It is not stated whether or not it would be affected by releases from the facility.

8. There are no ecological receptors on-site; however, there is a wetland area southwest of the facility across the river.

**Conclusions and Recommendations**

I concur with the PA/VSI - there are only 3 AOCs (AOC 1, AOC 2, AOC 3) and one SWMU (SWMU 13) where there are concerns relevant to releases of hazardous constituents. [My review of the other SWMUs has not given me any reasons to suspect potential releases from them.] At the time of the PA/VSI, the contractor seems to have been in contact with a MDEQ field office staff member Ms. Patricia Crowley (probably out of the Plainwell District Office), who was to have a meeting with the facility regarding the remediation efforts at the above-identified AOCs and SWMU. Results of this meeting apparently were not shared with the U.S. EPA, as there is no information in the U.S. EPA files regarding the outcome. Before making any decision on the need for corrective action at the facility, I need to contact Ms. Crowley (or someone else in the field office if she is not there) to give us an update on the facility and to answer the following questions:

1. What happened as a result of the scheduled meeting of August 1992? Was corrective action completed to the satisfaction of MDEQ? Is there any hard information (reports, approval letters, etc.) that MDEQ could supply copies of to us, and which we could use to base our corrective action decisions?

2. What is the situation (with respect to corrective action) at the facility today? Does MDEQ have any concerns regarding the need for corrective action today? What is their recommendation.

3. There are 3 identified monitoring wells at the facility. Are they being monitored today? Is any past data available? If so, does the data show any groundwater contamination?

4. Specifically with respect to SWMU 13, are all of the USTs formally closed? Was the last tank closed in-place, as was proposed? Is there documentation that available that we can use to support a corrective action determination at this SWMU?

5. Has closure verification sampling been done at all 3 AOCs? MDEQ speculated on potential releases to groundwater. Was any groundwater sampling done in these areas, and is any data available? Did any of the sampling include PCBs as

constituents of concern (especially in the lubricating oil spill area)?

If we are able to obtain the needed data from MDEQ, it could go a long way in making the EI determinations at this facility, as well as addressing the need for further corrective action. I will be contacting MDEQ and a resulting addendum to this memo will likely result.

-end-

**May 17, 2002 - Addendum to Summary Memo: Information submitted by American Axle & Manufacturing Inc.**

**Information Submitted by Facility**

After reviewing the material in the U.S. EPA files, I called AA&M to see if they had any information on the 3 areas of concern at the facility. I spoke to Amy Brodzinski (616/278-0251) an environmental engineer at the plant. She FAXed a number of documents which have answered my questions.

AOC 1.

In 1990, when the 10 underground storage tanks (and associated piping) located in this area were in the process of being removed, there was a visual and olfactory evidence of a release. An organic vapor detector was used to sample soils that were removed from the excavation. When the removed soils demonstrated no organic vapors, the sides and bottom of the excavation were sampled for toluene, ethylbenzene, xylenes, chromium, lead, and PNAs. This first sampling indicated that all constituents had not been removed from the soils. Further removal occurred, and the next round of soil sampling results found no constituent concentrations above detection limits. (This sampling data is included in the material submitted.) In a letter dated March 3, 1993,to GMC, MDNR approved closure, stating that contaminants in the soils were reduced to ".... acceptable Type A clean-up concentrations" (Steve Norton - contact).

I believe that this information is sufficient to recommend that a no further action determination is appropriate at this AOC. While no groundwater sampling seems to have been done at this location, the absence of constituents from the soils at the bottom of the excavation is a good indicator of the absence of releases to the groundwater. I do not believe that installing wells 12 years after the cleanup for sampling purposes is necessary - and apparently the DNR also did not think it necessary in 1990.

AOC 2.

Two 30,000 gallon fuel oil tanks were removed from this area in this area in 1990. Soil in a

"stained" area near the piping was excavated, and subsequent confirmatory soil sampling data did not detect BTEX or PNA constituents in the undisturbed soils. There was no mention of any releases from the tanks themselves. In a January 6, 1993 letter from MDNR, closure was approved, stating that the response activities , "... reduced the contaminants in the soil to acceptable Type A cleanup concentrations ...". As with AOC 1, no groundwater sampling was required. (Note: Ms. Brodzinski could not locate the actual data results, so they were not available for confirmation.)

While the supporting evidence is not as great as for AOC 1, I believe that there is still sufficient evidence to recommend no further action at this SWMU. MDNR approved the closure, and they did not require any groundwater monitoring at the time. I am sure that they must have had the sampling results to make this determination.

AOC 3

In a letter dated August 30, 1993, MDNR requested soil sampling in the undisturbed soils beneath the Transmission Oil Leak Area. They required analysis for BTEX, PNAs, and MEK (but no PCBs). Sampling results were submitted to the facility in a letter dated October 8, 1993, a copy of which was included in the FAX material sent to me. None of the identified constituents were detected. Ms. Brodzinski could not locate any response from the MDNR as to their response to the sampling data results. I asked her if there was any information as to the possibility of PCB constituents in the transmission oil. She did not believe that any PCBs were likely to have been used, as by the time of operation of the facility, they were banned.

I believe that the sampling results provide sufficient information to support a determination of no further action at this AOC.

SWMU 13

As discussed earlier in the report, this SWMU consisted of 4 underground storage tanks used to store waste oil and sludges. At the time of the PA/VSI, they were in the process of undergoing closure. In a letter dated July 26, 1993, MDNR summarized the activities done at the site. Three of the tanks were removed, and one closed in place. Soil was removed down to the groundwater table. Confirmatory sampling was done for BTEX, PNAs cadmium, chromium, lead, and PCBs. All but one sample met all of the closure criteria. Three groundwater monitoring wells were also installed. Groundwater sampling results all met MDNR standards for the constituents. The letter concludes, "..., we concur that the response activities undertaken at the General Motors/Saginaw Division facility have reduced the contamination in the soil in Area C to acceptable Type B cleanup concentrations provided for in Section 10E ... ". (No actual sampling results were presented.)

I believe that this information is sufficient to support a determination of no further action for this

SWMU.

**MDEQ Input to Corrective Action Determination**

I tried to contact Steve Buda of MDEQ to determine whether they had any additional concerns regarding this facility. On May 21, I received a call from one of his staff. She said that the corrective action staff have not looked at that facility, so that they do not know whether or not there are any unresolved problems, and could not say whether MDEQ would revisit the site at some time in the future with regard to corrective action.

**Final Determination and Recommendation**

Out of all of the SWMUs and AOCs in the PA/VSI, I determined that only 3 AOCs and 1 SWMU were of potential concern with respect to corrective action. All of these units were addressed by MDNR (the oversite agency at that time). For two of the AOCs and the SWMU, the facility received letters from MDNR that the remediation efforts were successfully completed, the media confirmatory sampling having successfully demonstrated that any remaining constituents were below established clean up levels. For the one SWMU, no correspondence of completion was found. However, sampling results were submitted demonstrating that no significant concentration of constituents remained.

On the basis of the information provided, I recommend that no further action is necessary. EI determinations and a CA999 determination should be made.

-end-

# AMERICAN AXLE & MANUFACTURING, INC.

**ONE MANUFACTURING DRIVE • THREE RIVERS, MI 49093-8915**
**PH: (616) 278-0211/FAX: (616) 278-0404**



RECEIVED
FEB 24 1994
U. S. EPA, REGION V
SWB — PMS


February 15, 1994

RCRA Activities
U.S. EPA Region V
Waste Management Division
P. O. Box 3587
Chicago, Illinois 60690


RECEIVED
WMD RECORD CENTER
JUN 07 1994


Re: Notification of Hazardous Waste Activity
American Axle & Manufacturing Inc.
One Manufacturing Drive
Three Rivers, MI 49093
MID #000718551

Dear Sir:

Attached is a complete Notification of Hazardous Waste Activity (Form 8700-12) for the American Axle & Manufacturing facility located in Three Rivers, MI (MID #000718551). This submittal is a subsequent notification reflecting the fact that, as of March 1, 1994, American Axle and Manufacturing will assume ownership and operation of this facility from the Saginaw Division of General Motors Corporation.

If you have any questions regarding this document, please contact the writer at (616) 278-0251.

Sincerely,

Jerry Timmer
Sr. Environmental Engineer

JT/mer

(616) 278-0211

PA

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

Form Approved. OMB No. 2050-0028. Expires 9-30-92
GSA No. 0246-EPA-OT

Please refer to the Instructions for Filling Notification before completing this form. The information requested here is required by law (Section 3010 of the Resource Conservation and Recovery Act).

# EPA Notification of Regulated Waste Activity

New Number

United States Environmental Protection Agency

Date Received (For Official Use Only)

RECEIVED FEB 24 1994

## I. Installation's EPA ID Number (Mark "X" in the appropriate box)

[ ] A. First Notification [X] B. Subsequent Notification (complete item C)

C. Installation's EPA ID Number: MID007185511

## II. Name of Installation (Include company and specific site name)

AMERICAN AXLE & MANUFACTURING

## III. Location of Installation (Physical address not P.O. Box or Route Number)

Location update as per call 5/11/94

Street: ONE MANUFACTURING DRIVE

Street (continued):

City or Town: THREE RIVERS | State: MI | ZIP Code: 49032-8915

County Code: | County Name: ST. JOSEPH

## IV. Installation Mailing Address (See instructions)

Street or P.O. Box: ONE MANUFACTURING DRIVE

City or Town: THREE RIVERS | State: MI | ZIP Code: 49093-8915

## V. Installation Contact (Person to be contacted regarding waste activities at site)

Name (last): TIMMER | (first): JERRY

Job Title: SR. ENV. ENG. | Phone Number (area code and number): 616-278-0251

## VI. Installation Contact Address (See instructions)

A. Contact Address: Location [X] Mailing [ ] | B. Street or P.O. Box:

City or Town: | State: | ZIP Code: -

## VII. Ownership (See instructions)

A. Name of Installation's Legal Owner: AMERICAN AXLE & MANUFACTURING

Street, P.O. Box, or Route Number: 1840 HOLBROOK AVENUE

City or Town: DETROIT | State: MI | ZIP Code: 48212-

Phone Number (area code and number): 313-496-3530

B. Land Type: P

C. Owner Type: P

D. Change of Owner Indicator: Yes [X] No [ ] (Date Changed) Month Day Year

MAY 23 1994



Continue on reverse

Form Approved. OMB No. 2050-0028. Expires 1-30-92
GSA No. 0246-EPA-OT

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

ID – For Official Use Only

## VIII. Type of Regulated Waste Activity (Mark 'X' in the appropriate boxes. Refer to instructions.)

### A. Hazardous Waste Activity

1. Generator (See Instructions)
   - [ ] a. Greater than 1000kg/mo (2,200 lbs.)
   - [X] b. 100 to 1000 kg/mo (220 – 2,200 lbs.)
   - [ ] c. Less than 100 kg/mo (220 lbs.)
2. Transporter (Indicate Mode in boxes 1-5 below)
   - [ ] a. For own waste only
   - [ ] b. For commercial purposes

   Mode of Transportation
   - [ ] 1. Air
   - [ ] 2. Rail
   - [ ] 3. Highway
   - [ ] 4. Water
   - [ ] 5. Other – specify
3. [ ] Treater, Storer, Disposer (at installation) Note: A permit is required for this activity; see instructions.
4. Hazardous Waste Fuel
   - [ ] a. Generator Marketing to Burner
   - [ ] b. Other Marketers
   - [ ] c. Boiler and/or Industrial Furnace
     - [ ] 1. Smelter Deferral
     - [ ] 2. Small Quantity Exemption

     Indicate Type of Combustion Device(s)
     - [ ] 1. Utility Boiler
     - [ ] 2. Industrial Boiler
     - [ ] 3. Industrial Furnace
5. [ ] Underground Injection Control

### B. Used Oil Fuel Activities

1. Off-Specification Used Oil Fuel
   - [ ] a. Generator Marketing to Burner
   - [ ] b. Other Marketer
   - [ ] c. Burner – indicate device(s) – Type of Combustion Device
     - [ ] 1. Utility Boiler
     - [ ] 2. Industrial Boiler
     - [ ] 3. Industrial Furnace
2. [ ] Specification Used Oil Fuel Marketer (or On-site Burner) Who First Claims the Oil Meets the Specification

## IX. Description of Regulated Wastes (Use additional sheets if necessary)

**A. Characteristics of Nonlisted Hazardous Wastes.** Mark 'X' in the boxes corresponding to the characteristics of nonlisted hazardous wastes your installation handles. *(See 40 CFR Parts 261.20 – 261.24)*

| 1. Ignitable (D001) | 2. Corrosive (D002) | 3. Reactive (D003) | 4. Toxicity Characteristic (D000) | (List specific EPA hazardous waste number(s) for the Toxicity characteristic contaminant(s)) | | | |
|---|---|---|---|---|---|---|---|
| X | X | X | X | D006 | D008 | D009 | |

**B. Listed Hazardous Wastes.** (See 40 CFR 261.31 – 33. See instructions if you need to list more than 12 waste codes.)

| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
| F002 | F003 | F005 | | | |
| **7** | **8** | **9** | **10** | **11** | **12** |
| | | | | | |

**C. Other Wastes.** (State or other wastes requiring a handler to have an I.D. number. See instructions.)

| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
| | | | | | |

## X. Certification

*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

| Signature | Name and Official Title (type or print) | Date Signed |
|---|---|---|
| M Pannucci RE | M. PANNUCCI · PLANT MANAGER | 2-15-94 |

## XI. Comments

*Note: Mail completed form to the appropriate EPA Regional or State Office. (See Section III of the booklet for addresses.)*

Saginaw

GM

May 23, 1990

RCRA Activities
U.S. EPA Region V
Waste Management Division
P.O. Box A 3587
Chicago, Illinois 60690

RE: Notification of Hazardous Waste Activities
Saginaw Division of GMC
One Saginaw Drive
Three Rivers, MI. 49093
MID# 000718551

Dear Sir:

Attached is a completed Notification of Hazardous Waste Activities (Form 8700-12) for Saginaw Division of GMC, Three Rivers, MI. 49093 (MID# 000718551). This submittal is a subsequent notification reflecting the fact that, as of May 1, 1990 operation of this facility has been transferred from Hydra-matic Division to the Saginaw Division of General Motors Corporation.

If you have any questions regarding this document, please contact the writer at (616)278-0251.

Sincerely,

Jerry Timmer
Sr. Environmental Engineer

JKT/tjv

cc: File

RECEIVED
MAY 31 1990
U. S. EPA, REGION V
SWB — PMS

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

Form Approved. OMB No. 2050-0028. Expires 10-30-91
GSA No. 0246-EPA-OT

United States Environmental Protection Agency
Washington, DC 20460

7074

# EPA Notification of Hazardous Waste Activity

Please refer to the *Instructions for Filing Notification* before completing this form. The information requested here is required by law (*Section 3010 of the Resource Conservation and Recovery Act*).

**For Official Use Only**

Comments

| Installation's EPA ID Number | Approved | Date Received (yr. mo. day) |
|---|---|---|
| MID000718551 | | |

**I. Name of Installation**

SAGINAW DIVISION-GMC

**II. Installation Mailing Address**

Street or P.O. Box: 1 SAGINAW DRIVE

City or Town: THREE RIVERS | State: MI | ZIP Code: 49093

**III. Location of Installation**

Street or Route Number: 1 SAGINAW DRIVE

City or Town: THREE RIVERS | State: MI | ZIP Code: 49093

**IV. Installation Contact**

| Name and Title (*last, first, and job title*) | Phone Number (*area code and number*) |
|---|---|
| TIMMER, JERRY-ENVIR. | 6162780251 |

**V. Ownership**

| A. Name of Installation's Legal Owner | B. Type of Ownership (*enter code*) |
|---|---|
| GENERAL MOTORS CORP. | P |

**VI. Type of Regulated Waste Activity** (*Mark 'X' in the appropriate boxes. Refer to Instructions.*)

A. Hazardous Waste Activity

- [X] 1a. Generator
- [X] 1b. Less than 1,000 kg/mo.
- [ ] 2. Transporter
- [ ] 3. Treater/Storer/Disposer
- [ ] 4. Underground Injection
- [ ] 5. Market or Burn Hazardous Waste Fuel (*enter 'X' and mark appropriate boxes below*)
  - [ ] a. Generator Marketing to Burner
  - [ ] b. Other Marketer
  - [ ] c. Burner

B. Used Oil Fuel Activities

- [ ] 6. Off-Specification Used Oil Fuel
  - [ ] a. Generator Marketing to Burner
  - [ ] b. Other Marketer
  - [ ] c. Burner
- [ ] 7. Specification Used Oil Fuel Marketer (*or On site Burner*) Who First Claims the Oil Meets the Specification

**VII. Waste Fuel Burning: Type of Combustion Device** (*enter 'X' in all appropriate boxes to indicate type of combustion device(s) in which hazardous waste fuel or off-specification used oil fuel is burned. See instructions for definitions of combustion devices.*)

[ ] A. Utility Boiler [ ] B. Industrial Boiler [ ] C. Industrial Furnace

**VIII. Mode of Transportation** (*transporters only - enter 'X' in the appropriate box(es)*)

[ ] A. Air [ ] B. Rail [ ] C. Highway [ ] D. Water [ ] E. Other (*specify*)

**IX. First or Subsequent Notification**

Mark 'X' in the appropriate box to indicate whether this is your installation's first notification of hazardous waste activity or a subsequent notification. If this is not your first notification, enter your installation's EPA ID Number in the space provided below.

[ ] A. First Notification [X] B. Subsequent Notification (*complete item C*)

C. Installation's EPA ID Number: MID000718551

| ID - For Official Use Only | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C W | | | | | | | | | | | | | T/A | C 1 |

## X. Description of Hazardous Wastes *(continued from front)*

**A. Hazardous Wastes from Nonspecific Sources.** Enter the four-digit number from 40 CFR Part 261.31 for each listed hazardous waste from nonspecific sources your installation handles. Use additional sheets if necessary.

| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
| F001 | F002 | F003 | F005 | | |
| 7 | 8 | 9 | 10 | 11 | 12 |
| | | | | | |

**B. Hazardous Wastes from Specific Sources.** Enter the four-digit number from 40 CFR Part 261.32 for each listed hazardous waste from specific sources your installation handles. Use additional sheets if necessary.

| 13 | 14 | 15 | 16 | 17 | 18 |
|---|---|---|---|---|---|
| P030 | U044 | U134 | U211 | U225 | U226 |
| 19 | 20 | 21 | 22 | 23 | 24 |
| | | | | | |
| 25 | 26 | 27 | 28 | 29 | 30 |
| | | | | | |

**C. Commercial Chemical Product Hazardous Wastes.** Enter the four-digit number 40 CFR Part 261.33 for each chemical substance your installation handles which may be hazardous waste. Use additional sheets if necessary.

| 31 | 32 | 33 | 34 | 35 | 36 |
|---|---|---|---|---|---|
| | | | | | |
| 37 | 38 | 39 | 40 | 41 | 42 |
| | | | | | |
| 43 | 44 | 45 | 46 | 47 | 48 |
| | | | | | |

**D. Listed Infectious Wastes.** Enter the four-digit number 40 CFR Part 261.34 for each hazardous waste from hospitals, veterinary hospitals, or medical and research laboratories your installation handles. Use additional sheets if necessary.

| 49 | 50 | 51 | 52 | 53 | 54 |
|---|---|---|---|---|---|
| | | | | | |

**E. Characteristics of Nonlisted Hazardous Wastes.** Mark 'X' in the boxes corresponding to the characteristics of nonlisted hazardous wastes your installation handles. *(See 40 CFR Parts 261.21 - 261.24)*

- ☒ 1. Ignitable *(D001)*
- ☒ 2. Corrosive *(D002)*
- ☐ 3. Reactive *(D003)*
- ☒ 4. Toxic *(D000)*

## XI. Certification

***I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.***

| Signature | Name and Official Title *(type or print)* | Date Signed |
|---|---|---|
| David A Burgner | David A. Burgner<br>Plant Manager | May 23, 1990 |

*Estimated burden: Public reporting burden for this collection of information is estimated to be 3 hours, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St., S.W., Washington, D.C. 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.*

HYDRA-MATIC Division of General Motors Corporation

U.S. Environmental Protection Agency
Region 5, RCRA Activities
P.O. Box A3587
Chicago, Illinois 60690

Re: Request for change in status to Generator.

Facility: U.S. EPA #MID000718551
Hydra-matic Division, GMC
One Hydra-matic Dr.
Three Rivers, MI 49093

G, TSD, PA

Dear Sir:

This letter is a formal request to change our RCRA status from "TSD facility" to "Generator" by means of withdrawal of our Part A application and closure of our storage facility. A signed certification of our operation as a "Generator accumulating waste on-site in compliance with 40 CFR 262.34" and a copy of our Closure Plan are attached.

At the time of the original filing of our Part A application, it was uncertain if we would be accumulating waste on-site in such a manner to require a permit. Routine operation and waste minimization efforts have shown that a permit will be unecessary due to the small amount of waste generated and length of our storage time.

If you have any questions, please direct them to myself at (616)278-0251 or Sandy Brewer at (616)278-0307, or in writing to the address above c/o myself.

Yours truly,

Gerald K. Timmer

Gerald K. Timmer
Sr. Environmental Engineer
Hydra-matic Division, GMC
St. Joseph County Operations

RECEIVED
SEP 02 1987
SWD - AIS
U.S. EPA, REGION V

cc: Michigan Department of Natural Resources
William Collinson, GM Environmental Activities Staff

HYDRA-MATIC Division of General Motors Corporation

REQUEST FOR CHANGE IN STATUS TO:

"GENERATOR ACCUMULATING WASTE ON-SITE
IN COMPLIANCE WITH 40 CFR 262.34"

Facility Name: Hydra-matic Division, General Motors Corp.
Facility Location: One Hydra-matic Dr.
Three Rivers, MI 49093
Mailing Address: (Same)
U.S. EPA ID No.: MID000718551

1. I certify, in reference to the above-named facility, that a complete and accurate description of the activities currently conducted, for purposes of the Resource Conservation and Recovery Act (RCRA), are those of a generator accumulating waste on-site, in compliance with 40 CFR 262.34. This description of activities shall be considered effective as of September 1, 1987.

2. I certify that all hazardous waste which had been stored at this facility for greater than 90 days have been permanently removed, and for that portion of the wastes that were present on-site on or after November 19, 1980, the manifest requirements of 40 CFR Part 262 have been complied with, and all manifests are on file at this facility, available for inspection by authorized State and Federal officials.

3. I finally certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Allen M. Coleman, Plant Manager

8-25-87
Date

5HS-13

SEP 19 1985

Mr. David Rinard
Environmental Engineer
Steelcase, Inc.
P. O. Box 1967
Grand Rapids, MI 49501

RE: Revised Part A
Steelcase, Inc.
Grand Rapids, MI 49501
MID 006 016 547

Dear Mr. Rinard:

We have approved your March 14, 1985, request for an increase in tank storage capacity, relative to the above referenced facility.

Our approval is based on our determination, per 40 CFR 270.72(b), that storage capacity for certain solvents you wish to recycle is not available at your sister facility. That sister facility generates dirty flush solvent and transports it to your facility for storage and recycling, since your facility already has "interim status" to store hazardous wastes. We believe that the recycling of those solvents at your facility is preferable to their being disposed of elsewhere.

If you have any questions concerning this letter, please contact Ms. Carol Witt of my staff, at (312) 886-6146

Sincerely,

ORIGINAL SIGNED BY
EDITH M. ARDIENTE

Edith M. Ardiente, P.E.
Chief, Technical Programs Section

cc: Alan J. Howard, MDNR

9/12/85

5HS-13:WMD:SWB:TPS:MI:C.Witt:G.Words:FINAL:9/11/85

| | TYP. | AUTH. | IL. CHIEF | IN. CHIEF | MI. CHIEF | MN/WI CHIEF | OH. CHIEF | TPS CHIEF | WMB CHIEF | WMD DIR |
|---|---|---|---|---|---|---|---|---|---|---|
| INIT. | | | | | | | | | | |
| DATE | 9/11/85 | 9/12/85 | | | 9-12-85 | | | 9/12/85 | | |

Division of General Motors Corporation Ypsilanti, Michigan 48197

June 2[illegible] 1984

- MID980587893 G, TSD, PA
- MID 005 356795 G, TSD, PA
- MID 000724 740 G, TSD, PA
- MID 000718551 G, TSD, PA
- MID 005 356811 G, PA-2

EPA Regional Administrator
EPA Region V
P.O. Box 7861
Chicago, Illinois 60680

Dear Sir,

Attached is a reissuance of Hydra-matic Division of G.M.C.'s signatory authority delegation letter for your file. It is being reissued as a result of the assignment of a new General Manager, Mr. T. R. Zimmer for Hydra-matic Division of G.M.C.

J. A. Denton

J. A. Denton
Environmental Engineering

JAD/njr

RECEIVED
JUL 06 1984
WMD-RAIU
EPA, REGION V

HYDRA-MATIC Division of General Motors Corporation

Inter-Organization

Date: June 19, 1984

Subject: Delegation of Authority to Sign Permit Applications Under EPA Permit Programs

To: D. C. Forshee

Address:

As provided under 40 CFR 122.22, 144.32, 233.6, and 270.11 of the "Environmental Permit Regulations", the position of General Manufacturing Manager is hereby designated as my duly authorized representative for Hydra-matic Division. As such, the General Manufacturing Manager is authorized to sign all permit applications, all reports required by permits, and other information requested by EPA or a corresponding state or municipal agency, submitted for the following programs:

1. National Pollutant Discharge Elimination System (NPDES) of the Clean Water Act (40 CFR 122)

2. Underground Injection Control Program of the Safe Drinking Water Act (40 CFR 144)

3. Dredge or Fill (404) Program of the Clean Water Act (40 CFR 233)

4. Hazardous Waste Permit Program of the Resource Conservation and Recovery Act (40 CFR 270)

In the absence of the individual occupying the designated position due to vacation, illness, or other reasons, the individual temporarily responsible for the operation of the facility or activity is my duly authorized representative.

T. R. Zimmer
T. R. Zimmer
General Manager

RECEIVED
JUL 06 1984
WMD-RAIU
EPA, REGION V

njr
cc: Administrator, EPA Region V
Director, Michigan Department of Natural Resources
Director, Ohio EPA

HYDRA-MATIC

Division of General Motors Corporation Ypsilanti, Michigan 48197

November 20, 1981

EPA Regional Administrator
EPA Region V
RCRA Activities
P. O. Box 7861
Chicago, IL 60680

MID000718551 OK MGP 12-16-81

RECEIVED
NOV 30 1981
WASTE MANAGEMENT BRANCH
EPA, REGION V

Re: Hazardous Waste Permit Revision
GMC Hydra-matic
Ypsilanti, MI 48197

Dear Sir:

Enclosed are revised Part A, Hazardous Waste Permit applications for our Three Rivers and Constantine, Michigan facilities (MID000718551 and MID000724740 respectively). With the exception of one of the Three Rivers items, all changes made have been deletions due to recent changes in the regulations.

F010 and F012 wastes have been deleted as a result of the EPA listing revision specifying only sludges from cyanide heat treat operations.

The D007 waste has been deleted as a result of the EPA listing revision specifying only hexavalent chromium. Additionally, this waste is no longer being generated at either location.

The annual quantity of D001 waste (paint solvent) at the Three Rivers location was changed due to an increase in this waste generation.

The hazardous waste management facilities (storage areas) remain the same as described on the original applications. Therefore, revised layout drawings and photographs are not being included in these revised permit applications.

We appreciate your cooperation in making the noted revisions indicated in the accompanying applications. Should there be any clarification, please contact H. L. Hopkinson at (313) 485-5256.

Yours truly,

G. W. Griffith
General Manager

RECEIVED
11/30/81

Please print or type in the unshaded areas only
(fill-in areas are spaced for elite type, i.e., 12 characters/inch).

Three Rivers
Form Approved OMB No. 158-S80004

FORM 3 RCRA

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

# HAZARDOUS WASTE PERMIT APPLICATION

*Consolidated Permits Program*

*(This information is required under Section 3005 of RCRA.)*

**I. EPA I.D. NUMBER**

| S | | | | | | | | | | | | | T/A | C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F | M | 1 | D | 0 | 0 | 0 | 7 | 1 | 8 | 5 | 5 | 1 | | 1 |

**FOR OFFICIAL USE ONLY**

| APPLICATION APPROVED | DATE RECEIVED (yr., mo., & day) | COMMENTS |
|---|---|---|
| | | |

## II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below *(mark one box only)* to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

**A. FIRST APPLICATION** *(place an "X" below and provide the appropriate date)*

☐ 1. EXISTING FACILITY *(See instructions for definition of "existing" facility. Complete item below.)*

FOR EXISTING FACILITIES, PROVIDE THE DATE *(yr., mo., & day)* OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED *(use the boxes to the left)*

| C | YR. | MO. | DAY |
|---|---|---|---|
| 8 | 77 | 09 | 19 |

☐ 2. NEW FACILITY *(Complete item below.)*

FOR NEW FACILITIES, PROVIDE THE DATE *(yr., mo., & day)* OPERATION BEGAN OR IS EXPECTED TO BEGIN

| YR. | MO. | DAY |
|---|---|---|
| | | |

**B. REVISED APPLICATION** *(place an "X" below and complete Item I above)*

☒ 1. FACILITY HAS INTERIM STATUS

☐ 2. FACILITY HAS A RCRA PERMIT

## III. PROCESSES – CODES AND DESIGN CAPACITIES

**A. PROCESS CODE** – Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below, then describe the process *(including its design capacity)* in the space provided on the form *(Item III-C)*.

**B. PROCESS DESIGN CAPACITY** – For each code entered in column A enter the capacity of the process.
1. AMOUNT – Enter the amount.
2. UNIT OF MEASURE – For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

| PROCESS | PROCESS CODE | APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY |
|---|---|---|
| **Storage:** | | |
| CONTAINER *(barrel, drum, etc.)* | S01 | GALLONS OR LITERS |
| TANK | S02 | GALLONS OR LITERS |
| WASTE PILE | S03 | CUBIC YARDS OR CUBIC METERS |
| SURFACE IMPOUNDMENT | S04 | GALLONS OR LITERS |
| **Disposal:** | | |
| INJECTION WELL | D79 | GALLONS OR LITERS |
| LANDFILL | D80 | ACRE-FEET *(the volume that would cover one acre to a depth of one foot)* OR HECTARE-METER |
| LAND APPLICATION | D81 | ACRES OR HECTARES |
| OCEAN DISPOSAL | D82 | GALLONS PER DAY OR LITERS PER DAY |
| SURFACE IMPOUNDMENT | D83 | GALLONS OR LITERS |

| PROCESS | PROCESS CODE | APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY |
|---|---|---|
| **Treatment:** | | |
| TANK | T01 | GALLONS PER DAY OR LITERS PER DAY |
| SURFACE IMPOUNDMENT | T02 | GALLONS PER DAY OR LITERS PER DAY |
| INCINERATOR | T03 | TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR |
| OTHER *(Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C.)* | T04 | GALLONS PER DAY OR LITERS PER DAY |

| UNIT OF MEASURE | UNIT OF MEASURE CODE | UNIT OF MEASURE | UNIT OF MEASURE CODE | UNIT OF MEASURE | UNIT OF MEASURE CODE |
|---|---|---|---|---|---|
| GALLONS | G | LITERS PER DAY | V | ACRE-FEET | A |
| LITERS | L | TONS PER HOUR | D | HECTARE-METER | F |
| CUBIC YARDS | Y | METRIC TONS PER HOUR | W | ACRES | B |
| CUBIC METERS | C | GALLONS PER HOUR | E | HECTARES | Q |
| GALLONS PER DAY | U | LITERS PER HOUR | H | | |

**EXAMPLE FOR COMPLETING ITEM III** *(shown in line numbers X-1 and X-2 below)*: A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

| S | | T/A | C |
|---|---|---|---|
| C | DUP | | 1 |

| LINE NUMBER | A. PROCESS CODE (from list above) | B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify) | B. 2. UNIT OF MEASURE (enter code) | FOR OFFICIAL USE ONLY | LINE NUMBER | A. PROCESS CODE (from list above) | B. PROCESS DESIGN CAPACITY 1. AMOUNT | B. 2. UNIT OF MEASURE (enter code) | FOR OFFICIAL USE ONLY |
|---|---|---|---|---|---|---|---|---|---|
| X-1 | ~~S 0 2~~ | ~~600~~ | ~~G~~ | | 5 | | | | |
| X-2 | ~~T 0 3~~ | ~~20~~ | ~~E~~ | | 6 | | | | |
| 1 | S 0 1 | 10,000 | G | | 7 | | | | |
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## III. PROCESSES *(continued)*

C. SPACE FOR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESSES *(code "T04")*. FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY.

## IV. DESCRIPTION OF HAZARDOUS WASTES

**A. EPA HAZARDOUS WASTE NUMBER** — Enter the four—digit number from 40 CFR, Subpart D for each listed hazardous waste you will handle. If you handle hazardous wastes which are not listed in 40 CFR, Subpart D, enter the four—digit number*(s)* from 40 CFR, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.

**B. ESTIMATED ANNUAL QUANTITY** — For each **listed waste** entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each **characteristic** or **toxic contaminant** entered in column A estimate the total annual quantity of all the non—listed waste*(s)* that will be handled which possess that characteristic or contaminant.

**C. UNIT OF MEASURE** — For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

| ENGLISH UNIT OF MEASURE | CODE | METRIC UNIT OF MEASURE | CODE |
|---|---|---|---|
| POUNDS | P | KILOGRAMS | K |
| TONS | T | METRIC TONS | M |

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

**D. PROCESSES**

1. PROCESS CODES:
   **For listed hazardous waste:** For each **listed** hazardous waste entered in column A select the code*(s)* from the list of process codes contained in Item III to indicate how the waste will be stored, treated, and/or disposed of at the facility.
   **For non—listed hazardous wastes:** For each characteristic or toxic contaminant entered in column A, select the code*(s)* from the list of process codes contained in Item III to indicate **all** the processes that will be used to store, treat, and/or dispose of all the non—listed hazardous wastes that possess that characteristic or toxic contaminant.
   **Note:** Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code*(s)*.

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

**NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER** — Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B,C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
2. In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
3. Repeat step 2 for each other EPA Hazardous Waste Number that can be used to describe the hazardous waste.

**EXAMPLE FOR COMPLETING ITEM IV** *(shown in line numbers X-1, X-2, X-3, and X-4 below)* — A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non—listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

| LINE NO. | A. EPA HAZARD. WASTE NO (enter code) | B. ESTIMATED ANNUAL QUANTITY OF WASTE | C. UNIT OF MEASURE (enter code) | D. PROCESSES 1. PROCESS CODES (enter) | D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1)) |
|---|---|---|---|---|---|
| X-1 | K054 | 900 | P | T03 D80 | |
| X-2 | D002 | 400 | P | T03 D80 | |
| X-3 | D001 | 100 | P | T03 D80 | |
| X-4 | D002 | | | | included with above |

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NOTE: Photocopy this page before completing i. have more than 26 wastes to list.

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| EPA I.D. NUMBER (enter from page 1) | FOR OFFICIAL USE ONLY |
|---|---|
| W M 1 D 0 0 0 7 1 8 5 5 1 — T/A 1 | W DUP — T/A 2 DUP |

## . DESCRIPTION OF HAZARDOUS WASTES (continued)

| LINE NO. | A. EPA HAZARD. WASTE NO. (enter code) | B. ESTIMATED ANNUAL QUANTITY OF WASTE | C. UNIT OF MEASURE (enter code) | D. PROCESSES 1. PROCESS CODES (enter) | D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1)) |
|---|---|---|---|---|---|
| 1 | F001 | 2400 | P | S01 | |
| 2 | F003 | 350 | P | S01 | |
| 3 | F005 | 1000 | P | S01 | |
| 4 | D001 | 3 | T | S01 | |
| 5 | D008 | | | | Included in D001 Above |
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EPA Form 3510-3 (6-80)

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(enter "A", "B", "C", etc. behind the "3" to identify photocopied pages)

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## IV. DESCRIPTION OF HAZARDOUS WA[illegible]S (continued)

E. USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM D(1) ON PAGE 3.

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EPA, REGION V

EPA I.D. NO. (enter from page 1)

F M I D 0 0 0 7 1 8 5 5 1 6

## V. FACILITY DRAWING

All existing facilities must include in the space provided on page 5 a scale drawing of the facility *(see instructions for more detail).* X

## VI. PHOTOGRAPHS

All existing facilities must include photographs *(aerial or ground—level)* that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas *(see instructions for more detail).* X

## VII. FACILITY GEOGRAPHIC LOCATION

| LATITUDE (degrees, minutes, & seconds) | LONGITUDE (degrees, minutes, & seconds) |
|---|---|
| 41 51 23 N | 85 38 34 W |

## VIII. FACILITY OWNER

[X] A. If the facility owner is also the facility operator as listed in Section VIII on Form 1, "General Information", place an "X" in the box to the left and skip to Section IX below.

B. If the facility owner is not the facility operator as listed in Section VIII on Form 1, complete the following items:

| 1. NAME OF FACILITY'S LEGAL OWNER | 2. PHONE NO. (area code & no.) |
|---|---|
| E | |

| 3. STREET OR P.O. BOX | 4. CITY OR TOWN | 5. ST. | 6. ZIP CODE |
|---|---|---|---|
| F | G | | |

## IX. OWNER CERTIFICATION

*I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.*

| A. NAME (print or type) | B. SIGNATURE | C. DATE SIGNED |
|---|---|---|
| George Griffith<br>General Manager | G. M. Griffith | 11/20/81 |

## X. OPERATOR CERTIFICATION

*I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.*

| A. NAME (print or type) | B. SIGNATURE | C. DATE SIGNED |
|---|---|---|
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Please print or type in the unshaded areas only
*(fill—in areas are spaced for elite type, i.e., 12 characters/inch).*

Three Rivers
*Form Approved OMB No. 158-S80004*

FORM 3 RCRA

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

# HAZARDOUS WASTE PERMIT APPLICATION

*Consolidated Permits Program*

*(This information is required under Section 3005 of RCRA.)*

## I. EPA I.D. NUMBER

| S | | | | | | | | | | | | | T/A | C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F | M | 1 | D | 0 | 0 | 0 | 7 | 1 | 8 | 5 | 5 | 1 | | 1 |

1 2 - 13 14 15

## FOR OFFICIAL USE ONLY

| APPLICATION APPROVED | DATE RECEIVED (yr., mo., & day) | COMMENTS |
|---|---|---|
| 23 | 24 - 29 | |

## II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below *(mark one box only)* to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

**A. FIRST APPLICATION** *(place an "X" below and provide the appropriate date)*

☐ 1. EXISTING FACILITY *(See instructions for definition of "existing" facility. Complete item below.)* (71)

C 8 (15) — FOR EXISTING FACILITIES, PROVIDE THE DATE *(yr., mo., & day)* OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED *(use the boxes to the left)*

| YR. | MO. | DAY |
|---|---|---|
| 73 74 | 75 76 | 77 78 |

☐ 2. NEW FACILITY *(Complete item below.)* (71)

FOR NEW FACILITIES, PROVIDE THE DATE *(yr., mo., & day)* OPERATION BEGAN OR IS EXPECTED TO BEGIN

| YR. | MO. | DAY |
|---|---|---|
| 73 74 | 75 76 | 77 78 |

**B. REVISED APPLICATION** *(place an "X" below and complete Item I above)*

☒ 1. FACILITY HAS INTERIM STATUS (72)

☐ 2. FACILITY HAS A RCRA PERMIT (72)

## III. PROCESSES — CODES AND DESIGN CAPACITIES

**A. PROCESS CODE** — Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code*(s)* in the space provided. If a process will be used that is not included in the list of codes below, then describe the process *(including its design capacity)* in the space provided on the form *(Item III-C).*

**B. PROCESS DESIGN CAPACITY** — For each code entered in column A enter the capacity of the process.

1. AMOUNT — Enter the amount.
2. UNIT OF MEASURE — For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

| PROCESS | PROCESS CODE | APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY |
|---|---|---|
| **Storage:** | | |
| CONTAINER *(barrel, drum, etc.)* | S01 | GALLONS OR LITERS |
| TANK | S02 | GALLONS OR LITERS |
| WASTE PILE | S03 | CUBIC YARDS OR CUBIC METERS |
| SURFACE IMPOUNDMENT | S04 | GALLONS OR LITERS |
| **Disposal:** | | |
| INJECTION WELL | D79 | GALLONS OR LITERS |
| LANDFILL | D80 | ACRE-FEET *(the volume that would cover one acre to a depth of one foot)* OR HECTARE-METER |
| LAND APPLICATION | D81 | ACRES OR HECTARES |
| OCEAN DISPOSAL | D82 | GALLONS PER DAY OR LITERS PER DAY |
| SURFACE IMPOUNDMENT | D83 | GALLONS OR LITERS |

| PROCESS | PROCESS CODE | APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY |
|---|---|---|
| **Treatment:** | | |
| TANK | T01 | GALLONS PER DAY OR LITERS PER DAY |
| SURFACE IMPOUNDMENT | T02 | GALLONS PER DAY OR LITERS PER DAY |
| INCINERATOR | T03 | TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR |
| OTHER *(Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C.)* | T04 | GALLONS PER DAY OR LITERS PER DAY |

| UNIT OF MEASURE | UNIT OF MEASURE CODE | UNIT OF MEASURE | UNIT OF MEASURE CODE | UNIT OF MEASURE | UNIT OF MEASURE CODE |
|---|---|---|---|---|---|
| GALLONS | G | LITERS PER DAY | V | ACRE-FEET | A |
| LITERS | L | TONS PER HOUR | D | HECTARE-METER | F |
| CUBIC YARDS | Y | METRIC TONS PER HOUR | W | ACRES | B |
| CUBIC METERS | C | GALLONS PER HOUR | E | HECTARES | Q |
| GALLONS PER DAY | U | LITERS PER HOUR | H | | |

**EXAMPLE FOR COMPLETING ITEM III** *(shown in line numbers X-1 and X-2 below):* A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

| S | | T/A | C |
|---|---|---|---|
| C | DUP | | 1 |

1 2 - 13 14 15

| LINE NUMBER | A. PROCESS CODE (from list above) | B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify) | B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code) | FOR OFFICIAL USE ONLY | LINE NUMBER | A. PROCESS CODE (from list above) | B. PROCESS DESIGN CAPACITY 1. AMOUNT | B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code) | FOR OFFICIAL USE ONLY |
|---|---|---|---|---|---|---|---|---|---|
| | 16 - 18 | 19 - 27 | 28 | 29 - 32 | | 16 - 18 | 19 - 27 | 28 | 29 - 32 |
| X-1 | S 0 2 | 600 | G | | 5 | | | | |
| X-2 | T 0 3 | 20 | E | | 6 | | | | |
| 1 | S 0 1 | 10,000 | G | | 7 | | | | |
| | | | | | 8 | | | | |
| 3 | | | | | 9 | | | | |
| 4 | | | | | 10 | | | | |

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## III. PROCESSES *(continued)*

C. SPACE FOR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESSES *(code "T04")*. FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY.

## IV. DESCRIPTION OF HAZARDOUS WASTES

**A. EPA HAZARDOUS WASTE NUMBER** – Enter the four–digit number from 40 CFR, Subpart D for each listed hazardous waste you will handle. If you handle hazardous wastes which are not listed in 40 CFR, Subpart D, enter the four–digit number*(s)* from 40 CFR, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.

**B. ESTIMATED ANNUAL QUANTITY** – For each **listed waste** entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each **characteristic** or **toxic contaminant** entered in column A estimate the total annual quantity of all the non–listed waste*(s)* that will be handled which possess that characteristic or contaminant.

**C. UNIT OF MEASURE** – For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

| ENGLISH UNIT OF MEASURE | CODE | METRIC UNIT OF MEASURE | CODE |
|---|---|---|---|
| POUNDS | P | KILOGRAMS | K |
| TONS | T | METRIC TONS | M |

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

**D. PROCESSES**

1. PROCESS CODES:
   **For listed hazardous waste:** For each **listed** hazardous waste entered in column A select the code*(s)* from the list of process codes contained in Item III to indicate how the waste will be stored, treated, and/or disposed of at the facility.
   **For non–listed hazardous wastes:** For each characteristic or toxic contaminant entered in column A, select the code*(s)* from the list of process codes contained in Item III to indicate **all** the processes that will be used to store, treat, and/or dispose of all the non–listed hazardous wastes that possess that characteristic or toxic contaminant.
   **Note:** Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code*(s)*.

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

**NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER** – Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B,C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
2. In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
3. Repeat step 2 for each other EPA Hazardous Waste Number that can be used to describe the hazardous waste.

**EXAMPLE FOR COMPLETING ITEM IV** *(shown in line numbers X-1, X-2, X-3, and X-4 below)* – A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non–listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

| LINE NO. | A. EPA HAZARD. WASTE NO. (enter code) | B. ESTIMATED ANNUAL QUANTITY OF WASTE | C. UNIT OF MEASURE (enter code) | D. PROCESSES 1. PROCESS CODES (enter) | D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1)) |
|---|---|---|---|---|---|
| X-1 | K 0 5 4 | 900 | P | T 0 3 D 8 0 | |
| X-2 | D 0 0 2 | 400 | P | T 0 3 D 8 0 | |
| X-3 | D 0 0 1 | 100 | P | T 0 3 D 8 0 | |
| X-4 | D 0 0 2 | | | | included with above |

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CONTINUE ON PAGE 3

Continued from page 2.
*NOTE: Photocopy this page before completing if you have more than 26 wastes to list.*

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| EPA I.D. NUMBER (enter from page 1) | | | | | | | | | | | | | | | FOR OFFICIAL USE ONLY | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | | | | | | | | | | | | T/A | C | | S | | T/A | C | | |
| W | M | 1 | D | 0 | 0 | 0 | 7 | 1 | 8 | 5 | 5 | 1 | | 1 | W | DUP | | 2 | DUP | |
| 1 | 2 | | | | | | | | | | 13 | 14 | 15 | | 1 | 2 - 13 | 14 | 15 | 23 - 26 | |

## V. DESCRIPTION OF HAZARDOUS WASTES (continued)

| LINE NO. | A. EPA HAZARD. WASTE NO. (enter code) | B. ESTIMATED ANNUAL QUANTITY OF WASTE | C. UNIT OF MEASURE (enter code) | D. PROCESSES 1. PROCESS CODES (enter) | | | | 2. PROCESS DESCRIPTION (if a code is not entered in D(1)) |
|---|---|---|---|---|---|---|---|---|
| | 23 - 26 | 27 - 35 | 36 | 27 - 29 | 27 - 29 | 27 - 29 | 27 - 29 | |
| 1 | F001 | 2400 | P | S01 | | | | |
| 2 | F003 | 350 | P | S01 | | | | |
| 3 | F005 | 1000 | P | S01 | | | | |
| 4 | D001 | 3 | T | S01 | | | | |
| 5 | D008 | | | | | | | Included in D001 Above |
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| 26 | | | | | | | | |
| | 23 - 26 | 27 - 35 | 36 | 27 - 29 | 27 - 29 | 27 - 29 | 27 - 29 | |

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## IV. DESCRIPTION OF HAZARDOUS WASTES *(continued)*

E. USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM D(1) ON PAGE 3.

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EPA I.D. NO. *(enter from page 1)*

| S | | | | | | | | | | | | T/A | C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F | M | I | D | 0 | 0 | 0 | 7 | 1 | 8 | 5 | 5 | 1 | 6 |

## V. FACILITY DRAWING

All existing facilities must include in the space provided on page 5 a scale drawing of the facility *(see instructions for more detail).*

## VI. PHOTOGRAPHS

All existing facilities must include photographs *(aerial or ground—level)* that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas *(see instructions for more detail).*

## VII. FACILITY GEOGRAPHIC LOCATION

| LATITUDE *(degrees, minutes, & seconds)* | LONGITUDE *(degrees, minutes, & seconds)* |
|---|---|
| 41 51 23 N | 85 38 34 W |

## VIII. FACILITY OWNER

[X] A. If the facility owner is also the facility operator as listed in Section VIII on Form 1, "General Information", place an "X" in the box to the left and skip to Section IX below.

B. If the facility owner is not the facility operator as listed in Section VIII on Form 1, complete the following items:

| 1. NAME OF FACILITY'S LEGAL OWNER | 2. PHONE NO. *(area code & no.)* |
|---|---|
| E | |

| 3. STREET OR P.O. BOX | 4. CITY OR TOWN | 5. ST. | 6. ZIP CODE |
|---|---|---|---|
| F | G | | |

## IX. OWNER CERTIFICATION

*I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.*

| A. NAME *(print or type)* | B. SIGNATURE | C. DATE SIGNED |
|---|---|---|
| George Griffith<br>General Manager | G. W. Griffith | 11/20/81 |

## X. OPERATOR CERTIFICATION

*I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.*

| A. NAME *(print or type)* | B. SIGNATURE | C. DATE SIGNED |
|---|---|---|
| | | |

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PAF

EPA

**ACKNOWLEDGEMENT OF NOTIFICATION OF HAZARDOUS WASTE ACTIVITY**
*(VERIFICATION)*

This is to acknowledge that you have filed a Notification of Hazardous Waste Activity for the installation located at the address shown in the box below to comply with Section 3010 of the Resource Conservation and Recovery Act *(RCRA)*. Your EPA Identification Number for that installation appears in the box below. The EPA Identification Number must be included on all shipping manifests for transporting hazardous wastes; on all Annual Reports that generators of hazardous waste, and owners and operators of hazardous waste treatment, storage and disposal facilities must file with EPA; on all applications for a Federal Hazardous Waste Permit; and other hazardous waste management reports and documents required under Subtitle C of RCRA.

EPA I.D. NUMBER → • MID000718551 REACKNOWLEDGEMENT

GMC HYDRA MATIC DIV THREE RIVERS MI
ONE HYDRA-MATIC DR
THREE RIVERS MI 49093

INSTALLATION ADDRESS → ONE HYDRA-MATIC DR
THREE RIVERS MI 49093

EPA Form 8700-12B (4-80) 09/28/81

Please print or type with ELITE type (12 characters/inch) in the unshaded areas only.

Form Approved OMB No. 158-S79016
GSA No. 0246-EPA-OT

EPA

ENVIRONMENTAL PROTECTION AGENCY

# NOTIFICATION OF HAZARDOUS WASTE ACTIVITY

INSTALLATION'S EPA I.D. NO.

I. NAME OF INSTALLATION

II. INSTALLATION MAILING ADDRESS

III. LOCATION OF INSTALLATION

PLEASE PLACE LABEL IN THIS SPACE

000804 AUG 18 80

**INSTRUCTIONS:** If you received a preprinted label, affix it in the space at left. If any of the information on the label is incorrect, draw a line through it and supply the correct information in the appropriate section below. If the label is complete and correct, leave Items I, II, and III below blank. If you did not receive a preprinted label, complete all items. "Installation" means a single site where hazardous waste is generated, treated, stored and/or disposed of, or a transporter's principal place of business. Please refer to the INSTRUCTIONS FOR FILING NOTIFICATION before completing this form. The information requested herein is required by law *(Section 3010 of the Resource Conservation and Recovery Act).*

DETACH

## FOR OFFICIAL USE ONLY

COMMENTS: C

INSTALLATION'S EPA I.D. NUMBER: F MID000718551 (T/A 12, C 1)

APPROVED: A

DATE RECEIVED (yr., mo., & day): 800818

GENERAL MOTORS CORP
HYDRAMATIC DIV

## I. NAME OF INSTALLATION

HYDRAMATIC DIVISION-GMC

## II. INSTALLATION MAILING ADDRESS

STREET OR P.O. BOX: 3 1 HYDRAMATIC DRIVE

CITY OR TOWN: 4 THREE RIVERS

ST.: MI

ZIP CODE: 49093

## III. LOCATION OF INSTALLATION

STREET OR ROUTE NUMBER: 5 1 HYDRAMATIC DRIVE

CITY OR TOWN: 6 THREE RIVERS

ST.: MI

ZIP CODE: 49093

## IV. INSTALLATION CONTACT

NAME AND TITLE *(last, first, & job title)*: 2 TIMMER, JERRY SR. ENVRN. ENGINEER

PHONE NO. *(area code & no.)*: 616-278-0251

## V. OWNERSHIP

A. NAME OF INSTALLATION'S LEGAL OWNER: 8 GENERAL MOTORS CORPORATION

DETACH

B. TYPE OF OWNERSHIP *(enter the appropriate letter into box)*

F = FEDERAL
M = NON-FEDERAL

M

## VI. TYPE OF HAZARDOUS WASTE ACTIVITY *(enter "X" in the appropriate box(es))*

- [X] A. GENERATION
- [ ] B. TRANSPORTATION *(complete item VII)*
- [X] C. TREAT/STORE/DISPOSE
- [ ] D. UNDERGROUND INJECTION

## VII. MODE OF TRANSPORTATION *(transporters only – enter "X" in the appropriate box(es))*

- [ ] A. AIR
- [ ] B. RAIL
- [ ] C. HIGHWAY
- [ ] D. WATER
- [ ] E. OTHER *(specify)*:

## VIII. FIRST OR SUBSEQUENT NOTIFICATION

Mark "X" in the appropriate box to indicate whether this is your installation's first notification of hazardous waste activity or a subsequent notification. If this is not your first notification, enter your Installation's EPA I.D. Number in the space provided below.

- [X] A. FIRST NOTIFICATION
- [ ] B. SUBSEQUENT NOTIFICATION *(complete item C)*

C. INSTALLATION'S EPA I.D. NO.: MID000718551

## IX. DESCRIPTION OF HAZARDOUS WASTES

Please go to the reverse of this form and provide the requested information.

EPA Form 8700-12 (6-80)

AUG 15 1980

CONTINUE ON REVERSE

| I.D. FOR OFFICIAL USE ONLY | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | | | | | | | | | | | | | T/A | C | |
| W | M | I | D | 0 | 0 | 0 | 7 | 1 | 8 | 5 | 5 | 1 | 2 | 1 | |
| 1 | 2 | | | | | | | | | | | 13 | 14 | 15 | |

## IX. DESCRIPTION OF HAZARDOUS WASTES *(continued from front)*

**A. HAZARDOUS WASTES FROM NON–SPECIFIC SOURCES.** Enter the four–digit number from 40 CFR Part 261.31 for each listed hazardous waste from non–specific sources your installation handles. Use additional sheets if necessary.

| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
| F001 | F002 | F003 | F005 | F010 | |
| 7 | 8 | 9 | 10 | 11 | 12 |
| | | | | | |

**B. HAZARDOUS WASTES FROM SPECIFIC SOURCES.** Enter the four–digit number from 40 CFR Part 261.32 for each listed hazardous waste from specific industrial sources your installation handles. Use additional sheets if necessary.

| 13 | 14 | 15 | 16 | 17 | 18 |
|---|---|---|---|---|---|
| | | | | | |
| 19 | 20 | 21 | 22 | 23 | 24 |
| | | | | | |
| 25 | 26 | 27 | 28 | 29 | 30 |
| | | | | | |

**C. COMMERCIAL CHEMICAL PRODUCT HAZARDOUS WASTES.** Enter the four–digit number from 40 CFR Part 261.33 for each chemical substance your installation handles which may be a hazardous waste. Use additional sheets if necessary.

| 31 | 32 | 33 | 34 | 35 | 36 |
|---|---|---|---|---|---|
| P030 | P105 | U002 | U044 | U117 | U134 |
| 37 | 38 | 39 | 40 | 41 | 42 |
| U154 | U159 | U211 | U220 | U225 | U226 |
| 43 | 44 | 45 | 46 | 47 | 48 |
| | | | | | |

**D. LISTED INFECTIOUS WASTES.** Enter the four–digit number from 40 CFR Part 261.34 for each listed hazardous waste from hospitals, veterinary hospitals, medical and research laboratories your installation handles. Use additional sheets if necessary.

| 49 | 50 | 51 | 52 | 53 | 54 |
|---|---|---|---|---|---|
| | | | | | |

**E. CHARACTERISTICS OF NON–LISTED HAZARDOUS WASTES.** Mark "X" in the boxes corresponding to the characteristics of non–listed hazardous wastes your installation handles. *(See 40 CFR Parts 261.21 – 261.24.)*

- [X] 1. IGNITABLE (D001)
- [X] 2. CORROSIVE (D002)
- [ ] 3. REACTIVE (D003)
- [X] 4. TOXIC (D000)

## X. CERTIFICATION

*I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.*

| SIGNATURE | NAME & OFFICIAL TITLE *(type or print)* | DATE SIGNED |
|---|---|---|
| Alan Batdorf | Alan Batdorf<br>PLANT ENGINEER | 8/12/80 |

DETACH

EPA Form 8700-12 (6-80) REVERSE

Please print or type in the unshaded areas only
(fill-in areas are spaced for elite type, i.e., 12 characters/inch).

