Index to the Administrative Record
Henkel Corporation, Henkel Surface Technologies
322 West Main Street
Morenci, MI
MID 058 723 867

Document Number	Date	Description/Author(if applicable)
HST-001	March 82 -Jan 87	Inspection Reports and Correspondence to and from Ecology and Environment (E&E), Michigan Department of Environmental Quality (MDEQ), Oxymetal Corp, Hooker Chemical, Parker Chemical and Henkel Surface Tech.
HST-002	Aug 82- March 89	RCRA Part A Permit Files of Oxymetal Corp, Hooker, Parker Chemical and Henkel Surface Tech.
HST-003	4/23/86	Ecology and Environment Preliminary Assessment/Visual Site Inspection (PA/VSI) Report
HST-004	5/27/82- 10/25/90	MDEQ Inspection Records and files.
HST-005	9/30/94	RCRA Corrective Action Prioritization Report and site scoring, authored by PRC Environmental Management Inc.,(now known as Tetratech, EMI, Inc.)
HST-006	2/26/ 2001	Groundwater Sampling Plan produced by the Dragun Corp on behalf of Henkel Surface Technologies, authored by Jeffrey Bolin of Dragun Corp.
HST-007	2/28 2001	Letter from HST-Morenci to U.S. EPA (Thomas Manning) conveying a copy of HST-006 (above).
HST-008	3/13/ 2000	Printed copy of first set of CA725 and CA750 Environmental Indicator Determinations (CA-725 is the determination for Human Exposures under Control, CA-750 is for Migration of Contaminated Groundwater Under Control.) Authored by Tom Manning, US EPA.
HST-009	5/3/ 2001	Record of Conference Call with Mr. Jack Garavanta of Henkel, and Tom Manning of US EPA, on findings of Groundwater Sampling Work Plan of February 2001.
HST-010	5/11 2000	Fax from Dragun Corp, with cc. to Jack Garavanta of Henkel Corp., of MDEQ Part 201 Cleanup concentrations of contaminants, authored by Jeffrey Bolin of Dragun.
HST-011	5/19 2000	Letter to Tom Manning of US EPA authored by Jeffrey Bolin of Dragun Corp, cc. Jack Garavanta of Henkel, summarizing a conference call on May 11, 2000, and

The Administrative Record for Henkel Surface Technologies, Morenci, Michigan will be located at:

U.S. Environmental Protection Agency

Index to the Administrative Record
Henkel Corporation, Henkel Surface Technologies
322 West Main Street
Morenci, MI
MID 058 723 867

including an attachment of groundwater sampling results at Henkel, Morenci MI.

HST-012	6/4/2001	Fax from Tom Manning of US EPA to Jack Garavanta of Henkel, indicating "Comments: None" to Groundwater Sampling Plan Meeting Notes.
HST-013	6/4/2001	Letter from Tom Manning, US EPA to Jack Garavanta, Henkel, asking Henkel to implement the Groundwater Sampling Plan (HST-006), and conveying concern regarding results due to lack of signed Voluntary Agreement on site cleanup.
HST-014	6/13/ 2001	Letter from Michael Jaeger of KAR Laboratories to Clifford Lawson of Dragun Corp., complying with Dragun's request for the Standard Operating Procedure (SOP) for Analysis of Volatile Organic Compounds (VOCs). A copy of the SOP is attached to this letter.
HST-015	6/15/ 2001	Letter from Jeffrey Bolin of Dragun Corp. to Tom Manning of US EPA with cc. to Jack Garavanta of Henkel, submitting a copy of the SOP for VOCs from KAR Laboratories (HST-014).
HST-016	8/30/ 2001	Groundwater Sampling Report authored by Dragun Corp., prepared for Henkel Corp.
HST-017	5/2000- 9/2001	Several Drafts of Voluntary Cleanup agreement for the Henkel Morenci, exchanged and modified several times between US EPA and Henkel Corp.
HST-018	9/4/2001	Letter to Tom Manning of the US EPA, authored by Jack Garavanta of Henkel Corp, specifying that the Groundwater Sampling of 8/2001 was in lieu of a proposed voluntary agreement, and claiming that the analytical results from the sampling event show no unacceptable concentrations of VOCs.
HST-019	10/19 2001	Letter from US EPA, authored by Tom Manning, to Jack Garavanta of Henkel Corp, specifying that without a Voluntary Cleanup Agreement, Mr. Manning cannot formally address the groundwater sampling results (of HST-016), and stating the finding that a groundwater problem exists, and that the matter is being turned over to the Enforcement and Compliance Assurance Branch (ECAB).
HST-020	11/6/ 2001	Fax of Monitoring Well and soil boring data from Clay Spencer of the MDEQ to Brian P. Freeman of the US EPA.

The Administrative Record for Henkel Surface Technologies, Morenci, Michigan will be located at:

U.S. Environmental Protection Agency

Index to the Administrative Record
Henkel Corporation, Henkel Surface Technologies
322 West Main Street
Morenci, MI
MID 058 723 867

HST-021	12/11/ 2001	Newly prepared Environmental Indicator Determinations CA-725 and CA-750 authored by Brian P. Freeman (US EPA) re: Henkel Corp.
HST-022	11/5/ 2001	US EPA Envirofacts internet query results on the Henkel Corp. Morenci, MI site.
HST-023	11/28/ 2001	Letter authored by Jack Garavanta of Henkel to Brian P. Freeman of US EPA setting forth Henkel's reasoning regarding a potential enforcement order.
HST-024	12/18/ 2001	Response letter of US EPA authored by Brian P. Freeman responding to statements made in the Henkel (Garavanta) letter of 11/28/2001 (HST-023) and stating that US EPA intends to issue an administrative order for corrective action at the Henkel Corp. site.
HST-025	12/4/	Draft Administrative Order pursuant to RCRA section 3008h.

The Administrative Record for Henkel Surface Technologies, Morenci, Michigan will be located at:

U.S. Environmental Protection Agency

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF

C-14J

October 30, 2003

Kenneth C. Gold, Esq.
Honigman Miller Schwartz and Cohn LLP
660 Woodward Avenue
2290 First National Building
Detroit, Michigan 48226.

RE: Henkel Surface Technologies, RCRA (3008h)-05-2002-0004

Dear Mr. Gold:

I am writing to confirm EPA's position (I have previously sent you an e-mail and left you a voice message conveying our position) on the issue of basic sediment sampling of Bean Creek near the Henkel Surface Technologies' (HST) Site. EPA believes that HST should perform very basic sampling of Bean Creek sediments (at areas similar to those sampled in 1982) to confirm whether or not any contamination from the Site is currently in the sediments. I am attaching a copy of a memorandum that summarizes the technical basis for EPA's position on the 1982 data, and the additional sampling.

EPA has carefully reviewed the State of Michigan's 1982 sediment sampling data. We have concluded that the 1982 data does not provide an adequate picture of current potential contamination and risk levels. Reasons for our conclusion include the following: 1) the data is old and contaminants may have entered the Creek after the 1982 samples were taken; 2) the 1982 data was developed with test methods and detection limits that are outdated, and which tended to under-state the amount of contaminants analyzed; and 3) the 1982 data actually confirms that contaminants entered the Creek as it passes the Site.

As a result of our analysis, EPA still believes that basic sediment sampling must be done in the Creek at and near the Site in order to assess current conditions. We still hope that HST agrees to take the samples as part of an agreed order resolving this matter. However, if HST is not prepared to agree to take the samples, EPA plans to take sediment samples as soon as possible, perhaps in November. We believe that the Agency has

Recycled/Recyclable . Printed with Vegetable Oil Based Inks on 100% Recycled Paper (50% Postconsumer)

clear authority to order HST to perform the sampling, but, at least at this point, we believe that it would be prudent to obtain the samples promptly, without awaiting conclusion to litigation over an order to HST to sample. We would seek to have HST repay the cost of the sediment sampling and analysis.

Please get back to me by Friday November 7, regarding whether HST is willing to agree to perform limited sediment sampling in the Creek near the Site as proposed by EPA, so that the Company, the Agency, and the public can be assured that the sediments do not pose significant risk to health or the environment. The parties are to submit a report or reports to the Presiding Officer by November 14. Also, EPA wants to perform the sampling as soon as possible if there is no agreement between the parties, before the onset of Winter makes the task more difficult.

If you have any questions about this letter, or the proposed sampling, please contact me. My telephone number is (312)886-6663. My e-mail address is "daugavietis.andre@epa.gov."

Sincerely,

A. Daugavietis
Associate Regional Counsel

Enclosure

cc: J. Garavanta, HST
C. Spencer, MDEQ
P. Quackenbush, MDEQ

MEMORANDUM

DATE: October 28, 2003

SUBJECT: Review of MDEQ Sampling and Analytical Data for Bean Creek Sediments near Henkel Surface Technologies Site

FROM: Brian P. Freeman, Brian P. Freeman
Senior Chemist,
RCRA Enforcement and Compliance Assurance Branch

TO: File

This memorandum summarizes my review and technical judgement of the MDEQ Sampling and Analytical data for Bean Creek Sediments collected on or about July 27, 1982, in the area of the Creek near the site of Parker Surface Treatment Co, the predecessor to Henkel Surface Technologies (HST). The summary was stamped "RECEIVED OCT 29, 1982, Water Quality Div., DIST. 1". This data is in the Administrative Record for this matter, which stems from the Administrative Order that the Region issued to HST under Section 3008h of RCRA.

My opinions and/or judgements are based only upon the summary data. No raw data, spectra, analytical methods or sampling standard operating procedures or methods have been located for this 1982 sampling.

Some of my opinions and/or judgements on the 1982 data are as follows:

1. Data for purgable hydrocarbons, purgable aromatic hydrocarbons, metals, and polychlorinated biphenyls (PCBs) were included in the summary data. Some sampling points were for water, others for sediment.

2. The summary tables list several sediment sampling locations starting at 1000' upstream of Main Street (the north boundary of the facility and the Creek), with other locations 550', 300', 200' and 100' upstream of Main Street, at Main Street, at the groundwater seepage point to Bean Creek just below where the barrel was reported buried in the left creek bank, and downstream of the Site. The 300' upstream of Main Street location was

Recycled/Recyclable . Printed with Vegetable Oil Based Inks on 100% Recycled Paper (50% Postconsumer)

described as Outfall #117 ("process waste being discharged that should have been entering sanitary sewer, downstream of Parker Chemical"), and the 550' upstream location was described as the "Upper Storm Sewer" location.

3. For the samples 300' upstream of Main Street and downstream of the Outfall 107, the <u>sediment</u> values for chromium, copper, nickel, lead and zinc are all 3-10 times higher than those found at the "upstream control" location, 1000' upstream of Main Street. This indicates that releases of these metals occurred into the Creek, and the sediment, adjacent to the Parker property. Since a public park is on the other side of the Creek, it is reasonable to conclude that the releases originated from the facility. Regarding the water results, Bean Creek is a flowing stream, and as such, the analytical results for the water samples have little relevance to water conditions in the Creek today.

4. The 1982 water sampling results show that in July 1982, the water values for heavy metals and purgable hydrocarbons were several times higher than the upstream background samples. This is also an indication that chemical releases from the facility to the Creek. Again, it is reasonable to conclude that the releases came from the Parker facility.

5. The PCB data available for sediments with Aroclors 1242, 1254 and 1260 were analyzed with detection limits far in excess of what would be of value and significance today. The quoted PCB values were non-detects at the 200ppm detection limit of the time. Unless a sample contained PCBs greater than 200ppm, this data is essentially useless because levels under 200ppm are of concern for human health risk.

6. The volatile organic sampling and analytical methods of the time had major flaws compared to the methods of today. Currently, Region 5 requires the use of Encore® samplers, which immediately cap solid samples and minimize loss of volatiles prior to analysis. The currently accepted Region 5 procedure for low soil volatiles extraction method (5035) utilizes a hermetically-sealed sample vial, the seal of which is never broken from the time of sampling to the time of analysis. Since the sample is never exposed to the atmosphere after sampling, the losses of VOCs during sample transport, handling, and analysis are negligible. The applicable concentration range of the low soil method is dependent on the determinative method, matrix, and compound. However, it will generally fall in the 0.5 to 200 g/kg range. In my discussions with a chemist at the Region 5 Lab, he reported that sediments at that time were routinely taken in 40ml jars, often half full, allowing up to three orders of magnitude of the original concentration of volatiles to enter the headspace

and escape upon opening. Analytical journal articles[1] claim losses of up to 3 orders of magnitude can occur with the older methods.

[1] Alan Hewitt, US Army Cold Regions Lab Publication

[2] Enchem Corporation, Encore® studies

7. Regarding inorganic parameters in sediments, the chemist at the Region 5 lab reported that sediment samples analyzed for metals circa 1982 went though a procedure in which the sediment was extracted and only the extractate was analyzed, because there was no ability to analyze a solid sample. Today, solid samples are digested completely and analyzed employing methods capable of achieving the detection limits required for assessing human health risks. The chemists indicated that the 1982 results represented only a fraction of the metal concentrations existent in the samples.

8. The MDEQ Part 401 rules did not have a table which strictly addressed sediments....only soils. The soil values in the summary table were much higher than the Region 9 Preliminary Remediation Goals (PRGs)(which are commonly used by EPA as screening values for human health risks of exposure to contaminants) for the same heavy metals. EPA has the choice of using the more conservative of EPA's or MDEQ's remediation goals. Part 201 refers to Rule 730, which states that all receptors must to be taken into account (ie. the food chain....plants and small organisms absorbing chemicals, fish eating small plants and organisms, people eating fish....etc.) However, the Region 9 PRGs, often used in RFIs for initial clean up goals in Superfund, indicate 300 ppm for hexavalent chromium as a max concentration for 10 E-6 cancer risk.

9. The 1982 data summary indicated 51 ppm of chromium for the sediments at the 300' (outfall) location, and 220 ppm in the water there. Since the 1982 sediment results very likely yielded only a fraction of the metal concentrations that were actually in the samples. It is reasonable to conclude that, using today's sampling and analytical procedures, the contaminants in the sediments may have exceeded the PRG cancer risk thresholds. The same can be said for volatile organic analytes, for which the 1982 results could be orders of magnitude less than what actually existed in the samples, and in the sediments.

10. No data was available in this 1982 sediment data table for semi-volatile compounds in water or sediments. Semi-volatile compounds were found in the HST soil samples of September 2002, and mentioned in the amended risk-assessment, and have risk-based concentration levels. Data should be developed for semi-volatile compounds in the Creek sediments.

Conclusion

My assessment of the 1982 data summary is that releases of metals and volatiles from the Site to the Creek had occurred at that time, but that it is difficult to assess the current concentrations of contaminants that may have remained in place or the risk levels that any contaminants remaining in the sediments present to human health and the environment. I recommend that, in order to assess current contamination and risk levels, sediment sampling be repeated at sampling locations similar to those used in 1982 and that the samples be analyzed for metals, volatile and semi-volatile organic compounds and PCBs.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

MEMORANDUM

DATE: October 28, 2003

SUBJECT: Review of MDEQ Sampling and Analytical Data for Bean Creek Sediments near Henkel Surface Technologies Site

FROM: Brian P. Freeman,
Senior Chemist, RCRA Enforcement and Compliance Assurance Branch

TO: File

This memorandum summarizes my review and technical judgement of the MDEQ Sampling and Analytical data for Bean Creek Sediments collected on or about July 27, 1982, in the area of the Creek near the site of Parker Surface Treatment Co, the predecessor to Henkel Surface Technologies (HST). The summary was stamped "RECEIVED OCT 29, 1982, Water Quality Div., DIST. 1". This data is in the Administrative Record for this matter, which stems from the Administrative Order that the Region issued to HST under Section 3008h of RCRA.

My opinions and/or judgements are based only upon the summary data. No raw data, spectra, analytical methods or sampling standard operating procedures or methods have been located for this 1982 sampling.

Some of my opinions and/or judgements on the 1982 data are as follows:

1. Data for purgable hydrocarbons, purgable aromatic hydrocarbons, metals, and polychlorinated biphenyls (PCBs) were included in the summary data. Some sampling points were for water, others for sediment.

2. The summary tables list several sediment sampling locations starting at 1000' upstream of Main Street (the north boundary of the facility and the Creek), with other locations 550', 300', 200' and 100' upstream of Main Street, at Main Street, at the groundwater seepage point to Bean Creek just below where the barrel was reported buried in the left creek bank, and downstream of the Site. The 300' upstream of Main Street location was

Recycled/Recyclable . Printed with Vegetable Oil Based Inks on 100% Recycled Paper (50% Postconsumer)

described as Outfall #107 ("process waste being discharged that should have been entering sanitary sewer, downstream of Parker Chemical"), and the 550' upstream location was described as the "Upper Storm Sewer" location.

3. For the samples 300' upstream of Main Street and downstream of the Outfall 107, the sediment values for chromium, copper, nickel, lead and zinc are all 3-10 times higher than those found at the "upstream control" location, 1000' upstream of Main Street. This indicates that releases of these metals occurred into the Creek, and the sediment, adjacent to the Parker property. Since a public park is on the other side of the Creek, it is reasonable to conclude that the releases originated from the facility. Regarding the water results, Bean Creek is a flowing stream, and as such, the analytical results for the water samples have little relevance to water conditions in the Creek today.

4. The 1982 water sampling results show that in July 1982, the water values for heavy metals and purgable hydrocarbons were several times higher than the upstream background samples. This is also an indication that chemical releases from the facility to the Creek. Again, it is reasonable to conclude that the releases came from the Parker facility.

5. The PCB data available for sediments with Aroclors 1242, 1254 and 1260 were analyzed with detection limits far in excess of what would be of value and significance today. The quoted PCB values were non-detects at the 200ppm detection limit of the time. Unless a sample contained PCBs greater than 200ppm, this data is essentially useless because levels under 200ppm are of concern for human health risk.

6. The volatile organic sampling and analytical methods of the time had major flaws compared to the methods of today. Currently, Region 5 requires the use of Encore® samplers, which immediately cap solid samples and minimize loss of volatiles prior to analysis. The currently accepted Region 5 procedure for low soil volatiles extraction method (5035) utilizes a hermetically-sealed sample vial, the seal of which is never broken from the time of sampling to the time of analysis. Since the sample is never exposed to the atmosphere after sampling, the losses of VOCs during sample transport, handling, and analysis are negligible. The applicable concentration range of the low soil method is dependent on the determinative method, matrix, and compound. However, it will generally fall in the 0.5 to 200 µg/kg range. In my discussions with a chemist at the Region 5 Lab, he reported that sediments at that time were routinely taken in 40ml jars, often half full, allowing up to three orders of magnitude of the original concentration of volatiles to enter the headspace

and escape upon opening. Analytical journal articles[1,2] claim losses of up to 3 orders of magnitude can occur with the older methods.

[1] Alan Hewitt, US Army Cold Regions Lab Publication
[2] Enchem Corporation, Encore® studies

7. Regarding inorganic parameters in sediments, the chemist at the Region 5 lab reported that sediment samples analyzed for metals circa 1982 went though a procedure in which the sediment was extracted and only the extractate was analyzed, because there was no ability to analyze a solid sample. Today, solid samples are digested completely and analyzed employing methods capable of achieving the detection limits required for assessing human health risks. The chemists indicated that the 1982 results represented only a fraction of the metal concentrations existent in the samples.

8. The MDEQ Part 401 rules did not have a table which strictly addressed sediments....only soils. The soil values in the summary table were much higher than the Region 9 Preliminary Remediation Goals (PRGs)(which are commonly used by EPA as screening values for human health risks of exposure to contaminants) for the same heavy metals. EPA has the choice of using the more conservative of EPA's or MDEQ's remediation goals. Part 201 refers to Rule 730, which states that all receptors must to be taken into account (ie. the food chain....plants and small organisms absorbing chemicals, fish eating small plants and organisms, people eating fish....etc.) However, the Region 9 PRGs, often used in RFIs for initial clean up goals in Superfund, indicate 300 ppm for hexavalent chromium as a max concentration for 10 E-6 cancer risk.

9. The 1982 data summary indicated 51 ppm of chromium for the sediments at the 300' (outfall) location, and 220 ppm in the water there. Since the 1982 sediment results very likely yielded only a fraction of the metal concentrations that were actually in the samples. It is reasonable to conclude that, using today's sampling and analytical procedures, the contaminants in the sediments may have exceeded the PRG cancer risk thresholds. The same can be said for volatile organic analytes, for which the 1982 results could be orders of magnitude less than what actually existed in the samples, and in the sediments.

10. No data was available in this 1982 sediment data table for semi-volatile compounds in water or sediments. Semi-volatile compounds were found in the HST soil samples of September 2002, and mentioned in the amended risk-assessment, and have risk-based concentration levels. Data should be developed for semi-volatile compounds in the Creek sediments.

Conclusion

My assessment of the 1982 data summary is that releases of metals and volatiles from the Site to the Creek had occurred at that time, but that it is difficult to assess the current concentrations of contaminants that may have remained in place or the risk levels that any contaminants remaining in the sediments present to human health and the environment. I recommend that, in order to assess current contamination and risk levels, sediment sampling be repeated at sampling locations similar to those used in 1982 and that the samples be analyzed for metals, volatile and semi-volatile organic compounds and PCBs.

Index to the Administrative Record
Henkel Corporation, Henkel Surface Technologies
322 West Main Street
Morenci, MI
MID 058 723 867

Document Number	Date	Description/Author(if applicable)
HST-001	March 82 -Jan 87	Inspection Reports and Correspondence to and from Ecology and Environment (E&E), Michigan Department of Environmental Quality (MDEQ), Oxymetal Corp, Hooker Chemical, Parker Chemical and Henkel Surface Tech.
HST-002	Aug 82- March 89	RCRA Part A Permit Files of Oxymetal Corp, Hooker, Parker Chemical and Henkel Surface Tech.
HST-003	4/23/86	Ecology and Environment Preliminary Assessment/Visual Site Inspection (PA/VSI) Report
HST-004	5/27/82- 10/25/90	MDEQ Inspection Records and files.
HST-005	9/30/94	RCRA Corrective Action Prioritization Report and site scoring, authored by PRC Environmental Management Inc.,(now known as Tetratech, EMI, Inc.)
HST-006	2/26/ 2001	Groundwater Sampling Plan produced by the Dragun Corp on behalf of Henkel Surface Technologies, authored by Jeffrey Bolin of Dragun Corp.
HST-007	2/28 2001	Letter from HST-Morenci to U.S. EPA (Thomas Manning) conveying a copy of HST-006 (above).
HST-008	3/13/ 2000	Printed copy of first set of CA725 and CA750 Environmental Indicator Determinations (CA-725 is the determination for Human Exposures under Control, CA-750 is for Migration of Contaminated Groundwater Under Control.) Authored by Tom Manning, US EPA.

The Administrative Record for Henkel Surface Technologies, Morenci, Michigan will be located at:

U.S. Environmental Protection Agency
77 West Jackson Boulevard
Chicago, Illinois 60604

HST-001

ADMINISTRATIVE RECORD

HENKEL SURFACE TECHNOLOGIES
322 W. MAIN STREET
MORENCI, MI 49256

MID 058 723 867

BOOK 1

United States Environmental
Protection Agency
RCRA Enforcement and
Compliance Assurance Branch
77 W. Jackson Street
Chicago, IL 60604

ADMINISTRATIVE RECORD

HENKEL SURFACE TECHNOLOGIES
322 W. MAIN STREET
MORENCI, MI 49256

MID 058 723 867

BOOK 1

United States Environmental Protection Agency
RCRA Enforcement and Compliance Assurance Branch
77 W. Jackson Street
Chicago, IL 60604

ecology and environment, inc.

111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415

International Specialists in the Environment

MEMORANDUM

DATE: January 30, 1987

TO: Don Josif

FROM: Suzanne Kozlowski SK

SUBJECT: Michigan/F05-8701-080/FMI0690GT
Morenci/Parker Surface Treatment Products
aka Occidental Chemical Corporation
MID058723867

According to Ken Burda, supervisor, Michigan Department of Natural Resources Hazardous Waste Division, this facility is a storage facility with interim status. According to Chris Cleming, of the U.S. EPA, the facility has turned in their Part A and has interim status. They are a permit candidate and the Part B will be submitted. Thus the facility, Parker Surface Treatment Products, is exempt from CERCLA consideration. For the above reasons, I recommend that no further action be taken by Field Investigation Team (FIT) members.

58I:1F

recycled paper

SITE DESCRIPTION/EXECUTIVE SUMMARY

Site Name and Location

Parker Surface Treatment Products
Mill St. Plant
Morenci, Michigan 49256

County: Lenawee
Michigan Code Number: 46-09S-02E-06BD
DNR District: Jackson
EPA ID Number: MID 058723867

SAS Score/Screen No.: 07

This facility, now owned by ~~Ford Motor Corporation~~ Occidental Chemical Corporation, produces metal treating chemicals. A 1982 RCRA inspection of the facility uncovered numerous chemical storage violations, chemical residues on the ground surface, and indications of overland runoff from a drum storage area to Bean Creek along the site's western boundary. At that time approximately 2150 drums were being stored on site, many of which were damaged and/or leaking.

Sampling has shown significant contamination of soils on-site with heavy metals and PCB. Limited groundwater data indicates the presence of some heavy metals, yet background levels are unknown. Sampling of waters at an outfall from the facility into the Bean Creek showed metals as well.

Two municipal wells lie within a few hundred feet of the property, but no sampling has been undertaken to determine potential impacts.

Since 1982, housekeeping practices have improved at this site. Damaged barrels have been removed, however, clean-up of soils and groundwaters have not been undertaken.

Recommendations to the EPA

A "high" priority for inspection is recommended. Additional groundwater and surface water sampling should be undertaken to better assess the extent of environmental contamination at the site. The analysis of Morenci municipal wells near the site is also a paramount concern. Jackson District MDNR Groundwater Quality file information should be sufficient for HRS scoring.

Date of Previous Summary:
Previous Author:

Current Date: 9/26/85
Author: Chris Grobbel

Site Assessment Unit
Groundwater Quality Division
Michigan Dept. of Natural Resources

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MI	

26

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Parker Surface Treatment Products	Mill Street Plant

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Morenci	MI	49256	Lenawee	091	04

09 COORDINATES LATITUDE	LONGITUDE	
41°43'05.0"	084°13'12.5"	Morenci Quad. (7.5) 1971

10 DIRECTIONS TO SITE (Starting from nearest public road)
US 127 South from Lansing to city of Hudson, east on M-34 through Hudson Fork to M-156. South on M-156 9.5 mi to city of Morenci. Continue through town on North St (M-156) to Main St, west on Main a hundred feet to Mill, north on Mill to site

III. RESPONSIBLE PARTIES

01 OWNER (If known)	02 STREET (Business, mailing, residential)
Parker Chem. Corp.	322 W. Main St.

03 CITY	04 STATE	05 ZIP CODE	06 TELEPHONE NUMBER
Morenci	MI	49256	(517) 458-2221

07 OPERATOR (If known and different from owner)	08 STREET (Business, mailing, residential)
J.K. Kashner - mgr.	same

09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER
			( )

13 TYPE OF OWNERSHIP (Check one)
[X] 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)
[X] A. RCRA 3001 DATE RECEIVED: 8 11 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
[X] YES [ ] NO DATE — — 82 (MONTH DAY YEAR)
BY (Check all that apply)
[ ] A. EPA [ ] B. EPA CONTRACTOR [X] C. STATE [ ] D. OTHER CONTRACTOR
[ ] E. LOCAL HEALTH OFFICIAL [ ] F. OTHER: _____ (Specify)
CONTRACTOR NAME(S): _____

02 SITE STATUS (Check one)
[X] A. ACTIVE [ ] B. INACTIVE [ ] C. UNKNOWN

03 YEARS OF OPERATION
1928 (BEGINNING YEAR) / present (ENDING YEAR) [ ] UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED
PCBs, Copper, Nickel, Lead, Zinc, Chromium, Cadmium

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION
Soils (environment) Drinking Water (population); Air (envir, pop)
Surface water (environment/population)
Groundwater "

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)
[X] A. HIGH (Inspection required promptly) [ ] B. MEDIUM (Inspection required) [ ] C. LOW (Inspect on one 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
Gene Hall	MDNR Jackson Dist. GWQ	(517) 788-99

04 PERSON RESPONSIBLE FOR ASSESSMENT	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NUMBER	08 DATE
Chris Grobbel / Denise Gulbu	MDNR	Site Assessment	(517) 373-9800	9 27 85 (MONTH DAY YEAR)

EPA FORM 2070-12 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: MI
02 SITE NUMBER:

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION — 02 ☒ OBSERVED (DATE: 2/10/83) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 1,896 — 04 NARRATIVE DESCRIPTION

- regional aquifer considered "protected" by clay till aquitard. Surface unconfined aquifer likely impacted significantly at the site; plant wells showed abnormal pH in late 1983; Cu, Ni in Groundwater 7/27/82 - 2 discharges observed to Bean Creek

01 ☒ B. SURFACE WATER CONTAMINATION — 02 ☒ OBSERVED (DATE: 10/29/82) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 1,896 — 04 NARRATIVE DESCRIPTION

- outfall #107 showed Zn @ 41000 ug/l; Ni @ 350 ug/l; Cu @ 220 ug/l & Cr @ 22 ug/l
- Pb, Zn, Cr in Bean Creek Sampling; pond at landfill where wastes were removed to, approx 3 miles from the plant showed PCBs @ 2500 ppm. Barrels reported to be leaked and content ran to the Bean Creek - ie PCBs & metals.

01 ☒ C. CONTAMINATION OF AIR — 02 ☒ OBSERVED (DATE: 4/16/82) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 3358 — 04 NARRATIVE DESCRIPTION

- drums without tops observed by MDNR; bag - house dust fiber packs strewn about property - 6/22/82

01 ☒ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☒ OBSERVED (DATE: 10/26/82) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 845 — 04 NARRATIVE DESCRIPTION

at least one drum containing waste solvents flammable material, was observed on-site by Federal & State Officials - flash pt < 70° F - MDNR - 4/27/82

01 ☒ E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE:) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 215 — 04 NARRATIVE DESCRIPTION

- barrels believed removed - 1982; tainted soils etc may still exist

01 ☒ F. CONTAMINATION OF SOIL — 02 ☒ OBSERVED (DATE: 4/14/82) ☐ POTENTIAL ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: unknown (Acres) — 04 NARRATIVE DESCRIPTION

PCBs detected in soils on site; chem residues on gnd surface, trucks hose rinsing to ground with chrome, nickel, zinc phosphate compounds in waste wash water

01 ☒ G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE:) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 1,896 — 04 NARRATIVE DESCRIPTION

2 municipal wells lie less than 50 yds from the site; sampling by Lenawee Co. Health Dept has shown no contamination on 5/20/80.

01 ☒ H. WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE:) ☒ POTENTIAL ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: 65 — 04 NARRATIVE DESCRIPTION

This site may possess waste materials/contaminated soils etc posing a health threat to workers

01 ☒ I. POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE:) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 1,896 — 04 NARRATIVE DESCRIPTION

- see Drinking Water Contamination potential above (II G.)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: MT | 02 SITE NUMBER: [illegible]

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 [X] J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) — [X] POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION
- potential impact on Bean Creek flora; fruit uptake of hazardous materials

01 [X] K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) — [X] POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)
- potential impact on Bean Creek fauna

01 [X] L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) — [X] POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION
- potential bioaccumulation / biomagnification of heavy metals + PCB found in the environment

01 [X] M. UNSTABLE CONTAINMENT OF WASTES (Spills/runoff/standing liquids/leaking drums) — 02 [X] OBSERVED (DATE: 4/17/82) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 1,896
04 NARRATIVE DESCRIPTION
1982 - All drum storage areas were unsealed
- barrels of chemical waste improperly stored onsite until; leaks observed; overland runoff from barrels to Bean Creek on west property line

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — [X] ALLEGED
04 NARRATIVE DESCRIPTION
N/A

01 [X] O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: 10/29/82) — ☐ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION
- stormsewer 550' upstream of main St showed Cu @ 140 mg/l; industrial wastes were repeatedly bypassed directly into Bean Creek - even in dry weather

01 [X] P. ILLEGAL/UNAUTHORIZED DUMPING — 02 [X] OBSERVED (DATE: 1982) — ☐ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION
- all releases from barrels; discharge to groundwater in base rinsing operations was illegal

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: 3,358

IV. COMMENTS
site is currently owned operated by Occidental Chemical, Hooker Chemical prior to Occidental, and Ford Motor Co prior to Hooker.

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)
MDNR Groundwater Quality Div. File
MDNR Groundwater Quality Jackson Dist. File.

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: MI 02 SITE NUMBER: [illegible]

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☒ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
- potential impact on Bean Creek flora; flood uptake of hazardous wastes

01 ☒ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)
- potential impact on Bean Creek fauna

01 ☒ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
- potential bioaccumulation / biomagnification of heavy metals + PCB found in the environment

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES (Spills/runoff/standing liquids/leaking drums) — 02 ☒ OBSERVED (DATE: 4/17/82) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 1,896 — 04 NARRATIVE DESCRIPTION 1982 - All drum storage areas were unlabeled
- barrels of chemical waste improperly stored onsite until; leaks observed; overland runoff from barrels to Bean Creek on west property line

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☒ ALLEGED
04 NARRATIVE DESCRIPTION
N/A

01 ☒ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: 10/29/82) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
- storm sewer 550' upstream of main st showed Cu @ 40 mg/l; industrial wastes were repeatedly bypassed directly into Bean Creek - even in dry weather

01 ☒ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☒ OBSERVED (DATE: 1982) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
- all releases from barrels; discharge to groundwater in hose rinsing operations was illegal

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: 3,358

IV. COMMENTS
site is currently owned operated by Occidental Chemical, Hooker Chemical prior to Occidental, and Ford Motor Co prior to Hooker.

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)
MDNR Groundwater Quality Div. File
MDNR Groundwater Quality Jackson Dist. File.

JWatt 10/4/85

SITE DESCRIPTION/EXECUTIVE SUMMARY

Site Name and Location

Parker Surface Treatment Products
Mill St. Plant
Morenci, Michigan 49256

County: Lenawee
Michigan Code Number: 46-09S-02E-06BD
DNR District: Jackson
EPA ID Number: MID058723867

SAS Score/Screen No.: 07

This facility, now owned by Ford Motor Corporation, produces metal treating chemicals. A 1982 RCRA inspection of the facility uncovered numerous chemical storage violations, chemical residues on the ground surface, and indications of overland runoff from a drum storage area to Bean Creek along the site's western boundary. At that time approximately 2150 drums were being stored on site, many of which were damaged and/or leaking.