Form Approved OMB No. 158-R0175 427

FORM 1 GENERAL

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

# GENERAL INFORMATION

*Consolidated Permits Program*

*(Read the "General Instructions" before starting.)*

**I. EPA I.D. NUMBER**

| S | | T/A | C |
|---|---|---|---|
| F | XID000718551 | | D |

**LABEL ITEMS**

- EPA I.D. NUMBER
- III. FACILITY NAME
- V. FACILITY MAILING ADDRESS
- VI. FACILITY LOCATION

PLEASE PLACE LABEL IN THIS SPACE

**GENERAL INSTRUCTIONS**

If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent *(the area to the left of the label space lists the information that should appear)*, please provide it in the proper fill-in area*(s)* below. If the label is complete and correct, you need not complete Items I, III, V, and VI *(except VI-B which must be completed regardless)*. Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.

## II. POLLUTANT CHARACTERISTICS

**INSTRUCTIONS:** Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of **bold—faced terms.**

| SPECIFIC QUESTIONS | MARK 'X' YES | NO | FORM ATTACHED | SPECIFIC QUESTIONS | MARK 'X' YES | NO | FORM ATTACHED |
|---|---|---|---|---|---|---|---|
| A. Is this facility a **publicly owned treatment works** which results in a **discharge** to **waters of the U.S.**? (FORM 2A) | | X | | B. Does or will this facility *(either existing or proposed)* include a **concentrated animal feeding operation** or **aquatic animal production facility** which results in a **discharge to waters of the U.S.**? (FORM 2B) | | X | |
| | 16 | 17 | 18 | | 19 | 20 | 21 |
| C. Is this a facility which currently results in **discharges to waters of the U.S.** other than those described in A or B above? (FORM 2C) | | X | | D. Is this a proposed facility *(other than those described in A or B above)* which will result in a **discharge** to **waters of the U.S.**? (FORM 2D) | | X | |
| | 22 | 23 | 24 | | 25 | 26 | 27 |
| E. Does or will this facility treat, store, or dispose of **hazardous wastes**? (FORM 3) | X | | X | F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4) | | X | |
| | 28 | 29 | 30 | | 31 | 32 | 33 |
| G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4) | | X | | H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4) | | X | |
| | 34 | 35 | 36 | | 37 | 38 | 39 |
| I. Is this facility a proposed **stationary source** which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an **attainment area**? (FORM 5) | | X | | J. Is this facility a proposed **stationary source** which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an **attainment area**? (FORM 5) | | X | |
| | 40 | 41 | 42 | | 43 | 44 | 45 |

## III. NAME OF FACILITY

C 1 SKIP: GMC HYDRA MATIC DIV THREE RIVERS, MI

## IV. FACILITY CONTACT

| A. NAME & TITLE *(last, first, & title)* | B. PHONE *(area code & no.)* |
|---|---|
| C 2: TIMMER, JERRY SR ENV ENGINEER | 616 278 0246 |

## V. FACILITY MAILING ADDRESS

| A. STREET OR P.O. BOX | B. CITY OR TOWN | C. STATE | D. ZIP CODE |
|---|---|---|---|
| C 3: ONE HYDRA-MATIC DR. | C 4: THREE RIVERS, | MI | 49093 |

## VI. FACILITY LOCATION

| A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER | B. COUNTY NAME |
|---|---|
| C 5: ONE HYDRA-MATIC DRIVE | ST. JOSEPH |

| C. CITY OR TOWN | D. STATE | E. ZIP CODE | F. COUNTY CODE *(if known)* |
|---|---|---|---|
| C 6: THREE RIVERS | MI | 49093 | |



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## VII. SIC CODES (4-digit, in order of priority)

| A. FIRST | B. SECOND |
|---|---|
| 3714 (specify) Moror Vehicle Parts & Accessories | 9998 (specify) Misc. Receipts |
| **C. THIRD** | **D. FOURTH** |
| (specify) | (specify) |

## VIII. OPERATOR INFORMATION

A. NAME: GMC HYDRA-MATIC THREE RIVERS

B. Is the name listed in Item VIII-A also the owner? [X] YES [ ] NO

C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box; if "Other", specify.)
F = FEDERAL
S = STATE
P = PRIVATE
M = PUBLIC (other than federal or state)
O = OTHER (specify)

P (specify)

D. PHONE (area code & no.): A 616 278 0246

E. STREET OR P.O. BOX: ONE HYDRA MATIC DRIVE

F. CITY OR TOWN: THREE RIVERS

G. STATE: MI

H. ZIP CODE: 49093

## IX. INDIAN LAND

Is the facility located on Indian lands? [ ] YES [X] NO

## X. EXISTING ENVIRONMENTAL PERMITS

| | |
|---|---|
| A. NPDES (Discharges to Surface Water): N N.A. | D. PSD (Air Emissions from Proposed Sources): P EPA-5-A-79-20 |
| B. UIC (Underground Injection of Fluids): U N.A. | E. OTHER (specify): 9 (specify) See attached sheet |
| C. RCRA (Hazardous Wastes): R N.A. | E. OTHER (specify): 9 (specify) |

## XI. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property bounderies. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements.

## XII. NATURE OF BUSINESS (provide a brief description)

Manufacture of motor vehicle parts and accessories

## XIII. CERTIFICATION (see instructions)

*I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.*

| A. NAME & OFFICIAL TITLE (type or print) | B. SIGNATURE | C. DATE SIGNED |
|---|---|---|
| George W. Griffith<br>General Manager | | 11-19-80 |

COMMENTS FOR OFFICIAL USE ONLY

C

Continued from the front.

## III. PROCESSES *(continued)*

C. SPACE FOR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESSES *(code "T04")*. FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY.

Water, solid Separation (5,200 gal per day)

## IV. DESCRIPTION OF HAZARDOUS WASTES

A. **EPA HAZARDOUS WASTE NUMBER** – Enter the four–digit number from 40 CFR, Subpart D for each listed hazardous waste you will handle. If you handle hazardous wastes which are not listed in 40 CFR, Subpart D, enter the four–digit number*(s)* from 40 CFR, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.

B. **ESTIMATED ANNUAL QUANTITY** – For each **listed waste** entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each **characteristic** or **toxic contaminant** entered in column A estimate the total annual quantity of all the non–listed waste*(s)* that will be handled which possess that characteristic or contaminant.

C. **UNIT OF MEASURE** – For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

| ENGLISH UNIT OF MEASURE | CODE | METRIC UNIT OF MEASURE | CODE |
|---|---|---|---|
| POUNDS | P | KILOGRAMS | K |
| TONS | T | METRIC TONS | M |

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. **PROCESSES**

1. PROCESS CODES:
   **For listed hazardous waste:** For each **listed** hazardous waste entered in column A select the code*(s)* from the list of process codes contained in Item III to indicate how the waste will be stored, treated, and/or disposed of at the facility.
   **For non–listed hazardous wastes:** For each characteristic or toxic contaminant entered in column A, select the code*(s)* from the list of process codes contained in Item III to indicate **all** the processes that will be used to store, treat, and/or dispose of all the non–listed hazardous wastes that possess that characteristic or toxic contaminant.
   **Note:** Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code*(s)*.

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

**NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER** – Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B,C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
2. In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
3. Repeat step 2 for each other EPA Hazardous Waste Number that can be used to describe the hazardous waste.

**EXAMPLE FOR COMPLETING ITEM IV** *(shown in line numbers X-1, X-2, X-3, and X-4 below)* – A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non–listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

| LINE NO. | A. EPA HAZARD. WASTE NO. (enter code) | B. ESTIMATED ANNUAL QUANTITY OF WASTE | C. UNIT OF MEASURE (enter code) | D. PROCESSES 1. PROCESS CODES (enter) | D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1)) |
|---|---|---|---|---|---|
| X-1 | K054 | 900 | P | T03 D80 | |
| X-2 | D002 | 400 | P | T03 D80 | |
| X-3 | D001 | 100 | P | T03 D80 | |
| X-4 | D002 | | | | included with above |

 CONTINUE ON PAGE 3

Please print or type in the unshaded areas only
*(fill–in areas are spaced for elite type, i.e., 12 characters/inch).*

*Form Approved OMB No. 158-S80004* 429

FORM 3 RCRA

EPA

ENVIRONMENTAL PROTECTION AGENCY

# HAZARDOUS WASTE PERMIT APPLICATION

*Consolidated Permits Program*

*(This information is required under Section 3005 of RCRA.)*

**I. EPA I.D. NUMBER**

| S | M | | | | | | | | | | | | T/A | C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F | & | 1 | D | 0 | 0 | 0 | 7 | 1 | 8 | 5 | 5 | 1 | 3 | 1 |

**FOR OFFICIAL USE ONLY**

| APPLICATION APPROVED | DATE RECEIVED (yr., mo., & day) | COMMENTS |
|---|---|---|
| | | |

## II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below *(mark one box only)* to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

**A. FIRST APPLICATION** *(place an "X" below and provide the appropriate date)*

[X] 1. EXISTING FACILITY *(See instructions for definition of "existing" facility. Complete item below.)*

[ ] 2. NEW FACILITY *(Complete item below.)*

FOR EXISTING FACILITIES, PROVIDE THE DATE *(yr., mo., & day)* OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED *(use the boxes to the left)*

| C | YR. | MO. | DAY |
|---|---|---|---|
| 8 | 77 | 09 | 19 |

FOR NEW FACILITIES, PROVIDE THE DATE *(yr., mo., & day)* OPERATION BEGAN OR IS EXPECTED TO BEGIN

| YR. | MO. | DAY |
|---|---|---|
| | | |

**B. REVISED APPLICATION** *(place an "X" below and complete Item I above)*

[ ] 1. FACILITY HAS INTERIM STATUS

[ ] 2. FACILITY HAS A RCRA PERMIT

## III. PROCESSES – CODES AND DESIGN CAPACITIES

**A. PROCESS CODE** – Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below, then describe the process *(including its design capacity)* in the space provided on the form *(Item III-C).*

**B. PROCESS DESIGN CAPACITY** – For each code entered in column A enter the capacity of the process.

1. AMOUNT – Enter the amount.
2. UNIT OF MEASURE – For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

| PROCESS | PROCESS CODE | APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY |
|---|---|---|
| **Storage:** | | |
| CONTAINER *(barrel, drum, etc.)* | S01 | GALLONS OR LITERS |
| TANK | S02 | GALLONS OR LITERS |
| WASTE PILE | S03 | CUBIC YARDS OR CUBIC METERS |
| SURFACE IMPOUNDMENT | S04 | GALLONS OR LITERS |
| **Disposal:** | | |
| INJECTION WELL | D79 | GALLONS OR LITERS |
| LANDFILL | D80 | ACRE-FEET *(the volume that would cover one acre to a depth of one foot)* OR HECTARE-METER |
| LAND APPLICATION | D81 | ACRES OR HECTARES |
| OCEAN DISPOSAL | D82 | GALLONS PER DAY OR LITERS PER DAY |
| SURFACE IMPOUNDMENT | D83 | GALLONS OR LITERS |

| PROCESS | PROCESS CODE | APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY |
|---|---|---|
| **Treatment:** | | |
| TANK | T01 | GALLONS PER DAY OR LITERS PER DAY |
| SURFACE IMPOUNDMENT | T02 | GALLONS PER DAY OR LITERS PER DAY |
| INCINERATOR | T03 | TONS PER HOUR OR METRIC TONS PER HOUR, GALLONS PER HOUR OR LITERS PER HOUR |
| OTHER *(Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C.)* | T04 | GALLONS PER DAY OR LITERS PER DAY |

| UNIT OF MEASURE | UNIT OF MEASURE CODE | UNIT OF MEASURE | UNIT OF MEASURE CODE | UNIT OF MEASURE | UNIT OF MEASURE CODE |
|---|---|---|---|---|---|
| GALLONS | G | LITERS PER DAY | V | ACRE-FEET | A |
| LITERS | L | TONS PER HOUR | D | HECTARE-METER | F |
| CUBIC YARDS | Y | METRIC TONS PER HOUR | W | ACRES | B |
| CUBIC METERS | C | GALLONS PER HOUR | E | HECTARES | Q |
| GALLONS PER DAY | U | LITERS PER HOUR | H | | |

**EXAMPLE FOR COMPLETING ITEM III** *(shown in line numbers X-1 and X-2 below):* A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

| S | | T/A | C |
|---|---|---|---|
| C | DUP | 3 | 1 |

| LINE NUMBER | A. PROCESS CODE (from list above) | B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify) | B. 2. UNIT OF MEASURE (enter code) | FOR OFFICIAL USE ONLY | LINE NUMBER | A. PROCESS CODE (from list above) | B. PROCESS DESIGN CAPACITY 1. AMOUNT | B. 2. UNIT OF MEASURE (enter code) | FOR OFFICIAL USE ONLY |
|---|---|---|---|---|---|---|---|---|---|
| ~~X-1~~ | ~~S 0 2~~ | ~~600~~ | ~~G~~ | | 5 | T 0 4 | 5200 | U | |
| ~~X-2~~ | ~~T 0 3~~ | ~~20~~ | ~~E~~ | | 6 | | | | |
| 1 | S 0 1 | 10,000 | G | | 7 | | | | |
| 2 | S 0 2 | 976,000 | G | | 8 | | | | |
| 3 | S 0 1 | 6060 30 | G Y | | 9 | | | | |
| 4 | T 0 1 | 864,000 | U | | 10 | | | | |

Continued from page 2.
NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

Form Approved OMB No. 158-S80004

| EPA I.D. NUMBER (enter from page 1) | FOR OFFICIAL USE ONLY |
|---|---|
| W M 1 D 0 0 0 7 1 8 5 5 1 T/A 3 C 1 | W DUP T/A 3 C 2 DUP |

## DESCRIPTION OF HAZARDOUS WASTES (continued)

| LINE NO. | A. EPA HAZARD. WASTE NO. (enter code) | B. ESTIMATED ANNUAL QUANTITY OF WASTE | C. UNIT OF MEASURE (enter code) | D. PROCESSES 1. PROCESS CODES (enter) | | | | D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1)) |
|---|---|---|---|---|---|---|---|---|
| 1 | F 0 0 1 | 2400 | P | S 01 | | | | |
| 2 | F 0 0 3 | 350 | P | S 01 | | | | |
| 3 | F 0 1 0 | 400 | T | S 01 | S 02 | T 01 | T 04 | |
| 003 4 | F 0 1 2 | | | | | | | Included in above |
| 5 | F 0 0 5 | 1000 | P | S 01 | | | | |
| 6 | D 0 0 1 | 1 | T | S 01 | | | | |
| 006 7 | D 0 0 7 | | | | | | | Included in above |
| 006 8 | D 0 0 8 | | | | | | | Included in above |
| 9 | | | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |
| 16 | | | | | | | | |
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| 23 | | | | | | | | |
| 24 | | | | | | | | |
| 25 | | | | | | | | |
| 26 | | | | | | | | |

Continued from the front.

## IV. DESCRIPTION OF HAZARDOUS WASTES (Continued)

E. USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM D(1) ON PAGE 3.

EPA I.D. NO. *(enter from page 1)*

| S | | | | | | | | | | | | T/A | C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F | M | 1 | D | 0 | 0 | 0 | 7 | 1 | 8 | 5 | 5 | 1 | 3 | 6 |

## V. FACILITY DRAWING

All existing facilities must include in the space provided on page 5 a scale drawing of the facility *(see instructions for more detail).*

## VI. PHOTOGRAPHS

All existing facilities must include photographs *(aerial or ground—level)* that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas *(see instructions for more detail).*

## VII. FACILITY GEOGRAPHIC LOCATION

| LATITUDE *(degrees, minutes, & seconds)* | LONGITUDE *(degrees, minutes, & seconds)* |
|---|---|
| 41 51 23 | 85 38 34 |

## VIII. FACILITY OWNER

☒ A. If the facility owner is also the facility operator as listed in Section VIII on Form 1, "General Information", place an "X" in the box to the left and skip to Section IX below.

B. If the facility owner is not the facility operator as listed in Section VIII on Form 1, complete the following items:

| 1. NAME OF FACILITY'S LEGAL OWNER | 2. PHONE NO. *(area code & no.)* |
|---|---|
| E | |

| 3. STREET OR P.O. BOX | 4. CITY OR TOWN | 5. ST. | 6. ZIP CODE |
|---|---|---|---|
| F | G | | |

## IX. OWNER CERTIFICATION

*I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.*

| A. NAME *(print or type)* | B. SIGNATURE | C. DATE SIGNED |
|---|---|---|
| George W. Griffith | G. W. Griffith | 11-19-80 |

## X. OPERATOR CERTIFICATION

*I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.*

| A. NAME *(print or type)* | B. SIGNATURE | C. DATE SIGNED |
|---|---|---|
| | | |



CONTINUE ON PAGE 5

Continued from page 4.



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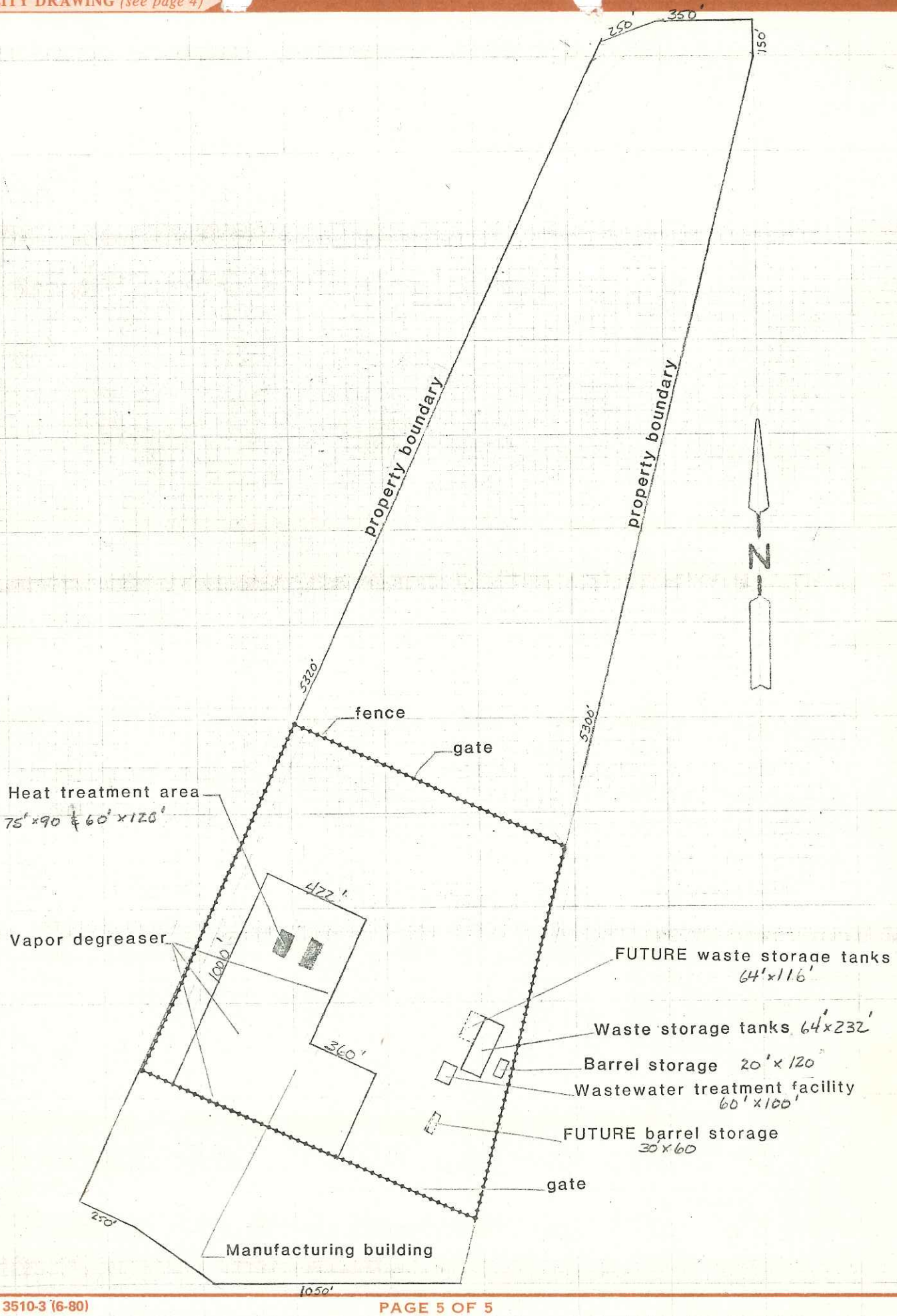
## V. FACILITY DRAWING *(see page 4)*



HYDRA-MATIC GM

Division of General Motors Corporation
One Hydra-matic Drive, Three Rivers, Michigan 49093

MID 0007 18551

Section X . Existing environmental Permits.

E. other - Air Quality Division Michigan DNR

Permit Number

833 - 79

926 - 79

927 - 79

766 - 80

152 - 80

60 - 80

434 - 79

595 - 80

ENVIRONMENTAL PROTECTION AGENCY

# GENERATOR BIENNIAL HAZARDOUS WASTE REPORT FOR 1983

This report is for the calendar year ending December 31, 1983.
Read All Instructions Carefully Before Making Any Entries on Form

## I. NON-REGULATED STATUS

Complete this section only if you did not generate regulated quantities of hazardous waste at any time during the 1983 calendar year. Circle the one code at right that best describes your status during the entire year (see instructions for explanation of codes).

1 Non-handler
2 Small Quantity Generator
4 Exempt
5 Beneficial Use
9 Closed

Please print/type with elite type (12 characters per inch)

This Installation's Non-Regulated Status is Expected to Apply:

☐ For 1983 Only ☐ Permanently

☐ Other _____

C303 ENTRY (OFFICIAL USE ONLY): ☐

## II. GENERATOR'S EPA I.D. NUMBER

T/A C

F M 1 D 0 0 0 7 1 8 5 5 1 1
1 2 13 14 15

## III. NAME OF INSTALLATION

HYDRA-MATIC DIVISION, GMC
30 69

## IV. INSTALLATION MAILING ADDRESS

3 #ONE HYDRA-MATIC DRIVE
15 16 45
Street or P.O. Box

4 THREE RIVERS MI 49093
15 16 41 42 47 51
City or Town State Zip Code

## V. LOCATION OF INSTALLATION (if different than section IV above)

5
15 16 45
Street or Route number

6
15 16 41 42 47 51
City or Town State Zip Code

## VI. INSTALLATION CONTACT

2 TIMMER, GERALD
15 16 45
Name (last and first)

616-278-0211
46 55
Phone No. (area code & no.)

## VII. CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER THE DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

| D.C.Forshee, | Gen.Mfg.Manager | [signature] | 3-17-84 |
|---|---|---|---|
| Print/Type Name | Title | Signature of Authorized Representative | Date Signed |

EPA Form 8700-13A(5-80) (Revised 11-83)



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ENVIRONMENTAL PROTECTION AGENCY

# ...or Bien al Hazardous Waste Rep t for 1983 (cont.)

This report is for the calendar year ending December 31, 1983.

Date rec'd: _____ Rec'd by: _____

VIII. GENERATOR'S EPA I.D. NO.

G M 1 D 0 0 0 7 1 8 5 5 1 1 (T/A C)

IX. FACILITY NAME (specify facility to which all wastes on this page were shipped)

Chemsolv, Inc.

X. FACILITY'S EPA I.D. NO.

F I N D 9 8 0 5 9 0 9 4 7

XI. FACILITY ADDRESS

P. O. Box 1433
South Bend, Indiana 46624

XII. TRANSPORTATION SERVICES USED

Chemsolv, Inc.
IND980590947

XIII. WASTE IDENTIFICATION

| Sequence # | Line # | A. Description of Waste | B. DOT Hazard code | C. EPA Hazardous Waste No. (see instructions) | | D. Amount of Waste | E. Unit of Measure |
|---|---|---|---|---|---|---|---|
| 29–32 | 1 | Mixture of spent 1,1,1-Trichloroethane and 1,1,2-Trichloro | 15 (33–34) | F001 (35–38) | F002 (39–42) | 715 (51–59) | G (60) |
| | 2 | 1,2,2, Trifluoroethane | | | | | |
| | 3 | Ignitable spent solvent used in paint thinning & cleaning; | 08 | D001 | | 440 | G |
| | 4 | mineral spirits | | | | | |
| | 5 | Ignitable liquid recovered from a spill in parking lot;gasoline | 08 | D001 | | 30 | G |
| | 6 | Ignitable paint waste, off-specification paint | 08 | D001 | | 55 | G |
| | 7 | Ignitable paint waste; off-specification paint and paint | | D001 | | 55 | G |
| | 8 | sludge | 01 | | | | |
| | 9 | | | | | | |
| | 10 | | | | | | |
| | 11 | | | | | | |
| | 12 | | | | | | |

XIV. COMMENTS (enter information by section number—see instructions)

SECTION X111
Line #1 - F001 = 11.3 lb/gal
F002 = 13.0 lb/gal
Line #3 - D001 = 7.2 lb/gal
Line #5 - D001 = 5.8 lb/gal
Line #6 - D001 = 8.7 lb/gal
Line #7 - D001 = 8.7 lb/gal

Reported on Facility Biennial Report (TSD Form)



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ENVIRONMENTAL PROTECTION AGENCY

# ator Biennial Hazardous Waste Report for 1983 (cont.)

This report is for the calendar year ending December 31, 1983.

Date rec'd: _____ Rec'd by: _____

VIII. GENERATOR'S EPA I.D. NO.

T/A C

G M 1 D 0 0 0 7 1 8 5 5 1 1

1 2 13 14 15

IX. FACILITY NAME (specify facility to which all wastes on this page were shipped)

Continental Waste Systems, Inc.

X. FACILITY'S EPA I.D. NO.

F I N D 0 8 8 7 3 7 2 7 5

16 28

XI. FACILITY ADDRESS

3651 N. Clinton St
Fort Wayne, Indiana 46805

XII. TRANSPORTATION SERVICES USED

Sturgis Iron & Metal (Michiana Solid Refuse Service)
M1D018898087

XIII. WASTE IDENTIFICATION

| Sequence # | Line # | A. Description of Waste | B. DOT Hazard code | C. EPA Hazardous Waste No. (see instructions) | D. Amount of Waste | E. Unit of Measure |
|---|---|---|---|---|---|---|
| 29 32 | 1 | Corrosive off-specification powdered compound used in | 0 2 (33 34) | D 0 0 2 (35 38) (39 42) (43 46) (47 50) | 7 0 0 (51 59) | P (60) |
| | 2 | derust operations;67% sodium hydroxide | | | | |
| | 3 | Corrosive acid waste,spent sulfuric acid | 0 2 | D 0 0 2 | 5 | G |
| | 4 | | | | | |
| | 5 | | | | | |
| | 6 | | | | | |
| | 7 | | | | | |
| | 8 | | | | | |
| | 9 | | | | | |
| | 10 | | | | | |
| | 11 | | | | | |
| | 12 | | | | | |

XIV. COMMENTS (enter information by section number—see instructions)

SECTION X111

Line #3 - D002 = 15.3 lb/gal

Reported on Facility Biennial Report (TSD Form)

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ENVIRONMENTAL PROTECTION AGENCY

# ..eor Bie nial Hazardous Waste Re ort for 1983 (cont.)

This report is for the calendar year ending December 31, 1983.

Date rec'd: _____ Rec'd by: _____

VIII. GENERATOR'S EPA I.D. NO.

G M 1 D 0 0 0 7 1 8 5 5 1 1 (T/A C)

IX. FACILITY NAME (specify facility to which all wastes on this page were shipped)

XI. FACILITY ADDRESS

X. FACILITY'S EPA I.D. NO.

F

XII. TRANSPORTATION SERVICES USED

XIII. WASTE IDENTIFICATION

| Sequence # | Line # | A. Description of Waste | B. DOT Hazard code | C. EPA Hazardous Waste No. (see instructions) | | D. Amount of Waste | E. Unit of Measure |
|---|---|---|---|---|---|---|---|
| | 1 | Ignitable spent solvent used in paint thinning and cleaning, | 08 | D001 | | 35 | G |
| | 2 | mineral spirits | | | | | |
| | 3 | Mixture of spent toluene, Methanol, and MIBK | 15 | F003 | F005 | 42 | G |
| | 4 | Spent Acetone | 08 | F003 | | 19 | G |
| | 5 | Mixture of spent 1,1,1-Trichloroethane and 1,1,2-Trichloro, | | | | | |
| | 6 | 1,2,2-Trifluoroethane | 15 | F001 | F002 | 5 | G |
| | 7 | | | | | | |
| | 8 | | | | | | |
| | 9 | | | | | | |
| | 10 | | | | | | |
| | 11 | | | | | | |
| | 12 | | | | | | |

XIV. COMMENTS (enter information by section number—see instructions)

SECTION X111

"1983 Generated-Stored on site less than 90 days as of December 31,1983"

Line #1 - D001 = 7.2 lb/gal

Line #3 - F003 Methanol = 6.6 lb/gal

F003 MIBK = 6.7 lb/gal

F005 = 7.2 lb/gal

Line #4 - F003 = 6.6 lb/gal

Line #5 - F001 = 11.3 lb/gal

F002 = 13.0 lb/gal

Reported on Facility Biennial Report (TSD Form)



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Tear out here

# FACILITY BIENNIAL HAZARDOUS WASTE REPORT FOR 1983

This r t is for the calendar year ending December 1983.
Read All tructions Carefully Before Making Any Entri n Form

## I. NON-REGULATED STATUS

See instructions before completing this section.

This facility did not treat, store, or dispose of regulated quantities of hazardous waste at any time during 1983. . . . . ☐

Explain your non-regulated status in the space below.

Please print/type with elite type (12 characters per inch)

## II. FACILITY EPA I.D. NUMBER

T/A C

FM1D0007185 5 1 1 (1–12, 13–15)

90 TSD

This Facility's Non-Regulated Status is Expected to Apply:

☐ For 1983 Only ☐ Permanently

☐ Other (explain in comment section)

C303 ENTRY (OFFICIAL USE ONLY): ☐

## III. NAME OF FACILITY

HYDRA-MATIC DIVISION, GMC (30–69)

## IV. FACILITY MAILING ADDRESS

3 #ONE HYDRA-MATIC DRIVE (15–45)

Street or P.O. Box

4 THREE RIVERS (15–41) MI (42–47) 49093 (48–51)

City or Town State Zip Code

## V. LOCATION OF FACILITY (if different than section IV above)

5 (15–45)

Street or Route number

6 (15–41) (42–47) (48–51)

City or Town State Zip Code

## VI. FACILITY CONTACT

2 TIMMER, GERALD (15–45)

Name (last and first)

616-278-0211 (46–55)

Phone No. (area code & no.)

## VII. COST ESTIMATES FOR FACILITIES

$ (16–18) 14 (19–21) 732 (22–24)

A. Cost Estimate for Facility Closure

$ (25–27) , (28–30) , (31–33)

B. Cost Estimate for Post Closure Monitoring and Maintenance (disposal facilities only)

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER THE DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

D.C.Forshee, Gen.Mfg.Manager — [signature] — 2-17-84

Print/Type Name — Title — Signature of Authorized Representative — Date Signed

EPA Form 8700-13B(5-80) (Revised 11-83)



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ENVIRONMENTAL PROTECTION AGENCY

# Biennial Hazardous Waste Report for 1983 (cont.)

This report is for the calendar year ending December 31, 1983.

Date rec'd: _____ Rec'd by: _____

IX. FACILITY'S EPA I.D. NO.

T/A C

F M 1 D 0 0 0 7 1 8 5 5 1 1

XI. GENERATOR NAME (specify generator from whom all wastes on this page were received)

Hydra-Matic Div. GMC

ON-SITE ☒

XII. GENERATOR ADDRESS

X. GENERATOR'S EPA I.D. NO.

G M 1 D 0 0 0 7 1 8 5 5 1

XIII. TOTAL WASTE IN STORAGE ON DECEMBER 31, 1983 (complete this section only once for your facility)

S01 AMOUNT OF WASTE 101 UOM G

S02 AMOUNT OF WASTE UOM

S03 AMOUNT OF WASTE UOM

S04 AMOUNT OF WASTE UOM

S05 AMOUNT OF WASTE UOM

XIV. WASTE IDENTIFICATION

| Sequence # | Line # | A. Description of Waste | B. EPA Hazardous Waste No. (see instructions) | | C. Handling Method | D. Amount of Waste | E. Unit of Measure |
|---|---|---|---|---|---|---|---|
| | 1 | Mixture of spent 1,1,1-Trichloroethane & 1,1,2-Trichloro-1,2,2 | F001 | F002 | S01 | 715 | G * |
| | 2 | Trifluoroethane | | | | | |
| | 3 | Ignitable spent solvent used in paint thinning & cleaning; | D001 | | S01 | 440 | G * |
| | 4 | mineral spirits | | | | | |
| | 5 | Ignitable Paint Waste; off-specification paint | D001 | | S01 | 110 | G * |
| | 6 | Corrosive off-specification powdered compound used in de-rust | D002 | | S01 | 700 | P ** |
| | 7 | operations, 67% sodium hydroxide | | | | | |
| | 8 | Corrosive acid waste; spent sulfuric acid | D002 | | S01 | 5 | G ** |
| | 9 | Ignitable Liquid recovered from spill in parking lot;gasoline | D001 | | S01 | 30 | G * |
| | 10 | Same as Line #1 | | | S01 | 5 | *** |
| | 11 | Same as Line #2 | | | S01 | 35 | *** |
| | 12 | Spent Acetone | F003 | | S01 | 19 | G *** |

XV. COMMENTS (enter information by section number—see instructions)

SECTION XIV

Lines #1 through #9 - Disposal was off-site

Line #1 - F001 = 11.3 lb/gal

F002 = 13.0 lb/gal

Line #3 - D001 = 7.2 lb/gal

Line #5 - D001 = 8.7 lb/gal

Line #8 - D002 = 15.3 lb/gal

Line #9 - D001 = 5.8 lb/gal

Line #12 - F003 = 6.6 lb/gal

Line #1 - Toluene = 7.2 lb/gal
Page 3 Methanol = 6.6 lb/gal
MIBK = 6.7 lb/gal

* Reported On Generator Biennial Report, Page 2

** Reported On Generator Biennial Report, Page 3

*** Reported On Generator Biennial Report, Page 4



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ENVIRONMENTAL PROTECTION AGENCY

# Biennial Hazardous Waste Report for 1983 (cont.)

This report is for the calendar year ending December 31, 1983.

Date rec'd: _____ Rec'd by: _____

IX. FACILITY'S EPA I.D. NO.

T/A C

F M 1 D 0 0 0 7 1 8 5 5 1 1

1 2 13 14 15

X. GENERATOR'S EPA I.D. NO.

G M 1 D 0 0 0 7 1 8 5 5 1

16 28

XI. GENERATOR NAME (specify generator from whom all wastes on this page were received)

Hydra-matic Div. GMC

ON-SITE ☒

XII. GENERATOR ADDRESS

XIII. TOTAL WASTE IN STORAGE ON DECEMBER 31, 1983 (complete this section only once for your facility)

S01 AMOUNT OF WASTE UOM S02 AMOUNT OF WASTE UOM S03 AMOUNT OF WASTE UOM

S04 AMOUNT OF WASTE UOM S05 AMOUNT OF WASTE UOM

XIV. WASTE IDENTIFICATION

| Sequence # (29–32) | Line # | A. Description of Waste | B. EPA Hazardous Waste No. (see instructions) (33–36) | (37–40) | (41–44) | (45–48) | C. Handling Method (49–51) | D. Amount of Waste (52–60) | E. Unit of Measure (61) |
|---|---|---|---|---|---|---|---|---|---|
| | 1 | Mixture of spent toluene, methanol and MIBK | F 0 0 3 | F 0 0 5 | | | S 0 1 | 4 2 | G *** |
| | 2 | | | | | | | | |
| | 3 | | | | | | | | |
| | 4 | | | | | | | | |
| | 5 | | | | | | | | |
| | 6 | | | | | | | | |
| | 7 | | | | | | | | |
| | 8 | | | | | | | | |
| | 9 | | | | | | | | |
| | 10 | | | | | | | | |
| | 11 | | | | | | | | |
| | 12 | | | | | | | | |

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XV. COMMENTS (enter information by section number—see instructions)

*** Reported On Generator Biennial Report, Page 4

Do not make entries in shaded areas

ENVIRONMENTAL PROTECTION AGENCY

# Facility Biennial Hazardous Waste Report for 1983 (cont.)

This report is for the calendar year ending December 31, 1983.

Date rec'd: _____ Rec'd by: _____

**IX. FACILITY'S EPA I.D. NO.** T/A C

F M 1 D 0 0 0 7 1 8 5 5 1 1

1 2 13 14 15

**X. GENERATOR'S EPA I.D. NO.**

G M 1 D 0 0 0 7 1 8 5 5 1

16 28

**XI. GENERATOR NAME** (specify generator from whom all wastes on this page were received)

Hydra-matic Div. GMC

ON-SITE ☒

**XII. GENERATOR ADDRESS**

**XIII. TOTAL WASTE IN STORAGE ON DECEMBER 31, 1983** (complete this section only once for your facility)

S01 AMOUNT OF WASTE UOM S02 AMOUNT OF WASTE UOM S03 AMOUNT OF WASTE UOM

S04 AMOUNT OF WASTE UOM S05 AMOUNT OF WASTE UOM

**XIV. WASTE IDENTIFICATION**

| Sequence # | Line # | A. Description of Waste | B. EPA Hazardous Waste No. (see instructions) | | C. Handling Method | D. Amount of Waste | E. Unit of Measure |
|---|---|---|---|---|---|---|---|
| 29 32 | 1 | Mixture of spent toluene, methanol and MIBK | F003 33 36 41 44 | F005 37 40 45 48 | S01 49 51 | 42 52 60 | G*** 61 |
| | 2 | | | | | | |
| | 3 | | | | | | |
| | 4 | | | | | | |
| | 5 | | | | | | |
| | 6 | | | | | | |
| | 7 | | | | | | |
| | 8 | | | | | | |
| | 9 | | | | | | |
| | 10 | | | | | | |
| | 11 | | | | | | |
| | 12 | | | | | | |

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**XV. COMMENTS** (enter information by section number—see instructions)

*** Reported On Generator Biennial Report, Page 4

Do not make entries in shaded areas

ENVIRONMENTAL PROTECTION AGENCY

# Facility Biennial Hazardous Waste Report for 1983 (cont.)

This report is for the calendar year ending December 31, 1983.

Date rec'd: _____ Rec'd by: _____

**IX. FACILITY'S EPA I.D. NO.**

F M 1 D 0 0 0 7 1 8 5 5 1 (T/A C: 1)

**X. GENERATOR'S EPA I.D. NO.**

G M 1 D 0 0 0 7 1 8 5 5 1

**XI. GENERATOR NAME** (specify generator from whom all wastes on this page were received)

Hydra-Matic Div. GMC

ON-SITE ☒

**XII. GENERATOR ADDRESS**

**XIII. TOTAL WASTE IN STORAGE ON DECEMBER 31, 1983** (complete this section only once for your facility)

S01 AMOUNT OF WASTE: 101 UOM: G
S02 AMOUNT OF WASTE: UOM:
S03 AMOUNT OF WASTE: UOM:
S04 AMOUNT OF WASTE: UOM:
S05 AMOUNT OF WASTE: UOM:

**XIV. WASTE IDENTIFICATION**

| Sequence # (29–32) | Line # | A. Description of Waste | B. EPA Hazardous Waste No. (see instructions) (33–36, 37–40, 41–44, 45–48) | C. Handling Method (49–51) | D. Amount of Waste (52–60) | E. Unit of Measure (61) |
|---|---|---|---|---|---|---|
| | 1 | Mixture of spent 1,1,1-Trichloroethane & 1,1,2-Trichloro-1,2,2 | F001 F002 | S01 | 715 | G * |
| | 2 | Trifluoroethane | | | | |
| | 3 | Ignitable spent solvent used in paint thinning & cleaning; | D001 | S01 | 440 | G * |
| | 4 | mineral spirits | | | | |
| | 5 | Ignitable Paint Waste; off-specification paint | D001 | S01 | 110 | G * |
| | 6 | Corrosive off-specification powdered compound used in de-rust | D002 | S01 | 700 | P ** |
| | 7 | operations, 67% sodium hydroxide | | | | |
| | 8 | Corrosive acid waste; spent sulfuric acid | D002 | S01 | 5 | G ** |
| | 9 | Ignitable Liquid recovered from spill in parking lot;gasoline | D001 | S01 | 30 | G * |
| | 10 | Same as Line #1 | | S01 | 5 | *** |
| | 11 | Same as Line #2 | | S01 | 35 | *** |
| | 12 | Spent Acetone | F003 | S01 | 19 | G *** |

**XV. COMMENTS** (enter information by section number—see instructions)

SECTION XIV
Lines #1 through #9 - Disposal was off-site
Line #1 - F001 = 11.3 lb/gal
F002 = 13.0 lb/gal
Line #3 - D001 = 7.2 lb/gal
Line #5 - D001 = 8.7 lb/gal
Line #8 - D002 = 15.3 lb/gal
Line #9 - D001 = 5.8 lb/gal
Line #12 - F003 = 6.6 lb/gal

Line #1 - Toluene = 7.2 lb/gal
Page 3 Methanol = 6.6 lb/gal
MIBK = 6.7 lb/gal

* Reported On Generator Biennial Report, Page 2
** Reported On Generator Biennial Report, Page 3
*** Reported On Generator Biennial Report, Page 4

Tear out here

Do not make entries in shaded areas

OMB #: 2050-0024 Expires: 12-31-86

ENVIRONMENTAL PROTECTION AGENCY

# FACILITY BIENNIAL HAZARDOUS WASTE REPORT FOR 1983

This report is for the calendar year ending December 31, 1983.
Read All Instructions Carefully Before Making Any Entries on Form

## I. NON-REGULATED STATUS

See instructions before completing this section.

This facility did not treat, store, or dispose of regulated quantities of hazardous waste at any time during 1983. . . . . ☐

Explain your non-regulated status in the space below.

Please print/type with elite type (12 characters per inch)

## II. FACILITY EPA I.D. NUMBER

T/A C

F M 1 D 0 0 0 7 1 8 5 5 1 1

1 2 13 14 15

90 TSD

This Facility's Non-Regulated Status is Expected to Apply:

☐ For 1983 Only ☐ Permanently

☐ Other (explain in comment section)

C303 ENTRY (OFFICIAL USE ONLY): ☐

## III. NAME OF FACILITY

HYDRA-MATIC DIVISION, GMC

30 69

## IV. FACILITY MAILING ADDRESS

3 #ONE HYDRA-MATIC DRIVE

15 16 45

Street or P.O. Box

4 THREE RIVERS MI 49093

15 16 41 42 47 51

City or Town State Zip Code

## V. LOCATION OF FACILITY (if different than section IV above)

5

15 16 45

Street or Route number

6

15 16 41 42 47 51

City or Town State Zip Code

## VI. FACILITY CONTACT

2 TIMMER, GERALD

15 16 45

Name (last and first)

616-278-0211

46 55

Phone No. (area code & no.)

## VII. COST ESTIMATES FOR FACILITIES

$ 14,732 (16, 19, 22)

A. Cost Estimate for Facility Closure

$ , , (25, 28, 31)

B. Cost Estimate for Post Closure Monitoring and Maintenance (disposal facilities only)

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER THE DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

D.C.Forshee, Gen.Mfg.Manager — 2-17-84

Print/Type Name Title Signature of Authorized Representative Date Signed

EPA Form 8700-13B(5-80) (Revised 11-83)

Tear out here

Do not make entries in shaded areas

OMB#: 2050-0024 Expires: 12-31-86

ENVIRONMENTAL PROTECTION AGENCY

# GENERATOR BIENNIAL HAZARDOUS WASTE REPORT FOR 1983

This report is for the calendar year ending December 31, 1983.
Read All Instructions Carefully Before Making Any Entries on Form

## I. NON-REGULATED STATUS

Complete this section only if you did not generate regulated quantities of hazardous waste at any time during the 1983 calendar year. Circle the one code at right that best describes your status during the entire year (see instructions for explanation of codes).

1 Non-handler
2 Small Quantity Generator
4 Exempt
5 Beneficial Use
9 Closed

Please print/type with elite type (12 characters per inch)

## II. GENERATOR'S EPA I.D. NUMBER

T/A C

F M 1 D 0 0 0 7 1 8 5 5 1 1

1 2 13 14 15

This Installation's Non-Regulated Status is Expected to Apply:

☐ For 1983 Only ☐ Permanently

☐ Other _____

C303 ENTRY (OFFICIAL USE ONLY): ☐

## III. NAME OF INSTALLATION

HYDRA-MATIC DIVISION, GMC

30 69

## IV. INSTALLATION MAILING ADDRESS

3 # ONE HYDRA-MATIC DRIVE

15 16 45

Street or P.O. Box

4 THREE RIVERS MI 49093

15 16 41 42 47 51

City or Town State Zip Code

Tear out here

## V. LOCATION OF INSTALLATION (if different than section IV above)

5

15 16 45

Street or Route number

6

15 16 41 42 47 51

City or Town State Zip Code

## VI. INSTALLATION CONTACT

2 TIMMER, GERALD

15 16 45

Name (last and first)

616-278-0211

46 55

Phone No. (area code & no.)

## VII. CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER THE DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

D.C.Forshee, Gen.Mfg.Manager — 2-17-84

Print/Type Name | Title | Signature of Authorized Representative | Date Signed

Do not make entries in shaded areas

NVIRONMENTAL PROTECTION AGENC

# Generator Biennial Hazardous Waste Report for 1983 (cont.)

This report is for the calendar year ending December 31, 1983.

Date rec'd: Rec'd by:

VIII. GENERATOR'S EPA I.D. NO.

G M 1 D 0 0 0 7 1 8 5 5 1 (T/A C) 1

IX. FACILITY NAME (specify facility to which all wastes on this page were shipped)

Chemsolv, Inc.

X. FACILITY'S EPA I.D. NO.

F I N D 9 8 0 5 9 0 9 4 7

XI. FACILITY ADDRESS

P. O. Box 1433
South Bend, Indiana 46624

XII. TRANSPORTATION SERVICES USED

Chemsolv, Inc.
IND980590947

XIII. WASTE IDENTIFICATION

| Sequence # | Line # | A. Description of Waste | B. DOT Hazard code | C. EPA Hazardous Waste No. (see instructions) | | D. Amount of Waste | E. Unit of Measure |
|---|---|---|---|---|---|---|---|
| | 1 | Mixture of spent 1,1,1-Trichloroethane and 1,1,2-Trichloro | 15 | F001 | F002 | 715 | G |
| | 2 | 1,2,2, Trifluoroethane | | | | | |
| | 3 | Ignitable spent solvent used in paint thinning & cleaning; | 08 | D001 | | 440 | G |
| | 4 | mineral spirits | | | | | |
| | 5 | Ignitable liquid recovered from a spill in parking lot;gasoline | 08 | D001 | | 30 | G |
| | 6 | Ignitable paint waste, off-specification paint | 08 | D001 | | 55 | G |
| | 7 | Ignitable paint waste; off-specification paint and paint | | D001 | | 55 | G |
| | 8 | sludge | 01 | | | | |
| | 9 | | | | | | |
| | 10 | | | | | | |
| | 11 | | | | | | |
| | 12 | | | | | | |

XIV. COMMENTS (enter information by section number—see instructions)

SECTION X111
Line #1 - F001 = 11.3 lb/gal
F002 = 13.0 lb/gal
Line #3 - D001 = 7.2 lb/gal
Line #5 - D001 = 5.8 lb/gal
Line #6 - D001 = 8.7 lb/gal
Line #7 - D001 = 8.7 lb/gal

Reported on Facility Biennial Report (TSD Form)

Tear out here

Do not make entries in shaded areas

NVIRONMENTAL PROTECTION AGENC

# Generator Biennial Hazardous Waste Report for 1983 (cont.)

This report is for the calendar year ending December 31, 1983.

Date rec'd: _____ Rec'd by: _____

VIII. GENERATOR'S EPA I.D. NO.

G M 1 D 0 0 0 7 1 8 5 5 1 1 (T/A C)

IX. FACILITY NAME (specify facility to which all wastes on this page were shipped)

Continental Waste Systems, Inc.

X. FACILITY'S EPA I.D. NO.

F I N D 0 8 8 7 3 7 2 7 5

XI. FACILITY ADDRESS

3651 N. Clinton St
Fort Wayne, Indiana 46805

XII. TRANSPORTATION SERVICES USED

Sturgis Iron & Metal (Michiana Solid Refuse Service)
M1D018898087

XIII. WASTE IDENTIFICATION

| Sequence # | Line # | A. Description of Waste | B. DOT Hazard code | C. EPA Hazardous Waste No. (see instructions) | | D. Amount of Waste | E. Unit of Measure |
|---|---|---|---|---|---|---|---|
| | 1 | Corrosive off-specification powdered compound used in | 02 | D002 | | 700 | P |
| | 2 | derust operations;67% sodium hydroxide | | | | | |
| | 3 | Corrosive acid waste,spent sulfuric acid | 02 | D002 | | 5 | G |
| | 4 | | | | | | |
| | 5 | | | | | | |
| | 6 | | | | | | |
| | 7 | | | | | | |
| | 8 | | | | | | |
| | 9 | | | | | | |
| | 10 | | | | | | |
| | 11 | | | | | | |
| | 12 | | | | | | |

XIV. COMMENTS (enter information by section number—see instructions)

SECTION X111

Line #3 - D002 = 15.3 lb/gal

Reported on Facility Biennial Report (TSD Form)

Tear out here

Do not make entries in shaded areas

NVIRONMENTAL PROTECTION AGENC

# Generator Biennial Hazardous Waste Report for 1983 (cont.)

This report is for the calendar year ending December 31, 1983.

Date rec'd: _____ Rec'd by: _____

VIII. GENERATOR'S EPA I.D. NO.

G M 1 D 0 0 0 7 1 8 5 5 1 T/A C 1

IX. FACILITY NAME (specify facility to which all wastes on this page were shipped)

X. FACILITY'S EPA I.D. NO.

F

XI. FACILITY ADDRESS

XII. TRANSPORTATION SERVICES USED

XIII. WASTE IDENTIFICATION

| Sequence # | Line # | A. Description of Waste | B. DOT Hazard code | C. EPA Hazardous Waste No. (see instructions) | | D. Amount of Waste | E. Unit of Measure |
|---|---|---|---|---|---|---|---|
| | 1 | Ignitable spent solvent used in paint thinning and cleaning, | 08 | D001 | | 35 | G |
| | 2 | mineral spirits | | | | | |
| | 3 | Mixture of spent toluene, Methanol, and MIBK | 15 | F003 | F005 | 42 | G |
| | 4 | Spent Acetone | 08 | F003 | | 19 | G |
| | 5 | Mixture of spent 1,1,1-Trichloroethane and 1,1,2-Trichloro, | | | | | |
| | 6 | 1,2,2-Trifluoroethane | 15 | F001 | F002 | 5 | G |
| | 7 | | | | | | |
| | 8 | | | | | | |
| | 9 | | | | | | |
| | 10 | | | | | | |
| | 11 | | | | | | |
| | 12 | | | | | | |

XIV. COMMENTS (enter information by section number—see instructions)

SECTION X111

"1983 Generated-Stored on site less than 90 days as of December 31,1983"

Line #1 - D001 = 7.2 lb/gal

Line #3 - F003 Methanol = 6.6 lb/gal

F003 MIBK = 6.7 lb/gal

F005 = 7.2 lb/gal

Line #4 - F003 = 6.6 lb/gal

Line #5 - F001 = 11.3 lb/gal

F002 = 13.0 lb/gal

Reported on Facility Biennial Report (TSD Form)

Tear out here

# A.3 Groundwater/ Soil Documents

Saginaw

October 8, 1993

Mr. Steve Noble
ERD
Michigan DNR
1342 M-89
Suite B
Plainwell, MI 49080

Enclosed are the results of the soil boring conducted in Bay 14 and 15 at the General Motors/Saginaw Division - Three Rivers facility. As per your letter of 8/30/93 the soil was analyzed for MEK, BTEX, and PNA's. All results showed less than the MDL. If you have any questions regarding this matter please call me at 616/278-0251.

Sincerely,

Jerry Timmer

WW Engineering & Science
A Summit Company

October 4, 1993

Mr. Jerry Timmer
General Motors Saginaw Division
One Saginaw Drive
Three Rivers, Michigan 49093

**RE: SOIL SAMPLING AT THE BAY-14 AREA**

Dear Mr. Timmer:

On September 9, 1993, WW Engineering & Science (WWES) conducted one soil boring at the Three Rivers Plant in accordance with our August 17th proposal. The soil boring was located by Jerry Timmer and is as indicated on Figure 1.

The soil boring was advanced to 22' with a soil sample being collected from 20' to 22'. The soil sample collected was analyzed to determine Methyl Ethyl Ketone (MEK), Benzene, Toluene, Ethyl Benzene and Xylene (BTEX), and Polynuclear Anomatic concentrations. No analytes were reported at concentrations above the detection (Act 307) limits. A copy of the analytical results is attached.

WWES is pleased to have been of service on this project. Please feel free to call us at (616) 942-9600 if you have any questions or need additional information.

Sincerely,
WW ENGINEERING & SCIENCE

M J Potter

Michael Potter
Manager, Field Services Group

5555 Glenwood Hills Parkway SE PO Box 874 Grand Rapids, MI 49588-0874 616/942-9600 Fax 616/942-6499
Bloomington IN Chattanooga, TN Columbus, OH Detroit, MI Indianapolis, IN Milwaukee, WI Minneapolis, MN

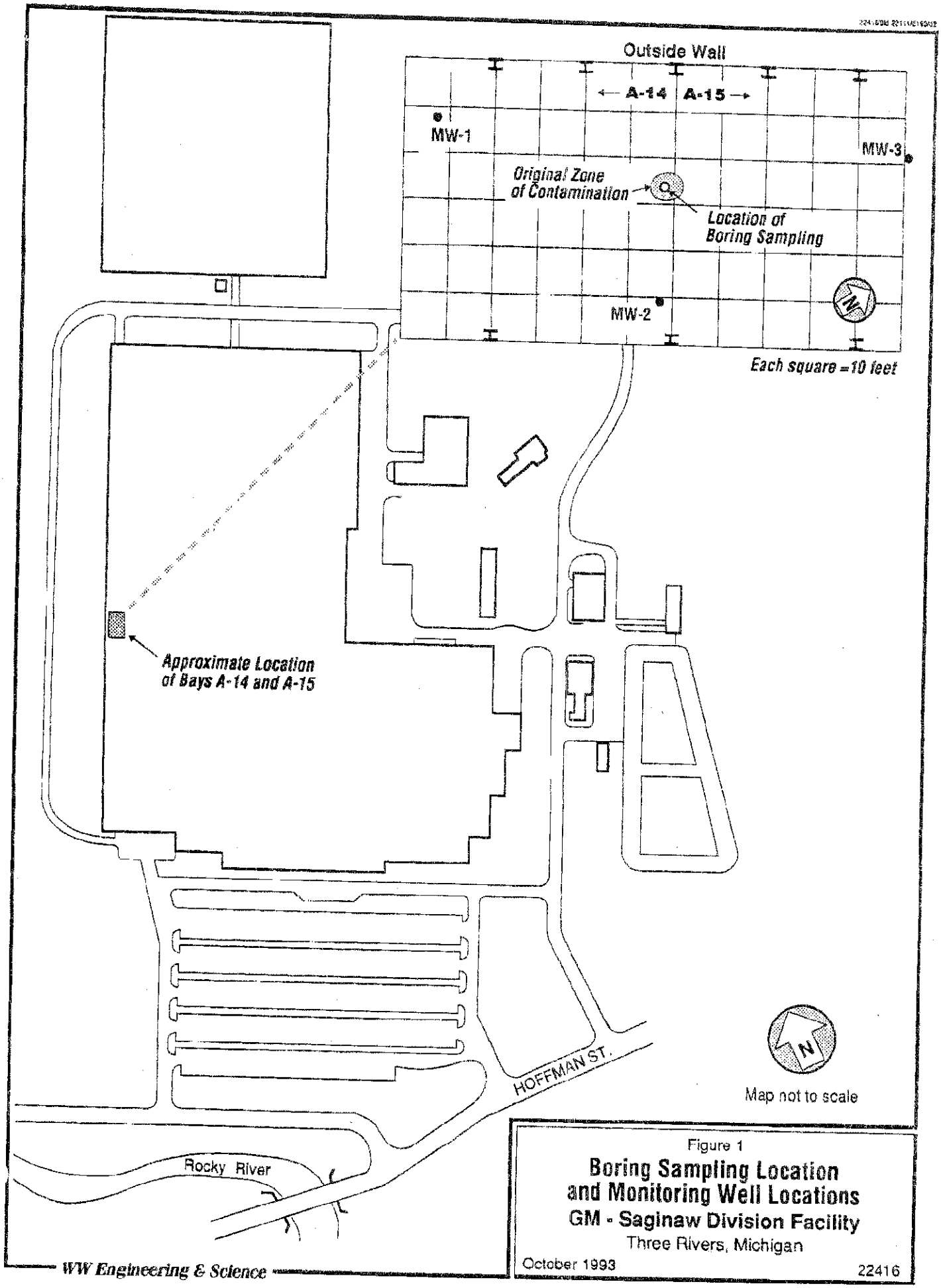


Figure 1

**Boring Sampling Location and Monitoring Well Locations**

**GM - Saginaw Division Facility**

Three Rivers, Michigan

October 1993

22416

*WW Engineering & Science*

WW Engineering & Science
A Summit Company

ANALYTICAL SERVICES

## STATEMENT OF DATA QUALIFICATIONS

***CLIENT: GM Three Rivers***

***SUBMITTAL: 31866-1***

__X__ All analyses have been validated and comply with our Quality Control Program. No qualifications required.

_____ The following analyses have been qualified for the reasons cited.

KEY

1. Sample integrity suspect upon receipt (explain).
2. Analysis performed beyond EPA established maximum allowable holding time.
3. Detection limit elevated due to matrix interferences.
4. Laboratory control sample value outside established acceptable limits.
5. Matrix spike sample value outside established acceptable limits.
6. Duplicate analysis value outside established acceptable limits.
7. Surrogate/internal standard recoveries outside established acceptable limits.
8. Data point suspect due to potential laboratory contamination (explain).
9. Coelutes with the compound cited. Result may represent a combination of both compounds.
10. Other (explain).

***Note:*** This document is included as part of the Analytical Report for the above referenced and should be retained as a permanent record thereof.

5555 Glenwood Hills Parkway SE, PO Box 874, Grand Rapids, MI 49588-0874, 616/942-9600 Fax 942-6499

WW Engineering & Science
A Sonnar Company

ANALYTICAL SERVICES

# ANALYTICAL REPORT

**GM Three Rivers - CCS**
Proj: Soil Analyses

Subm: September 9, 1993 Samples

Submittal Number: 31866- 1
Location:
CCS Number 22416.00
CCS Manager: Mike Potter

| | SB#1-93 | SB#1-93 Duplicate | Detection Limit | Units |
|---|---|---|---|---|
| WWES Sample No: | 65454 | 65455 | | |
| Project Specific Fraction USEPA-8240 | Enclosed | Enclosed | | |
| Semi-Volatile Organics P/N/A Scan | Enclosed | Enclosed | | |
| Percent Solids | 98 | 99 | 0.1 | % |
| Sampled by: | C.C. | C.C. | | |
| Date Sampled: | 09/09/93 | 09/09/93 | | |
| Time Sampled: | 13:30 | 13:30 | | |
| Date Received: | 09/09/93 | 09/09/93 | | |
| Time Received: | 16:10 | 16:10 | | |

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WW Engineering & Science
A Summit Company

ANALYTICAL SERVICES

31866- 1

# METHODS PAGE

Parameter: Project Specific Fraction
Method: Volatiles Purge & Trap-GC/MS USEPA-8240
Application: SOIL
Analyst: Janet M. Kudirka
Reference Citation: USEPA-8240
Date Analyzed: 09/14/93

65454 SB#1-93
65455 SB#1-93 Duplicate

Parameter: EXTRACT: PNA'S - HPLC
Method: Extraction for P/N/A'S by HPLC
Application: SOIL
Analyst: Mary Anne Scott
Reference Citation: USEPA-8310
Date Analyzed: 09/13/93

65454 SB#1-93
65455 SB#1-93 Duplicate

Parameter: Percent Solids
Method: Residue-Gravimetric, Dried @ 103-105*C
Application: SOIL
Analyst: Chris S. Lantinga
Reference Citation: USEPA-160.3
Date Analyzed: 09/13/93

65454 SB#1-93
65455 SB#1-93 Duplicate

Parameter: Semi-Volatile Organics
Method: Polynuclear Aromatic Hydrocarbons - HPLC P/N/A Scan
Application: SOIL
Analyst: Karen K. Kennedy
Reference Citation: USEPA-8310
Date Analyzed: 09/13/93

65454 SB#1-93
65455 SB#1-93 Duplicate

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WW Engineering & Science
A Summit Company

ANALYTICAL SERVICES

# PROJECT SPECIFIC FRACTION
## USEPA-8240

**GM Three Rivers - CCS**
Proj: Soil Analyses

Subm: September 9, 1993 Samples
Sample: SB#1-93

Submittal Number 31866- 1
Date Sampled: 09/09/93 Time: 13:30
Date Received: 09/09/93 Time: 16:10
Analysis Date: 09/14/93
Sample No: 65454

| Parameter | Result mg/kg | Parameter | Result mg/kg |
|---|---|---|---|
| Benzene | <0.010 | Xylene, Total | <0.030 |
| Ethylbenzene | <0.010 | Methyl Ethyl Ketone | <0.10 |
| Toluene | <0.010 | | |

5555 Glenwood Hills Parkway SE, PO Box 874, Grand Rapids, MI 49588-0874, 616/942-9600 Fax 942-6499

WW Engineering & Science
A Summit Company

ANALYTICAL SERVICES

# SEMI-VOLATILE ORGANICS
## P/N/A SCAN

**GM Three Rivers - CCS**
Proj: Soil Analyses

Subm: September 9, 1993 Samples
Sample: SB#1-93

Submittal Number 31866- 1
Date Sampled: 09/09/93 Time: 13:30
Date Received: 09/09/93 Time: 16:10
Analysis Date: 09/13/93
Sample No: 65454

| Parameter | Result mg/kg |
|---|---|
| Acenaphthene | <0.33 |
| Acenaphthylene | <0.33 |
| Anthracene | <0.33 |
| Benzo (a) Anthracene | <0.33 |
| Benzo (a) Pyrene | <0.33 |
| Benzo (b) Fluoranthene | <0.33 |
| Benzo (g,h,i,) Perylene | <0.33 |
| Benzo (k) Fluoranthene | <0.33 |

| Parameter | Result mg/kg |
|---|---|
| Chrysene | <0.33 |
| Dibenzo (a,h) Anthracene | <0.33 |
| Fluoranthene | <0.33 |
| Indeno (1,2,3-cd) Pyrene | <0.33 |
| Fluorene | <0.33 |
| Naphthalene | <0.33 |
| Phenanthrene | <0.33 |
| Pyrene | <0.33 |

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WW Engineering & Science
A Summit Company

ANALYTICAL SERVICES

# PROJECT SPECIFIC FRACTION
## USEPA-8240

**GM Three Rivers - CCS**
Proj: Soil Analyses

Subm: September 9, 1993 Samples
Sample: SB#1-93
Duplicate

Submittal Number 31866- 1
Date Sampled: 09/09/93 Time: 13:30
Date Received: 09/09/93 Time: 16:10
Analysis Date: 09/14/93
Sample No: 65455

| Parameter | Result mg/kg | Parameter | Result mg/kg |
|---|---|---|---|
| Benzene | <0.010 | Xylene, Total | <0.030 |
| Ethylbenzene | <0.010 | Methyl Ethyl Ketone | <0.10 |
| Toluene | <0.010 | | |

5555 Glenwood Hills Parkway SE, PO Box 874, Grand Rapids, MI 49588-0874, 616/942-9600 Fax 942-6499

WW Engineering & Science
A Summit Company

ANALYTICAL SERVICES

# SEMI-VOLATILE ORGANICS
## P/N/A SCAN

**GM Three Rivers - CCS**
Proj: Soil Analyses

Subm: September 9, 1993 Samples
Sample: SB#1-93
Duplicate

Submittal Number 31866- 1
Date Sampled: 09/09/93 Time: 13:30
Date Received: 09/09/93 Time: 16:10
Analysis Date: 09/13/93
Sample No: 65455

| Parameter | Result mg/kg |
|---|---|
| Acenaphthene | <0.33 |
| Acenaphthylene | <0.33 |
| Anthracene | <0.33 |
| Benzo (a) Anthracene | <0.33 |
| Benzo (a) Pyrene | <0.33 |
| Benzo (b) Fluoranthene | <0.33 |
| Benzo (g,h,i,) Perylene | <0.33 |
| Benzo (k) Fluoranthene | <0.33 |

| Parameter | Result mg/kg |
|---|---|
| Chrysene | <0.33 |
| Dibenzo (a,h) Anthracene | <0.33 |
| Fluoranthene | <0.33 |
| Indeno (1,2,3-cd) Pyrene | <0.33 |
| Fluorene | <0.33 |
| Naphthalene | <0.33 |
| Phenanthrene | <0.33 |
| Pyrene | <0.33 |

5555 Glenwood Hills Parkway SE, PO Box 874, Grand Rapids, MI 49588-0874, 616/942-9600 Fax 942-6499

NATURAL RESOURCES COMMISSION
JERRY C. BARTNIK
LARRY DEVUYST
PAUL BISELE
JAMES P. HILL
DAVID HOLLI
JOEY M. SPANO
JORDAN B. TATTER

STATE OF MICHIGAN

JOHN ENGLER, Governor

**DEPARTMENT OF NATURAL RESOURCES**

ROLAND HARMES, Director

Plainwell District Headquarters
Environmental Response Division
1342-B M-89, Plainwell, Michigan 49080-1915

August 30, 1993

Mr. Jerry Timmer
General Motors/Saginaw Division
One Saginaw Drive
Three Rivers, MI 49093-5915

Dear Mr. Timmer:

SUBJECT: Closure of Bays A-14 & 15, General Motors/Saginaw Division, Three Rivers, St. Joseph County

A review of the remediation activities in the area of the release of transmission fluids from the Bay 14 & 15 sump has been completed. In order to provide sufficient information to close the site, the following activities need to be completed:

1. Sample the soils in the area below "SS-7" (approximately 20-22 feet Below Ground Level). The sample should be obtained from soils that are previously undisturbed by remediation activities.

2. Analyze the soils for BTEX, PNAs and Methyl Ethyl Ketone (MEK) using appropriate Method Detection Limits (MDLs) and analysis methods. Appropriate MDLs for soils are 10 ppb for BTEX, 330 ppb for PNAs, and 100 ppb for MEK.

If appropriate MDLs cannot be obtained, Act 307 rules allow for performing leachability tests on the soils to determine if constituents of concern may be present in concentrations that would exceed the groundwater criteria. If the soils do not leach levels of BTEX, PNAs or MEK at quantities sufficient to exceed the "TYPE B" groundwater criteria, then closure can also be granted using these results.

If you have any questions, please feel free to contact me at the telephone number below.

Sincerely,

Steven D. Noble
Environmental Response Division
Plainwell District Office
616-692-2120

SDN/cjf

cc: Mr. Paul Massoth, MDNR

Access
SWMU13

**AMERICAN AXLE & MANUFACTURING**

TM

ONE MANUFACTURING DRIVE - THREE RIVERS, MI 49093-8915

# FAX COVER SHEET
## FAX: (616) 278-0537

TO: Gale Heruska
LOCATION: EPA
FAX NO.: 312/353-4788
PHONE NO:
CC:
PHONE NO:
CC:
PHONE NO:
FROM: Amy Brodzinski
PHONE NO: 616/278-0251
DATE: 5/15/02
NO. OF PAGES W/COVER 12

COMMENTS:

Gale - I have found the analytical results from soil borings taken from the "transmission fluid sump leak area". Attached is the letter sent from GMC to MDNR w/ the results (as refered to on page F3 of my 5/13/02 fax) aswell as a prior letter from MDNR to GMC regarding how to proceed with the area. Hope this helps!

Amy

IF YOU DID NOT RECEIVE A CLEAR OR COMPLETE COPY, OR IF THIS TRANSMISSION WAS RECEIVED IN ERROR, PLEASE CONTACT THE SENDER. THANK YOU.

Saginaw

October 8, 1990

Michigan DNR
621 N. 10th Street
Plainwell, MI 49080

ATTN: Mr. Virgil Loper

The following information summarizes data findings involved with a "Suspected Release" reported, as required by LUST-Act #478, by Saginaw Division, General Motors Corporation, located at Three Rivers, Michigan.

Notification was made on September 20, 1990, based on field meter readings (H-Nu) on soil borings conducted in the tank farm area. The tank farm consists of ten (10)-30,000 gallon UST's, of which seven (7) have, in the past, held regulated substances. These tanks were emptied of material during July 1990, and all tanks were cleaned in August. They are scheduled to be removed in November 1990.

Soil borings were done on the perimeter of the tank farm area for soil characterization for disposal purposes during the removal project. Four (4) of five (5) boring samples gave field H-Nu readings: however, laboratory analysis of all samples show BTEX and PNA levels less than MDL, or "clean". Also, the environmental consulting firm that performed the field monitoring has determinded that the H-Nu meter used was apparently malfunctioning at that time. Based on this data, it appears that a "Release" did not occur.

As part of the planned removal project, sampling will be done as per Fire Marshall Office requirements, which represents a "worst case" condition if a release did occur. Further sampling and analysis will be done as warranted.

If you have any questions regarding this matter, please contact me at 616-278-0251.

Sincerely,

Jerry Timmer

Jerry Timmer
Senior Environmental Engineer

attached documents: (5)

Saginaw

October 8, 1990

Michigan State Police
Fire Marshall Division
Lansing, MI 48913

ATTN: Ms. Terry Harmon
UST Program

I am writing to confirm our conversation of October 5, 1990.

Mr. Jerry Timmer of Saginaw Division of General Motors Corporation located at Three Rivers, Michigan, reported a "Suspected Release" on September 20, 1990, based on H-Nu meter field reading taken of soil borings around UST's at this facility. Your office was notified on September 26, 1990, to upgrade this to a "Confirmed Release".

Subsequent to this, outside independent laboratory analysis showed that all the soil samples involved were "clean", i.e., BTEX and PNA all less than M.D.L. Also, this laboratory has notified us that the H-Nu meter used during the boring operations was malfunctioning and giving erroneous results.

We therefore request that the "Confirmed Release" be downgraded to a "Suspected Release"; and also, that the "Suspected Release" be cancelled since analytical data indicates a clean condition.

Thank you for your help in this matter. If you have any questions, please contact me at 616-278-0251.

Sincerely,

Jerry

Jerry Timmer
Senior Environmental Engineer

SNELL ENVIRONMENTAL GROUP, INC.

October 8, 1990

Mr. Jerry Timmer
Saginaw Division of GMC
Three Rivers, Michigan 49042

RE: Suspected Release Report

Dear Mr. Timmer:

During the process of acquiring soil samples for assessing the integrity of underground storage tanks at your facility, SEG's geologist notified yourself of a suspected release based upon HNU readings obtained during the drilling operation. Calibration checks of the instrument in question have indicated that this unit was probably malfunctioning at the time. Indeed, the soil sample in question has been subject to the appropriate laboratory testing and has yielded no detectable levels of contamination. Consequently, the suspected release has not been confirmed. The unit has been subsequently returned to the factory for servicing.

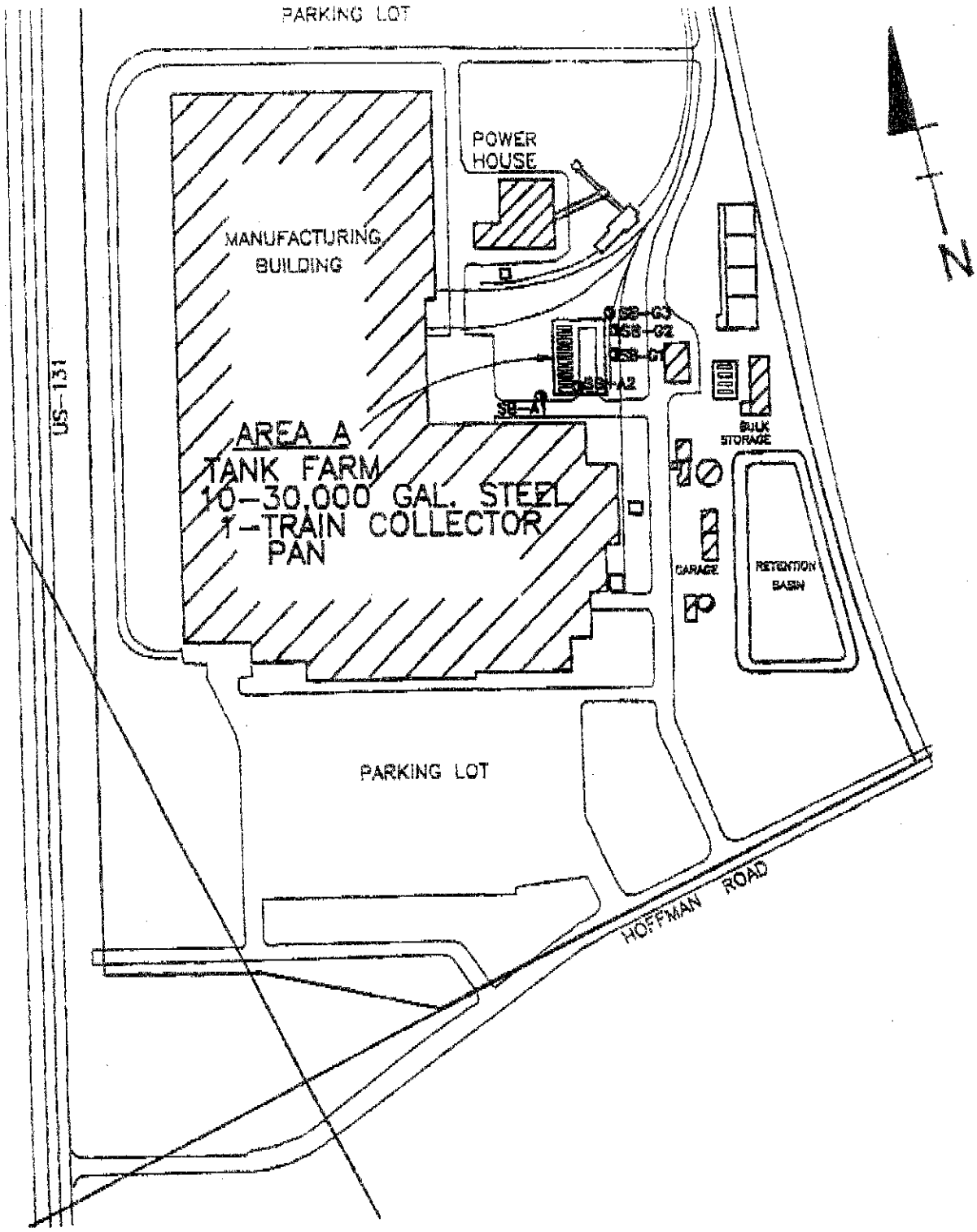
If we can be of any additional assistance, please call.

Very truly yours,

Peter F. Cole, P.E.
Environmental Services Manager

PFC/jp

1120 May Street, Lansing, Michigan 48906 • (517) 374-6800 • FAX (517) 374-7390




| | | | |
|---|---|---|---|
| SHELL ENVIRONMENTAL GROUP, INC. ENGINEERS LANDSCAPE ARCHITECTS SURVEYORS | SAGINAW DIVISION GMC THREE RIVERS, MICHIGAN | UNDERGROUND STORAGE TANK DEMOLITION | SCALE: 1"=300' |
| | | | FIGURE 1 |

# SEG LABORATORIES, INC.

SEG LABORATORIES, INC.
1120 MAY STREET
LANSING, MI 48906
PHONE - 517-374-6800

SEG ENGINEERS & CONSULTANTS
1120 MAY STREET
LANSING, MICHIGAN 48906
MR. PETER F. COLE, P.E.

PROJECT NUMBER

| Location | | Lab No | Time Sampled | Date Sampled | Date Received |
|---|---|---|---|---|---|
| A-1-3 | ON SAGINAW | 19869 | 0 | 09/19/90 | 09/21/90 |
| A-2-3 | ON SAGINAW | 19872 | 0 | 09/19/90 | 09/21/90 |
| B-1-3 | ON SAGINAW | 19905 | 0 | 09/20/90 | 09/21/90 |
| B-2-3 | ON SAGINAW | 19908 | 0 | 09/20/90 | 09/21/90 |

ANALYTICAL REPORT
DATE REPORTED 09/26/90

| TEST | UNITS | LAB NO. 19869 | LAB NO. 19872 | LAB NO. 19905 | LAB NO. 19908 |
|---|---|---|---|---|---|
| PURGEABLE AROMATICS | | EPA 8020 | EPA 8020 | EPA 8020 | EPA 8020 |
| Benzene | ug/kg | <10 | <10 | <10 | <10 |
| Toluene | ug/kg | <10 | <10 | <10 | <10 |
| Ethylbenzene | ug/kg | <10 | <10 | <10 | <10 |
| Chlorobenzene | ug/kg | <10 | <10 | <10 | <10 |
| 1,3-Dichlorobenzene | ug/kg | <10 | <10 | <10 | <10 |
| 1,4-Dichlorobenzene | ug/kg | <10 | <10 | <10 | <10 |
| 1,2-Dichlorobenzene | ug/kg | <10 | <10 | <10 | <10 |
| p-Xylene | ug/kg | <10 | <10 | <10 | <10 |
| m-Xylene | ug/kg | <10 | <10 | <10 | <10 |
| o-Xylene | ug/kg | <10 | <10 | <10 | <10 |
| POLYNUCLEAR AROMATIC HYD. | | EPA 8270 | EPA 8270 | EPA 8270 | EPA 8270 |
| Anthracene | ug/kg | <330 | <330 | <330 | <330 |
| Acenaphthene | ug/kg | <330 | <330 | <330 | <330 |
| Acenaphthylene | ug/kg | <330 | <330 | <330 | <330 |
| Aniline | ug/kg | <330 | <330 | <330 | <330 |
| Benzo(a)anthracene | ug/kg | <330 | <330 | <330 | <330 |
| Benzo(a)pyrene | ug/kg | <330 | <330 | <330 | <330 |
| Benzo(b)fluoranthene | ug/kg | <330 | <330 | <330 | <330 |
| Benzo(ghi)perylene | ug/kg | <330 | <330 | <330 | <330 |
| Benzo(k)fluoranthene | ug/kg | <330 | <330 | <330 | <330 |
| Chrysene | ug/kg | <330 | <330 | <330 | <330 |
| Dibenzo(a,h)anthracene | ug/kg | <330 | <330 | <330 | <330 |
| Fluoranthene | ug/kg | <330 | <330 | <330 | <330 |
| Fluorene | ug/kg | <330 | <330 | <330 | <330 |
| Ideno(1,2,3-cd)pyrene | ug/kg | <330 | <330 | <330 | <330 |
| Naphthalene | ug/kg | <330 | <330 | <330 | <330 |
| Phenanthrene | ug/kg | <330 | <330 | <330 | <330 |
| Pyrene | ug/kg | <330 | <330 | <330 | <330 |

| Location | | Lab No | Time Sampled | Date Sampled | Date Received |
|---|---|---|---|---|---|
| 6-3-3 | 6R SAGINAW | 19911 | 0 | 09/20/90 | 09/21/90 |

ANALYTICAL REPORT
DATE REPORTED 09/28/90

| TEST | UNITS | LAB NO. 19911 |
|---|---|---|
| PURGEABLE AROMATICS | | EPA 8020 |
| Benzene | ug/kg | <10 |
| Toluene | ug/kg | <10 |
| Ethylbenzene | ug/kg | <10 |
| Chlorobenzene | ug/kg | <10 |
| 1,3-Dichlorobenzene | ug/kg | <10 |
| 1,4-Dichlorobenzene | ug/kg | <10 |
| 1,2-Dichlorobenzene | ug/kg | <10 |
| Xylene | ug/kg | <10 |
| m-Xylene | ug/kg | <10 |
| o-Xylene | ug/kg | <10 |
| POLYNUCLEAR AROMATIC HYD. | | EPA 8270 |
| Anthracene | ug/kg | <330 |
| Acenaphthene | ug/kg | <330 |
| Acenaphthylene | ug/kg | <330 |
| Aniline | ug/kg | <330 |
| Benzo(a)anthracene | ug/kg | <330 |
| Benzo(a)pyrene | ug/kg | <330 |
| Benzo(b)fluoranthene | ug/kg | <330 |
| Benzo(ghi)perylene | ug/kg | <330 |
| Benzo(k)fluoranthene | ug/kg | <330 |
| Chrysene | ug/kg | <330 |
| Dibenzo(a,h)anthracene | ug/kg | <330 |
| Fluoranthene | ug/kg | <330 |
| Fluorene | ug/kg | <330 |
| Indeno(1,2,3-cd)pyrene | ug/kg | <330 |
| Naphthalene | ug/kg | <330 |
| Phenanthrene | ug/kg | <330 |
| Pyrene | ug/kg | <330 |

PROJECT MANAGER Lori A. Vaclo

Cancel
Faulty equipment

MICHIGAN STATE POLICE FIRE MARSHAL DIVISION
UST PROGRAM
SUSPECTED/CONFIRMED RELEASE
Sec. 280.50/280.61 EPA Rules

Facility ID Number _____ Incident Number ~~S-1848-90~~

Person Reporting Release Jerry Timmer

Company/Contractor Name G.M.

Soil tested clean per. J. Timmer 10/8/90 [illegible]

**Location of Release**

Facility Name Saginaw Div. General Motors

Address 1 Saginaw Dr

City/State/Zip Three Rivers 49093

County St. Joseph Township _____

**Company Mailing Address**

Name _____

Address Same

City/State/Zip _____

Contact Person Jerry Timmer Phone # 616-278 0251

**Release Information**

Date and Time Release Known _____

Tank: FRP (Steel) Composite Capacity 10 - 30,000 gal each

Substance and Amount Released lubricating oils

~~Site Condition (Circle reason~~ for believing a leak may have/has occurred)

Presence of product/vapors in soil/basements/failed tank tightness test

Unusual operating conditions/site assessment showed contamination

Other _____

Copy of this form sent to: DNR____ FD (info only) DMB____

Date/Time Received 9-20-90 1:15 pm tx / fax / voice mail

Person Receiving Information Ellen

ONDEO Nalco

9-1-312-353-4788

# FACSIMILE TRANSMISSION

**ONDEO Nalco Canada Co.**
**1055 Truman Street**
**Burlington, Ontario L7R 3V7**

**Manufacturing - Fax # (905)333-6197**

| | |
|---|---|
| **Send To (Location):** | EPA - Chicago Illinois |
| **Please Deliver To:** | Joe Lukascyk or David Star |
| **From:** | Irene Moldrik |
| **Date:** | May 13/02 |
| **No. of Pages:** | 1 |

**If you do not receive all the pages, please call the sender at (905)632-8791 immediately.**

**MESSAGE**

Joe or David

Please mail out a packet of Forms - EPA-Form 3540-1

ATTENTION Irene Moldrik

Ondeo Nalco Canada Co.

PO Box 5002
Burlington Ont
L7R 3Y9

Thankyou.

**AMERICAN AXLE & MANUFACTURING**

TM

ONE MANUFACTURING DRIVE - THREE RIVERS, MI 49093-8915

# FAX COVER SHEET

**FAX: (616) 278-0537** 0429

TO: Gale Hruska

FAX NO.: 312/353-4788

CC:

CC:

FROM: Amy Bodzinski

PHONE NO: (616)278-0251

DATE: 5/13/02

LOCATION: USEPA - Waste Mngmt

PHONE NO:

PHONE NO:

PHONE NO:

NO. OF PAGES W/COVER

COMMENTS:

Gale

Here is the info/documentation I have found so far on "Area A". I will look for additional documentation in our annex and call you with what I find.

Amy B.

IF YOU DID NOT RECEIVE A CLEAR OR COMPLETE COPY, OR IF THIS TRANSMISSION WAS RECEIVED IN ERROR, PLEASE CONTACT THE SENDER. THANK YOU.

# A.4 Closure/ Post-Closure

N RAL RESOURCES
COMMISSION
LARRY DEVUYST
PAUL EISELE
JAMES P. HILL
DAVID HOLLI
O. STEWART MYERS
JOEY M. SPANO
JORDAN B. TATTER

STATE OF MICHIGAN

JOHN ENGLER, Governor

**DEPARTMENT OF NATURAL RESOURCES**

ROLAND HARMES, Director

**Plainwell District Headquarters**
**Environmental Response Division**
**1342-B M-89 Plainwell, Michigan 49080**

July 26, 1993

Mr. Jerry Timmer
General Motors/Saginaw Division
One Saginaw Drive
Three Rivers, Michigan 49093-8915

Dear Mr. Timmer:

SUBJECT: Type B Closure for the October 12, 1990 Confirmed Release from an Underground Storage Tank (UST) at General Motors/Saginaw Division Area C, One Saginaw Drive Three Rivers, St. Joseph County, MERA# 750073

The Michigan Department of Natural Resources (MDNR) is in receipt of your submittal requesting concurrence that no further remedial actions are necessary at the above facility with regard to the specified release described below.

According to the work summary three 12,000 gallon waste oil tanks were removed from the excavation and one was closed in place. Soil was removed down to the water table but not to standing water. All but one of the confirmatory soil samples met type B closure criteria for benzene, toluene, ethylbenzene, xylenes (BTEX), polynuclear aromatic hydrocarbons (PNAs), cadmium, chromium, lead, and polychlorinated byphenyls (PCBs). Three monitoring wells installed around the excavation provided analytical data below detection limits for the above mentioned analytes.

Since one of the soil samples from the excavation floor immediately above the water table contained analytes of concern above type B closure criteria, the MDNR requested a monitoring well be installed directly adjacent and downgradient to the soil sample in question. This well was installed and sampled. This groundwater sample was below acceptable detection levels for BTEX, PNAs, and PCBs. This sample was also below acceptable background levels for lead, cadmium, and chromium.

During the site investigation an area east of the excavation and on the opposite side of the oil barn was at first thought to be part of the contamination from Area C. This area was referred to in reports as the Area East of the Oil Barn. An investigation of the soils remaining in this area showed they met Type A cleanup criteria. It was evident the area was neither part of the Area C contamination nor in need of any further remediation.

Based on staff review of the summary of work performed, we concur that the response activities undertaken at the General Motors/Saginaw Division facility have reduced the contaminants in the soil in Area C to acceptable Type B cleanup concentrations provided for in Section 10e of the Michigan Environmental Response Act (MERA), 1982 PA 307, as amended, and the Administrative Rules.

With regard to this facility, this document is not intended to comment on any other known or potential environmental conditions and/or the status of compliance with other environmental protection laws and regulations.

In providing this document, the MDNR makes no warranty or guarantee as to the fitness of this facility for any general or specified use. Prospective purchasers or users are advised to use due diligence in acquiring or using this facility.

Details about remedial actions at this location may be found on file at this office. Specific inquiries should be addressed to Steve Norton at (616) 692-2120.

Sincerely,

Linn Duling, District Supervisor
Environmental Response Division
Plainwell District
616-692-2120

SN:njw

cc: Senator Paul Wartner
Representative Glenn Oxender
Ms. Jenny Hoffmann, Plainwell ERD

MDNR-ERD REVIEW/APPROVAL DOCUMENT
PLAINWELL DISTRICT PEER REVIEW GROUP

SITE NAME AND COUNTY: GM Saginaw Division Area C St. Joseph County
PROJECT MANAGER/PRESENTER: Steve Norton
IS THE SITE ON THE 307 LIST? Yes SITE ID NUMBER? 750073
PURPOSE OF PRESENTATION (TYPE B CLOSURE, RAP, ETC.) Type B Closure

BRIEF REVIEW OF SITE HISTORY/FACTS PRESENTED: A review of the site was presented at a previous QRT meeting. In short, the only above type B soils remaining in the pit were confined to one area and these samples were taken from soil just above the water table (sample #26). All soil samples except #26 satisfied type B closure criteria. Three monitoring wells around the pit (one of them directly downgradient) were BADL for the appropriate parameters. The Quality Review Team decided additional data was required and asked for monitoring well data from the pit area itself immediately downgradient from the sample #26 location. General Motors had WW Engineering install the well and collect a sample. The sample was BADL for BTEX, PNAs, Cadmium, Chromium, Lead, and PCBs. Based upon this information I recommend they be granted a Type B closure for this site.

CONCLUSION OF DISTRICT PEER REVIEW PROCESS, REASONING, AND FOLLOW UP ACTION RECOMMENDED: Type B Closure Approved

Steve Norton 7-20-93
PROJECT MANAGER DATE

APPROVED BY:

DISTRICT SENIOR GEOLOGIST: [signature] 7-20-93
DATE

DISTRICT SENIOR EQA/EQM: [signature] 7/20/93
DATE

DISTRICT SUPERVISOR: [signature] 7/22/93
DATE

Other than the above approved action, MDNR is unable to express an opinion with regard to any other contaminants or interim response actions that may be associated with this site. Please refer to the site file for more information.

**Kimberly Tyson**
**<TYSONKM@michigan.gov>**
05/23/02 09:05 AM

To: Stephen Buda <BUDAS@michigan.gov>
cc: Gale Hruska/R5/USEPA/US@EPA, Kimberly Tyson <TYSONKM@michigan.gov>
Subject: American Axle & Manufacturing; MID 000 718 551

I had a conversation with Gayle Harza at EPA, Region 5 regarding corrective action at the subject facility. The facility is ranked high but is not a GPRA facility. The 12/11/92 PA/VSI for this facility identify about 18 SWMUs and 3 AOCs. Based on the recommendations of the PA/VSI, only 3 of the AOCs needed to be addressed. The 3 AOCs were underground storage tanks. Gayle received some additional information from the facility regarding the closure of their underground storage tanks. The closures were apparently completed under the MDNR, LUST program. Based on Gayle's review of this documentation, he believes that the releases have been addressed. Gayle's recommendation will be no further interest because he finds no reason to continue with corrective action.

I informed Gayle that the DEQ, RCRA program has not looked at corrective action for this facility. We are <u>not</u> able to make a determination of no further interest at this time. Although the PA/VSI only identified 3 AOCs in 1992, others could have been developed since that time. Also I picked up that this facility may still be operating. I don't know if any consideration has been given to the possiblity that SWMUs and AOCs could have been created between 1992 - Present.

Gayle don't know the policy for how Michigan and EPA will interact on the voluntary agreements, especially for the facilities that may have completed corrective action in the past. Gayle's recommendation has been submitted to Hak Cho and Gerry Phillips.

Kimberly M. Tyson,
Senior Environmental Engineer
Michigan Department of Environmental Quality
Waste Management Division
Hazardous Waste Program Section
P.O. Box 30241
Lansing, Michigan 48909-7741
Phone: (517) 373-2487
Fax: (517) 373-4797
Internet: Tysonkm@michigan.gov

**AMERICAN AXLE & MANUFACTURING**

TM

ONE MANUFACTURING DRIVE - THREE RIVERS, MI 49093-8915

# FAX COVER SHEET
## FAX: (616) 278-0537

TO: Gale Hruska
LOCATION: EPA - Chicago
FAX NO.: 312/353-4788
PHONE NO:
CC:
PHONE NO:
CC:
PHONE NO:
FROM: Amy Brodzinski
PHONE NO: (616)278-0251
DATE: 5/18/02
NO. OF PAGES W/COVER 4

COMMENTS:

Gale

- Here is a copy of the Type B Closure letter from MDNR for SWMU 13 or Area C (as referred to in GMC documents). Let me know if you would like anything more on this area.

Amy

IF YOU DID NOT RECEIVE A CLEAR OR COMPLETE COPY, OR IF THIS TRANSMISSION WAS RECEIVED IN ERROR, PLEASE CONTACT THE SENDER. THANK YOU.

NATURAL RESOURCES COMMISSION
THOMAS J. ANDERSON
ARLENE J. FLUHARTY
KERRY KAMMER
O. STEWART MYERS
DAVID D. OLSON
RAYMOND POUPORE

STATE OF MICHIGAN

JAMES J. BLANCHARD, Governor

# DEPARTMENT OF NATURAL RESOURCES

STEVENS T. MASON BUILDING
BOX 30028
LANSING, MI 48909

GORDON E. GUYER, Director

RECEIVED
JAN 29 1988
U.S. EPA, REGION V

January 19, 1988

Mr. Gerald K. Timmer
Senior Environmental Engineer
Hydra-matic Division, GMC
One Hydra-matic Drive
Three Rivers, Michigan 49093

Dear Mr. Timmer:

SUBJECT: Approval of Closure Plan
Three Rivers Facility
MID 000 718 551

Your closure plan for the storage of hazardous wastes in containers, which we received November 9, 1987, has been reviewed and is hereby approved with the following stipulations:

1. The following detection limits shall be used for soil analyses:

| Waste Description | Detection Limit, ppm |
|---|---|
| 1,1,1-trichloroethane | 0.010 |
| Toluene | 0.005 |
| Acetone | 0.25 |
| Carbon tetrachloride/bromoform mixture | 0.020 |
| 1,1,2-trichloro-1,2,2-trifluoroethane | 0.050 |
| Xylene | 0.050 |
| Methanol | 0.80 |
| Methyl isobutyl ketone | 0.25 |
| Methyl ethyl ketone | 0.25 |

2. Grid points shall be sampled at specific depth increments. Individual, not composite, soil samples shall be obtained at 0.25 to 0.5 foot depth intervals in clay soils and 1.0 to 5.0 foot depth intervals in silt-sand soils.

3. If contaminated soils are found, a plan for soil removal, disposal and resampling shall be submitted to Waste Management Division within 30 days of discovery.

4. The closure certification statement shall be signed by an independent registered professional engineer and the owner/operator.

5. GMC Hydra-matic shall notify Waste Management Division Plainwell District staff (616-685-9886) and Lansing Hazardous Waste Permits Unit staff (517-373-2730) at least two working days in advance of soil sampling and soil excavation and removal, to enable staff to be present to observe and/or take samples.

6. The certification submitted to verify that closure has been carried out in accordance with the approved closure plan shall include all pertinent information listed in the attached "Closure Certification Checklist."

Closure of RCRA interim status units does not release the facility from its responsibilities under the Hazardous and Solid Waste Amendments of 1984 (HSWA). All interim status facilities are subject to the corrective action requirements.

If you have any questions regarding this approval, please contact Mr. Stephen Blayer at 517-373-7739.

Sincerely,

Alan J. Howard, Chief
Waste Management Division
517-373-9523

Attachment

cc: Mr. Rich Traub, U.S. EPA-Region V
Ms. Marilyn Sabadaszka, U.S. EPA-Region V
Mr. Wayde Hartwick, U.S. EPA-Region V
Mr. Ken Burda, WMD/C&E File
Mr. Chuck Bikfalvy, WMD, Plainwell
Ms. Becky Kocsis, WMD
Mr. Stephen Blayer, WMD

HYDRA-MATIC GM

Division of General Motors Corporation
One Hydra-matic Drive, Three Rivers, Michigan 49093

U.S. Environmental Protection Agency
Region V, RCRA Activities
P.O. Box A3587
Chicago, Illinois 60690

Facility: U.S. EPA # MID000718551
Hydra-matic Division, GMC
One Hydra-matic Dr.
Three Rivers, Michigan 49093

Dear Sir:

Please attach the enclosed copy of our Closure Plan (EPA Facility #: MID000718551) to our recent submittal letter requesting the withdrawal of our Part A RCRA permit application and change to "Generator only" status. It was inadvertently not included in the original submittal.

Yours truly,

Gerald K. Timmer 9/1/87

Gerald K. Timmer
Sr. Environmental Engineer
Hydra-matic Division, GMC
St. Joseph County Operations
One Hydra-matic Dr.
Three Rivers, MI 49093

RECEIVED
SEP 03 1987
SWD - AIS
U.S. EPA, REGION V

cc: Michigan Department of Natural Resources
William Collinson, GM Environmental Activities Staff

MID000718551 HYDRA-MATIC DIVISION, GENERAL MOTORS CORP.
THREE RIVERS, MICHIGAN

OPERATING RECORD
SECTION XVI

CLOSURE PLAN

## DESCRIPTION OF FACILITY - MAXIMUM WASTE INVENTORY

The Hazardous Waste Management Facility at Three Rivers is a self contained area (indoors) where all hazardous wastes produced in-plant are stored in drums prior to their disposal by a waste solvent reclaimer or an approved disposal site. The maximum estimated quantity that shall be in storage at any time during the life of the Three Rivers facility is 24 drums or 1,320 gallons. The drums at this facility consist of both drums that are capped and ready for disposal and those in which wastes are being accumulated prior to disposal.

## CLOSURE SCHEDULE

Facility closure is estimated to be January 1, 2030, based on the life expectancy of the facility's structures. However, an earlier closure date could be determined by one of three conditions: 1) discontinuation of use of any products and processes in-plant that would produce hazardous wastes, 2) total closure of the manufacturing plant(s), or 3) a management decision to change the facility's operating status. Under these conditions, the following procedures would be implemented:

| | |
|---|---|
| Day 1 | Plant termination of hazardous waste activity. |
| Day 10 | Final collection and storage of all in-plant wastes into the Hazardous Waste Management Facilities from laboratories, maintenance areas, degreasing operations. |
| Day 15 | Perform necessary collection operations and disposal into storage drums of wates contained in storage area sumps and/or dikes. |
| Day 25 | Preparation of stored wastes for shipment, including necessary laboratory analysis to determine waste constituents and/or characteristics and proper labelling, marking, and preparation of shipping papers and manifests. |
| Day 30 | Contact disposal contractor for pickup of drummed wastes. |
| Day 35 | Certification of closure by independent registered professional engineer. |

## DECONTAMINATION OF FACILITY

The drummed storage areas will be cleaned up via sweeping.

Safety cans used for collection of laboratory and maintenance waste shall be triple-rinsed and the rinsate added to the stored wastes for proper disposal. The rinsed safety cans may then be either discarded or used for nonhazardous materials.

HYDRA-MATIC

Division of General Motors Corporation
One Hydra-matic Drive, Three Rivers, Michigan 49093

July 26, 1985

Department of Natural Resources
Plainwell District Headquarters
Hazardous Waste Division
P. O. Box 355
Plainwell, MI 49080

RECEIVED
AUG 2 1985
R.W.D. — PLAINWELL

Dear Sir:

Please refer to the attached copy of our recent correspondence wherein we state that any possible inventory from the Constantine facility is included in the Three Rivers estimates for hauling and disposal. This means that the one (1) drum maximum at Constantine is included in the twenty-four (24) drum maximum at Three Rivers.

Additionally, the numbers of drums in the closure plan have been modified to represent an actual situation more closely and to clarify an area which "raises concern" (see enclosed copy of the modified closure plan).

We believe that all valid concerns relative to our closure plan have been resolved.

Gerald K. Timmer
Sr. Environmental Engineer
Hydra-matic Div. GMC

GKT:sjc

Attach

XC: EPA
Howard
Bohunsky (C+E)

9-16-85

TX Sandra Brewer on closure costs for Constantine facility. Discussed requirement that all closure cost for T+D must be included constantine plan. I will check with Permits to get their comments + call back.

T Cop 9-13-85

Plainwell District Headquarters
Box 355, Plainwell, Michigan 49080

July 17, 1985

Gerald K. Timmer
Senior Environmental Engineer
GMC Hydramatic Division
One Hydramatic Drive
Three Rivers, Michigan 49093

Re: EPA ID # - MID 000718551
Closure Plan - Three Rivers Facility

Dear Mr. Timmer:

Thank you for your letter of June 24, 1985, in response to our recent review of your closure plan.

Your response is deemed adequate to resolve the deficiencies noted in our letter of May 31, 1985.

Please feel free to contact this office at (616) 685-9886 if you have any questions.

Sincerely,

Chuck Bikfalvy, Water Quality Specialist
Hazardous Waste Division
Plainwell Compliance District

CB:ls

cc: U.S. EPA - Region V
J. Bohunsky - HWD (C&E File)
A. Howard - HWD

Plainwell District Headquarters
Box 355, Plainwell, Michigan 49080

May 31, 1985

Gerald Timmer, Senior Environmental Engineer
General Motors Corporation - Hydramatic Division
One Hydramatic Drive
Three Rivers, Michigan 49093

Re: Closure Plan - Three Rivers Facility
EPA ID # - MID 000718551

Dear Mr. Timmer:

Staff has reviewed your closure plan dated September 28, 1984, which was submitted to this office on March 19, 1985.

40 CFR 265.142(a) requires that the cost estimate for closure must equal the cost of closure at the point in the facility's operating life when the extent and manner of its operation would make closure the most expensive. It is assumed that those highest costs would be realized if closure was carried out by third parties (i.e., contractors, commercial laboratories, etc.).

The plan was determined to be deficient as follows:

1. The cost estimate for laboratory analysis was based on 22 drums of waste, although the maximum waste inventory described in the plan was 24 drums.
2. Cost estimate should be broken down to unit costs, such as disposal cost per waste type, disposal method, gallon of each type stored. Include assumptions and calculations.
3. Transportation costs must be included as a separate item.

Please respond to this letter by June 28, 1985, documenting actions taken to correct these deficiencies.

If you have any questions regarding this matter, please feel free to contact us at (616) 685-9886 for assistance.

Sincerely,

Chuck Bikfalvy

Chuck Bikfalvy, Water Quality Specialist
Hazardous Waste Division
Plainwell Compliance District

CB:ls
cc: J. Bohunsky (C&E File)
A. Howard
EPA - Region V

HYDRA-MATIC GM

Division of General Motors Corporation
One Hydra-matic Drive, Three Rivers, Michigan 49093

March 19, 1985

Hazardous Waste Division
Michigan Dept. of Natural Resources
621 North 10th Street
P. O. Box 355
Plainwell, MI 49080

RECEIVED
MAR 29 1985
H.W.D. — PLAINWELL

Dear Mr. Leep:

In response to your request for copies of our closure plans, we are enclosing the latest revisions of both our Three Rivers and Constantine Facility's plans (EPA ID #MID000718551 and MID000724740, respectively). As you know, both facilities are storage facilities only and there has been no hazardous waste activity at the Constantine location for several years. The closure plans, though, are written to represent a "worst case" situation.

If you have any questions, please contact Mr. Gerald Timmer (Sr. Environmental Engineer) at (616) 278-0251.

Daniel C. Forshee
General Manufacturing Manager
Hydra-matic Division, GMC

Enc

xc ERP 4-5-85

file

Plainwell District Headquarters
Box 355, Plainwell, Michigan 49080

February 26, 1985

General Motors Corporation
Hydra-Matic Division
No. 1 Hydramatic Drive
Three Rivers, Michigan 49093

Re: EPA ID # - MID 000718551
Three Rivers Facility

Dear Sir/Madam:

As part of our Fiscal Year 1985 Hazardous Waste Management Cooperative Agreement with the United States Environmental Protection Agency, we are obligated to review the adequacy of the closure and post-closure plans for selected hazardous waste treatment, storage, and disposal facilities (TSDF) in the state. All TSDF's will have their closure plans reviewed over the next two fiscal years. Your facility was selected, more or less at random, for review this year.

Therefore, please submit two up-to-date copies of your closure plan by April 15, 1985, to the following address:

Hazardous Waste Division
Michigan Department of Natural Resources
621 North 10th Street
P.O. Box 355
Plainwell, Michigan 49080

If you have any questions, please feel free to contact me at (616) 685-9886.

Sincerely,

Tomas Leep

Tomas Leep, District Supervisor
Hazardous Waste Division
Plainwell Compliance District

TL:ls

cc: U.S. EPA - Region V
J. Bohunsky (C&E File)
A. Howard

SECTION XVI

CLOSURE PLAN

INTRODUCTION

Under the U. S. EPA regulations, 40 CFR Part 265, subpart G, Sections 265.110 thru 265.120, each facility which stores, treats, or disposes of hazardous wastes must have a closure plan on file. This closure plan has been prepared to cover the following facilities:

1. EPA I D Number - MID000718551
   MID000724740

2. Owner's Name: General Motors Corporation
   Hydra-Matic Division
   One Hydra-Matic Dr.
   Three Rivers, MI 49093

   Industrial Park
   Constantine, MI 49093

3. This plan has been prepared by Sandra G. Shelton
   Environmental Engineer
   5/11/81

   This plan has been revised by SANDRA S. BRENER / ENV. ENG.
   Name and Job Title

   9/28/84
   Date

4. The attached details the facilities for storage of hazardous wastes.

(procedures updated to include a closure date as directed by the D.N.R. in their inspection of Sept. 13, 1984.)

## Description of Facility - Maximum Waste Inventory

The Hazardous Waste Management Facilities at Three Rivers and Constantine are both self contained areas (indoors) where all hazardous wastes produced in-plant are stored in drums prior to their disposal by a waste solvent reclaimer or an approved disposal site. The maximum estimated quantity that shall be in storage at any time during the life of the Three Rivers facilities is 24 drums or 1,320 gallons. (2 drums or 110 gallons at Constantine). The drums at these facilities consist of both drums that are capped and ready for disposal and those in which wastes are being accumulated prior to disposal.

## Closure Schedule

Facility closure is estimated to be January 1, 2030, based on the life expectancy of the facilitie's structures. However, an earlier closure date could be determined by one of two conditions: 1) discontinuation of use of any products and processes in-plant that would produce hazardous wastes or 2) total closure of the manufacturing plant (s). Under these conditions, the following procedures would be implemented:

| | |
|---|---|
| Day 1 | Plant termination of hazardous waste activity. |
| Day 10 | Final collection and storage of all in-plant wastes into the Hazardous Waste Management Facilities, (from laboratories, maintenance areas, degreasing operations). |
| Day 15 | Perform necessary collection operations and disposal into storage drums of wastes contained in storage area sumps and/or dikes. |
| Day 25 | Preparation of stored wastes for shipment, including necessary laboratory analysis to determine waste constituents and/or characteristics and proper labelling, marking, and preparation of shipping papers and manifests. |
| Day 30 | Contact disposal contractor for pickup of drummed wastes. |
| Day 35 | Certification of closure by independent registered professional engineer |

## Decontamination of Facility

The drum storage areas will be cleaned up via sweeping.

Safety cans used for collection of laboratory and maintenance waste shall be triple rinsed and the rinsate added to the stored wastes for proper disposal. The rinsed safety cans may then be either discarded or used for other purposes.

COST ESTIMATE FOR CLOSURE OF HAZARDOUS WASTE STORAGE FACILITIES
(TO BE UPDATED ANNUALLY BY MAY 19)

PLANT: Hydra-matic Div., St. Joseph Operations
LOCATION: Three Rivers, MI
CONTACT: G. K. Timmer 8-364-0251
PREPARED BY: S. G. Shelton Plant Engineering, Environmental Engineer
ORIGINAL
PREPARATION DATE: May 31, 1981
DATE OF THIS UPDATE: 5/21/84

| ACTIVITY | COST |
|---|---|
| Final collection and storage of ALL in-plant hazardous waste<br>Met Lab<br>Reliability Lab<br>Audit Garage<br>Degreasers<br>Computer Rooms<br>Maintenance<br>Tool Rooms<br>Cutter Grind<br>Painter's Crib<br>Jobsetter's Solvents | 1,144 |
| Clean-up and proper containerization of wastes in storage bldg. sump and dike. Equipment clean up. | 319 |
| Laboratory analysis to determine content and amounts. (Assume worst case of 22 drums containing an unknown number of misc. unknown solvents - average number of solvents per drum is 2 to 15 different kinds) (Also assume average gas chromatograph - mass spectro photometer charge by outside laboratory). (Also include rinsate of bldg. wash). | 10,170 |
| Preparation of shipping papers, manifests, labelling, marking. | 317 |
| Contractor disposes of waste in an environmentally sound and legal manner. | 3,178 |
| Certification of closure by independent registered professional engineer. | 636 |
| TOTAL COST | $15,764 |

THREE RIVERS

COST ESTIMATE FOR CLOSURE OF HAZARDOUS WASTE STORAGE FACILITIES
(TO BE UPDATED ANNUALLY BY MAY 19)

PLANT: Hydra-Matic Div., St.Joseph County Operations
LOCATION: Constantine, MI
CONTACT: G. K. Timmer 8-364-0251
PREPARED BY: S. G. Shelton Plant Engineering, Environmental Engineer
ORIGINAL
PREPARATION DATE: May 31, 1981
DATE OF THIS UPDATE: 5/21/84

| ACTIVITY | COST |
|---|---|
| Final collection and storage of ALL in-plant hazardous waste<br>Met Lab<br>Degreasers<br>Maintenance<br>Tool Rooms<br>Cutter Grind<br>Painter's Crib<br>Jobsetter's Solvents | 127 |
| Clean-up and proper containerization of wastes in storage bldg. Equipment clean up. | 319 |
| Laboratory analysis to determine content and amounts. (Assume worst case of 5 drums containing an unknown number of misc. unknown solvents - average number of solvents per drum is 2 to 15 different kinds) (Also assume average gas chromatograph - mass spectrophotometer charge by outside laboratory). (Also include rinsate of bldg. wash). | 2,542 |
| Preparation of shipping papers, manifests, labelling, marking. | 317 |
| Contractor disposes of waste in an environmentally sound and legal manner. | 319 |
| Certification of closure by independent registered professional engineer. | 636 |
| TOTAL COST | $4,260 |

CONSTANTINE

WASTE MANAGEMENT DIVISION
CLEAN CLOSURE CERTIFICATION CHECKLIST
(Guidance Document)

This checklist was developed to review RCRA clean closures. Due to direct reference to 40 CFR 264 Subpart G by Act 64, Rule 613; Act 64 closures should also be evaluated by this checklist.

Documentation supporting the independent registered professional engineer's certification can be requested under 40 CFR 264.115 and 265.115 (as of October 29, 1986). The owner/operation must submit at least two copies of certification documentation, one for MDNR, and one for the EPA files.

The checklist identifies items recommended to properly evaluate a closure certification. These items are not "absolutes". Other information or substitutions may be provided with technically justify and certify a "clean closure". The WMD Draft "How Clean is Clean" procedure is a recommended reference.

This checklist can be used for land disposal facilities and storage facilities. Several of the items would not be required for a storage facility where testing was minimal. Items 1 thru 5 would be required for all closures. Items 6 thru 11 would be optional for storage facilities, dependent on extent of testing required. Land disposal facilities would require all items listed.

1. Manifests (or some type of manifest/waste removal summary) of where and how much waste was shipped.

2 Certification statement is needed by the owner/operator AND an independent registered engineer. All independent registered professional engineer certificates must have an original stamp on at least one copy.

3. Summary of decontamination procedures (pressure wash, stream clean, etc.) and how waste water was disposed.

4. Summary analysis (include conditions of haul roads, time table, soil and groundwater results, weather conditions, runoff controls, equipment decontamination, etc.).