Sampling has shown significant contamination of soils on-site with heavy metals and PCB. Limited groundwater data indicates the presence of some heavy metals, yet background levels are unknown. Sampling of waters at an outfall from the facility into the Bean Creek showed metals as well.

Two municipal wells lie within a few hundred feet of the property, but no sampling has been undertaken to determine potential impacts.

Since 1982, housekeeping practices have improved at this site. Damaged barrels have been removed, however, clean-up of soils and groundwaters have not been undertaken.

Recommendations to the EPA

A "high" priority for inspection is recommended. Additional groundwater and surface water sampling should be undertaken to better assess the extent of environmental contamination at the site. The analysis of Morenci municipal wells near the site is also a paramount concern. Jackson District MDNR Groundwater Quality file information should be sufficient for HRS scoring.

Date of Previous Summary:
Previous Author:

Current Date: 9/26/85
Author: Chris Grobbel

Site Assessment Unit
Groundwater Quality Division
Michigan Dept. of Natural Resources

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE: MI | 02 SITE NUMBER: 26

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site): Parker Surface Treatment Products

02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER: Mill Street Plant

03 CITY: Morenci | 04 STATE: MI | 05 ZIP CODE: 49256 | 06 COUNTY: Lenawee | 07 COUNTY CODE: 091 | 08 CONG DIST: 04

09 COORDINATES LATITUDE: 41°47'05.0" | LONGITUDE: 084°13'12.5" | Morenci Quad. (7.5) 1971

10 DIRECTIONS TO SITE (Starting from nearest public road): US 127 South from Lenawee to City of Hudson, east on M-34 through Hudson Fork to M-156. South on M-156 9.5 mi to city of Morenci. Continue through town on North St (M-156) to Main St, west on Main a few hundred feet to Mill, north on Mill St to site

III. RESPONSIBLE PARTIES

01 OWNER (If known): Parker Chem. Corp. | 02 STREET (Business, mailing, residential): 377 W. Main St.

03 CITY: Morenci | 04 STATE: MI | 05 ZIP CODE: 49256 | 06 TELEPHONE NUMBER: (517) 458-2221

07 OPERATOR (If known and different from owner): J.K. Kashner - mgr. | 08 STREET (Business, mailing, residential): Same

09 CITY: | 10 STATE: | 11 ZIP CODE: | 12 TELEPHONE NUMBER: ( )

13 TYPE OF OWNERSHIP (Check one): [X] 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): [X] A. RCRA 3001 DATE RECEIVED: 8/18/80 (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: [X] YES DATE: / / 82 (MONTH DAY YEAR) ☐ NO

BY (Check all that apply): ☐ A. EPA ☐ B. EPA CONTRACTOR [X] C. STATE ☐ D. OTHER CONTRACTOR ☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: (Specify)

CONTRACTOR NAME(S):

02 SITE STATUS (Check one): [X] A. ACTIVE ☐ B. INACTIVE ☐ C. UNKNOWN

03 YEARS OF OPERATION: 1928 (BEGINNING YEAR) | present (ENDING YEAR) ☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED: PCBs, Copper, Nickel, Lead, Zinc, Chromium, Cadmium

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION: Soils (environment) Drinking Water (population); Air (envir, pop) Surface Water (environment/population) Groundwater

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): [X] 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: Gene Hall | 02 OF (Agency/Organization): MDNR Jackson Dist. GWQ | 03 TELEPHONE NUMBER: 517 788-9918

04 PERSON RESPONSIBLE FOR ASSESSMENT: Chris Grobbel / Denise Gulbu | 05 AGENCY: MDNR | 06 ORGANIZATION: Site Assessment | 07 TELEPHONE NUMBER: (517) 373-9800 | 08 DATE: 9/27/85 (MONTH DAY YEAR)

EPA FORM 2070-12 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MT	26

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- A. SOLID
- B. POWDER, FINES
- C. SLUDGE
- D. OTHER _____ (Specify)
- E. SLURRY
- X F. LIQUID
- G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

TONS _____

CUBIC YARDS _____

NO. OF DRUMS 2,163 - leaking and improperly stored; since 1982 removed

03 WASTE CHARACTERISTICS (Check all that apply)

- X A. TOXIC
- X B. CORROSIVE
- C. RADIOACTIVE
- X D. PERSISTENT
- E. SOLUBLE
- F. INFECTIOUS
- X G. FLAMMABLE
- H. IGNITABLE
- X I. HIGHLY VOLATILE
- J. EXPLOSIVE
- K. REACTIVE
- L. INCOMPATIBLE
- M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			Pb, Zn, Cr, Cu, Cd, Ni in soils

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
OCC	PCB A-1242	Class-079	Barrels to leaking ground (in soil sample) 1982	2500000	ug/kg
MES	Lead	Class-01-9		330	mg/kg
MES	Zinc	7440-66-6		52000	mg/kg
MES	Chromium	7440-47-3		43000	mg/kg
MES	Copper	7440-50-8		2,300	mg/kg
MES	Cadmium	7440-43-9		7	mg/kg
MES	Nickel	7440-02-0		1600	mg/kg
MES	Cu	7440-50-8	? groundwater data 12/10/83	25	ug/l
MES	Nickel	7440-02-0		70	ug/l

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

MDNR Groundwater Quality Files
MDNR Jackson Dist. Groundwater Quality Personnel

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: MI
02 SITE NUMBER:

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION — 02 ☒ OBSERVED (DATE: 2/10/83) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 1,896
04 NARRATIVE DESCRIPTION
- regional aquifer considered "protected" by clay till aquitard. surface unconfined aquifer likely impacted significantly at the site; plant wells showed abnormal pH in late 1983; Cu, Ni in Gndwater 7/27/82 - 2 discharges observed to Bean Creek

01 ☒ B. SURFACE WATER CONTAMINATION — 02 ☒ OBSERVED (DATE: 10/29/82) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 1,896
04 NARRATIVE DESCRIPTION
- outfall #107 showed Zn @ 41000 ug/l; Ni @ 350 ug/l. Cu @ 220 ug/l & Cr @ 22 ug/l
- Pb, Zn, Cr in Bean Creek Sampling; pond at landfill where wastes were removed to, approx 3 miles from the plant showed PCBs @ 2500 ppm. Barrels reportedly leaked and content ran to the Bean Creek - ie PCBs & metals.

01 ☒ C. CONTAMINATION OF AIR — 02 ☒ OBSERVED (DATE: 4/14/82) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 3358
04 NARRATIVE DESCRIPTION
- drums without tops observed by MDNR; bag - house dust fiber packs strewn about property - 6/22/82

01 ☒ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☒ OBSERVED (DATE: 10/26/82) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 845
04 NARRATIVE DESCRIPTION
- at least one drum containing waste solvents flammable material, was observed on-site by Federal & State Officials - flash pt < 70° F - MDNR - 4/27/82

01 ☒ E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE:) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 215
04 NARRATIVE DESCRIPTION
- barrels believed removed - 1982; tainted soils etc may still exist

01 ☒ F. CONTAMINATION OF SOIL — 02 ☒ OBSERVED (DATE: 4/14/82) ☐ POTENTIAL ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: unknown (Acres)
04 NARRATIVE DESCRIPTION
PCBs detected in soils on site; chem residues on gnd surface, truck hose rinsing to ground with chrome, nickel, zinc phosphate compounds in waste wash water

01 ☒ G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE:) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 1,896
04 NARRATIVE DESCRIPTION
2 municipal wells lie less than 50 yds from the site; sampling by Lenawee Co. Health Dept has shown no contamination on 5/20/80.

01 ☒ H. WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE:) ☒ POTENTIAL ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: 65
04 NARRATIVE DESCRIPTION
This site may possess waste materials / contaminated soils etc posing a health threat to workers

01 ☒ I. POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE:) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 1,896
04 NARRATIVE DESCRIPTION
- see Drinking Water Contamination potential above (II G.)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: MI
02 SITE NUMBER: [illegible]

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 [X] J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) — [X] POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION
- potential impact on Bean Creek flora; floral uptake of hazardous materials

01 [X] K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) — [X] POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)
- potential impact on Bean Creek fauna

01 [X] L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) — [X] POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION
- potential bioaccumulation / biomagnification of heavy metals + PCB found in the environment

01 [X] M. UNSTABLE CONTAINMENT OF WASTES (Spills/runoff/standing liquids/leaking drums) — 02 [X] OBSERVED (DATE: 4/17/82) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 6896
04 NARRATIVE DESCRIPTION 1982 - All drum storage areas were unsealed
- barrels of chemical waste improperly stored onsite until; leaks observed; overland runoff from barrels to Bean Creek on west property line

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION
N/A

01 [X] O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: 10/29/82) — ☐ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION
- storm sewer 550' upstream of main St. showed Cu @ 140 ug/l; industrial wastes were repeatedly disposed directly into Bean Creek - even in dry weather

01 [X] P. ILLEGAL/UNAUTHORIZED DUMPING — 02 [X] OBSERVED (DATE: 1982) — ☐ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION
- all releases from barrels; discharge to groundwater in hose rinsing operations was illegal

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: 3358

IV. COMMENTS
site is currently owned operated by Occidental Chemical, Hooker Chemical prior to Occidental, and Ford Motor Co prior to Hooker.

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)
MDNR Groundwater Quality Div. File
MDNR Groundwater Quality Jackson Dist. File.

ECOLOGY AND ENVIRONMENT, INC.

FIELD INVESTIGATION TEAM

SITE INSPECTION PLAN

A. GENERAL INFORMATION

SITE: Parker Surface Treatment Products

TDD NO.: R05-8602-07

LOCATION: 322 W. Main St.
Morenci, MI 49256

U.S. EPA NO.: MID058723867

SSID NO.:

WSTS NO.: MI 0690

PLAN PREPARED BY: S. Kozlowski

DATE: 4-23-86

APPROVED BY:

DATE:

OBJECTIVE (including description of work to be performed): Perform site inspection. No sampling will be done.

DESIRED REPORT FORM: SI REPORT (2070-13) ✓ HRS REPORT

OTHER (EXPLAIN)

PROPOSED DATE OF INVESTIGATION: May 12, 1986 12:30 PM

BACKGROUND REVIEW: Complete: Preliminary:

HRS PRELIMINARY SCORE OF ROUTES: GW 36.84 SW 6.71 AIR 0
(NO FIELD WORK)

DIRECT CONTACT 37.50 FIRE AND EXPLOSION 0

TOTAL PRELIMINARY HRS SCORE VALUE (NO FIELD WORK) 21.65

PROJECTED HRS SCORE: GW 69.07 SW 8.39 AIR 0
(WITH FIELD WORK)

DIRECT CONTACT 37.50 FIRE AND EXPLOSION 0

TOTAL PROJECTED HRS SCORE 40.22

IF NO SAMPLING, EXPLAIN ON PAGE 3.

INSPECTION PRIORITY (BASED ON PROJECTED HRS SCORE): LOW: MEDIUM: ✓ HIGH:

B. SITE/WASTE CHARACTERISTICS

WASTE TYPE(S): Liquid ✓ Solid Sludge Gas

CHARACTERISTIC(S): Corrosive ✓ Ignitable ✓ Radioactive Volatile ✓

Toxic ✓ Reactive Unknown Other (Name) Persistent

FACILITY DESCRIPTION: Facility produces metal treating chemicals. They have taken back drums of used products and disposed of them. Most of the facility is RCRA regulated.

Principal Disposal Method (type and location): containers and tanks in storage areas.

Unusual Features (dike integrity, power lines, terrain, etc.): None.

Status: (active, inactive, unknown) years of operation 1928-present

History: (worker or non-worker injury; complaints from public; previous agency action):

A 1982 RCRA inspection revealed numerous storage violations. Many damaged or/and leaking drums (approx. 2100) were on-site. Two areas containing approx. 125 drums were/are not RCRA covered. These areas and the RCRA areas have been cleaned up. No soils have been cleaned up. The leaking/damaged drums have been removed.

C. HAZARD EVALUATION

(Use Hazard Evaluation of Chemicals sheets for specific or representative chemicals present.):

PCBs, Cr, Cd, Cu, Ni, xylene, ethyl benzene, toluene, ethylamine, hydrofluoric acid

LEVEL OF PROTECTION: A ___ B ___ C ___ D X

MODIFICATIONS: Upgrade to level C if HNu shows readings 1-5 ppm above background.

SITE SAFETY PLAN ON FILE AT E & E: YES ✓ NO ___

D. FIELD WORK REQUIRED

PERIMETER ESTABLISHMENT: MAP/SKETCH ATTACHED? YES ✓ NO ___

Perimeter Identified? YES ✓ NO ___

Zone(s) of Contamination Identified? YES ___ NO ✓

Geophysical Work: YES ___ NO ✓

Type: Magnetometry ___ Seismic Refraction ___ GPR ___ Resistivity ___ Other ___

Comments: ___

Drilling: YES ___ NO ✓

Well Location Identified: YES ___ NO ___

Drill Plan/Well Installation Plan Attached: YES ___ NO ___

Sampling Required: YES ___ NO ✓

Type: GW ___ SW ___ Air ___ Soil ___ Waste ___ Other ___

Sampling Locations Identified: YES ___ NO ___

SUMMARY OF SAMPLING PROCEDURES: (Special Equipment, Facilities, or Procedures)

In order to get an observed release (necessary for a score above 28.5) monitor wells would need to be installed in the non-RCRA areas. It appears that the non-RCRA areas are small and are located downgradient from the RCRA areas. It would probably be costly and not feasible to install wells. A on-site inspection with no sampling will determine the feasibility of well installation. It will probably be impossible to deliniate RCRA waste from CERCLA waste as they are composed of the same compounds.

E. ANALYTICAL SERVICES REQUIRED None

RAS ____ SAS ____ CRL ____

F. QAPP

REQUIRED: YES ____ NO ✓

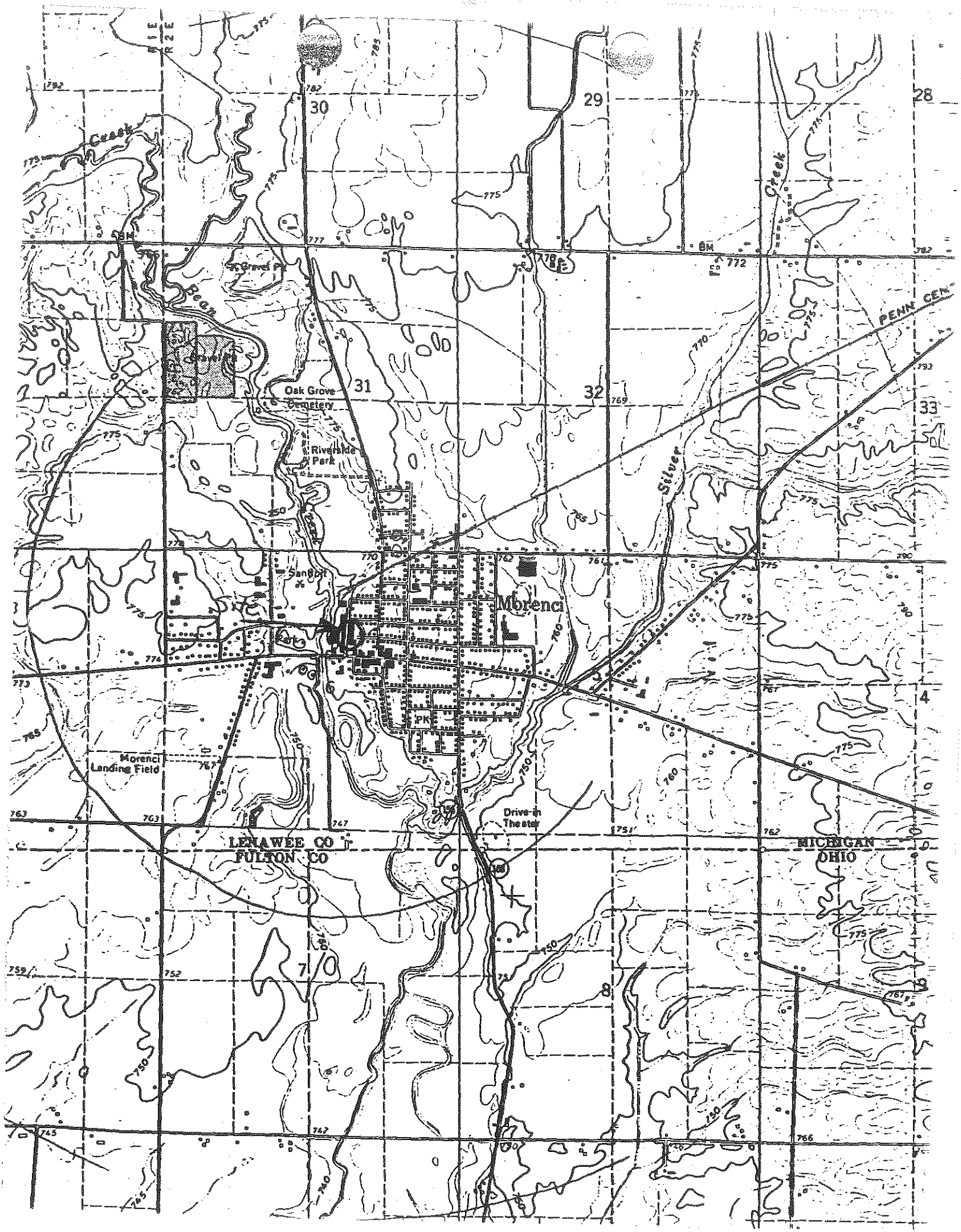
IF NO, EXPLAIN: No sampling to be performed.

G. SI WORK TEAM SIZE/LIMITATION

TEAM MEMBER	DISCIPLINE	RESPONSIBILITY
Suzanne Kozlowski	chemist	team leader
Mary Jane Ripp	chemist	site safety officer

WORK LIMITATIONS (Time of day, etc.): Work daylight hours only

COMMENTS:



30
29
28
31
32
33
4
7
8
Creek
Bean
Gravel Pit
Oak Grove Cemetery
Riverside Park
Sanbolt
Morenci
PK
Morenci Landing Field
Drive-in Theater
LENAWEE CO
FULTON CO
MICHIGAN
OHIO
Silver
Creek
PENN CEN

SITE Parker Surface Treatment Products
ADDRESS 322 W. Main Street
CITY Morenci STATE MI 49256
SCHEDULED DATE FOR INSPECTION Mar. 12, 1986
SITE INSPECTION TEAM LEADER S. Kozlowski

SAMPLING: No sampling to be performed. Most of the facility is RCRA covered and there is documentation of wastes that aren't RCRA covered.

A) Groundwater Route - Number of Samples 0
Location of Samples

Rationale for Sampling

B) Surface Water Route - Number of Samples 0
Location of Samples

Rationale for Sampling

C) Air Route - Number of Samples 0
Location of Samples

Rationale for Sampling

D) Soil/Sediment - Number of Samples 0
Location of Samples

Rationale for Sampling

E) Waste - Number of Samples 0
Location of Samples

Rationale for Sampling

F) Parameters

ATTENTION: SAMPLE LOCATIONS AND/OR THE NUMBER OF SAMPLES MAY BE CHANGED OR ELIMINATED AT THE DISCRETION OF THE SITE TEAM LEADER IN RESPONSE TO ACTUAL SITE CONDITIONS DURING THE COURSE OF THE INSPECTION.

Parker Surface Treatment Products
MID 058723867 R05-8602-07

Morenci Quad 7.5 series
1960 photorevised 1971

Hudson Quad 7.5' series
1962

Clayton Quad 7.5' series
1962

Fayette Quad 7.5' series
1960 photorevised 1971

REGION: 05
STATE : MI

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF EMERGENCY AND REMEDIAL RESPONSE
C E R C L A

M.2 - EVENT MAINTENANCE FORM

* ACTION: _ *

SITE: PARKER SURFACE TREATMENT
PROGRAM: SITE EVALUATION

EPA ID: MID058723867 PROGRAM CODE: H01 EVENT TYPE: DSI

FMS CODE: EVENT QUALIFIER: EVENT LEAD: S

EVENT NAME: DISCOVERY STATUS:

DESCRIPTION:

ORIGINAL	CURRENT	ACTUAL
START:	START:	START:
COMP :	COMP :	COMP : 85/06/30

HQ COMMENT:

RG COMMENT:

COOP AGR # AMENDMENT # STATUS STATE %

REGION: 05
STATE : MI

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF EMERGENCY AND REMEDIAL RESPONSE
C E R C L A

M.2 - SITE MAINTENANCE FORM

* ACTION: _ *

EPA ID: MID058723867

SITE NAME: PARKER SURFACE TREATMENT SOURCE: T

STREET: 322 W MAIN ST CONG DIST: 02

CITY: MORENCI ZIP: 49256

CNTY NAME: LENAWEE CNTY CODE: 091

LATITUDE: 41/43/12.0 LONGITUDE: 084/12/48.0

SMSA: HYDRO UNIT: 04100006

INVENTORY IND: Y REMEDIAL IND: Y REMOVAL IND: N FED FAC IND: N

NPL IND: N NPL LISTING DATE: NPL DELISTING DATE:

APPROACH: SITE CLASS:

SITE/SPILL IDS:

RPM NAME: RPM PHONE: - -

DIOXIN TIER: REG FLD1: REG FLD2:

RESP TERM: PENDING ( ) NO FURTHER ACTION ( ) * PENDING (_) NO FURTHER ACTION (_) *

ENF DISP: NO VIABLE RESP PARTY ( ) VOLUNTARY RESPONSE ( )

ENFORCED RESPONSE ( ) COST RECOVERY ( )

SITE DESCRIPTION:

SITE DESCRIPTION/EXECUTIVE SUMMARY

Site Name and Location

Parker Surface Treatment Products
Mill St. Plant
Morenci, Michigan 49256

County: Lenawee
Michigan Code Number: 46-09S-02E-06BD
DNR District: Jackson
EPA ID Number: MID 058 723867

SAS Score/Screen No.: 07

This facility, now owned by ~~Ford Motor Corporation~~ Occidental Chemical Corporation, produces metal treating chemicals. A 1982 RCRA inspection of the facility uncovered numerous chemical storage violations, chemical residues on the ground surface, and indications of overland runoff from a drum storage area to Bean Creek along the site's western boundary. At that time approximately 2150 drums were being stored on site, many of which were damaged and/or leaking.

Sampling has shown significant contamination of soils on-site with heavy metals and PCB. Limited groundwater data indicates the presence of some heavy metals, yet background levels are unknown. Sampling of waters at an outfall from the facility into the Bean Creek showed metals as well.

Two municipal wells lie within a few hundred feet of the property, but no sampling has been undertaken to determine potential impacts.

Since 1982, housekeeping practices have improved at this site. Damaged barrels have been removed, however, clean-up of soils and groundwaters have not been undertaken.

Recommendations to the EPA

A "high" priority for inspection is recommended. Additional groundwater and surface water sampling should be undertaken to better assess the extent of environmental contamination at the site. The analysis of Morenci municipal wells near the site is also a paramount concern. Jackson District MDNR Groundwater Quality file information should be sufficient for HRS scoring.

Date of Previous Summary:
Previous Author:

Current Date: 9/26/85
Author: Chris Grobbel

Site Assessment Unit
Groundwater Quality Division
Michigan Dept. of Natural Resources

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE: MI | 02 SITE NUMBER: 26

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Parker Surface Treatment Products	Mill Street Plant

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Morenci	MI	49256	Lenawee	091	04

09 COORDINATES LATITUDE	LONGITUDE	
41°47'05.0"	084°13'12.5"	Morenci Quad. (7.5) 1971

10 DIRECTIONS TO SITE (Starting from nearest public road)
US 127 South from Lansing to City of Hudson, east on M-34 through Hudson Twp to M-156. South on M-156 9.5 mi to city of Morenci. Continue through town on North St (M-156) to Main St, west on Main a few hundred feet to Mill, north on Mill St to site

III. RESPONSIBLE PARTIES

01 OWNER (If known)	02 STREET (Business, mailing, residential)
Parker Chem. Corp.	372 W. Main St.

03 CITY	04 STATE	05 ZIP CODE	06 TELEPHONE NUMBER
Morenci	MI	49256	(517) 458-2221

07 OPERATOR (If known and different from owner)	08 STREET (Business, mailing, residential)
J.K. Kashner - mgr.	Same

09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER
			( )

13 TYPE OF OWNERSHIP (Check one)
[X] 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)
[X] A. RCRA 3001 DATE RECEIVED: 8/18/80 (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
[X] YES DATE __/__/82 (MONTH DAY YEAR)
☐ NO

BY (Check all that apply)
☐ A. EPA ☐ B. EPA CONTRACTOR [X] C. STATE ☐ D. OTHER CONTRACTOR
☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: _____ (Specify)

CONTRACTOR NAME(S): _____

02 SITE STATUS (Check one)
[X] A. ACTIVE ☐ B. INACTIVE ☐ C. UNKNOWN

03 YEARS OF OPERATION
1928 (BEGINNING YEAR) | present (ENDING YEAR) ☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED
PCBs, Copper, Nickel, Lead, Zinc, Chromium, Cadmium

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION
Soils (environment) Drinking Water (population); Air (envrn, pop)
Surface water (environment/population)
Groundwater "

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)
[X] 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
Gene Hall	MDNR Jackson Dist. GWQ	517 788-9918

04 PERSON RESPONSIBLE FOR ASSESSMENT	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NUMBER	08 DATE
Chris Grobbel / Denise Gulbu	MDNR	Site Assessment	(517) 373-9800	9/27/85 (MONTH DAY YEAR)

EPA FORM 2070-12 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MT	28

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- A. SOLID
- B. POWDER, FINES
- C. SLUDGE
- D. OTHER _____ (Specify)
- E. SLURRY
- X F. LIQUID
- G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

TONS _____

CUBIC YARDS _____

NO. OF DRUMS 2,163 - leaking and improperly stored; since removed ; since 1982

03 WASTE CHARACTERISTICS (Check all that apply)

- X A. TOXIC
- X B. CORROSIVE
- C. RADIOACTIVE
- X D. PERSISTENT
- E. SOLUBLE
- F. INFECTIOUS
- X G. FLAMMABLE
- H. IGNITABLE
- X I. HIGHLY VOLATILE
- J. EXPLOSIVE
- K. REACTIVE
- L. INCOMPATIBLE
- M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			Pb, Zn, Cr, Cu, Cd, Ni in soils

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
OCC	PCB A-1242	Class-079	Barrels - 10 leaking open	2500000	ug/kg
MES	Lead	Class-01-9		330	mg/kg
MES	Zinc	7440-666		52,000	mg/kg
MES	Chromium	7440-47-3		47,000	mg/kg
MES	Copper	7440-50-8	(in soil samples)	2,300	mg/kg
MES	Cadmium	7440-43-9	1982	7	mg/kg
MES	Nickel	7440-02-0		1600	mg/kg
MES	Cu	7440-50-8	? groundwater data	25	ug/l
MES	Nickel	7440-02-0	12/10/83	70	ug/l

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

MDNR Groundwater Quality Files
MDNR Jackson Dist. Groundwater Quality Personnel

EPA FORM 2070-12 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: MI
02 SITE NUMBER: Lee

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION — 02 ☒ OBSERVED (DATE: 2/10/83) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 1,896
04 NARRATIVE DESCRIPTION
- regional aquifer considered "protected" by clay till aquitard. Surface unconfined aquifer likely impacted significantly at the site; plant wells showed abnormal pH in late 1983; Cu, Ni in Gndwater 7/27/82 - 2 discharges [illegible]

01 ☒ B. SURFACE WATER CONTAMINATION — 02 ☒ OBSERVED (DATE: 10/29/82) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 1,896
04 NARRATIVE DESCRIPTION
- outfall #107 showed Zn @ 41000 ug/l, Ni @ 350 ug/l, Cu @ 220 ug/l & Cr @ 22[illegible] ug
- Pb, Zn, Cr in Bean Creek Sampling; pond at landfill where wastes were removed to, approx 3 mile from the plant showed PCBs @ 2500 ppm. Barrels reported by leaked and content ran to the Bean Creek - ie PCBs & metals.

01 ☒ C. CONTAMINATION OF AIR — 02 ☒ OBSERVED (DATE: 4/18/82) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 3358
04 NARRATIVE DESCRIPTION
- drums without tops observed by MDNR; bag - house dust fiber packs strewn about property - 6/22/82

01 ☒ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☒ OBSERVED (DATE: 10/26/82) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 845
04 NARRATIVE DESCRIPTION
- at least one drum containing waste solvents flammable material, was observed on-site by Federal & State Officials - flash pt < 70° F - MDNR - 4/27/82

01 ☒ E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 215
04 NARRATIVE DESCRIPTION
- barrels believed removed - 1982; tainted soils etc may still exist

01 ☒ F. CONTAMINATION OF SOIL — 02 ☒ OBSERVED (DATE: 4/14/82) ☐ POTENTIAL ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: unknown (Acres)
04 NARRATIVE DESCRIPTION
PCBs detected in soils on site; chem residues on gnd surface, truck hose rinsing to ground with chrome, nickel, zinc phosphate compounds in waste wash water

01 ☒ G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 1,896
04 NARRATIVE DESCRIPTION
2 municipal wells lie less than 50 yds from the site; sampling by Lenawee Co. Health Dept has shown no contamination on 5/20/80.

01 ☒ H. WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: 65
04 NARRATIVE DESCRIPTION
This site may possess waste materials / contaminated soils etc posing a health threat to workers

01 ☒ I. POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 1,896
04 NARRATIVE DESCRIPTION
- see Drinking Water Contamination potential above (II G.)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: MI | 02 SITE NUMBER:

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☒ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: ____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
- potential impact on Bean Creek flora; floral uptake of hazardous materials

01 ☒ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: ____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (include name(s) of species)
- potential impact on Bean Creek fauna

01 ☒ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: ____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
- potential bioaccumulation / biomagnification of heavy metals + PCB found in the environment

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES (Spills/runoff/standing liquids/leaking drums) — 02 ☒ OBSERVED (DATE: 4/17/82) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 1896 — 04 NARRATIVE DESCRIPTION 1982 - All drum storage areas were unsealed
- barrels of chemical waste improperly stored onsite until; leaks observed; overland runoff from barrels to Bean Creek on west property line

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: ____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
N/A

01 ☒ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: 10/29/82) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
- stormsewer 550' upstream of main st. showed Cu @ 140 ug/l; industrial wastes were repeatedly bypassed directly into Bean Creek - even in dry weather

01 ☒ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☒ OBSERVED (DATE: 1982) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
- all releases from barrels; discharge to groundwater in base rinsing operations was illegal

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: 3358

IV. COMMENTS
site is currently owned operated by Occidental Chemical, Hooker Chemical prior to Occidental, and Ford Motor Co prior to Hooker.

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)
MDNR Groundwater Quality Div. File
MDNR Groundwater Quality Jackson Dist. File.

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: MT
02 SITE NUMBER: —

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 [X] J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) — [X] POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION
- potential impact on Bean Creek flora; flood uptake of hazardous wastes

01 [X] K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) — [X] POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)
- potential impact on Bean Creek fauna

01 [X] L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) — [X] POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION
- potential bioaccumulation / biomagnification of heavy metals + PCB found in the environment

01 [X] M. UNSTABLE CONTAINMENT OF WASTES (Spills/runoff/standing liquids/leaking drums) — 02 [X] OBSERVED (DATE: 4/17/82) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 6896
04 NARRATIVE DESCRIPTION
1982 - All drum storage areas were marked
- barrels of chemical waste improperly stored onsite until; leaks observed; overland runoff from barrels to Bean Creek on west property line

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION
N/A

01 [X] O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: 10/24/82) — ☐ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION
- storm sewer 550' upstream of main St showed Cu @ 40 mg/l; industrial wastes were repeatedly bypassed directly into Bean Creek - even in dry weather

01 [X] P. ILLEGAL/UNAUTHORIZED DUMPING — 02 [X] OBSERVED (DATE: 1982) — ☐ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION
- all releases from barrels; discharge to groundwater in base rinsing operations was illegal

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: 3358

IV. COMMENTS
site is currently owned operated by Occidental Chemical, Hooker Chemical prior to Occidental, and Ford Motor Co prior to Hooker.

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)
MDNR Groundwater Quality Div. File
MDNR Groundwater Quality Jackson Dist. Files.

ecology and environment, inc.

111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415

International Specialists in the Environment

MEMORANDUM

Put in CERCLIS file

DATE: January 30, 1987

TO: Don Josif

FROM: Suzanne Kozlowski SK

SUBJECT: Michigan/F05-8701-080/FMI0690GT
Morenci/Parker Surface Treatment Products
aka Occidental Chemical Corporation
MID058723867

According to Ken Burda, supervisor, Michigan Department of Natural Resources Hazardous Waste Division, this facility is a storage facility with interim status. According to Chris Cleming, of the U.S. EPA, the facility has turned in their Part A and has interim status. They are a permit candidate and the Part B will be submitted. Thus the facility, Parker Surface Treatment Products, is exempt from CERCLA consideration. For the above reasons, I recommend that no further action be taken by Field Investigation Team (FIT) members.

58I:1F

recycled paper

ecology and environment, inc.

111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415

International Specialists in the Environment

MEMORANDUM

Put in CERCLIS file

DATE: January 30, 1987

TO: Don Josif

FROM: Suzanne Kozlowski SK

SUBJECT: Michigan/F05-8701-080/FMI0690GT
Morenci/Parker Surface Treatment Products
aka Occidental Chemical Corporation
MID058723867

According to Ken Burda, supervisor, Michigan Department of Natural Resources Hazardous Waste Division, this facility is a storage facility with interim status. According to Chris Cleming, of the U.S. EPA, the facility has turned in their Part A and has interim status. They are a permit candidate and the Part B will be submitted. Thus the facility, Parker Surface Treatment Products, is exempt from CERCLA consideration. For the above reasons, I recommend that no further action be taken by Field Investigation Team (FIT) members.