5. Results of all tests used to determine clean closure (chart, tables, lab sheets).

6. Statistical comparisons on sampling results compared to background. (This should include full computations on background and statistical analysis).

7. Sampling and analysis procedures (specify references).

8. Final depth and elevations of excavations of wastes and soils.

9. Properly labelled and easily identified sampling grid stations (map); including background stations.

10. Groundwater data (and statistical evaluation) used to determine if groundwater degradation has occurred (usually four sets of replicate analysis compared to sampling event after closure activities). Monitor well construction details and sampling and analysis procedures may be required if documentation is not in the file.

11. Summary of final restoration of excavated area... information on fill material used and/or future land use outline. If clean closure cannot be achieved (e.g. contaminated soils to water table and groundwater results show contamination) this summary item should be used to address the post closure program and/or corrective action.

12. A copy of the approved closure plan and letter of closure approval.

NATURAL RESOURCES COMMISSION
THOMAS J. ANDERSON
MARLENE J. FLUHARTY
GERRY KAMMER
STEWART MYERS
DAVID D. OLSON
RAYMOND POUPORE

STATE OF MICHIGAN

JAMES J. BLANCHARD, Governor

**DEPARTMENT OF NATURAL RESOURCES**

David F. Hales, Director

S.E. MICHIGAN FIELD OFFICE
Waste Management Division
505 W. Main
Northville, MI 48167

September 14, 1988

MID 980587843
GMC Hydra Matic
Ypsilanti, MI 48197

Katrina Strickland
General Motors Corp.
3044 W. Grand Blvd.
Detroit, MI 48202

RE: General Motors Financial Test

Dear Ms. Strickland,

A financial assurance review has been made on the General Motors Financial Test document for compliance with the requirements of Subtitle C of the Resource Conservation and Recovery Act (RCRA) of 1976, as amended, and Michigan's Hazardous Waste Management Act, Act 64 of 1979, as amended.

As a result of that review, the following violations were noted:

1. The letter from the chief financial officer must be addressed to the Director of Dept. of Natural Resources, not John Bohunsky, for compliance with Act 64.

2. Two separate financial tests are needed from General Motors. One in compliance with Act 64 for its one permitted facility and one in compliance with 40 CFR for the remaining interim status facilities (however, in this test, "Director" and "Dept. of Natural Resources" always replace "Regional Administrator" and "E.P.A."). Wording requirements are to be met as follows:

   a) for Act 64, see enclosed Attachment 3.
   b) for 40 CFR, see 264.151(g) as required by 265.147(f)(3)(i) for the letter from the chief financial officer and 264.151 (f) for the correct Alternative I wording.

3. The current G.M. financial test does not meet either the 40 CFR or Act 64 wording requirements. Most deficiencies relate to the "Alternative I" section.

We request your response by October 12, 1988 demonstrating these corrections to the financial test.

If you have any questions, please contact me at (313) 344-4670.

Sincerely,

Daria W. Devantier

Daria W. Devantier
Environmental Quality Analyst

DWD:bs
cc: B. Okwumabua
U.S. EPA, Region V

Attachment D

Inspection Priorities For RCRA Interim Status Financial Responsibility Requirements

265.140(c) Is this a State or Federal Facility?

FINANCIAL ASSURANCE REQUIREMENTS

265.142(a) Is the written closure cost estimate available? yes facility currently undergoing closure

265.144(a) Is the written post-closure cost estimate available?

265.142(c) 265.144(c) Have any revisions been made to the closure/post-closure cost estimates which increase the cost of closure/post-closure? N/A

265.142(d) 265.144(d) Have the closure/post-closure cost estimates been revised to reflect the increased cost of closure/post-closure? see above

265.142(b) 265.144(b) Have the closure/post-closure cost estimates been updated to the current year by either recalculating the cost estmiates or using an inflation factor derived from the most recent Implicit Price Deflator from the U.S. Department of Commerce? yes

Note: The annual Implicit Price Deflator covers the period from April 1987 to April 1988 (for example) and can be obtained from the Commerce Department Library in Chicago, (312) 353-4450.

| | |
|---|---|
| 1980 - 85.7 | 1984 - 108.1 |
| 1981 - 97.0 | 1985 - 111.7 |
| 1982 - 100.0 base year | 1986 - 114.5 |
| 1983 - 103.8 | 1987 - 116.4 |

265.143 265.145 Which financial instrument(s) is used to assure closure/post-closure care costs?

| | Closure | Post-Closure |
|---|---|---|
| | [ ] Trust Fund * | [ ] Trust Fund * |
| | [ ] Surety Bond* | [ ] Surety Bond* |
| | [ ] Letter of Credit* | [ ] Letter of Credit* |
| | [ ] Insurance* | [ ] Insurance* |
| | [X] Financial Test | [ ] Financial Test |
| | [ ] Corporate Guarantee | [ ] Corporate Guarantee |
| 265.143(f) 265.145(f) | [ ] Combination of above* Specify: | [ ] Combination of above* Specify: |
| 265.143(g) 265.145(g) | [X] One instrument for multiple facilities specify: | [ ] One instrument for multiple facilities specify: |

265.146 Has the owner or operator used one instrument for financial assurance of both closure and post-closure care? yes, P.C. NA

265.142 265.144 Does the amount of the financial assurance instrument(s) equal or exceed the current closure/post-closure cost estimates? NA financial

265.150 Has the State assumed responsibility for the facility's compliance with closure/post-closure care requirements? No

LIABILITY REQUIREMENTS

265.147(a) Does the owner or operator have coverage for sudden accidental occurrences in an amount of at least $1 million per occurrence with an annual aggregate of at least $2 million, exclusive of legal defense costs?

265.147(a) What is the method of coverage?

- [ ] Insurance
  - [ ] Hazardous Waste Facility Endorsement, or
  - [ ] Certificate of Liability Insurance
- [x] Financial test
- [ ] Corporate Guarantee
- [ ] Combination of financial test or corporate guarantee and insurance

265.147(b) Does the owner or operator of a surface impoundment, landfill, or land treatment facility which is used to manage hazardous waste have coverage for nonsudden accidental occurrences in the amount of at least $3 million per occurrence with an annual aggregate of at least $6 million, exclusive of legal defense costs?

265.147(b) What is the method of coverage? N/A

- [ ] Insurance
  - [ ] Hazardous Waste Facility Liability Endorsement, or
  - [ ] Certificate of Liability Insurance
- [ ] Financial test
- [ ] Corporate guarantee
- [ ] Combination of financial test or corporate guarantee and insurance

265.147(e) After receiving final closure certifications from the owner or operator and an independent registered professional engineer, has the Director notified the owner or operator in writing that the owner or operator is no longer required to maintain liability coverage? N/A

265.150 Has the State assumed responsibility for the owner's or operator's compliance with the liability requirements for sudden and/or nonsudden accidental occurrences?

No

Depending on the division of responsibility between the district offices and the central office in Lansing, the following may apply to a CEI inspection:

265.143
265.145 Does the wording of all financial instrument(s) match that in 264.151 and identify the Director of MDNR rather than the U.S. EPA Regional Administrator? No

265.143(a)
265.145(a) Are the closure/post-closure cost estimates calculated according to Federal and State requirements? yes

265.143
265.145 Have the procedures regarding the financial instrument(s) been followed?

see Low

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

MAR 26 1987

REPLY TO THE ATTENTION OF:
5HE-12

MID 006 718 551

General Motors Corporation
General Motors Building
3044 W. Grand Boulevard
Detroit, Michigan 48202

Re: RCRA Financial Responsibility

Dear Owner/Operator:

On October 30, 1986, the State of Michigan was granted final authorization by the Administrator of the United States Environmental Protection Agency (U.S. EPA) to administer a hazardous waste program in lieu of the Federal program. As a result of final authorization, Michigan is required to enforce the provisions of the Resource Conservation and Recovery Act (RCRA). One of these provisions (40 CFR Part 265, Subpart H) requires all hazardous waste facilities to demonstrate financial responsibility for liability coverage and closure/post-closure care.

To implement this aspect of authorization, financial documents must be written to satisfy the requirements of the Michigan Administrative Code 1985 AACS, Part 7, which is the Michigan equivalent of 40 CFR Part 265, Subpart H. This letter is to notify you that your financial test should be updated and sent to the Director of the Michigan Department of Natural Resources within 90 days after the close of your fiscal year.

If you have any questions or desire additional information, please contact Ms. Sharon Johnson at (312) 886-4581 or Ronald Brown at (312) 353-7921.

Sincerely yours,

Wm. E. Muno

William E. Muno, Chief
RCRA Enforcement Section

cc: John Bohunsky, MDNR

U.S. EPA ID #: MID000721

GMC ROCHESTER PROD DIV COOPERSVILL*
2100 BURLINGAME
GRAND RAPIDS MI 49501

U.S. EPA ID #: MID003912920

GMC WHS & DIST DIV DRAYTON PLAINS
6060 W BRISTOL ROAD
FLINT MI 48554

U.S. EPA ID #: MID980700827

GMC OLDSMOBILE DIV PLTS 2 & 3
P O BOX 30061
LANSING MI 48909

U.S. EPA ID #: MID017079625

GMC ROCHESTER PROD DIV WYOMING PLT
2100 BURLINGAME
GRAND RAPIDS MI 49501

U.S. EPA ID #: MID005356902

GMC TRUCK & BUS GROUP
660 S BLVD E
PONTIAC MI 48053

U.S. EPA ID #: MID003906773

GMC WHS & DIST DIV FLINT
6060 W BRISTOL ROAD
FLINT MI 48554

U.S. EPA ID #: MID005356840 ✓

GMC FISHER BODY DIV COLDWATER RD
1245 E COLDWATER RD
FLINT MI 48559

U.S. EPA ID #: MID000718544 ✓

GMC GMAD LAKE ORION TWP PLT
PO BOX 347
LAKE ORION MI 48035

U.S. EPA ID #: MID005356704 ✓

GMC CADILLAC MOTOR CAR CLARK PLT
2860 CLARK ST
DETROIT MI 48232

U.S. EPA ID #: MID005356688 ✓

GMC CHEVROLET BAY CITY
100 FITZGERALD ST
BAY CITY MI 48706

U.S. EPA ID #: MID086744802 ✓

GMC CHEVROLET DETROIT GEAR AND AXLE
1840 HOLBROOK AVE
DETROIT MI 48212

U.S. EPA ID #: MID005356621 ✓

GMC CHEVROLET LIVONIA
13000 ECKLES RD
LIVONIA MI 48151

U.S. EPA ID #: MID005356803 ✓

GMC DETROIT DIESEL ALLISON DIV RED*
13400 WEST OUTER DR
DETROIT MI 48239

U.S. EPA ID #: MID005356787 ✓

GMC FISHER BODY DIV FORT ST
6307 WEST FORT STREET
DETROIT MI 48209

U.S. EPA ID #: MID000724740 ✓

GMC HYDRA-MATIC DIV
ONE HYDRA-MATIC DRIVE
THREE RIVERS MI 49093

U.S. EPA ID #: MID000718551 ✓

GMC HYDRA-MATIC DIV THREE RIVERS P*
ONE HYDRA-MATIC DR
THREE RIVERS MI 49093

U.S. EPA ID #: MID005356694 ✓

GMC OLDSMOBILE DIV PLT 1
P O BOX 30061
LANSING MI 48909

U.S. EPA ID #: MID082220757 ✓

GMC PROVING GROUND MILFORD
HICKORY RIDGE & GM ROADS
MILFORD MI 48042

U.S. EPA ID #: MID980568836 ✓

GMC TRUCK & COACH DIV PONTIAC WEST
660 S BLVD E
PONTIAC MI 48053

U.S. EPA ID #: MID980700843 ✓

GMC OLDSMOBILE DIV PLT 5
P O BOX 30061
LANSING MI 48909

U.S. EPA ID #: MID980568 ✓

GMC AC SPARK PLUG DIV DAVISON ENG
1300 NORTH DORT HIGHWAY
FLINT MI 48556

U.S. EPA ID #: MID005356647 ✓

GMC AC SPARK PLUG DIV DORT HWY
1300 N DORT HWY
FLINT MI 48556

U.S. EPA ID #: MID980568570 ✓

GMC AC SPARK PLUG DIV WASTE TRMT
1300 N DORT HIGHWAY
FLINT MI 48556

U.S. EPA ID #: MID005356795 ✓

GMC ASSEMBLY DIV
2625 TYLER ROAD
YPSILANTI MI 48197

U.S. EPA ID #: MID005356696 ✓

GMC CENTRAL FOUNDRY DIV SAG MAL IR*
77 W CENTER ST
SAGINAW MI 48605

U.S. EPA ID #: MID076380583 ✓

GMC CHEVROLET DETROIT ASSEMBLY
601 PIQUETTE
DETROIT MI 48202

U.S. EPA ID #: MID005356654 ✓

GMC CHEVROLET FLINT MFG
300 NORTH CHEVROLET AVENUE
FLINT MI 48555

U.S. EPA ID MID041793340 ✓

GMC CHEVROLET SAGINAW CASTING & PA*
2100 VETERANS MEMORIAL PARKWAY
SAGINAW MI 48601

U.S. EPA ID #: MID000809905 ✓

GMC DETROIT DIESEL ALLISON ROMULUS*
36680 ECORSE RD
ROMULUS MI 48174

U.S. EPA ID #: MID005356712 ✓

GMC BUICK MOTOR DIV
902 E HAMILTON ST BLDG 85
FLINT MI 48550

U.S. EPA ID #: MID084571256 ✓

GMC CHEVROLET ADRIAN MFG
1450 E BEECHER ST
ADRIAN MI 49221

U.S. EPA ID #: MID020105565 ✓

GMC CHEVROLET DETROIT FORGE
8435 ST AUBIN
DETROIT MI 48212

U.S. EPA ID #: MID005356951 ✓

GMC CHEVROLET FLINT VAN SLYKE COMP*
G-3248 VAN SLYKE RD
FLINT MI 48552

U.S. EPA ID #: MID005356845 ✓

GMC CHEVROLET SAGINAW MFG
2328 EAST GENESEE AVE
SAGINAW MI 48605

MID 000 718 551

HYDRA-MATIC

Division of General Motors Corporation
One Hydra-matic Drive, Three Rivers, Michigan 49093

RECEIVED
JUN 26 1985
H.W.D. — PLAINWELL

June 24, 1985

Department of Natural Resources
Plainwell District Headquarters
Hazardous Waste Division
P. O. Box 355
Plainwell, MI 49080

Dear Sir:

In response to your letter of May 31, 1985, regarding our closure plan for the Three Rivers, Hydra-matic Facility, we submit the following:

RE: 1. Laboratory analysis of 22 drums - inventory of 24 drums.

Our cost estimate is based on the fact that because of the nature of our operations and strict control of the handling of our wastes, we would know the contents of, at the very least, 2 drums of wastes in inventory (for example; our parts degreaser, using 1,1,1 - trichloroethane, fills two drums when emptied). Waste analysis, therefore, would not be necessary on all drums in storage.

RE: 2. Cost estimate breakdowns

Based on the disposal method of reclamation (which we use for all waste types) the worst-case disposal costs would be $135/drum x 24 drums = $3,240. This is an actual cost based on our present hauling and disposal contract. The estimated cost in the closure plan is slightly higher because the original hauling and disposal figure from our closure plan developed in 1981 has been multiplied by the required inflation factor (40 CFR 265.142 (b) each year since 1981 to arrive at the present estimated cost.

The gallons of each waste type stored varies among our three waste categories (mineral spirits, 1,1,1 - trichloroethane, and laboratory solvents, normally 6:2:1, respectively) and are recorded in our storage records.

RE: 3. Transportation costs

Our contracts for disposal always require that the transportation costs be a part of the contract, therefore, transportation costs are not included as a separate item in the closure estimate. This has been noted in the estimate for clarification (see attached).

If you have any further questions, please contact Sandra Brewer of my office at (616) 278-0307.

Gerald K. Timmer
Sr. Environmental Engineer
Hydra-matic Div. GMC

GKT:sjc

xc: EPA 6-26-85

COST ESTIMATE FOR CLOSURE OF HAZARDOUS WASTE STORAGE FACILITIES
(TO BE UPDATED ANNUALLY BY MAY 19)

PLANT: Hydra-matic Div., St. Joseph Operations
LOCATION: Three Rivers, MI
CONTACT: G. K. Timmer 8-364-0251
PREPARED BY: S. G. Shelton Plant Engineering, Environmental Engineer
ORIGINAL
PREPARATION DATE: May 31, 1981
DATE OF THIS UPDATE: May 29, 1985

| ACTIVITY | | COST |
|---|---|---|
| Final collection and storage of ALL in-plant hazardous waste | | |
| Met Lab | | |
| Reliability Lab | Cutter Grind | |
| Audit Garage | Painter's Crib | |
| Degreasers | Jobsetter's Solvents | |
| Computer Rooms | | |
| Maintenance | | |
| Tool Rooms | | 1,190 |
| Clean-up and proper containerization of wastes in storage bldg. sump and dike. Equipment clean up. | | 332 |
| Laboratory analysis to determine content and amounts. (Assume worst case of 22 drums containing an unknown number of misc. unknown solvents - average number of solvents per drum is 2 to 15 different kinds) (Also assume average gas chromatograph - mass spectro photometer charge by outside laboratory). (Also include rinsate of bldg. wash). | | 10,577 |
| Preparation of shipping papers, manifests, labelling, marking. | | 330 |
| Contractor disposes of waste in an environmentally sound and legal manner.(includes pickup,transportation, and disposal) | | 3,305 |
| Certification of closure by independent registered professional engineer. | | 661 |
| TOTAL COST | | $16,395 |

U.S. EPA REGION V

MICHIGAN

EPA ID: MID082220757
Facility Name: GMC GM PROVING GROUND: MILFORD
Mailing Address: HICKORY RIDGE & GM ROAD
MILFORD, MI 48042
Facility Location: HICKORY RIDGE & GM ROAD, County: OAKLAND
Current closure cost estimate: $10,100

EPA ID: MID050615996
Facility Name: GMC GM TECHNICAL CENTER: WARREN
Mailing Address: 30800 MOUND RD. SERVICE SECT.
WARREN, MI 48090
Facility Location: 30800 MOUND ROAD, County: MACOMB
Current closure cost estimate: $164,900

EPA ID: MID000718551
Facility Name: GMC HYDRA-MATIC: THREE RIVERS
Mailing Address: ONE HYDRA-MATIC DRIVE
THREE RIVERS, MI 49093
Facility Location: ONE HYDRA-MATIC DRIVE, County: ST. JOSEPH
Current closure cost estimate: $18,200

EPA ID: MID980587893
Facility Name: GMC HYDRA-MATIC: YPSILANTI
Mailing Address: WILLOW RUN
YPSILANTI, MI 48198
Facility Location: WILLOW RUN, County: WASHTENAW
Current closure cost estimate: $31,800

DTW217888327

O: WMD
cc: RF

General Motors Corporation

RECEIVED
APR 04 1983
U.S. EPA, REGION V
WASTE MANAGEMENT DIVISION
OFFICE OF THE DIRECTOR

Mr. Valdas V. Adamkus
Regional Administrator
U.S. EPA Region V
230 S. Dearborn
Chicago, IL 60604

Dear Mr. Adamkus:

I am the chief financial officer of General Motors Corporation, 3044 West Grand Boulevard, Detroit, Michigan 48202. This letter is in support of the use of the financial test to demonstrate financial responsibility for liability coverage and closure and/or post-closure care as specified in Subpart H of 40 CFR Parts 264 and 265.

The firm identified above is the owner or operator of the following facilities for which liability coverage for both sudden and non-sudden accidental occurrences is being demonstrated through the financial test specified in Subpart H of 40 CFR Parts 264 and 265: See Attachments A and B.

The firm identified above guarantees, through the corporate guarantee specified in Subpart H of 40 CFR Parts 264 and 265, liability coverage for both sudden and non-sudden accidental occurrences at the following facilities owned or operated by the following subsidiaries of the firm: None.

1. The firm identified above owns or operates the following facilities for which financial assurance for closure or post-closure care is demonstrated through the financial test specified in Subpart H of 40 CFR Parts 264 and 265. The current closure and/or post-closure cost estimates covered by the test are shown for each facility: See Attachments A and B.

2. The firm identified above guarantees, through the corporate guarantee specified in Subpart H of 40 CFR Parts 264 and 265, the closure and post-closure care of the following facilities owned or operated by its subsidiaries. The current cost estimates for the closure or post-closure care so guaranteed are shown for each facility: None.

3. In States where EPA is not administering the financial requirements of Subpart H of 40 CFR Parts 264 and 265, this firm is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in Subpart H of 40 CFR Parts 264 and 265. The current closure and/or post-closure cost estimates covered by such a test are shown for each facility: See Attachment B.

RECEIVED
APR 04 1983
U.S. EPA REGION 5
OFFICE OF THE DIRECTOR

9275f-75

COPY

4. The firm identified above owns or operates the following hazardous waste management facilities for which financial assurance for closure or, if a disposal facility, post-closure care, is not demonstrated either to EPA or a State through the financial test or any other financial assurance mechanism specified in Subpart H of 40 CFR Parts 264 and 265 or equivalent or substantially equivalent State mechanisms. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility: None.

5. This firm is the owner or operator of the following UIC facilities for which financial assurance for plugging and abandonment is required under Part 144. The current closure cost estimates as required by 40 CFR 144.62 are shown for each facility: None.

This firm is required to file a Form 10-K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this owner or operator ends on December 31. The figures for the following items marked with an asterisk are derived from this firm's independently audited, year-end financial statements for the latest completed fiscal year, ended December 31, 1987.

ALTERNATIVE I
($ In Millions)

| | | |
|---|---|---|
| 1. | Sum of current closure and post-closure cost estimates (total of all cost estimates listed above) | $ 59.1 |
| 2. | Amount of annual aggregate liability coverage to be demonstrated | $ 8.0 |
| 3. | Sum of lines 1 and 2 | $ 67.1 |
| *4. | Total liabilities (if any portion of your closure or post-closure cost estimates is included in your total liabilities, you may deduct that portion from this line and add that amount to lines 5 and 6) | $ 54,196.8 |
| *5. | Tangible net worth | $ 28,038.7 |
| *6. | Net worth | $ 33,225.1 |
| *7. | Current assets | $ 39,771.5 |
| *8. | Current liabilities | $ 25,528.2 |
| 9. | Net working capital (line 7 minus line 8) | $ 14,243.3 |
| *10. | The sum of net income plus depreciation, depletion, and amortization | $ 9,662.9 |
| *11. | Total assets in U.S. (required only if less than 90% of assets are located in the U.S.) | $ 68,168.1 |

| | | YES | NO |
|---|---|---|---|
| 12. | Is line 5 at least $10 million? | X | |
| 13. | Is line 5 at least 6 times line 3? | X | |
| 14. | Is line 9 at least 6 times line 3? | X | |
| *15. | Are at least 90% of assets located in the U.S.? If not complete line 16. | | X |
| 16. | Is line 11 at least 6 times line 3? | X | |
| 17. | Is line 4 divided by line 6 less than 2.0? | X | |
| 18. | Is line 10 divided by line 4 greater than 0.1? | X | |
| 19. | Is line 7 divided by line 8 greater than 1.5? | X | |

I hereby certify that the wording of this letter is identical to the wording specified in 40 CFR 264.151(g) as such regulations were constituted on the date shown immediately below..

F. A. Smith
Executive Vice President
March 30, 1988

Deloitte
Haskins + Sells

1114 Avenue of the Americas
New York, New York 10036-7778
(212) 790-0500
International Telex: 66262
ITT Telex: 4995707

General Motors Corporation:

We have examined the Consolidated Balance Sheet of General Motors Corporation (the "Corporation") and consolidated subsidiaries as of December 31, 1987 and the related Statements of Consolidated Income and Changes in Consolidated Financial Position for the year then ended, and have issued our opinion thereon dated February 8, 1988. Our examination was made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We have not performed any auditing procedures beyond the date of our opinion on the 1987 financial statements; accordingly, this report is based on our knowledge as of that date and should be read with that understanding.

At your request, we have performed the procedures enumerated below with respect to the accompanying letter from Mr. F. A. Smith to the Regional Administrator, U.S. EPA Region V, dated March 30, 1988. It is understood that this report is solely for filing with the addressee of the accompanying letter, and is not to be used for any other purpose. The procedures that we performed are summarized as follows:

1. We compared the amounts included in items 6, 7, 8 and 11 under the caption Alternative I in the letter referred to above with the corresponding amounts in the financial statements referred to in the first paragraph.

2. We recomputed from, or reconciled to, the financial statements referred to in the first paragraph the information included in items 4, 5, 10 and 15 under the caption Alternative I in the letter referred to above.

Because the procedures referred to in the preceding paragraph were not sufficient to constitute an examination made in accordance with generally accepted auditing standards, we do not express an opinion on any of the information or amounts listed under the caption Alternative I in the aforementioned letter. In performing the procedures referred to above, however, no matters came to our attention that caused us to believe that the information or amounts included in items 4, 5, 6, 7, 8, 10, 11 and 15 should be adjusted.

Deloitte Haskins & Sells

March 30, 1988

ORIGINAL COPY OF LETTER AND ENCLOSURE (1987 ANNUAL REPORT) ARE FILED AT:

OHD 020 632 998
GMC BOC LORDSTOWN ASSEMBLY
LORDSTOWN, OHIO

HYDRA-MATIC

Division of General Motors Corporation
One Hydra-matic Drive, Three Rivers, Michigan 49093

June 24, 1985

Department of Natural Resources
Plainwell District Headquarters
Hazardous Waste Division
P. O. Box 355
Plainwell, MI 49080

Dear Sir:

In response to your letter of May 31, 1985, regarding our closure plan for the Constantine, Hydra-matic Facility, we submit the following:

RE: 1. & 2. Cost estimate breakdowns and transportation costs.

Because of the very limited generation of hazardous waste at the Constantine Facility, (none to date), the most cost effective means of disposal would be to transport any waste by licensed hauler eight (8) miles to the Three Rivers, Hydra-matic Facility for shipment and disposal with their wastes. Therefore, the disposal cost estimate includes only transportation costs to the Three Rivers Facility. This has been noted in the closure estimate for clarification (see attached). This possible inventory from the Constantine facility is included in the Three Rivers estimates for hauling and disposal.

Based upon the strict control of incoming materials at the Constantine facility, the only possible waste type that could be expected from the facility would be a mixture of miscellaneous laboratory solvents. (Methanol, toluene, and 1,1,1 - trichloroethane).

If you have any further questions, please contact Sandra Brewer of my office at (616) 278-0307.

Gerald K. Timmer
Sr. Environmental Engineer
Hydra-matic Div. GMC

GKT:sjc

## Description of Facility - Maximum Waste Inventory

The Hazardous Waste Management Facilities at Three Rivers and Constantine are both self contained areas (indoors) where all hazardous wastes produced in-plant are stored in drums prior to their disposal by a waste solvent reclaimer or an approved disposal site. The maximum estimated quantity that shall be in storage at any time during the life of the Three Rivers facilities is 24 drums or 1,320 gallons. (Including 1 drum or 55 gallons from Constantine). The drums at these facilities consist of both drums that are capped and ready for disposal and those in which wastes are being accumulated prior to disposal.

## Closure Schedule

Facility closure is estimated to be January 1, 2030, based on the life expectancy of the facility's structures. However, an earlier closure date could be determined by one of two conditions: 1) discontinuation of use of any products and processes in-plant that would produce hazardous wastes or 2) total closure of the manufacturing plant(s). Under these conditions, the following procedures would be implemented:

| | |
|---|---|
| Day 1 | Plant termination of hazardous waste activity. |
| Day 10 | Final collection and storage of all in-plant wastes into the Hazardous Waste Management Facilities, (from laboratories, maintenance areas, degreasing operations). |
| Day 15 | Perform necessary collection operations and disposal into storage drums of wastes contained in storage area sumps and/or dikes. |
| Day 25 | Preparation of stored wastes for shipment, including necessary laboratory analysis to determine waste constituents and/or characteristics and proper labelling, marking, and preparation of shipping papers and manifests. |
| Day 30 | Contact disposal contractor for pickup of drummed wastes. |
| Day 35 | Certification of closure by independent registered professional engineer. |

## Decontamination of Facility

The drum storage areas will be cleaned up via sweeping.

Safety cans used for collection of laboratory and maintenance waste shall be triple rinsed and the rinsate added to the stored wastes for proper disposal. The rinsed safety cans may then be either discarded or used for other purposes.

COST ESTIMATE FOR CLOSURE OF HAZARDOUS WASTE STORAGE FACILITIES
(TO BE UPDATED ANNUALLY BY MAY 19)

PLANT: Hydra-matic Div., St. Joseph Operations
LOCATION: Three Rivers, MI
CONTACT: G. K. Timmer, 8-364-0251
PREPARED BY: S. S. Brewer Plant Engineering, Environmental Engineer
ORIGINAL
PREPARATION DATE: May 31, 1981
DATE OF THIS UPDATE: July 30, 1985

| ACTIVITY | COST |
|---|---|
| Final collection and storage of ALL in-plant hazardous<br>Met Lab<br>Reliability Lab — Cutter Grind<br>Audit Garage — Painter's Crib<br>Degreasers — Jobsetter's Solvents<br>Computer Rooms — Constantine Waste<br>Maintenance<br>Tool Rooms | $ 1,190 |
| Clean-up and proper containerization of wastes in storage bldg. sump and dike. Equipment clean up. | 332 |
| Laboratory analysis to determine content and amounts. (Assume worst case of 22 drums containing an unknown number of misc. unknown solvents - average number of solvents per drum is 2 to 15 different kinds) (Also assume average gas chromatograph - mass spectro photometer charge by outside laboratory). (Also include rinsate of bldg. wash) | 10,577 |
| Preparation of shipping papers, manifests, labelling, marking. | 330 |
| Contractor disposes of waste in an environmentally sound and legal manner. (Includes pickup, transportation and disposal) | 3,305 |
| Certification of closure by independent registered professional engineer | 661 |
| TOTAL COST | $16,395 |

COST ESTIMATE FOR CLOSURE OF HAZARDOUS WASTE STORAGE FACILITIES
(TO BE UPDATED ANNUALLY BY MAY 19)

PLANT: Hydra-Matic Div., St. Joseph County Operations
LOCATION: Constantine, MI
CONTACT: G. K. Timmer 8-364-0251
PREPARED BY: S. S. Brewer Plant Engineering, Environmental Engineer
ORIGINAL
PREPARATION DATE: May 31, 1981
DATE OF THIS UPDATE: July 30, 1985

| ACTIVITY | COST |
|---|---|
| Final collection and storage of ALL in-plant hazardous waste<br>Met Lab<br>Degreasers<br>Maintenance<br>Tool Rooms<br>Cutter Grind<br>Painter's Crib<br>Jobsetter's Solvents | 132 |
| Clean-up and proper containerization of wastes in storage bldg. Equipment clean up. | 332 |
| Laboratory analysis to determine content and amounts. (Assume worst case of 1 drum containing an unknown number of misc. unknown solvents - average number of solvents is 2 to 15 different kinds) (Also assume average gas chromatograph - mass spectrophotometer charge by outside laboratory). (Also include rinsate of bldg. wash) | 2,644 |
| Preparation of shipping papers, manifests, labelling, marking. | 330 |
| Contractor disposes of waste in an environmentally sound and legal manner. (includes pickup and transportation only to Three Rivers facility for disposal with their waste) | 332 |
| Certification of closure by independent registered professional engineer | 661 |
| TOTAL COST | $4,431 |

# C.2 Compliance/ Enforcement

Plainwell District Headquarters
Box 355, Plainwell, Michigan 49080

August 25, 1987

Sandra Brewer, Environmental Engineer
GMC Hydramatic Division
One Hydramatic Drive
Three Rivers, Michigan 49093

Re: EPA ID #MID000718551

Dear Ms. Brewer:

On July 30, 1987, staff of the Department of Natural Resources conducted an inspection of your facility located in Three Rivers, Michigan, to evaluate compliance of that facility with requirements of Michigan's Hazardous Waste Management Act (Act 64, P.A. of 1979, as amended).

My inspection revealed that your facility was in compliance at the time of the inspection, with the specific requirements of Act 64 evaluated on the inspection report. Enclosed is a copy of the inspection report for your information.

In addition to this inspection, we also inspected your facility for compliance with the federal land disposal restrictions for F-solvent wastes. Your facility was determined to be in violation of those restrictions as follows: F-solvent wastes exceeding treatment standards were shipped to a disposal facility without providing the required written notification of the treatment standard. This is a violation of 40 CFR 268.7(a)(1).

Please respond in writing by September 25, 1987, documenting actions taken to correct this violation.

If you have any questions, please feel free to contact me at (616) 685-9886.

Sincerely,

Chuck Bikfalvy
Environmental Quality Analyst
Waste Management Division
Plainwell District

CB:ls

Enclosure

cc: U.S. EPA - Region V

1/03/85
YES
code D

Plainwell District Headquarters
Box 355, Plainwell, Michigan 49080

October 24, 1984

Jerry Timmer
Senior Environmental Engineer
G.M.C. - Hydramatic Division
No. 1 Hydramatic Drive
Three Rivers, Michigan 49093

Re: EPA ID # - MID 000718551
Three Rivers Facility

Dear Mr. Timmer:

On September 13, 1984, staff of the Department of Natural Resources conducted an investigation of your facility located in Three Rivers, Michigan, to evaluate compliance of that facility with requirements of Subtitle C of the Resource Conservation and Recovery Act (RCRA), as amended. The inspection revealed three instances of noncompliance which were communicated to you via a letter of warning dated October 2, 1984.

Based on your response dated October 3, 1984, we believe your facility has returned to compliance with the specific requirements evaluated in the inspection.

If you have any questions regarding this matter, please feel free to contact me at (616) 685-9886.

Sincerely,

Chuck Bikfalvy, Water Quality Specialist
Hazardous Waste Division
Plainwell Compliance District

CB:ls

cc: U.S. EPA - Region V
Bohunsky (C&E File)
Howard

MID 000 718 551

S. Johnson

HYDRA-MATIC

GES 12-13-84 Code A

Division of General Motors Corporation
One Hydra-matic Drive, Three Rivers, Michigan 49093

October 3, 1984

RECEIVED
OCT 10 1984
H.W.D. — PLAINWELL

Mr. Chuck Bikfalvy
Dept. of Natural Resources
Plainwell District Headquarters
P. O. Box 355
Plainwell, MI 49080

Dear Mr. Bikfalvy,

In response to your letter of October 2, 1984, pertaining to items found out of compliance with subtitle C of RCRA during your September 13, 1984, inspection of our Hydra-matic, Three Rivers Facility, the following describes the remedial actions taken to correct those items:

1). Our training policy has always been to provide timely annual reviews of training to all applicable facility personnel. The timeliness of our training will be more strictly enforced in the future.

2). The addresses for our second and third emergency coordinators have been added to the facility's Contingency Plan.

3). An estimated closure date of January 1, 2030, (based on the life expectancy of our facility's structures) has been written into the closure plan.

If you have any further questions, please contact me at (616) 278-0251.

Very truly yours,

Gerald K. Timmer
Sr. Environmental Engineer

GKT:sjc
cc: W. Collinson,
G. M. Environmental
Activities Staff

XC: EPA
Bohunsky (C+E File)
Howard

10-10-84

EPA

b 85 11/5/84 Status 5 Code X

Plainwell District Headquarters
Box 355, Plainwell, Michigan 49080

October 2, 1984

Jerry Timmer
Senior Environmental Engineer
GMC Hydramatic Division
No. 1 Hydramatic Drive
Three Rivers, Michigan 49093

Re: EPA ID # - MID 000718551
Three Rivers Facility

Dear Mr. Timmer:

On September 13, 1984, staff of the Department of Natural Resources, acting as representatives of the United States Environmental Protection Agency, conducted an investigation of your facility located in Three Rivers, Michigan, to evaluate compliance of that facility with requirements of Subtitle C of the Resource Conservation and Recovery Act (RCRA), as amended; Michigan's Hazardous Waste Management Act (P.A. 64 1979, as amended); and Michigan's Liquid Industrial Waste Hauling Act (P.A. 136 1969).

As a result of that investigation, staff of the Department have determined that the above facility is in violation of the requirements of Subtitle C of RCRA. Specifically, staff found:

1. Facility personnel have not taken part in the annual review of training required by 40 CFR 265.16, in that the training session conducted on August 3, 1984, was more than one year after the previous session of May 5, 1983.

2. The contingency plan did not include addresses of persons qualified to serve as emergency coordinator as required by 40 CFR 265.52(d).

3. The closure plan for the facility did not include the estimated year of closure as required by 40 CFR 265.112(a)(4).

We request that you respond to this letter by November 2, 1984, providing documentation to this office regarding those actions taken to correct these

continued...

violations. The Department of Natural Resources will forward your response to the United States Environmental Protection Agency with a recommendation regarding your facility's compliance status.

If you have any questions regarding this matter, please feel free to contact me at (616) 685-9886.

Sincerely,

Chuck Bikfalvy, Water Quality Specialist
Hazardous Waste Division
Plainwell Compliance Section

CB:ls

Enclosure

cc: U.S. EPA - Region V
Bohunsky (C&E File)
Howard

GMC
HYDRA-MATIC
Three Rivers
MID 000718551

Division of General Motors Corporation
One Hydra-matic Drive, Three Rivers, Michigan 49093

August 11, 1983

RECEIVED
AUG 15 1983
WATER QUALITY DIV.
DIST. I

Chuck Bikfalvy
Water Quality Specialist
Compliance Section
Hazardous Waste Division
9311 Groh Road
Grosse, Ile, MI 48138

Dear Mr. Bikfalvy:

Regarding the deficiency noted during the RCRA compliance inspection of our Hazardous Waste Storage Facility on June 22, 1983; this deficiency has been corrected.

The personnel responsible for inspecting the storage facility have been instructed to note date and time of inspection and the use of a modified inspection log that reflects this change has been implemented. Enclosed is a copy of the revised form now in use.

If you have any questions, regarding this matter, please feel free to contact the writer at (616) 278-0251.

Sincerely,

Jerry Timmer

Jerry Timmer
Sr. Environmental Eng.

Enc.

RECORD NO. _____

HYDRA-MATIC DIVISION

HAZARDOUS WASTES
OPERATING RECORD

INSPECTION LOG

A. Basic Checklist

(Additional Copies in the Env. Eng. Dept. "Solid Waste" File)

| ITEM | DATE _____ TIME ____ AM/PM | DATE _____ TIME ____ AM/PM | DATE _____ TIME ____ AM/PM | DATE _____ TIME ____ AM/PM |
|---|---|---|---|---|
| Fill Funnels in Good Condition | | | | |
| Grounding Equipment in Good Condition | | | | |
| Dike in Good Condition | | | | |
| Building in Good Condition | | | | |
| Danger & No Smoking Signs in Place | | | | |
| Drum Dolly in Good Condition | | | | |
| Stored Drums in Good Condition (No Leaks) | | | | |
| Fill Drums in Good Condition | | | | |
| Locks in Working Order | | | | |
| Fire Extinguisher Available and Charged | | | | |
| Nearest Emergency Telephone in Working Order | | | | |
| Spill Pump Available and in Working Order | | | | |
| Inspector | | | | |

B. Observations and Actions Taken

| DATE | COMMENTS | REPAIRS DONE |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

NOTE: Record time in AM or PM (Circle correct time of day)
Inspections are to be logged every week that this facility is manned. Report all discrepancies to Plant Engineering X-307 or X-251. Send all completed forms to S. Brewer each month.

INSPECTION FORM A

Section A: SCOPE OF INSPECTION.

1. Interim status standards for treatment storage or disposal of HAZARDOUS WASTES SUBJECT TO 40 CFR 265.1. Complete Inspection Form A sections B, C, D, E, and G.

2. Place an "X" in the box(es) corresponding to the facility's treatment, storage and disposal processes, and generation and/or transportation activity (if any). Complete only the applicable sections and appendixes.

| Permit application process(es) (EPA Form 3510-3) | | | Inspection Form A section(s) |
|---|---|---|---|
| S01 | [X] | storage in containers | I |
| S02 | [ ] | storage in tanks | J |
| T01 | [ ] | treatment in tanks | J |
| S04 | [ ] | storage in surface impoundment | K,F |
| T02 | [ ] | treatment in surface impoundment | K,F |
| D83 | [ ] | disposal in surface impoundment | K,F |
| S03 | [ ] | storage in waste pile | L |
| D81 | [ ] | disposal by land application | M,F |
| D80 | [ ] | disposal in landfill | N,F |
| T03 | [ ] | treatment by incineration | O/P |
| T04 | [ ] | treatment in devices other than tanks, surface impoundments, or incinerators | Q |

Other activities

| | | | |
|---|---|---|---|
| GENERATOR | [X] | APPENDIX | GN |
| TRANSPORTER | [ ] | APPENDIX | TR |

3. Indicate any hazardous waste processes, by process code, which have been omitted from Part A of the facility's permit application.

4. Indicate any hazardous waste processes (by process code and line number on EPA Form 3510-3 page 1 of 5) which appear to be eligible for exclusion per 40 CFR 265.1(c). Provide a brief rationale for the possible exclusion.

## Section B: GENERAL FACILITY STANDARDS: (Part 265 Subpart B)

| | YES | NO | NI* | Remarks |
|---|---|---|---|---|
| 1. Has the Regional Administrator been notified regarding: 265.12 | | | | |
| a. Receipt of hazardous waste from a foreign source? | | | ✓ | NA - NO CHANGES |
| b. Facility expansion? | | | | |
| c. Change of owner or operator? | | | | |
| 2. General Waste Analysis: 265.13 | | | | |
| a. Has the owner or operator obtained a detailed chemical and physical analysis of the waste? | ✓ | | | |
| b. Does the owner or operator have a detailed waste analysis plan on file at the facility? | ✓ | | | |
| c. Does the waste analysis plan specify procedures for inspection and analysis of each movement of hazardous waste from off-site? | ✓ | | | |
| 3. Security - Do security measures include: (if applicable) 265.14 | | | | |
| a. 24-Hour surveillance? | ✓ | | | |
| or | | | | |
| b. i. Artificial or natural barrier around facility? | ✓ | | | |
| and | | | | |
| ii. Controlled entry? | ✓ | | | |
| c. Danger sign(s) at entrance? | ✓ | | | |
| 4. Owner or operator inspections: 265.15 | | | | |
| a. Does the owner or operator inspect the facility for malfunctions, deterioration, operator errors, and dischanges of hazardous waste that may affect human health or the environment? | ✓ | | | |

*Not Inspected

| | YES | NO | NI | Remarks |
|---|---|---|---|---|
| b. Does the owner or operator have an inspection schedule at the facility? | ✓ | | | |
| c. If so, does the schedule address the inspection of the following items: | | | | |
| i. monitoring equipment? | ✓ | | | |
| ii. safety and emergency equipment? | ✓ | | | |
| iii. security devices? | | | | |
| iv. operating and structural equipment (i.e. dikes, pumps, etc.)? | ✓ | | | |
| v. type of problems to be looked for during the inspection (e.g. leaky fitting, defective pump, etc.)? | ✓ | | | |
| vi. inspection frequency (based upon the possible deterioration rate of the equipment)? | ✓ | | | |
| d. Are areas subject to spills inspected daily when in use? | ✓ | | | |
| e. Does the owner or operator maintain an inspection log or summary of owner or operator inspections? | ✓ | | | |
| f. Does the inspection log contain the following information: | | | | |
| i. the date and time of the inspection? | ✓ | | | |
| ii. the name of the inspector? | ✓ | | | INITIALS |
| iii. a notation of the observations made? | ✓ | | | |
| iv. the date and nature of any repairs or remedial actions? | ✓ | | | |
| 5. Do personnel training records include: 265.16 | | | | |
| a. Job titles? | ✓ | | | |
| b. Job descriptions? | ✓ | | | ON FILE IN PERSONNEL |

| | YES | NO | NI | Remarks |
|---|---|---|---|---|
| c. Description of training? | ✓ | | | |
| d. Records of training? | ✓ | | | |
| e. Did facility personnel receive the required training by 5-19-81? | | | ✓ | |
| f. Do new personnel receive required training within six months? | ✓ | | | |
| g. Do personnel training records indicate that personnel have taken part in an annual review of initital training? | ✓ | | | HOWEVER, WAS 1 GAP OF OVER 1 YEAR BETWEEN 5/5/83 - 8/3/84. |
| 6. If required, are the following special requirements for ignitable, reactive, or incompatible wastes addressed? 265.17 | | | | |
| a. Special handling? | ✓ | | | IGNITABLE |
| b. No smoking signs? | ✓ | | | |
| c. Separation and protection from ignition sources? | ✓ | | | BUILDING AND DRUMS GROUNDED |

## Section C: PREPAREDNESS AND PREVENTION: (Part 265 Subpart C)

| | YES | NO | NI | Remarks |
|---|---|---|---|---|
| 1. Maintenance and Operation of Facility: 265.31 | | | | |
| Is there any evidence of fire, explosion, or release of hazardous waste or hazardous waste constituent? | | ✓ | ~~NA~~ | NO INCIDENTS |
| 2. If required, does the facility have the following equipment: 265.32 | | | | |
| a. Internal communications or alarm systems? | ✓ | | | |
| b. Telephone or 2-way radios at the scene of operations? | ✓ | | | |
| c. Portable fire extinguishers, fire control, spill control equipment and decontamination equipment? | ✓ | | | |

Indicate the volume of water and/or foam available for fire control:

300,000 gallons and city water system

| | YES | NO | NI | Remarks |
|---|---|---|---|---|
| 3. Testing and Maintenance of Emergency Equipment: 265.33 | | | | |
| a. Has the owner or operator established testing and maintenance procedures for emergency equipment? | ✓ | | | COMPANY FIRE DEPT. TESTS + MAINTAINS REGULARLY |
| b. Is emergency equipment maintained in operable condition? | ✓ | | | |
| 4. Has owner or operator provided immediate access to internal alarms? (if needed) 265.34 | ✓ | | | |
| 5. Is there adequate aisle space for unobstructed movement? | ✓ | | | |
| 6. Has the owner or operator attempted to make arrangements with local authorities in case of an emergency at the facility? | ✓ | | | |

## Section D: CONTINGENCY PLAN AND EMERGENCY PROCEDURES: (Part 265 Subpart D)

| | YES | NO | NI | Remarks |
|---|---|---|---|---|
| 1. Does the Contingency Plan contain the following information: 265.52 | | | | |
| a. The actions facility personnel must take to comply with §265.51 and 265.56 in response to fires, explosions, or any unplanned release of hazardous waste? (If the owner has a Spill Prevention, Control, and Countermeasures (SPCC) Plan, he needs only to amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this Part (as applicable.) | ✓ | | | |
| b. Arrangements agreed by local police departments, fire departments hospitals, contractors, and State and local emergency response teams to coordinate emergency services pursuant to §265.37? | ✓ | | | |
| c. Names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinators? | ✓ | | | EXCEPT ADDRESSES OF 2ND AND THIRD COORDINATOR NOT LISTED, BUT AVAILABLE FROM SECURITY |
| d. A list of all emergency equipment at the facility which includes the location and physical description of each item on the list and a brief outline of its capabilities? | ✓ | | | |
| e. An evacuation plan for facility personnel where there is a possibility that evacuation could be necessary? (This plan must describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes?) | ✓ | | | |
| 2. Are copies of the Contingency Plan available at the site and local emergency organizations? 265.53 | ✓ | | | |

| | YES | NO | NI | Remarks |
|---|---|---|---|---|
| 3. Emergency Coordinator 265.55 | | | | |
| a. Is the facility Emergency Coordinator identified? | ✓ | | | |
| b. Is coordinator familiar with all aspects of site operation and emergency procedures? | ✓ | | | |
| c. Does the Emergency Coordinator have the authority to carry out the Contingency Plan? | ✓ | | | |
| 4. Emergency Procedures 265.56 | | | | |
| If an emergency situation has occurred at this facility, has the Emergency Coordinator followed the emergency procedures listed in 265.56? | | | ✓ | NA - NO EMERGENCY |

## Section E: MANIFEST SYSTEM, RECORDKEEPING, AND REPORTING: (Part 265 Subpart E)

| | YES | NO | NI | Remarks |
|---|---|---|---|---|
| ** 1. Use of Manifest System 265.71 | | | NA | |
| a. Does the facility follow the procedures listed in §265.71 for processing each manifest? (Particularly sending a copy of the signed manifest back to the generator within 30 days after delivery.) | | | | |
| b. Are records of past shipments retained for 3 years? | | | | |
| ** 2. Does the owner or operator meet requirements regarding manifest discrepancies? 265.72 | | | | |

** Not applicable to owners or operators of on-site facilities that do not receive any waste from off-site sources.

| | YES | NO | NI | Remarks |
|---|---|---|---|---|
| 3. Operating Record 265.73 | | | | |
| a. Does the owner or operator maintain an operating record as required in 265.73? | ✓ | | | |
| b. Does the operating record contain the following information: | | | | |
| i. The method(s) and date(s) of each waste's treatment, storage, or disposal as required in 40 CFR Part 265 Appendix I? | ✓ | | | |
| ii. The location and quantity of each hazardous waste within the facility? (This information should be cross-referenced to specific manifest number, if waste was accompanied by by a manifest.) | ✓ | | | |
| ***iii. A map or diagram of each cell or disposal area | | | | |

*** only applies to disposal facilities

| | YES | NO | NI | Remarks |
|---|---|---|---|---|
| showing the location and quantity of each hazardous waste? (This information should be cross-referenced to specific manifest number, if waste was accompanied by a manifest.) | | | | NA |
| iv. Records and results of all waste analyses, trial tests, monitoring data, and operator inspections? | ✓ | | | |
| v. Reports detailing all incidents that required implementation of the Contingency Plan? | | | | NA - NO INCIDENTS |
| vi. All closure and post closure costs as applicable? | | | | NA - NO CLOSURE |
| 4. Availability of Records 265.74 | | | | |
| Are all facility records required under 40 CFR Part 265 available for inspection? | ✓ | | | |
| 5. **Unmanifested Waste Reports 265.76 | | | | |
| a. Has the facility accepted any hazardous waste from an off-site generator subject to 40 CFR 262.20 without a manifest or or shipping paper? | | | | NA |
| b. If "a" is yes, provide the identity of the source of the waste and a description of the quantity, type, and date received for each unmanifested hazardous waste shipment. | | | | |

** Not applicable to owners or operators of on-site facilities that do not receive any hazardous from off-site sources.

## Section G - OSURE AND POST CLOSURE (Part 2 Subpart G)

| | YES | NO | NI | Remarks |
|---|---|---|---|---|
| 1 Closure 265.112 | | | | |
| a. Is the facility closure plan available for inspection? | | | | |
| b. Does the plan identify: | | | | |
| i. maximum extent unclosed during facility life? | ✓ | | | |
| ii. maximum hazardous waste inventory? | ✓ | | | |
| iv. estimated year of closure? | | ✓ | | DO NOT EXPECT TO CLOSE |
| v. schedule of closure activities? | ✓ | | | |
| c. Has closure begun? | | ✓ | | |
| *2. Post-Closure 265.118 | | | | |
| a. Is the post-closure plan available for inspection? | | | | NA |
| b. Does this plan contain: | | | | |
| i. description of groundwater monitoring activities and frequencies? | | | | |
| ii. description of maintenance activities and frequencies for | | | | |
| AA. integrity of cap, final cover, or containment structures, where applicable | | | | |
| BB. facility monitoring equipment | | | | |
| iii. name, address, and phone number of person or office to contact during post-closure care period? | | | | |
| c. Has the post-closure period begun? | | | | |
| d. Is the written post-closure cost estimate available? 265.144 | | | | |

*A. lies only to disposal facilities.

## Section I - USE AND MANGEMENT OF CONTAINERS (Part 265, Subpart I)

| | | YES | NO | NI | Remarks |
|---|---|---|---|---|---|
| 1. | Are containers in good condition? 265.171 | ✓ | | | |
| 2. | Are containers compatible with waste in them? 265.172 | ✓ | | | |
| 3. | Are containers managed to prevent leaks? 265.173 | ✓ | | | |
| 4. | Are containers stored closed? | ✓ | | | |
| 5. | Are containers inspected weekly for leaks and defects. | ✓ | | | |
| 6. | Are ignitable and reactive wastes stored at least 15 meters (50 feet) from the facility property line? (Indicate if waste is ignitable or reactive). 265.176 | ✓ | | | IGNITABLE |
| 7. | Are incompatible wastes stored in separate containers? (If not, the provisions of 40 CFR 265.17(b) apply). 265.177 | | | | |
| 8. | Are containers of incompatible waste separated or protected from each other by physical barriers or sufficient distance? | | | | |

Appendix GN

Section A: Scope

1. Complete this Appendix if the owner or operator of a TSD facility also generates hazardous waste that is subsequently shipped off-site for treatment, storage, or disposal.

Section B: MANIFEST REQUIREMENTS (Part 262, Subpart B)

| | YES | NO | NI | Remarks |
|---|---|---|---|---|
| (1) Does the operator have copies of the manifest available for review? 262.40 | ✓ | | | |
| (2) Examine manifests for shipments in past 6 months. Indicate approximate number of manifested shipments during that period. 1 | | | | |
| (3) Do the manifest forms examined contain the following information: (If possible, make copies of, or record information from, manifest(s) that do not contain the critical elements). 262.21 | | | | |
| a. Manifest document number? | ✓ | | | |
| b. Name, mailing address, telephone number, and EPA ID number of Generator | ✓ | | | |
| c. Name and EPA ID Number of Transporter(s)? | ✓ | | | |
| d. Name, address, and EPA ID Number Designated permitted facility and alternate facility? | ✓ | | | |
| e. The description of the waste(s) (DOT shipping name, DOT hazard class, DOT identification number)? | ✓ | | | |
| f. The total quantity of waste(s) and the type and number of containers loaded? | ✓ | | | |
| g. Required certification? | ✓ | | | |
| h. Required signatures? | ✓ | | | |

(4) Reportable exceptions 262.42

a. For manifests examined in (2) (except for shipments within the last 35 days), enter the number of manifests for which the generator has NOT received a signed copy from the designated facility within 35 days of the date of shipment. 0

b. For manifests indicated in (4a), enter the number for which the generator has submitted exception reports (40 CFR 262.42) to the Regional Administrator. 0

## Section C: PRE-TRANSPORT REQUIREMENTS (Part 262, Subpart C)

| | YES | NO | NI | Remarks |
|---|---|---|---|---|
| 1 Is waste packaged in accordance with DOT regulations? (Required prior to movement of hazardous waste off-site) 262.30 | ✓ | | | |
| 2. Are waste packages marked and labeled in accordance with DOT regulations concerning hazardous waste materials? (Required for movement of hazardous waste off-site) 262.31 262.32 | ✓ | | | |
| 3. If required, are placards available to transporters of hazardous waste? 262.33 | ✓ | | | |

4. On-site accumulation of generated hazardous wastes. A HWMF may accumulate hazardous waste it generates either (A) in its storage facility [265.1(b)] or (B) in accordance with 40 CFR 262.34 [see 265.1(c)(7)]. Option B restricts all accumulation to tanks and containers. If the installation elects option A, check this box [✓] and skip to Section D. If the installation elects option B, complete the following observations: See 40 CFR 262.34 January 11, 1982 Revision ONE DRUM ACCUMULATED IN PAINT SHOP UNTIL FULL, THEN TRANSFERRED TO STORAGE AREA

| | YES | NO | NI | Remarks |
|---|---|---|---|---|
| a. Is each container clearly marked with the start of accumulation date? | | | | |
| b. Have more than 90 days elapsed since the date inspected in (a)? | | | | |
| c. Do wastes remain in accumulation tanks for more than 90 days? | | | | |
| d. Is each container and tank labeled or marked clearly with the words "Hazardous Waste"? | | | | |

## Section D: - RECORDKEEPING AND REPORTING (Part 262, Subpart D)

| | YES | NO | NI | Remarks |
|---|---|---|---|---|
| 1. Are all test results and analyses needed for hazardous waste determinations retained for at least three years? 262.40 | ✓ | | | |

## Section E: - INTERNATIONAL SHIPMENTS (Part 262, Subpart E)

| | YES | NO | NI | Remarks |
|---|---|---|---|---|
| 1. Has the installation imported or exported Hazardous Waste? 262.50 | | ✓ | | |

(If answered Yes, complete the following as applicable.)

a. Exporting Hazardous waste; has a generator:

Status Code: X
Violations = 3
8/31/83 - dlw

NATURAL RESOURCES COMMISSION
JACOB A. HOEFER
ROBERT HOLMES
E. M. LAITALA
HILARY F. SNELL
PAUL H. WENDLER
HARRY H. WHITELEY

STATE OF MICHIGAN

JAMES J. BLANCHARD, Governor

**DEPARTMENT OF NATURAL RESOURCES**

STEVENS T. MASON BUILDING
BOX 30028
LANSING, MI 48909
HOWARD A. TANNER, Director
Hazardous Waste Division
9311 Groh Road
Grosse Ile, Michigan 48138

July 28, 1983

Jerry Timmer,
Senior Environmental Engineer
GMC Hydramatic Division
No. 1 Hydramatic Drive
Three Rivers, Michigan 49093

MID 000 718 551

Dear Mr. Timmer:

On June 22, 1983, I inspected your facility and your Constantine facility for compliance with Subtitle C of the Resource Conservation and Recovery Act (RCRA) of 1976, as amended. Your Three Rivers plant is a storage facility and generator of hazardous waste. Your Constantine facility was inspected by interview only, based on your information that it has not been involved in any hazardous waste activity so far. Copies of my inspection reports are enclosed.

Three Rivers: This plant was found to be generally in compliance except that your inspection log did not include the date and time of inspections conducted, as required by 40 CFR 265.15(d). Please correct this deficiency and respond in writing by August 29, 1983 documenting what action was taken.

Constantine: Since this facility has engaged in no hazardous waste activity so far, it is automatically in compliance and no response is needed.

If you have any questions regarding hazardous waste issues please do not hesitate to call at your convenience. Otherwise, I am looking forward to your letter by August 29.

Sincerely,

Chuck Bikfalvy

Chuck Bikfalvy
Water Quality Specialist
Compliance Section
Hazardous Waste Division

CB/sc
Enclosure
cc: EPA
Tom Leep
Division files
District files

R1026

RCRA Inspection Report

EPA Identification Number: M I D 0 0 0 7 1 8 5 5 1

Installation Name: GMC HYDRAMATIC DIV.

Location Address: NO 1 HYDRAMATIC DRIVE

City: THREE RIVERS State: MI 49093

Date of inspection: 6/22/83 Time of inspection (from) 11:45 (to) 12:55

| Person(s) interviewed | Title | Telephone |
|---|---|---|
| SANDY BREWER | ENV. ENG. | (616)278-0307 |
| JERRY TIMMER | SR. ENV. ENG | (616)278-0251 |
| NICK BOCK | WASTEWATER SUPV | (616)278-0427 |

| Inspector(s) | Agency/Title | Telephone |
|---|---|---|
| CHUCK BIKEALLY | MDNR/WATER QUAL. SPECIALIST | (313)675-0860 |
| | | |

Installation Activity (mark only one box) — Inspection Form(s)

- [x] Treatment/Storage/Disposal per 40 CFR 265.1 and/or Generation and/or Transportation — A
- [ ] Treatment/Storage/Disposal (no generation or Transportation) — A
- [ ] Generation and Transportation — B, C
- [ ] Generation only — B
- [ ] Transportation only — C

GENERATE + STORE ONLY

INSPECTION FORM A

Section A: SCOPE OF INSPECTION.

1. Interim status standards for treatment storage or disposal of HAZARDOUS WASTES SUBJECT TO 40 CFR 265.1. Complete Inspection Form A sections B, C, D, E, and G.

2. Place an "X" in the box(es) corresponding to the facility's treatment, storage and disposal processes, and generation and/or transportation activity (if any). Complete only the applicable sections and appendixes.

| Permit application process(es) (EPA Form 3510-3) | | | Inspection Form A section(s) |
|---|---|---|---|
| S01 | [X] | storage in containers | I |
| S02 | [ ] | storage in tanks | J |
| T01 | [ ] | treatment in tanks | J |
| S04 | [ ] | storage in surface impoundment | K,F |
| T02 | [ ] | treatment in surface impoundment | K,F |
| D83 | [ ] | disposal in surface impoundment | K,F |
| S03 | [ ] | storage in waste pile | L |
| D81 | [ ] | disposal by land application | M,F |
| D80 | [ ] | disposal in landfill | N,F |
| T03 | [ ] | treatment by incineration | O/P |
| T04 | [ ] | treatment in devices other than tanks, surface impoundments, or incinerators | Q |

Other activities

| | | | |
|---|---|---|---|
| GENERATOR | [X] | APPENDIX | GN |
| TRANSPORTER | [ ] | APPENDIX | TR |

3. Indicate any hazardous waste processes, by process code, which have been omitted from Part A of the facility's permit application.

NONE

4. Indicate any hazardous waste processes (by process code and line number on EPA Form 3510-3 page 1 of 5) which appear to be eligible for exclusion per 40 CFR 265.1(c). Provide a brief rationale for the possible exclusion.

ORIGINAL HAS BEEN AMENDED. HAVE S01 ONLY

## Section B: GENERAL FACILITY STANDARDS: (Part 265 Subpart B)

| | YES | NO | NI* | Remarks |
|---|---|---|---|---|
| 1. Has the Regional Administrator been notified regarding: 265.12 | | | | |
| a. Receipt of hazardous waste from a foreign source? | | | ✓ | NA - NO OUTSIDE WASTES BROUGHT IN |
| b. Facility expansion? | | | ✓ | NA - NO EXPANSION |
| c. Change of owner or operator? | | | ✓ | NO CHANGE |
| 2. General Waste Analysis: 265.13 | | | | |
| a. Has the owner or operator obtained a detailed chemical and physical analysis of the waste? | ✓ | | | |
| b. Does the owner or operator have a detailed waste analysis plan on file at the facility? | ✓ | | | |
| c. Does the waste analysis plan specify procedures for inspection and analysis of each movement of hazardous waste from off-site? | ✓ | | | |
| 3. Security - Do security measures include: (if applicable) 265.14 | | | | |
| a. 24-Hour surveillance? | ✓ | | | |
| or | | | | |
| b. i. Artificial or natural barrier around facility? | ✓ | | | |
| and | | | | |
| ii. Controlled entry? | ✓ | | | |
| c. Danger sign(s) at entrance? | ✓ | | | |
| 4. Owner or operator inspections: 265.15 | | | | |
| a. Does the owner or operator inspect the facility for malfunctions, deterioration, operator errors, and dischanges of hazardous waste that may affect human health or the environment? | ✓ | | | |

*Not Inspected

| | YES | NO | NI | Remarks |
|---|---|---|---|---|
| b. Does the owner or operator have an inspection schedule at the facility? | ✓ | | | |
| c. If so, does the schedule address the inspection of the following items: | | | | |
| i. monitoring equipment? | | | ✓ | NA – NO MONITORING EQUIPMENT |
| ii. safety and emergency equipment? | ✓ | | | |
| iii. security devices? | ✓ | | | |
| iv. operating and structural equipment (i.e. dikes, pumps, etc.)? | ✓ | | | |
| v. type of problems to be looked for during the inspection (e.g. leaky fitting, defective pump, etc.)? | ✓ | | | |
| vi. inspection frequency (based upon the possible deterioration rate of the equipment)? | ✓ | | | |
| d. Are areas subject to spills inspected daily when in use? | ✓ | | | |
| e. Does the owner or operator maintain an inspection log or summary of owner or operator inspections? | ✓ | | | |
| f. Does the inspection log contain the following information: | | | | |
| i. the date and time of the inspection? | | ✓ | | WEEK OF INSPECTION RECORDED, BUT NOT DATE & TIME |
| ii. the name of the inspector? | ✓ | | | INITIALS |
| iii. a notation of the observations made? | ✓ | | | |
| iv. the date and nature of any repairs or remedial actions? | ✓ | | | |

5. Do personnel training records include: 265.16

| | | | | |
|---|---|---|---|---|
| a. Job titles? | ✓ | | | |
| b. Job descriptions? | ✓ | | | |

| | YES | NO | NI | Remarks |
|---|---|---|---|---|
| c. Description of training? | ✓ | | | |
| d. Records of training? | ✓ | | | |
| e. Did facility personnel receive the required training by 5-19-81? | ✓ | | | |
| f. Do new personnel receive required training within six months? | ✓ | | | |
| g. Do personnel training records indicate that personnel have taken part in an annual review of initital training? | ✓ | | | |
| 6. If required, are the following special requirements for ignitable, reactive, or incompatible wastes addressed? 265.17 | | | | |
| a. Special handling? | ✓ | | | IGNITABLE |
| b. No smoking signs? | ✓ | | | |
| c. Separation and protection from ignition sources? | ✓ | | | DRUMS + STORAGE BUILDING GROUNDED |

## Section C: PREPAREDNESS AND PREVENTION: (Part 265 Subpart C)

| | YES | NO | NI | Remarks |
|---|---|---|---|---|
| 1. Maintenance and Operation of Facility: 265.31 | | | | |
| Is there any evidence of fire, explosion, or release of hazardous waste or hazardous waste constituent? | | ✓ | | NO INCIDENTS |
| 2. If required, does the facility have the following equipment: 265.32 | | | | |
| a. Internal communications or alarm systems? | ✓ | | | |
| b. Telephone or 2-way radios at the scene of operations? | ✓ | | | TELEPHONE |
| c. Portable fire extinguishers, fire control, spill control equipment and decontamination equipment? | ✓ | | | |

Indicate the volume of water and/or foam available for fire control:

300,000 GALLON STORAGE TANK. ALSO HAVE OWN FIRE BRIGADE

| | YES | NO | NI | Remarks |
|---|---|---|---|---|
| 3. Testing and Maintenance of Emergency Equipment: 265.33 | | | | |
| a. Has the owner or operator established testing and maintenance procedures for emergency equipment? | ✓ | | | COMPANY FIRE BRIGADE REGULARLY TESTS EQUIPMENT |
| b. Is emergency equipment maintained in operable condition? | ✓ | | | |
| 4. Has owner or operator provided immediate access to internal alarms? (if needed) 265.34 | ✓ | | | |
| 5. Is there adequate aisle space for unobstructed movement? | ✓ | | | |
| 6. Has the owner or operator attempted to make arrangements with local authorities in case of an emergency at the facility? | ✓ | | | |

## Section D: CONTINGENCY PLAN AND EMERGENCY PROCEDURES: (Part 265 Subpart D)

| | YES | NO | NI | Remarks |
|---|---|---|---|---|
| 1. Does the Contingency Plan contain the following information: 265.52 | | | | |
| a. The actions facility personnel must take to comply with §265.51 and 265.56 in response to fires, explosions, or any unplanned release of hazardous waste? (If the owner has a Spill Prevention, Control, and Countermeasures (SPCC) Plan, he needs only to amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this Part (as applicable.) | ✓ | | | |
| b. Arrangements agreed by local police departments, fire departments hospitals, contractors, and State and local emergency response teams to coordinate emergency services pursuant to §265.37? | ✓ | | | |
| c. Names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinators? | ✓ | | | |
| d. A list of all emergency equipment at the facility which includes the location and physical description of each item on the list and a brief outline of its capabilities? | ✓ | | | |
| e. An evacuation plan for facility personnel where there is a possibility that evacuation could be necessary? (This plan must describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes?) | ✓ | | | |
| 2. Are copies of the Contingency Plan available at the site and local emergency organizations? 265.53 | ✓ | | | |

| | YES | NO | NI | Remarks |
|---|---|---|---|---|
| 3. Emergency Coordinator 265.55 | | | | |
| a. Is the facility Emergency Coordinator identified? | ✓ | | | |
| b. Is coordinator familiar with all aspects of site operation and emergency procedures? | ✓ | | | |
| c. Does the Emergency Coordinator have the authority to carry out the Contingency Plan? | ✓ | | | |
| 4. Emergency Procedures 265.56 | | | | |
| If an emergency situation has occurred at this facility, has the Emergency Coordinator followed the emergency procedures listed in 265.56? | | | ✓ | NA - NO EMERGENCY |

## Section E: MANIFEST SYSTEM, RECORDKEEPING, AND REPORTING: (Part 265 Subpart E)

| | YES | NO | NI | Remarks |
|---|---|---|---|---|
| ** 1. Use of Manifest System 265.71 | | | | |
| a. Does the facility follow the procedures listed in §265.71 for processing each manifest? (Particularly sending a copy of the signed manifest back to the generator within 30 days after delivery.) | | | ✓ | NA |
| b. Are records of past shipments retained for 3 years? | | | | |
| ** 2. Does the owner or operator meet requirements regarding manifest discrepancies? 265.72 | | | ✓ | NA |

** Not applicable to owners or operators of on-site facilities that do not receive any waste from off-site sources.

| | YES | NO | NI | Remarks |
|---|---|---|---|---|
| 3. Operating Record 265.73 | | | | |
| a. Does the owner or operator maintain an operating record as required in 265.73? | ✓ | | | |
| b. Does the operating record contain the following information: | | | | |
| i. The method(s) and date(s) of each waste's treatment, storage, or disposal as required in 40 CFR Part 265 Appendix I? | ✓ | | | |
| ii. The location and quantity of each hazardous waste within the facility? (This information should be cross-referenced to specific manifest number, if waste was accompanied by by a manifest.) | ✓ | | | |
| ***iii. A map or diagram of each cell or disposal area | | | | |

*** only applies to disposal facilities

| | YES | NO | NI | Remarks |
|---|---|---|---|---|
| showing the location and quantity of each hazardous waste? (This information should be cross-referenced to specific manifest number, if waste was accompanied by a manifest.) | | | ✓ | NA |
| iv. Records and results of all waste analyses, trial tests, monitoring data, and operator inspections? | ✓ | | | |
| v. Reports detailing all incidents that required implementation of the Contingency Plan? | | | ✓ | NA |
| vi. All closure and post closure costs as applicable? | | | ✓ | NA |
| 4. Availability of Records 265.74 | | | | |
| Are all facility records required under 40 CFR Part 265 available for inspection? | ✓ | | | |
| 5.**Unmanifested Waste Reports 265.76 | | | | |
| a. Has the facility accepted any hazardous waste from an off-site generator subject to 40 CFR 262.20 without a manifest or or shipping paper? | | ✓ | ✓ | NA |
| b. If "a" is yes, provide the identity of the source of the waste and a description of the quantity, type, and date received for each unmanifested hazardous waste shipment. | | | | |

** Not applicable to owners or operators of on-site facilities that do not receive any hazardous from off-site sources.

## Section G CLOSURE AND POST CLOSURE (Part 265 Subpart G)

| | YES | NO | NI | Remarks |
|---|---|---|---|---|
| 1. Closure 265.112 | | | | |
| a. Is the facility closure plan available for inspection? | ✓ | | | |
| b. Does the plan identify: | | | | |
| i. maximum extent unclosed during facility life? | ✓ | | | |
| ii. maximum hazardous waste inventory? | ✓ | | | |
| iv. estimated year of closure? | ✓ | | | ADDRESSED IN PLAN, BUT LEFT OPEN ENDED |
| v. schedule of closure activities? | ✓ | | | |
| c. Has closure begun? | | ✓ | | |
| *2. Post-Closure 265.118 | | | | |
| a. Is the post-closure plan available for inspection? | | | ✓ | NA |
| b. Does this plan contain: | | | | |
| i. description of groundwater monitoring activities and frequencies? | | | | |
| ii. description of maintenance activities and frequencies for | | | | |
| AA. integrity of cap, final cover, or containment structures, where applicable | | | | |
| BB. facility monitoring equipment | | | | |
| iii. name, address, and phone number of person or office to contact during post-closure care period? | | | | |
| c. Has the post-closure period begun? | | | | |
| d. Is the written post-closure cost estimate available? 265.144 | | | | |

*Applies only to disposal facilities.

## Section I - USE AND MANGEMENT OF CONTAINERS (Part 265, Subpart I)

| | | YES | NO | NI | Remarks |
|---|---|---|---|---|---|
| 1. | Are containers in good condition? 265.171 | ✓ | | | |
| 2. | Are containers compatible with waste in them? 265.172 | ✓ | | | |
| 3. | Are containers managed to prevent leaks? 265.173 | ✓ | | | SECONDARY CONTAIN-MENT NOT |
| 4. | Are containers stored closed? | ✓ | | | |
| 5. | Are containers inspected weekly for leaks and defects. | ✓ | | | |
| 6. | Are ignitable and reactive wastes stored at least 15 meters (50 feet) from the facility property line? (Indicate if waste is ignitable or reactive). 265.176 | ✓ | | | |
| 7. | Are incompatible wastes stored in separate containers? (If not, the provisions of 40 CFR 265.17(b) apply). 265.177 | | | ✓ | NA - NO INCOMPATIBLE WASTES |
| 8. | Are containers of incompatible waste separated or protected from each other by physical barriers or sufficient distance? | | | ✓ | NA |

Section A: Scope

1. Complete this Appendix if the owner or operator of a TSD facility also generates hazardous waste that is subsequently shipped off-site for treatment, storage, or disposal.

Section B: MANIFEST REQUIREMENTS (Part 262, Subpart B)

| | YES | NO | NI | Remarks |
|---|---|---|---|---|
| (1) Does the operator have copies of the manifest available for review? 262.40 | ✓ | | | |
| (2) Examine manifests for shipments in past 6 months. Indicate approximate number of manifested shipments during that period. 2 | | | | |
| (3) Do the manifest forms examined contain the following information: (If possible, make copies of, or record information from, manifest(s) that do not contain the critical elements). 262.21 | | | | |
| a. Manifest document number? | ✓ | | | |
| b. Name, mailing address, telephone number, and EPA ID number of Generator | ✓ | | | |
| c. Name and EPA ID Number of Transporter(s)? | ✓ | | | |
| d. Name, address, and EPA ID Number Designated permitted facility and alternate facility? | ✓ | | | |
| e. The description of the waste(s) (DOT shipping name, DOT hazard class, DOT identification number)? | ✓ | | | |
| f. The total quantity of waste(s) and the type and number of containers loaded? | ✓ | | | |
| g. Required certification? | ✓ | | | |
| h. Required signatures? | ✓ | | | |

(4) Reportable exceptions 262.42

a. For manifests examined in (2) (except for shipments within the last 35 days), enter the number of manifests for which the generator has NOT received a signed copy from the designated facility within 35 days of the date of shipment. 0

b. For manifests indicated in (4a), enter the number for which the generator has submitted exception reports (40 CFR 262.42) to the Regional Administrator. NA

Section C: PRE-TRANSPORT REQUIREMENTS (Part 262, Subpart C)

| | YES | NO | NI | Remarks |
|---|---|---|---|---|
| 1 Is waste packaged in accordance with DOT regulations? (Required prior to movement of hazardous waste off-site) 262.30 | ✓ | | | |
| 2. Are waste packages marked and labeled in accordance with DOT regulations concerning hazardous waste materials? (Required for movement of hazardous waste off-site) 262.31 262.32 | ✓ | | | |
| 3. If required, are placards available to transporters of hazardous waste? 262.33 | ✓ | | | |

4. On-site accumulation of generated hazardous wastes. A HWMF may accumulate hazardous waste it generates either (A) in its storage facility [265.1(b)] or (B) in accordance with 40 CFR 262.34 [see 265.1(c)(7)]. Option B restricts all accumulation to tanks and containers. If the installation elects option A, check this box [✓] and skip to Section D. If the installation elects option B, complete the following observations: See 40 CFR 262.34 January 11, 1982 Revision

| | YES | NO | NI | Remarks |
|---|---|---|---|---|
| a. Is each container clearly marked with the start of accumulation date? | | | | |
| b. Have more than 90 days elapsed since the date inspected in (a)? | | | | |
| c. Do wastes remain in accumulation tanks for more than 90 days? | | | | |
| d. Is each container and tank labeled or marked clearly with the words "Hazardous Waste"? | | | | |

Section D: - RECORDKEEPING AND REPORTING (Part 262, Subpart D)

| | YES | NO | NI | Remarks |
|---|---|---|---|---|
| 1. Are all test results and analyses needed for hazardous waste determinations retained for at least three years? 262.40 | ✓ | | | INDEFINITELY |

Section E: - INTERNATIONAL SHIPMENTS (Part 262, Subpart E)

| | YES | NO | NI | Remarks |
|---|---|---|---|---|
| 1. Has the installation imported or exported Hazardous Waste? 262.50 | | ✓ | | |

(If answered Yes, complete the following as applicable.)

a. Exporting Hazardous waste; has a generator:

350 Ottawa Avenue, N. W.
Grand Rapids, Michigan 49503
Phone (616) 456-6232

May 7, 1982

Mr. Jerry Timmer
GMC Hydra-Matic Division
One Hydra-Matic Drive
Three Rivers, MI 49093

Dear Mr. Timmer:

On April 28, 1982, staff of the Department of Natural Resources conducted an investigation of your facility located at One Hydra-Matic Drive in Three Rivers, Michigan, to evaluate compliance of that facility with requirements of subtitle C of the Resource Conservation and Recovery Act (RCRA) as amended. The completed RCRA inspection form is enclosed.

As a result of that investigation, staff of the Department of Natural Resources have determined that the above facility is in compliance with the requirements of subtitle C of RCRA.

If you have any questions regarding this matter, please feel free to contact me at (616) 456-6232.

Sincerely,
WATER QUALITY DIVISION

Roger Przybysz

Roger Przybysz
Water Quality Specialist

RP:bjc

cc: Al Howard, OHWM (w/copy of form)
EPA Region V (w/copy of form)
John Bohunsky, Water Quality Div.

bjc

RECEIVED
MAY 14 1982
ACT 64

STATE IDENTIFICATION NUMBER
(If Applicable)

MID 000718551
EPA IDENTIFICATION NUMBER

RCRA INSPECTION REPORT - INTERIM STATUS STANDARDS
TREATMENT, STORAGE, AND DISPOSAL FACILITIES
Form A - General Facility Standards

## I. General Information:

(A) Facility Name: GMC HYDRA-MATIC DIV. THREE RIVERS MI

(B) Street: ONE HYDRA-MATIC DR.

(C) City: THREE RIVERS (D) State: MICHIGAN (E) Zip Code: 49093

(F) Phone: (616) 278-0246 (G) County: ST. JOSEPH

(H) Operator: GMC HYDRA-MATIC DIV.

(I) Street: ONE HYDRA-MATIC DR.

(J) City: THREE RIVERS (K) State: MICHIGAN (L) Zip Code 49093

(M) Phone: (616) 278-0246 (N) County: ST. JOSEPH

(O) Owner: GMC HYDRA-MATIC DIV.

(P) Street: ONE HYDRA-MATIC DR.

(Q) City: THREE RIVERS (R) State: MICHIGAN (S) Zip Code: 49093

(T) Phone: (616) 278-0246 (U) County: ST. JOSEPH

(V) Date of Inspection: 4/28/82 (W) Time of Inspection (From) 9:30AM (To) 12:00 Noon

(X) Weather Conditions: SUNNY

Rev. 1-26-81/J.B.

RECEIVED
MAY 14 1982
ACT 04

| (Y) Person(s) Interviewed | Title | Telephone |
|---|---|---|
| JERRY TIMMER | Sr. ENV. ENGINEER | (616) 278-0246 |
| SANDY SHELTON | ENV ENGINEER | (616) 278-0246 |
| | | |

| (Z) Inspection Participants | Agency/Title | Telephone |
|---|---|---|
| ROGER PRZYBYSZ | DNR/WATER QUAL. SPEC. | (616) 456-6232 |
| | | |
| | | |

(AA) Preparer Information

| Name | Agency/Title | Telephone |
|---|---|---|
| ROGER PRZYBYSZ | DNR/WATER QUAL. SPEC. | (616) 456-6232 |

## II. SITE ACTIVITY:

Complete sections I through VII for all treatment, storage, and/or disposal facilities. Complete the forms (in parenthesis) in section VIII corresponding to the site activities identified below:

(I) A. Storage and/or Treatment
1. Containers (I)
2. Tanks (J)
3. Surface Impoundments (K)
4. Waste Piles (L)

___ B. Land Treatment (M)

___ C. Landfills (N)

___ D. Incineration and/or Thermal Treatment (O and P)

___ E. Chemical, Physical, and Biological Treatment (Q)

Note: If facility is also a generator or transporter of hazardous waste complete sections IX and X of this form as appropriate.

## III. GENERAL FACILITY STANDARDS:
(Part 265 Subpart B)

| | Yes | No | NI* | Remark |
|---|---|---|---|---|
| (A) Has the Regional Administrator been notified regarding: | | | | |
| 1. Receipt of hazardous waste from a foreign source? | N/A | | | No Foreign Waste |
| 2. Facility expansion? | N/A | | | |
| (B) General Waste Analysis: | | | | |
| 1. Has the owner or operator obtained a detailed chemical and physical analysis of the waste? | ✓ | | | Known By Nature of Process |
| 2. Does the owner or operator have detailed waste analysis plan on file at the facility? | ✓ | | | |
| 3. Does the waste analysis plan specify procedures for inspection and analysis of each movement of hazardous waste from off-site? | ✓ | | | |
| (C) Security - Do security measures include: (if applicable) | | | | |
| 1. 24-Hour surveillance? | ✓ | | | |
| 2. Artificial or natural barrier around facility? | ✓ | | | |
| 3. Controlled entry? | ✓ | | | |
| 4. Danger sign(s) at entrance? | ✓ | | | |
| (D) Do Owner or Operator Inspections Include: | | | | |
| 1. Records of malfunctions? | ✓ | | | |
| 2. Records of operator error? | ✓ | | | Have not had Operator Error |
| 3. Records of discharges? | N/A | | | |

*Not Inspected

| | Yes | No | NI* | Remarks |
|---|---|---|---|---|
| 4. Inspection schedule: | ✓ | | | |
| 5. Safety, emergency equipment? | ✓ | | | |
| 6. Security devices? | ✓ | | | |
| 7. Operating and structural devices? | ✓ | | | |
| 8. Inspection log? | ✓ | | | |
| (E) Do personnel training records include: (Effective 5/19/81) | | | | |
| 1. Job Titles? | ✓ | | | |
| 2. Job Descriptions? | ✓ | | | |
| 3. Description of Training? | ✓ | | | |
| 4. Records of Training? | ✓ | | | |
| 5. Have facility personnel received required training by 5-19-81? | ✓ | | | |
| 6. Do new personnel receive required training within six months? | ✓ | | | |
| (F) If required are the following special requirements for ignitable, reactive, or incompatible wastes addressed? | | | | |
| 1. Special handling? | ✓ | | | |
| 2. No smoking signs? | ✓ | | | |
| 3. Separation and protection from ignition sources? | ✓ | | | |

*Not Inspected

## IV. PREPAREDNESS AND PREVENTION:
(Part 265 Subpart C)

(A) Maintenance and Operation of Facility:

1. Is there any evidence of fire, explosion, or release of hazardous waste or hazardous waste constituent? ✓

(B) If required, does the Facility have the Following Equipment:

1. Internal communications or alarm systems? ✓
2. Telephone or 2-way Radios at the scene of operations? ✓
3. Portable fire extinguishers, fire control, spill control equipment and decontamination equipment? ✓

Indicate the volume of water and/or foam available for fire control:

Units: 300,000 GALLON PRIVATE WATER STORAGE TANK WITH CITY OF THREE RIVER BACKUP OF 2.5 MGD

(C) Testing and Maintenance of Emergency Equipment:

1. Has the Owner or Operator established Testing and Maintenance Procedures for Emergency Equipment? ✓
2. Is Emergency Equipment maintained in Operable Conditions? ✓

(D) Has Owner or Operator Provided Immediate Access to Internal Alarms? (if needed) ✓

·Not Inspected

(E) Is there adequate aisle space for unobstructed movement? ✓

## V. CONTINGENCY PLAN AND EMERGENCY PROCEDURES: (Part 265 Subpart D)

| (A) Does the contingency Plan contain the following information: | Yes | No | NI* | Remarks |
|---|---|---|---|---|
| 1. The actions facility personnel must take to comply with §265.51 and 265.56 in response to fires, explosions, or any unplanned release of hazardous waste? (If the owner has a Spill Prevention, Control, and Counter-measures (SPCC) Plan, he needs only to amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this Part (as applicable.) | ✓ | | | |
| 2. Arrangements agreed to by local police departments, fire departments hospitals, contractors, and State and local emergency response teams to coordinate emergency services pursuant to §265.37? | ✓ | | | |
| 3. Names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinators? | ✓ | | | |
| 4. A list of all emergency equipment at the facility which includes the location and physical description of each item on the list and a brief outline of its capabilities? | ✓ | | | |
| 5. An evacuation plan for facility personnel where there is a possibility that evacuation could be necessary? (This plan must describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes?) | ✓ | | | |

*Not Inspected

| | Yes | No | NI* | Remarks |
|---|---|---|---|---|
| (b) Are copies of the Contingency Plan Available at Site and local Emergency Organizations? | ✓ | | | |
| (C) Emergency Coordinator | | | | |
| 1. Is the facility Emergency Coordinator identified? | ✓ | | | |
| 2. Is coordinator familiar with all aspects of site operation and emergency procedures? | ✓ | | | |
| 3. Does the Emergency Coordinator have the authority to carry out the Contingency Plan? | ✓ | | | |
| (D) Emergency Procedures | | | | |
| If an emergency situation has occurred at this facility, has the Emergency Coordinator followed the emergency procedures listed in 265.56? | | | | HAS NOT OCCURRED |

## VI. MANIFEST SYSTEM, RECORDKEEPING, AND REPORTING
(Part 265 Subpart E)

| | Yes | No | NI* | Remarks |
|---|---|---|---|---|
| (A) Use of Manifest System | | | | |
| 1. Does the facility follow the procedures listed in §265.71 for processing each Manifest? | ✓ | | | |
| 2. Are records of past shipments retained for 3 years | ✓ | | | |
| (B) Does the owner or operator meet requirements regarding Manifest Discrepancies? | ✓ | | | HAVE NOT HAD ANY DISCREPANCIES |

*Not Inspected

(b) Operating Record

| | | | |
|---|---|---|---|
| 1. Does the owner or operator maintain an operating record as required in 265.73? | ✓ | | |
| 2. Does the operating record contain the following information: | | | |
| **b. The method(s) and date(s) of each wastes treatment, storage, or disposal as required in Appendix I? | ✓ | | |
| c. The location and quantity of each hazardous waste within the facility? | ✓ | | |
| ***d. A map or diagram of each cell or disposal area showing the location and quantity of each hazardous waste? (This information should be cross-referenced to specific manifest numbers if waste was accompanied by a manifest.) | N/A | | STORAGE ONLY |
| e. Records and results of all waste analyses, trial tests, monitoring data, and operator inspections? | ✓ | | |
| f. Reports detailing all incidents that required implementation of the contingency plan? | N/A | | NO INCIDENTS HAVE OCCURRED |
| g. All closure and past closure costs as applicable? (Effective 5-19-81) | N/A | | |

** See page 33252 of the May 19 , 1980, Federal Register.

*** Only applies to disposal facilities

*Not Inspected

## VIII. CLOSURE AND POST CLOSURE
(Part 265 Subpart G)

| | Yes | No | NI* | Remarks |
|---|---|---|---|---|
| (A) Closure and Post Closure | | | | |
| 1. Closure Plan Available for Inspection by May 19, 1981? | ✓ | | | |
| 2. Has this plan been submitted to the Regional Administrator | ✓ | | | |
| 3. Has Closure begun? | | ✓ | | |
| 4. Is closure estimate available by May 19, 1981? | ✓ | | | |
| (B) Post Closure Care and Use of Property | | | | |
| Has the Owner or Operator supplied a Post Closure Monitoring Plan (by May 19, 1981)? | | | | N/A |

## IX. FACILITY STANDARDS
(Part 265, Subparts I thru R)

### I
### USE AND MANAGEMENT OF CONTAINERS

Facility Name: _____ Date of Inspection: _____

| | Yes | No | NI* | Remarks |
|---|---|---|---|---|
| 1. Are containers in good condition? | ✓ | | | |
| 2. Are containers compatible with waste in them? | ✓ | | | |
| 3. Are containers stored closed? | ✓ | | | |
| 4. Are containers managed to prevent leaks? | ✓ | | | |
| 5. Are containers inspected weekly for leaks and defects? | ✓ | | | |
| 6. Are ignitable & reactive wastes stored at least 15 meters (50 feet) from the facility property line? | ✓ | | | Indicate if waste is: ☒ Ignitable, ☒ Reactive |

*Not Inspected

| | Yes | No | NI* | Remarks |
|---|---|---|---|---|
| 7. Are incompatible wastes stored in separate containers? (If not, the provisions of 40 CFR 265.17(b) apply.) | | | | N/A No incompatible wastes |
| 8. Are containers of incompatible wastes separated or protected from each other physical barriers or sufficient distance? | | | | N/A " " " " |

J
TANKS

Facility Name: _____ Date of Inspection: _____

| | Yes | No | NI* | Remarks |
|---|---|---|---|---|
| 1. Are tanks used to store only those wastes which will not cause corrosion, leakage or premature failure of the tank? | | | | |
| 2. Do uncovered tanks have at least 60 cm (2 feet) of freeboard, or dikes or other containement structures? | | | | |
| 3. Do continuous feed systems have a waste-feed cutoff? | | | | |
| 4. Are waste analyses done before the tanks are used to store a substantially different waste than before? | | | | |
| 5. Are required daily and weekly inspections done? | | | | |
| 6. Are reactive & ignitable wastes in tanks protected or rendered non-reactive or non-ignitable? (If waste is rendered non-reactive or non-ignitable, see treatment requirements.) | | | | Indicate if waste is: ☐ Ignitable ☐ Reactive |
| 7. Are incompatible waste stored in separate tanks? (If not, the provisions of 40 CFR 265.17(b) apply.) | | | | |

*Not Inspected

| | Yes | No | NI* | Remarks |
|---|---|---|---|---|
| 3. Has the owner or operator addressed the waste analysis requirements of 265.402? | | | | |
| 4. Are inspection procedures followed according to 265.403? | | | | |
| 5. Are the special requirements fulfilled for ignitable or reactive wastes? | | | | |
| 6. Are incompatible wastes treated? (If yes, 265.17(b) applies.) | | | | |

Note: EPA has temporarily suspended the applicability of the requirements of the hazardous waste regulations in 40 CFR Parts 122, 264 and 265 to owners and operators of (1) wastewater treatment tanks that receive, store, and treat wastewaters that are hazardous waste or that generate, store or treat a wastewater treatment sludge which is a hazardous waste where such wastewaters are subject to regulation under Sections 402 or 307(b) of the Clean Water Act (33 U.S.C. 1251 et seq.) and (2) neutralization tanks, transport vehicles, vessels, or containers which neutraliz wastes which are hazardous only because they exhibit the corrosivity characteristic under 40 CFR §261.22 or are listed as hazardous wastes in Subpart D of 40 CFR Part 261 only for this reason.

## IX

Complete this section if the owner or operator of a TSD facility also generates hazardous waste that is subsequently shipped off-site for treatment, storage, or disposal.

### 1. MANIFEST REQUIREMENTS

| | Yes | No | NI* | Remarks |
|---|---|---|---|---|
| (A) Does the operator have copies of the Manifest available for review? | ✓ | | | |
| (B) Do the Manifest forms reviewed contain the following information: (If possible, make copies of/or record information from, manifest(s) that do not contain the critical elements) | | | | |
| 1. Manifest document number? | ✓ | | | NF 002 7825 |
| 2. Name, mailing address, telephone number, and EPA ID Number of Generator | ✓ | | | MID 000 718 551 |

| | Yes | No | NI* | Remarks |
|---|---|---|---|---|
| 3. Name and EPA ID Number of Transporter(s)? | ✓ | | | THOMAS SOLVENTS Co. BATTLE CREEK MID 039993402 |
| 4. Name, address, and EPA ID Number of Designated permitted facility and alternate facility? | ✓ | | | CHEMICAL RECOVERY SYSTEMS MID 060975844 |
| 5. The description of the waste(s) (DOT shipping name, DOT hazard class, DOT identification number)? | ✓ | | | M.L. - TRICHLOROETHANE UN - 1993 ORM-A |
| 6. The total quantity of waste(s) and the type and number of containers loaded? | ✓ | | | 275 GAL. - 5 DRUMS |
| 7. Required Certification? | ✓ | | | |
| 8. Required Signatures? | ✓ | | | |
| (C) Does the Owner or Operator Submit Exception Reports when Needed? | ✓ | | | |

## 2. PRE-TRANSPORT REQUIREMENTS

| | | | | |
|---|---|---|---|---|
| (A) Is waste packaged in accordance with DOT Regulations? (Required prior to movement of hazardous waste off site) | ✓ | | | |
| (B) Are waste packages marked and labeled in accordance with DOT Regulations concerning hazardous waste materials? (Required to movement of hazardous waste off site) | ✓ | | | |
| (C) If required, are placards available to transfer? | ✓ | | | |

Omit Section 3 if the facility has interim status and its Part A permit application describes storage

## 3. On Site Accumulation

| | Yes | No | NI* | Remarks |
|---|---|---|---|---|
| 1. Are containers marked with start of accumulation date? | | | | |
| 2. Are the containers of hazardous waste removed from installation before they can accumulate for more than 90 days | | | | |
| 3. Are wastes stored in containers managed in accordance with 40 CFR Part 265.174 and 265.176 (weekly inspections of containers, containers holding ignitable or reactive wastes located at least 15 meters (50 Feet) from facility's property line? | | | | |
| 4. If wastes are stored in tanks, are the tanks managed according to the following requirements? | | | | |
| a. Are tanks used to store only those wastes which will not cause corrosion leakage or premature failure of the tank? | | | | |
| b. Do uncovered tanks have at least 60 cm (2 feet) of freeboard, dikes, or other containment structures? | | | | |
| c. Do continous feed systems have a waste-feed cutoff? | | | | |
| d. Are required daily and weekly inspections done? | | | | |
| e. Are reactive & ignitable wastes in tanks protected or rendered non-reactive or non-ignitable? (If waste is rendered non-reactive or non-ignitable, see treatment requirements? | | | | |
| f. Are incompatible wastes stored in separate tanks? (If not, the provisions of 40 CFR §265.17(b) apply) | | | | |



*Not Inspected

## VI. RECORDKEEPING and REPORTING
(Part 262, Subpart D)

| | Yes | No | NI* | Remarks |
|---|---|---|---|---|
| (A) Are Manifests, Annual Reports, Exception Reports, and all test results and analyses retained for at least three years? | ✓ | | | |
| (B) Has the Generator submitted Annual Reports and Exception Reports as required? | | | | N/A |

## VII. INTERNATIONAL SHIPMENTS
(Part 262, Subpart E)

| | Yes | No | NI* | Remarks |
|---|---|---|---|---|
| (A) Has the installation imported or exported Hazardous Waste? | | ✓ | | |

(If A was answered Yes, then complete the following as applicable.)

| | Yes | No | NI* | Remarks |
|---|---|---|---|---|
| 1. Exporting Hazardous waste, has a generator: | | | | |
| a. Notified the Administrator in writing? | | | | |
| b. Obtained the signature of the foreign consignee confirming delivery of the waste(s) in the foreign country? | | | | |
| c. Met the Manifest requirements? | | | | |
| 2. Importing Hazardous Waste, has the generator: | | | | |
| a. Met the manifest requirements? | | | | |

*Not Inspected

HYDRA-MATIC

Division of General Motors Corporation Ypsilanti, Michig

MIT 270012560
MID 005350811
MID000724740
MID000718551
MID005350195 6, TSD PA

December 21, 1982

RECEIVED
DEC 27 1982
WASTE MANAGEMENT BRANCH
EPA, REGION V

Administrator, EPA Region V
P.O.Box 7861
Chicago, Illinois 60680

Dear Sir:

Please find enclosed a revised copy of the signitory authority delegation letter for Hydra-matic Division of General Motors Corporation concerning the Consolidated Permit Program, 40 CFR Part 122, Section 122.6. The previously submitted authority delegation has been revised due to changes in the Division's organizational structure. Please update your files to indicate the current authority delegation.

H. L. Hopkinson
Supv. Environmental Engineering

njr

HYDRA-MATIC Division of General Motors Corporation

Inter-Organizational

Date: December 10, 1982

Subject: Delegation of Authority to Sign Reports Under EPA Consolidated Permit Program

To:

Address: General Manufacturing Manager, Ypsilanti, MI

As required under Environmental Protection Agency Consolidated Permit Regulations, Part 122, Section 122.6, the position of General Manufacturing Manager, Ypsilanti, is hereby designated as my duly authorized representative for Hydra-matic Division, all plant locations. As such, the General Manufacturing Manager is authorized to sign all reports required by permits, other information requested by the Director, and all permit applications submitted for Class II wells under Section 122.38 for the Underground Injection Control Program.

In the absence of the General Manufacturing Manager due to vacation, illness, or other reasons, the person temporarily responsible for the operation of the facility or activity is my duly authorized representative.

G. W. Griffith
General Manager

njr

cc: Administrator, EPA Region V
Director, Michigan Department of Natural Resources

General Motors Parts Division
General Motors Corporation

# Inter-Organization Letter

MID 000 718 551
G TSD PA

To See Below — Location

From Mr. J. W. Cagle — Location

Subject Delegation of Authority to Sign Reports Under EPA Consolidated Permit Programs — Date March 24, 1981

TO: All Parts Plant Managers
All P.D.C. Managers
All Truck and Coach Managers

As required under Environmental Protection Agency Consolidated Permit Programs, Part 122, Section 122.6, the position of Plant Manager is hereby designated as my duly authorized representative for your facility. As such, the Plant Manager is authorized to sign all reports required by permits, and other information requested by the EPA Regional Administrator and/or the State/Local Program Director.

In the absence of the person occupying the designated position due to vacation, illness, or other reasons, the person temporarily responsible for the operation of the facility or activity is my duly authorized representative.

Any questions should be directed to the Environmental Control Group - Flint Central Office.

J. W. Cagle
General Manager
General Motors Warehousing and Distribution Division

JWC/vp

cc: EPA Regional Administrator

## D. Corrective Action

**United States Environmental Protection Agency**
**Region 5**

**Date:** May 9, 2002

**Subject:** Review of Region 5 Files on General Motors Corporation Facility (Now Known as American Axle & Manufacturing, Inc.), Three Rivers Michigan - MID 000 718 551

**From:** Gale R. Hruska
Corrective Action Project Manager

**To:** GMC Three Rivers Facility/American Axle & Manufacturing, Inc. Files

## Introduction

This facility file review is done to address the need for corrective action at this high priority, non-GPRA facility. The Company changed ownership from GMC to AA&M in 1994, but the only information we have related to this in the files is an updated notification of hazardous waste activity, in which AA&M identifies itself as a small quantity generator. The Company apparently is continuing the last GM activities, as was evidenced by viewing its web site during my review. GM owned the property from 1980 until the sale to AA&M. Everything in our files relevant to releases of hazardous wastes and constituents dates from the time GM owned and operated the facility. Therefore, in this memo everything discussed will only refer to GM operations, unless otherwise specified. (GM bought the facility from Continental Can Corporation. Nothing is known about their operations.)

## General Information

| | |
|---|---|
| **Facility Name:** | American Axle & Manufacturing, Inc.<br>(Formerly GM Hydramatic Division and GM Saginaw Division) |
| **Address:** | One Manufacturing Drive<br>Three Rivers, Michigan 49032 |
| **Telephone:** | (616) 278-0211 [2002 telephone number from internet]<br>(616) 278-0251 [Jerry Timmer - Contact in 1994] |
| **U.S. EPA ID No.** | MID 000 718 551 |

GM purchased this property from Continental Can sometime prior to the original 1980 notification date. No information is known about Continental's operations. From 1980 to 1990,

GM manufactured automotive transmission systems at this facility, then known as the Hydra-Matic Division. Their Part A Permit Application identified a 10,000 gallon container storage capacity for RCRA-regulated hazardous wastes. They identified paint wastes and solvents (FOO1 - F003, F005, D001, D002, and several P- and U- listed wastes), as well as a number of non-hazardous wastes, as being generated. In 1988, Michigan DEQ (then MDNR) approved a closure plan for the container storage area. This plan appears to have been implemented, but there is no information in our files specifically certifying the closure was formally completed. (See SWMU 17 write up below.)

In 1990, the facility changed operations, and its name was changed to the Saginaw Division. The operations of this new division were similar to the Hydra-Matic Division operations, in that it manufactured vehicle drive shafts. The RCRA closure operations identified in the previous paragraph must have been completed at least by May of 1990, when a revised notification form was received, identifying the facility as a 100 - 1,000 kg/mo. generator submitted and presumably approved. The wastes identified in the revised notification were virtually identical to those previously identified.

In 1994, a revised notification form was received, identifying American Axle & Manufacturing as the new owner. They also identified their status as a 100 - 1,000 kg/mo. generator. The wastes generated were listed as: F002, F003, F005, and D001-D004. I checked the internet, and it appears that AA&M are still in operation at the Three Rivers Site today.

The GM Part A application contains a topographical map of the region. It shows the facility property (130 acres) as a narrowish parcel of land bordering the town of Three Rivers, MI, which is located to the south and east of the facility. The bordering areas appear to be residential on the south end and business/commercial on the east border. Along the western border is the Rocky River, which one would suppose would be the receptor for any surface run-off or groundwater contamination. Most of the land to the west seems to be unused. (Note: The USGS map is dated 1972, and could be seriously out of date.)

The Part A application provides the locations of hazardous waste activities circa 1980. It shows heat treating and vapor degreasing operations located inside of the manufacturing building. Outside in a small area are a series of storage tanks, a small container storage area, and a wastewater treatment facility. Photographs show: The buildings were relatively new at that time; The tanks were all USTs; The container storage area was a concrete pad; and The entire area appears to be very clean.

State enforcement inspection forms in our files dating from 1982 through 1987 show no serious problems. All of the violations seem to be minor paperwork infractions.

**Preliminary Assessment/Visual Site Inspection (PA/VSI)**

Almost everything we know about the facility with respect to the need for corrective action is found in a PA/VSI report done for the U.S. EPA (Preliminary Assessment/Visual Site Inspection - General Motors Corporation, Three Rivers Facility, Three Rivers Michigan - MID 000 718 551 - Final Report (dated December 11, 1992). This report identifed 18 SWMUs and 3 AOCs. It was done while GM still owned and operated the facility, and does not address AA&M operations.

In addition to the information I found in our files which I discussed previously in this memo, the PA/VSI found information in the MDEQ files that a closure inspection for the container storage area was conducted in April of 1988, and the closure itself was approved in September 1988. Nothing is mentioned as to whether or not there was a final closure report.

Wastes generated at the facility at the time of the PA/VSI were paint related wastes containing solvents (MEK, F003, F005, D001, D035), and various non-hazardous wastes (paint filters, wastewater, treatment sludge, grinder sludge, scrap metal, oil sludge, etc.). Wastes generated by GM prior to the various notifications and the Part A application identified the same basic waste codes.

Eighteen SWMUs and 3 AOCs were identified in the PA/VSI:

| SWMU | Description |
|---|---|
| 1. | Scrap Metal Gondolas. There were estimated to be up to 150 metal gondolas around the facility. Scrap metal was stored in them prior to transportation to the scrap metal shredder. They were judged to be in good condition. No releases from them have been documented. The PA/VSI recommends no further action. |
| 2. | Scrap Metal Collection Areas. These are two indoor docking areas adjacent to the scrap metal shredders. Open top dump trucks are stationed there to collect the shredded metal directly from the shredder for off-site recycling. Floor drains collect any liquids, which are sent to the WWTP. At the time of the PA/VSI no releases had been reported and the concrete floor was in good condition. The PA/VSI recommends no further action. |
| 3. | Grinder Sludge Gondola. This unit is used to manage non-hazardous grinder sludge prior to off-site disposal. It consists of a 1 cubic yard steel container on wheels, which is located indoors. Any liquid spilled would go into floor drains and would go to the WWTP. No releases have been documented, and the PA/VSI recommends no further action. |
| 4. | Grinder Sludge Roll-Off Area. This is an in-ground tank used to manage non-hazardous grinder sludge (grinding fines and some oil residues). A steel tank with a screened bottom collects grinder sludge. The non-liquid material is caught by |

the screen, while any liquid in the sludge drains into a concrete sump, from which it is pumped to the WWTP. At the time of the PA/VSI, the concrete in the sump area appeared to be in good condition. The PA/VSI recommended no further action.

5. Steel Peed Gondola. This is yet another steel, 4-wheeled 1 cubic yard container. It is used to contain waste steel peed granules, which is the material used to "shot blast" metal (sort of equivalent to metal grinding). The peed material is nonhazardous. There have been no reported releases from this unit, and the PA/VSI recommends no further action.

6. Weld Slag Drums. These are 2 55-gallon drums which sit on the floor in the manufacturing building. They are part of a welding operation, and are attached to the welding booth. They collect the slag from the welding operations. There have been no reported releases and the PA/VSI recommends no further action.

7. Paint Room Bucket. This is a lidded 10-gallon steel bucket in which paint waste from maintenance painting operations is disposed. It is located indoors. There have been no known releases from this unit, and the PA/VSI recommends no further action.

8. Former Metal Lab Satellite Accumulation Area. This SWMU consists of 2 steel cabinets located inside the building, which are used to store wastes generated in the metal/prototype laboratory. The cabinets each held 1 55-gallon drum and 2 5-gallon containers. The units had not been used since 1990. No releases from them have been identified, and the PA/VSI recommends no further acion.

9. Steam Booth Catch Basin. This is a unit which manages non-hazardous oil sludge generated by steam cleaning operations. It is a 900 cubic foot concrete pit located beneath the steam cleaning booth. It is covered by a steel grate. The sludge is put in containers for treatment/disposal off-site. While the condition of the bottom of the pit was not observed, the PA/VSI did say that the above ground portion of the pit looked to be in good shape. It recommended no further action.

10. Coal Pad and Run-Off Lagoon. The coal pad is a 10,000 square foot concrete pad on which coal used to fire boilers is stored. Run-off from the pad is directed to an adjacent 960 cubic foot capacity concrete surface impoundment. Pictures of the SWMU indicate that it was in good condition at the time of the PA/VSI. No releases from the SWMU have been documented. The PA/VSI recommends no further action.

11. Wastewater Treatment System. This SWMU incorporates the facility's wastewater treatment process. It consists primarily of 4 covered inground

concrete tanks. The principle treatment consists of a DAF system to de-emulsify soluble oils in the wastewater. The 4 holding tanks are made of epoxy-coated concrete. The wastewater is non-hazardous and the treated water is sent to the Three Rivers WTP. The PA/VSI included the observation that WWTS appeared to be in good shape, and that no releases have been documented. It recommended no further action.

12. Stormwater Treatment System. This SWMU is a 7 million gallon retention basin which collects stormwater run-off from the facility. The only contaminants that would be expected in the water would be petroleum constituents from the parking lot. The retention basin is constructed of concrete and is lined with some sort of fabric liner. Treatment of the water consists of removal of any solids, after which it is discharged to the Rocky River. The sludge is disposed off-site. No releases from this SWMU have been documented, and the PA/VSI recommends no further action.

13. Former Treatment Sludge UST Area. This is an area immediately east of the Waste Water Treatment System building. At one time, 4 12,000-gallon fiberglass USTs were located there. They were used to store non-hazardous sludges from the wastewater and stormwater treatment systems. In 1990, 3 of the tanks had been removed, and a fourth was expected to be closed in place. Sampling in the soils had detected some low levels of lead and chromium, but the concentrations appear to have been at least an order of magnitude below Region 5. Screening levels. According to the report, MDEQ was going to meet with the company to discuss the requirements for finalizing closure. For some unknown reason the PA/VSI identifies a high potential for soil and groundwater contamination. However, it does not provide any supporting reason for this determination, while the facts as presented suggest only minor (if even any) contamination. It recommends complying with the MDEQ final determinations. I assume that by this time, MDEQ has approved closure (although I am sure that this would not be a RCRA closure). I will contact MDEQ to find out exactly how this closure was resolved.

14. Treatment Sludge ASTs. Two 10,000-gallon aboveground fiberglass storage tanks are located within the wastewater treatment building on a diked concrete pad. They are used to temporarily store sludges from the stormwater and wastewater treatment systems. No releases from the tanks have been documented. It the photos, the tanks look clean and in good condition. The PA/VSI recommends no further action.

15. Outdoor Roll-Off Area. This SWMU is an outdoor concrete pad with roof under which a roll-off box is located. The pad is curbed and sloped to a run-off sump. It is used to manage non-hazardous wastes such as paint filters, construction

debris, damaged products, etc.) for off-site disposal or reclamation. No releases have been documented at this unit, and the PA/VSI recommends no further action.

16. Coal Ash Silo. This is an aboveground steel silo used prior to 1990 to store coal ash from the facility boiler operations. The silo sits above the ground on a steel frame, which allowed dump trucks to be gravity loaded with the fly ash for disposal. The area looks clean in the pictures, and there have been no documented releases from the unit. The PA/VSI recommends no further action.

17. Hazardous Waste Storage Building. This was/is the only RCRA-regulated unit at the facility. It is a 15' by 20' steel building with a bermed and sloped concrete floor leading to a sump. It was used for container storage of hazardous wastes. It went through RCRA closure in 1988, which was approved by MDEQ. At the time of the PA/VSI it was being used for product storage, but was expected to eventually be used as generator-regulated storage area for hazardous wastes. The wastes managed in the unit were basically the same hazardous wastes previously identified in this memo - spent solvents. The PA/VSI visit found the building and the concrete pad to be in good condition. No spills have been documented at the unit. The PA/VSI recommends no further action.

18. Oil Storage Barn. This is a 150' by 50' steel building with a bermed concrete floor and no floor drains. Drums of product oils and non-hazardous oil sludges are stored here. The VSI and pictures indicate the concrete to be in good condition. No releases have been documented, and the PA/VSI report recommends no further action.

AOC

1. UST Area A. This is an area between the WWTS and the Manufacturing Building at which there were 10 30,000-gallon steel underground tanks. They were used to store mineral spirits, oils, lubricants, soap, and transmission fluid. They were constructed in 1979, and were removed in 1990. During removal, visible contamination was observed, although it is not stated which tank(s) were determined/suspected of causing the releases. The removal of 5,000 cubic yards of visibly contaminated soil was removed. After verification sampling indicated the continuing presence of hazardous constituents, more soil was excavated. [Note: It is not known whether the sampling analysis included PCBs as constituents, and it appears that there was no groundwater monitoring.] At the time of the PA/VSI, MDEQ was overseeing the remediation, and had scheduled a meeting to discuss the completion of remediation. (GMC had apparently sent in a subsequent sampling report indicating that the remaining soils did not show "any detectable contamination." However, U.S. EPA files do not have a copy of this report, nor any information as to what was the final outcome of the remediation.)

The PA/VSI recommends continuation of the remediation under MDEQ guidance.

2. UST Area B. This is an area east of the Manufacturing Building which formerly contained 2 30,000-gallon underground fuel oil storage tanks. During their removal, contamination was observed near the associated piping. Visually contaminated soil was removed from the SWMU, and the unexcavated soil was sampled (but not the groundwater). According to the facility, no detectable contamination was found. (However, the report documenting this determination has not been supplied.) Because there was a release, the MDEQ was monitoring the remediation, and was to discuss the remediation in a future meeting. The PA/VSI recommends continued remediation under MDEQ guidance.

3. Transmission Fluid Leak Area. This area is related to a sump inside the Manufacturing Building. The sump was used to collect transmission fluid overflows which occur during assembly operations. The release at a joint in the sump was uncovered during a remodeling project. The total amount of fluid released is not known. MEK and PNAs were detected, but actual concentrations were not reported. [Note: It is never mentioned whether or not the transmission fluids used at the facility ever contained PCBs. All that they are described as is hydraulic oils and mineral oils.] Soil was removed down to the groundwater, and the area backfilled with sand. No groundwater sampling was done and no after-removal soil verification was done either. This AOC was expected to be addressed by MDEQ in a meeting scheduled after the PA/VSI investigation was done. The PA/VSI recommended that remediation be continued under MDEQ oversight.