58I:1F

Roy Schrameck

DEPARTMENT OF NATURAL RESOURCES
AIR QUALITY DIVISION

ACTIVITY REPORT

AQ-42

- [ ] COMPLAINT RECEIVED
- [ ] PERMIT ACTION
- [ ] ANNUAL COMPLIANCE INVESTIGATION COMPLETED
- [ ] NESHAP
- [ ] NSPS
- [ ] REVISED STATUS

		DATE MM/DD/YY: 07-09-82	
ESTABLISHMENT: Hooker Chemicals and Plastics Corp. (formerly Parker Chemical)	NO.: B2422	QUARTER: JULY	NO.: 03
NUMBER AND STREET: 322 W. Main Street	CITY: Adrian	STAFF: L. Koivuniemi	NO.: 97
CONTACT: John Kashner	TITLE: Manager-Mfg.	COUNTY: Lenawee	NO.: 46
PRIMARY ACTIVITY: Chemical Prodution-Mixing		DISTRICT: Ann Arbor	NO.: 08

REMARKS:

RCRA (Resource Conservation Recovery Act):

RCRA Inspection follow-up with Roy Schrameck, Water Quality District Engineer.

Meeting with the following company officials:

Robert J. Schuttler: Director, Environmental Health & Safety, Plastics and Chemicals Specialty Group; Niagara Falls, N.Y. telephone (716) 286-3102.

Mike McLin, Project Engineer, Morenci
Richard Speed, Environmental Engineer, Morenci
John Kashner, Plant Manager, Morenci

Lee Huffaker, Chemist, and Richard Fredrick, Production Superintendent, both of Morenci and usually involved in RCRA inspections were both absent from today's meeting and follow up inspection.

Source of PCB's:

Sample #2 in area 2 collected 5-18-82 had 2,500,00 µg/kg or 0.25% PCB's. (Not 2.5%, as was incorrectly reported in 6-22-82 Activity Report).

The company could not or would not explain how high levels of PCB's were found in this storage area 2

Returned Drums:

Company agreed to set up a system of sealing their drums, so when a product is returned it can be easily determined if the barrel had been opened. A returned, opened barrel may have been the source of the PCB's. But, in any case, the company should not have allowed the waste to be leaked and spilled onto the ground in violation to RCRA and Act 245 (Michigan's Water Law).

Picture #35 of area 6 :

Mr. Kashner thought the brown-yellow on the surface of

PROJECT	
01 MAJOR SOURCE	
02 MINOR SOURCE	
03 RESIDENCE	
04 MEETING – CONFERENCE	
05 TRAINING	
07	
08	
09	
10	
00 OTHER (explain)	

SURVEY ACTION	TYPE	NO.
01 EMISSION POINTS INVESTIGATED		
02 VISIBLE EMISSION EVALUATION		
03 SOURCE TEST (STAFF)		
04 SOURCE TEST (COMPANY)		
05 GRAB SAMPLE		
06 PICTURES TAKEN		
09		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
00 OTHER (explain)		

COMPLIANCE STATUS	
A. IN COMPLIANCE	
B. UNKNOWN COMPLIANCE	
C. OUT OF COMPLIANCE NOT ON A SCHEDULE	
D. ON A SCHEDULE MEETING INCREMENTS	
E. ON A SCHEDULE, NOT MEETING INCREMENTS	
F. ON A SCHEDULE, NOT KNOWN IF MEETING INCREMENTS	

DEPARTMENT OF NATURAL RESOURCES
AIR QUALITY DIVISION

ACTIVITY REPORT

AQ-42

- [ ] COMPLAINT RECEIVED
- [ ] PERMIT ACTION
- [ ] ANNUAL COMPLIANCE INVESTIGATION COMPLETED
- [ ] NESHAP
- [ ] NSPS
- [ ] REVISED STATUS

		DATE MM/DD/YY: 07-09-82	
ESTABLISHMENT: Hooker Chemicals and Plastics Corp.	NO.: B2422	QUARTER: JULY	NO.: 03
NUMBER AND STREET	CITY	STAFF: L. Koivuniemi	NO.: 97
CONTACT	TITLE	COUNTY: Lenawee	NO.: 46
PRIMARY ACTIVITY: Page 2 of 3		DISTRICT: Ann Arbor	NO.: 08

REMARKS:

the pad in picture #35 taken 6-22-82 was Bismark Brown R. (Toulene-2,4-diazo-bis-meta-toluyene diamine hydrochloride is the chemical name, Condensed Chemical Dictionary.)

Flush Drum: Outgoing Hooker Product including acids with Nickel and Chromium from flushing of loading lines was being allowed to drain through a limestone, barrel into ground. Roy again, informed the company this likely could have contaminated the ground water; and therefore, because of this practice and the leaking waste in storage, hydrogeologic study must be done by the company to determine extent of contamination and possible need for clean-up.

Hydrogeological Study:

All along in our discussions, Mr. Kashner and Mr. Speed agreed to do this hydrogeological study, but now Mr. Schuttle is not convinced it is necessary.

I gave Mr. Schuttler a copy of the 38 pictures I took documenting the company's recent hazardous waste disposal practices. After seeing these pictures and hearing about the flush drum, supra, Mr. Schuttler said he would re-evaluate whether they would do this hydro-study. Mr. Schuttler will have a decision by August 4, 1982, and will inform Roy Schramack.

Storage of Waste:

The material has been cleaned up outside the storage building. No leaking drums were noted outside the storage building. Although, I did detect some oil-like, dark liquid on the floor inside the storage building. I informed Mr. Speed and Mr. Kashner, again, of the RCRA requirements of inspecting the drums and logging problems and correcting them when found. The company seems to be still not concerned enough to follow all of the safe hazardous waste practices required by RCRA.

PROJECT	
01 MAJOR SOURCE	
02 MINOR SOURCE	
03 RESIDENCE	
04 MEETING – CONFERENCE	
05 TRAINING	
07	
08	
09	
10	
00 OTHER (explain)	

SURVEY ACTION	TYPE	NO.
01 EMISSION POINTS INVESTIGATED		
02 VISIBLE EMISSION EVALUATION		
03 SOURCE TEST (STAFF)		
04 SOURCE TEST (COMPANY)		
05 GRAB SAMPLE		
06 PICTURES TAKEN		
09		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
00 OTHER (explain)		

COMPLIANCE STATUS	
A. IN COMPLIANCE	
B. UNKNOWN COMPLIANCE	
C. OUT OF COMPLIANCE NOT ON A SCHEDULE	
D. ON A SCHEDULE MEETING INCREMENTS	
E. ON A SCHEDULE, NOT MEETING INCREMENTS	
F. ON A SCHEDULE, NOT KNOWN IF MEETING INCREMENTS	

DEPARTMENT OF NATURAL RESOURCES
AIR QUALITY DIVISION

ACTIVITY REPORT

AQ-42

- [ ] COMPLAINT RECEIVED
- [ ] PERMIT ACTION
- [ ] ANNUAL COMPLIANCE INVESTIGATION COMPLETED
- [ ] NESHAP
- [ ] NSPS
- [ ] REVISED STATUS

		DATE MM/DD/YY: 07-09-82	
ESTABLISHMENT: Hooker Chemicals and Plastics Corp.	NO.: B2422	QUARTER: JULY	NO.: 03
NUMBER AND STREET	CITY	STAFF: L. Koivuniemi	NO.: 97
CONTACT	TITLE	COUNTY: Lenawee	NO.: 46
PRIMARY ACTIVITY: Page 3		DISTRICT: Ann Arbor	NO.: 08

REMARKS:

Samples Collected:

Mr. Speed and I watched as the company (Jose) collected three samples of waste liquid from drums which had been in storage area 6, but had been moved inside the storage building. Samples were split with company.

#xx-1. 3/4 full fiberpac drum, see picture #31. Barrel on left side of this picture. Collected 2:20pm.

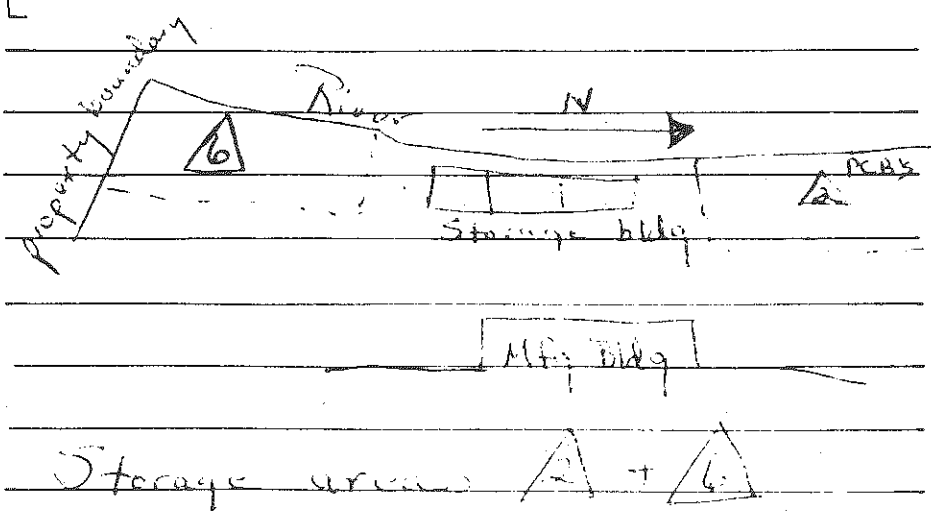
#xx-2. 3" of liquid on side of fiberpac barrel: Note, "side of barrel" because barrel was lying on its side as it was in picture #31. Barrel on right side of this picture #31.

The liquid from the above two barrels appeared to be the same; it was brown-yellow in the barrrel, but appeared reddish-brown when placed in sample bottle.

#xx-3. Drum labeled nitric acid.

Roy is maintaining chain of custody and taking the samples to the ESD Lab. to check for pH and heavy metals.

cc: OHWM
US EPA
Roy Schrameck



PROJECT	
01	MAJOR SOURCE
02	MINOR SOURCE
03	RESIDENCE
04	MEETING – CONFERENCE
05	TRAINING
07	
08	
09	
10	
00	OTHER (explain)

SURVEY ACTION		TYPE	NO.
01	EMISSION POINTS INVESTIGATED		
02	VISIBLE EMISSION EVALUATION		
03	SOURCE TEST (STAFF)		
04	SOURCE TEST (COMPANY)		
05	GRAB SAMPLE		
06	PICTURES TAKEN		
09			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
00	OTHER (explain)		

COMPLIANCE STATUS	
A.	IN COMPLIANCE
B.	UNKNOWN COMPLIANCE
C.	OUT OF COMPLIANCE NOT ON A SCHEDULE
D.	ON A SCHEDULE MEETING INCREMENTS
E.	ON A SCHEDULE, NOT MEETING INCREMENTS
F.	ON A SCHEDULE, NOT KNOWN IF MEETING INCREMENTS

DEPARTMENT OF NATURAL RESOURCES
AIR QUALITY DIVISION

ACTIVITY REPORT

AQ-42

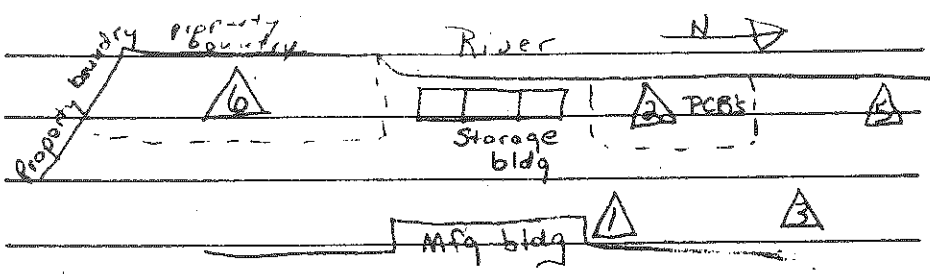
- [ ] COMPLAINT RECEIVED
- [ ] PERMIT ACTION
- [ ] ANNUAL COMPLIANCE INVESTIGATION COMPLETED
- [ ] NESHAP
- [ ] NSPS
- [ ] REVISED STATUS

To: Roy Schrameck, WQD #1 Direct

ESTABLISHMENT: Hooker Chemicals and Plastics Corp. (Formerly Parker Chemical)	NO. B-2422	DATE MM/DD/YY: 06-22-82	
		QUARTER: JUNE	NO. 02
NUMBER AND STREET: 322 W. Main Street	CITY: Morenci	STAFF: L. Koivuniemi	NO. 97
CONTACT: Richard Fredrick	TITLE: Prod. Sup't.	COUNTY: LENAWEE	NO. 46
PRIMARY ACTIVITY: Chemical Production-Mixing Pg 1 of 5		DISTRICT: ANN ARBOR	NO. 08

REMARKS:

Roy Schrameck, W.Q.D. #1, and I inspected storage area 6 which is south of the storage building next to the river.



There was no easy path to get back to the fence next to the river in storage area 6. First we tried the south end of storage area 6 but drums and lab. samples haphazardly strewn made it impossible to get to the west side of this storage area via this path. Finally, we got through by going along the south side of the storage building and pushing in the fence to get to the west side of storage area 6 which is on a concrete pad.

Mr. Fredricks and Lee Huffaker accompanied Roy and me while we collected 4 samples from the ground-no drums were sampled. The drums which we were most concerned about were two badly decomposed plastic lined fibpac barrels laying on their sides. One of which was leaking on to the ground and had eaten into the wood that the barrel was placed on. The liquid was possibly a chromic acid-like substance, since there was a greenish-yellow material near these two barrels on the ground. Roy sampled this before mentioned material; but, since it had apparently rained heavily the night before the sample was probably more diluted than it would have been if we had collected before the rain. There was evidence of rain because the area was still wet, as it had just rained.

When I had originally seen this contaminated part of area 6 on 6-15-82, there had been a lot more multi-colored liquid on the ground. This likely had been washed away by the recent rain. There was evidence that water washed directly from this storage pad into the river, because there were obvious drainage areas. Some of which were stained dark-not unlike an oil slick.

PROJECT	
01 MAJOR SOURCE	
02 MINOR SOURCE	
03 RESIDENCE	
04 MEETING – CONFERENCE	
05 TRAINING	
07	
08	
09	
10	
00 OTHER (explain)	

SURVEY ACTION	TYPE	NO.
01 EMISSION POINTS INVESTIGATED		
02 VISIBLE EMISSION EVALUATION		
03 SOURCE TEST (STAFF)		
04 SOURCE TEST (COMPANY)		
05 GRAB SAMPLE		
06 PICTURES TAKEN		
09		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
00 OTHER (explain)		

COMPLIANCE STATUS	
A. IN COMPLIANCE	
B. UNKNOWN COMPLIANCE	
C. OUT OF COMPLIANCE NOT ON A SCHEDULE	
D. ON A SCHEDULE MEETING INCREMENTS	
E. ON A SCHEDULE, NOT MEETING INCREMENTS	
F. ON A SCHEDULE, NOT KNOWN IF MEETING INCREMENTS	

R5642
3/77

DEPARTMENT OF NATURAL RESOURCES
AIR QUALITY DIVISION

ACTIVITY REPORT

AQ-42

- [ ] COMPLAINT RECEIVED
- [ ] PERMIT ACTION
- [ ] ANNUAL COMPLIANCE INVESTIGATION COMPLETED
- [ ] NESHAP
- [ ] NSPS
- [ ] REVISED STATUS

		DATE MM/DD/YY: 06-22-82	
ESTABLISHMENT: Hooker Chemicals and Plastics Corp. (Formerly Parker Chemical)	NO. B-2422	QUARTER: JUNE	NO. 02
NUMBER AND STREET: 322 W. Main Street	CITY: Morenci	STAFF: L. Koivuniemi	NO. 97
CONTACT: Richard Fredrick	TITLE: Prod. Sup't.	COUNTY: LENAWEE	NO. 46
PRIMARY ACTIVITY: Chemical Production-Mixing		DISTRICT: ANN ARBOR	NO. 08

REMARKS:

Roy Schrameck, W.Q.D. #1, and I inspected storage area 6. (Continuation Page 2)

These areas of dark colored grass and soil may have been stained by the company's Parco T-8 which had been contained in small aerosol cans (approximately 16 oz. size). Several piles of these aerosol cans were strewn on the ground and most were corroded and empty. Parco T-8 is an oil base lubricant similar to WD40.

Many piles of the baghouse dust were exposed to the weather and was being washed away each time it rained.

The 70% ethylamine drum which was incorrectly stored open, outside during earlier inspections had been moved into the storage building, but was still stored open and was almost empty. Disposal had been illegally accomplished by allowing this material to evaporate directly to the atmosphere.

I took pictures of Roy sampling and of the storage area 6.

PCB's :

Two samples of surface/contaminant collected 5-18-82 in storage area 2 had high levels of PCB's and chromium, sample #3 from area 3 was not as high:

	A-1242 PCB ug/kg (ppb)	CR-Total mg/kg (ppm)
Sample #1area 2	19,000	4,700
Sample #2area 2	2,500,000	2,500
Sample #3area 3	6,500	37

Clean-up and Company Sampling:

After we collected our 4 samples and took pictures of storage area 6, we had a meeting with John Gashner, Plant

PROJECT	
01	MAJOR SOURCE
02	MINOR SOURCE
03	RESIDENCE
04	MEETING – CONFERENCE
05	TRAINING
07	
08	
09	
10	
00	OTHER (explain)

	SURVEY ACTION	TYPE	NO.
01	EMISSION POINTS INVESTIGATED		
02	VISIBLE EMISSION EVALUATION		
03	SOURCE TEST (STAFF)		
04	SOURCE TEST (COMPANY)		
05	GRAB SAMPLE		
06	PICTURES TAKEN		
09			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
00	OTHER (explain)		

COMPLIANCE STATUS	
A.	IN COMPLIANCE
B.	UNKNOWN COMPLIANCE
C.	OUT OF COMPLIANCE NOT ON A SCHEDULE
D.	ON A SCHEDULE MEETING INCREMENTS
E.	ON A SCHEDULE, NOT MEETING INCREMENTS
F.	ON A SCHEDULE, NOT KNOWN IF MEETING INCREMENTS

DEPARTMENT OF NATURAL RESOURCES
AIR QUALITY DIVISION

ACTIVITY REPORT

AQ-42

- [ ] COMPLAINT RECEIVED
- [ ] PERMIT ACTION
- [ ] ANNUAL COMPLIANCE INVESTIGATION COMPLETED
- [ ] NESHAP
- [ ] NSPS
- [ ] REVISED STATUS

ESTABLISHMENT: Hooker Chemicals and Plastics Corp. (Formerly Parker Chemical)	NO. B-2422	DATE MM/DD/YY: 06-22-82	
		QUARTER: JUNE	NO. 02
NUMBER AND STREET: 322 W. Main Street	CITY: Morenci	STAFF: L. Koivuniemi	NO. 97
CONTACT: Richard Fredrick	TITLE: Prod. Sup't.	COUNTY: LENAWEE	NO. 46
PRIMARY ACTIVITY: Chemical Production-Mixing		DISTRICT: ANN ARBOR	NO. 08

REMARKS:

Roy Schrameck, W.Q.D. #1, and I inspected storage area 6. (Continuation Page 3)

Manager, Mr. Richard Fredricks; and Lee Huffaker, Chemist. We requested and obtained as much of their operating record as was available, i.e.:

(1) 24 Manifests of Waste shipped since May 1982

(2) 29 Generator's Waste Material Profile Sheets

(3) Logs of : Chemical waste to ship, transfer record, and chemical waste already shipped.

Much of the waste stored on the west side of area 6 ~~near the river was not labeled and the company could~~ not specifically identify it. The company promised to ~~start immediately to contain all leaking waste~~ and test it to determine proper handling and disposal. ~~The company's operating record is much more deficient~~ then I had originally determined.

Slowly, more and more information is dragged out of the ~~company concerning quality, quantity and location of~~ hazardous waste stored. The company has been less than accurate ~~in answering my questions concerning their hazardous~~ waste activity and practices.

After we had copies of their operating record (required (RCRA) ~~by Appendix I), I asked the company if they had~~ PCB's on the property either in use or storage. They ~~said no-absolutely not-not even in any transformers because the~~ transformers had been tested.

Then Roy S. gave them a copy of the testing results of the ~~3 samples we collected 5-18-82. The three officials could~~ explain the chromium levels because the company used ~~chromium; but the 2.5% PCB-A 1242 was not readily~~ explained. We informed the company that they had to ~~determine the extent of the contamination and the source~~ of the PCB's, as well as clean up the contaminated environment, i.e. soils, river sediment and ground

PROJECT

- 01 MAJOR SOURCE
- 02 MINOR SOURCE
- 03 RESIDENCE
- 04 MEETING – CONFERENCE
- 05 TRAINING
- 07
- 08
- 09
- 10
- 00 OTHER (explain)

SURVEY ACTION	TYPE	NO.
01 EMISSION POINTS INVESTIGATED		
02 VISIBLE EMISSION EVALUATION		
03 SOURCE TEST (STAFF)		
04 SOURCE TEST (COMPANY)		
05 GRAB SAMPLE		
06 PICTURES TAKEN		
09		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
00 OTHER (explain)		

COMPLIANCE STATUS

- A. IN COMPLIANCE
- B. UNKNOWN COMPLIANCE
- C. OUT OF COMPLIANCE NOT ON A SCHEDULE
- D. ON A SCHEDULE MEETING INCREMENTS
- E. ON A SCHEDULE, NOT MEETING INCREMENTS
- F. ON A SCHEDULE, NOT KNOWN IF MEETING INCREMENTS

DEPARTMENT OF NATURAL RESOURCES
AIR QUALITY DIVISION

ACTIVITY REPORT

AQ-42

- [ ] COMPLAINT RECEIVED
- [ ] PERMIT ACTION
- [ ] ANNUAL COMPLIANCE INVESTIGATION COMPLETED
- [ ] NESHAP
- [ ] NSPS
- [ ] REVISED STATUS

ESTABLISHMENT: Hooker Chemicals and Plastics Corp. (Formerly Parker Chemical)	NO. B-2422	DATE MM/DD/YY: 06-22-82	
		QUARTER: JUNE	NO. 02
NUMBER AND STREET: 322 W. Main Street	CITY: Morenci	STAFF: L. Koivuniemi	NO. 07
CONTACT: Richard Fredrick	TITLE: Prod. Sup't.	COUNTY: LENAWEE	NO. 46
PRIMARY ACTIVITY: Chemical Production-Mixing Page 4		DISTRICT: ANN ARBOR	NO. 08

REMARKS:

water if necessary.
The company agreed to have this area 6 cleaned up and leaking or leaching waste in recovery drums by July 6, 1982 and to have a study plan by approximately July 12 or 13 when the parent company's environmental audit is conducted at the Morenci facility. audit

Source of PCB's ?:

The company informed us that they use only internally generated waste oil for dust control; therefore, a waste oil for dust control from an outside source was not responsible for this PCB contamination.

The company had transferred and stored Reacto-bond (an oily product) in area 2 ; therefore, they will be checking to see if this product is contaminated with PCB's through an inadvertent side reaction.

I called Dave Long (6-24-82) , ESD Lab; he said that there was practically no chance there was a lab error, Also, since total oil (FE-Oil) was 54,000 mg/kg or ppm or 5.4% that the oil in the sample #2 was approximately 46% PCB.

I also asked Dave to make sure chain of custody was maintained and to save these three samples indefinitely or until notice from Roy-since they were Roy's samples and may be important to either a civil or criminal enforcement case.

Company promised to save samples of liquid in the two badly decomposed plastic lined fiberpac drums, as well as their baghouse dust for me to pick up. The company thought the liquid in these two barrels was CWM #66701. I tried to decode this by looking up Code 66701 on the Generator's Waste Management Material Profile Sheet, but the company had not given me this document. I have 66700 and 66702, but not 66701.

U.S. EPA Phone call of June 23, 1982 :

Received telephone call from Ms. Sally Swanson of.....

PROJECT	
01	MAJOR SOURCE
02	MINOR SOURCE
03	RESIDENCE
04	MEETING – CONFERENCE
05	TRAINING
07	
08	
09	
10	
00	OTHER (explain)

SURVEY ACTION		TYPE	NO.
01	EMISSION POINTS INVESTIGATED		
02	VISIBLE EMISSION EVALUATION		
03	SOURCE TEST (STAFF)		
04	SOURCE TEST (COMPANY)		
05	GRAB SAMPLE		
06	PICTURES TAKEN		
09			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
00	OTHER (explain)		

COMPLIANCE STATUS	
A.	IN COMPLIANCE
B.	UNKNOWN COMPLIANCE
C.	OUT OF COMPLIANCE NOT ON A SCHEDULE
D.	ON A SCHEDULE MEETING INCREMENTS
E.	ON A SCHEDULE, NOT MEETING INCREMENTS
F.	ON A SCHEDULE, NOT KNOWN IF MEETING INCREMENTS

DEPARTMENT OF NATURAL RESOURCES
AIR QUALITY DIVISION

ACTIVITY REPORT

AQ-42

- [ ] COMPLAINT RECEIVED
- [ ] PERMIT ACTION
- [ ] ANNUAL COMPLIANCE INVESTIGATION COMPLETED
- [ ] NESHAP
- [ ] NSPS
- [ ] REVISED STATUS

ESTABLISHMENT: Hooker Chemicals and Plastics Corp. (Formerly Parker Chemical)	NO. B-2422	DATE MM/DD/YY: 06-22-82	
		QUARTER: JUNE	NO. 02
NUMBER AND STREET: 322 W. Main Street	CITY: Morenci	STAFF: L. Koivuniemi	NO. 97
CONTACT: Richard Fredrick	TITLE: Prod. Sup't.	COUNTY: LENAWEE	NO. 46
PRIMARY ACTIVITY: Chemical Production-Mixing		DISTRICT: ANN ARBOR	NO. 08

Pg 5 of 5

REMARKS:

Roy Schrameck, W.Q.D. #1, and I inspected storage area 6 . (Continuation Page 5)

U.S. EPA Region V, Chicago, Telephone (312) 886-7482. She is assigned to write and coordinate the enforcement or compliance order with the company. I promised to get the information I obtained since June 14, 1982 off to her within the next week.

Telephone Call to Lyle Rowell of Environmental Enforcement Division on June 23, 1982:

I called Lyle to make sure he knew about: all of my inspections at Hooker and the high levels of PCB's in the samples collected in area A . Lyle confirmed that there was no need for him to be involved in the sampling or meeting with Hooker on June 22, 1982. Since the company is cleaning up the barrels and agreeing to do a hydro-geological study and perform the subsequent environmental clean-up as necessary, it appears a criminal court case may not be pursued. I will continue to inform Lyle of important findings which he may need.

PROJECT

- 01 MAJOR SOURCE
- 02 MINOR SOURCE
- 03 RESIDENCE
- 04 MEETING – CONFERENCE
- 05 TRAINING
- 07
- 08
- 09
- 10
- 00 OTHER (explain)

SURVEY ACTION	TYPE	NO.
01 EMISSION POINTS INVESTIGATED		
02 VISIBLE EMISSION EVALUATION		
03 SOURCE TEST (STAFF)		
04 SOURCE TEST (COMPANY)		
05 GRAB SAMPLE		
06 PICTURES TAKEN		
09		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
00 OTHER (explain)		

COMPLIANCE STATUS

- A. IN COMPLIANCE
- B. UNKNOWN COMPLIANCE
- C. OUT OF COMPLIANCE NOT ON A SCHEDULE
- D. ON A SCHEDULE MEETING INCREMENTS
- E. ON A SCHEDULE, NOT MEETING INCREMENTS
- F. ON A SCHEDULE, NOT KNOWN IF MEETING INCREMENTS

DEPARTMENT OF NATURAL RESOURCES
AIR QUALITY DIVISION

ACTIVITY REPORT

AQ-42

☐ RECEIVED
☐ PERMIT ACTION
☐ ANNUAL COMPLIANCE INVESTIGATION COMPLETED
☐ NSPS
☐ REVISED STATUS

To: Roy Schrameck - AWQ.D. # - Direct

ESTABLISHMENT: Hooker Chemicals and Plastics Corporation (formerly Parker Chemical)	NO. B-2422	DATE MM/DD/YY: 06-15-82	
		QUARTER: JUNE	NO. 02
NUMBER AND STREET: 322 W. Main Street	CITY: Morenci	STAFF: L. Koivuniemi	NO. 97
CONTACT: Richard Fredrick	TITLE: Prod. Sup't.	COUNTY: LENAWEE	NO. 46
PRIMARY ACTIVITY: Chemical Production-Mixing		DISTRICT: ANN ARBOR	NO. 08

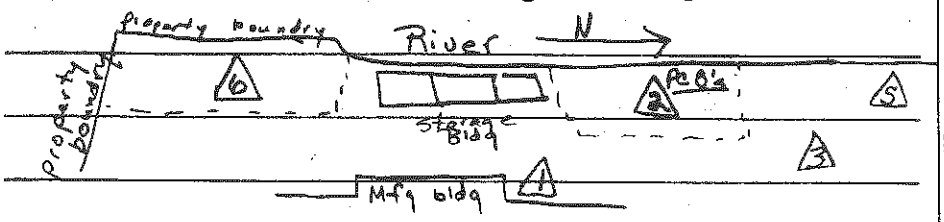
REMARKS:

Dhruman Shah, Permit Engineer and I met with Richard Speed at the company to discuss the Permit to Install applications numbered 243-82, 244-82, and 245-82. Dhruman needed more process information and wanted to look at existing equipment. The company is sending Dhruman a letter with the additional requested information.

Could not conduct a scheduled investigation since the processes were not operating at the time of the meeting, afternoon of 6-15-82.

RCRA (Resource Conservation Recovery Act-Haz. Waste):

I had received a telephone call (06-08-82) and an aerial photo (June 9, 1982) from Lyle Rowell of Environmental Enforcement Division (E.E.D.) informing me that there were some more drums that neither Lyle nor I had previously known about. Therefore, I asked Mr. Fredricks about storage area 6 which is located on the river on the south side of the storage building.



Mr. Fredricks insisted that there was not any hazardous waste stored there-only nonhazardous baghouse dust (phosphates) and empty drums.

I insisted that I needed to take a look. Mr. Fredricks continued to want to know why I thought there was anything back there that may be a problem. Finally, I told him that I had seen an aerial photo that had been taken recently and wanted to check out the area. Then Mr. Fredricks said it was all right and I climbed (squeezed) through several rows of drums to discover a [redacted] mess. There were approximately 100 drums of which many were corroded, leaking or open. Several drums were open and filled with laboratory bottles filled with samples. Two fiberpac barrels with a....

PROJECT

01 MAJOR SOURCE
02 MINOR SOURCE
03 RESIDENCE
04 MEETING – CONFERENCE
05 TRAINING
07
08
09
10
00 OTHER (explain)

SURVEY ACTION	TYPE	NO.
01 EMISSION POINTS INVESTIGATED		
02 VISIBLE EMISSION EVALUATION		
03 SOURCE TEST (STAFF)		
04 SOURCE TEST (COMPANY)		
05 GRAB SAMPLE		
06 PICTURES TAKEN		
09		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
00 OTHER (explain)		

RECEIVED
JUN 28 1982
WATER QUALITY DIV.
DIST. I

COMPLIANCE STATUS

A. IN COMPLIANCE
B. UNKNOWN COMPLIANCE
C. OUT OF COMPLIANCE NOT ON A SCHEDULE
D. ON A SCHEDULE MEETING INCREMENTS
E. ON A SCHEDULE, NOT MEETING INCREMENTS
F. ON A SCHEDULE, NOT KNOWN IF MEETING INCREMENTS

R5642
3/77

DEPARTMENT OF NATURAL RESOURCES
AIR QUALITY DIVISION

ACTIVITY REPORT

AQ-42

- [ ] COMPLAINT RECEIVED
- [ ] PERMIT ACTION
- [ ] ANNUAL COMPLIANCE INVESTIGATION COMPLETED
- [ ] NESHAP
- [ ] NSPS
- [ ] REVISED STATUS

ESTABLISHMENT: Hooker Chemicals and Plastics. Corp.	NO.: B-2422	DATE MM/DD/YY: 06-15-82	
		QUARTER: JUNE	NO.: 02
NUMBER AND STREET	CITY	STAFF: L. Koivuniemi	NO.: 97
CONTACT	TITLE	COUNTY: LENAWEE	NO.: 46
PRIMARY ACTIVITY: Page 2		DISTRICT: ANN ARBOR	NO.: 08

REMARKS:

plastic internal liner were laying on their side, one was leaking. The fiberpac outer shell had broken down and only the plastic liner was holding the liquid. The liquid was corrosive; it had dripped on & eaten through some wood under it.

I informed Mr. Fredricks that this "mess" had to be cleaned up right away, since everytime it rained the contaminants washed directly into the river immediately adjacent to these leaking drums.

Mr. Fredricks did not know what was in these two fiberpac barrels containing liquid. He said the company would analyze them to determine proper disposal and clean up the area.

When I got back to the office, I called Roy Schrameck of W.Q.D. #1 to inform him of this newly discovered improper storage area. Roy was in Chicago; therefore, I left him a message to call me when he returned.

Monday June 21, 1982 :

Roy called me back on Monday 06-21-82. Roy had received the results from our 05-18-82 sampling showing extremely high levels of PCB's on the ground near the river.

Therefore, Roy and I decided it was necessary to document what was in this newly discovered unacceptable storage area. Roy called Ron Waybrandt, PCB Coordinator in Lansing and Lyle Rowell of E.E.D. Ron W. told Roy to follow up as planned. Lyle was not in; therefore, Roy Schrameck talked to Warren Hutchinson of E.E.D. who informed Roy that Lyle did not need to be involved in our investigation or meeting with Hooker, on Tues. 6-22-82.

Roy and I arranged to go to Hooker the following day June 22, 1982.

PROJECT	
01	MAJOR SOURCE
02	MINOR SOURCE
03	RESIDENCE
04	MEETING – CONFERENCE
05	TRAINING
07	
08	
09	
10	
00	OTHER (explain)

	SURVEY ACTION	TYPE	NO.
01	EMISSION POINTS INVESTIGATED		
02	VISIBLE EMISSION EVALUATION		
03	SOURCE TEST (STAFF)		
04	SOURCE TEST (COMPANY)		
05	GRAB SAMPLE		
06	PICTURES TAKEN		
09			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
00	OTHER (explain)		

COMPLIANCE STATUS	
A.	IN COMPLIANCE
B.	UNKNOWN COMPLIANCE
C.	OUT OF COMPLIANCE NOT ON A SCHEDULE
D.	ON A SCHEDULE MEETING INCREMENTS
E.	ON A SCHEDULE, NOT MEETING INCREMENTS
F	ON A SCHEDULE, NOT KNOWN IF MEETING INCREMENTS

R5642
3/77

DEPARTMENT OF NATURAL RESOURCES
AIR QUALITY DIVISION

ACTIVITY REPORT

AQ-42

(Formerly Parker Chemical)

☐ COMPLAINT RECEIVED
☐ PERMIT ACTION
☐ ANNUAL COMPLIANCE INVESTIGATION COMPLETED
☐ NESHAP
☐ NSPS
☐ REVISED STATUS

		DATE MM/DD/YY: 05-27-82	
ESTABLISHMENT: Hooker Chemicals and Plastics Corp.	NO.: B-2422	QUARTER: MAY	NO.: 02
NUMBER AND STREET: 322 W. Main Street	CITY: Morenci	STAFF: L. Koivuniemi	NO.: 97
CONTACT: Richard Fredrick	TITLE: Prod. Sup't.	COUNTY: Lenawee	NO.: 46
PRIMARY ACTIVITY: Chemical Production-Mixing pg 1 of 4		DISTRICT: Ann Arbor	NO.: 08

REMARKS:

RCRA Inspection #3: Sampled four (4) drums with Roy Schrameck, District Engineer for Water Quality District #1.

Collected four (4) liquid samples from four (4) different drums of hazardous waste, retained custody and delivered to ESD Lab on Friday, May 28, 1982 at 5:05 p.m.-log #9450. All four (4) samples were split with Mr. Fredrick.

Area 2 and 3 are listed on Hooker's Part A RCRA application dated 10-08-80. I have used this labeling all through my RCRA investigation reports.

Sample #1

a. 55-gallon drum labeled: Junk Solvent with Flammable Label located in area 2 approximately 55 feet from property line.

b. Sample collected 11:50 a.m. Roy dropped a small glass bottle into the bulk waste 55 gallon drum to collect the sample; we could not get our metal collecting tubes to pull up the waste liquid. We split this sample, as well as the other three (3) samples with Richard Fredrick. Mr. Fredrick was helpful to us in our sample collection; he supplied us with two polyethylene bottles, because he was concerned there may have been H-F contamination.

c. Collected in a glass container-dark liquid.

d. Mr. Huffaker said this drum was waste Hooker solvents and was mainly acetone, xylene, oil and phosphoric.

e. Lab analyses request: volatile hydrocarbons scan, flash point and pH.

PROJECT

01 MAJOR SOURCE
02 MINOR SOURCE
03 RESIDENCE
04 MEETING – CONFERENCE
05 TRAINING
07
08
09
10
00 OTHER (explain)

SURVEY ACTION	TYPE	NO.
01 EMISSION POINTS INVESTIGATED		
02 VISIBLE EMISSION EVALUATION		
03 SOURCE TEST (STAFF)		
04 SOURCE TEST (COMPANY)		
05 GRAB SAMPLE		
06 PICTURES TAKEN		
09		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
00 OTHER (explain)		

COMPLIANCE STATUS

A. IN COMPLIANCE
B. UNKNOWN COMPLIANCE
C. OUT OF COMPLIANCE NOT ON A SCHEDULE
D. ON A SCHEDULE MEETING INCREMENTS
E. ON A SCHEDULE, NOT MEETING INCREMENTS
F. ON A SCHEDULE, NOT KNOWN IF MEETING INCREMENTS

R5642
1/77

DEPARTMENT OF NATURAL RESOURCES
AIR QUALITY DIVISION

ACTIVITY REPORT

AQ-42

☐ RECEIVED ☐ NESHAP
☐ PERMIT ACTION ☐ NSPS
☐ ANNUAL COMPLIANCE INVESTIGATION COMPLETED ☐ REVISED STATUS

		DATE MM/DD/YY: 05-27-82	
ESTABLISHMENT: Hooker Chemical and Plastics Corp.	NO.: B-2422	QUARTER: MAY	NO.: 02
NUMBER AND STREET	CITY	STAFF: L. Koivuniemi	NO.: 97
CONTACT	TITLE	COUNTY: Lenawee	NO.: 46
PRIMARY ACTIVITY		DISTRICT: Ann Arbor	NO.: 08

Page 2 of 4

REMARKS:

Sample #2

a. 55-gallon drum in area (2) located near the drum sampled and listed as Sample #1 (supra). Drum was painted green and labeled 615473.

b. Sample collected at 12:04 p.m. with metal tube. This red liquid waste was extremely corrosive and attacked the metal tube which was used to collect the sample. Sample was placed in a polyethylene bottle. Based on the above reaction we decided our metal collecting tubes may have been aluminum.

c. Company said the drum contents was PARCO Cleaner FP-5, Code 1267, Batch 615473 and was surfactant, phosphoric acid and H_2O.

d. Lab analyses request: pH and phosphate.

Sample #3

a. 55 gallon drum labeled ethylamine 70%. Drum had bung removed and therefore was open to environment. Mr. Fredricks had removed the plug in April, 1982, to allow the ethylamine to dissipate. Strong ammonia odor, volatile liquid and flammable are the properties of ethylamine; therefore, this drum should not have been stored, uncovered, outdoors. Drum was located in area (3).

b. Collected at 12:16 in polyethylene bottle.

c. Lab analyses request: flash point, identify and pH.

PROJECT	
01	MAJOR SOURCE
02	MINOR SOURCE
03	RESIDENCE
04	MEETING – CONFERENCE
05	TRAINING
07	
08	
09	
10	
00	OTHER (explain)

	SURVEY ACTION	TYPE	NO.
01	EMISSION POINTS INVESTIGATED		
02	VISIBLE EMISSION EVALUATION		
03	SOURCE TEST (STAFF)		
04	SOURCE TEST (COMPANY)		
05	GRAB SAMPLE		
06	PICTURES TAKEN		
09			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
00	OTHER (explain)		

COMPLIANCE STATUS	
A	IN COMPLIANCE
B	UNKNOWN COMPLIANCE
C	OUT OF COMPLIANCE NOT ON A SCHEDULE
D	ON A SCHEDULE MEETING INCREMENTS
E	ON A SCHEDULE, NOT MEETING INCREMENTS
F	ON A SCHEDULE, NOT KNOWN IF MEETING INCREMENTS

R5642
3/77

DEPARTMENT OF NATURAL RESOURCES
AIR QUALITY DIVISION

ACTIVITY REPORT

AQ-42

- [ ] COMPLAINT RECEIVED
- [ ] PERMIT ACTION
- [ ] ANNUAL COMPLIANCE INVESTIGATION COMPLETED
- [ ] NESHAP
- [ ] NSPS
- [ ] REVISED STATUS

ESTABLISHMENT: Hooker Chemical and Plastics Corp.	NO. B-2422	DATE MM/DD/YY: 05-27-82	
NUMBER AND STREET	CITY	QUARTER: MAY	NO. 02
CONTACT	TITLE	STAFF: L. Koivuniemi	NO. 97
PRIMARY ACTIVITY		COUNTY: Lenawee	NO. 46
		DISTRICT: Ann Arbor	NO. 08

Page 3 of 4

REMARKS:

Sample #4

a. 55-gallon drum of brown-yellow, viscous liquid with sludge/solids at bottom. No labeling visible on drum which was covered with a layer of an oil-wax like substance in area A. Took a picture of Roy Schrameck sampling this drum.

b. Sample collected at 12:24 p.m. While collecting this sample, it started to rain.

c. Sample collected with a metal tube into a glass sample bottle.

d. Lee Huffaker said this drum was probably: oil and emulsifier additive used to protect machined metal from rusting.

e. Lab analyses request: Flash point, pH and PCB scan.

Sampling Summary:

Richard Fredrick was with Roy and me while we collected the four (4) different drum samples. We split our samples with Mr. Fredrick. I took one picture of Roy Schrameck taking the fourth sample and promised to send the company a copy of this picture along with the pictures I took on May 18, 1982. The company was very cooperative and did not seem to mind our unannounced follow-up sampling and questions on their waste storage practices. It was 5:30 p.m. before I left the company, after asking more questions concerning Hooker's operating record for RCRA.

Length of Time Drums have been in Storage:

During my earlier investigation (05-18-82) I questioned Mr. Fredrick about the reason the drums were in such terrible condition, i.e. leaking; he said they were returned to Hooker that way and had only been accumulating

PROJECT	
01 MAJOR SOURCE	
02 MINOR SOURCE	
03 RESIDENCE	
04 MEETING – CONFERENCE	
05 TRAINING	
07	
08	
09	
10	
00 OTHER (explain)	

SURVEY ACTION	TYPE	NO.
01 EMISSION POINTS INVESTIGATED		
02 VISIBLE EMISSION EVALUATION		
03 SOURCE TEST (STAFF)		
04 SOURCE TEST (COMPANY)		
05 GRAB SAMPLE		
06 PICTURES TAKEN		
09		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
00 OTHER (explain)		

COMPLIANCE STATUS	
A IN COMPLIANCE	
B. UNKNOWN COMPLIANCE	
C. OUT OF COMPLIANCE NOT ON A SCHEDULE	
D. ON A SCHEDULE MEETING INCREMENTS	
E. ON A SCHEDULE, NOT MEETING INCREMENTS	
F. ON A SCHEDULE, NOT KNOWN IF MEETING INCREMENTS	

R5642

DEPARTMENT OF NATURAL RESOURCES
AIR QUALITY DIVISION

ACTIVITY REPORT

AQ-42

RECEIVED
PERMIT ACTION
ANNUAL COMPLIANCE INVESTIGATION COMPLETED
NSPS
REVISED STATUS

		DATE MM/DD/YY 05-27-82	
ESTABLISHMENT: Hooker Chemical and Plastics Corp.	NO. B-2422	QUARTER: MAY	NO. 02
NUMBER AND STREET	CITY	STAFF: L. Koivuniemi	NO. 97
CONTACT	TITLE	COUNTY: Lenawee	NO. 46
PRIMARY ACTIVITY		DISTRICT: Ann Arbor	NO. 08

REMARKS:

since April 1981. I told him they looked like they had been in storage much longer, but he insisted-"No, they were returned that way and it had been a bad winter."

During this inspection, while discussing the problem of accepting unmanifested waste with Lee Huffaker, Mr. Huffaker said that "many of the returned product waste had been returned prior to November 19, 1980; therefore, they possibly did not come under the manifest requirement." At this, Mr. Cashner, the Plant Manager, said he did not care about the waste on site, as much as, the continuing problem of requiring his customers to manifest Hookers "returned product."

Mr. Cashner promised to write me a letter explaining Hooker's position on returned product not being a waste.

During this investigation I reviewed the U.S. EPA RCRA inspection report and corrected some of my responses on this form based on the information I had obtained during these three separate investigations. (May 14, 18 and 27, 1982).

Attached are three documents that Hooker gave me during this inspection in order to show they were working on getting compliance with RCRA.

Attachment A: Inter-Company Memorandum

Attachment B: Waste Manifests (May 26, 1982)

Attachment C: Purchase Agreement with Chemical Waste Management (1st pg.)

June 1, 1982 telephone call from Mr. Cashner:

On June 1, 1982 I received a call from Mr. Cashner. Mr. Cashner is sending me a letter stating why the returned "waste product" is not a waste until Hooker makes the determination that they can't use or recycle the material. Mr. Cashner is carbon copying Joe Boyle of U.S. EPA Region V Chicago.

PROJECT	
01 MAJOR SOURCE	
02 MINOR SOURCE	
03 RESIDENCE	
04 MEETING - CONFERENCE	
05 TRAINING	
07	
08	
09	
10	
00 OTHER (explain)	

SURVEY ACTION	TYPE	NO.
01 EMISSION POINTS INVESTIGATED		
02 VISIBLE EMISSION EVALUATION		
03 SOURCE TEST (STAFF)		
04 SOURCE TEST (COMPANY)		
05 GRAB SAMPLE		
06 PICTURES TAKEN		
09		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
00 OTHER (explain)		

COMPLIANCE STATUS	
A. IN COMPLIANCE	
B. UNKNOWN COMPLIANCE	
C. OUT OF COMPLIANCE NOT ON A SCHEDULE	
D. ON A SCHEDULE MEETING INCREMENTS	
E. ON A SCHEDULE, NOT MEETING INCREMENTS	
F. ON A SCHEDULE, NOT KNOWN IF MEETING INCREMENTS	

R5642
3/77

DEPARTMENT OF NATURAL RESOURCES
AIR QUALITY DIVISION

ACTIVITY REPORT

AQ-42

- [ ] COMPLAINT RECEIVED
- [ ] PERMIT ACTION
- [ ] ANNUAL COMPLIANCE INVESTIGATION COMPLETED
- [ ] NESHAP
- [ ] NSPS
- [ ] REVISED STATUS

ESTABLISHMENT: Hooker Chemicals and Plastics Corporation(Formerly Parker Chemical)	NO. B-2422	DATE MM/DD/YY: 05-18-82	
		QUARTER: MAY	NO. 02
NUMBER AND STREET: 322 W. Main Street	CITY: Morenci	STAFF: L. Koivuniemi	NO. 97
CONTACT: Richard Fredrick	TITLE: Prd'n Sup't.	COUNTY: Lenawee	NO. 46
PRIMARY ACTIVITY: Chemical Production-Mixing RCRA Inspection #2:		DISTRICT: Ann Arbor	NO. 08

REMARKS:

Conducted a joint investigation of this company's hazardous waste storage practices with Roy Schrameck, District Engineer, Water Quality District #1. As stated in my previous activity report of 05-14-82, there appeared to be Act 245 (Water Law) violations due to this company's hazardous waste drum storage area, i.e. open or leaking drums. Therefore, Roy and I conducted this follow up inspection.

Roy and I informed the company that I would be collecting more information for my RCRA report (as an authorized representative of the U.S. EPA) and Roy would be inspecting the company for possible Act 245 violations. Since the MDNR's Office of Hazardous Waste Management (OHWM) does not have field staff; they did not have anyone at this inspection. I had contacted OHWM and informed them of the huge number of leaking drums and, also that Roy and I would follow up with an inspection and sampling. OHWM was in agreement with the need for a more complete inspection to determine the contents of the leaking drums located in the company's hazardous waste storage area.

When I checked the company's inspection log of the drums the company generally had not been noting and correcting the problems of leaking drums, open drums and inadequate aisle space. One problem was cited in April 1982: a barrel of 70% ethylamine (no longer used raw material- not a Hooker product) had been expanding due to warm weather. Mr. Fredrick corrected this problem by "rupturing and venting" to release the pressure in the drum. This was the source of the strong, irritating odor that I had detected during my first or May 14, 1982 site investigation. This waste ethylamine storage drum was not in the same storage area (A) that I had been shown on my first inspection, but in storage area (A) approximately 20 feet west of storage area (A) (diagram attached).

The company informed Roy and I that the drums had been accumulating since April 1981. This is apparently a violation of Act 64, P. A. 1979-long term storage, which requires a permit.....

PROJECT	
01	MAJOR SOURCE
02	MINOR SOURCE
03	RESIDENCE
04	MEETING – CONFERENCE
05	TRAINING
07	
08	
09	
10	
00	OTHER (explain)

SURVEY ACTION		TYPE	NO.
01	EMISSION POINTS INVESTIGATED		
02	VISIBLE EMISSION EVALUATION		
03	SOURCE TEST (STAFF)		
04	SOURCE TEST (COMPANY)		
05	GRAB SAMPLE		
06	PICTURES TAKEN		
09			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
00	OTHER (explain)		

COMPLIANCE STATUS	
A.	IN COMPLIANCE
B.	UNKNOWN COMPLIANCE
C.	OUT OF COMPLIANCE NOT ON A SCHEDULE
D.	ON A SCHEDULE MEETING INCREMENTS
E.	ON A SCHEDULE, NOT MEETING INCREMENTS
F	ON A SCHEDULE, NOT KNOWN IF MEETING INCREMENTS

R5642
3/77

Table 4. Population of County Subdivisions: 1960 to 1980—Con.

[Total population of a place in two or more county subdivisions appears in table 5. Counts relate to county subdivisions and places as defined at each census. For meaning of symbols, see introduction]

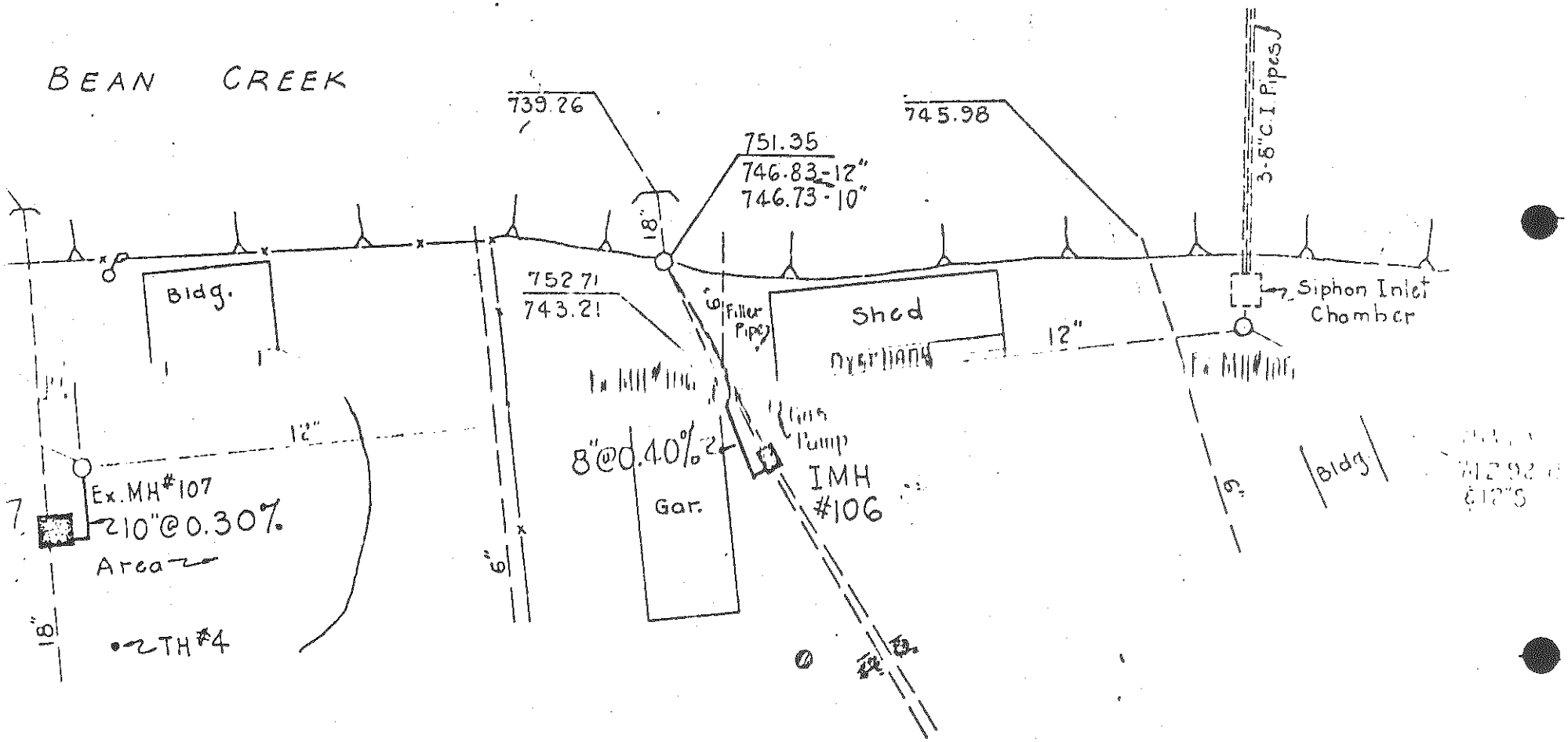
County Subdivisions	1980	1970	1960
Keweenaw County	1 963	2 264	2 417
Allouez township	1 508	1 700	1 918
Ahmeek village	210	238	265
Eagle Harbor township	113	199	84
Grant township	118	68	71
Houghton township	161	229	245
Sherman township	63	68	99
Lake County	7 711	5 661	5 338
Chase township	858	752	649
Cherry Valley township	272	172	199
Dover township	293	201	237
Eden township	174	116	85
Elk township	538	325	216
Ellsworth township	542	376	385
Luther village (pt.)	148	129	117
Lake township	516	341	273
Newkirk township	608	426	343
Luther village (pt.)	266	191	208
Peacock township	278	144	142
Pinora township	348	249	195
Pleasant Plains township	1 401	1 211	1 304
Baldwin village (pt.)	546	502	701
Sauble township	260	194	144
Sweetwater township	206	115	110
Webber township	865	614	657
Baldwin village (pt.)	128	110	134
Yates township	552	425	399
Lapeer County[35]	70 038	[1]52 361	41 926
Almont township	4 124	3 163	2 453
Almont village[35]	1 857	1 634	1 279
Arcadia township	2 347	1 666	1 253
Attica township	3 642	2 695	1 880
Brown City city (pt.)[35]	5	...	...
Burlington township	1 562	1 423	1 222
Clifford village	406	472	389
Burnside township[35]	1 772	1 506	1 322
Deerfield township	4 672	2 713	1 760
Barnes Lake–Millers Lake (CDP)	1 172	...	...
Dryden township	2 977	2 129	1 427
Dryden village	650	654	531
Elba township	4 604	5 651	5 410
Goodland township	1 534	1 261	1 013
Hadley township	3 331	2 011	1 304
[illegible]ay township[35]	2 238	4 150	3 815
[illegible]y City city[35]	2 495	1 980	1 968
[illegible]ser city[35]	6 198	[1]6 314	6 160
Lapeer township[35]	4 261	2 574	1 875
Marathon township	4 336	3 513	2 788
Columbiaville village (pt.)[35]	953	935	878
Otter Lake village (pt.)	442	549	556
Mayfield township	7 098	3 645	2 125
Metamora township	3 220	1 988	1 445
Metamora village	552	468	452
North Branch township	2 721	2 277	2 029
North Branch village[35]	896	932	901
Oregon township	5 652	2 510	1 623
Columbiaville village (pt.)[35]	–	...	...
Rich township	1 249	1 172	1 022
Leelanau County[36]	14 007	10 872	9 321
Bingham township	1 546	916	625
Centerville township	709	473	577
Cleveland township	654	393	288
Elmwood township	3 004	2 240	1 687
Empire township	797	956	824
Empire village[36]	340	409	448
Glen Arbor township	578	571	431
Kasson township	952	676	640
Leelanau township	1 560	1 270	1 189
Northport village	611	594	530
Leland township	1 446	1 219	1 229
Solon township	987	798	701
Suttons Bay township	1 774	1 360	1 130
Suttons Bay village	504	522	421
Lenawee County[37]	89 948	[1]81 951	77 789
Adrian city[37]	21 186	20 382	20 347
Adrian township[37]	4 612	3 725	3 341
Blissfield township	3 744	3 475	3 458
Blissfield village[37]	3 107	2 753	2 653
Cambridge township	3 800	2 647	2 143
Onsted village	670	555	526
Clinton township	3 413	2 540	2 298
Clinton village	2 342	1 677	1 481
Deerfield township	1 729	1 589	1 656
Deerfield village[37]	957	834	866
Dover township	1 933	1 637	1 533
Clayton village (pt.)	230	312	274
Fairfield township	1 986	2 047	2 117
Franklin township	2 463	1 768	1 813
Hudson city[37]	2 545	2 618	2 546
Hudson township[37]	1 550	1 373	1 341
Clayton village (pt.)[37]	166	193	196
Macon township	1 480	1 316	1 262
Madison township[37]	5 035	5 494	5 226
Medina township	1 455	1 227	1 301
Morenci city	2 110	2 132	2 053
Ogden township	1 224	[1]1 553	1 305

County Subdivisions	1980	1970	1960
Lenawee County—Con.			
Palmyra township	2 476	2 424	2 418
Raisin township[37]	5 499	4 322	3 061
Ridgeway township	1 746	1 756	1 605
Britton village[37]	693	697	622
Rigo township	1 671	1 675	1 863
Rollin township	3 428	2 983	2 692
Addison village (pt.)	416	363	331
Manitou Beach–Devils Lake (CDP) (pt.)	1 633	1 560	1 291
Rome township	1 681	1 330	1 219
Seneca township	1 377	1 337	1 297
Tecumseh city[37]	7 320	7 120	7 045
Tecumseh township[37]	1 480	1 048	775
Woodstock township	3 005	2 433	2 074
Addison village (pt.)	239	232	244
Cement City village (pt.)	501	489	429
Manitou Beach–Devils Lake (CDP) (pt.)	521	332	253
Livingston County[38]	100 289	58 967	38 233
Brighton city[38]	4 268	2 457	2 282
Brighton township[38]	11 222	5 882	2 875
Cohoctah township	2 436	1 454	1 160
Conway township	1 722	1 160	978
Deerfield township	2 611	1 734	1 149
Genoa township	9 261	4 800	2 402
Green Oak township[38]	10 802	7 598	4 631
Whitmore Lake (CDP) (pt.)	1 590	1 269	...
Hamburg township	11 318	5 481	3 189
Handy township	4 681	3 556	2 890
Fowlerville village[38]	2 289	1 978	1 674
Hartland township	6 034	2 630	1 436
Howell city[38]	6 976	5 224	4 861
Howell township[38]	3 999	2 426	1 540
Iosco township	1 436	817	705
Marion township[38]	4 754	2 668	1 740
Oceola township	4 175	2 496	1 453
Putnam township	5 643	3 354	2 203
Pinckney village[38]	1 390	921	732
Tyrone township	6 077	3 437	1 523
Unadilla township	2 874	1 793	1 216
Luce County	6 659	6 789	7 827
Columbus township	293	281	269
Lakefield township	804	627	579
McMillan township	3 355	3 575	4 001
Newberry village	2 120	2 334	2 612
Pentland township	2 207	2 306	2 978
Mackinac County	10 178	9 660	10 853
Bois Blanc township	62	28	45
Brevort township	451	476	530
Clark township	1 879	1 771	1 563
Garfield township	1 206	1 013	1 017
Hendricks township	166	97	134
Hudson township	212	138	213
Mackinac Island city	479	517	942
Marquette township	461	471	506
Moran township	823	779	877
Newton township	354	302	398
Portage township	747	625	608
St. Ignace city	2 632	2 892	3 334
St. Ignace township	706	551	686
Macomb County[39]	694 600	625 309	405 804
Armada township	3 887	2 953	2 447
Armada village	1 392	1 352	1 111
Bruce township	5 756	4 350	3 288
Romeo village (pt.)[39]	1 933	2 137	1 750
Center Line city	9 293	10 379	10 164
Chesterfield township	18 276	9 378	5 888
Clinton township[39]	72 400	48 865	25 688
Clinton Township (CDP)	72 400	...	...
East Detroit city[39]	38 280	45 920	45 756
Fraser city	14 560	11 868	7 027
Harrison township	23 649	18 755	12 910
Harrison Township (CDP)	23 649	...	...
Lake township	110	135	109
Grosse Pointe Shores village (pt.)	110	135	109
Lenox township	4 899	4 724	4 750
New Haven village[39]	1 871	1 855	1 198
Macomb township	14 230	6 140	4 807
Memphis city (pt.)	817	749	648
Mount Clemens city[39]	18 806	20 476	21 016
New Baltimore city[39]	5 439	4 132	3 159
Ray township	3 121	2 683	2 086
Richmond city	3 536	3 234	2 667
Richmond township	2 453	1 719	2 856
Roseville city[39]	54 311	60 529	50 195
St. Clair Shores city[39]	76 210	88 093	76 657
Shelby township	38 939	29 467	17 114
Sterling Heights city	108 999	61 365	...
Utica city	5 282	3 504	1 454
Warren city	161 134	179 260	89 246
Washington township	10 213	7 526	4 701
Romeo village (pt.)[39]	1 576	1 875	1 577
Manistee County[40]	23 019	[1]20 393	19 042
Arcadia township	641	592	610
Bear Lake township	1 658	1 444	1 101
Bear Lake village	388	376	323
Brown township	631	[1]689	507

See footnotes at end of table.

Population Count
for
Parker Surface Treatment Products
S. Koslowski 4-17-86

Mile 1	all of Morenci	2110	2216
	28 houses x 3.8 =	106	
Mile 2	124 x 3.8 =	471	2687
Mile 3	149 houses x 3.8 =	566	3253


BEAN CREEK
739.26
751.35
746.83-12"
746.73-10"
745.98
3-8" C.I. Pipes
18"
752.71
743.21
6"
Filler Pipe
Shed
Siphon Inlet Chamber
12"
Bldg.
12"
Ex. MH#107
10"@0.30%
Area
18"
TH#4
6"
8"@0.40%
Gar.
IMH #106
6"
Bldg.

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

Roy Schramack

July 7, 1982

TO: File, W.Q.D., OHWM, U.S. EPA Region V

FROM: Linda Koivuniemi, A.Q.D. Ann Arbor

SUBJECT: Log of Pictures taken during three RCRA Investigations at Hooker Chemicals and Plastics Corporation, Morenci, MI

Date pictures (Standard 50 mm lens) were taken by L. Koivuniemi:

(1) May 18, 1982: Took 22 pictures, but two were essentially the same-just different exposure, therefore, only 21 different pictures: #1 thru #21. Roy and I collected 3 surface samples, but I wanted to sample drums because, for example, the company insisted there were no solvents stored in area 2; I noted a green drum near the center labelled industrial solvents. Since, we did not have equipment to sample drums, I planned to make arrangements in Lansing the next day 05-19-82 to get help and/or equipment to sample these drums by 05-20-82 or 05-21-82.

When I checked in Lansing to find out how to get the drums sampled before the end of the week, I was informed by Lyle Rowell that he would make the necessary arrangements because he may be needed for a criminal investigation. I agreed with Lyle that a joint investigation would be fine, but I wanted to sample drums before the weekend.

Without informing me, Lyle decided to go to Hooker and take samples alone on 05-20-82, and called me on Friday, 05-21-82. I had to start all over trying to get sampling equipment and arrange drum sampling because Lyle did not sample drums which I felt to be important. Hooker complained to Lyle about the number of sampling investigations. Lyle informed the company I was likely coming again, but that I would call before, if I wanted any drums moved which required a forklift. I did not call before my investigation on 05-27-82; therefore, I could not request the company to move barrels and sample the green drum labelled industrial solvents in storage area 2, see picture #16, which would have documented solvents, likely ignitable, within 50 feet of property line.

(2) May 27, 1982: Only one picture taken on this date: #22.

(3) June 22, 1982: Took 16 pictures in area 6: #23-38: Four samples: results not back as of 07-07-82; Roy delivered samples to ESD lab on 06-23-82.

Key: Picture # : time : camera setting
A. location
B. comments

May 18, 1982

#1: 3:15 PM : F 5.6, 60
A. Westside of storage area 2 -next to fence between river and storage pad.
B. Roy Schrameck, W.Q.D. #1, collecting sample #1, greenish-dark; 19,000 mg/kg (ppb) or 19 ppm PCB-A1242 and 47,000 mg/kg (ppm) CR-TOT.

#2: 3:16 PM : F 1.7, 60
A. West side of storage area 2 - Picture taken while standing next to fence and looking east toward manufacturing building.
B. Green/black waste on storage pad.

#3: 3:20 PM : F 4, 60
A. West side of storage area 2 next to fence, barrels lying down in background are near the storage building.
B. Sample #2, collected by Roy Schrameck. High levels of PCB's: 2,500,000 ppb/kg (ppb) or 2.5% A1242; and 2,500mg/kg (ppm) CR-TOT.

#4: 3:24 PM : F 8, 60
A. S.W. side of storage area 2, note storage building in background, adjacent to river.
B. Picture #5 (below) is a close-up of the corroded drum in this picture.

#5: 3:25 PM : F 2.8, 60
A. S.W. side of storage area 2 on N. side of storage building next to river, storage building in background.
B. Note corroded condition of drum.

#6: 3:28 PM : F 5.6, 60
A. North side of storage building; south side of storage area 2 - approximately 20 ft. from the river.
B. Note hole in drum-contents were apparently allowed to leak out.

#7: 3:30 PM : F 8.0, 60
A. Again, north side of storage building, in area 2, wide angle of picture #6.
B. Note drum with hole near bottom (center bottom of this picture)-same drum as picture #6.

#8: 3:34 PM: F 11, 60
A. East side of storage area 2
B. Note black boards under storage drums in S.E. side of storage area 2

#9: 3:35 PM: F 11, 60
A. East side of storage area 2
East edge of stored drums is approximately 50 ft. from the river.
B. If the green barrel in the center held industrial solvents, as it was labeled, it would have been less than 50 ft. to the property line. But we could not get to it to sample and company insisted there were no ignitable liquids ($< 140^{o}F$) in this storage area 2 Later, May 27, we sampled and found ignitable liquids on the eastern edge, but this edge was about 50 ft. from property line (I paced it off). Note leaker in left bottom of photo.

#10: 3:40 PM : F 8, 125
A. New Area: storage area 3 note Mfg. building in background.
B. Note poor condition of drums.

#11: 3:42 PM : F 8, 125
A. Center of storage area 3.
B. Roy Schrameck collecting sample #3 from ground-no concrete pad.
GW 749 Lot 689-old raw material, dye-greenish blue.

#12: 3:45 PM : F 8, 125
A. Single drum with dark colored, oily ooze on outside in area 3.
B. Roy Schrameck later sampled this (picture #22 taken 05-27-82) drum.

#13: 3:50 PM : F 8, 125
A. Storage area 3 - note mfg. building in background.
B. Richard Fredricks on north side of storage area 3. Storage area 3 is where 70% ethylamine was stored open and evaporating.

#14: 3:53 PM : F 4, 60
A. N.W. Corner of property, next to river, note fence in background. Storage area 5.
B. This drum was an example of open drums in storage with various types and amounts of waste/junk.

#15: 3:55 PM : ?-did not document camera setting.
A. Storage area 5 -near river.
B. Note stained material on ground-no storage pad.

#16: 3:56 PM: F 8, 125
A. Back to original or main storage area 2 (Eastside), trees on river bank in background.
B. Note green barrel-was labeled industrial solvent.(refer to picture #9).

#17: 3:57 PM : F 8, 125
A. Small storage area 1.
B. Note Mfg. building in background.

#18: 3:58 PM: F 5.6, 60
A. Storage area 1 - near center.
B. Single corroded drum: company thought it could be X185 Bonderite make-up.

#19: 3:59 PM : F 16, 125
A. Tanks, loading rack on south side of Mfg. building.
B. Note barrel at base of loading rack which is used to allow waste acid to drain through to ground (therefore ground water).