**Miscellaneous Information**

The PA/VSI provided additional information about the site. Some pertinent items are:

4. The facility is located outside of the 500-year floodplain.

5. Treated storm water is discharged to the Rocky River.

6. The soils are classified as sandy loam, which are well drained and are "moderately rapidly permeable." The bedrock is shale.

7. The depth to groundwater is approximately 20', and it flows to the south-southwest toward the Rocky river. There are 3 monitoring wells which are downgradient from the facility. [However, no groundwater monitoring results are documented in the PA/VSI.] The City of Three Rivers withdraws its water from this aquifer, but the report does not identify the location of the wells. The report

does mention that there is a potable water well approximately 500' south of the facility boundary. It is not stated whether or not it would be affected by releases from the facility.

8. There are no ecological receptors on-site; however, there is a wetland area southwest of the facility across the river.

**Conclusions and Recommendations**

I concur with the PA/VSI - there are only 3 AOCs (AOC 1, AOC 2, AOC 3) and one SWMU (SWMU 13) where there are concerns relevant to releases of hazardous constituents. [My review of the other SWMUs has not given me any reasons to suspect potential releases from them.] At the time of the PA/VSI, the contractor seems to have been in contact with a MDEQ field office staff member Ms. Patricia Crowley (probably out of the Plainwell District Office), who was to have a meeting with the facility regarding the remediation efforts at the above-identified AOCs and SWMU. Results of this meeting apparently were not shared with the U.S. EPA, as there is no information in the U.S. EPA files regarding the outcome. Before making any decision on the need for corrective action at the facility, I need to contact Ms. Crowley (or someone else in the field office if she is not there) to give us an update on the facility and to answer the following questions:

1. What happened as a result of the scheduled meeting of August 1992? Was corrective action completed to the satisfaction of MDEQ? Is there any hard information (reports, approval letters, etc.) that MDEQ could supply copies of to us, and which we could use to base our corrective action decisions?

2. What is the situation (with respect to corrective action) at the facility today? Does MDEQ have any concerns regarding the need for corrective action today? What is their recommendation.

3. There are 3 identified monitoring wells at the facility. Are they being monitored today? Is any past data available? If so, does the data show any groundwater contamination?

4. Specifically with respect to SWMU 13, are all of the USTs formally closed? Was the last tank closed in-place, as was proposed? Is there documentation that available that we can use to support a corrective action determination at this SWMU?

5. Has closure verification sampling been done at all 3 AOCs? MDEQ speculated on potential releases to groundwater. Was any groundwater sampling done in these areas, and is any data available? Did any of the sampling include PCBs as

constituents of concern (especially in the lubricating oil spill area)?

If we are able to obtain the needed data from MDEQ, it could go a long way in making the EI determinations at this facility, as well as addressing the need for further corrective action. I will be contacting MDEQ and a resulting addendum to this memo will likely result.

-end-

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# CORRECTIVE ACTION STABILIZATION QUESTIONNAIRE

**Completed by:** Mary Wojciechowski
**Date:** November 20, 1992

ENFORCEMENT CONFIDENTIAL

**Background Facility Information**

Facility Name: General Motors Corporation, Three Rivers Facility
EPA Identification No.: MID 000 718 551
Location (City, State): Three Rivers Michigan
Facility Priority Rank: High

1. Is this checklist being completed for one solid waste management unit (SWMU), several SWMUs, or the entire facility? Explain.

Entire facility which includes 18 SWMUs and 3 AOCs

**Status of Corrective Action Activities at the Facility**

2. What is the current status of HSWA corrective action activities at the facility?

( ) No corrective action activities initiated (Go to 5)
(X) RCRA Facility Assessment (RFA) or equivalent completed
( ) RCRA Facility Investigation (RFI) underway
( ) RFI completed
( ) Corrective Measures Study (CMS) completed
( ) Corrective Measures Implementation (CMI) begun or completed
( ) Interim Measures begun or completed

3. If corrective action activities have been initiated, are they being carried out under a permit or an enforcement order?

( ) Operating permit
( ) Post-closure permit
( ) Enforcement order
(X) Other (Explain)

Corrective actions appear to be voluntary but are occurring under MDNR guidance

4. Have interim measures, if required or completed [see Question 2], been successful in preventing the further spread of contamination at the facility?

( ) Yes
( ) No
(X) Uncertain; still underway
( ) Not required

Additional explanatory notes:

Removal of contaminated soils has taken place in 4 areas. Soil samples in three areas showed no contaminants above detectable limits. Soil samples have not yet been taken in the fourth area. MDNR is overseeing the corrective action.



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**Facility Releases and Exposure Concerns**

5. To what media have contaminant releases from the facility occurred or been suspected of occurring?

(X) Ground water
( ) Surface water
( ) Air
(X) Soils

6. Are contaminant releases migrating off-site?

( ) Yes; Indicate media, contaminant concentrations, and level of certainty.

Groundwater: _____
Surface water: _____
Air: _____
Soils: _____

( ) No
(X) Uncertain

7a. Are humans currently being exposed to contaminants released from the facility?

( ) Yes (Go to 8a)
( ) No
(X) Uncertain

Additional explanatory notes:

It is not known if contaminants are migrating off-site.

7b. Is there a potential for human exposure to the contaminants released from the facility over the next 5 to 10 years?

( ) Yes
( ) No
(X) Uncertain

Additional explanatory notes:

It is not known how much contamination remains on site.

8a. Are environmental receptors currently being exposed to contaminants released from the facility?

( ) Yes (Go to 9)
( ) No
(X) Uncertain

Additional explanatory notes:

It is not known if contaminants are migrating off-site

8b. Is there a potential that environmental receptors could be exposed to the contaminants released from the facility over the next 5 to 10 years?

( ) Yes
( ) No
(X) Uncertain

Additional explanatory notes:

It is not known if contaminants are migrating off-site

**Anticipated Final Corrective Measures**

9. If already identified or planned, would final corrective measures be able to be implemented in time to adequately address any existing or short-term threat to human health and the environment?

( ) Yes
( ) No
(X) Uncertain

Additional explanatory notes:

Contaminated soil has been removed from the facility but it is not known if further corrective action will be needed.

10. Could a stabilization initiative at this facility reduce the present or near-term (e.g., less than two years) risks to human health and the environment?

( ) Yes
(X) No
( ) Uncertain

Additional explanatory notes:

Corrective action is occurring under MDNR guidance.

11. If a stabilization activity were not begun, would the threat to human health and the environment significantly increase before final corrective measures could be implemented?

( ) Yes
(X) No
( ) Uncertain

Additional explanatory notes:

Corrective action is occurring under MDNR guidance.

**Technical Ability to Implement Stabilization Activities**

12. In what phase does the contaminant exist under ambient site conditions? Check all that apply.

(X) Solid
(X) Light non-aqueous phase liquids (LNAPLs)
(X) Dense non-aqueous phase liquids (DNAPLs)
( ) Dissolved in ground water or surface water
( ) Gaseous
( ) Other _____

13. Which of the following major chemical groupings are of concern at the facility?

(X) Volatile organic compounds (VOCs) and/or semi-volatiles
(X) Polynuclear aromatics (PAHs)
( ) Pesticides
( ) Polychlorinated biphenyls (PCBs) and/or dioxins
( ) Other organics
(X) Inorganics and metals
( ) Explosives
( ) Other _____

14. Are appropriate stabilization technologies available to prevent the further spread of contamination, based on contaminant characteristics and the facility's environmental setting? [See Attachment A for a listing of potential stabilization technologies.]

( ) Yes; Indicate possible course of action.

(X) No; Indicate why stabilization technologies are not appropriate; then go to Question 18.

Corrective action is occurring under MDNR guidance

15. Has the RFI, or another environmental investigation, provided the site characterization and waste release data needed to design and implement a stabilization activity?

( ) Yes
( ) No

If No, can these data be obtained faster than the data needed to implement the final corrective measures?

( ) Yes
( ) No

**Timing and Other Procedural Issues Associated with Stabilization**

16. Can stabilization activities be implemented more quickly than the final corrective measures?

( ) Yes
( ) No
( ) Uncertain

Additional explanatory notes:

17. Can stabilization activities be incorporated into the final corrective measures at some point in the future?

( ) Yes
( ) No
( ) Uncertain

Additional explanatory notes:

**Conclusion**

18. Is this facility an appropriate candidate for stabilization activities?

( ) Yes
( ) No, not feasible
(X) No, not required
( ) Further investigation necessary

Explain final decision, using additional sheets if necessary.

Corrective action is occurring under MDNR guidance.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

HRE-8J

January 7, 1993

Mr. Gerald Timmer
General Motors Corp. - Three River Faiclity
One Saginaw Drive
Three Rivers, Michigan 49093

Re: Visual Site Inspection
GMC - Three River Facility
Three Rivers, Michigan
MID 000 718 551

Dear Mr. Timmer:

The U.S. Environmental Protection Agency is enclosing a copy of the final Preliminary Assessment/Visual Site Inspection (PA/VSI) report for the referenced facility. The executive summary and conclusions and recommendations section have been withheld as Enforcement Confidential.

If you have any questions, please call Francene Harris at (312) 886-2884.

Sincerely yours,

Kevin M. Pierard, Chief
Minnesota/Ohio Technical Enforcement Section
RCRA Enforcement Branch

Printed on Recycled Paper

Hi Gale,

Here is what I have found so far. I will continue to look for documentation resolving AOC 3.

The first letter dated 3/22/93, from GMC to EPA, includes responses to AOC's 1, 2 and 3. This is included as fax pages F3 and F4.

Type A closure for Area A (AOC 1) is given in the second letter, dated 3/5/93 from MDNR to GMC (included as fax pages F5 and F6)

A 1/6/93 letter granting Type A closure to Area "E" is included as the 3rd letter (fax pages F7 and F8). Based on the description of Area "E" in the body of the letter and the description of Area "B" in the VSI report (see VSI report page 16, fax page F9), I believe the reference to Area "E" in the 1/6/93 letter is a typo and that the letter is actually granting Type A closure to Area B.

I have not yet been able to find any response from the state on the Transmission Fluid Sump Leak Area (AOC 3 in the VSI report), nor have I found the analytical reports on this area referenced in the 3/22/93 letter from GMC to EPA.

I have not found any evidence that the August 8, 1992 meeting ever took place – no meeting notes or summaries.

As stated above, I will continue to look for information regarding AOC 3 and will let you know what I find, if anything additional. Please let me know if I can be of further assistance in the interim.

Sincerely,

Amy Brodzinski
Sr. Environmental Engineer

March 22, 1993

Mr. Kevin Pierard
RCRA Enforcement Branch
U.S. EPA
Region 5
77 West Jackson Blvd.
Chicago, IL 60604-3590

Subject: Visual Site Inspection Final Report
GMC-Three Rivers Facility
Three Rivers, Michigan
MID#000718551

Dear Mr. Pierard:

This letter is to update and clarify the information presented in the VSI Final Report for this facility. The VSI identified three (3) areas of concern (AOC):

AOC #1 (UST Area A) - This area is listed as an AOC because this facility had, at the time of the VSI, "not responded to questions raised by MDNR" regarding documentation of remedial activities (see VSI report, page 38). Subsequent to the VSI, these questions were resolved and the MDNR has issued a Type A closure for UST Area A, concurring that no further remediation is required. A copy of the closure letter, dated March 5, 1993, is attached.

AOC #2 (UST Area B) - Similarly, UST Area B (formerly used to store boiler heating fuel) is considered an AOC since "there was a documented release to the environment from the UST's and documentation of remediation activities was not available" (VSI report, page 39). Again, subsequent to the VSI, documentation of remedial activities was submitted to the MDNR, and they have approved a type A closure concurring that no further remedial activities are required in this area. A copy of the closure letter, dated January 6, 1993, is attached.

AOC #3 (Transmission Fluid Sump Leak Area) - This is listed as an AOC "because facility did not conduct verification soil or ground water sampling" (VSI report pages 39, 40). This statement is incorrect; soil samples were taken after all contaminated soils were excavated down to groundwater level, and six (6) monitoring wells were installed

F3

in this area based upon the analytical results. All the activities involved have been documented in report form and submitted to the MDNR for review.

Based on the above information, we believe that UST Area A & B (AOC #1 and #2) should no longer be considered Areas of Concern since they have been successfully remediated to MDNR Type A closure criteria. Also, the rationale given for considering the transmission fluid leak area to be an AOC does not apply to this case because soil and groundwater investigation was done in this area.

The following clarifications/corrections should be made in the text of the VSI report:

1. Section 2.4 (p. 11) indicates the contents of UST #1 were <u>mineral spirits</u>. This tank contained only <u>mineral seal oil</u>.

2. Section 2.5 (p. 19) states that TTO analysis is done daily on pre-treated effluent. TTO analysis is done bi-annually per EPA Metal Finishing Categorical Pretreatment Standards.

3. Section 2.5 (p. 20) states that documentation of removal activities for two 900-gallon fuel UST's was not available at the time of the VSI. Subsequent to the VSI, a report documenting remedial actions was submitted to the MDNR, and they have approved a Type A closure for this project. A copy of the MDNR closure approval letter, dated March 5, 1993, is attached.

4. Section 3.0 (p. 24 - Observations) - Scrap metal gondolas when stored outdoors are stored <u>on</u>, not near, the coal pile concrete pad to prevent any residual oily material from being released to the ground.

5. Throughout the text of the report, references to "shot-peed" or "shot peeding" operations should read shot-peen(ing).

6. Footnote "6" to Table I (pp. 12, 13) indicates that various units were "erroneously" listed as hazardous waste management units in the 1981 Part A permit application. This was not done in error, but because these units may contain quench oil from facility heat treating operations. As originally promulgated, RCRA listed all quench oil as hazardous waste, but sub-

F4

COPY

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STATE OF MICHIGAN

JOHN ENGLER, Governor

**DEPARTMENT OF NATURAL RESOURCES**

ROLAND HARMES, Director

**Plainwell District Headquarters**
**Environmental Response Division**
**1342-B M-89 Plainwell, MI 49080**

March 5, 1993

Mr. Jerry Timmer
General Motors/Saginaw Division
One Saginaw Drive
Three Rivers, MI 49093-8915

Dear Mr. Timmer:

SUBJECT: Type A Closure for the 11/28/90 Confirmed Release from an Underground Storage Tank System (USTS) at General Motors Saginaw Division Area A Tank Farm, One Saginaw Drive, Three Rivers, MI, St. Joseph County, MERA# 750073

The Michigan Department of Natural Resources (MDNR) is in receipt of your submittal requesting concurrence that no further remedial actions are necessary at the above facility with regard to the specified release described below.

According to the work summary, a sequence of excavations were performed at the site during the removal of the underground storage tanks (USTs) and ancillary equipment connected with the Area A Tank Farm. The majority of the work was performed between November 20, 1990 and January 14, 1991. A series of excavations followed by confirmatory sampling eventually provided analytical data showing below detection level limits of benzene, toluene, ethylbenzene, xylene (BTEX), and polynuclear aromatic hydrocarbons (PNAs) for the entire site. However, problems with the analytical data from an isolated area produced detection limits that were not acceptable based upon Michigan Department of Natural Resources criteria. In September of 1992 this area was further excavated and additional confirmatory samples were taken. These samples were all below acceptable detection limits for BTEX and PNAs.

Based on staff review of the summary of work performed, we concur that the response activities undertaken at the General Motors Saginaw Division Area A Tank Farm facility have reduced the contaminants in the soil to acceptable Type A cleanup

F5

concentrations provided for in Section 10e of the Michigan Environmental Response Act (MERA) 1982 PA 307, as amended, and the Administrative Rules.

With regard to this facility, this document is not intended to comment on any other known or potential environmental conditions and/or the status of compliance with other environmental protection laws and regulations.

In providing this document, the MDNR makes no warranty or guarantee as to the fitness of this facility for any general or specified use. Prospective purchasers or users are advised to use due diligence in acquiring or using this facility. Area A will be removed from the MDNR LUST Database.

Details about remedial actions at this location may be found on file at this office. Specific inquiries should be addressed to Steve Norton at 616-692-2120.

Sincerely,

Linn Duling

Linn Duling, District Supervisor
Environmental Response Division
Plainwell District
616-692-2120

LD:njw

cc: Senator Paul Wartner
Representative Glenn Oxender
Mr. Ian K. Richardson, Conestoga-Rovers & Associates Limited
Ms. Jenny Hoffmann, Plainwell ERD

FO

NATURAL RESOURCES COMMISSION
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JORDAN B. TATTER

STATE OF MICHIGAN

JOHN ENGLER, Governor

# DEPARTMENT OF NATURAL RESOURCES

ROLAND HARMES, Director

Plainwell District Headquarters
P. O. Box 355, Plainwell, Michigan 49080

January 6, 1993

Mr. Jerry Timmer
General Motors/Saginaw Division
One Saginaw Drive
Three Rivers, MI 49093-8915

Dear Mr. Timmer:

SUBJECT: Type A Closure for Soil Contamination from the Release of Fuel Oil at the General Motors Saginaw Division Area E Tank Farm, One Saginaw Drive, Three Rivers, MI 49093-8915, MERA# 750073

The Michigan Department of Natural Resources (MDNR) is in receipt of your submittal requesting concurrence that no further remedial actions are necessary at the above facility, with regard to the specified release described below.

According to the work summary dated April of 1992, two 30,000 gallon fuel oil USTs were removed. Visual evidence of a release was apparent in the vicinity of the fuel fill line on the south end of the tank system. After initial excavation, low levels of PNA compounds were detected in samples from the south wall of the excavation. Further excavation in that same area was performed and south wall samples were taken again. All final samples from the pit walls and floor showed levels of BTEX and PNA compounds below acceptable detection limits.

Based on staff review of the summary of work performed, we concur that the response activities undertaken at the General Motors Saginaw Division, Area E Tank Farm facility, have reduced the contaminants in the soil to acceptable Type A cleanup concentrations provided for in Section 10e of the Michigan Environmental Response Act (MERA) (1982 PA 307, as amended), and the Administrative Rules.

With regard to this facility, this document is not intended to comment on any other known or potential environmental conditions and/or the status of compliance with other environmental protection laws and regulations.

In providing this document, the MDNR makes no warranty or guarantee as to the fitness of this facility for any general or specified use. Prospective purchasers or users are advised to use due diligence in acquiring or using this facility.



F7

Details about remedial actions at this location may be found on file at this office. Specific inquiries should be addressed to Steve Norton at (616) 685-9886.

Sincerely,

Linn Duling, District Supervisor
Environmental Response Division
Plainwell District
616-685-9886

LD:njw

cc: Senator Paul Wartner
Representative Glenn Oxender
Ms. Jenny Hoffmann, MDNR

In December 1990, Snell Environmental Group, Inc. (SEG), initiated the excavation and removal of the 10 USTs and associated piping at AOC 1. During the removal activities SEG noted visual and olfactory evidence of a release to surrounding soils. SEG initially removed approximately 5,000 cubic yards of visibly contaminated soil. After the initial abatement, SEG used an organic vapor analyzer (OVA) to identify areas of contaminated soil. Based on the OVA readings, SEG excavated additional soil to a depth of 16.5 feet at which point they encountered a concrete anchor pad (in sound condition). SEG subsequently conducted excavation until the OVA did not detect significant levels of contamination. The 45-day abatement report prepared by SEG did not indicate the levels of contamination detected by the OVA (SEG, 1991).

SEG then collected soil samples along the walls and base of the excavation. Analysis of these soil samples detected the following contaminants and levels: toluene (63 micrograms per kilogram (ug/kg)); ethylbenzene (22 ug/kg); xylene (42 ug/kg); chromium (5.7 milligrams per kilogram (mg/kg)); lead (5.8 mg/kg); and polynuclear aromatic hydrocarbons (PAH) including benzo(b)fluoranthene (83,000 ug/kg). SEG then removed additional soil and conducted verification soil sampling at AOC 1 (SEG, 1991). According to facility representatives, GMC-SD submitted a 45-day abatement report to the MDNR in early 1992. Facility representatives stated that the report indicated that verification soil samples did not show detectable levels of contaminants. Facility representatives also indicated that MDNR responded to the final report with a variety of questions. Subsequent to the VSI, Dynamac contacted Patricia Crowley of the MDNR. Ms. Crowley stated that the facility submitted a report on July 14, 1992, responding to MDNR's questions. In addition, Ms. Crowley stated that MDNR scheduled a meeting with GMC-SD for August 8, 1992, to discuss and define required actions for the facility to complete remediation activities associated with this area (MDNR, 1992b).

According to facility representatives, the USTs located in UST Area B (AOC 2) were also removed in late 1990. AOC 2 is located east of the manufacturing building and contained two 30,000-gallon fuel oil USTs (See Photo No. 22). The USTs were installed in 1958. During the excavation and removal activities, the UST removal contractor noted an area of stained soil surrounding the piping associated with the USTs. Analysis of soil samples collected from the excavation indicated the presence of polynuclear aromatic compounds (PNA). The contractor then excavated and removed soil up to five feet out and three feet down from the USTs. The contractor collected verification soil samples along the walls and base of the excavation. According to facility representatives, analysis of these samples did not show detectable levels of contaminants. Information regarding the removal activities and sample results associated with AOC 2 was derived from interviews with facility representatives. Subsequent to the VSI, Dynamac contacted Patricia Crowley of the MDNR. Ms. Crowley stated that MDNR scheduled a meeting with GMC-SD for August 8, 1992, to discuss and define required actions for the facility to complete remediation activities associated with this AOC (MDNR, 1992b).



F9

**AMERICAN AXLE & MANUFACTURING**

TM

ONE MANUFACTURING DRIVE - THREE RIVERS, MI 49093-8915

# FAX COVER SHEET

**FAX: (616) 278-~~0531~~ 0429**

TO: Gale Hruska

FAX NO.: 312/353-4788

CC:

CC:

FROM: Amy Brodzinski

PHONE NO: (616)278-0251

DATE: 5/13/02

LOCATION: US EPA - Waste Mngmt Division

PHONE NO:

PHONE NO:

PHONE NO:

NO. OF PAGES W/COVER 9

COMMENTS:

Gale

- please see note (page 2)

Amy

IF YOU DID NOT RECEIVE A CLEAR OR COMPLETE COPY, OR IF THIS TRANSMISSION WAS RECEIVED IN ERROR, PLEASE CONTACT THE SENDER. THANK YOU.

F1

PRC Environmental Management, Inc.
233 North Michigan Avenue
Suite 1621
Chicago, IL 60601
312-856-8700
Fax 312-938-0118

# PRELIMINARY ASSESSMENT/ VISUAL SITE INSPECTION

## GENERAL MOTORS CORPORATION-
## THREE RIVERS FACILITY
## THREE RIVERS, MICHIGAN
## MID 000 718 551

## FINAL REPORT

**Prepared for**

**U.S. ENVIRONMENTAL PROTECTION AGENCY**
**Office of Waste Programs Enforcement**
**Washington, DC 20460**

| | | |
|---|---|---|
| Work Assignment No. | : | C05087 |
| EPA Region | : | 5 |
| Site No. | : | MID 000 718 551 |
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contains recycled fiber and is recyclable

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## EXECUTIVE SUMMARY

Dynamac Corporation (Dynamac), performed a preliminary assessment and visual site inspection (PA/VSI) to identify and assess the existence and likelihood of releases from solid waste management units (SWMU) and other areas of concern (AOC) at the General Motors Corporation - Three Rivers (GMC-TR) facility, in Three Rivers, St. Joseph County, Michigan. From 1980 to 1990, the GMC-TR facility was operated by General Motors Corporation Hydra-Matic Division (GMC-HD). From 1990 to present the facility has been operated by General Motors Corporation - Saginaw Division (GMC-SD). This summary highlights the results of the PA/VSI and the potential for releases of hazardous wastes or hazardous constituents from SWMUs and AOCs identified. In addition, a completed U.S. Environmental Protection Agency (EPA) Preliminary Assessment Form (EPA Form 2070-12) is included in Attachment A to assist in prioritizing RCRA facilities for corrective action.

From January 1980 to April 1990 the facility was owned and operated by GMC-HD, and manufactured automotive transmissions and related components. In May 1990, GMC-SD took over operations at the facility and began re-tooling preparatory to the manufacture of vehicle drive shafts. The facility began limited assembly of vehicle drive shafts in December 1990, and began limited machining of vehicle drive shafts in September 1991.

The hazardous waste streams currently generated at the facility are paint-related waste containing acetone, toluene, xylene, and methyl ethyl ketone (MEK) (F003, F005, D001, D035) and excess paint waste containing mineral spirits (D001). Nonhazardous waste currently generated at the facility include waste paint filters; facility-wide waste water; treatment sludge; facility-wide storm water; grinder sludge; weld slag; scrap metal; steel peed granules; oil sludge; manganese-phosphate wash sludge; and miscellaneous wastes. Wastes streams generated at the facility prior to 1990 included waste acetone (F003, D001); mixed waste non-halogenated solvents (F003, F005, D001); mixed waste halogenated solvents (F001, F002); nonhazardous waste quench oil; and nonhazardous coal ash.

The facility occupies 129.8 acres in a mixed residential/industrial area. According to facility representatives, GMC-HD purchased the facility from Continental Can Company (CCC) in 1979, and began operations in 1980. Subsequent to the VSI, Dynamac contacted the Michigan Department of Natural Resources (MDNR), Plainwell, Michigan office and requested file information regarding the use of the facility prior to 1980. According to an MDNR representative, there is no file information available in MDNR files regarding CCC and/or the use of the facility prior to 1980. In addition, facility representatives did not have information regarding the operations or wastes generated by CCC. During GMC-HD management, the facility employed a maximum of 2,100 people. The facility currently employs approximately 300 people.

GMC-HD submitted a RCRA Part A permit application (Part A) to EPA on November 19, 1980, identifying the facility as a generator and storage facility. After the

Michigan Department of Natural Resources (MDNR) approved that facility's Closure Plan in January 1988, the facility began closure activities for the Hazardous Waste Storage Building (HWSB) (SWMU 17), the only Interim Status unit at the facility. The MDNR conducted a closure verification inspection at the facility on April 19, 1988, and approved closure activities on September 27, 1988. Although there was no documentation in EPA, MDNR, or facility files that indicated whether EPA approved the facility's change in status, GMC-SD representatives stated that the facility's current regulatory status is that of a small-quantity generator of hazardous waste.

The PA/VSI identified the following 18 SWMUs and 3 AOCs at the facility:

Solid Waste Management Units

1. Scrap Metal Gondolas
2. Scrap Metal Collection Areas
3. Grinder Sludge Gondola
4. Grinder Sludge Roll-Off Area
5. Steel Peed Gondola
6. Weld Slag Drums
7. Paint Room Bucket
8. Former Metal Lab Satellite Accumulation Area (SAA)
9. Steam Booth Catch Basin
10. Coal Pad and Run-Off Lagoon
11. Waste Water Treatment System (WWTS)
12. Storm Water Treatment System (SWTS)
13. Former Treatment Sludge Underground Storage Tank (UST) Area
14. Treatment Sludge Aboveground Storage Tanks (AST)
15. Outdoor Roll-Off Area
16. Coal Ash Silo
17. Hazardous Waste Storage Building (HWSB)
18. Oil Storage Barn

Areas of Concern

1. UST Area A
2. UST Area B
3. Transmission Fluid Leak Area

With the exception of SWMU 13, the potential for a release to on-site soils, ground water, surface water, or the air from facility SWMUs is low. SWMU 1, 2, 3, 4, 5, 6, 9, 14, and 18 do not manage volatile wastes and are located indoors on concrete floors. Floor drains in the areas surrounding these SWMUs discharge to the WWTS (SWMU 11) at the facility. SWMUs 7 and 17 manage volatile wastes in closed containers located indoors on concrete floors. Floor drains associated with these two units lead to closed sumps. SWMU

8 managed volatile waste in closed containers located indoors on a concrete floor and has been inactive since 1990. SWMUs 10 and 15 do not manage volatile wastes and are located outdoors. Both units are constructed of concrete and contain sumps that discharge to the WWTS (SWMU 12). SWMU 16 is constructed of steel, located over a concrete pad and has been inactive since 1990. In addition, surface water drainage at the facility is collected by the SWTS (SWMU 12) and treated prior to discharge to the Rocky River. SWMU 11 (WWTS) and SWMU 12 (SWTS) appeared to be in sound condition and adequate to contain the waste water and storm water at the facility. The treated waste water is discharged to the Three Rivers Municipal Waste Treatment Plant. There is no history of releases associated with these units.

There have documented releases to on-site soils from SWMU 13, and AOCs 1, 2, and 3. The Former Treatment Sludge UST Area (SWMU 13) formerly contained four 12,000-gallon fiberglass USTs used for the accumulation of treatment sludge generated by both the WWTS (SWMU 11) and the SWTS (SWMU 12). During the excavation and removal activities at this unit in 1990, Snell Environmental Group (SEG) documented releases of chromium and lead to on-site soils associated with three of the four USTs. SEG subsequently excavated and removed contaminated soil until analysis indicated that contaminants were not present above detection limits. The facility submitted a report to MDNR documenting initial removal activities associated with this unit in early 1992.

UST Area A (AOC 1) is located between the manufacturing building and the WWTS building and formerly contained ten 30,000-gallon steel USTs. Each of the USTs contained product for use in the manufacturing processes. During the removal activities beginning in 1990, SEG documented releases of solvents, heavy metals, and polyaromatic hydrocarbons (PAH) to on-site soils associated with the 10 USTs. SEG subsequently excavated and removed additional contaminated soil until analysis of verification soil sampling indicated that contaminants were not present above detection limits. Facility representatives indicated that MDNR responded to a report documenting initial remediation activities with a variety of questions. The facility submitted a report on July 14, 1992, responding to the questions raised by MDNR.

UST Area B (AOC 2) is located east of the manufacturing building and formerly contained two 30,000-gallon fuel oil USTs. During the excavation and removal activities beginning in 1990, the UST removal contractor documented a release of polynuclear aromatic hydrocarbons (PNA) to on-site soils associated with the two USTs. The contractor subsequently excavated and removed contaminated soil until verification soil samples indicated that contaminants were not present above detection limits.

The Transmission Fluid Leak Area (AOC 3 ) is located indoors, near the southwest portion of the manufacturing building. During remodeling activities in 1989, the facility experienced a release of MEK and polynuclear aromatic hydrocarbons (PNA) to on-site soils associated with a broken underground sump used to catch overflow of transmission fluid spilled during the final assembly stages. According to facility representatives, potentially contaminated soil was removed and the excavation was back-filled with sand.

At the time of the VSI, verification soil sampling had not been conducted. On July 14, 1992, the facility submitted a report to the MDNR documenting initial removal activities associated with this area.

At the time of the VSI, the facility did not have documentation of the excavation and removal activities associated with SWMU 13, AOC 1, and AOC 2, the documentation was not available in the MDNR's public files at the time of the PA. Subsequent to the VSI, Dynamac contacted Patricia Crowley of the MDNR regarding the releases associated with SWMU 13 and AOCs 1, 2, and 3. Ms. Crowley indicated that the facility submitted additional documentation of activities associated with these areas on July 14, 1992. Ms. Crowley also indicated that MDNR scheduled a meeting with GMC-SD for August 8, 1992 to discuss and define the required actions for GMC-SD to complete remediation activities associated with SWMU 13 and AOCs 1, 2, and 3 (MDNR, 1992b).

There is a high potential that a past release to ground water occurred from SWMU 13 and AOCs 1, 2, and 3 for the following reasons: the facility experienced documented soil contamination associated with each area; ground water is encountered at approximately 19.5 feet below ground surface (BGS) in the area; and soils are sandy and porous. There is a low potential for a future release from these areas. According to facility representatives, verification soil sampling conducted at SWMU 13, AOC 1, and AOC 2 did not show detectable levels of contaminants.

Although surface water run-off at the facility is collected by the SWTS (SWMU 12) and treated prior to discharge to the Rocky River, the potential for a release to surface water via the ground water from SWMU 13 or AOCs 1, 2, and 3 is moderate. The Rocky River is located approximately 500 feet southwest of the facility and ground-water flow in the area is south-southwest.

The potential for a release to the air from SWMU 13 or AOCs 1, 2, and 3 is low. The USTs and the sump were located below grade and did not contain volatile constituents.

The southern portion of the facility is fenced; the fence encloses all manufacturing operations, treatment systems, and storage areas. The northern portion of the facility containing the softball field and the undeveloped grassy area is not fenced. Facility access is gained through a gate located on Hoffman Road. In addition, the facility is monitored 24-hours per day, 7 days per week by security guards. The potential receptors of a release to on-site soils are the 300 current facility employees.

Ground water in the area is used for a municipal water supply. The nearest downgradient drinking water well is located south of the facility 200 feet south of Hoffman Road. In addition, there are four municipal wells located approximately 2,000 feet south of Hoffman Road. There are no industrial wells within three miles of the facility.

The nearest surface water body, the Rocky River, is located approximately 500 feet

southwest of the facility and is used for recreational and industrial purposes. The GMC-TR facility discharges treated storm water to the Rocky River. Additional industrial uses of the Rocky River include permitted non-contact cooling water discharges and treated ground water discharge from a facility located approximately one and three-quarters mile downstream of the facility. There are no surface water intakes on the Rocky River within two miles of the facility. Other surface water bodies within two miles of the facility include Goose Lake, Hoffman Pond, the Portage River, and the St. Joseph River. Goose Lake and Hoffman Pond are used for recreational purposes including boating, fishing, and swimming. The Portage River and the St. Joseph River are used for recreational and industrial purposes.

Sensitive environments are not located on site. There is a large wetland area (approximately 90 acres in area) located 500 feet southwest (downgradient) of the facility, along the flood plain of the Rocky River.

Dynamac recommends that the facility continue remediation activities associated with SWMU 13, and AOCs 1, 2, and 3 under MDNR guidance.

# 1.0 INTRODUCTION

PRC Environmental Management, Inc. (PRC), received Work Assignment No. C05087 from the U.S. Environmental Protection Agency (EPA) under Contract No. 68-W9-0006 (TES 9) to conduct preliminary assessments (PA) and visual site inspections (VSI) of hazardous waste treatment and storage facilities in Region 5. PRC assigned Dynamac Corporation (Dynamac), its TES 9 subcontractor, to conduct the PA/VSI for the General Motors Corporation - Three Rivers (GMC-TR) facility in Three Rivers, Michigan. Prior to 1990 this facility was operated by the General Motors Corporation Hydra-Matic Division (GMC-HD). Since 1990, the facility has been operated by General Motors Corporation Saginaw Division (GMC-SD).

As part of the EPA Region 5 Environmental Priorities Initiative, the RCRA and CERCLA programs are working together to identify and address RCRA facilities that have a high priority for corrective action using applicable RCRA and CERCLA authorities. The PA/VSI is the first step in the process of prioritizing facilities for corrective action. Through the PA/VSI process, enough information is obtained to characterize a facility's actual or potential releases to the environment from solid waste management units (SWMU) and areas of concern (AOC).

A SWMU is defined as any discernible unit at a RCRA facility in which solid wastes have been placed and from which hazardous constituents might migrate, regardless of whether the unit was intended to manage solid or hazardous waste.

The SWMU definition applies to the following:

- RCRA-regulated units, such as container storage areas, tanks, surface impoundments, waste piles, land treatment units, landfills, incinerators, and underground injection wells

- Closed and abandoned units

- Recycling units, wastewater treatment units, and other units that EPA has generally exempted from standards applicable to hazardous waste management units

- Area contaminated by routine and systematic releases of wastes or hazardous constituents. Such areas might include a wood preservative drippage area, a loading or unloading area, or an area where solvent used to wash large parts has continually dripped onto soils.

An AOC is defined as any area where a release of hazardous waste or constituents to the environment has occurred or is suspected to have occurred on a nonroutine and nonsystematic basis. This includes any area where a strong possibility exists that such a release might occur in the future.

The purpose of the PA is as follows:

- Identify SWMUs and AOCs at the facility
- Obtain information on the operational history of the facility
- Obtain information on releases from any units at the facility
- Identify data gaps and other information needs to be filled during the VSI.

The PA generally includes review of all relevant documents and files located at state offices and at the EPA Region 5 office in Chicago.

The purpose of the VSI is as follows:

- Identify SWMUs and AOCs not discovered during the PA
- Identify releases not discovered during the PA
- Provide a specific description of the environment setting
- Provide information on release pathways and the potential for releases to each medium
- Confirm information obtained during the PA regarding operations, SWMUs, AOCs, and releases

The VSI includes interviewing appropriate facility staff; inspecting the entire facility to identify all SWMUs and AOCs; photographing all visible SWMUs; identifying evidence of releases; making a preliminary selection of potential sampling parameters and locations, if needed; and obtaining additional information necessary to complete the PA/VSI report.

This report documents the results of a PA/VSI of the General Motors Corporation Three Rivers (GMC-TR) facility (EPA Identification No. MID 000 718 551) in Three Rivers, St. Joseph County, Michigan. The PA was completed on March 31, 1992. Dynamac gathered and reviewed information from the Michigan Department of Natural Resources (MDNR) offices in Plainwell, Michigan, and from EPA Region 5 RCRA files. In addition, Dynamac gathered information from the Federal Emergency Management Agency (FEMA), the National Oceanic and Atmospheric Administration (NOAA), the Soil Conservation Service (SCS), and the United States Geological Survey (USGS).

Valerie Farrell and Joseph Weslock of Dynamac conducted the VSI on May 6, 1992. It included interviews with facility representatives and a walk-through inspection of the facility. Dynamac identified 18 SWMUs and 3 AOCs at the facility.

Dynamac completed EPA Form 2070-12 using information gathered during the PA/VSI. This form is included in Attachment A. The VSI is summarized and 23 inspection photographs are included in Attachment B. Field notes from the VSI are included in Attachment C.

# 2.0 FACILITY DESCRIPTION

This section describes the facility's location; past and present operations; waste generating processes and waste management practices; a history of documented releases; regulatory history; environmental setting; and receptors.

## 2.1 FACILITY LOCATION

The GMC-TR facility is located at One Hydra-Matic Drive, in the City of Three Rivers, St. Joseph County, Michigan. Figure 1 shows the location of the facility in relation to the surrounding topographic features (latitude 41° 51' 23.0" N and longitude 85° 38' 34.0" W) (GMC-HD, 1980a). The facility occupies 129.8 acres in a mixed residential/industrial area.

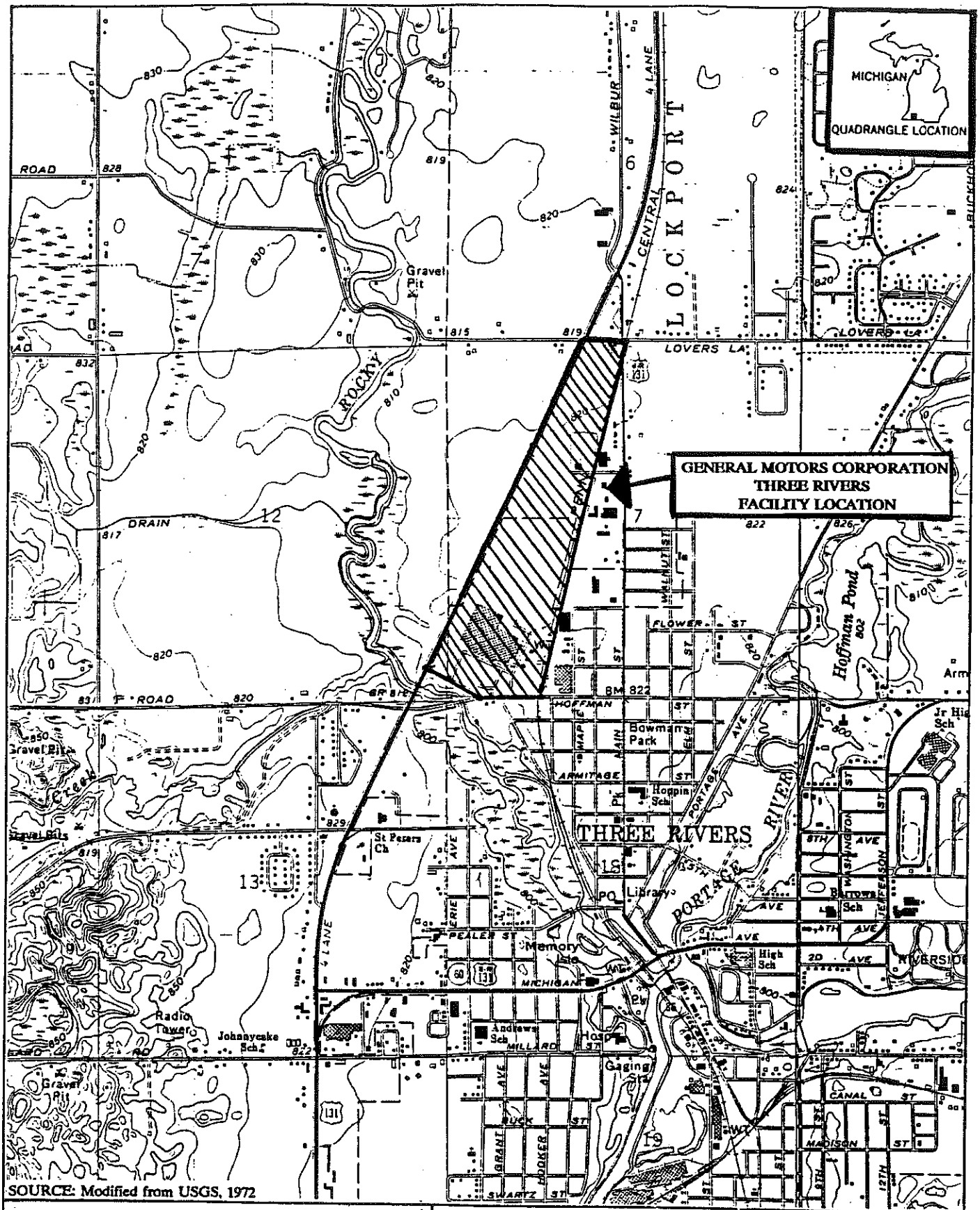
The GMC-TR facility is bordered on the north by Lovers Lane followed by a residential area, on the west by Highway 131 followed by an undeveloped grassy/marshy area, and on the south by Hoffman Road followed by the Rocky River. The eastern border of the facility is a Penn Central Railroad Line followed by a mixed residential/industrial area.

## 2.2 FACILITY OPERATIONS

From January 1980 to April 1990 the facility manufactured automotive transmissions and related components. Operations included stamping, machining, washing, cleaning, heat treating, and assembly. Non-production operations included maintenance painting and fleet vehicle maintenance. The materials used in the manufacturing processes included a variety of steel, cast iron, and aluminum stock; machine oils including coolants, lubricants, and hydraulic fluids; quench oil; paints; and solvents. Some products used in the manufacturing operations were stored in 15 of the 19 underground storage tanks (UST) at the facility. The remainder of the materials were stored in containers and drums indoors. The four remaining USTs (Former Treatment Sludge UST Area (SWMU 13)) were used for the accumulation of treatment sludge generated at the facility. The facility stopped manufacturing transmissions and related components in April 1990.

In May 1990, the facility became part of the General Motors Corporation Saginaw Division (GMC-SD). GMC-SD began re-tooling the facility preparatory to the manufacture of vehicle drive shafts. The facility began limited assembly of vehicle drive shafts in December 1990, and began limited machining of vehicle drive shafts in September 1991. Current operations associated with vehicle drive shafts include machining, peeding (shot blasting), welding, washing, and assembly. In addition, non-production maintenance painting is still conducted at the facility.

Solid wastes generated from facility operations and the SWMUs where they are managed are discussed in detail in Section 2.3.




SCALE 1:24,000

0 ½ 1 MILE

0 1000 2000 3000 4000 FEET

SCALE 1" = 2,000'

NORTH

**FIGURE 1**
**FACILITY LOCATION**
**GENERAL MOTORS CORPORATION**
**THREE RIVERS FACILITY**
**THREE RIVERS, MICHIGAN**

In 1979, General Motors Corporation Hydra-Matic Division purchased the facility from Continental Can Company (CCC) and concurrently added an additional 220,000 square feet to the 430,000-square-foot manufacturing building. Subsequent to the VSI, Dynamac contacted the Michigan Department of Natural Resources (MDNR), Plainwell, Michigan office and requested file information regarding the use of the facility prior to 1980. According to an MDNR representative, there is no file information available in MDNR files regarding CCC and/or the use of the facility prior to 1980 (MDNR, 1992c). In addition, facility representatives did not have information regarding the operations or wastes generated by CCC. From 1980 to 1990 the facility employed approximately 2,100 people. At the time of the VSI, the facility employed approximately 300 people. According to facility representatives, the facility will employ over 600 people by 1993.

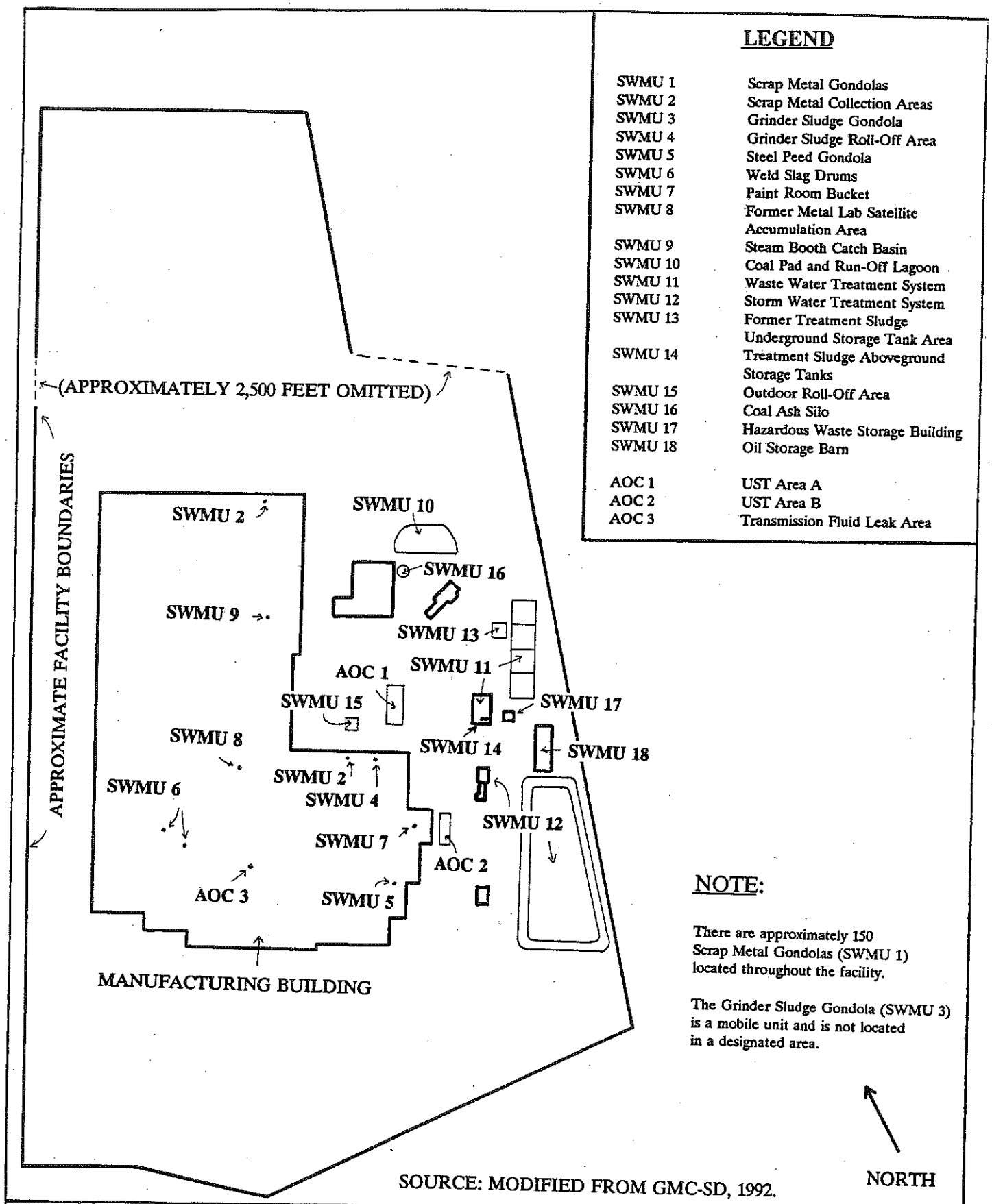
The facility occupies 129.8 acres and contains eight buildings including a manufacturing building, a power house, a coal crusher house, a waste water treatment system building, a storm water treatment system building, an oil storage building, a hazardous waste storage building, and a pump house. In addition the facility contains four 244,000-gallon waste water holding tanks; a 7,000,0000-gallon storm water retention basin; two paved parking lots; a softball field; and an undeveloped grassy area (See Figure 2). Prior to 1990, there were 19 USTs at the facility, 18 of which have been removed. There is currently one UST at the facility located outside the southwest portion of the manufacturing building. The UST contains gasoline used as emergency fuel for a back-up generator at the facility.

## 2.3 WASTE GENERATION AND MANAGEMENT

The primary hazardous waste streams currently generated at the facility are paint-related waste containing acetone, toluene, xylene, and methyl ethyl ketone (MEK) (F003, F005, D001, D035) and excess paint waste containing mineral spirits (D001). Nonhazardous wastes currently generated at the facility include waste paint filters; facility-wide waste water; treatment sludge; facility-wide storm water; grinder sludge; weld slag; scrap metal; steel peed granules; oil sludge; manganese-phosphate wash sludge; and miscellaneous wastes.

Waste streams generated at the facility prior to 1990 include waste acetone (F003, D001); mixed waste non-halogenated solvents containing toluene, methanol, and methyl isobutyl ketone (MIK) (F003, F005, D001); mixed waste halogenated solvents containing 1,1,1-trichloroethane (TCA) and 1,1,2-trichloro-1,2,2-trifluoroethane (F001, F002); waste quench oil (nonhazardous); and coal ash (nonhazardous).

The facility currently conducts non-production maintenance painting operations which consist of painting signs, placards, guard rails, designated parking areas, and facility-wide production machinery. This operation generates paint-related waste containing acetone, toluene, xylene, and MEK (F003, F005, D001, D035), excess paint waste containing mineral spirits (D001), and nonhazardous waste paint filters.




SOURCE: MODIFIED FROM GMC-SD, 1992.

FIGURE 2 - FACILITY LAYOUT

GENERAL MOTORS CORPORATION-
THREE RIVERS FACILITY
THREE RIVERS, MICHIGAN

The paint-related waste (F003, F005, D001, D035) is a combination of solvents and excess paint waste generated by the maintenance painting operations at the facility. The solvent is generated during the cleaning of paint brushes and painting equipment and is contained in a Safety-Kleen Corporation (Safety-Kleen) parts washer located in the paint room inside the manufacturing building (See Photo No. 18). The excess paint waste (D001) is generated when facility employees complete a task and have excess paint left over. This waste is accumulated in a closed 10-gallon bucket in the paint room (Paint Room Bucket (SWMU 7)). Approximately every two weeks, when the solvent becomes dirty, Safety-Kleen Corporation (Safety-Kleen) comes to the facility and combines the excess paint waste (D001) from the Paint Room Bucket (SWMU 7) with paint-related waste (F003, F005, D001). The facility generates a total of approximately 1,300 pounds of paint-related waste (F003, F005, D001, D035) and excess paint waste (D001) per month. This combined waste is not managed by the facility. According to facility representatives, Safety-Kleen transports this waste directly off site and combines it with waste solvent generated at other facilities. Safety-Kleen then transports the waste to its facility located in Dolton, Illinois for reclamation.

The facility maintains one dry-filter paint booth at the facility. When the paint filters become dirty (approximately every four to five years), the facility allows them to dry and then removes them from the paint booth. Facility employees deposit the waste paint filters in a roll-off in the Outdoor Roll-Off Area (SWMU 15). The facility generates approximately 20 pounds of waste paint filters every four to five years. Michigan Disposal, Inc. (MDI), transports this waste off site to West Side Refuse and Disposal Facility (WSRDF) in Fabius Township, Michigan for disposal in a landfill.

Nonhazardous facility-wide waste water is generated by production processes throughout the facility. According to facility representatives, the waste water contains varying amounts of nonhazardous waste hydraulic fluid, waste coolant, and waste oil. Prior to 1990, the waste water also contained nonhazardous waste quench oil. The waste water is directed to Waste Water Treatment System (WWTS) (SWMU 11). The facility generates approximately 2,000,000 gallons of waste water per month. The WWTS de-emulsifies the soluble oils contained in the waste water using dissolved air floatation. The treated waste water is discharged to the Three Rivers Municipal Waste Treatment Plant (TRMWTP).

The treatment sludge from the WWTS (SWMU 11) is currently collected in the Treatment Sludge Aboveground Storage Tanks (AST) (SWMU 14). Prior to 1990, the facility generated approximately 5,000 gallons of treatment sludge per week and the sludge was accumulated in the Former Treatment Sludge UST Area (SWMU 13). The current generation rate for this waste was not available. K and D Industries (K and D) transports this waste to Envirotech Landfill in Detroit, Michigan for solidification and land disposal.

The facility maintains a Storm Water Treatment System (SWTS) (SWMU 12) for the collection and treatment of storm water collected throughout the entire facility grounds. The storm water may contain oil and gasoline drippings from facility parking lots. The storm water is collected by a system of storm drains, sewers, and trenches throughout the

facility and is discharged to the SWTS (SWMU 12). Storm water is also collected by the Coal Pad and Run-off Lagoon (SWMU 10) and discharged to the WWTS (SWMU 11). The treated storm water is discharged to the Rocky River and the resulting treatment sludge is collected in Treatment Sludge ASTs (SWMU 14) with the treatment sludge generated by the WWTS (SWMU 11).

Grinding operations at the facility are conducted in an oil/water bath to reduce heat. Approximately once per week, when this bath becomes dirty, the facility removes the wet grinder sludge from the grinding machines and places it in the Grinder Sludge Gondola (SWMU 3). The Grinder Sludge Gondola (SWMU 3) is used to transport the grinder sludge to the Grinder Sludge Roll-Off Area (SWMU 4), where the liquid is allowed to drain from the sludge. The liquid is pumped to the WWTS (SWMU 11) and the "cake-like" sludge is shipped off-site by K and D to WSRDF in Fabius Township, Michigan for solidification and disposal. The facility generates approximately 40 cubic yards of grinder sludge per month.

In December 1991, the facility began a welding operation which generates nonhazardous weld slag. This waste is collected by the Weld Slag Drums (SWMU 6) that are connected to the welding machines by a duct and a funnel (See Photo Nos. 5 and 6). At the time of the VSI, the facility had not disposed of any of this waste. According to facility representatives, this waste will be generated at a rate of approximately 55-gallons per year and will be shipped off site for recycling.

Nonhazardous scrap metal, including steel, cast iron, and aluminum, is generated by the stamping and machining operations at the facility. The facility maintains approximately 150 Scrap Metal Gondolas (SWMU 1) for the collection and conveyance of scrap metal. When a unit becomes full, it is brought to one of the scrap metal shredder systems (shredder systems) at the facility, where the scraps are separated and shredded prior to being deposited in one of the Scrap Metal Collection Areas (SWMU 2).

The facility generates a total of approximately 40,000 pounds of scrap metal every 10 days. This total includes steel, cast iron, aluminum, and steel peed granules. The steel and cast iron is transported off site for recycling; the scrap aluminum is re-used at other GMC facilities. According to facility representatives, the transporter and recycling facilities for the steel and cast iron change annually. The last transporter and recycler used by the facility was Schupan and Sons located in Kalamazoo, Michigan.

The facility operates a steel peeding machine (shot blasting) which removes rough areas from parts produced at the facility. When the steel peed becomes too small for use it is deposited into the Steel Peed Gondola (SWMU 5) located adjacent to the peeding machine. When the unit becomes full, it is transported to one of the Scrap Metal Collection Areas (SWMU 2) where the waste is combined with rest of the scrap steel generated at the facility. Separate generation rates for this waste stream were not available from facility representatives.