#20: 4 PM : F 5.6, 125
A. N.E. side of storage area 6.
B. This drum labeled Leaker Bottom was empty, my field note book is in center-bottom of picture.

#21: 4:03 PM : F 5.6, 125
A. Storage area 6 -south side of storage building.
B. The company insisted there was absolutely no reason for me to be inspecting this area because only empty drums and nonhazardous baghouse dust was stored here. As one is able to observe, there was no easy route through these drums, since there was no aisle space for movement to the back, i.e. west side of this storage area. Later, Lyle Rowell of Environmental Enforcement Division

had an aerial photo taken showing wastes haphazardly lying around behind the wall of drums showing in this photo. Note pictures of this area 6 taken June 22, 1982, #23-38.

May 27, 1982

#22: 12:24 PM: Took with a flash, F 5.6, 125, the reason the flash was needed was because it had just gotten dark; it started to rain after this photo was taken.

A. Roy Schrameck collecting sample #4 from area 3. We did not get pictures of samples 1,2, or 3. All four samples were split with Hooker.
B. Company said this was likely oil and emulsifier. ESD lab tested and found pH 3, flash point approximately 190°F.

June 22, 1982: It had rained the night before these pictures were taken in area 6:

#23: 12:12 PM : F 5.6, 125

A. Sample #1 collected by Roy Schrameck in area 6, next to the river.
B. Sample #1 collected from surface of ground next to fence. Note dark-stained material forming a pathway to the river; also, hole in fence. Even though it had rained and the barrels and ground were still wet the storage pad and surface of ground were heavily stained with green-yellow, black liquid wastes.

#24: 12:16 PM : F 8, 125

A. Area 6 - west side, collection point for sample #1.
B. This is a wider angle of picture #23, supra. Please note the yellow-green, dark colored material leaching to river.

#25: 12:17 PM : F 8, 125

A. Sample #2-another surface ground sample collected a few feet south of sample #1 in area 6 along river.
B. Note liquid storage drum in foreground; company could not identify the contents. We could not collect a sample of this waste because it would have to be placed in a recovery drum. The fiberpac barrel's outer shell had disintegrated. Company promised to immediately place in recovery drum and sample to determine proper disposal and share the sample with the DNR.

#26: 12:18 PM : F 8, 250
A. Same as #25, supra: Close-up of where Roy collected sample #2, sample #2-visible on sample bottle.
B. Note dark- stained soil.

#27: 12:19 PM : F 5.6, 125
A. Approximately 4 ft. to east of sample collection point #2. Sample #3.
B. Note green-yellow oil-like slick on ground in foreground.

#28: 12:20 PM : F 5.6, 60
A. Sample #4 collected by Roy Schrameck in area 6.
B. Note Roy collecting sample #4, the concrete appeared to have been broken down by the multicolored ooze on the pad surface.

#29: 12:21 PM : F 5.6, 60
A. Same as #28 above-after Roy finished collecting sample #4.
B. Note stained material on surface of pad in background. Also, the fiberpac barrel in this picture was leaking onto surface of concrete pad.

#30: 12:23 PM : F 11, 250
All four samples collected from surface of pad, or ground next to the fence are shown.

#31: 12:25 PM: F 11, 250
A. General area where samples were collected in area 6.
B. Note Richard Fredricks and Roy Schrameck. As noted before, company promised to save samples of these two fiberpac drums for me.

#32: 12:27 PM: F 8, 125
A. General condition of storage area 6 behind wall of empty or stainless steel drums, see Picture #21. The wall of drums are on left side of this picture.
B. Aerosol cans and drums have apparently leaked all or most of their contents. Company reported to me that they did not have records documenting the quantity or quality of waste in this storage area. They did not report this area to either the U.S. EPA or MDNR (Roy or myself). Vegetation in background is southern property boundary.

#33: 12:28 PM : F 5.6, 125
A. S.W. corner of Hooker property. Note where fence comes together in upper right of picture.
B. Picture #37 is a close up of material spilling from drums shown here falling against fence, right side of picture.

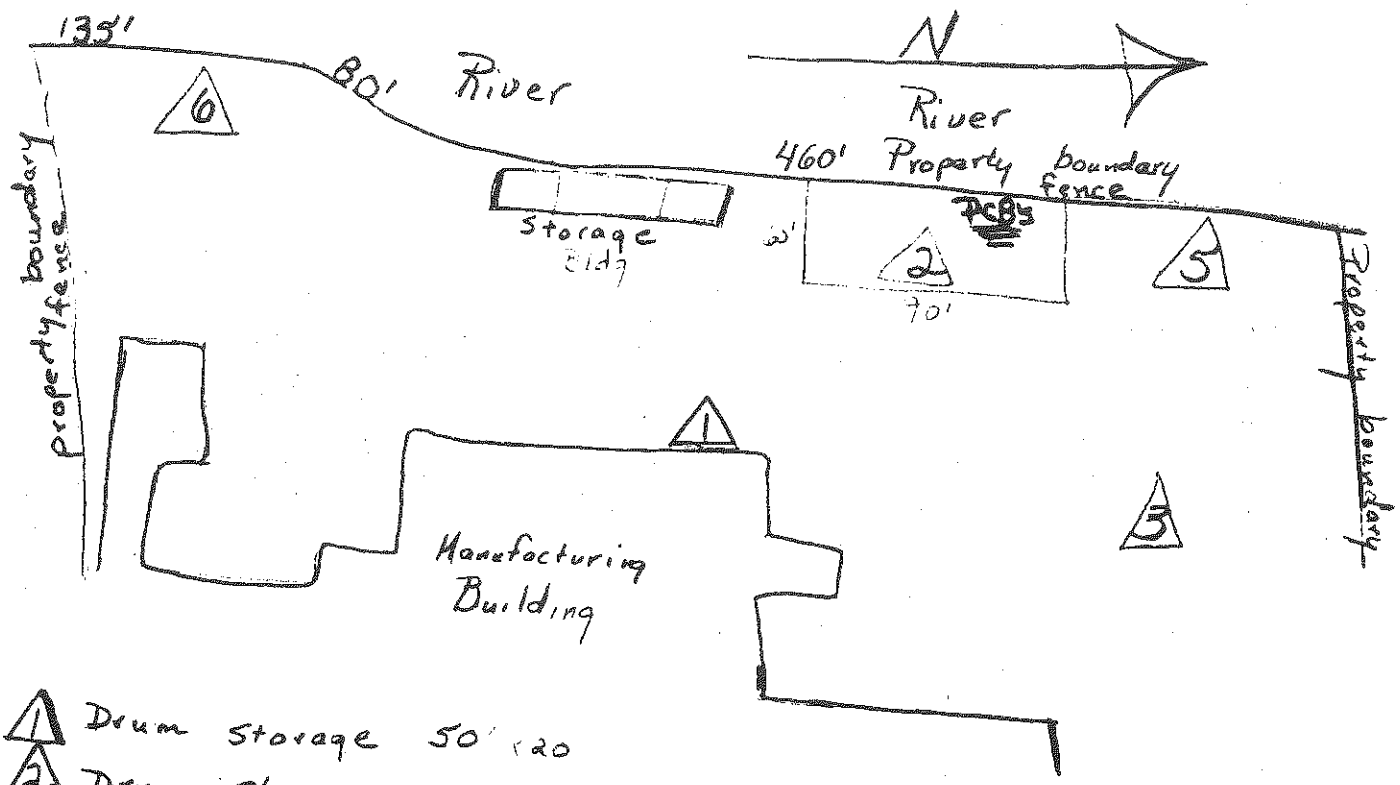
#34: 12:30 PM: F 8, 125
A. Barrel of lab samples-many open-in center of area 6.
B. Fredricks still insists these barrels and bottles became corroded over the winter; yet, he says this white powdered material is nonhazardous baghouse dust.

#35: 12:31 PM : F 11, 125
A. Area 6 - note southern property line fence in background.
B. Baghouse dust piles and yellow green-ooze on concrete pad surface. This was as bad in person as this picture shows.

#36: 12:33 PM: F 11, 125
A. Stainless steel drums in N.W. section of area 6.
B. Drum labeled "nitric acid" was hissing and bubbling (rain water on top of drum). R. Fredricks removed bung to allow pressure to be relieved.

#37: 12:34 PM: 1.7 1/2, 60
A. Next to river, west side of area 6.
B. This is a close up of drums on and near fence-leaning against wood pallet (see picture #33 for wider angle).

#38: 12:36 PM : F 4, 250
A. S.W. section of area 6.
B. Looks like lab chemicals-obviously not carefully controlled-not part of RCRA required operating record.



1 Drum Storage 50' x 20
2 Drum Storage 60' x 90
3 Drum Storage 30 x 20
4 Drum Storage 8' x 24' - not shown on this diagram
5 Drum Storage } added by L. Koivuniemi
6 Drum Storage }

Hooker did not report storage areas 5 or 6 on their Part A - application of 10-8-80.

above diagram copied from Hooker's Part A - not to scale

DEPARTMENT OF NATURAL RESOURCES
AIR QUALITY DIVISION

ACTIVITY REPORT

AQ-42

- [ ] COMPLAINT RECEIVED
- [ ] PERMIT ACTION
- [ ] ANNUAL COMPLIANCE INVESTIGATION COMPLETED
- [ ] INSPECTION
- [ ] NSPS
- [ ] REVISED STATUS

		DATE MM/DD/YY 05-18-82	
ESTABLISHMENT Hooker Chemicals and Plastics Corporation	NO. B-2422	QUARTER MAY	NO. 02
NUMBER AND STREET	CITY	STAFF L. Koivuniemi	NO. 97
CONTACT	TITLE	COUNTY Lenawee	NO. 46
PRIMARY ACTIVITY Page 2		DISTRICT Ann Arbor	NO. 08

REMARKS:

if storing longer than one year.

Mr. Fredrick informed us that the only reason the drums were still on site was because they had problems getting approval from Cecos; therefore, the company switched to Chemical Waste Management in Alabama and was working on a contract and getting a truck in to ship the waste. The shipping date had not been set yet.

Accepting Unmanifested Hazardous Waste:

When asked why the drums were in such bad shape, i.e. leaking and corroded, Mr. Fredrick said many of the drums had arrived that way as returned product or off spec material from companies which Hooker had originally supplied, as well as, it was a bad winter. Most of these companies returning this waste pay Hooker a disposal cost of $120 per drum, occasionally a company may get a credit toward their next purchase from Hooker.

When I asked to see the manifests for these off-spec or returned products, the company informed me that the waste was not manifested because Hooker made the decision after the returned drum contents were inspected by Hooker to determine if Hooker could use or recycle the waste. I informed Mr. Fredrick and Richard Speed that the material "being beneficially used or reused or legitimately recycled or reclaimed" 40CFR 261.6, need not be manifested. But at the point Hooker has decided it can not reclaim this material and therefore the waste is to be disposed of, it is a waste, and also, Hooker has accepted an unmanifested hazardous waste if it is hazardous (40 CFR Part 261, Identification of Hazardous Waste).

Roy Schrameck informed Mr. Fredrick and Richard Speed that it appeared Hooker may be required to conduct a MDNR approved hydrogeological survey to determine if Hooker's practices of waste disposal had created ground water contamination. The company did not react negatively to Roy's suggestion for a hydro-survey.

PROJECT	
01	MAJOR SOURCE
02	MINOR SOURCE
03	RESIDENCE
04	MEETING – CONFERENCE
05	TRAINING
07	
08	
09	
10	
00	OTHER (explain)

	SURVEY ACTION	TYPE	NO.
01	EMISSION POINTS INVESTIGATED		
02	VISIBLE EMISSION EVALUATION		
03	SOURCE TEST (STAFF)		
04	SOURCE TEST (COMPANY)		
05	GRAB SAMPLE		
06	PICTURES TAKEN		
09			
10			
11			
12			
13			
14			
15			
16			
18			
19			
00	OTHER (explain)		

COMPLIANCE STATUS	
A.	IN COMPLIANCE
B.	UNKNOWN COMPLIANCE
C.	OUT OF COMPLIANCE NOT ON A SCHEDULE
D.	ON A SCHEDULE MEETING INCREMENTS
E.	ON A SCHEDULE, NOT MEETING INCREMENTS
F.	ON A SCHEDULE, NOT KNOWN IF MEETING INCREMENTS

R5642
3/77

DEPARTMENT OF NATURAL RESOURCES
AIR QUALITY DIVISION

ACTIVITY REPORT

AQ-42

- [ ] COMPLAINT RECEIVED
- [ ] PERMIT ACTION
- [ ] ANNUAL COMPLIANCE INVESTIGATION COMPLETED
- [ ] NESHAP
- [ ] NSPS
- [ ] REVISED STATUS

ESTABLISHMENT: Hooker Chemicals and Plastics Corporation	NO.: B-2422	DATE MM/DD/YY: 05-18-82	
NUMBER AND STREET	CITY	QUARTER: MAY	NO.: 02
CONTACT	TITLE	STAFF: L. Koivuniemi	NO.: 97
PRIMARY ACTIVITY		COUNTY: Lenawee	NO.: 46
Page 3 of 3		DISTRICT: Ann Arbor	NO.: 08

REMARKS:

Request for Pictures and Samples:

Roy and I asked the company officials if they had any objections to our taking pictures and samples. Richard Speed asked John D. Cashner, Plant Manager, for permission. Mr. Cashner came in to Mr. Speed's office where we were waiting and said it was all right.

I took twenty-two pictures and Roy took three samples from the ground, (description attached). We saw six different drum storage areas. Apparantly, pictures were lost in processing since they were not returned to me from Kodak.

Mr. Fredrick insisted that the company was not presently storing ignitible or reactive waste as reported in their Part A application to the U.S. EPA. I observed in storage area 2 at least one drum labeled Industrial Solvents; therefore, I am not convinced that Mr. Fredrick was accurate in this statement. Therefore, since Roy and I did not have the proper equipment to sample drums, I will be returning to Hooker with the proper sampling equipment to verify what is in some of the drums, and compare these samples to what Hooker has in their operating record (as required by 40 CFR 265.73).

Roy and I also looked at an area of 4,000 gallon storage tanks in the basement of the west manufacturing building, used to store corrosive products going out (e.g. nickel nitrate). These tanks may be used to store hazardous waste if needed in the future.

Hooker's Prdt labeling system:

yr.	area	Batch #
9	1	2373

The 9 refers to 1979.

91273-cold cleaner lying on its side next to fence area 2

Size of storage area 2 (estimated): 29 drums X 3 drums X 15 drums equals approximately 1,300 drums.

Mr. Fredrick said he "had 935 drums stored in back and 150 across the street". Also, in the future the company hoped to have only 80 drums in storage at a time.

PROJECT	
01 MAJOR SOURCE	
02 MINOR SOURCE	
03 RESIDENCE	
04 MEETING – CONFERENCE	
05 TRAINING	
07	
08	
09	
10	
00 OTHER (explain)	

SURVEY ACTION	TYPE	NO.
01 EMISSION POINTS INVESTIGATED		
02 VISIBLE EMISSION EVALUATION		
03 SOURCE TEST (STAFF)		
04 SOURCE TEST (COMPANY)		
05 GRAB SAMPLE		
06 PICTURES TAKEN		
09		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
00 OTHER (explain)		

COMPLIANCE STATUS	
A. IN COMPLIANCE	
B. UNKNOWN COMPLIANCE	
C. OUT OF COMPLIANCE NOT ON A SCHEDULE	
D. ON A SCHEDULE MEETING INCREMENTS	
E. ON A SCHEDULE, NOT MEETING INCREMENTS	
F. ON A SCHEDULE, NOT KNOWN IF MEETING INCREMENTS	

R5642
3 77

AIR QUALITY DIVISION

ACTIVITY REPORT

AQ-42

- [ ] PERMIT ACTION
- [ ] ANNUAL COMPLIANCE INVESTIGATION COMPLETED
- [ ] NSPS
- [ ] REVISED STATUS

ESTABLISHMENT (Formerly Parker Chemical)		DATE MM/DD/YY 05-14-82	
Hooker Chemicals and Plastics Corporation	B-2422	QUARTER MAY	NO. 02
NUMBER AND STREET 322 W. Main Street	CITY Morenci	STAFF L. Koivuniemi	NO. 97
CONTACT Richard Fredrick	TITLE Prod. Sup't.	COUNTY Lenawee	NO. 46
PRIMARY ACTIVITY Chemical Production-Mixing		DISTRICT Ann Arbor	NO. 08

REMARKS:

As an authorized representative of the U.S. EPA, on May 14, 1982, I conducted a site investigation to evaluate Hooker Chemicals and Plastics Corporation in Morenci for compliance of Subtitle C of the Resource Conservation Recovery Act (RCRA).

During the investigation, I completed the form: RCRA Inspection Report. The company has applied for storage only on their Part A application, no treatment or disposal.

During this inspection, I observed one hazardous waste drum storage area on the bank of a river on a concrete pad on the north side of a storage building. I observed the following problems with this drum storage (labeled in the Part A application):

(1) Leaking, corroded metal drums (approximately 1,000 drums in storage).
(2) Uncovered drums.
(3) One drum with an apparent forklift hole near the bottom drum was empty - except a few inches of liquid below the hole.
(4) On the surface of the concrete in between the rows of drums, ooze and colored waste material had collected. It looked as if these drums had been stored and waste had been leaking for a considerable period of time.
(5) Drums were collapsed and falling into the fence on the bank of the river.
(6) One partially burried drum between the fence and the river at the north end of the storage building.
(7) While walking on the east side of this drum storage area, I observed a strong, irritating odor. I asked Richard Fredrick what the odor was; he said he could not smell anything. I then asked and received permission to inspect the roof to determine if this odor was emanating from a process stack. While on the roof, I could not detect the odor. I asked Mr. Fredrick to follow up on this and determine where it was coming from, and also said I would be back to investigate further.

PROJECT	
01	MAJOR SOURCE
02	MINOR SOURCE
03	RESIDENCE
04	MEETING - CONFERENCE
05	TRAINING
07	
08	
09	
10	
00	OTHER (explain)

	SURVEY ACTION	TYPE	NO.
01	EMISSION POINTS INVESTIGATED		
02	VISIBLE EMISSION EVALUATION		
03	SOURCE TEST (STAFF)		
04	SOURCE TEST (COMPANY)		
05	GRAB SAMPLE		
06	PICTURES TAKEN		
09			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
00	OTHER (explain)		

COMPLIANCE STATUS	
A.	IN COMPLIANCE
B.	UNKNOWN COMPLIANCE
C.	OUT OF COMPLIANCE NOT ON A SCHEDULE
D.	ON A SCHEDULE MEETING INCREMENTS
E.	ON A SCHEDULE, NOT MEETING INCREMENTS
F.	ON A SCHEDULE, NOT KNOWN IF MEETING INCREMENTS

R5642
3 77

STATE OF MICHIGAN

NATURAL RESOURCES COMMISSION
JACOB A. HOEFER
ARL T. JOHNSON
E.M. LAITALA
HILARY F. SNELL
HARRY H. WHITELEY
JOAN L. WOLFE
CHARLES G. YOUNGLOVE

WILLIAM G. MILLIKEN, Governor

STEVENS T. MASON BUILDING
BOX 30028
LANSING, MI 48909

DEPARTMENT OF NATURAL RESOURCES

HOWARD A. TANNER, Director
Water Quality Division
9311 Groh Road
Grosse Ile, Michigan 48138

December 6, 1982

Mr. John Kashner
Parker Surface Treatment Products
Occidental Chemical Corporation
322 W. Main Street
Morenci, Michigan 49256

Dear Mr. Kashner:

In discussion by telephone on December 3, 1982, with your consultants for the Preliminary Hydrogeological Assessment Plan, I agreed to modify my November 29, 1982 letter as follows:

1) Chromium referred to in 1) and 2) of my November 29 letter should be total chromium.

2) The fourth well referred to in 3) of the November 29 letter shall not be a requirement of the Plan but the need for an additional well (5) will be based on data resulting during and/or from the drilling of the three wells indicated in your Plan.

3) Paragraph 5) in the November 29, 1982 letter was an advisory of possible future study phases associated with the phase I (preliminary) investigation and should not be considered to be a prior requirement of phase I.

Yours truly,

WATER QUALITY DIVISION

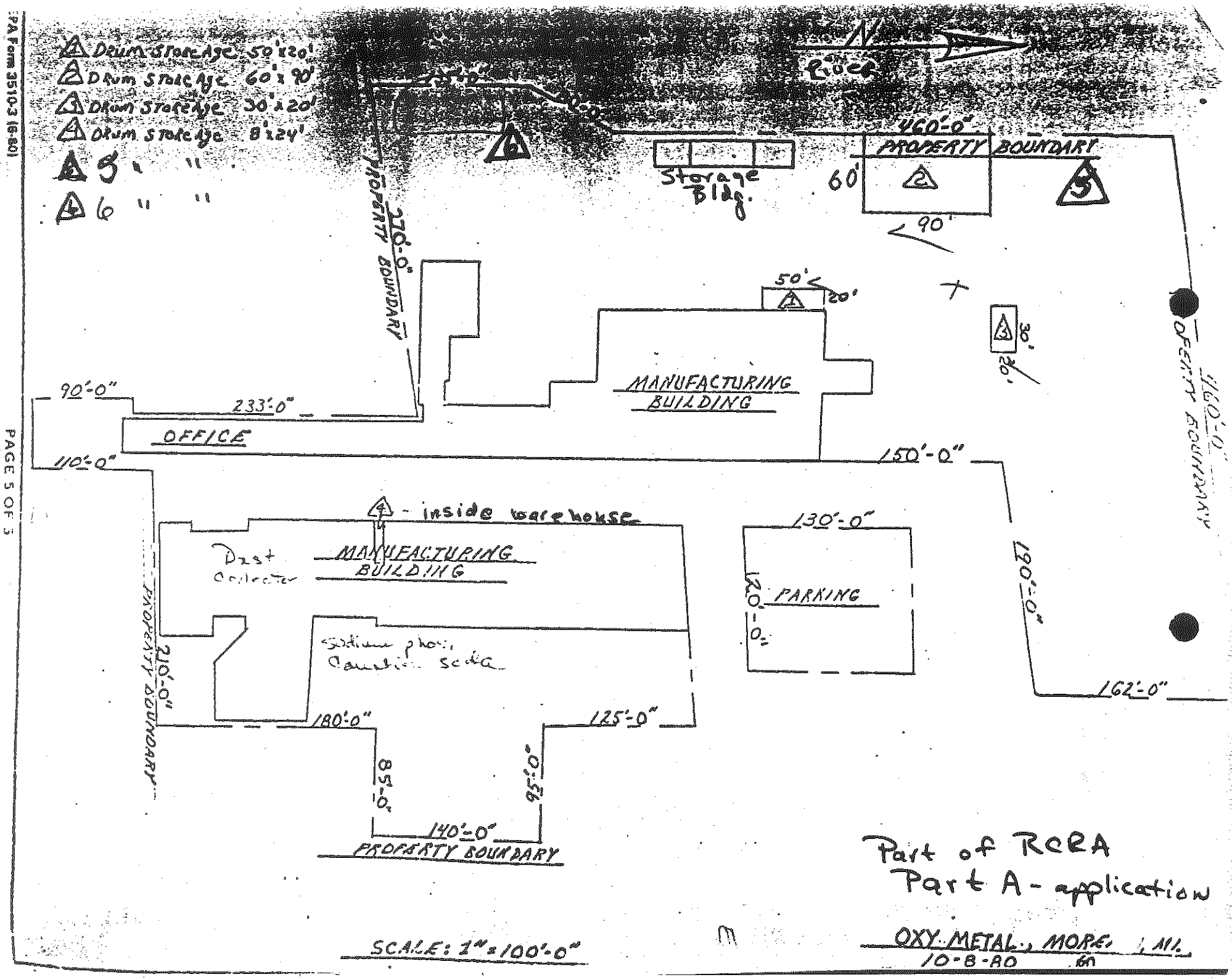
Roy E. Schrameck

Roy E. Schrameck, P.E.
District Engineer

RES/sc

cc: Bill Iversen
WQD files

MICHIGAN
THE GREAT LAKE STATE



Part of RCRA
Part A - application

EPA Form 3510-3 (6-80)
PAGE 5 OF 5

[redacted]

[redacted] 8, 1982

Project No. 82-1853

[redacted]
[redacted]
[redacted] Street
[redacted], MI 49256

Letter Report
Preliminary Hydrogeologic Assessment
Parker Surface Treatment Products
Occidental Chemical Corporation
Morenci, Michican

Dear Mr. Kashner:

Recently, Parker Surface Treatment Products (Parker) has been requested by Michigan Department of Natural Resources (MDNR) to conduct a hydrogeologic investigation at its Morenci Plant (Figure 1). This has resulted from a concern by the MDNR for the protection of the ground water quality in the vicinity of the plant. D'Appolonia Consulting Engineers, Inc. (D'Appolonia) has conducted a preliminary hydrogeologic assessment of the site and this letter reports our findings.

Parker has an on-going program to upgrade the plant facilities and operations, and many items completed and planned will serve to mitigate or prevent leaks, spills, or other discharges which may reach the ground water. This plan is actually a long range program, which will continue over the next several years. Items which have already been initiated include:

- Pavement of the West Yard.
  - The "backyard" of the facility has been paved and the tank farm area diked.
- Development of a Waste Segregation Procedure.
  - A procedure has been developed and fully implemented to identify waste as hazardous or non-hazardous, and provide for laboratory sample identification and segregation of materials.

10 DUFF ROAD, PITTSBURGH, PA 15235 TELEPHONE: 412/243-3200 TELEX: 81-2378

ALBUQUERQUE, NM BECKLEY, WV CHESTERTON, IN DENVER, CO HOUSTON, TX IRVINE, CA
MILWAUKEE, WI NEW ORLEANS, LA WILMINGTON, NC BRUSSELS, BELGIUM GENOA, ITALY

pan) appears to be the layer which confines the gravel aquifer. Figure 3 is a generalized cross section which depicts the relationships of the various stratigraphic units, based upon the well logs and regional reports.

Ground water movement in both the alluvium and the outwash is anticipated to be generally toward, and controlled by, Bean Creek, with a flow vector exhibiting a downstream component. This hypothesis is supported by observed seepage through the floor in the well house at the plant which occurs with the rise of the river stage. The fact that the confined gravel aquifer exhibits a high artesian head indicates that the clay till acts as an effective confining layer, severely restricting ground water communication between the near-surface water-bearing zones and the gravel. This, and the upward vertical flow gradient between the gravel and the alluvium, suggests that there is little likelihood of any potential surface contamination affecting the gravel aquifer. Therefore, any ground water contamination investigations should be limited to the near surface deposits.

The combination of on-going efforts to upgrade the plant to minimize impacts on ground water quality and the preliminary hydrogeologic assessment, indicates there is little likelihood that plant activities (past or future) will adversely impact the regional aquifer. We believe that any additional hydrogeologic investigations should focus on the near-surface regime and the possible related plant impacts.

D'Appolonia recommends three wells be installed to document the ground water conditions at the Parker Plant (Figure 4). Two will be located near Bean Creek where access gates in the fence will allow permanent installation without interfering with plant operations. The third will be located in the parking lot to the east of Mill Street. This configuration will provide sufficient data to determine the direction of flow and the ground water gradient. Since flow is expected to be toward the river, W-1 will act as an upgradient well and the two remaining wells will lie, in part, downgradient of the plant. This configuration will also provide the opportunity to collect ground water samples from both up-gradient and down-gradient locations for water quality analyses.

The wells will be screened throughout the near-surface, water-bearing zone (alluvium or outwash) and will be installed in borings terminated in the underlying till layer (approximately 50 feet). The drilling and construction of each well will be supervised by an experienced hydrogeologist who will be responsible for obtaining the necessary state permits, preparation of a detailed log of the stratigraphy as each boring is drilled, and recording the as-built construction details of each well. Because the potential contaminants are inorganic in nature, these wells will be constructed of three inch inside diameter PVC well screen and riser pipe. The screen will be sand-packed with an

appropriately-sized clean sand and a bentonite plug emplaced above the sand. A cement surface plug and a protective steel casing with locking cap will be installed over the stand pipe to prevent vandalism. Development of each well will be by pumping several well volumes of water from the well with a three-inch nominal diameter submersible pump.

One set of water samples (taken in duplicate) will be collected by pumping after several well volumes have been removed. The pump will be thoroughly rinsed with clean water before use in each well. In addition, the water levels in each well will be read prior to sampling.

Field preparation and analysis of the samples will include:

- Determination of field temperature
- Determination of field pH
- Determination of field specific conductance
- Filtration of samples for metals analyses
- The addition of appropriate preservatives (e.g., nitric acid for metals samples)
- Storage and shipment under ice to maintain samples at approximately 4 degrees Celsius

Field Collection Records and a Chain-of-Custody Record will be completed and shipped with the samples to our Pittsburgh laboratory for analyses. Laboratory analyses will include:

- pH
- Specific conductance
- Total organic carbon
- Zinc
- Total solids
- Total dissolved solids

add: COD
Nickel
Chrome

These water quality parameters are intended to act as key indicators of any potential contamination which would be plant induced. Should anomalous values be encountered, then an expanded sampling and testing program may be required.

At the conclusion of the field and laboratory activities, all relevant information will be compiled and evaluated relative to the hydrogeologic

regime at the site and the potential for contamination of the ground water as a result of plant operations. A report will then be prepared which will detail the activities and findings of the investigations; presenting boring logs and well construction details as appendices. Conclusions and recommendations will be presented.

We look forward to working with you and Occidental on this project. If you have any questions, please contact us.

Very truly yours,

Robert W. Arko

Robert W. Arko
Project Geologist

David Andrews

David E. Andrews
Manager
Engineering Operations

RWA:DEA:jmm

Enclosures
cc: Mr. Mike Robinson

REFERENCES

Brehm, L., 1982, (Commercial Pump Service, formerly Dunbar Drilling), Personal Communication.

Knutilla, R. L., and W. B. Allen, 1975, Water Resources of the River Raisin Basin - Southeastern Michigan, Hydrologic Investigations Atlas HA-520, U.S. Geological Survey, Reston, Virginia.

Striker, M. M., and A. E. Taylor, 1961, Soil Survey of Lenawee County, Michigan, United States Department of Agriculture, Washington, D.C.

United States Geological Survey, 1977, Morenci Quadrangle, 7.5 minute topographic series, Reston, Virginia.

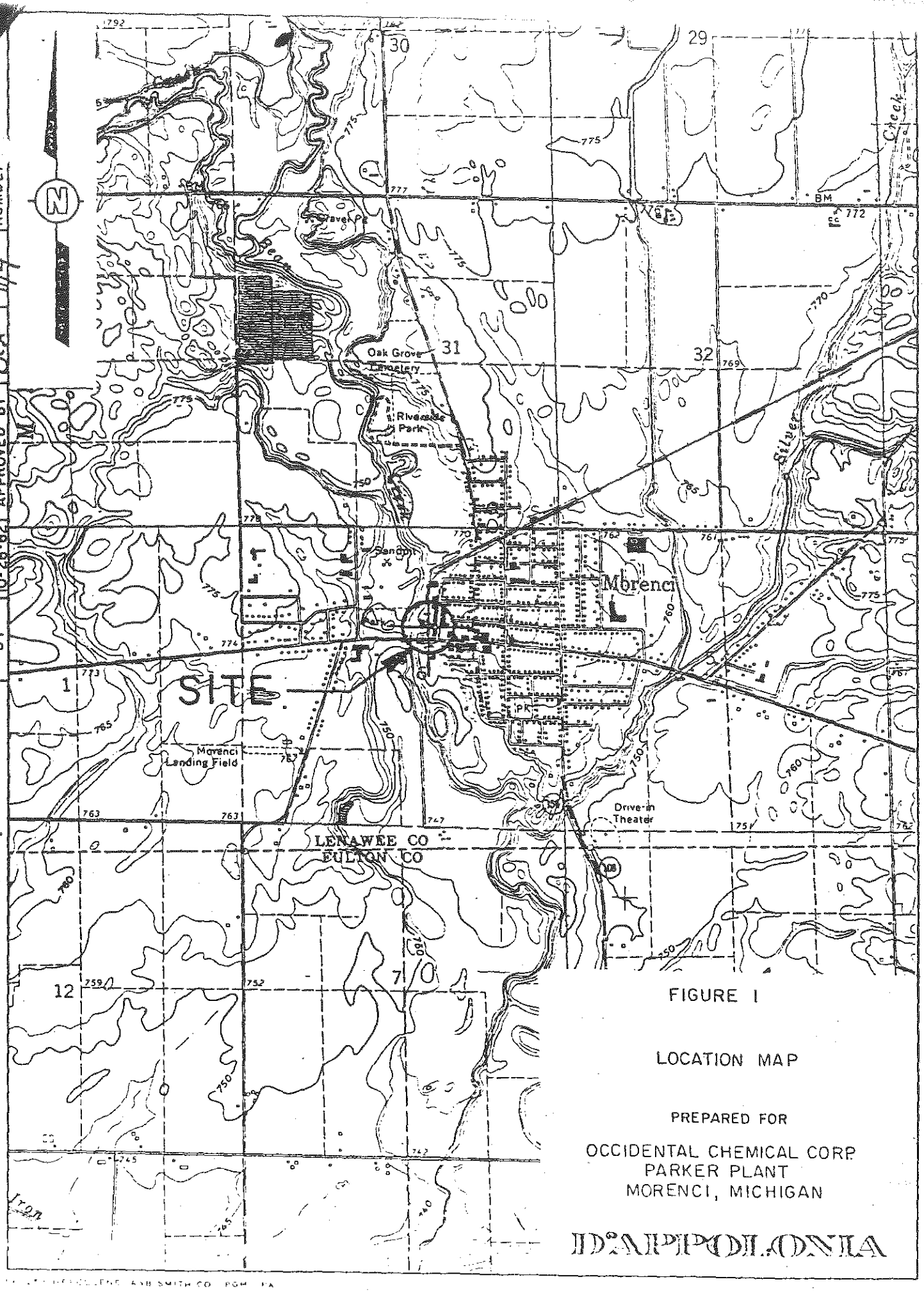


FIGURE I

LOCATION MAP

PREPARED FOR

OCCIDENTAL CHEMICAL CORP.
PARKER PLANT
MORENCI, MICHIGAN

IDAPPOLONIA

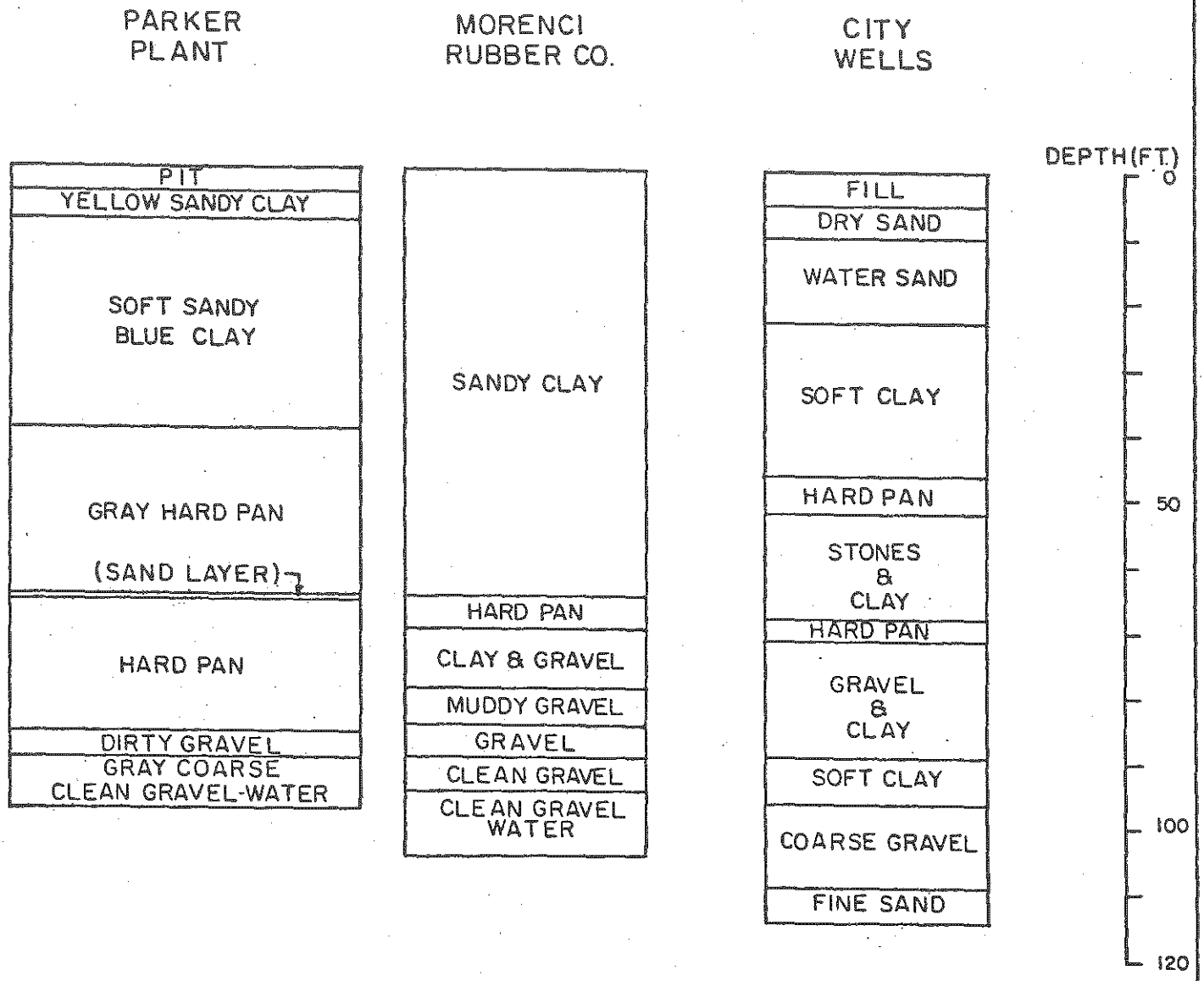


FIGURE 2

LOGS OF NEARBY WELLS

PREPARED FOR

OCCIDENTAL CHEMICAL CORP.
PARKER PLANT
MORENCI, MICHIGAN

REFERENCE:

RECORDS OF COMMERCIAL PUMP SERVICE, INC. (FORMERLY DUNBAR DRILLING).

D'APPOLONIA

DRAWN BY Trs 10-28-82 CHECKED BY APPROVED BY DRAWING NUMBER 2-1853-A

DRAWN BY	CHECKED BY		DRAWING NUMBER
Trg 10-28-82	APPROVED BY		~2-1853-A4

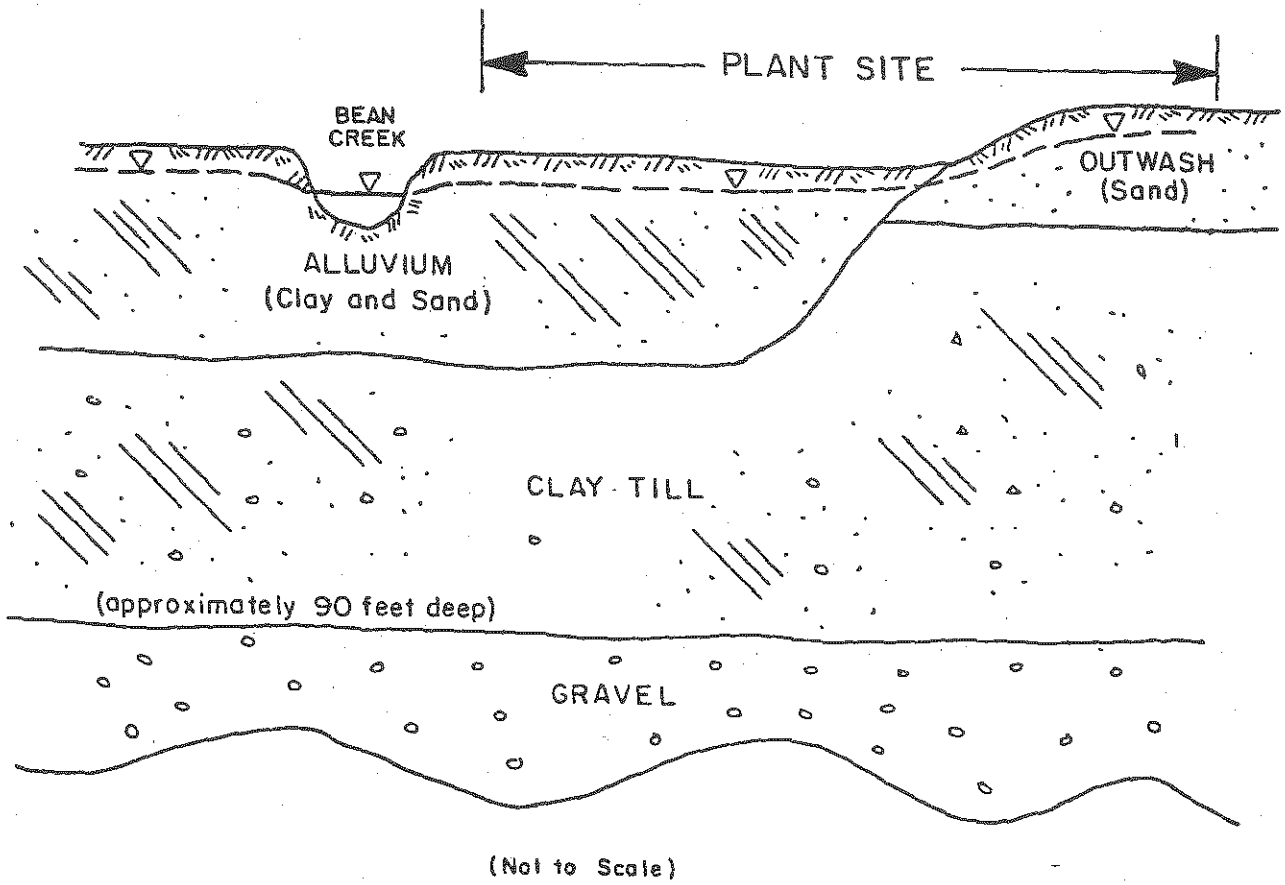


FIGURE 3

GENERALIZED CROSS SECTION
(LOOKING NORTH)

PREPARED FOR

OCCIDENTAL CHEMICAL CORP.
PARKER PLANT
MORENCI, MICHIGAN

D'APPOLONIA

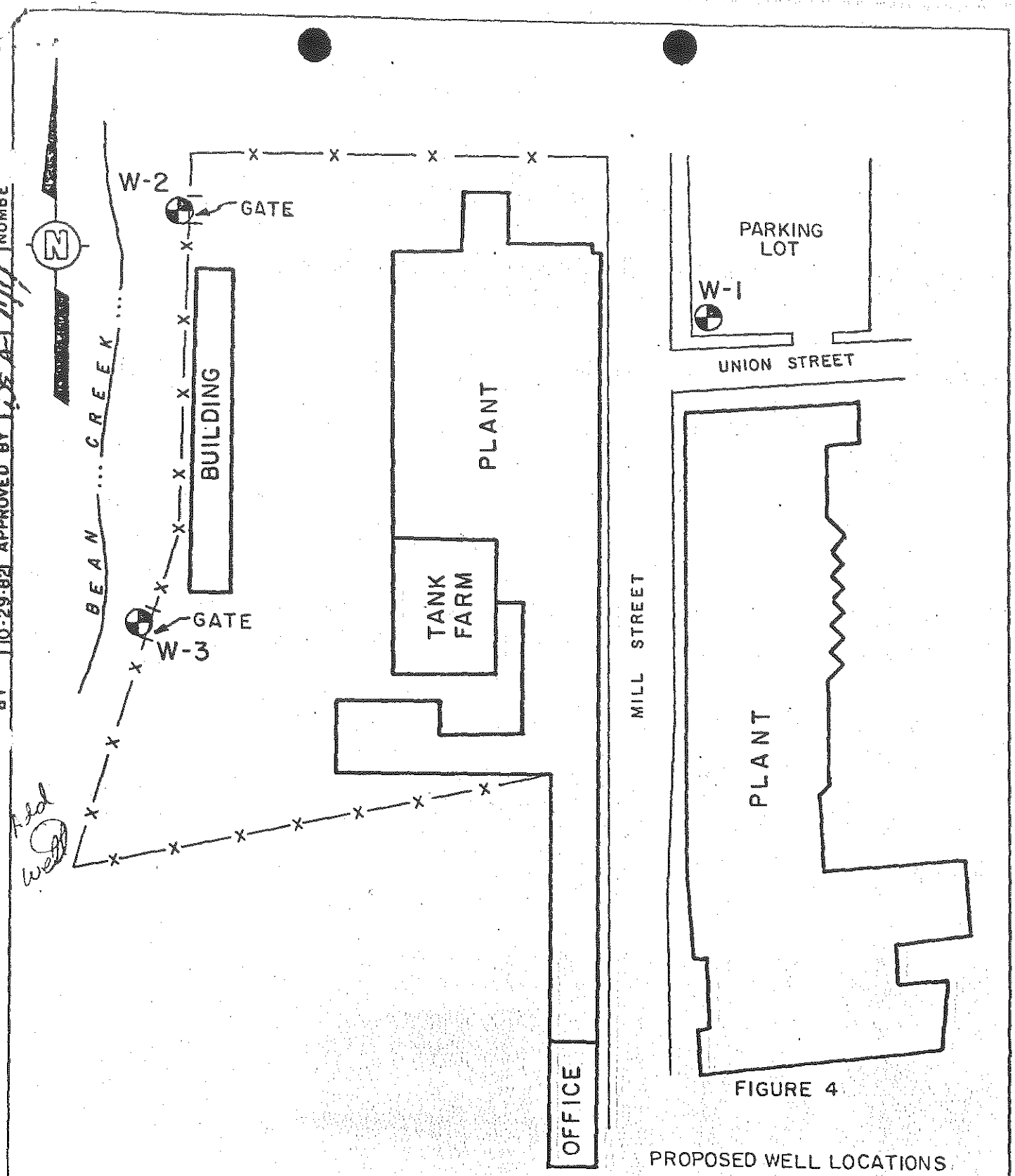


FIGURE 4

PROPOSED WELL LOCATIONS

REFERENCE:

SKETCH MAP PROVIDED BY THE PARKER COMPANY.

PREPARED FOR

OCCIDENTAL CHEMICAL CORP.
PARKER PLANT
MORENCI, MICHIGAN

D'APPOLONIA

DRAFT
Subject to Revision

Table Sediment organic analysis data for samples collected (July 27, 1982) from Bean Creek, in the vicinity of Parker Chemical Company (Morenci, Lenawee County). K = less than the level of detection indicated. Values as µg/kg dry weight.

Station Number	Station Location	(Purgeable Halogens) Scan 1	(Purgeable Aromatic Hydrocarbons) Scan 2	Polychlorinated Biphenyls Aroclor 1242	Aroclor 1254	Aroclor 1260
1	Upstream Control (1000' upstream of Main Street)	K1	K10	K200	K200	K200
5 ~~2~~	200' upstream of Main Street (downstream of Parker Chemical Co. discharge)	K1	K10	K200	K200	K200
6 ~~4~~	Main Street	K1	K10	K200	K200	K200

Subject to Division

file

Table

Water analysis data for samples collected July 27, 1982 in the vicinity of Parker Chemical Company (Morenci, Lenawee County). K = less than the level of detection indicated. *Parameters and concentrations of concern.

Div. of Occidental Petroleum

RAB

Station Number	Station Location	Organic Compounds: Purgeable Hydrocarbons (µg/l)	Organic Compounds: Purgeable Aromatic Hydrocarbons (µg/l)	Heavy Metals (µg/l): Cd	Cr	Cu	Ni	Pb	Zn	pH (SU)	Total Ammonia (mg/l)	Total Phosphorus (mg/l)	Total Oil (mg/l)
(1)	Upstream Control (100' upstream of Main Street)	K1	K10										
2 (2)	Upper Stormsewer (550' upstream of Main Street)			K20	K50	140	K50	K50	110				
2A (2)	Groundwater Seepage to Bean Creek (along left bank adj. to barrell. Storage-Parker Chemical)	K50	K10										
(4) 3	Outfall #107 (process waste being discharged that should have been entering sanitary sewer) (300' upstream of Main Street)			K20	220	220	350	K50	41000*	3.9	3.8	220*	
(5) 4	200' upstream of Main Street	K1	K10										
(6) 4	Main Street	K1	K10										

RECEIVED
OCT 29 1982
WATER QUALITY DIV.
DIST. I

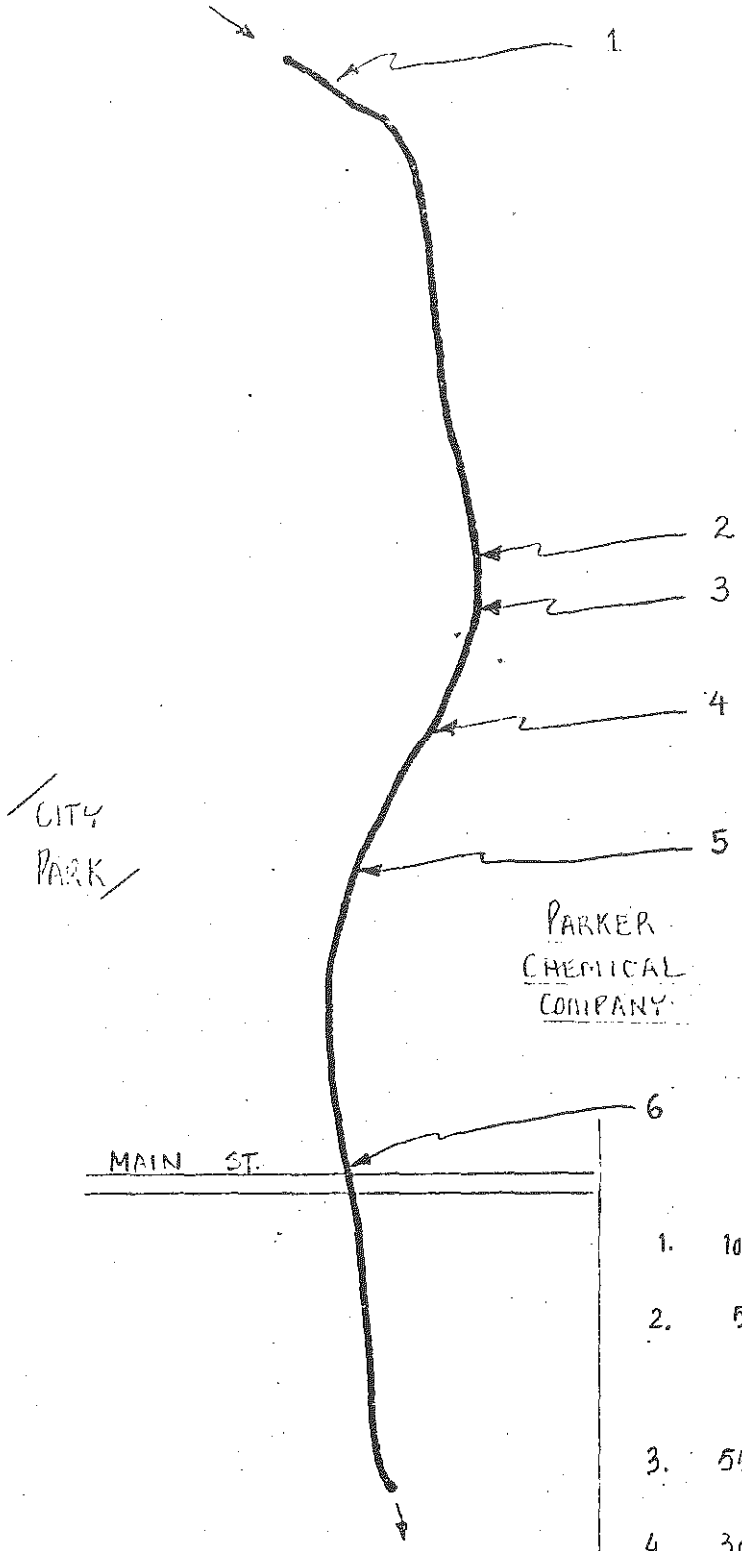
Subject to Revision

Table Sediment heavy metals analysis data for samples collected July 27, 1982 from Bean Creek in the vicinity of Parker Chemical Company (Morenci-Lenawee County). EPA, 1977 dredge spoils criteria values for "heavily polluted" spoils are included for comparison. Values as mg/kg dry weight unless otherwise indicated.

Station	Total % Solids	Cd	Cr	Cu	Ni	Pb	Zn
1 Upstream control (1000' upstream of Main Street)	63	K2	17	12	13	8	65
2 Upper storm sewer outfall sludges (550' upstream of Main Street)	72	K2	14	10	7	6	34
3 Downstream of Parker Chemical Co. outfall (300' upstream of Main Street)	72	K2	51	44	64	100	650
4 Main Street	74	K2	17	10	13	K5	160
Dredge Spoils Criteria, EPA, 1977		>6	>75	>50	>50	>60	>200

DRAFT
Subject to Revision

Oct 29, 1982



BEAN CREEK SURVEY SAMPLING STATIONS

1. 1000' upstream of Main Street - control
2. 575' upstream of Main Street - groundwater seep from left bank nr. Parker Chem Company.
3. 550' upstream of Main Street - Stormsewer
4. 300' upstream of Main Street - Process waste discharge from Parker Chemical (
5. 200' upstream of Main Street
6. Main Street

NATURAL RESOURCES COMMISSION
B A. HOEFER
T. JOHNSON
E.M. LAITALA
HILARY F. SNELL
HARRY H. WHITELEY
JOAN L. WOLFE
CHARLES G. YOUNGLOVE

STATE OF MICHIGAN

WILLIAM G. MILLIKEN, Governor

DEPARTMENT OF NATURAL RESOURCES

HOWARD A. TANNER, Director

Water Quality Division
9311 Groh Road
Grosse Ile, Michigan 48138

STEVENS T. MASON BUILDING
BOX 30028
LANSING, MI 48909

October 25, 1982

Mr. John Kashner
Manager-Manufacturing
Occidental Chemical Corporation
Parker Surface Treatment Products
322 Main Street
Morenci, Michigan 49256

Dear Mr. Kashner:

Enclosed are the copies of Act 245, P.A. 1929, as amended, and Parts 4, 5 and 22 of the General Rules of the Water Resources Commission that you requested during our July 9, 1982 meeting at your facility. The results of the study on Bean Creek conducted on July 27, 1982 are being compiled and a report should be transmitted to you in the near future.

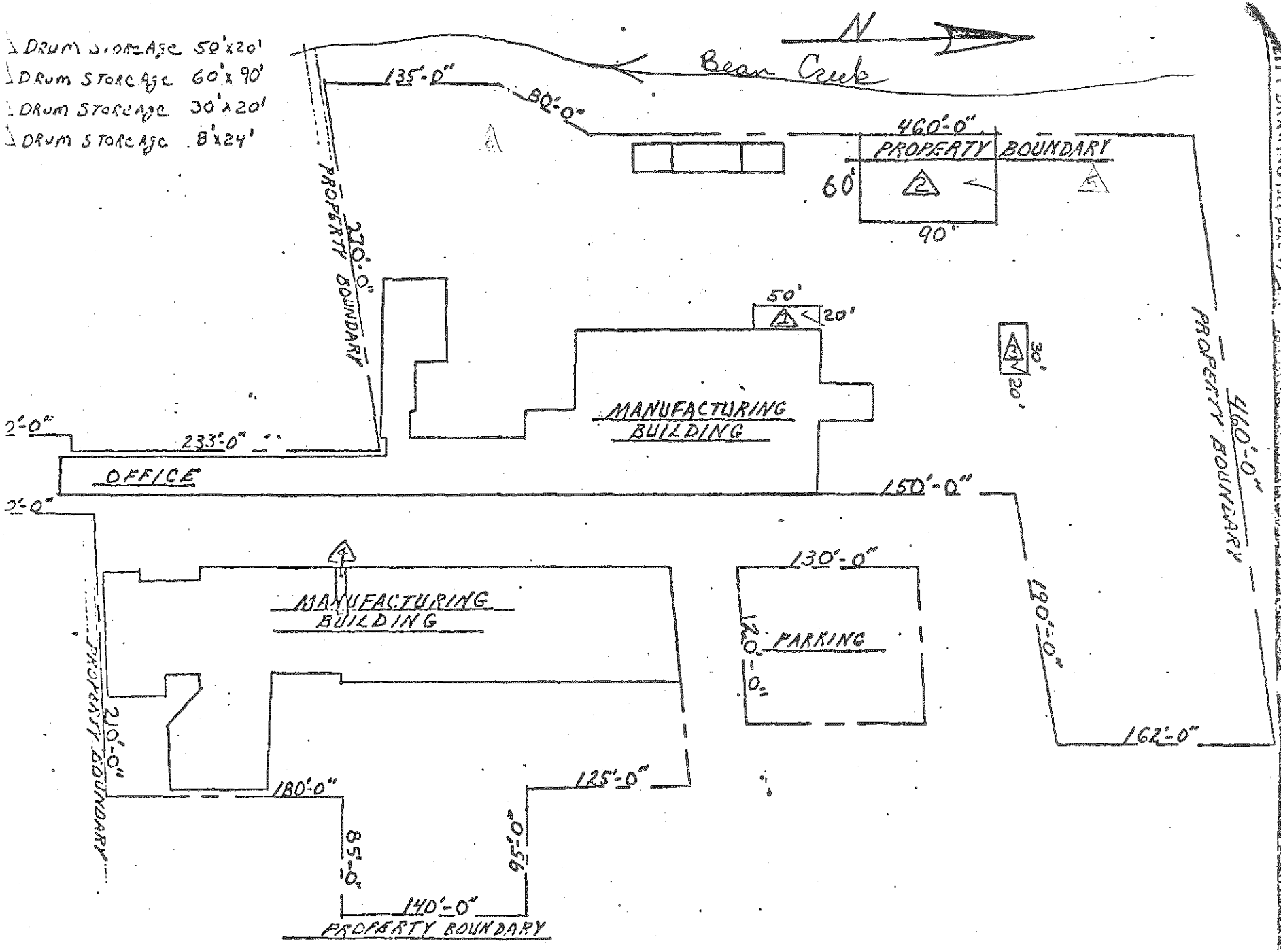
Although we agreed during our discussion on July 27, 1982 that we would delay our planned August 4, 1982 meeting until the Bean Creek study report was completed, I expected to hear from you some time ago regarding our request for your company to conduct a hydrogeological study at your facility. When we met on July 9, 1982, it was my impression that you and Mr. Schuttler would present your proposal for the study during the planned August 4, 1982 meeting. Although we delayed the meeting, I was under the impression from our July 27 discussion that you only wanted about a two to three week delay in presenting something in writing to us regarding the study. Since we have not received any correspondence regarding the study, we are hereby requesting that you correspond with this office by no later than November 5, 1982 outlining a proposed study plan and schedule for conducting the hydrogeological study.

You will recall that our meeting on July 27, 1982 was precipitated by our discovery of process waste discharging to Bean Creek from your facility during our creek study. At that time, I indicated that the company should pursue a program to eliminate the possibility of by-passes to the creek from the sewer system serving your plant and that as a minimum an alarm system indicating when a by-pass was occurring and a routine preventative maintenance program to preclude dry weather by-passes was essential. As I have not heard from you regarding this matter, I am hereby requesting that you correspond with this office by no later than November 5, 1982, outlining your progress in eliminating all or, as a minimum, all dry weather by-passes to Bean Creek.

MICHIGAN
THE GREAT LAKE

OCT 29, 1982
Sediment Sampling

(BEFORE HERE)



SCALE: 1" = 100'-0"

OXY METAL, MORENCI, MI.
10-8-80 JGD

CITY DRAWING (see page 4)

Form Approved OMB No. 159-S80001

180

Michigan Files

PC80-1-A24
Mich.

CHARACTERISTICS OF THE POPULATION

Number of Inhabitants

MICHIGAN

1980

Census of Population

U.S. Department of Commerce
BUREAU OF THE CENSUS

1980 Census of Population

CHARACTERISTICS OF THE POPULATION

VOLUME 1

CHAPTER A

Number of Inhabitants

PART 24

MICHIGAN

PLATE A24

Issued January 1982

U.S. Department of Commerce
Malcolm Baldrige, Secretary
Joseph R. Wright, Jr., Deputy Secretary
Robert G. Ingersoll, Assistant Secretary for Economic Affairs
BUREAU OF THE CENSUS
Bruce A. Chalmers, Director

Data Index

This index provides a summary listing of the tables in which the particular data are presented. For a listing of the individual tables and their page numbers, see page 1.

	Table
The State	
Earliest Census to 1980	1
Size of Place	7
Urban and Rural: 1930 to 1980	8
Counties	
Land Area and Population	2
Urban and Rural	3
County Subdivisions	4
Places	
All Places	5
Incorporated Places of 5,000 or More	6
Townships	
Townships	5a
Inside and Outside SMSA's	
Urban and Rural	9
Size of Place	10
SMSA's	
Component Parts	11
Type of Residence	12
SCSA's	
Component Parts	11a
Urbanized Areas	
Component Parts	13

MI. State Coordinator

DISCARD

Data on

PUBLIC WATER SUPPLIES IN MICHIGAN

Engineering Bulletin
No. 4.

MICHIGAN DEPARTMENT OF HEALTH
Lansing 4, Michigan

LOCATION	POPULATION	OWNERSHIP	SOURCE	TREATMENT: Sil. Filtration	Lime Softening	Zeolite Softening	Iron Removal	Chlorination	Fluoridation
LEELANAU COUNTY									
Empire	448	M	Wells in drift 54' deep						
Lake Street Pumping Station (7 wells)									
Northport	530	M	Wells in drift 56' to 90' deep						
Third Street (2 wells)									
Leelanau Township									
Northport Point (Owner: Northport Point Cottage Owners Association)	300	P	Grand Traverse Bay 800' of 6" Intake 35' deep					x	
Paradesia Point (Owner: Paradesia Point Water Users Association)	50	P	Grand Traverse Bay 500' of 3" intake 6' deep					x	
Sutton's Bay	421	M	Wells in drift 58' deep						
Lincoln and Jefferson Avenues (2 wells)									
LENAWEE COUNTY									
Addison	575	M	Wells in drift 108' deep				x		
Mason Street (2 wells)									
Adrian	20,347	M	Lake Adrian—30" Intake		x				x
Blissfield	2,653	M	River Raisin	x					
Britton	622	M	Well in drift 60' deep					x	
Village Park									
Cambridge Township									
Sand Lake (Owner: U.A.W.-C.I.O. Local 12)	300	P	Well in drift 85' deep						
Shady Rest Park—Wampler's Lake	300	P	Well in drift 90' deep						
Clinton	1,481	M	Wells in drift 34' and 42' deep						
River Street at Power Plant									
Raisin River at Ella M. Bartlett Rd. extended									
Deerfield	866	M	River Raisin	x					
Hudson	2,546	M	Wells in drift 80' deep						
Jackson and Market Streets (4 wells)									
Morenci	2,053	M	Wells in drift 109' and 114' deep				x		
W. Main St. and Tiffin River (2 wells)									
Onsted	526	M	Wells in drift 154' and 178' deep				x		
South Third Street (2 wells)									
Palmyra Township									
Man-Nor Farms Subdivision (Owner: American Home and Farm Corporation)	230	P	Wells in drift 135' deep						
U.S. 223 (3 wells)									
Man-Nor Drive (2 wells)									
Rollin and Woodstock Townships									
Echo Cove Resort (Owner: Mr. M. Ferguson)	60	P	Wells in drift 18' to 84' deep						
Woodland Avenue (2 wells)									
Finch Street									
Tecumseh	7,045	M	Wells in drift 76' to 146' deep						x
Union and Patterson Streets (2 wells)									
Union Street									
Patterson Street									
N. Union Street									
N. River Court									
LIVINGSTON COUNTY									
Brighton	2,282	M	Wells in drift 94' to 97' deep					x	
Pierce Street (3 wells)									
Brighton Township									
Brighton Country Club Annex Subdivision Ethel and Clara Jean Blvds. (2 wells)	450	T	Wells in drift 105' deep						
Fowlerville	1,674	M	Wells in rock 225' deep						
Ann and Power Streets (2 wells)									
Green Oak Township									
Boys Vocational School	100	S	Wells in drift 81' and 90' deep				x	x	
Saxony and Willmor Subdivision	1,000	T	Wells in drift 116' to 126' deep						
Stephens Dr. and Beth Ave. (2 wells)									
Stephens Dr. and Shirley Ct.									