The facility operates a steam booth for cleaning out empty 55-gallon drums that formerly contained oil, coolant, or hydraulic fluid (products) used at the facility. The steam booth generates an oily waste water which is discharged to the WWTS (SWMU 11) via a sump located at the bottom of the concrete pit associated with the steam booth. As the waste water is discharged, some of the oily sludge is collected in the Steam Booth Catch Basin (SWMU 9). Facility employees remove the oil sludge from the unit and place it into 55-gallon drums which are stored in the Oil Storage Barn (SWMU 18). The facility generates approximately 60 drums of oil sludge per year. This waste is transported off site by K and D to Michigan Disposal in Ypsilanti, Michigan for solidification and disposal.

In February 1992, the facility began a manganese-phosphate washing operation which cleans and coats parts produced at the facility. The waste water generated from this operation is discharged to the WWTS (SWMU 11). According to facility representatives, approximately once per year the tank associated with the process will be cleaned out. The clean out process will generate a manganese-phosphate wash sludge. According to facility representatives, this sludge is expected to be nonhazardous. At the time of the VSI, the facility had not disposed of any manganese-phosphate wash sludge.

According to facility representatives, the facility occasionally generates nonhazardous wastes that do not fit into one of the designated waste steams. These miscellaneous wastes may include inoperative machinery, construction debris, or damaged products. Miscellaneous wastes are collected in the Outdoor Roll-Off Area (SWMU 15). Due to the nonroutine nature of these wastes, information regarding the annual generation rate, transporter, or ultimate deposition of these wastes was not available. In general, the wastes are either recycled or disposed of with municipal wastes.

Prior to 1990, the facility generated waste acetone (F003, D001) and mixed waste non-halogenated solvents containing toluene, methanol, and MIK (F003, F005, D001) in the metal/prototype lab (lab). The lab was used for the development of prototype parts that would potentially be manufactured at the facility in the future. Information regarding the method in which these wastes were generated was not available at the time of the PA/VSI. According to facility representatives, these wastes were collected in a 55-gallon drum in the Former Metal Lab Satellite Accumulation Area (SAA) (SWMU 8). When a 55-gallon drum became full, a facility employee brought it to the Hazardous Waste Storage Building (HWSB)(SWMU 17). The facility generated a combined total of approximately 400 gallons per year of waste acetone (F003, D001) and waste mixed non-halogenated solvents (F003, F005, D001). This waste was transported off site by Safety-Kleen to its Dolton, Illinois facility for reclamation.

Prior to 1990, the facility also generated mixed waste halogenated solvents containing TCA and 1,1,2-trichloro-1,2,2-trifluoroethane (F001, F002) from degreasing operations at the facility. Approximately once per year the facility removed the dirty solvent from the degreasing unit and placed it in a 55-gallon drum. Facility employees then brought the 55-gallon drum to the HWSB (SWMU 17) for less than 180-day storage prior to shipment off

site. This facility generated approximately 720 gallons of mixed waste halogenated solvents (F001, F002) per year. The transporter and disposal facility that managed this waste changed annually. Facility representatives indicated that this waste was often transported by Safety-Kleen, to its Dolton, Illinois facility for incineration.

Prior to 1990, GMC-HD operated coal-fired boilers for an energy and heat source at the facility. The use of the boilers generated nonhazardous coal ash. This waste was accumulated in the Coal Ash Silo (SWMU 16) located outside, northeast of the manufacturing building. The facility generated approximately 1,000 cubic yards of coal ash per year. This waste was transported off site by Solid Waste Disposal Company of Dowagiac, Michigan to WSRDF in Fabius Township, Michigan for disposal. The facility has not used the coal-fired boilers since 1990 when the facility began a re-tooling phase. According to facility representatives, the coal-fired boilers will be used again when full scale production is resumed at the facility.

The facility SWMUs are identified in Table 1. The facility layout, including SWMUs and AOCs, is shown in Figure 2. The facility's present and past waste streams are summarized in Table 2.

## 2.4 HISTORY OF DOCUMENTED RELEASES

This section discusses the history of documented releases to ground water, surface water, air and on-site soils at the facility.

Prior to 1990, there were 19 USTs located at the facility. In July 1990, the facility emptied and cleaned 18 of the 19 USTs. There is currently one UST in use at the facility; this UST is discussed in Section 2.5 of this report. In December 1990, the facility initiated excavation and removal of the 18 emptied and cleaned USTs. These USTs were located in four designated areas including UST Area A (AOC 1), UST Area B (AOC 2), the Former Treatment Sludge UST Area (SWMU 13); and the former fuel oil UST area. There have been documented releases to on-site soils associated with UST Area A, UST Area B, and SWMU 13. Because there was no release associated the former fuel oil UST area it is not considered an AOC. The removal activities and documented releases are summarized below.

UST Area A (AOC 1) is located between the manufacturing building and the WWTS building and formerly contained ten 30,000-gallon steel USTs (See Photo No. 19). Each of the USTs contained product for use in the manufacturing processes. The material formerly stored in each UST is listed below (SEG, 1991).

| UST | Contents | UST | Contents |
|---|---|---|---|
| UST 1 | Mineral Spirits | UST 6 | Soap |
| UST 2 | Never Used | UST 7 | Quench Oil |
| UST 3 | Petroleum Based Lubricant | UST 8 | Lubricant |
| UST 4 | Hydraulic Oil | UST 9 | Transmission Fluid |
| UST 5 | Mineral Oil | UST 10 | Transmission Fluid |

## TABLE 1
## SOLID WASTE MANAGEMENT UNITS (SWMU)

| SWMU Number | SWMU Name | RCRA Hazardous Waste Management Unit[a] | Status |
|---|---|---|---|
| 1 | Scrap Metal Gondolas | No | Active |
| 2 | Scrap Metal Collection Areas | No | Active |
| 3 | Grinder Sludge Gondola | No | Active |
| 4 | Grinder Sludge Roll-Off Area | No | Active |
| 5 | Steel Peed Gondola | No | Active |
| 6 | Weld Slag Drums | No | Active |
| 7 | Paint Room Bucket | No | Active |
| 8 | Former Metal Lab SAA | No | Inactive |
| 9 | Steam Booth Catch Basin | No | Active |
| 10 | Coal Pad and Run-Off Lagoon | No | Active |
| 11 | Waste Water Treatment System | No[b] | Active |
| 12 | Storm Water Treatment System | No | Active |
| 13 | Former Treatment Sludge UST Area | No[b] | Inactive; Removed December 1990 |
| 14 | Treatment Sludge ASTs | No | Active |
| 15 | Outdoor Roll-Off Area | No | Active |

[a] A RCRA hazardous waste management unit is one that currently requires or formerly required submittal of a RCRA Part A or Part B permit application.

[b] These units were listed on the 1981 Part A erroneously. These units were not listed on the 1981 revised Part A because they were never used to manage hazardous wastes.

## TABLE 1 (Continued)
## SOLID WASTE MANAGEMENT UNITS (SWMU)

| SWMU Number | SWMU Name | RCRA Hazardous Waste Management Unit[a] | Status |
|---|---|---|---|
| 16 | Coal Ash Silo | No | Inactive since 1990. |
| 17 | Hazardous Waste Storage Building | Yes | RCRA closed in 1988; active for less than 180 day storage of hazardous wastes. |
| 18 | Oil Storage Barn | No[b] | Active for storage of nonhazardous wastes. |

[a] A RCRA hazardous waste management unit is one that currently requires or formerly required submittal of a RCRA Part A or Part B permit application.

[b] These units were listed on the 1981 Part A erroneously. These units were not listed on the 1981 revised Part A because they were never used to manage hazardous wastes.

## TABLE 2
## SOLID WASTES

| Waste/EPA Waste Code[a] | Source | Solid Waste Management Unit [b] |
|---|---|---|
| Paint-Related Waste/ (F003, F005, D001, D035) | Maintenance Painting | None |
| Excess Paint Waste/(D001) | Maintenance Painting | 7 |
| Waste Acetone/ (F003, D001) | Metal/Prototype Lab (Discontinued) | 8, 17 |
| Mixed Waste Non-halogenated Solvents/(F003, F005, D001) | Metal Lab/Prototypes (Discontinued) | 8, 17 |
| Mixed Waste Halogenated Solvents/(F001, F002) | Degreasing Operations (Discontinued) | 17 |
| Waste Paint Filters/NA | Maintenance Painting | 15 |
| Facility-Wide Waste Water/NA | Facility-Wide Production | 11 |
| Treatment Sludge/NA | Facility-Wide Operations | 13, 14 |
| Facility-Wide Storm Water/NA | Storm/Surface Water | 10, 12 |
| Grinder Sludge/NA | Grinding Operations | 3, 4 |
| Weld Slag/NA | Welding Operations | 6 |
| Scrap Metal/NA | Stamping and Machining Operations | 1, 2 |
| Steel Peed Granules/NA | Peeding Operation | 5, 2 |

[a] Not Applicable (NA) designates nonhazardous waste.

[b] "None" indicates that the waste is not managed on site.

**TABLE 2 (Continued)**
**SOLID WASTES**

| Waste/EPA Waste Code[a] | Source | Solid Waste Management Unit [c] |
|---|---|---|
| Oil Sludge/NA | Steam Booth | 9, 18 |
| Manganese-Phosphate Wash Sludge/NA | Washing Operations | Undetermined [c] |
| Miscellaneous Wastes | Miscellaneous Clean Up and Renovation | 15 |
| Waste Quench Oil/NA | Heat Treatment Operation (Discontinued) | 11 |
| Coal Ash/NA | Boilers (Discontinued) | 16 |

[a] Not Applicable (NA) designates nonhazardous waste.

[c] At the time of the VSI, the facility had not yet disposed of this waste or conducted a waste analysis of this waste. If this waste is determined to be hazardous it will be managed in SWMU 17. If this waste is determined to be nonhazardous it will be managed in SWMU 18.

In December 1990, Snell Environmental Group, Inc. (SEG), initiated the excavation and removal of the 10 USTs and associated piping at AOC 1. During the removal activities SEG noted visual and olfactory evidence of a release to surrounding soils. SEG initially removed approximately 5,000 cubic yards of visibly contaminated soil. After the initial abatement, SEG used an organic vapor analyzer (OVA) to identify areas of contaminated soil. Based on the OVA readings, SEG excavated additional soil to a depth of 16.5 feet at which point they encountered a concrete anchor pad (in sound condition). SEG subsequently conducted excavation until the OVA did not detect significant levels of contamination. The 45-day abatement report prepared by SEG did not indicate the levels of contamination detected by the OVA (SEG, 1991).

SEG then collected soil samples along the walls and base of the excavation. Analysis of these soil samples detected the following contaminants and levels: toluene (63 micrograms per kilogram (ug/kg)); ethylbenzene (22 ug/kg); xylene (42 ug/kg); chromium (5.7 milligrams per kilogram (mg/kg)); lead (5.8 mg/kg); and polynuclear aromatic hydrocarbons (PAH) including benzo(b)fluoranthene (83,000 ug/kg). SEG then removed additional soil and conducted verification soil sampling at AOC 1 (SEG, 1991). According to facility representatives, GMC-SD submitted a 45-day abatement report to the MDNR in early 1992. Facility representatives stated that the report indicated that verification soil samples did not show detectable levels of contaminants. Facility representatives also indicated that MDNR responded to the final report with a variety of questions. Subsequent to the VSI, Dynamac contacted Patricia Crowley of the MDNR. Ms. Crowley stated that the facility submitted a report on July 14, 1992, responding to MDNR's questions. In addition, Ms. Crowley stated that MDNR scheduled a meeting with GMC-SD for August 8, 1992, to discuss and define required actions for the facility to complete remediation activities associated with this area (MDNR, 1992b).

According to facility representatives, the USTs located in UST Area B (AOC 2) were also removed in late 1990. AOC 2 is located east of the manufacturing building and contained two 30,000-gallon fuel oil USTs (See Photo No. 22). The USTs were installed in 1958. During the excavation and removal activities, the UST removal contractor noted an area of stained soil surrounding the piping associated with the USTs. Analysis of soil samples collected from the excavation indicated the presence of polynuclear aromatic compounds (PNA). The contractor then excavated and removed soil up to five feet out and three feet down from the USTs. The contractor collected verification soil samples along the walls and base of the excavation. According to facility representatives, analysis of these samples did not show detectable levels of contaminants. Information regarding the removal activities and sample results associated with AOC 2 was derived from interviews with facility representatives. Subsequent to the VSI, Dynamac contacted Patricia Crowley of the MDNR. Ms. Crowley stated that MDNR scheduled a meeting with GMC-SD for August 8, 1992, to discuss and define required actions for the facility to complete remediation activities associated with this AOC (MDNR, 1992b).

The Former Treatment Sludge UST Area (SWMU 13) is located immediately east of the WWTS building and contained four 12,000-gallon fiberglass USTs (See Photo No. 20). The USTs were used for the accumulation of the treatment sludge generated by both the WWTS (SWMU 11) and the SWTS (SWMU 12).

In December 1990, SEG initiated excavation and removal activities for three of the four USTs and associated piping located at SWMU 13. The facility plans to close the fourth UST "in place" by the fall of 1992. During the removal activities, SEG removed approximately 400 yards of visibly contaminated soil. SEG subsequently collected soil samples from the walls and the base of the excavation. Analysis of these samples indicated the presence of chromium (5.7 mg/kg) and lead (5.8 mg/kg). SEG then removed additional soil from the area and encountered ground water at 19.5 feet (SEG, 1991). SEG then collected verification soil and ground water samples from the excavation. According to facility representatives, a report documenting initial removal activities and the analytical results was submitted to the MDNR in early 1992. Facility representatives indicated that analysis of the verification samples showed that contaminants were not present above detection limits. Subsequent to the VSI, Dynamac contacted Patricia Crowley of the MDNR. Ms. Crowley stated that MDNR scheduled a meeting with GMC-SD for August 8, 1992, to discuss and define required actions for the facility to complete remediation activities associated with this unit (MDNR, 1992b).

In addition, the facility experienced a release to on-site soils associated with an in ground sump located in the assembly area inside the manufacturing building. The sump was used to catch overflow of transmission fluid that may spill during the final assembly stages. During remodeling in 1989, a joint in the sump was broken, causing transmission fluid to leak into on-site soils under the manufacturing building (Transmission Fluid Leak Area (AOC 3)). Facility representatives could not estimate the quantity of the release. The facility conducted the excavation and removal of soil to ground water (approximately 19.5 feet) in a 15-foot radius of the sump. According to facility representatives, soil samples collected from the excavation indicated the presence of MEK (10 parts per billion (ppb)) and PNAs (levels unknown). The facility submitted a report to the MDNR on July 14, 1992, documenting initial remediation activities associated with this area.

## 2.5 REGULATORY HISTORY

General Motors Corporation Hydra-Matic Division (GMC-HD) submitted a Notification of Hazardous Waste Activity form to EPA on August 12, 1980 (GMC-HD, 1980a). GMC-HD submitted a RCRA Part A permit application (Part A) identifying the facility as a generator and storage facility to EPA on November 19, 1980 (GMC-HD, 1980b). The Part A listed the following process codes and capacities; a container (S01) storage capacity of 10,000 gallons; a container (S01) storage capacity of 6,060 gallons; a tank (S02) storage capacity of 976,000 gallons; a treatment (T01) capacity of 864,000 gallons per day; and a treatment (T04) capacity of 5,200 gallons per day. The Part A also listed the facility as generating a total annual quantity of the following wastes: 2,400 pounds of F001

waste, 350 pounds of F003 waste, 400 tons of F010 and F012 waste, 1,000 pounds of F005 waste, and 1 ton of D001, D007, D008 waste.

According to facility representatives, with the exception of the 10,000-gallon-capacity container storage area (Hazardous Waste Storage Building (SWMU 17)), the units identified on the original Part A never managed hazardous wastes and were identified erroneously. In addition, many of the wastes identified on the original Part A were listed protectively.

GMC-HD submitted a revised Part A to EPA on November 20, 1981, which listed only the Hazardous Waste Storage Building (HWSB) (SWMU 17). The revised Part A listed the facility as generating a total annual quantity of the following wastes: 2,400 pounds of F001 wastes; 350 pounds of F003 wastes; 1,000 pounds of F005 wastes; and 3 tons of D001, D008 wastes (GMC-HD, 1981).

In August 1987, GMC-HD submitted a letter to the EPA requesting that its Part A be withdrawn and the facility's status be changed to that of a generator only (GMC-HD, 1987a). In September 15, 1987, letter to GMC-HD, the MDNR stated that in order to change the facility's status, the Interim Status unit must undergo MDNR-approved RCRA Closure (MDNR, 1987).

On November 6, 1987, GMC-HD submitted a closure plan to the MDNR for the HWSB (SWMU 11), the designated Interim Status unit (GMC-HD, 1987b). After the MDNR approved the closure plan on January 19, 1988, GMC-HD began closure activities for the HWSB (SWMU 11) (MDNR, 1988a). In August 1988, GMC-HD submitted certification of closure by a registered Professional Engineer to the MDNR. Following this submittal, the MDNR conducted a closure verification inspection at the facility on April 19, 1988 and approved the closure activities on September 27, 1988 (MDNR, 1988b and 1988c). Although there was no documentation in EPA, MDNR, or facility files that indicated whether EPA approved the facility's change in status, GMC-SD representatives stated that the facility's current regulatory status is that of a small-quantity generator of hazardous waste.

The MDNR conducted RCRA compliance inspections at the facility in April 1982, May 1983, September 1984, and June 1986. The inspections identified violations due to inadequate record keeping and documentation concerning the following: the contingency plan, the personnel training records, the closure plan, and the weekly inspection log (MDNR, 1982; 1983; 1984; and 1986a). Subsequent to each inspection, GMC-HD submitted documents responding to individual violations. A July 9, 1986, letter from the MDNR to GMC-HD indicated that apparent violations had been resolved, and the facility was operating in compliance at that time (MDNR, 1986b).

The facility is currently required to have 21 air operating permits. According to MDNR file information, the facility has not violated its air operating permits. There is no history of odor complaints from area residents. Emission sources covered by individual air permits are summarized as follows (GMC-SD, Undated):

| Air Permit Emission Source(s) | Permit Number(s) |
|---|---|
| (2) Coal-Fired Boilers w/ Dust Collectors | 657-78 |
| Dry Filter Paint Booth for Maintenance Painting | 751-81 |
| Wet Scrubber for Phosphate Wash | 1278-90 |
| (2) Fume Scrubbers for WWTS | 434-79 |
| (2) Batch Type Carburizing Furnaces | 926-79 |
| Pusher Type Carburizing Furnace | 927-79 |
| Electric Heated Carburizing Furnace | 1077-91 |
| Surface Combustion Carburizing Furnace | 177-91 |
| Pusher Type Carburizing Furnace | 1073-91 |
| Air Scrubbers for Machining Operations | 336-85, 334-85, 290-81, 209-81, 903-87, and 1186-91 |
| Mist Collectors for Machining Operations | 521-81, 335-85, and 870-85 |
| Smoke Collectors for Welding Operations | 886-91, 331-91, 1204-91 |

The facility operates a WWTS (SWMU 11) for the collection and treatment of facility-wide waste water. The treated waste water from SWMU 11 is discharged to the TRMWTP. The TRMWTP requires the facility to conduct daily sampling of the discharge for the following parameters: chemical oxygen demand (COD); pH, oil and grease; phenol, metals, and total toxic organics (TTO). According to facility representatives, the facility has never exceeded the allowable discharge limits for any of the above parameters. In addition, there is no documentation of any violations regarding the waste water discharge.

The facility also operates a SWTS (SWMU 12) for the collection and treatment of facility-wide storm water. The treated storm water is discharged to the Rocky River located south of the facility. The Rocky River is used for recreational and industrial purposes. According to a June 12, 1979, letter from the MDNR to GMC-HD, the facility was not required to have a National Pollutant Discharge Elimination System (NPDES) permit for the discharge (MDNR, 1979). Because of current regulations associated with the Clean Water Act (CWA) the facility is re-evaluating its storm water discharge. In January 1990, the facility submitted an NPDES permit application for the storm water discharge described above. At the time of the VSI, the facility and the MDNR were discussing the application.

Prior to 1990, there were 19 USTs located at the facility. In July 1990, the facility emptied and cleaned 18 of the 19 USTs. In December 1990, the facility initiated excavation and removal of the emptied and cleaned USTs. There was a documented release to on-site soils from 16 of the facility USTs; these USTs were located in three designated areas including UST Area A (AOC 1), UST Area B (AOC 2), and the Former Treatment Sludge UST Area (SWMU 13). The removal activities and documented releases are summarized in Section 2.4 of this report.

The facility maintained two 900-gallon steel USTs located outside the southeast corner of the manufacturing building (former fuel oil UST area) (See Photo No. 22). One of the USTs contained diesel fuel and the other contained gasoline. The USTs were installed in 1983 and removed in 1990. According to facility representatives, the USTs were found intact and there were no stains or evidence of a release noted during the excavation and removal activities. Verification soil samples collected from the excavation show no detectable levels of contaminants. Documentation of the removal activities was not available in state, Federal, or facility files at the time of the PA/VSI. Information regarding the removal activities and sample results associated with these two USTs was obtained from interviews with facility representatives.

The facility currently maintains one 300-gallon gasoline UST located outside the southwest corner of the manufacturing building (See Photo No. 23). The UST contains gasoline which is used for emergency fuel for a back-up generator at the facility. The UST was installed in the 1950s; the facility plans to remove the UST by 1993. According to facility representatives, this UST is monitored weekly for inventory loss. There has been no documentation of a loss from this UST. There is no history of CERCLA activity at the facility.

## 2.6 ENVIRONMENTAL SETTING

This section describes the climate; flood plain and surface water; geology and soils; and ground water in the vicinity of the GMC-TR facility.

### 2.6.1 Climate

Climatic data is not available for Three Rivers. Climatic data for South Bend, Indiana, located approximately 35 miles southwest of Three Rivers is summarized below. The Three Rivers and South Bend areas can be expected to have similar climates because of their proximity.

The climate in South Bend, Indiana is continental with cold winters and warm summers, though it is moderated somewhat by the proximity of Lake Michigan. The average daily temperature is 49.5° Fahrenheit (F). The lowest average daily temperature is 23.7° F in February. The highest average daily temperature is 80.1° F in July (NOAA, 1990).

Mean annual precipitation is approximately 36.34 inches and mean annual lake evaporation for the area is approximately 31 inches (NOAA, 1979); net annual precipitation is approximately 5 inches. The 1-year, 24-hour maximum rainfall is approximately 2.3 inches (NOAA, 1979).

The prevailing wind is from the south-southwest. The average annual wind speed is 10.3 miles per hour and the average wind speed is highest in January at 11.9 miles per hour (NOAA, 1990).

### 2.6.2 Flood Plain and Surface Water

The GMC-TR facility is located in an area of minimal flooding, outside the 100-year or 500-year flood plain of any surface water body (FEMA, 1990). The nearest surface water body, the Rocky River, is located approximately 500 feet southwest of the facility and is used for recreational and industrial purposes (USGS, 1972a and 1972b). The GMC-TR facility discharges treated storm water to the Rocky River. Additional industrial uses of the Rocky River include permitted non-contact cooling water discharges, storm water discharges, and treated ground water discharge from a facility located approximately one and three-quarters mile downstream of the facility (MDNR, 1992a). The Rock River flows south and discharges to the St. Joseph River approximately one mile south of the facility (SEG, 1991).

Surface water drainage is collected by a system of storm drains, sewers, and trenches located throughout the facility and is discharged to the SWTS (SWMU 12). The treated storm water is discharged to the Rocky River and the remaining treatment sludge is managed in Treatment Sludge ASTs (SWMU 14).

Other surface water bodies within two miles of the facility include Goose Lake, Hoffman Pond, the Portage River, and the St. Joseph River (USGS, 1972a and 1972b). Goose Lake and Hoffman Pond are used for recreational purposes including boating, fishing, and swimming. The Portage River and the St. Joseph River are used for recreational and industrial purposes (MDNR, 1992a).

### 2.6.3 Geology and Soils

The soils of the GMC-TR facility are mapped as Urban land - Oshtemo Complex and Spinks loamy sand. The Urban land - Oshtemo Complex includes sandy soils extensively disturbed by urban construction and deep sandy loam soils which are well drained and moderately rapidly permeable. The Spinks loamy sand is a deep, well drained, moderately rapidly permeable soil. These soils were developed on outwash plains (SCS, 1983).

The surficial deposits of the GMC-TR facility are sands and gravels deposited as outwash from the latest Wisconsinan glaciation (Ferrand and Bell, 1982). The total thickness of the unconsolidated surficial deposits is approximately 150 feet (WMU, 1981).

The bedrock underlying the GMC-TR facility is composed of Mississippian-aged Coldwater Shale (WMU, 1981). The Coldwater Shale is a thick, fine textured unit that can be as much as 1,300 feet thick in some areas (MDNR, 1964).

### 2.6.4 Ground Water

The depth to ground water at the facility is 19.5 feet below ground surface (BGS) as measured during the remediation of the Former Treatment Sludge UST Area (SWMU 13) (SEG, 1991). Three ground-water monitoring wells have been installed at the facility. The direction of ground-water flow at the facility is south-southwest towards the Rocky River. The Coldwater Shale is not an aquifer, and area wells are completed in the surficial deposits. The City of Three Rivers draws its water supply from five wells at depths of approximately 110 feet BGS (SEG, 1991).

## 2.7 RECEPTORS

The facility occupies 129.8 acres in a mixed residential/industrial area in Three Rivers, Michigan. Three Rivers has a population of 7,500 people (SEG, 1991).

The facility is bordered on the north by Lovers Lane followed by a residential area, on the west by highway 131 followed by an undeveloped grassy/marshy area, and on the south by Hoffman Road followed by the Rocky River. The eastern border of the facility is a Penn Central Railroad Line followed by a mixed residential/industrial area. The nearest school, St. Peters, is located approximately one-half mile southwest of the facility.

The southern portion of the facility is fenced; the fence encloses all manufacturing operations, treatment systems, and storage areas. The northern portion of the facility containing the softball field and the undeveloped grassy area is not fenced. Facility access is gained through a gate located on Hoffman Road. In addition, the facility is monitored 24-hours per day, 7 days per week by security guards.

The nearest surface water body, the Rocky River, is located approximately 500 feet southwest of the facility and is used for recreational and industrial purposes. The GMC-TR facility discharges treated storm water to the Rocky River. Additional industrial uses of the Rocky River include permitted non-contact cooling water discharges and treated ground water. There are no surface water intakes on the Rocky River within two miles of the facility (MDNR, 1992a). Other surface water bodies within two miles of the facility include Goose Lake, Hoffman Pond, the Portage River, and the St. Joseph River (USGS, 1972a and 1972b). Goose lake and Hoffman Pond are used for recreational purposes including boating, fishing, and swimming. The Portage River and the St. Joseph River are used for recreational and industrial purposes.

Ground water in the area is used for a municipal water supply. The nearest downgradient drinking water well is located south of the facility 200 feet south of Hoffman Road. In addition, there are five municipal wells located approximately 2,000 feet south of Hoffman Road. There are no industrial wells within three miles of the facility (Three Rivers Department of Public Works (TRDPW, 1992).

Sensitive environments are not located on site. There is a large wetland area (approximately 90 acre in area) located 500 feet southwest (downgradient) of the facility, along the flood plain of the Rocky River (USGS, 1972b).

## 3.0 SOLID WASTE MANAGEMENT UNITS

This section describes the 18 SWMUs identified during the PA/VSI. The following information is presented for each SWMU: description of the unit, dates of operation, wastes managed, release controls, history of documented releases, and Dynamac's observations. Figure 2 shows the SWMU locations.

| | |
|---|---|
| **SWMU 1** | **Scrap Metal Gondolas** |
| Unit Description: | There are approximately 150 Scrap Metal Gondolas located throughout the facility. The units are used for the collection and conveyance of nonhazardous scrap metal generated throughout the facility. Each unit consists of a one-cubic-yard steel gondola equipped with wheels for mobility (See Photo No. 1). Floor drains in the manufacturing building discharge to the WWTS (SWMU 11) at the facility. Surface water at the facility is collected by the SWTS (SWMU 12) and treated prior to discharge to the Rocky River. |
| Date of Startup: | These units began operation in 1980. |
| Date of Closure: | These units are currently active. |
| Wastes Managed: | These units are used for the collection and conveyance of nonhazardous scrap metal generated at the facility, including steel, cast iron, and aluminum. When a unit becomes full, it is brought to one of the scrap metal shredder systems (shredder systems) at the facility where the scrap metal is separated, shredded and cleaned prior to being deposited in one of the Scrap Metal Collection Areas (SWMU 2). |
| Release Controls: | These units are constructed of steel and are located indoors on a concrete floor. The floor drains located throughout the manufacturing building discharge to the WWTS (SWMU 11) at the facility. |
| History of Document Releases: | No releases from this unit have been documented. |
| Observations: | Due to the reduced production level, there were only a few scrap metal hoppers in use at the facility at the time of the VSI. The units observed were in sound condition and appeared to be adequate to manage the solid pieces of scrap metal. The remaining units not in use were stored outdoors near the Coal Pad and Run-Off Lagoon (SWMU 10). |

| | |
|---|---|
| **SWMU 2** | **Scrap Metal Collection Areas** |
| Unit Description: | There is a Scrap Metal Collection Area located at the end of each of the two shredder systems that discard the separated, shredded, and cleaned scrap metal (See Figure 2 and Photo No. 1). Each unit consists of a designated area where open-top dump trucks periodically dock and collect the scrap metal as it dropped from the shredder system. According to facility representatives, the facility normally uses 40-cubic-yard dump trucks with capacities of approximately 40,000 pounds. The units are located inside the manufacturing building. Floor drains in the area discharge to the WWTS (SWMU 11) at the facility. |
| Date of Startup: | These units began operation in approximately 1980. |
| Date of Closure: | These units are currently active. |
| Wastes Managed: | These units manage nonhazardous scrap metal that has been separated, shredded, and cleaned by the two shredder systems and steel peed from the peeding operations. The scrap metal consists of varying amounts of steel, cast iron, and aluminum. The scrap steel and scrap cast iron is shipped off site for recycling and the scrap aluminum is re-used at other GMC facilities. |
| Release Controls: | The units are located indoors on concrete-floored areas. Floor drains in the manufacturing building discharge to the WWTS (SWMU 11) at the facility. |
| History of Documented Releases: | No releases from this unit have been documented. |
| Observations: | There were no trucks in the this unit at the time of the VSI. The area was free of debris and the concrete floor appeared to be in sound condition. |
| **SWMU 3** | **Grinder Sludge Gondola** |
| Unit Description: | The Grinder Sludge Gondola is located inside the manufacturing building and consists of a one-cubic-yard steel gondola equipped with wheels. The unit is used for the collection and conveyance of grinder sludge generated by the grinding operations at the facility. Floor drains in the manufacturing building discharge to the WWTS (SWMU 11) at the facility. |

| | |
|---|---|
| Date of Startup: | This unit began operation in approximately 1980. |
| Date of Closure: | This unit is currently active. |
| Wastes Managed: | This unit manages nonhazardous grinder sludge generated by the grinding operations at the facility. When this unit becomes full, the waste is deposited in the Grinder Sludge Roll-Off Area (SWMU 4), where it is allowed to dry prior to shipment off site for disposal. |
| Release Controls: | The unit is constructed of steel and is located inside the manufacturing building. Floor drains in the manufacturing building discharge to the WWTS (SWMU 11) at the facility. |
| History of Documented Releases: | No releases from this unit have been documented. |
| Observations: | Dynamac did not observe this unit during the VSI. According to facility representatives, the unit is identical to the Scrap Metal Gondolas (SWMU 1) (See Photo No. 1). |
| **SWMU 4** | **Grinder Sludge Roll-Off Area** |
| Unit Description: | The Grinder Sludge Roll-Off Area is located indoors adjacent to a truck bay near the northeast portion of the manufacturing building. The unit consists of a 20-cubic-yard steel roll-off with a screen bottom enclosed in a concrete pit. The pit is equipped with a sump which discharges to the WWTS (SWMU 11) at the facility (See Photo Nos. 2 and 3). The concrete pit is only slightly larger than the roll-off and the walls are approximately 6 inches thick. This unit is used for the accumulation and draining of grinder sludge generated by the grinding operations at the facility. |
| Date of Startup: | This unit began operation in approximately 1980. |
| Date of Closure: | This unit is currently active. |
| Wastes Managed: | This unit is used for the accumulation and drainage of nonhazardous grinder sludge generated by the machining operations and previously collected by the Grinder Sludge Gondola (SWMU 3). After the liquid has been drained, the "cake-like" sludge is shipped off-site for disposal. |

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| Release Controls: | The unit is located indoors, constructed of steel, and contained within a concrete pit equipped with a sump that discharges to the WWTS (SWMU 11) at the facility. |
| History of Documented Releases: | No releases from this unit have been documented. |
| Observations: | At the time of the VSI, the unit was approximately one-quarter full. Some of the liquid had been drained and the resulting sludge was in a "cake-like" form. The concrete pit, the roll-off, and the sump appeared to be in sound condition with no visible evidence of a previous release. |
| **SWMU 5** | **Steel Peed Gondola** |
| Unit Description: | The Steel Peed Gondola consists of a one-cubic-yard steel gondola equipped with wheels (See Photo No. 4). The unit is located inside the manufacturing building adjacent to the peeding machine and is used for the collection of steel peed granules that have become too small for use. Floor drains in the manufacturing building discharge to the WWTS (SWMU 11) at the facility. |
| Date of Startup: | This unit began operation in 1991. |
| Date of Closure: | This unit is currently active. |
| Wastes Managed: | This unit manages nonhazardous steel peed granules that are dropped from the steel peeding machine because they have become too small for use. |
| Release Controls: | The unit is constructed of steel and located indoors on a concrete floor. Floor drains in the manufacturing building discharge to the WWTS (SWMU 11) at the facility. |
| History of Documented Releases: | No releases form this unit have been documented. |
| Observations: | At the time of the VSI, the unit was approximately one-half full. The unit was in sound condition and there was no visible evidence of a release. |

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| **SWMU 6** | **Weld Slag Drums** |
| Unit Description: | The Weld Slag Drums are located inside the manufacturing building and are used for the collection of weld slag generated by the welding operations. Each of the two units consist of two 55-gallon drums attached to dust collection units associated with each of the two welding machines at the facility (See Photo Nos. 5 and 6). The units are located on concrete floors; floor drains in the area discharge to the WWTS (SWMU 11) at the facility. |
| Date of Startup: | These units began operation in 1991. |
| Date of Closure: | These units are currently active. |
| Wastes Managed: | These units manage nonhazardous weld slag generated by welding operations at the facility. At the time of the VSI, the facility had not disposed of any of this waste. According to facility representatives, this waste will be shipped off site for recycling. |
| Release Controls: | The 55-gallon drums are constructed of steel and are attached to dust collection units to prevent any releases. The units are located indoors on a concrete floor. Floor drains in the area discharge to the WWTS (SWMU 11) at the facility. |
| History of Documented Releases: | No releases form this unit have been documented. |
| Observations: | At the time of the VSI, Dynamac observed two Weld Slag Drums associated with each of the two welding machines at the facility. Each drum appeared to be in sound condition with no visible evidence of a previous release. |
| **SWMU 7** | **Paint Room Bucket** |
| Unit Description: | The Paint Room Bucket consists of a 10-gallon steel bucket equipped with a lid. The unit is located inside the manufacturing building in the paint room. Facility employees use the unit for the temporary collection of excess paint waste (D001) left over from maintenance painting tasks at the facility. The floor drain in the paint room leads to a closed sump. |
| Date of Startup: | This unit began operation in 1980. |

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| Date of Closure: | This unit is currently active. |
| Wastes Managed: | This unit manages excess paint waste (D001) generated by the maintenance painting operations at the facility. This waste is combined with waste solvents that are generated by the Safety-Kleen parts washer in the paint room (See Photo No. 18). The combined waste (paint-related waste (F003, F005, D001, D035)) is not managed by the facility. Safety-Kleen transports this waste off site for reclamation. |
| Release Controls: | The unit is constructed of steel, kept closed while not being filled, and is located indoors, on a concrete floor. The floor drain in the paint room leads to a closed sump. |
| History of Documented Releases: | No releases from this unit have been documented. |
| Observations: | At the time of the VSI, this unit was approximately one-quarter full and appeared to be in sound condition. There were no stains or visual evidence of a previous release. |

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| **SWMU 8** | **Former Metal Lab Satellite Accumulation Area** |
| Unit Description: | The Former Metal Lab SAA is located indoors, near the center of the manufacturing building. The unit consists of two steel cabinets (each approximately 12 square feet in size) containing one 55-gallon drum and two 5-gallon portable containers (See Photo No. 7). Prior to 1990, the unit was used for the satellite accumulation of hazardous wastes generated in the metal/prototype lab. The unit is located on concrete floors; floor drains in the area discharge to the WWTS (SWMU 11) at the facility. |
| Date of Startup: | This unit began operation in approximately 1980. |
| Date of Closure: | This unit has been inactive since 1990. |
| Wastes Managed: | This unit was used to manage hazardous waste generated in the metal/prototype lab including waste acetone (F003, D001), and mixed waste non-halogenated solvents containing toluene, methanol, and MIK (F003, F005, D001). According to facility representatives, wastes from this unit were shipped off site for incineration. |

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| Release Controls: | Waste were contained in closed steel containers which were located inside a steel cabinet. The unit is located indoors, on a concrete floor; floor drains in the area discharge to the WWTS (SWMU 11) at the facility. |
| History of Documented Releases: | No releases from this unit have been documented. |
| Observations: | Although the unit has not been used since 1990, it was still in place at the time of the VSI. The cabinets, the empty 55-gallon drums, and the empty portable containers appeared to be in sound condition. There were no stains or visible evidence of a release in the area surrounding the unit. |
| **SWMU 9** | **Steam Booth Catch Basin** |
| Unit Description: | The Steam Booth Catch Basin is situated at the bottom of a 900-cubic-foot concrete pit located under the steam booth inside the manufacturing building (See Photo No. 8). The Steam Booth Catch Basin collects some of the oily sludge generated during the steam cleaning operations; the remaining waste water is discharged to the WWTS (SWMU 11) at the facility. Information regarding the size of the unit was not available at the time of the PA/VSI. |
| Date of Startup: | This unit began operation in approximately 1980. |
| Date of Closure: | This unit is currently active. |
| Wastes Managed: | This unit manages a nonhazardous oil sludge generated by steam cleaning operations. Waste from this unit is collected in 55-gallon drums which are stored in the Oil Storage Barn (SWMU 18) prior to shipment off site for solidification and disposal. |
| Release Controls: | The unit is located indoors at the bottom of a concrete pit. |
| History of Documented Releases: | No releases from this unit have been documented. |
| Observations: | Dynamac did not directly observe this unit during the VSI because it is located at the bottom of a six-foot concrete pit that is covered by a steel grate. The area surrounding the pit did not show any evidence of a previous release (See Photo No. 8). |

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| **SWMU 10** | **Coal Pad and Run-Off Lagoon** |
| Unit Description: | The Coal Pad and Run-Off Lagoon consists of a sloped concrete pad and a lagoon. The concrete pad (approximately 10,000 square-feet in area) is used to store coal (product) and directs storm water run-off to a 960-cubic-foot concrete lagoon (See Photo No. 9). The unit is located near the northeast portion of facility, directly north of the four 244,000-gallon holding tanks associated with the WWTS (SWMU 11). |
| Date of Startup: | This unit began operation in 1980. |
| Date of Closure: | This unit is currently active. |
| Wastes Managed: | This unit is used for the collection of storm water contaminated with coal. The storm water is then pumped to the WWTS (SWMU 11) at the facility. |
| Release Controls: | The unit is constructed of concrete; the waste is discharged to the holding tanks associated with the WWTS. |
| History of Documented Releases: | No releases from this unit have been documented. |
| Observations: | At the time of the VSI, the unit contained a few inches of water with a sludge-like residue at the bottom. The unit appeared to be in sound condition. |
| **SWMU 11** | **Waste Water Treatment System** |
| Unit Description: | The WWTS, located near the southeast portion of the facility, is used for the treatment of waste water generated throughout the facility. The unit consists of four 244,000-gallon concrete holding tanks and a treatment system which de-emulsifies the soluble oils contained in the waste water using dissolved air flotation (See Photo No. 10). |
| Date of Startup: | This unit began operation in 1980. |
| Date of Closure: | This unit is currently active. |
| Wastes Managed: | This unit manages nonhazardous waste water generated throughout the facility. According to facility representatives, |

the waste water may contain varying amounts of waste hydraulic fluid, waste coolant, and oil. Prior to 1990, the waste water also contained waste quench oil. The treated waste water is discharged to the TRMWTP and the remaining treatment sludge is managed in Treatment Sludge ASTs (SWMU 14).

Release Controls: The holding tanks are constructed of 12-inch epoxy-coated concrete. Any releases from the unit would be collected by the SWTS (SWMU 12).

History of Documented Releases: No releases from this unit have been documented.

Observations: The exterior of the holding tanks appeared to be in sound condition with no cracks or visible evidence of a release. In addition, Dynamac observed the facility-wide pipes and trenches leading to the unit which also appeared to be in sound condition. There were no stains or visible evidence of a previous release.

**SWMU 12** **Storm Water Treatment System**

Unit Description: The SWTS, located near the southeast portion of the facility, is used for the treatment of storm water collected throughout the facility grounds. The unit consists of a 7,000,0000-gallon storm water retention basin and a physical treatment system which removes the solids from the storm water (See Photo No. 11). The retention basin is constructed of concrete and is lined with a fabric-like cover. After the storm water is treated, it is discharged to the Rocky River.

Date of Startup: This unit began operation in 1980.

Date of Closure: This unit is currently active.

Wastes Managed: This unit manages storm water collected throughout the entire facility grounds. The storm water may contain oil and gasoline from facility parking lots. The treated storm water is discharged to the Rocky River and the resulting treatment sludge is collected in the Treatment Sludge ASTs (SWMU 14).

Release Controls: The storm water retention basin is constructed of concrete and is lined with a thick fabric-like cover. In addition, there is a system of storm drains, sewers, and trenches throughout the facility to collect any miscellaneous spills that may occur.

History of Documented Releases: No releases from this unit have been documented.

Observations: At the time of the VSI, the retention basin and the treatment system appeared to be in sound condition. There was no visible evidence of a previous release.

**SWMU 13** **Former Treatment Sludge UST Area**

Unit Description: The Former Treatment Sludge UST Area is located immediately east of the WWTS building and formerly contained four 12,000-gallon fiberglass USTs. The USTs were used for the accumulation of nonhazardous treatment sludge generated by both the WWTS (SWMU 11) and the SWTS (SWMU 12).

Date of Startup: The unit began operation in 1980.

Date of Closure: Three of the four USTs formerly contained in this unit were removed in 1990. The facility plans to close the remaining UST in place.

Wastes Managed: The unit managed nonhazardous treatment sludge generated by both the WWTS (SWMU 11) and the SWTS (SWMU 12).

Release Controls: The units were constructed of fiberglass and located below grade. There were no leak detection systems and the tanks were not double-walled

History of Documented Releases: During the removal activities, SEG removed approximately 400 yards of visibly contaminated soil and collected soil samples from the excavation. Analysis of these samples indicated the presence of chromium (5.7 mg/kg) and lead (5.8 mg/kg). During the removal of additional soil, SEG encountered ground water and collected verification soil and ground water samples from the excavation. According to facility representatives, a report documenting initial removal activities and the analytical results was submitted to the MDNR in early 1992. Facility representatives indicated that analysis of the verification samples showed that contaminants were not present above detection levels; documentation of this analysis was not available in state, Federal, or facility files. Subsequent to the VSI, Dynamac contacted Patricia Crowley of MDNR. Ms. Crowley indicated that MDNR scheduled a meeting with GMC-

SD for August 8, 1992 to discuss and define the required actions for GMC-SD to complete MDNR approved closure of SWMU 13 (MDNR, 1992b).

Observations: Dynamac observed the excavated area where the USTs were formerly located. Three of the USTs had been removed from the facility and the area had been back filled with sand. The facility plans to close the remaining UST in place.

**SWMU 14** **Treatment Sludge ASTs**

Unit Description: The Treatment Sludge ASTs consist of two 10,000-gallon fiberglass ASTs located inside the waste water treatment building (See Photo No. 12). The units are used for the collection of treatment sludge generated by the WWTS (SWMU 11) and the SWTS (SWMU 12). The units are located on a concrete pad with a six-inch dike to collect any miscellaneous spill that may occur when the tanks are emptied.

Date of Startup: The units began operation in 1990.

Date of Closure: The units are currently active.

Wastes Managed: The units manage treatment sludge generated by the WWTS (SWMU 11) and the SWTS (SWMU 12). The treatment sludge contains varying amounts of waste hydraulic fluid, waste coolant, oil, and gasoline. A GMC-TR vendor pumps the waste from the unit with a vacuum truck via a pipe located on the east side of the waste water treatment building (See Photo No. 13). This waste is shipped off site for solidification and disposal.

Release Controls: The units are located indoors, constructed of fiberglass, and are situated on a concrete pad with a six-inch dike. The dike is sufficient to contain miscellaneous spills that may occur during pump out. If a large spill were to occur it would be collected by floor drains in the building and discharged back through the WWTS.

History of Documented Releases: No releases from this unit have been documented.

Observations: At the time of the VSI, the unit appeared to be in sound condition. There were no stains or visual evidence of a release.

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| **SWMU 15** | **Outdoor Roll-Off Area** |
| Unit Description: | The Outdoor Roll-Off Area is located on the east side of the manufacturing building and consists of a sloped concrete pad which directs run-off to a sump that discharges to the WWTS (SWMU 11). The concrete pad is surrounded by a six-inch concrete berm and contains a 20-cubic-yard, open-topped steel roll-off. The unit is used for the collection of nonhazardous waste paint filters and various miscellaneous wastes generated at the facility. |
| Date of Startup: | This unit began operation in approximately 1985. |
| Date of Closure: | This unit is currently active. |
| Wastes Managed: | This unit manages nonhazardous waste paint filters and miscellaneous wastes generated at the facility. According to facility representatives, if the facility generates wastes that do not fit into one of the designated waste steams, they are managed by this unit. These wastes my include inoperative machinery, construction debris, or damaged products. The disposition varies depending on the waste; waste paint filters are shipped off site for disposal. The remainder of the wastes are either recycled or disposed of with municipal wastes. |
| Release Controls: | Wastes are contained in a steel roll-off located on a sloped concrete pad which directs run-off to a sump that discharges to the WWTS (SWMU 11). The pad is surrounded by a six-inch concrete berm to prevent a release to surrounding soils. |
| History of Documented Releases: | No releases from this unit have documented. |
| Observations: | There was no roll-off in the unit at the time of the VSI. The concrete pad, concrete berm and sump appeared to be in sound condition. There were no stains or evidence of a previous release. |
| **SWMU 16** | **Coal Ash Silo** |
| Unit Description: | The Coal Ash Silo consists of a 120-cubic-yard steel silo located outdoors, northeast of the manufacturing building (See Photo No. 14). Prior to 1990, the unit was used for the collection of coal ash generated during the use of coal-fired boilers at the facility. The unit is equipped with a duct on the bottom used to deposit the coal ash into a transport truck. |

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| Date of Startup: | This unit began operation in 1980. |
| Date of Closure: | This unit has been inactive since 1990. |
| Wastes Managed: | This unit managed nonhazardous coal ash generated during the use of coal-fired boilers at the facility. |
| Release Controls: | The unit is constructed of steel and is situated over a concrete pad. Waste from this unit is deposited directly into a transport truck via a duct located in the bottom of the silo. This waste is transported off site for disposal. |
| History of Documented Releases: | No releases from this unit have been documented. |
| Observations: | The silo, the duct, and the concrete pad associated with this unit appeared to be in sound condition. There were no stains or visible evidence of a previous release. |

**SWMU 17** **Hazardous Waste Storage Building**

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| Unit Description: | The HWSB is located near the southeast portion of the facility. The unit consists of a 15-foot by 20-foot steel building with a sloped concrete floor that leads to a closed sump (See Photo No. 15). In addition, the unit contains a 6-inch concrete berm. |
| Date of Startup: | This unit began operation in 1980. |
| Date of Closure: | The MDNR approved RCRA closure of this unit in 1988. The unit is currently active for product storage. In the future the unit will be used for less than 180 day storage of hazardous waste. |
| Wastes Managed: | Prior to 1990, this unit managed waste acetone (F003, D001); mixed waste halogenated solvents containing 1,1,1-trichloroethane (TCA) and 1,1,2-trichloro-1,2,2-trifluoroethane (F001, F002); and mixed waste non-halogenated solvents containing toluene, methanol, and MIK (F003, F005, D001). This currently used to store products used at the facility. In the future, this unit will be used for less than 180 day storage of hazardous wastes generated at the facility. |
| Release Controls: | The building is constructed of steel and has a sloped concrete floor that leads to a closed sump. The unit also has a six-inch concrete berm. |

History of Documented Releases: No releases from this unit have been documented.

Observations: There were no waste stored in this unit at the time of the VSI. The steel building, the concrete floor, and the berm appeared to be in sound condition with no stains or visual evidence of a release.

**SWMU 18** **Oil Storage Barn**

Unit Description: The Oil Storage Barn, located near the southeast portion of the facility, is used for the storage of product oils and oil sludge in 55-gallon drums. The unit consists of a 150-foot by 50-foot steel building with a concrete floor and no floor drains (See Photo Nos. 16 and 17).

Date of Startup: This unit began operation in 1980.

Date of Closure: This unit was identified on the facility's original Part A as a designated Interim Status unit. This unit was not included on the facility's revised Part A submitted in 1981. According to facility representatives, the unit never managed hazardous wastes and was listed on the Part A as a protective measure. Therefore, the MDNR did not require the facility to conduct RCRA closure of this unit. The unit is currently active.

Wastes Managed: This unit manages nonhazardous oil sludge generated by the steam booth at the facility. The oil sludge is transported off site for solidification and disposal. In addition, various oils (products) used at the facility are stored in this unit.

Release Controls: The building is constructed of steel and contains a concrete floor with no floor drains. Wastes are contained in closed 55-gallon drums.

History of Documented Releases: No releases from this unit have been documented.

Observations: There were fifteen 55-gallon drums of oil sludge in this unit at the time of the VSI. According to facility representatives, this waste is shipped off site after approximately 20 drums have been accumulated. The building and the concrete floor appeared to be in sound condition with no stains or visual evidence of a release.

## 4.0 AREAS OF CONCERN

Dynamac identified three AOCs at the GMC-TR facility during the PA/VSI. These AOCs are discussed below; their locations are shown in Figure 2.

**AOC 1** **UST Area A**

UST Area A (AOC 1) is located between the manufacturing building and the WWTS building and formerly contained ten 30,000-gallon steel USTs installed in 1979. Nine of the ten USTs contained product for use in the manufacturing processes. The contents of each UST were as follows: UST 1 (mineral spirits); UST 2 (never used); UST 3 (petroleum based lubricant); UST 4 (hydraulic oil); UST 5 (mineral oil); UST 6 (soap); UST 7 (quench oil); UST 8 (petroleum based lubricant); and UST 9 and 10 (transmission fluid).

During the removal activities beginning in 1990, SEG noted visual and olfactory evidence of a release to surrounding soils. SEG initially removed approximately 5,000 yards of visibly contaminated soil. After the initial abatement, SEG used an organic vapor analyzer (OVA) to identify additional contaminated soil. Based on the OVA readings, SEG continued excavations to a depth of 16.5 feet, at which point they encountered a concrete anchor pad (in sound condition). SEG subsequently conducted lateral excavation until the OVA did not detect significant levels of contamination (levels not available) (SEG, 1991).

Analysis of subsequent soil sampling indicated the presence of various solvents, heavy metals, and PAHs. SEG then removed additional soil and conducted verification soil sampling in the area. According to facility representatives, GMC-SD submitted a report to the MDNR in early 1992 which indicated that verification soil samples did not show detectable levels of contaminants (a copy of the report was not available a the time of the PA/VSI). Facility representatives also indicated that MDNR responded to the final report with a variety of questions. At the time of the VSI, the facility had not responded to the questions raised by MDNR, therefore, this area is considered an AOC.

According to Patricia Crowley of the MDNR, the facility submitted a report on July 14, 1992, responding to MDNR's questions. Ms. Crowley also stated the MDNR scheduled a meeting with GMC-SD for August 8, 1992, to discuss and define actions required to complete remediation activities associated with this area (MDNR, 1992b).

**AOC 2** **UST Area B**

UST Area B (AOC 2) is located east of the manufacturing building and formerly contained two 30,000-gallon fuel oil USTs (See Photo No. 22). The USTs were installed in 1958 and removed in 1990. During the excavation and removal activities, the UST removal contractor noted an area of stained soil surrounding the piping associated with the USTs. Analysis of soil samples collected from the excavation indicated the presence of polynuclear aromatic compounds (PNA). The contractor then excavated and removed soil up to five feet out and three feet down from the USTs. The contractor collected verification soil samples along the walls and base of the excavation. According to facility representatives, analysis of these samples did not show detectable levels of contaminants. Documentation of the removal activities was not available in state, Federal, or facility files at the time of the PA/VSI. Because there was a documented release to the environment from the USTs and documentation of remediation activities was not available, this area is considered an AOC. Subsequent to the VSI, Dynamac contacted Patricia Crowley of MDNR. Ms. Crowley stated that MDNR scheduled a meeting with GMC-SD for August 8, 1992, to define and discuss actions required to complete remediation activities associated with this AOC (MDNR, 1992b).

**AOC 3** **Transmission Fluid Leak Area**

The Transmission Fluid Leak Area is located indoors, near the southwest portion of the manufacturing building (See Photo No. 21). The facility experienced a leak to on-site soils associated with an in-ground sump located in the assembly area inside the manufacturing building. The sump was used to catch overflow of transmission fluid spilled during the final assembly stages. During remodeling in 1989, a joint in the sump was broken causing transmission fluid to leak into on-site soils located under the manufacturing building floor. Facility representatives could not estimate the quantity of the release. Approximately 500 cubic yards of soil was excavated and removed to ground water (approximately 19.5 feet) within a 15 foot radius of the sump. According to facility representatives, soil samples collected from the excavation indicated the presence of MEK (10 parts per billion (ppb)) and PNAs (levels unknown). According to facility representatives, additional soil was removed and the excavation was back-filled with sand. Verification soil sampling has not been conducted. Facility representatives also indicated that the MDNR was notified of the release. Because the facility did not conduct

verification soil or ground water sampling after the second soil removal, this area is considered an AOC. Subsequent to the VSI, Dynamac contacted Patricia Crowley of MDNR. Ms. Crowley stated that the facility submitted documentation of initial removal activities associated with this area to MDNR on July 14, 1992. Ms. Crowley also stated that MDNR scheduled a meeting with GMC-SD for August 8, 1992, to discuss and define actions required to complete remediation activities associated with this AOC (MDNR, 1992b).

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## 5.0 CONCLUSIONS AND RECOMMENDATIONS

The PA/VSI identified 18 SWMUs and 3 AOCs at the GMC-TR facility. Background information on the facility's location; operations; waste generation and management; history of documented releases; regulatory history; environmental setting; and receptors is presented in Section 2.0. SWMU-specific information, such as the unit's description, dates of operation, wastes managed, release controls, history of documented releases, and observed condition, is presented in Section 3.0. AOCs are discussed in Section 4.0. Following are Dynamac's conclusions and recommendations for each SWMU and AOC. Table 3, located at the end of this section, summarizes the SWMUs and AOCs at the facility and recommended further actions.

**SWMU 1** **Scrap Metal Gondolas**

Conclusions: The facility has approximately 150 Scrap Metal Gondolas for the collection and conveyance of nonhazardous scrap metal generated throughout the facility. Each unit is located indoors and consists of a one-cubic-yard steel gondola equipped with wheels (See Photo No. 1). Floor drains in the manufacturing building discharge to the WWTS (SWMU 11) at the facility. The potential for a release to environmental media is summarized below.