STORAGE (1000 Gallons)			CHEMICAL ANALYSES—PPM											DATE
Treated Water at Plant	Ground Level on System	Elevated	Total Solids	Silica (SiO_2)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na+K)	Chloride (Cl)	Sulphate (SO_4)	Bicarbonate (HCO_3)	Total Hardness ($CaCO_3$)	Fluoride (F)	
	5	30												
			196	10	0	52	12	2.2	0	6	214	182	0.1	6-59
		100 stp												
			230	12	0.1	64	17	2.1	2	13	276	232	0	6-59
		30 stp	170	3	0	30	12	5.9	8	4.6	144	125	0	6-59
		1 pm												
	12	50												
			256	9	0	57	17	3.3	0	2.1	264	211	0	6-59
		130 stp												
			366	18	1.4	74	28	28.1	15	10	394	300	0.6	6-58
				Treated: 0										
1,500		1,500	160	6	0	20	15	12.3	15	57	0	113	1.0	9-58
552		100	246	6	0	40	6	11.8	23	75	34	124	0.2	9-58
		75												
			390	12	0.3	32	16	93.5	98	0	245	144	1.2	10-60
		100												
			534	10	0	116	27	28.7	28	85	368	400	0	10-56
50		75	408	6	0	88	22	19.9	32	60	265	300	0.1	9-58
			418	16	1.5	77	31	27	22	45	359	320	0.5	7-57
		100	390	15	0	66	29	37	28	27	355	285	0.7	5-58
			400	10.4	1.1	70	32	35.8	22	34.8	386	306	0.95	10-50
57.8														
			352	18	2.0	72	26	20.4	14	15	346	285	0.4	2-58
				Treated: 0										
		10 pm												
			618	18	0.4	26	13	184	226	1	229	118	1.0	7-59
			594	17	0.3	24	10	184	216	1	232	103	1.2	7-59
		300												
		160 stp	406	9	0.1	94	26	9.9	8	85	303	344	1.0	9-58
			530	8	1.8	118	28	12.7	12	126	345	410	1.0	9-58
			520	10	0.3	120	33	14.7	14	145	345	436	1.0	9-58
			400	13	2.0	76	32	21.7	15	25	370	320	1.0	9-58
			372	7	0	90	21	9.2	14	63	270	310	1.0	9-58
		100												
			340	14	1.9	79	19	16.2	21	15	320	275	0	12-57
		2.0 pm												
		100												
			510	6	0.4	75	23	77.5	109	21	342	284	0	10-55
		100	430	16	3.5	106	28	7	26	43	386	380	0	5-60
				Treated: 0										
		4.3 pm												

SION DIST	WSSN	WATER SUPPLY NAME	POP. SERVED	OWNER TYPE		COUNTY	SOURCE	WATER FROM	TO	F	D	S	O R	O R	A G	L T
05	04176	MAURICE SPEAR CAMPUS	60	C	1	LENAWEE	W					4				
02	04178	MAYFIELD TOWNSHIP	468	T	1	LAPEER	P	01600					5	6		
13	04180	MAYVILLE	872	P		TUSCOLA	W									
07	04197	MC DOWELL SUB ASSOC	50	P	1	CHIPPEWA	W									
13	04190	MCBAIN	520	P		MISSAUKEE	W									
08	04212	MEADOW WOOD MANOR SUBDIVISION	250	P	1	GRAND TRAVERS	W					4				
09	04216	MELODY APARTMENTS	75	P	1	EATON	W									
08	04215	MELROSE-CHANDLER WATER COMPANY	100	P	1	CHARLEVOIX	W					4				
11	04220	MELVINDALE	12,322	P	1	WAYNE	P	01800				2	5	6		
02	04230	MEMPHIS	1,171	M	1	ST. CLAIR	W					3				
12	04240	MENDON	951	V	1	ST. JOSEPH	W				4	4	2			
07	04250	MENOMINEE	10,099	M	1	MENOMINEE	G			2		2	1	2	1	1
04	04260	MERIDIAN TOWNSHIP	27,500	T	1	INGHAM	B	01995				1	5			
10	04280	MERRITT TOWNSHIP	440	T	1	BAY	P	00470				4	5	6		
13	04310	MESICK	376	P		WEXFORD	W									
02	04312	METAMORA	336	V	1	LAPEER	W					4				
12	04320	MICHIANA	960	V	1	BERRIEN	P	IN	YES			4	5	6		
09	04325	MICHIGAN DUNES CORR FACILITY	500	S	1	ALLEGAN	W				4	4	2			
04	04330	MICHIGAN REFORMATORY	1,800	S	1	IONIA	W				3	3	2			
04	04340	MICHIGAN STATE UNIVERSITY	50,000	S	1	INGHAM	W				1	1	1	3		
04	04350	MICHIGAN TRAINING UNIT	600	S	1	IONIA	W					4				
03	04356	MICKELSON SHORES	60	C	1	OAKLAND	W					4				
09	04360	MIDDLEVILLE	1,865	V	1	BARRY	W					3				
10	04370	MIDLAND	37,250	M	1	MIDLAND	G	05880	YES	1		1	1	3	3	1
10	04375	MIDLAND COUNTY WATER DIST NO 1	3,555	C	1	MIDLAND	P	04370				3	5	6		
11	04380	MILAN	4,182	P	1	WASHTENAW	W				2	2	1			
09	05907	MILDRED HOUTING LEISURE ACRES	64	V	1	KENT	W									
03	04390	MILFORD	5,040	V	1	OAKLAND	W				2	2	1	3		
13	04400	MILLINGTON	1,100	P		TUSCOLA	W									
02	04410	MINDEN CITY	250	V	1	SANILAC	W				4	4	2			
06	04415	MINERAL HILLS	257	V	1	IRON	B	05760				4				
06	04430	MOHAWK-FULTON	1,000	T	1	KEWEENAW	B	04800				2				
10	04440	MONITOR TOWNSHIP	6,055	T	1	BAY	P	00470				2	5	6		
11	04450	MONROE	23,531	M	1	MONROE	G		YES	1		1	1	3	2	1
11	04455	MONROE SOUTH COUNTY SYSTEM	5,000	C	1	MONROE	P	OH	YES		2	2	5	6		
11	04460	MONROE TOWNSHIP	1,500	T	1	MONROE	P	04450				3	5	6		
04	04470	MONTAGUE	2,396	M	1	MUSKEGON	W				3	3	2			
02	04480	MONTROSE	1,900	M	1	GENESEE	P	02615				3	5	6		
05	04490	MORENCI	2,110	M	1	LENAWEE	W				3	3	2			
05	04500	MORGAN WOODS - ORCHARD PARK	1,360	T	1	CALHOUN	W					3				
11	04505	MOUND MANOR APARTMENTS	48	P	1	MACOMB	W					4				
11	04510	MOUNT CLEMENS	18,806	M	1	MACOMB	G		YES	1		1	1	3	2	4
02	04520	MOUNT MORRIS	3,246	M	1	GENESEE	P	02615				3	5	6		

[redacted]

CHLORINATION

0 not practiced
1 gas chlorination
2 sodium or calcium hypochlorite
3 chlorine dioxide
4 combined chlorination
5 purchase chlorinated water
6 rechlorinate purchased water
9 combination

FLUORIDE

0 not practiced
1 sodium fluoride
2 sodium silicofluoride
3 hydrofluosilicic acid
4 naturally fluoridated
5 other
6 purchase fluoridated water
9 combination

COAGULATION

0 not practiced
1 dry alum
2 liquid alum
3 iron coagulant
4 polyelectrolyte
5 other
9 combination

FILTRATION

0 not practiced
1 gravity rapid sand filters
2 pressure sand filters
3 diatomaceous earth filters
4 other
9 combination

IRON CONTROL

0 not practiced
1 aeration-filtration
2 potassium permanganate-filtration
3 phosphate
4 other
9 combination

TASTE AND ODOR CONTROL

0 not practiced
1 powdered activated carbon
2 granular activated carbon
3 ozonation
4 chlorine dioxide
5 potassium permanganate
6 aeration
7 other
9 combination

STABILIZATION

0 not practiced
1 pH adjustment
2 phosphate
3 other
9 combination

SOFTENING

0 not practiced
1 lime
2 lime-soda ash
3 lime-caustic soda
4 zeolite
9 combination

OTHER TREATMENT

0 none
1 other treatment practiced

STAND-BY POWER CODE LIST

0 none
1 stationary generator
2 portable generator
3 right angle drive with stationary auxiliary engine
4 right angle drive with portable auxiliary engine
5 alternate electric power source
6 direct drive with stationary auxiliary engine
9 combination

OWNERSHIP CODE

A Authority
C County
D District
F Federal
M Municipal
P Private
S State
T Township
V Village

SOURCE CODE

B Purchased ground water
C Combined surface and ground water
G Great Lakes and connecting waters
L Inland lakes
P Purchased surface water
R River
S Spring
W Wells

ROGRAM NO. P22310
CHIGAN DEPT. OF PUBLIC HEALTH
TER SUPPLY SERVICES DIVISION

COMMUNITY PUBLIC WATER SUPPL
SUMMARY REPORT

GION DIST	WSSN	WATER SUPPLY NAME	POP. SERVED	OWNER TYPE		COUNTY	SO RC
08	07103	CRYSTAL RIVER WATER COMPANY	900	P	1	LEELANAU	E
08	02130	EMPIRE	340	M	1	LEELANAU	E
08	03017	HARBOR WEST MARINA VILLAGE	30	P	1	LEELANAU	E
08	04810	NORTHPORT	611	M	1	LEELANAU	E
08	06445	SUGARLOAF MOUNTAIN VILLAGE	450	P	1	LEELANAU	E
08	06500	SUTTONS BAY	504	M	1	LEELANAU	E
08	06592	THORN CREEK CONDOMINIUMS	50	P	1	LEELANAU	E
*** NUMBER OF SUPPLIES IN COUNTY 7							
05	00030	ADDISON	655	V	1	LENAWEE	E
05	00040	ADRIAN	21,186	M	1	LENAWEE	C
05	00750	BLISSFIELD	3,107	V	1	LENAWEE	R
05	00817	BOYSVILLE	250	P	1	LENAWEE	E
05	00890	BRITTON	693	V	1	LENAWEE	E
05	01458	CLEARWATER BEACH/DEVILS LAKE	100	P	1	LENAWEE	E
05	01470	CLINTON	2,342	M	1	LENAWEE	E
05	01770	DEERFIELD	957	V	1	LENAWEE	R
05	02040	ECHO COVE - DEVILS LAKE	60	P	1	LENAWEE	E
05	03280	HUDSON	2,545	M	1	LENAWEE	E
05	03692	LAKE ARROWHEAD ESTATES SUBD	96	P	1	LENAWEE	E
05	04005	MADISON TOWNSHIP	216	T	1	LENAWEE	E
05	05180	MANNOR FARM SUBDIVISION	200	C	1	LENAWEE	E
05	04176	MAURICE SPEAR CAMPUS	60	C	1	LENAWEE	E
05	04490	MORENCI	2,110	M	1	LENAWEE	E
05	04890	OAK SHADE PARK - WAMPLER LAKE	500	P	1	LENAWEE	E
05	05020	ONSTED	670	V	1	LENAWEE	E
05	06560	TECUMSEH	7,320	M	1	LENAWEE	E
*** NUMBER OF SUPPLIES IN COUNTY 18							
11	00860	BRIGHTON	4,268	M	1	LIVINGSTON	E
11	00870	BRIGHTON COUNTRY CLUB ANNEX	450	T	1	LIVINGSTON	E
11	01054	CAMP BRIGHTON	151	S	1	LIVINGSTON	E
11	01543	COLONIAL ACRES CENTENNIAL FARM	250	T	1	LIVINGSTON	E
11	02000	EAST SHORE APARTMENTS	65	P	1	LIVINGSTON	E
11	02400	FOWLERVILLE	2,289	V	1	LIVINGSTON	E
	02846	GREENFIELD POINT SUBDIVISION	200	T	1	LIVINGSTON	E
		HARVEST HILLS SUBDIVISION	20[illegible]	[illegible]	1	LIVINGSTON	E
		[illegible]	6,976	M	1	LIVINGSTON	E
		[illegible]	[illegible]	[illegible]	[illegible]	LIVINGSTON	[illegible]

RECEIVED
OCT 14 1982
WATER QUALITY DIV.
DIST. I

THE MORENCI

"Friendliest Gateway To Water Wonderland"

VOLUME 111 NUMBER 39 WEDNESDAY, SEPTEMBER 29, 1982 MORENCI, MI

Parker to contest some charges

EPA cites violations, fines Parker Division

The Parker Surface Treatment roducts Division in Morenci has een cited and fined by the U. S. nvironmental Protection Agency or alleged violations at the plant nvolving hazardous waste aterials.

Parker is a subsidiary of the Oc-idental Chemical Corporation, hich recently changed its name om Hooker Chemical.

The EPA notice of complaint lists 2 regulations the Morenci plant is urported to have violated. The PA has assessed a $25,000 civil enalty against Parker.

The violations were discovered uring five inspections of the plant onducted in May and June by the ichigan Department of Natural esources for the EPA.

The EPA report states at the time f the inspections conditions were ound that "could threaten human ealth or the environment."

Ins tors found hazardous waste on ers leaking contents onto e ground and stored open, subject to evaporation. "Evidence also existed of run-off into a river (Bean Creek) from the container storage area," the report stated.

The EPA further charged there was a lack of written records concerning the receipt and methods of treatment, storage or disposal and of the quantity and location of the hazardous wastes in the facility.

Parker is also charged with having more hazardous wastes on site than its permit allows and that ignitable wastes were stored in an open container unprotected from ignition sources.

Other charges concerned the general condition of the storage containers, the lack of warning signs, internal communications and alarm systems and inadequate aisle space.

Sy Kashner, manager of the manufacturing division, said Parker will contest some of the charges. Others, which resulted from "less than adequate housekeeping," have been cleaned up, he reported.

Kashner admitted there was some improper storage of waste and that some containers had leaked their locations. But he contended no harm was done to the environment and that the health of area residents wasn't threatened by this or other in-plant conditions.

Concerning run-off from the site into Bean Creek, Kashner said, "there was run-off from one drum, but whether it reached the creek would be a matter of speculation."

The DNR has taken sediment and water samples from Bean Creek both above and downstream from the plant in order to test for possible contamination. The results are not yet known, though.

Roy Schramacka of the Grosse Ile office of the DNR noted, Parker "has had everything cleaned up that we asked them to" and has cooperated with them.

According to Schramacka, the DNR wants Parker to conduct a ground water study to determine if there's been any ground water contamination. He said the company is considering the proposal.

Kashner and Schramacka both noted one "hotbed" of PCB, a toxic industrial lubricant, was discovered at the plant. The area was scraped

By The

Ho

The old

49221.

Parker and EPA disagree on definition of "waste"

(Continued From Page 1) Parker could not provide bills of sale or of lading (for shipping) for the materials as proof.

Kashner said the company doesn't have the bills of lading or sale because "much of the material had been brought back and consolidated. The bills of lading didn't exist because the materials had always been there."

But Swanson remarked, "they should have some record of what the stuff is."

Schramacka said some of the material was undergoing analysis to determine just that.

Kashner said as the material is approved for shipping and the necessary paperwork and permits are received, the material is being shipped out for disposal. He estimates it takes 100 man-hours to prepare paperwork prior to shipping 80 drums of wastes.

Much of the material has been shipped already, he added.

The materials awaiting shipment or classification are now being stored in a new storage building, Kashner reported. Parker was only 30 days shy of completing the structure when the site was inspected, he continued.

"We expected the EPA to slap us on the wrist, but they came down hard," he observed. The company expected leniency because it was attempting to remedy the situation when inspected, he explained.

He thinks the fine, which he said is the maximum allowed by the law, is excessive.

Swanson noted the fine is negotiable. The final amount will be determined after the EPA meets with Parker representatives, she explained. The groups have planned to meet in an informal hearing soon. Swanson said much can be accomplished in such meetings.

Parker has until October 7 to formally respond to the notice of complaint.

Swanson said the action and proposed fines were warranted by the nature of the violations, which she termed "fairly serious."

Schramacka also agreed the situation "needed attention." However he went on to say, "things are pretty well in hand there at this point."

Swanson remarked Parker will probably be subject to closer scrutiny until the EPA is convinced its conditions have been met.

The purpose of the law i
to provide uniform iden-
tification for livestock

SPECIA
Oct. 4 thr
Coal/Wo
Add-on
Stoker
Bishop Co
Sand Cre
436

AUTOPRO
PROFESSIONAL PARTS PEOPLE
OCTOBER
TIRE SALE
Dean 4 ply
A-78-13 $36
E-78-14 $39
Dick's
Auto Parts
OPEN 7 DAYS

Registration Notice

For General Primary Election

TUESDAY, NOV. 2

To the qualified electors of Medina Township, County of Lenawee, State of Michigan.

Notice is hereby given that I will be at my home Monday, Oct. 4, 1982, the last

MICHIGAN DEPT. OF NATURAL RESOURCES, ENVIRONMENTAL [illegible]

LAB LOGN 9577 PROJ CODE HG COST CENTER _____ PR II COLLECTED BY Schrameck TRANSFERED TO _____ RECEIVED AT LAB _____

LOCATION SAMPLED Parker-Morenci SAMPLE REMARKS may be high in PCB SEND RESULTS TO (NAME & SECTION)

FIELD ID.	DESCRIPTION OF SAMPLING SITE OR SAMPLE	REF NO.	STORET NUMBER	START DATE YYMMDD	TIME MIL TTTT	S,T OR B	NUM SAMPLES	END DATE YYMMDD	TIME MIL TTTT	DEPTH FEET	LAB NO.	TOTAL SOLIDS PERCNT
	"DO NOT PUNCH"	P									2 00003	70318
1	southwest of gate - near property fence	C01		820622	1212						16935	
2	10 ft. southwest of #1	C02		820622	1217						16937	
3	10 ft. " " #2	C03		820622	1219						16938	
4	below fallen over fibrepaks	C04		820622	1221						16939	
		C05										
		C06										
		C07										
		C08										
		C09										
		C10										

REF NO.	A-126 PCB UG/KG 39511	DDE P,P'- UG/KG 39321	DDD P,P'- UG/KG 39311	DDT O,P'- UG/KG 39306	DDT P,P'- UG/KG 39301	DILDRN UG/KG 39383	CHLRDN UG/KG 39351	HCB UG/KG 39701
01	K200							
02								
03								
04								
05								
06								
07								
08								
09								
10								

RECEIVED AUG 25 19 WATER QUALITY DIST.

ESD-013

L RESOURCES, ENVIRONMENTAL LABORATORY ANALYSIS -- INORGANIC - SEDIMENT & EP TOXICITY-DRY WT. BASIS

OST ENTER ------ PR II --- COLLECTED BY Schrameck TRANSFERED TO ---------- RECIEVED AT LAB BW EXAMINER Nordlund

ence SAMPLE REMARKS ---------- SEND RESULTS TO (NAME & SECTION) Roy Schrameck Water Quality - Dist I

SAMPLING	REF NO.	STORET NUMBER	START DATE YYMMDD	TIME MIL HHMM	S,T OR B	NUM SAM-PLES	END DATE YYMMDD	TIME MIL HHMM	DEP-TH FEET	LAB NO. 1 P00008	TOTAL SOLIDS PERCNT 70318	CD-SED DRY-WT MG/KG 01028	CR-TOT DRYSED MG/KG 01029	CU-SED DRY-WT MG/KG 01043	NI-SED DRY-WT MG/KG 01068
c - fence	C01		820622	1212						16935	cs.	5	640	1100	31
of #1	C02		820622	1217						16937		7	1000	2300	250
" #2	C03		820622	1219						16938		6	14,000	2100	61
fibrepaks	C04		820622	1221						16939		3	36,000	400	280
	C05														
	C06														
	C07														
	C08														
	C09														
	C10														

MN-SED DRY-WT MG/KG 01053	HG-SED DRY-WT MG/KG 71921	AS-SED DRY-WT MG/KG 01003	CD EP TOX UG/L	CR EP TOX UG/L	CU EP TOX UG/L	NI EP TOX UG/L	PB EP TOX UG/L	ZN EP TOX UG/L

INCLUDES CD, CR, CU, NI, PB, AND ZN.

ESD - [illegible] 81

Sharon

Concentr Waste

MICHIGAN DEPT. OF NATURAL RESOURCES, ENVIRONMENTAL LABORATORY ANALYSIS -- ENIVRONMENTAL QUALITY - ~~WATER~~ -

LAB LOG# 9688 PROJ CODE WE COST CENTER ------ PR 7 COLLECTED BY Lindia K. TRANSFERED TO Schramack RECEIVED AT LAB ----

LOCATION SAMPLED Parker Morenci SAMPLE REMARKS Maybe strong acid SEND RESULTS TO (NAME & SECTION)

<----------"DO NOT PUNCH"----------> REF NO. P | STORET NUMBER | START DATE YYMMDD | TIME MIL TTTT | DEPTH FEET | LAB NO. 2 00008 | CL2 T. RES MG/L 50060 | OXYGEN DIS. MG/L 00300 | C.O.D. HIGH MG/L 00340 | T.O.C. AMPUL MG/L 00680 | PHE T. UG 327

FIELD ID.	DESCRIPTION OF SAMPLING SITE OR SAMPLE	REF NO. P	STORET NUMBER	START DATE YYMMDD	TIME MIL TTTT	DEPTH FEET	LAB NO. 2 00008	CL2 T. RES MG/L 50060	OXYGEN DIS. MG/L 00300	C.O.D. HIGH MG/L 00340	T.O.C. AMPUL MG/L 00680	PHE T. UG 327
XX-1	Fibre pak	I01		820709	0420		17982					
XX-2	Fibre pak	I02		↓	1425		17983					
[illegible]-3	Stainless Steel (labled Nitric Acid)	I03		↓	1430		17984					
		I04										
		I05										
		I06										
		I07										
		I08										
		I09										
		I10										

REF NO.	NO3NO2 TOTAL MG/L N 00630	NO3 TOTAL MG/L N 00620	NO2 TOTAL MG/L N 00615	NH3 TOTAL MG/L N 00610	ORG N TOTAL MG/L N 00605	KJEL N TOTAL MG/L N 00625	ORTH.P TOTAL MG/L P 70507	PHOS. TOTAL MG/L P 00665	MBAS MG/L 38260	CR6+ TOTAL UG/L 01032	F TOTAL MG/L 00951	CL TOTAL MG/L 00940	SI REACT. MG/L 00958	SO4= TOTAL MG/L 00945	AL TOT MG 00[illegible]
[illegible]		C			C						7000				
02		C			C						5200				
03		C			C						1.7				
04		C			C										
05		C			C										
06		C			C										
07		C			C										
08		C			C										
09		C			C										
10		C			C										

Sweed

MICHIGAN DEPT. OF NATURAL RESOURCES, ENVIRONMENTAL LABORATORY ANALYSIS -- PHYSICAL & BIOLOGICAL - ~~WATER~~ Concentration

LAB LOG# 96088 PROJ CODE WE COST CENTER ____ PR 2 COLLECTED BY Linda K. TRANSFERED TO Schromeck RECEIVED AT LAB ____

LOCATION SAMPLED Parker Morenci SAMPLE REMARKS Maybe Strong Acid SEND RESULTS T (NAME & SECTIC

<"DO NOT PUNCH"> FIELD ID.	DESCRIPTION OF SAMPLING SITE OR SAMPLE	REF NO. P	STORET NUMBER	START DATE YYMMDD	TIME MIL TTTT	DEPTH FEET	LAB NO. 2 00008	TEMP. DEGREE CENT. 00010	FECAL COLI MF. 31616	TOTAL COLI MF. 31504	PH STAND. UNITS 00400	C L C
XX-1	Fibre Pak	I01		820709	1420		17982				0-1	
XX-2	Fibre Pak	I02		↓	1425		17983				0-1	
XX-3	Stainless Steel (labled Nitric Acid)	I03		↓	1430		17984				0-1	
		I04										
		I05										
	* Run with pH paper	I06										
		I07										
		I08										
		I09										
		I10										

REF NO.															
01															
02															
03															
04															
05															
06															
07															
08															
09															
10															

Shramek

Concentrated waste

MICHIGAN DEPT. OF NATURAL RESOURCES, ENVIRONMENTAL LABORATORY ANALYSIS -- INORGANIC - ~~WATER~~ - GENERAL USE

LAB LOG# 96688 PROJ CODE JE COST CENTER ____ PR 2 COLLECTED BY Linda K. TRANSFERED TO Schramek RECEIVED AT LAB ____

LOCATION SAMPLED Parker Morenci SAMPLE REMARKS Maybe Strong acid SEND RESULTS TO (NAME & SECTION

<'DO NOT PUNCH'> FIELD ID.	DESCRIPTION OF SAMPLING SITE OR SAMPLE	REF NO.	STORET NUMBER	START DATE YYMMDD	TIME MIL HHMM	DEPTH FEET	LAB NO. 1 P00008	CA TOTAL MG/L 00916	MG TOTAL MG/L 00927	NA TOTAL MG/L 00929	K TOTAL MG/L 00937	C TO L 01
xx-1	Fibrepak	I01		820709	1420		17982					
xx-2	Fibrepak	I02		↓	1425		17983					
xx-3	Stainless Steel (labled Nitric Acid)	I03		↓	1430		17984					
		I04										
		I05										
		I06										
		I07										
		I08										
		I09										
		I10										

REF NO.	PB * TOTAL UG/L 01051	ZN * TOTAL UG/L 01092	FE TOTAL UG/L 01045	HG TOTAL UG/L 71900	AS TOTAL UG/L 01002	SE TOTAL UG/L 01147							CD DIS. UG/L 01025	CR DIS. UG/L 01030	O
1	75	720													
02	K50	1300													
03	190	3000													
04															
05															
06															
07															
08															
09															
10															

Aug. 4, 1982

R4446

Sealed
Concentrated waste

MICHIGAN DEPT. OF NATURAL RESOURCES, ENVIRONMENTAL LABORATORY ANALYSIS -- ORGANICS - WATER - GENERAL USAGE

LAB LOG# [illegible] PROJ CODE [illegible] COST CENTER ------ PR 2 COLLECTED BY Lindian K. TRANSFERED TO Schrameck RECEIVED AT LAB ------ EXAMINER JB

LOCATION SAMPLED Parker Morenci SAMPLE REMARKS Maybe Strong Acid SEND RESULTS TO (NAME & SECTION) R Schrameck Water Quality - District I

FIELD ID.	DESCRIPTION OF SAMPLING SITE OR SAMPLE	REF NO. P	STORET NUMBER	START DATE YYMMDD	TIME MIL TTTT	DEPTH FEET	LAB NO. 2 00008	FE-OIL MG/L 00560	A-1242 PCB UG/L 39496	A-1254 PCB UG/L 39504	A-1260 PCB UG/L 39508	Scan 1	Scan 2	Scan 4
XX-1	Fibre Pak	I01		820709	1420		17982		K5000	K2000	K2000	X	X	U
-2	Fibre Pak	I02		↓	1425		17983		↓	↓	↓	X	X	↓
XX-3	Stainless Steel (labled Nitric Acid)	I03		↓	1430		17984		↓	↓	↓	Nos	Nos	↓
		I04												
		I05												
		I06												
		I07												
		I08												
		I09												
		I10												

REF NO.																	
01																	
02																	
03																	
04																	
05																	
06																	
07																	
08																	
09																	
10																	

ESD-01004 REV. 04/80

/1/82 - Parker Morenci -

Bob Schuttler Dick Speed
Mike McLain John Kashner

=

verified soil sample locations w/ company
Co. still has no idea where PCB came from

(check w/ Lyle re: results of his soil samples)

=

Clean up of area south of new storage building
was completed by 6/28/82

=

Trisodium phosphate & silicate - baghouse dust constituents

storage area existed for about 18 months

Everything has either been moved inside or shipped
Analysis of some of the unknowns have come back.

1300 drums have been manifested out - 400 to 500 drums
were waste - rest baghouse dust

=

Bonderites were bulk loaded

=

Solvents & Bonder lube oils are only on-site
organics -> (ref: drum analyses)

Hydrogeo Study

→ talk to Bio relative to core samples in river

→ End of week of 8/2 for meeting to discuss what company intends to do

Letter to Co. - include copy of Act 245, Part 22, ~~and~~ Part 5 and Part 4 Rules

---

Baghouse Dust → Sodium metasilicate, sodium phosphate compound, soda ash, possibly caustic

2:20 pm

x 1 } fibrepaks

x 2

2:25 pm

x 3 - stainless steel (labled nitric acid)

(heavy metal screen)

Flouride, pH, [Cr, Ni,]

PCB

Volatile Organics

2:30 pm

file

STATE OF MICHIGAN

NATURAL RESOURCES COMMISSION
JACOB A. HOEFER
CARL T. JOHNSON
E.M. LAITALA
HILARY F. SNELL
HARRY H. WHITELEY
JOAN L. WOLFE
CHARLES G. YOUNGLOVE

WILLIAM G. MILLIKEN, Governor

DEPARTMENT OF NATURAL RESOURCES

HOWARD A. TANNER, Director

Water Quality Division
9311 Groh Road
Grosse Ile, Michigan 48138

STEVENS T. MASON BUILDING
BOX 30028
LANSING, MI 48909

June 29, 1982

Mr. John D. Kashner
Manager-Manufacturing
Occidental Chemical Corporation
Parker Surface Treatment Products
322 Main Street
Morenci, Michigan 49256

Dear Mr. Kashner:

The purpose of this letter is to confirm our discussion during our meeting of June 22, 1982 at your facility. You will recall that we inspected the waste storage area south of the new storage area that Linda Koivuniemi, from Air Quality, discovered during her last inspection. You and Mr. Fredrick agreed that the site would be cleaned up no later than July 5, 1982

We also left a copy of the analytical results of the soil samples Linda and I collected during our inspection on May 18, 1982 and discussed the PCB results with Mssrs. Fredrick and Huffaker and yourself. Based on these results and past storage and disposal practices at your facility, we are requiring that you conduct a Hydrogeological Study on the site to determine soil types, groundwater elevations and flow directions and groundwater quality to determine if these practices have caused a deleterious impact on the groundwater. Additionally, due to the potential for contaminated storm water runoff from your storage areas flowing to Bean Creek, we are requiring that you conduct a study on the bottom sediments of Bean Creek upstream and downstream of your site and collect samples of soils from potentially contaminated areas of the Creek bank to determine if there has been any deleterious impact on the Creek as a result of your past practices.

We agreed during our meeting that you would discuss the above items with environmental control personnel from Occidental Chemical Corporation during their July 12-13, 1982 audit at your facility and a letter would be transmitted to our office by July 23, 1982 specifing a date for submittal of the plans for the above studies.

MICHIGAN
THE GREAT LAKE STATE

6/22/82

12/82 Parker Morenci - Dick Frederick
see
Plant Manager

- still confusion as to when drummed material becomes waste

=

Appendix I information → still working on it - won't be done until all material shipped out (Operating Record)

Linda requested copies of all Waste Characterization reports
(some waste drums still not characterized)
~ 80 drums of material uncharacterized - samples collected last week and shipped to Hooker lab for analyses

=

New waste area that Linda discovered -
- sample bottles from lab samples in drums (someone didn't follow procedure)
- 2 drums of liquids that no one knows anything about

=

Returned [illegible] - [illegible] last 2 months

=

 Parker 6/22/82

Sample #1 - Southwest of gate along "rear" fenceline 12:12 pm

#2 - 10 ft. southwest of #1 @ "oilly" area through raised portion of fence - 12:17 pm

#3 - 10 ft. southwest of #2 @ greenish runoff area inside fence - 12:19 pm

#4 - below fallen over fibrepak - greenish yellow material - wood pallet and concrete eaten away - trib. to #3 - adjacent barrel (also over) labled "corrosive" and contained brownish colored liquid - 12:21 p

Hydroflouric acid and chromium possibly in #3 & #4
- Liondia requested samples be collected for us from two fibrepaks @ #3, #4 and stainless steel "nitric acid" drum that was bubbling due to internal pressure

- told co. to clean up south storage area ~~before~~ right away
told co. that outside storage of raw materials or waste must be contained for fire and emergency area

 Parker 6/22/82

No PCB used on site in hydraulic systems or electrical

Methylene Chloride ; Cryslic (?) acid

bank samples, hydrogeo and creek sediment samples for organics and metals and phosphates ; gw quality and direction

uly 12 & 13 Environmental Audit by Oxy —

South storage area to be cleaned by 7/6/82

Study plan to be discussed 7/12-13 with letter from Co. by 7/23/82 committing to study and date for plan submittal

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

A.Q.D. - Lansing File
B 2422
Lenawee Co.

June 14, 1982

TO: Al Howard, OHWM, MDNR
U.S. EPA, Region V, Chicago

FROM: Linda Koivuniemi, A.Q.D.

SUBJECT: Hooker Chemicals and Plastics, Morenci
RCRA AND ACT 64 VIOLATIONS

RECEIVED
JUN 16 1982
WATER QUALITY DIV.
DIST. I

Attached are:

(1) Three activity reports describing my recent RCRA investigations to Hooker Chemicals and Plastics, Morenci.

(2) A letter from John D. Kashner of Hooker dated June 1, 1982.

(3) RCRA inspection report.

(4) Draft EPA Compliance Order.

Please note in my three attached activity reports that this company has changed its story on more than one occasion:

(1) At the beginning the hazardous waste drums had been accumulating since April, 1981; then later the drums had been in storage prior to RCRA rules going into effect on November 19, 1980.

(2) Also, at the beginning the company would not accept returned product/waste unless the company returning the unused material paid a fee of approximately $120 per drum. Then, after I informed the company they were accepting unmanifested waste, they changed and said they accepted unused product back from the customer for credit.

It is my understanding that the Federal Register/Vol. 45, No. 229/Tuesday, November 25, 1980/Rules and Regulations, does not apply to the Hooker returned material because the returned product/waste is not regulated under 261.33, but hazardous based on its characteristics under Sub part C of 40 CFR 261.

Due to the serious violations caused by leaking and open hazardous waste drums, it is my belief that this company should be fined and issued the attached Compliance Order without further delay.

cc: Joe Boyle, U.S. EPA Region V (no attachments) sent directly to Chicago from the Ann Arbor Air Quality Office.

LKK:vl

PARKER DIVISION
HOOKER CHEMICALS & PLASTICS CORP. • 322 Main Street, Morenci, Michigan 49256 • Tel. (517) 458-2221

June 1, 1982

Michigan Department of Natural Resources
Air Quality Division
2309 Shelby
Ann Arbor, Michigan 48103

Air Pollution Control
JUN 3 1982
RECEIVED

Attention: Linda Koivuniemi
Environmental Specialist

Dear Ms. Koivuniemi:

This is written to outline the Parker Company procedure and rational behind returned finished products from customers and the same for deciding when a product is considered obsolete and targeted for disposal.

We service the metal treatment industry which includes almost any industry that paints metal. Our products generally are mid-strength acids and alkalies which are classified as hazardous by both the D.O.T. and R.C.R.A.

In the nature of our business, the customers have occasion to switch from one of our products to a different one, or to a new formulation that gives them better performance. Since we may still have other customers using the switched from product, or we can rework the switched from product into a different blend, any unused product is accepted back from the customer for credit. In any case, we only accept back product that is still viable product that we sold.

In the event that there really is no other volume user and the product is destined to become dead inventory, we first determine; 1) if the product can be sold at a discount, and 2) if the product can be reworked. If no other option is feasible, we designate the product as scrap and dispose of it via our established R.C.R.A. procedure. Other items that never left our plant which do not sell, or were not made to spec. also are disposed of through the same procedure.

While a certain percentage of material we receive back from our customers does end up as a waste material, it would be impossible to tell at the time of shipment back which ones they would be. The unused finished product being returned to the manufacturer in the same form as it was shipped should not have to travel to our plant under manifest system. It does travel back under the D.O.T. regulations and descriptions as were required outbound. It only becomes waste when we determine no practical use exists.

As further credence, I have attached a Federal Register copy, November 25, 1980, pp. 78540-78541.

I hope this satisfies you as to the origin of the material we are generating as waste; however, if further information is needed, please let me know.

Sincerely,

PARKER DIVISION

John D. Kashner
Manager-Manufacturing

JDK:bal

Attachment

cc: Joe Boyle, U.S. E.P.A., Waste Management Division, 230 South Dearborn, Chicago, Illinois 60604
R. J. Schuttler
R. G. Speed
A. E. Kluegel

Attachment C
rec'd May 27, 82
by Linda Kowjonsen

NATIONAL PURCHASING AGREEMENT

Summary of Corporate Agreement with CHEMICAL WASTE MANAGEMENT (CWM)

AGREEMENT NO: 100-0080

AGREEMENT TERM: November 7, 1980 - March 15, 1982 (under Revision)

SERVICES:
a) Hazardous Waste Disposal
b) Hazardous Waste Transportation
c) Major Environmental Clean-up Services
d) Lease of Waste Containers

PRICE: CWM will price services on bid basis, and pricing will be firm for the term of the agreement. (1 year)

PAYMENT TERMS: Net 30

WEIGHT TERMS:
a) CWM Equipment or CWM arranged Equipment - F.O.B. Shipping Point.
b) Hooker/Occidental Equipment - F.O.B. Delivery Point.

PROCEDURE: The intent of this National agreement is to simplify the execution of Waste Disposal services from a contractual/liability standpoint. The following procedure has been developed with, and is being circulated to CWM locations. This will enable CWM to perform transactions with Hooker/OXY Chemical locations in a consistent fashion. Additionally, the HCC Hazardous Waste Manifest procedure (which is an EPA mandated requirement) is to be followed once the business relationship has been established and waste disposal or transportation services are started.

Step 1: For wastes to be considered under the contract, a Generator's Waste Profile Sheet (Exhibit C) must be filled out and signed by either of the authorized HCC/OXY representatives shown on Exhibit B (authorized signatures and locations). Technical assistance is available from the local CWM representative or Hooker Chemical Environmental, Health & Safety staff if required. This form is then forwarded to CWM, from which will be developed dispoal and transportation pricing - (Note: Each individual Generator's Waste Profile Sheet will have its own unique Code No.)