The potential for a release to on-site soils, ground water, surface water, or air from the Scrap Metal Gondolas is low. The units are constructed of steel and are located inside the manufacturing building on a concrete floor. Floor drains in the manufacturing building discharge to the WWTP at the facility.

Recommendations: Dynamac recommends no further action at this time.

**SWMU 2** **Scrap Metal Collection Areas**

Conclusions: There is a Scrap Metal Collection Area located indoors, at the end of the each of the two shredder system that discard the separated, shredded, and cleaned scrap metal (See Figure 2 and Photo No. 1). Each unit consists of a designated area where open top dump trucks dock and collect the scrap metal as it dropped from the shredder system. The steel peed granules are also collected in this unit. The potential for a release to environmental media is summarized below.

The potential for a release to on-site soils, ground water, surface water, or air from the SWMU 2 is low. The units manage solid clean pieces of scrap metal and are located inside the manufacturing building on a



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concrete floor. Floor drains in the manufacturing building discharge to the WWTP at the facility.

Recommendations: Dynamac recommends no further action at this time.

**SWMU 3** **Grinder Sludge Gondola**

The unit is used for the collection and conveyance of grinder sludge generated by the machining operations at the facility. The unit is located inside the manufacturing building and consists of a one-cubic-yard steel gondola equipped with wheels. Floor drains in the manufacturing building discharge to the WWTS (SWMU 11) at the facility. The potential for a release to environmental media is summarized below.

The potential for a release to on-site soils, ground water, surface water, or air from the unit is low. The unit is constructed of steel and is located inside the manufacturing building on a concrete floor. Floor drains in the manufacturing building discharge to the WWTP at the facility.

Recommendations: Dynamac recommends no further action at this time.

**SWMU 4** **Grinder Sludge Roll-Off Area**

Conclusions: The unit is located inside the manufacturing building and consists of a steel roll-off with a screen bottom enclosed in a concrete pit. The pit is equipped with a sump which discharges to the WWTS (SWMU 11) at the facility (See Photo Nos. 2 and 3). The unit is used for the accumulation and draining of grinder sludge generated by the grinding operations at the facility. The potential for a release to environmental media is summarized below.

The potential for a release to on-site soils, ground water, surface water, or air from the unit is low. The unit is constructed of steel and concrete and is located inside the manufacturing building on a concrete floor. The sump associated with this unit discharges to the WWTP at the facility.

Recommendations: Dynamac recommends no further action at this time.

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**SWMU 5** **Steel Peed Gondola**

Conclusions: The unit consists of a steel gondola located inside the manufacturing building adjacent to the peeding machine and is used for the collection of nonhazardous steel peed granules that have become too small for use. Floor drains in the manufacturing building discharge to the WWTS (SWMU 11) at the facility. The potential for a release to environmental media is summarized below.

The potential for a release to on-site soils, ground water, surface water, or air from the unit is low. The unit is constructed of steel and is located inside the manufacturing building on a concrete floor. Floor drains in the manufacturing building discharge to the WWTP at the facility.

Recommendations: Dynamac recommends no further action at this time.

**SWMU 6** **Weld Slag Drums**

Conclusions: The Weld Slag Drums are located inside the manufacturing building and are used for the collection of weld slag generated by the welding operations. Each of the two units consist of two 55-gallon drums attached to dust collection units (See Photo Nos. 5 and 6). The units are located on concrete floors; floor drains in the area discharge to the WWTS (SWMU 11) at the facility. The potential for a release to environmental media is summarized below.

The potential for a release to on-site soils, ground water, surface water, or air from the unit is low. The waste are contained in enclosed steel 55-gallon drums and the units are located inside the manufacturing building on a concrete floor. Floor drains in the manufacturing building discharge to the WWTP at the facility.

Recommendations: Dynamac recommends no further action at this time.

**SWMU 7** **Paint Room Bucket**

Conclusions: The unit consists of a 10-gallon steel bucket equipped with a lid. The unit is located inside the manufacturing building in the paint room. Facility employees use the unit for the temporary collection of excess paint waste (D001) left over from maintenance painting tasks at the facility. The floor drain in the paint room leads to a closed sump.



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The potential for a release to environmental media is summarized below.

The potential for a release to on-site soils, ground water, surface water, or air from the unit is low. The waste is contained in a closed steel 10-gallon bucket. The units are located inside the manufacturing building on a concrete floor. Floor drains in the manufacturing building discharge to the WWTP at the facility.

Recommendations: Dynamac recommends no further action at this time.

**SWMU 8** **Former Metal Lab Satellite Accumulation Area**

Conclusions: The unit is located inside the manufacturing building and consists of two steel cabinets (each approximately 12 square feet in size) containing one 55-gallon drum and two 5-gallon portable containers. Prior to 1990, the unit was used for the satellite accumulation of hazardous wastes generated in the metal/prototype lab. The potential for a release to environmental media is summarized below.

The potential for a release to on-site soils, ground water, surface water, or air from the unit is low. The wastes are contained in closed steel containers which are located inside steel cabinets. The units are located inside the manufacturing building on a concrete floor. Floor drains in the manufacturing building discharge to the WWTP at the facility.

Recommendations: Dynamac recommends no further action at this time.

**SWMU 9** **Steam Booth Catch Basin**

Conclusions: The Steam Booth Catch Basin is constructed of concrete and is situated at the bottom of a concrete pit located under the steam booth inside the manufacturing building. The Steam Booth Catch Basin collects some of the oily sludge generated during the steam cleaning operations; the remaining waste water is discharged to the WWTS (SWMU 11) at the facility. The potential for a release to environmental media is summarized below.

The potential for a release to on-site soils, ground water, surface water, or air from the unit is low. The waste is contained by a concrete basin located at the bottom of a concrete pit inside the manufacturing building. Floor drains in the manufacturing building discharge to the WWTP at the facility.

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Recommendations: Dynamac recommends no further action at this time.

**SWMU 10** **Coal Pad and Run-Off Lagoon**

Conclusions: The unit consists of a sloped concrete pad and a concrete lagoon used for the collection of storm water run-off that has been contaminated by coal (product) (See Photo No. 9). The unit is located near the northeast portion of facility, directly north of the four 244,000-gallon holding tanks associated with the WWTS (SWMU 11). The potential for a release to environmental media is summarized below.

The potential for a release to on-site soils, ground water, surface water, or air from the unit is low. The waste is contained in a concrete lagoon which discharges to the WWTS (SWMU 12) at the facility.

Recommendations: Dynamac recommends no further action at this time.

**SWMU 11** **Waste Water Treatment System**

Conclusions: The WWTS is used for the treatment of waste water generated throughout the facility. The unit consists of four 244,000-gallon concrete holding tanks and a treatment system which de-emulsifies the soluble oils contained in the waste water using dissolved air floatation. The treated waste water is discharged to the TRMWTP and the remaining treatment sludge is collected in Treatment Sludge ASTs (SWMU 14). The potential for a release to environmental media is summarized below.

The potential for a release to on-site soils, ground water, surface water, or air from the unit is low. The unit manages and treats nonhazardous facility-wide waste water. Prior to treatment, the facility-wide waste water is retained in concrete holding tanks; the treated waste water is discharged to the TRMWTP. Any releases that may occur would be collected by the SWTS (SWMU 12).

Recommendations: Dynamac recommends no further action at this time.

**SWMU 12** **Storm Water Treatment System**

Conclusions: The SWTS is used for the treatment of storm water collected throughout the entire facility grounds. The unit consists of a storm water retention basin and a treatment system. The treated storm water is discharged to the Rocky River and the resulting treatment sludge is collected in the Treatment Sludge ASTs (SWMU 14). The potential for a release to environmental media is summarized below.



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The potential for a release to on-site soils, ground water, surface water, or air from the unit is low. The unit manages and treats nonhazardous facility-wide storm water. Prior to treatment, the facility-wide storm water is contained in a concrete retention basin. Any release that may occur would be collected by the system of drains and sewer and redirected to the retention basin.

Recommendations: Dynamac recommends no further action at this time.

**SWMU 13** **Former Treatment Sludge UST Area**

Conclusions: The unit is located just east of the WWTS building and formerly contained four 12,000-gallon fiberglass USTs. The USTs were used for the accumulation of nonhazardous treatment sludge generated by both the WWTS (SWMU 11) and the SWTS (SWMU 12). The facility initiated excavation and removal activities for three of the four USTs and associated piping in late 1990. The facility plans to close the fourth UST "in place" by the fall of 1992. Because analysis of soil samples collected during removal activities indicated the presence of chromium (5.7 mg/kg) and lead (5.8 mg/kg), SEG excavated and removed additional soil from the area. During the removal of additional soil, SEG encountered ground water and collected verification soil and ground water samples from the excavation. According to facility representatives, a report documenting initial removal activities and the analytical results was submitted to the MDNR in early 1992. Facility representatives indicated that analysis of the verification samples showed that contaminants were not present above detection levels; documentation of this analysis was not available in state, Federal, or facility files. Subsequent to the VSI, Dynamac contacted Patricia Crowley of the MDNR. Ms. Crowley stated that the MDNR scheduled a meeting with GMC-SD to discuss and define the actions required to complete remediation activities associated with this unit (MDNR, 1992b). The potential for a historical release to environmental media is summarized below.

On-Site Soils: Soil sampling conducted by SEG during excavation and removal activities in 1990 indicated the presence of chromium and lead.

Ground Water: High. There is a high potential that contaminants from this unit impacted ground water in the past for the following reasons: there is documented soil contamination associated with this unit; ground water is encountered at approximately 19.5 feet BGS in the area; and surrounding soils are sandy and porous.



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Surface Water: Moderate. Although surface water drainage at the facility is collected by the SWTS (SWMU 12) and treated prior to discharge to the Rocky River, there is a moderate potential for a release to surface water via the ground water. The Rocky River is located 500 feet southwest of the facility and ground-water flow in the area is south-southwest.

Air: Low. Contaminants associated with this unit were found below ground surface.

The potential for a future release from this unit is low. According to facility representatives, verification soil and ground water samples from this area did not show detectable levels of contaminants.

Recommendations: Dynamac recommends that the facility comply with MDNR's recommendations based on the facility's 1992 submittal.

**SWMU 14** **Treatment Sludge ASTs**

Conclusions: The unit consists of two 10,000-gallon fiberglass ASTs located inside the waste water treatment building on a concrete pad with a six-inch dike. The unit is used for the collection of treatment sludge generated by the WWTS (SWMU 11) and the SWTS (SWMU 12). The potential for a release to environmental media is summarized below.

The potential for a release to on-site soils, ground water, surface water, or air from the unit is low. The unit is constructed of fiberglass and is located indoors on a concrete floor with a six-inch dike. Any release that may occur would be collected by the SWTS (SWMU 12).

Recommendations: Dynamac recommends no further action at this time.

**SWMU 15** **Outdoor Roll-Off Area**

Conclusions: The unit is located on the east side of the manufacturing building and consists of a sloped concrete pad which directs run-off to a sump that discharges to the WWTS (SWMU 11). The concrete pad is surrounded by a six-inch concrete berm and contains a 20-cubic-yard, open topped steel roll-off. The unit is used for the collection of nonhazardous waste paint filters and various miscellaneous wastes generated at the facility. The potential for a release to environmental media is summarized below.

The potential for a release to on-site soils, ground water, surface water, or air from the unit is low. The unit manages nonhazardous wastes

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which are contained in a steel roll-off located on a sloped concrete pad. The concrete pad directs surface water run-off to a sump that discharges to the WWTS (SWMU 12)

Recommendations: Dynamac recommends no further action at this time.

**SWMU 16** **Coal Ash Silo**

Conclusions: The unit consists of a steel silo located outdoors, northeast of the manufacturing building. Prior to 1990, the unit was used for the collection of coal ash generated during the use of coal-fired boilers at the facility. The unit is equipped with a duct on the bottom used to deposit the coal ash into a transport truck. The unit has been inactive since 1990. The potential for a release to environmental media is summarized below.

The potential for a release to on-site soils, ground water, surface water, or air from the unit is low. The unit manages nonhazardous waste in a steel silo located over a concrete pad. Any releases that may occur from this unit would be collected by the SWTS (SWMU 12).

Recommendations: Dynamac recommends no further action at this time.

**SWMU 17** **Hazardous Waste Storage Building**

Conclusions: The unit is located near the southeast portion of the facility and consists of a steel building with a sloped concrete floor with a six-inch berm that leads to a closed sump. The unit is used for the accumulation of hazardous wastes generated at the facility. The potential for a release to environmental media is summarized below.

The potential for a release to on-site soils, ground water, surface water, or air from the unit is low. The unit manages wastes in closed 55-gallon drums located on a sloped concrete floor that leads to a closed sump.

Recommendations: Dynamac recommends no further action at this time.

**SWMU 18** **Oil Storage Barn**

Conclusions: The unit is located near the southeast portion of the facility and is used for the storage of various oils (products) and oil sludge in 55-gallon drums. The unit consists of a steel building with a concrete floor and no floor drains. The potential for a release to environmental media is summarized below.

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The potential for a release to on-site soils, ground water, surface water, or air from the unit is low. The unit manages nonhazardous waste in closed 55-gallon drums. The drums are located in a steel building with a concrete floor and no floor drains.

Recommendations: Dynamac recommends no further action at this time.

**AOC 1** **UST Area A**

Conclusions: AOC 1 is located between the manufacturing building and the WWTS building and formerly contained ten 30,000-gallon steel USTs installed in 1979. Each of the USTs contained product for use in the manufacturing processes. During excavation and removal activities beginning in December 1990, SEG encountered and removed visibly contaminated soil. After the initial abatement, SEG used an OVA to identify contaminated areas and conducted excavation until the OVA did not detect significant levels of contamination (SEG, 1991).

Analysis of subsequent soil sampling indicated the presence of various solvents, heavy metals, and PAHs. SEG then removed additional soil and conducted verification soil sampling in the area. According to facility representatives, GMC-SD submitted a report to the MDNR in early 1992 which indicated that verification soil samples did not show detectable levels of contaminants (a copy of the report was not available a the time of the PA/VSI). Facility representatives also indicated that MDNR responded to the final report with a variety of questions. According to Patricia Crowley of the MDNR, the facility submitted a report on July 14, 1992, responding to MDNR's questions. Ms. Crowley also stated that MDNR scheduled a meeting with GMC-SD for August 8, 1992, to discuss and define actions required to complete remediation activities associated with this area (mdnr, 1992B). The potential for a historical release to environmental media is summarized below.

On-Site Soils: Soil sampling conducted by SEG during excavation and removal activities in 1990 indicated the presence of solvents, heavy metals, and PAHs.

Ground Water: High. SEG excavated contaminated soil to a depth of 16.5 feet BGS. Because ground water is encountered at approximately 19.5 feet BGS in the area and soils are sandy and porous, there is a high potential that contaminants impacted ground water.

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Surface Water: Moderate. Although surface water drainage at the facility is collected by the SWTS (SWMU 12) and treated prior to discharge to the Rocky River, there is a moderate potential for a release to surface water. The Rocky River is located 500 feet southwest of the facility and ground-water flow in the area is south-southwest.

Air: Low. Contaminants associated with this unit were found below ground surface.

The potential for a future release from this area is low. According to facility representatives, verification soil samples collected from this area did not show detectable levels of contaminants.

Recommendations: Dynamac recommends that the facility complete remediation activities associated with this area under MDNR guidance.

**AOC 2** **UST Area B**

Conclusions: AOC 2 is located east of the manufacturing building and formerly contained two 30,000-gallon fuel oil USTs. The USTs were installed in 1958 and removed in 1990. According to facility representatives, the UST removal contractor noted an area of stained soil surrounding the piping associated with the USTs. Analysis of soil samples collected from the excavation indicated the presence of PNAs. The contractor then excavated and removed soil up to five feet out and four feet down from the bottom of the USTs. According to facility representatives, analysis of soil samples collected form the excavation did not show detectable levels of contaminants. Documentation of the removal activities was not available in state, Federal, or facility files at the time of the PA/VSI. On August 8, 1992, GMC-SD and MDNR will conduct a meeting to discuss and define actions required to complete remediation activities associated with this AOC. The potential for a historical release to environmental media is summarized below.

On-Site Soils: Initial soil samples collected during the excavation of the USTs in 1990 indicated the presence of PNAs.

Ground Water: High. The UST removal contractor removed soil to a depth of approximately nine feet BGS in the area surrounding the AOC. Because ground water is encountered at approximately 19.5 feet BGS in the area and soils are sandy and porous, there is a high potential that contaminants impacted ground water.



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Surface Water: Moderate. Although surface water drainage at the facility is collected by the SWTS (SWMU 12) and treated prior to discharge to the Rocky River, there is a moderate potential for a release to surface water. The Rocky River is located 500 feet southwest of the facility and ground-water flow in the area is south-southwest.

Air: Low. Contaminants associated with this unit were found below ground surface.

The potential for a future release from this area is low. According to facility representatives, verification soil samples collected from this area did not show detectable levels of contaminants.

Recommendations: Dynamac recommends that the facility continue remediation activities associated with AOC under MDNR guidance.

**AOC 3** **Transmission Fluid Leak Area**

Conclusions: The AOC is located indoors, near the southwest portion of the manufacturing building. During remodeling and renovation in 1989, the facility experienced a documented release to on site soils associated with a broken sump in the area. Soil was excavated and removed to ground water (approximately 19.5 feet BGS) in a 15 foot radius of the sump. According to facility representatives, soil samples collected from the excavation indicated the presence of MEK (10 ppb) and PNAs (levels unknown). At the time of the VSI, facility representatives indicated that additional soil had been removed, but verification soil sampling had not been conducted. According to Patricia Crowley of the MDNR, the facility submitted a report documenting initial removal activities on July 14, 1992. Ms. Crowley also stated that MDNR scheduled a meeting with GMC-SD for August 8, 1992, to discuss and define actions required to complete remediation activities associated with this AOC (MDNR, 1992b). The potential for a historical release to environmental media is summarized below.

On-Site Soils: Soil samples collected during the remediation activities indicated the presence of MEK and PNAs.

Ground Water: High. Contaminated soil was excavated and removed to ground water (approximately 19.5 feet BGS), but ground water was not sampled. There is a high potential that contaminants impacted ground water in the past.

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Surface Water: Moderate. Although surface water drainage at the facility is collected by the SWTS (SWMU 12) and treated prior to discharge to the Rocky River, there is a moderate potential for a release to surface water. The Rocky River is located 500 feet southwest of the facility and ground-water flow in the area is south-southwest.

Air: Low. Contaminants associated with this unit were found below ground surface.

The potential for a future release from this area is low. The facility submitted a report to the MDNR on July 14, 1992, documenting the initial removal activities associated with AOC 3.

Recommendations: Dynamac recommends that the facility continue remediation activities associated with this area under MDNR guidance.

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**TABLE 3**
**SWMU AND AOC SUMMARY**

| SWMU | Dates of Operation | Evidence of Release | Recommended Further Action |
|---|---|---|---|
| 1. Scrap Metal Gondolas | 1980 to Present | None | None |
| 2. Scrap Metal Collection Areas | 1980 to Present | None | None |
| 3. Grinder Sludge Gondola | 1980 to Present | None | None |
| 4. Grinder Sludge Roll-Off Area | 1980 to Present | None | None |
| 5. Steel Peed Gondola | 1991 to Present | None | None |
| 6. Weld Slag Drums | 1991 to Present | None | None |
| 7. Paint Room Bucket | 1980 to Present | None | None |
| 8. Former Metal Lab SAA | 1980 to 1990 | None | None |
| 9. Steam Booth Catch Basin | 1980 to Present | None | None |
| 10. Coal Pad and Run-Off Lagoon | 1980 to Present | None | None |
| 11. Waste Water Treatment System | 1980 to Present | None | None |
| 12. Storm Water Treatment System | 1980 to Present | None | None |
| 13. Former Treatment Sludge UST Area | 1980 to 1990 | Documented Soil Contamination | Dynamac recommends that the facility continue remediation activities associated with this unit under MDNR guidance. |

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**TABLE 3**
**SWMU AND AOC SUMMARY**
**(continued)**

| SWMU | Dates of Operation | Evidence of Release | Recommended Further Action |
|---|---|---|---|
| 14. Treatment Sludge ASTs | 1990 to Present | None | None |
| 15. Outdoor Roll-Off Area | 1985 to Present | None | None |
| 16. Coal Ash Silo | 1980 to 1990 | None | None |
| 17. Hazardous Waste Storage Building | 1980 to Present | None | None |
| 18. Oil Storage Barn | 1980 to Present | None | None |

| AOC | Dates of Operation | Evidence of Release | Recommended Further Action |
|---|---|---|---|
| 1. UST Area A | 1979 to 1990 | Documented Soil Contamination | Dynamac recommends that the facility continue remediation activities at this area under MDNR guidance. |
| 2. UST Area B | 1958 to 1990 | Documented Soil Contamination | Dynamac recommends that the facility continue remediation activities at this area under MDNR guidance. |
| 3. Transmission Fluid Leak Area | Not Applicable | Documented Soil Contamination | Dynamac recommends that the facility continue remediation activities at this area under MDNR guidance. |



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GMC-HD, 1981. Revised Part A permit application for the GMC-TR facility, November 20.

GMC-HD, 1987a. Letter from GMC-HD to EPA requesting that the facility's Part A be withdrawn and its status changed to that of a generator only, August 25.

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MDNR, 1979. Letter from Roger Przybysz, Water Quality Division of MDNR, to GMC-TR regarding storm water discharge, June 12.

MDNR, 1982. RCRA compliance inspection report prepared by Roger Przybysz, Water Quality Division, MDNR, April 28.

MDNR, 1983. RCRA compliance inspection report prepared by Chuck Bikfalvy, Compliance Section, MDNR, June 22.

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MDNR, 1986a. RCRA compliance inspection report prepared by Chuck Bikfalvy, Compliance Section, MDNR, June 3.

MDNR, 1986b. Letter from MDNR to GMC-HD stating that the facility was operating in compliance at the time of the inspection, July 9.

MDNR, 1987. Letter from Chuck Bikfalvy of the MDNR to GMC-HD stating that the facility must conduct MDNR approved RCRA closure in order to change the facility's status, September 15.

MDNR, 1988a. Letter from the MDNR to GMC-HD approving the GMC-TR facility's Closure Plan for the Hazardous Waste Storage Building, January 19.

MDNR, 1988b. MDNR Field Report of the closure verification inspection conducted at the GMC-TR facility, April 19.

MDNR 1988c. Letter from MDNR to GMC-HD approving RCRA closure activities at the facility, September 27.

MDNR, 1992a. Telephone conversation between Dennis Dunlap of MDNR and Valerie Farrell of Dynamac regarding surface water use near Three Rivers, Michigan, June 25.

MDNR, 1992b. Telephone conversation between Patricia Crowley of MDNR and Valerie Farrell of Dynamac regarding remediation activities at the GMC-TR facility, July 17.

MDNR, 1992c. Telephone conversation between Nadine Deak of MDNR and Valerie Farrell of Dynamac regarding available file information regarding the use of the GMC-TR facility prior to 1980, November 30.

National Oceanic and Atmospheric Administration (NOAA), 1979. Climatography of the U.S.,Ashville, NC.

NOAA, 1990. Local Climatological Data from 1990 (South Bend, Indiana)

Snell Environmental Group (SEG), 1991. Site Characterization Report for the GMC-TR facility located in Three Rivers, Michigan, January 17.

Soil Conservation Service (SCS), 1983. Soil Survey of St. Joseph County, Michigan, April.

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USGS, 1972b. 7.5 minute series topographic map, 1:24,000 scale, Three Rivers West, Michigan Quadrangle. Photoinspected 1970.

Western Michigan University (WMU), 1981. Hydrogeologic Atlas of Michigan, Kalamazoo, Michigan.

# ATTACHMENT A

# EPA PRELIMINARY ASSESSMENT FORM
# 2070-12

EPA

# POTENTIAL HAZARDOUS WASTE SITE
## PRELIMINARY ASSESSMENT
### PART 1 - SITE INFORMATION AND ASSESSMENT

**I. IDENTIFICATION**

| 01 STATE | 02 SITE NUMBER |
|---|---|
| MI | MID 000 718 551 |

## II. SITE NAME AND LOCATION

| 01 SITE NAME (Legal, common, or descriptive name of site) | 02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER |
|---|---|
| General Motors Corporation - Three Rivers Facility | One Hydra-Matic Drive |

| 03 CITY | 04 STATE | 05 ZIP CODE | 06 COUNTY | 07 COUNTY CODE | 08 CONG DIST |
|---|---|---|---|---|---|
| Three Rivers | MI | 49093 | St. Joseph | | |

| 09 COORDINATES: LATITUDE | LONGITUDE |
|---|---|
| 41° 51' 23" N | 85° 38' 34" W |

10 DIRECTIONS TO SITE (Starting from nearest public road)

Travel Interstate 94 east to U.S. Route 131. Travel U.S. Route 131 south, for approximately 20 miles, to Hoffman Road. Take a left (east) on Hoffman Road and then take a left (north) into the facility parking lot.

## III. RESPONSIBLE PARTIES

| 01 OWNER (if known) | 02 STREET (Business, mailing residential) |
|---|---|
| General Motors Corporation - Saginaw Division | One Saginaw Drive |

| 03 CITY | 04 STATE | 05 ZIP CODE | 06 TELEPHONE NUMBER |
|---|---|---|---|
| Three Rivers | MI | 49093 | (616) 278-0251 |

| 07 OPERATOR (If known and different from owner) | 08 STREET (Business, mailing, residential) |
|---|---|
| Same as above | |

| 09 CITY | 10 STATE | 11 ZIP CODE | 12 TELEPHONE NUMBER |
|---|---|---|---|
| | | | |

13 TYPE OF OWNERSHIP (Check one)

■ A. PRIVATE ☐ B. FEDERAL: (Agency name) ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL

☐ F. OTHER _____ (Specify) ☐ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)

■ A. RCRA 3010 DATE RECEIVED: 03 / 18 / 80 (MONTH DAY YEAR) ☐ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: ___ / ___ / ___ (MONTH DAY YEAR) ☐ C. NONE

## IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION

■ YES DATE 05 / 06 / 92
☐ NO

BY (Check all that apply)

☐ A. EPA ■ B. EPA CONTRACTOR ☐ C. STATE ☐ D. OTHER CONTRACTOR
☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: _____ (Specify)

CONTRACTOR NAME(S): Dynamac Corporation

02 SITE STATUS (Check one)

■ A. ACTIVE ☐ B. INACTIVE ☐ C. UNKNOWN

03 YEARS OF OPERATION

1980 / Present (BEGINNING YEAR ENDING YEAR) ☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

Paint wastes containing solvents (F003, F005, D001, D035); oily sludges; and scrap metal. Prior to 1990, there were 19 underground storage tanks at the facility with the following contents: mineral spirits, transmission fluid, oils, soap, lubricant, fuel oil, gasoline, and waste oil.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

Potential ground-water contamination associated with leaking underground storage tanks and a leaking sump containing transmission fluid.

## V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents.)

☐ A. HIGH (Inspection required promptly) ☐ B. MEDIUM (Inspection required) ■ C. LOW (Inspect on time-available basis) ☐ D. NONE (No further action needed; complete current disposition form)

## VI. INFORMATION AVAILABLE FROM

| 01 CONTACT | 02 OF (Agency/Organization) | | 03 TELEPHONE NUMBER |
|---|---|---|---|
| Kevin Pierard | U.S. EPA | | (312) 886-4448 |

| 04 PERSON RESPONSIBLE FOR ASSESSMENT | 05 AGENCY | 06 ORGANIZATION | 07 TELEPHONE NUMBER | 08 DATE |
|---|---|---|---|---|
| Valerie Farrell | | Dynamac Corporation | (312) 466-0222 | 06 / 30 / 92 (MONTH DAY YEAR) |

# ATTACHMENT B

# VISUAL SITE INSPECTION SUMMARY AND PHOTOGRAPHS

# VISUAL SITE INSPECTION SUMMARY

## GENERAL MOTORS CORPORATION - THREE RIVERS FACILITY
## ONE SAGINAW DRIVE
## THREE RIVERS, MICHIGAN
## MID 000 718 551

| | |
|---|---|
| Date: | May 6, 1992 |
| Primary Facility Representative: | Gerald Timmer, Senior Environmental Engineer |
| Representative Telephone No.: | (616) 278-0251 |
| Additional Facility Representatives: | Dean Suber, Manufacturing Engineer<br>David Burgner, Plant Manager<br>David Seamans, Senior Plant Engineer<br>Brenda Pearow, Environmental Technician |
| Inspection Team: | Valerie Farrell, Dynamac Corporation<br>Joseph Weslock, Dynamac Corporation |
| Photographer: | Joseph Weslock, Dynamac Corporation |
| Weather Conditions: | Sunny and Windy, approximately 60° Fahrenheit |

Summary of Activities:

The visual site inspection (VSI) began at 10:30 a.m. with an introductory meeting. The inspection team explained the purpose of the VSI and the agenda for the visit. Facility representatives then discussed the facility's past and current operations, solid wastes generated, and release history. Facility representatives provided the inspection team with copies of requested documents.

The VSI tour began at 3:20 p.m. The inspection team first walked through the manufacturing building and observed the Weld Slag Drums (SWMU 6), the Transmission Fluid Leak Area (AOC 3), the Steel Peed Gondola (SWMU 5), the Steam Booth Catch Basin (SWMU 9), the Scrap Metal Gondolas (SWMU 1), the Scrap Metal Collection Areas (SWMU 2), and the Grinder Sludge Roll-Off Area (SWMU 4). The inspection team did not observe the Grinder Sludge Gondola (SWMU 3), but facility representatives indicated that it is identical to the Scrap Metal Gondolas (SWMU 1).

Facility representatives then led the inspection team outside the northeast corner of the manufacturing building. The inspection team observed the Outdoor Roll-Off Area (SWMU 15), the Coal Ash Silo (SWMU 16), the Coal Pad and Run-Off Lagoon (SWMU 10), the Waste Water Treatment System (WWTS) (SWMU 11), the Storm Water Treatment System (SWTS) (SWMU 12), the Former Treatment Sludge Underground Storage Tank Area (SWMU 13), the Hazardous Waste Storage Building (SWMU 17), the Oil Storage Barn (SWMU 18), the Treatment Sludge Aboveground Storage Tanks (AST) (SWMU 14), UST Area A (AOC 1), and UST Area B (AOC 2).

The inspection team then re-entered the manufacturing building and observed the Paint Room Bucket (SWMU 7) and the Former metal Lab Satellite Accumulation Area (SAA) (SWMU 8).

The tour concluded at 5:40 p.m., after which the inspection team held an exit meeting with facility representatives. The VSI was completed and the inspection team left the facility at 5:50 p.m.

**Photo No.** : **1**
**Location** : **SWMU 1**
**Orientation** : **South**
**Date** : **June 6, 1992**
**Description** : **Six Scrap Metal Gondolas being stored in the Scrap Metal Collection Area (SWMU 2).**

**Photo No.:** **2** **Location: SWMU 4**
**Orientation:** **West** **Date: June 6, 1992**
**Description:** **Grinder Sludge Roll-Off Area located in the concrete pit in background of photograph.**

**Photo No.:** 3 **Location:** SWMU 4
**Orientation:** North **Date:** June 6, 1992
**Description:** Sump located in the bottom of the concrete pit associated with the Grinder Sludge Roll-Off Area.

**Photo No.** : 4
**Location** : SWMU 5
**Orientation** : South-southwest
**Date** : June 6, 1992
**Description** : Steel Peed Gondola.

| | | |
|---|---|---|
| **Photo No.** | **:** | **5** |
| **Location** | **:** | **SWMU 6** |
| **Orientation** | **:** | **North-northwest** |
| **Date** | **:** | **June 6, 1992** |
| **Description** | **:** | **Weld Slag Drums.** |

**Photo No.:** **6**
**Orientation:** **North**
**Description:** **Weld Slag Drums.**

**Location:** **SWMU 6**
**Date:** **June 6, 1992**

**Photo No.:** 7 **Location:** SWMU 8
**Orientation:** East **Date:** June 6, 1992
**Description:** Former Metal Lab Satellite Accumulation Area (SAA).

**Photo No.:** 8 **Location:** SWMU 9
**Orientation:** North **Date:** June 6, 1992
**Description:** Steam booth located near the northeast portion of the manufacturing building. The Steam Booth Catch Basin (SWMU 9) is located under the steel grate at the bottom of a concrete pit.

**Photo No.:** 9 **Location:** SWMU 10
**Orientation:** Northeast **Date:** June 6, 1992
**Description:** Coal Pad and Run-Off Lagoon.

**Photo No.:** 10 **Location:** SWMU 11
**Orientation:** Southeast **Date:** June 6, 1992
**Description:** Four 244,000-gallon concrete holding tanks associated with the Waste Water Treatment System (WWTS).

**Photo No.:** 11 **Location:** SWMU 12
**Orientation:** South **Date:** June 6, 1992
**Description:** 7,000,000-gallon storm water retention pond associated with the Storm Water Treatment System (SWTS).

**Photo No.** : 12
**Location** : SWMU 14
**Orientation** : Northeast
**Date** : June 6, 1992
**Description** : Two 10,000-gallon ASTs (Treatment Sludge ASTs) used for the collection of treatment sludge generated by the WWTS (SWMU 11) and the SWTS (SWMU 12).

**Photo No.:** 13 **Location:** East of the WWTS Building
**Orientation:** Southwest **Date:** June 6, 1992
**Description:** Area east of WWTS building where treatment sludge is removed from the Treatment Sludge ASTs (SWMU 14) by a vacuum truck.

**Photo No.:** 14
**Location:** SWMU 16
**Orientation:** South
**Date:** June 6, 1992
**Description:** Coal Ash Silo.

**Photo No.:** 15 **Location:** SWMU 17
**Orientation:** East **Date:** June 6, 1992
**Description:** Hazardous Waste Storage Building.

**Photo No.:** 16 **Location:** SWMU 18
**Orientation:** South **Date:** June 6, 1992
**Description:** Oil Storage Barn located on the left.

**Photo No.:** 17 **Location:** SWMU 18
**Orientation:** East **Date:** June 6, 1992
**Description:** Fifteen 55-gallon drums of nonhazardous oil sludge located in the Oil Storage Barn.

**Photo No.:** 18 **Location:** Paint Room
**Orientation:** Northwest **Date:** June 6, 1992
**Description:** Safety-Kleen parts washer located in paint room.

**Photo No.:** 19 **Location:** AOC 1
**Orientation:** Northeast **Date:** June 6, 1992
**Description:** UST Area A. Former location of ten 30,000-gallon product USTs.

**Photo.:** 20 **Location:** SWMU 13
**Orientation:** Southeast **Date:** June 6, 1992
**Description:** Former Treatment Sludge UST Area.

**Photo.:** 21 **Location: AOC 3**
**Orientation:** South-southwest **Date: June 6, 1992**
**Description:** Transmission Fluid Leak Area inside manufacturing building.

**Photo.:** 22 **Location: AOC 2**
**Orientation:** West **Date: June 6, 1992**
**Description:** UST Area B. Former location of two 30,000 gallon fuel oil USTs removed from the facility in 1990.

**Photo.:** 23 **Location: Outside Southwest Corner of Manufacturing Building**
**Orientation: East** **Date: June 6, 1992**
**Description: Location of 300-gallon gasoline UST used for emergency fuel for the back-up generator at the facility.**

# ATTACHMENT C

# VISUAL SITE INSPECTION
# FIELD NOTES

(1) 5/6/92 GMC - Saginaw Facility
Arrive 10:30 AM. Valerie Farrell &
Joe Westlock, Dynamac. Sunny, approx.
60°F.
Met by Gerald Timmer, Sr Envtl Engineer
Dean Suber, Mfg Engineer
David Burgner, Plant Mgr.
David Seamans, Sr. Plant Eng.
Brenda Pearson, Environmental technical

facility originally a Continental Can fac.
GM purchased in 1979. Hydramatic Div.
converted to transmission Mfg facility.
Changed to Saginaw Div. in May 1990.
Currently re-tooling to mfg. axles for
drive-shaft (n/k/a) prop-shaft plant.
started drive shafts in Dec. 1990. Still at
very low production assembly only.
Machining started Fall 1991.
About 300 employees currently. Expected
to double. 2,100 people before 1990
change.

facility built in 1958. Closed in
70s by CC for a couple 3 years.

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prox.

Engineer
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Eng.
ental technical

Can fac.
Driv.
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ay 1990.
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1990

in

②

facility property 129.8 acres
17 acres covered by bldgs.

property fenced - mfg operations
only. 24-hour/7-day manned
security.

West border - US 131. South - Hoffman Rd.
North - Lovers Lane. East - Conrail lines.

Rocky River - west & south of fac. -
dumps into St Joseph River - discharge
to Lake Mi.. Outside of St Gow
Rocky River Flood Plain.

All storm water collected & treated
prior to discharge to Rocky River.

W/in Three Rivers, approx 7,500 people

Entrance from Hoffman Rd
Lovers Lane & Clifton Drive

GOW

(3)

Rail spur from Conrail Line.

Transmission - main processes:
① machining - casting - steel wt. cutting, turning, boring, drilling, reaming. Presses & stampings

- waste - scrap metal, waste coolants - oil/water mixture. Recycled w/in machines - about 5% oil in water emulsion. When changed out, pumped to WWTP.
Process wastewater - total - ~~includes gov~~ average 2,000,000 gal/mo.

Scrap metal collected in gondolas at machining areas 1 & 2 - yd. units. Chips sent to chip processing unit - include Al, cast iron & steel. Machining took place plant-wide

North Chip System - Chipper, shredder & dryer.

South - centrifuge & dryer. No chipper, or shredder

(4)

Chips at North area dumped into truck - about 1-1½ wks to fill open-top dump truck. - About 40,000 pd capacity (30-40 yds). Transporter - varied. Most gov recycler varied - bid yearly to get best priced

---

Aluminum collected by GM or GM contractor & re-used by GM foundries ≈ 500,000 lbs/mo.

---

Arma steel - same recycling as regular.

70% AL 20% Cast iron 10% Steel.

---

Other machining wastes - grinder sludge sludge collected in gondolas - mostly cast iron & steel

---

Grinding sludge collected at sludge 20-yard roll-off - indoors. Liquid run-off pumped to WWTP via floor drain.

---

JOW

(5)

Average about 2-20cyd roll-offs/week.
Transporter-varied-bid out. ->
taken to West Side Refuse & Disposal Facility
-Fairlawn Twp.

After machining-assembly.

After assembly-washing.-water wash-
water collected & treated at WWTP.

Heat treating of drive shafts. No
solid waste except quench oil.
in-ground 4,000-gal tanks -
emergency tanks. Quench oil
periodically-changed out
will ask at end-doesn't recall.

Maintenance changed machine hydraulic
fluids-went to WWTP.

In-house garage-car wash.-went
to WWTP.

JW

(6)

No parts washers, no solvent usage.

1 degreaser - 1,1,1 TCA - 10 sq. ft. ->
in maintenance; - changed about
once/yr. - about 55 gals. - hauled
directly to hazardous storage bldg.
- transported TSD varied year to year.
Example: Safety-Kleen in Dalton ->
reclamation. Stopped use in 1990.

Paint shop - maintenance painting -
touch up. Paint Booth - dry filter
solvent based paint. Brush cleaning -
lacquer thinner - ave. 1 drum/mo.

Paint booths changed - cleaned every
4-5 yrs. - drummed & regd as haz. waste.

12:15 - break for lunch 12:45 resume.

During hydromatic solvents used in
3-4 drums/yr. settlement area (acetone, then mineral spirits)
3-4 drums/yr. Metal lab - toluene, freon, de-natured alcohol,
carbon tetrachloride
1 drum/mo. paint shop - lacquer thinner

(7)

after sattelite accumulation, drums go to hay waste mgt bldg.

oil sludge - generated at cleaning booth. Sludge collected in catch basin. Drummed & shipped to M. Disposal - solidification & landfill - Ypsilanti, MI. - Drums moved to Oil Stores Barn prior to disposal. 20 accumulated every 3-4 mos., prior to shipment.

analyses - non-hay. - req. copy.

Saginaw (post-90) processes.

No AL use: No Arma-Steel use. regular steel use increases

Added - phosphating operation - Managnese - phosphate operation - started in Feb-92 (pilot operation) coats shafts. Wastewater pumped to WWTP.

JW

(8)

sludges will be changed probably about once/yr - about 500-gal bath

sludge anticipated to be vacuumed out once/yr. Anticipate take non-haz.

new Safety-Kleen parts bath - late 91. - uses mineral spirits - made by safety-kleen. for recycling at Chicago facility

USTs

Tank Farm - 10, 30,000-gal steel USTs, cathodic protection - installed 1979. Product storage - oils, coolants, lubricants. Removed in late 1990 - complete mid-91. Leaks found - remediation under MDNR oversight. State has submitted questions: GMC has not responded to questions:
- Area A.

Area C. - 4, 12,000-gal fiberglass USTs Waste oil from WWTP. North tank leaked. Remediation - soil removed & GW. Tank 1 - still there. Want to close in place.

(9)

GW - 20.5 ft. - under waste oil USTs.

GW sampled. Results - nothing at detection limits

2, 30,000-gal fuel oil USTs - alternate fuel for Cont'l Can boilers. 1950s installation - removal - same time. found staining near filling pipe - removed soil. PNAs found. Soil removed - no detection in verification sampling.

2 - 900 gal vehicle fuel USTs 1 diesel, 1 - gas. Installed 1982 or 83

1 - 300-gal UST w/ emergency fuel for generator. → planning on '92 removal. Weekly inventory. Installed - original facility - late 50s.

gw ~~100 ft²~~ concrete pad for coal storage
100x100 Ft concrete " " " "
runoff channelled to lagoon & pumped to WWTP.

gw

(10)

lagoon - about 4 ft deep, 8 ft wide,
x ft long. - concrete

about 14-16" concrete lagoons.
designed for 100-yr rainfall.
Could not used since re-tooling in
1990. May not be re-used.
installed 1979.

Beginning 1985 - separate
sludge-filter paper box on
concrete pad. Gondulo.
20-yd. filled 3-4 times/year.
recycled for AL

4, 250-000 gal concrete tanks
used for holding of waste-water.
Treated, then discharged to POTW.
De-emulsifier soluble oils.
Dissolved air flotation. Oil pumped
~~to waste oil bldg. into tank~~
gal ~~trucks~~ to fiberglass above-ground
tanks - 1, 15,000-gal. Then pumped
to waste oil USTs. Since removal -
2-10,000 gal ASTs being stored in
bldg.

(11)

during hydromatic days, 5-6,000 gals (1 tanker)/week. Various vendors - unknown end.

---

once every 2 years, facility did fac-wide tanks cleaning - generated about 5,000-gals - sent to M. Disposal.

---

Storm water treatment

1-screening

2-CPI - oil seperator - gravity seperator - oil to WWTP.

-storm water retention basins - concrete-lined - designed for 100-yr. rain. 7-million gals.

---

Hwy waste bldg - metal garage - concrete - epoxy-coated slab.

---

JOW

(12)

Regulatory History

Not. Gen & TSD 1980.
PART A
-- Tank storage - 976,000.
precautionary - due to gravel oils
in WWTP lagoons.

Drum Storage & Oil Storage Bldg

Haz. Waste Bldg used to store

RCRA closure - under MDNR oversight
- have copy. Since then SQG

Application for storm water
discharge pending - discharge
to Rocky River.

POTW requires daily sampling
& quarterly sampling. COD, oil/grease
phenol, pH. Three Rivers Mun.
Waste Treatment Plant. Since
phosphating began also 8x/yr -
metals & TTOs. & daily metal

gor

(14)

cyclone/baghouse - ash silo -
trucked to West Side LF.
10-20 yd loads every 3 mos.
3,000 tons/year
5% ash
→ powerhouse built 1979.

---

3:20 - began facility walk-through
5:40 - concluded walk-through &
returned to room for wrap up.
5:50 concluded wrap-up - thanked
facility reps & left facility.

NATURAL RESOURCES COMMISSION
LARRY DEVUYST
PAUL EISELE
GORDON E. GUYER
JAMES P. HILL
DAVID HOLLI
O. STEWART MYERS
JOEY M. SPANO

STATE OF MICHIGAN

JOHN ENGLER, Governor

**DEPARTMENT OF NATURAL RESOURCES**

Stevens T. Mason Building, P.O. Box 30028, Lansing, MI 48909

**ROLAND HARMES**, Director

RECEIVED JAN 05 1993
WMD RCRA
RECORD CENTER

October 26, 1992

Ms. Laura Lodisio, HRE-8J
U.S. Environmental Protection Agency
Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

RECEIVED
OCT 29 1992
OFFICE OF RCRA
Waste Management Division
U.S. EPA, REGION V

Dear Ms. Lodisio:

SUBJECT: Comments on Draft PA/VSI
General Motors Corporation
Three Rivers Facility
MID 000 718 551

Thank you for the opportunity to review the draft PA/VSI for the subject facility. Our comments are enclosed.

This review is intended to identify major deficiencies in the draft PA/VSI. This review does not represent an exhaustive file search or technical analysis, and does not verify the accuracy of information presented in the draft PA/VSI.

Please contact me at Waste Management Division, Department of Natural Resources, P.O. Box 30241, Lansing, Michigan 48909, or at the telephone number listed below if you have any questions.

Sincerely,

Kenneth J. Burda

Kenneth J. Burda, Chief
Hazardous Waste Permits Section
Waste Management Division
517-373-0530

Enclosures

cc: Corrective Action File

Dynamac searched the file at MDNR but no information see page 6.

Stated this page 18.

mments
poration
51

General Motors C[illegible], Hydra-Matic Division, [illegible] Rivers facility, was regulated as a storage facility fro[illegible] 1980 to 1988. The hazardous waste container storage area at the Three Rivers facility was used to store solvents. This facility was approved clean closed by the Michigan Department of Natural Resources on September 27, 1988. Our files indicate that the Three Rivers facility submitted a request for change in status to generator from a TSD facility to EPA on August 25, 1987. We have no documented response from EPA approving the request.

It is our understanding that the PA/VSI is to include a historical search of facility documents, but the draft PA/VSI report states that no files prior to 1980 were inspected. It seems that there is a potential for releases to the air, water and soils prior to 1980 since the site was operated as an industrial site. Therefore, we recommend that a historical file search should be conducted to ensure that all potential releases be accurately assessed.

The draft PA/VSI discusses a moderate potential that a past release to groundwater occurred from SWMU 13 and AOCs 1, 2, and 3. The report also states that the site soils are sandy and porous, that groundwater is shallow (within 20 feet of the surface), that groundwater is used as a drinking water source in this area, and that spills of hazardous waste are documented in these portions of the site. We disagree that this represents a moderate risk of a past release, but instead represents a high risk of a past release.

Agreed and corrected.

# MICHIGAN DEPARTMENT OF NATURAL RESOURCES

## INTEROFFICE COMMUNICATION

October 9, 1992

TO: Kimberly Bee
Hazardous Waste Permits Unit

FROM: Kay Miller
Geological Support Unit

SUBJECT: GMC, Three Rivers Michigan MID 000 718 551
Review of Draft PA/VSI Executive Summary

I've reviewed the above-referenced document and offer the following comments. Prior to this document, I've had no involvement with this facility. Therefore, my comments are offered without benefit of a historical perspective and without field exposure to the site.

It is my understanding that the PA/VSI is to include a historical search of facility documents, but the draft PA/VSI report states that no files prior to 1980 were inspected. It seems that there is a potential for releases to the air, water and soils prior to 1980 since the site was operated as an industrial site. Therefore, I recommend that a historical file search should be conducted to ensure that all potential releases be accurately assessed.

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I hope that these comments help in your assessment of the draft PA/VSI report. If you would like to discuss this memo, let me know.

cc: De Montgomery

Kay M.



RECYCLED PAPER

From: BIKFALVC--DNRDC Date and time 10/07/92 17:02:13
To: BEEK --DNRDC

From: Bikfalvc
Subject: (u)GMC Three Rivers

In response to your memo of 10/5/92 requesting comments on the executive summary of the draft PA/VSI for this facility: I have read the document and found no reason to question the accuracy of any factual statements made. It appears consistent with my own knowledge of the facility. I have made no recent visits to the site since the closure of the storage building, however, so my knowledge of current operations is limited.

NATURAL RESOURCES COMMISSION
THOMAS J. ANDERSON
MARLENE J. FLUHARTY
KERRY KAMMER
O. STEWART MYERS
DAVID D. OLSON
RAYMOND POUPORE

STATE OF MICHIGAN

JAMES J. BLANCHARD, Governor

DEPARTMENT OF NATURAL RESOURCES

STEVENS T. MASON BUILDING
BOX 30028
LANSING, MI 48909

~~GORDON E. GUYER, DIRECTOR~~
David F. Hales, Director

September 27, 1988

Mr. Gerald K. Timmer
Senior Environmental Engineer
Hydra-Matic Division, GMC
One Hydra-Matic Drive
Three Rivers, Michigan 49093

Dear Mr. Timmer:

SUBJECT: Approval of Closure Certification
Three Rivers Facility
MID 000 718 551

Waste Management Division has reviewed the certification of closure from General Motors Corporation, Hydra-Matic Division, relating to the hazardous waste container storage area at the Three Rivers facility which was used to store solvents and has found it to be acceptable.

As a result, Waste Management Division is approving the closure certification and releasing General Motors Corporation, Hydra-Matic Division from the financial assurance requirements at its Three Rivers facility for closure of the storage area under R 299.9601(3) and 40 CFR §265.143(h).

Approval of closure of a Resource Conservation and Recovery Act (RCRA) interim status unit does not release the facility from its responsibilities under the Hazardous and Solid Waste Amendments of 1984 (HSWA). Closure does not terminate interim status and, therefore, General Motors Corporation may be responsible for corrective action if U.S. EPA and MDNR determines that a release of hazardous waste or hazardous waste constituents is taking or has taken place from a solid waste management unit as defined under HSWA.

If you have any questions, please contact Mr. Steve Blayer at 517-373-7739 or me.

Sincerely,

Alan J. Howard, Chief
Waste Management Division
517-373-9523

cc: Mr. Rich Traub, U.S. EPA - Region V
Ms. Marilyn Sabadaszka, U.S. EPA - Region V
Mr. Ken Burda, WMD/C&E File
Mr. Stephen Blayer, WMD
Mr. Chuck Bikfalvy, WMD, Plainwell

HYDRA-MATIC

HWP/CEE

RECEIVED

Waste Management Division

U.S. Environmental Protection Agency
Region 5, RCRA Activities
P.O. Box A3587
Chicago, Illinois 60690

Re: Request for change in status to Generator.

Facility: U.S. EPA #MID000718551
Hydra-matic Division, GMC
One Hydra-matic Dr.
Three Rivers, MI 49093

Dear Sir:

This letter is a formal request to change our RCRA status from "TSD facility" to "Generator" by means of withdrawal of our Part A application and closure of our storage facility. A signed certification of our operation as a "Generator accumulating waste on-site in compliance with 40 CFR 262.34" and a copy of our Closure Plan are attached.

At the time of the original filing of our Part A application, it was uncertain if we would be accumulating waste on-site in such a manner to require a permit. Routine operation and waste minimization efforts have shown that a permit will be unecessary due to the small amount of waste generated and length of our storage time.

If you have any questions, please direct them to myself at (616)278-0251 or Sandy Brewer at (616)278-0307, or in writing to the address above c/o myself.

Yours truly,

Gerald K. Timmer

Gerald K. Timmer
Sr. Environmental Engineer
Hydra-matic Division, GMC
St. Joseph County Operations

cc: Michigan Department of Natural Resources
William Collinson, GM Environmental Activities Staff

HYDRA-MATIC

REQUEST FOR CHANGE IN STATUS TO:

"GENERATOR ACCUMULATING WASTE ON-SITE
IN COMPLIANCE WITH 40 CFR 262.34"

Facility Name: Hydra-matic Division, General Motors Corp.
Facility Location: One Hydra-matic Dr.
Three Rivers, MI 49093
Mailing Address: (Same)
U.S. EPA ID No.: MID000718551

1. I certify, in reference to the above-named facility, that a complete and accurate description of the activities currently conducted, for purposes of the Resource Conservation and Recovery Act (RCRA), are those of a generator accumulating waste on-site, in compliance with 40 CFR 262.34. This description of activities shall be considered effective as of September 1, 1987.

2. I certify that all hazardous waste which had been stored at this facility for greater than 90 days have been permanently removed, and for that portion of the wastes that were present on-site on or after November 19, 1980, the manifest requirements of 40 CFR Part 262 have been complied with, and all manifests are on file at this facility, available for inspection by authorized State and Federal officials.

3. I finally certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Allen M. Coleman

Allen M. Coleman, Plant Manager

8-25-87
Date

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

Compliance

INTEROFFICE COMMUNICATION

RECEIVED MAR 5 1993
WMD RCRA
RECORD CENTER

October 9, 1992

TO: Kimberly Bee
Hazardous Waste Permits Unit

FROM: Kay Miller
Geological Support Unit

SUBJECT: GMC, Three Rivers Michigan MID 000 718 551
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I hope that these comments help in your assessment of the draft PA/VSI report. If you would like to discuss this memo, let me know.

cc: De Montgomery

Kay M.



RECYCLED PAPER

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

April 14, 1992

HRE-8J

Jerry Timmer
Senior Environmental Engineer
GMC - Saginaw Division
1 Saginaw Drive
Three Rivers, Michigan 49093

FILE COPY

Re: Visual Site Inspection
GMC - Saginaw Division
Three Rivers, Michigan
MID 000 718 551

Dear Mr. Timmer:

The United States Environmental Protection Agency (U.S. EPA) Region V will conduct a Preliminary Assessment including a Visual Site Inspection (PA/VSI) at the referenced facility. This inspection is conducted pursuant to the Resource Conservation and Recovery Act, as amended (RCRA) Section 3007 and the Comprehensive Environmental Response, Compensation, and Liability Act, as amended (CERCLA) Section 104(e). The referenced facility has generated, treated, stored, or disposed of hazardous waste subject to RCRA. The PA/VSI requires identification and systematic review of all solid waste streams at the facility. The objective of the PA/VSI is to determine whether or not releases of hazardous wastes or hazardous constituents have occurred or are occurring at the facility which may require further investigation. This analysis will also provide information to establish priorities for addressing any confirmed releases.

The visual site inspection of your facility is to verify the location of all solid waste management units (SWMUs) and areas of concern (AOCs) to make a cursory determination of their condition by visual observation. The definitions of SWMUs and AOCs are included in attachment I. The VSI supplements and updates data gathered during a preliminary file review. During this site inspection, no samples will be taken. A sampling visit to ascertain if releases of hazardous waste or constituents have occurred may be required at a later date.

Assistance of some of your personnel may be required in reviewing solid waste flow(s) or previous disposal practices. The site inspection is to provide a technical understanding of the present and past waste flows and handling, treatment, storage, and disposal practices. Photographs of the facility are necessary to document the condition of units at the facility and the waste management practices used.

Printed on Recycled Paper

The VSI has been scheduled for May, 6, 1992. The inspection team will consist of Russ Crittenden and Valerie Farrell of Dynamac Corporation, contractors for the U.S. EPA. Representatives of the Illinois Environmental Protection Agency (IEPA) may also be present. Your cooperation in admitting and assisting them while on site is appreciated.

The U.S. EPA recommends that personnel who are familiar with present and past manufacturing and waste management activities be available during the VSI. Access to any relevant maps, diagrams, hydrogeologic reports, environmental assessment reports, sampling data sheets, environmental permits (air, NPDES), manifests and/or correspondence is also necessary, as such information is needed to complete the PA/VSI.

If you have any questions, please contact me at (312) 886-4448 or Francene Harris at (312) 886-2884. A copy of the Preliminary Assessment/Visual Site Inspection Report, excluding the Conclusions and Executive Summary portions, will be sent when the report is available.

Sincerely yours,

Kevin M. Pierard, Chief
OH/MN Technical Enforcement Section

attachment

cc: Ken Burda, Chief, Permit Section, MDNR Waste Management Division
Dennis Drake, Chief, Compliance Enforcement Section, MDNR