STATE OF MICHIGAN

Rev. 3/81

WASTE DISPOSAL MANIFEST

[X] Act 64 Waste (HAZARDOUS) [ ] Act 136 Waste (OTHER)

MI 0095722

IDENTIFICATION

Generator's Name	Primary Transporter's Name	Treatment, Storage or Disposal Facility
Parker Div., Occidental Chemical Corp.	Chemical Waste Management, Inc.	Chemical Waste Management, Inc.
Site Address: 322 West Main Street, Morenci, MI 49256	Transporter's Address: 3106 Snyder-Domer Road, Springfield, OH 45502	Facility Address: Emelle Facility, P.O. Box 55, Emelle, Alabama 35459
Phone Number: (517) 458-2221	Phone Number: (513) 969-8346	Phone Number: (205) 652-9531
Generator's Site EPA I.D. Number: MID058723867	Transporter's EPA I.D. Number: OKD007241651	Facility Site EPA I.D. Number: ALT000622464

If more than one Transporter is to be utilized, give the Name and EPA I.D. Number of each:

WASTE INFORMATION

No.	U.S. D.O.T. Shipping Name	D.O.T. Hazard Class	U.N./N.A. No.	Haz. Class Code	Container No.	Container Type	Form: Solid	Form: Liquid	Form: Gas	Form: Sludge	Weight or Volume	Units	Hazardous Waste Number
1.	Waste Compound, Rust Preventing	Corrosive Material	NA1760	02	72	DR		X			35760	LB	D007
2.	Waste Compound, Rust Preventing	Corrosive Material	NA1760	02	8	DR		X			1368	LB	D002
3.													
4.													
5.													
6.													

COMMENTS

Include Safety precautions and special handling instructions.

SID Number 2-146-82
SID Number 2-140-82

GENERATOR CERTIFICATION: I certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and U.S. EPA. I further certify that the information contained on the manifest is factual. I understand that the failure to accurately report all information requested by the manifest constitutes a violation of 1979 PA64 and/or PA136. I further understand that this manifest may be used in administrative and court proceedings.

Generator Signature ① Richard G. Fredrick

Date Shipped MO. DAY YEAR: 05 26 82

HAULER'S CERTIFICATION: I certify acceptance of the above identified wastes for transportation. I further certify that I shall deliver the hazardous wastes, together with this manifest, only to the destination specified by the generator on this manifest. I understand that this manifest can be used in administrative and court proceedings.

Transporter Vehicle I.D. No.: No. 1

Subsequent Transporter Vehicle I.D. No's

Transporter Signature ②

Subsequent transporter(s) signature(s) ③

Date(s) Received: 05 26 82

If the shipment cannot be delivered, describe the reasons for non-delivery.

TSDF CERTIFICATION: I certify receipt at this facility of the above identified wastes and that this facility is licensed to accept those wastes. I also certify that the wastes were accompanied by a manifest properly certified by both the generator and hauler and that this facility is the destination indicated on the manifest. I understand that this manifest can be used in administrative and court proceedings.

TSDF Signature ④

Facility Site EPA I.D. Number

[ ] Accepted [ ] Rejected

Date Received

any significant discrepancies between manifest and shipment

723 A.M.

WASTE DISPOSAL SHIPMENT: DATE: May 26, 1982 Wed

TO: CHEMICAL WASTE MANAGEMENT, INC.
EMELLE FACILITY
P.O. BOX 55
EMELLE, ALABAMA 35459

ALABAMA HAZARDOUS WASTE MANIFEST NO. CWMA 40020

MICHIGAN WASTE DISPOSAL MANIFEST NO. MI 0095722

OXY METAL INDUSTRIES CORP. STRAIGHT BILL OF LADING/HAZARDOUS WASTE MANIFEST NO. 05081

TRANSPORTER:

CHEMICAL WASTE MANAGEMENT, INC.
3106 SYNDER-DOMER ROAD
SPRINGFIELD, OHIO 45502

Reg # No. 36361

Attachment 2 rec'd May 29, 82 by Linda Kovanieni

PRODUCT NAME	PRODUCT CODE	CWCA WASTE CODE	NUMBER DRUMS	DRUM WEIGHT	TOTAL WEIGHT	LABELS REQUIRED
PLN 62 R	01117	COLA66701	16	555	8880	3.16, 3.47 compound, Rust Prevent.
Chrome Waste	N/A	COLA66701	56	480	26880	3.16, 3.47 compound, Rust Prevent.
B785 R	01571	COL A66693	8	460	3680	~~[illegible]~~, 3.8, 3.16 compound, Rust Prevent.
					39440	

Attachment C
rec'd May 27, 82
by Linda Kowjinsani

NATIONAL PURCHASING AGREEMENT

Summary of Corporate Agreement with CHEMICAL WASTE MANAGEMENT (CWM)

AGREEMENT NO: 100-0080

AGREEMENT TERM: November 7, 1980 - March 15, 1982 (under Revision)

SERVICES:
a) Hazardous Waste Disposal
b) Hazardous Waste Transportation
c) Major Environmental Clean-up Services
d) Lease of Waste Containers

PRICE: CWM will price services on bid basis, and pricing will be firm for the term of the agreement. (1 year)

PAYMENT TERMS: Net 30

REIGHT TERMS:
a) CWM Equipment or CWM arranged Equipment - F.O.B. Shipping Point.
b) Hooker/Occidental Equipment - F.O.B. Delivery Point.

PROCEDURE: The intent of this National agreement is to simplify the execution of Waste Disposal services from a contractual/liability standpoint. The following procedure has been developed with, and is being circulated to CWM locations. This will enable CWM to perform transactions with Hooker/OXY Chemical locations in a consistent fashion. Additionally, the HCC Hazardous Waste Manifest procedure (which is an EPA mandated requirement) is to be followed once the business relationship has been established and waste disposal or transportation services are started.

Step 1: For wastes to be considered under the contract, a Generator's Waste Profile Sheet (Exhibit C) must be filled out and signed by either of the authorized HCC/OXY representatives shown on Exhibit B (authorized signatures and locations). Technical assistance is available from the local CWM representative or Hooker Chemical Environmental, Health & Safety staff if required. This form is then forwarded to CWM, from which will be developed dispoal and transportation pricing - (Note: Each individual Generator's Waste Profile Sheet will have its own unique Code No.)

STATE OF MICHIGAN

Rev 3/81

WASTE DISPOSAL MANIFEST

[X] Act 64 Waste (HAZARDOUS) ☐ Act 136 Waste (OTHER) MI 0095722

Generator's Name	Primary Transporter's Name	Treatment, Storage or Disposal Facility
Parker Div., Occidental Chemical Corp.	Chemical Waste Management, Inc.	Chemical Waste Management, Inc.
Site Address 322 West Main Street Morenci, MI 49256	Transporters Address 3106 Snyder-Domer Road Springfield, OH 45502	Facility Address Emelle Facility, P.O. Box 55 Emelle, Alabama 35459
Phone Number (517) 458-2221	Phone Number (513) 969-8346	Phone Number (205) 652-9531
Generator's Site EPA I.D. Number MI D 0 5 8 7 2 3 8 6 7	Transporter's EPA I.D. Number O H D 0 0 0 7 2 4 1 6 1	Facility Site EPA I.D. Number A L T D 0 0 6 2 2 4 6 4

If more than one Transporter is to be utilized, give the Name and EPA I.D. Number of each:

No.	U.S. D.O.T. Shipping Name	D.O.T. Hazard Class	U.N./N.A. No.	Haz. Class Code	Container No.	Container Type	Form Solid	Form Liquid	Form Gas	Form Sludge	Weight or Volume	Units	Hazardous Waste Number
1.	Waste Compound, Rust Preventing	Corrosive Material	NA1760	0 2	72	DR		X			3 5 7 6 0	LB	D 0 0 7
2.	Waste Compound, Rust Preventing	Corrosive Material	NA1760	0 2	8	DR		X			1 3 6 8 0	LB	D 0 0 2
3.													
4.													
5.													
6.													

Include Safety precautions and special handling instructions.

SID Number 2-146-82
SID Number 2-140-82

GENERATOR CERTIFICATION: I certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and U.S. EPA. I further certify that the information contained on the manifest is factual. I understand that the failure to accurately report all information requested by the manifest constitutes a violation of 1979 PA64 and/or PA136. I further understand that this manifest may be used in administrative and court proceedings.

Generator Signature ① Richard G. Fredrick

Date Shipped MO. DAY YEAR 0 5 2 6 8 2

HAULER'S CERTIFICATION: I certify acceptance of the above identified wastes for transportation. I further certify that I shall deliver the hazardous wastes, together with this manifest, only to the destination specified by the generator on this manifest. I understand that this manifest can be used in administrative and court proceedings.

Transporter Vehicle I.D. No. No. 1 1 3 1 0

Subsequent Transporter Vehicle I.D. No.

Transporter Signature ②

Subsequent transporter(s) signature(s) ③

Date(s) Received 0 5 2 6 8 2

If the shipment cannot be delivered, describe the reasons for non-delivery.

TSDF CERTIFICATION: I certify receipt at this facility of the above identified wastes and that this facility is licensed to accept those wastes. I also certify that the wastes were accompanied by a manifest properly certified by both the generator and hauler and that this facility is the destination specified on the manifest. I understand that this manifest can be used in administrative and court proceedings.

TSDF Signature ④

Facility Site EPA I.D. Number

☐ Accepted
☐ Rejected

Date Received

Note any significant discrepancies between manifest and shipment.

HAZARDOUS WASTE MANIFEST

40020

IDENTIFICATION INFORMATION

NAME	ADDRESS	PHONE	EPA ID CODE
GENERATOR Pa[illegible]r Div., Occidental Chemical Corp.	322 West Main Street Morenci, MI 4[illegible]	(517) 458-2221	[illegible]
TRANSPORTER NO. 1 Chemical Waste Mgmt.	3106 Snyder-Domer Road Springfield, OH 45502	(513) 969-8346	OHD00072415
TRANSPORTER NO. 2			
DISPOSER Chemical Waste Management, Inc. Emelle Facility	P. O. Box 55 Emelle, Alabama 35459	205-652-9531	ALT000622464

WASTE INFORMATION

CONTAINER NO.	CONTAINER TYPE	DESCRIPTION/CLASS	TOTAL QUAN.	UNIT	EPA Hazardous Waste ID No.	CWMA WASTE CODE	WEIGHT
72	Drums	Waste Compound, Rust Preventing Corrosive Material	72	LB	D007	COL A66701	35,760
8	Drums	Waste Compound, Rust Preventing Corrosive Material	8	LB	D007	COL A66699	3,630

EMERGENCY INFORMATION

EMERGENCY NOS.: DISPOSER — (205) 652-9531 ; GENERATOR — ([illegible]) [illegible] US COAST GUARD 1-800-424-8802

SPECIAL INSTRUCTIONS:

CERTIFICATION

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation, the U.S. Environmental Protection Agency:

[signature] Production Superintendent 05-26-82

Fredrick Generator — Title — Date

This is to certify acceptance of the hazardous waste shipment described above:

[signature] [signature] 5-26-82

Transporter #1 — Title — Date

Transporter #2 — Title — Date

This is to certify acceptance of the hazardous waste shipment described above for treatment, storage or disposal:

Disposer — Title — Date

DISPOSAL INFORMATION

CWMA WASTE CODE	QUANTITY	UNIT	PROCESS CODE	LOCATION TRENCH	LOCATION LEVEL	LOCATION QUAD	COMMENTS

PRODUCER NO. 1

Chemical Waste Management

Nº 03994

3106 Snyder-Domer Road
Springfield, Ohio 45502
(513) 969-8346

MO. DAY YR.
5 2 6 8 2

MANIFEST NUMBER

Remit To:
Chemical Waste Management, Inc.
P. O. Box 833
Fremont, Ohio 43420

CUSTOMER P. O. # _____

SHIPPER (From) Hodge Chemical (Parker Division)

ADDRESS 322 W Main St Morenci STATE Michigan COUNTY _____

DESTINATION (To) Chemical Waste Management PROCESSING SITE Emelle

ADDRESS PO Box 55 Emelle STATE Alabama COUNTY _____

HM	DESCRIPTION	# OF UNITS	UNIT PRICE	AMOUNT
	Waste Compound, Rust Preventing Corrosive Material Col A66701	72 Drums		
	Waste Compound, Rust Preventing Corrosive Material Col A66693	8 Drums		

INVOICE TOTAL _____

THIS IS TO CERTIFY THAT THE ABOVE NAMED ARTICLES ARE PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED, AND LABELED AND ARE IN PROPER CONDITION FOR TRANSPORTATION ACCORDING TO THE APPLICABLE REGULATIONS OF THE DEPARTMENT OF TRANSPORTATION AND THE ENVIRONMENTAL PROTECTION AGENCY.

[signature] 5-21-87 SIGNATURE

SPECIAL COMMENTS _____

LEFT SITE _____ START LOAD _____ END UNLOADING _____ TOTAL TIME _____

START LOAD AT CUSTOMER'S SITE _____ END LOAD AT CUSTOMER'S SITE _____ TOTAL TIME _____

TRUCK _____ TRAILER 9170 TRACTOR 310 DRIVER [illegible]

COPIES TO: Gold-*Shipper* / Pink-*Disposal Site* / Canary-*Hauler* / White-*Hauler*

RETAIN BY ORIGINATOR

OMI
OXY METAL INDUSTRIES CORPORATION

Chemical Waste Management, Inc.
2941 Kenny Road, Suite 220
Columbus, OH 43221

	Dock No.
	29620 Parkway, Roseville, Mich. 48066
	17100 Stephenson Hwy Madison Heights, Mich. 48071
XX	322 W. Main Street, Morenci, Mich. 49256
	75 River Road, Nutley, N.J. 07110
	5640 Knott Ave., Buena Park, Calif. 90620

REQUISITION
36361
P. O. NUMBER

If no P.O. number refer to Req. No.

F.O.B.	TAX	Ship Via	Notify	When Required	Promised	Date of P.O.
Morenci	Yes ☐ No ☐	Your Pick Up	R. Fredrick	5-26-82	5-26-82	5-26-82

Quantity	Description	Charge To Ind	Acct	Dept	Prod Code or P.S.O. No	Price
	Pick up and transport material as listed below	02	565	503		
	as agreed in the National Purchasing Agreement					
	No. 100-0050, with Chemical Waste Management					
	and between Occidental Chemical Corporation					
	dated November 7, 1980.					
	Disposal of material to meet all government and					
	state requirements					
30	drums, consisting of the following material approved by CWM to be shipped 05-26-82					
	drums COL A66701 - SID Number 2-146-82					
2	drums COL A66693 - SID Number 2-140-82					
	Michigan Manifest No. M 0095722					
	Alabama Hazardous Waste Manifest No. CWMA 40020					
	OMIC Straight Bill of Lading/Hazardous Waste Manifest No. 85081					
	Price approximately					$5,500

SIGNED BY Richard G. Fredrick
John D. Kashner

DATE 5-26-82

SS OTHERWISE AUTHORIZED, SHIP 0-50 POUNDS VIA U.P.S., OVER 50 POUNDS VIA_____
NOT INSURE, WHERE THE RATE IS DEPENDENT ON RELEASED VALUE, RELEASE HE VALUE WHICH PRODUCES THE LOWEST FREIGHT CHARGES.
REIGHT SHIPPED ON ONE DAY MUST BE BILLED ON ONE SHIPPING DOCUMENT.

HEREBY CERTIFY THAT THE ARTICLES COVERED HEREBY ARE PURCHASED FOR USE OR SUMPTION IN INDUSTRIAL PROCESSING OR FOR RESALE AND THEREFORE ARE NOT ECT TO SALES OR USE TAX.

ON DAY OF SHIPMENT, MAIL INVOICES IN TRIPLICATE, SHOWING OUR PURCHASE ORDER NUMBER, AND ORIGINAL BILL OF LADING OR OTHER SHIPPING DOCUMENTS TO:

OXY METAL INDUSTRIES CORPORATION
P.O. BOX 1273A, DETROIT, MICH. 48232

36361

THIS RELEASE IS SUBJECT TO TERMS AND CONDITIONS STATED ON BLANKET ORDER.

I 1001 (4/79)

RETAIN BY ORIGINATOR

Parker Surface Treatment Products

Parker → Morenci

meet @ 10:00 am 5/18/82

w/ Sindia Kovenemi right turn into Morenci

Weston Rd to ~~Main St.~~ ~~past~~ Dairy Queen

into town - before light - coffee shop (left hand side)

Richard Fredrick or Richard Speed

(brown cutlass)

Sibiepaks

- yard drain in drum storage to city

16X8 X12 → 128 X12 → 256 / 128 / 1536 ±5% North End of New Storage Bldg

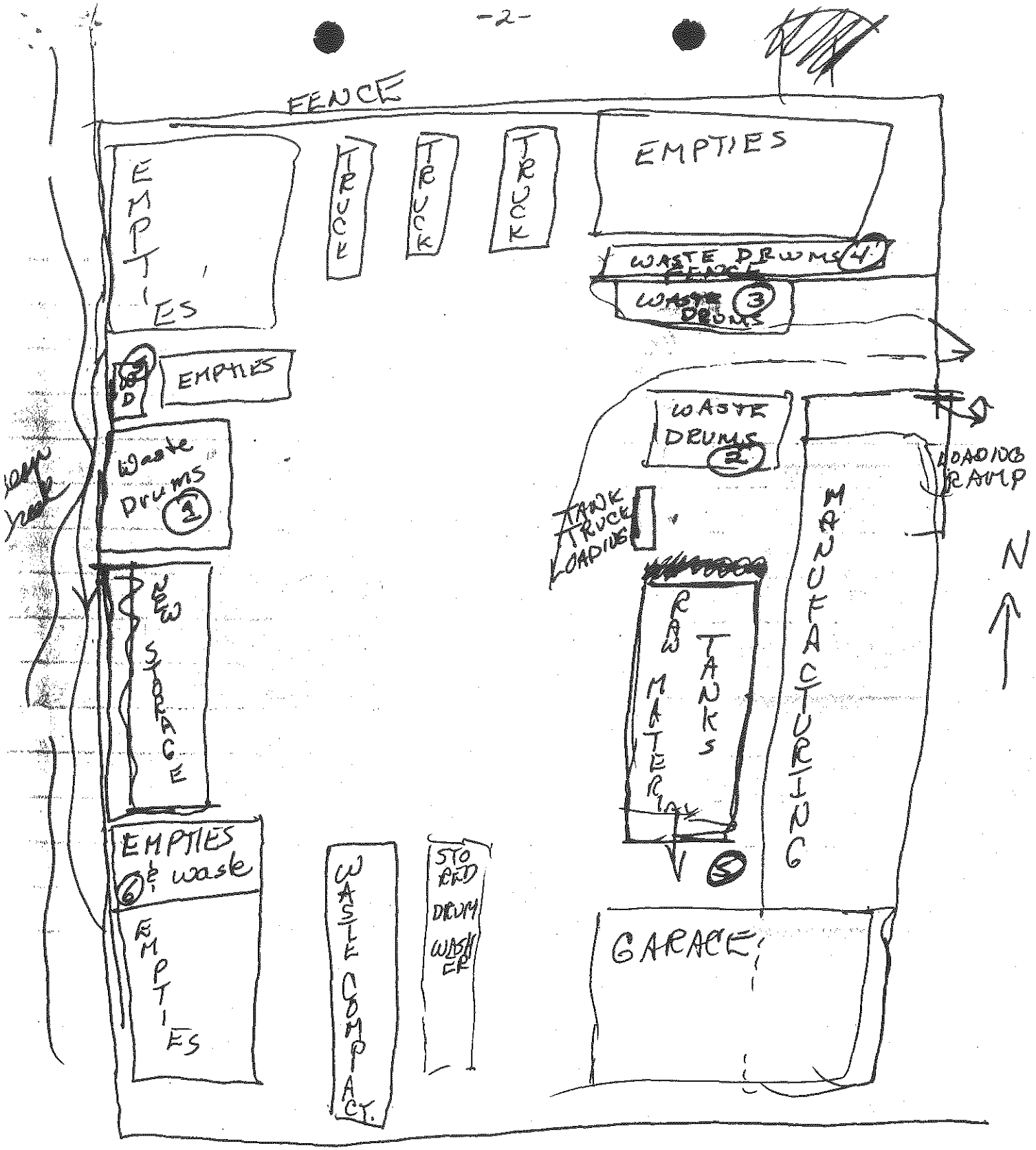
drums [illegible] as part of fill for [illegible]

5X5X8 → 25X8 → 200 ±5% west side - North end of main bldg

methylene [illegible]

[illegible] - drum [illegible]

10± years



1) 1536 ± 5% - 25% D or L

2) 200 ± 5% - 10% D

3)

4) 10x5 x 8 - 40%

5) 12 ± 10%

6) 15 ± 10% (waste)

~~PIPK~~ 3/11/81
SPCC

Chemical Waste Managment - Alabama

question relative to shipment to Parker
recieving material as "product no longer usable"

No manifest on materials shipped to Parker

Quarantine area in Building H (inside)
laboratory analysis
stock, rework or disposal
↳ ~~[illegible]~~
Building O & P
(warehouse)

80 drum maximum storage after present stock shipped out

Existing stock of waste drums will be shipped out by end of June 1982
[Chemical Waste Managment trucks]
- monies already allocated and contract arranged - lab done -
1st truck out 5/26/82

Present stock in yard since April 1981
900± drums

[illegible]

3:18 pm — Northwest area of ~~Northwest~~ area #1
#2 3:20 pm — Southwest area of " "
#3 3:30 pm — south center of area #4

~~[illegible]~~ Monastral Green B GW-749-P
Pigment Green 7 — C.I. No. 74260
Polychloro Copper Phthalocyanine
E.I. DuPont De Nemours & Co. Pigments Dept.
1007 Market St. Wilmington, Del. 19898
302-774-1000

[redacted]

AN DEPT. OF NATURAL RESOURCES, ENVIRONMENTAL LABORATORY ANALYSIS -- ORGANICS - SEDIMENTS -DRY WT. BASIS

AB 3384 PROJ CODE WC COST CENTER ------ PR 4 COLLECTED BY Schrameck TRANSFERED TO ---------- RECEIVED AT LAB [illegible] EXAMINER [illegible]

OCATION AMPLED Parker - Morenci SAMPLE REMARKS ---------- SEND RESULTS TO (NAME & SECTION) Schrameck WQD - District I

ELD	"DO NOT PUNCH" DESCRIPTION OF SAMPLING SITE OR SAMPLE	REF NO. P	STORET NUMBER	START DATE YYMMDD	TIME MIL TTTT	S,T OR B	NUM SAM-PLES	END DATE YYMMDD	TIME MIL TTTT	DEP-TH FEET	LAB NO. 2 00008	TOTAL SOLIDS PERCNT 70318	VOLITL SOLIDS % T.S. 70322	FE-OIL MG/KG 00561	A-1242 PCB UG/KG 39499	A-125 PCB UG/KG 39507
	Northwest area of area #1	C01		820518	1518						15720			30,000	19,000	K200
	Southeast area of area #1	C02		820518	1520						15721			54,000	2500,000	K200
	South center of area #4	C03		820518	1530						15722			1200	6500	K20
		C04														
		C05														
		C06														
		C07														
		C08														
		C09														
		C10														

EF).	A-1260 PCB UG/KG 39511	DDE P,P'- UG/KG 39321	DDD P,P'- UG/KG 39311	DDT O,P'- UG/KG 39306	DDT P,P'- UG/KG 39301	DILDRN UG/KG 39383	CHLRDN UG/KG 39351	HCB UG/KG 39701
01	K2000							
02	K20,000							
03	K2000							
04								
05								
06								
07								
08								
09								
10								

ESD-01303 REV. 12/79

Staff Report

Occidental Chemical Corporation
Parker Surface Treatment Products Division
322 Main Street
Morenci, Michigan

Linda Koivuniemi, DNR Air Quality Division, conducted a RCRA inspection at Occidental Chemical in Morenci on May 14, 1982. There were numerous violations of the RCRA regulations surfaced as a result of that in inspection. Linda noted that the storage area was generally in poor condition with what appeared to be chemical residues on-the ground surface, leaky drums and indications of overland runoff from the storage area to Bean Creek on the west property line of the company. As as result of these observations, Linda contacted the District I Water Quality Division office on May 17, 1982 and dicussed the potential groundwater and surface water problems associated with the site with the writer. We agreed to meet at Occidental Chemical on May 18, 1982 so that I could evaluate the situation with regard to potential groundwater and/or surface water contamination and possible violations of Act 245, P.A. 1929, as amended.

May 18, 1982

I met with Linda and she furnished me with a copy of the company's Part A RCRA application and reviewed her observations of May 14, 1982. Linda and I then went to Occidental Chemical and met with Mssrs. Richard Fredrick and Richard Speed and advised them that Linda was doing a follow-up/continuation regarding the RCRA inspection and that I would be inspecting the site relative to possible Act 245 violations. We requested, and received, permission to inspect the drum storage areas, take pictures and possibly collect some samples off the ground in the storage areas. Permission was granted verbally by Mr. John Kashner, Manager-Manufacturing, Occidental Chemical.

All the drum storage areas were undiked and four of the six areas were on stone or unprotected earth. With reference to the attached site drawing (attachment I), the storage areas are described below:

1 - Located at the northwest corner of the manufacturing building on a crushed stone base. This area contained an estimated 200 drums ± 5%. Approximately 10% of the drums were damaged but there were only minimal indications of any leakage onto the ground. At least one drum had the outer metal completely rusted out and the remaining "drum" was empty.

2 - This area is located just north of the new drum storage building on a concrete pad. The pad was covered with "dirt" and leaves. There were approximately 1536 drums ± 5%, of which about 25% appeared to be damaged and/or leaking. Several drums had chemicals on the outside indicating leaks from the drums. There was "oilly" residue soaked into the leaves and dirt on the pad

and indications along the fence line that some minor runoff might have occurred to Bean Creek. The drum stacks were haphazard and disorganized with some of the top drums falling over against adjacent stacks. There was liquid on the ground inside the drum stacks but there was no way to get into the area.

3 - The fence on the north side of the plant driveway bisected a group of waste drums referred to as area 3. These drums were stacked on crushed stone and there were several discolored areas indicating leakage from the drums. There was an estimated 400 drums ± 20% in this area with about 40% of the drums opened, damaged or leaking.

4 - This area was inside the warehouse on the east side of the property near the shipping/receiving area. No estimate of the number of drums was made at this location.

5 - This area was north of location #2 and contained approximately twelve drums of waste materials. In addition there were several "empty" drums stacked on their sides to the east of the waste drums. These drums had contained chromic acid and residual pools of brownish liquid from the rinsing operations were collected in the drum grooves. At least two of the waste drums had no tops and there was no concrete pad under any of the drums. The drums were resting on bare ground. This area was not identified in the RCRA Part A form.

6 - This area located just south of the new storage building was not identified on the RCRA Part A either. The estimated 15 waste containing drums were stacked next to some empty drums on the concrete.

The total estimated drum inventory on hand on May 18, 1982 was as follows:

Area 1 - 200 ± 5%
Area 2 - 1536 ± 5%
Area 3 - 400 ± 20%
Area 4 - not estimated
Area 5 - 12
Area 6 - 15
Total drums - 2163

Note: The ± range on the estimate is to compensate for interior voids in the drum stacks and irregular stacking.

Following our inspection of the drum storage areas, Linda and I met with Mssrs. Fredrick and Speed and we discussed various aspects of RCRA and Act 245 regulations. I told the company respresentatives that the storage

areas had to be cleaned up and that it would probably be required that they conduct a hydrogeological investigation at the site to determine if any groundwater contamination had occurred at the site. This advisory was based on the drum storage area conditions and on the past practices the company was using to drain their tank truck loading hoses.

The outside loading area for tank truck shipments is located in about the middle of the west side of the manufacturing building. For at least the last 10 years the company has been draining and rinsing delivery hoses into a stainless steel drum sunk partially into the ground. Reportedly, the bottom had been cut out of the drum and the drum then filled with crushed stone. The waste material being discharged to the drum would have contained primarily chrome, nickel and zinc phosphate compounds. I advised the company that this practice was illegal and that they should cease the operation immediately.

In our discussion with Mssrs. Fredrick and Speed, I found out that the drums were primarily "product no longer usable" that had been returned to Occidental by their customers. The drums in the yard, which they contented were ± 900 in number, had been accumulated reportedly since April 1981. The company had a contract with Chemical Waste Management in Alabama and would be shipping the drums out after characterisation was completed. Monies had already been allocated and the lab work was reportedly done. The company expected to ship the first load out May 26, 1982 and be completed with the removal by the end of June 1982.

The company was characterising the materials in the drums by company drum code. The code is a nine digit number; the first of which is the last number of the year the product was manufactured, the second is the plant area in which the product was manufactured, and the last four, the product batch number. The company was not sampling each drum but would randomly select single drums of the same code number to analyse. They were not running complete analysis on the drum samples but were analysing for characteristics, i.e., percent phosphate, that should have been in that product code number. If the analyses was within acceptable analytical error, they were assuming no other material had been introduced into the drum. The company, in reality, had no way of knowing if the drums had been tampered with or what was in the drums when they accepted receipt of them and put them in the storage yard. Many of the drums were so badly rusted that no product code or company name could be found.

In the future the company intends to store returned product in a "quarantine area" in building H. The drums will remain in this inside storage area until they are analysed and the company decides whether to return them to "stock", rework the material into a different product, or dispose of the drum contents as a waste. Waste drums will be stored in the new storage building with a maximum inventory of 80 drums.

After our discussion with Mssrs. Fredrick and Speed, Linda and I went back out to the storage area to take pictures and collect samples. I collected three samples in the storage area. These samples were collected by scrapping the ground surface and depositing the material into a clean glass jar. The samples were transferred to the Environmental Services Division Laboratory on May 19, 1982. Custody was maintained on all samples. The sample locations and results were as follows:

Sample #	Location	Cyanide mg/kg	Cadmium mg/kg	Chromium Mg/kg	Copper Mg/kg
1	Northwest area of area #2	---	3	4,700	100
2	Southeast area of area #2	---	k2	2,500	140
3	Southcenter area of area #3	NAV	k2	37	190

	Nickel (Mg/kg)	Lead (Mg/kg)	Zinc (Mg/kg)	Oil and Grease (Mg/kg)
1	67	100	3800	30,000
2	170	170	4800	54,000
3	30	14	170	1,300

	PCB (A-1242) (µg/kg)	PCB (A-1254) (µg/kg)	PCB (A-1260) (µg/kg)
1	19,000	k2000	k2000
2	2,500,000	k2000	k2000
3	6,500	k2000	k2000

Note: k means "less than"
NAV means "requested analysis not available"

May 27, 1982

I returned to Occidental Chemical on May 27, 1982 with Linda. The purpose of the visit was to collect some "random" drum samples from the storage are as we were not equipped with the necessary materials for drum sampling during our May 18, 1982 inspection. We met with Mssrs. Kashner and Fredrick again and also with Mr. Lee Huffaker. Samples were collected from four drums and transferred to Linda for transmittal to the ESD laboratory. Custody was maintained on all samples. I collected duplicate samples for the company at the same time. The locations and analytical results for the four samples were as follows:

Sample #1 - This sample was collected from a 55 gallon drum marked "Junk Solvent" located in storage area number 2. The dark colored liquid was too "thin" to collect in a sampling tube, so I lowered a small bottle into the drum and transferred the sample

to a clean glass container. The liquid had a "solvent" type odor and Mr. Huffaker indicated that it probably contained waste solvent used by Occidental. Analysis of the sample showed:

Flash point - less than 70° F
pH - 3

The material was characterised by the ESD laboratory as being a "mixture including ethyl benzene and xylenes".

Sample #2 - A highly corrosive red liquid was sampled from a 55 gallon drum located in area number 2. The liquid surface etched the metal tube, presumably aluminum, that we were using to collect the sample. The sample was collected in a polyethylene bottle supplied by Occidental Chemical due to their concern for possible presence of hydroflouric acid. The drum, labled 615473, was identified by the company as PARCO cleaner. Analysis of the sample showed:

pH - 1

Sample #3 - A sample was collected from a 55 gallon drum in area number 3 labled Ethylamine 70%. The sample had a strong ammonia odor despite the fact that Mr. Fredrick had opened the drum in April 1982 to relieve pressure build-up in the drum. The sample was collected using a metal tube and deposited in a Occidental Chemical supplied polyethylene bottle. Analysis of the sample showed:

Flash point - less than 40° F
pH - 14

The material was characterised by the ESD laboratory as containing a trace of xylene.

Sample #4 - A 55 gallon drum covered with a wax like substance on the outside was located in area number 3. A sample of the brown-yellow viscous liquid was collected using a metal sample tube and deposited in a clean glass bottle. Analysis of the sample showed:

Flash point - approximately 190° F
pH - 3

ESD laboratory characterisation of the sample indicated the presence of tolvene, ethylbenzene and xylene. Analysis for PCB showed:

A-1242 - less than 4000 µg/l
A-1254 - less than 2000 µg/l
A-1260 - less than 2000 µg/l

Arter we collected the drum samples we met with Mssrs. Kashner, Fredrick and Huffaker to discuss additional RCRA information that Linda needed. During our disucussion, Lee Huffaker indicated that he felt some of the stored material would not have needed to be manifested under RCRA because it had been returned prior to November 19, 1980 when RCRA regulations took affect.

June 22, 1982

Linda and I met with Dick Fredrick, Lee Huffaker and John Kashner to discuss the PCB results obtained in our May 18, 1982 samples, collect additional RCRA information and inspect the storage area that Linda discovered during her June 15, 1982 inspection.

Linda once again requested a copy of Occidental's operating record under RCRA. The company indicated they were still working on putting the information together. The record would not be done until all materials were shipped out to Chemical Waste Management. Linda then requested copies of all the waste characterisation Reports being compiled for Chemical Waste Management. The company responded by stating that about 80 drums had not been characterised yet because they could not get any markings off the drums but that samples from these drums had been shipped to the company's lab for analysis the previous week.

The company stated that the new storage area Linda had discovered behind the empty stainless steel drums in area 6, contained sample bottles from lab samples that someone had deposited in the area contrary to established procedures and two drums of liquid that no one knew anything about. The remaining drums contained "bag house" dust from the air scrubbers at the plant.

Linda and I inspected the expanded number 6 storage area. Several attempts were made to penetrate through to the waste area in question without success. We finally gained access by going along the south side of the new storage building and pushing the west property line fence back and squeezing between the fence and the drums to gain access to the west portion of area 6.

The area was generally a mess with deteriorated fibre paks of "bag house" dust having lost their contents all over the concrete pad. There were several open top drums of plastic bottles that Mssrs. Fredrick and Huffaker said were discarded lab sample bottles. When we entered the area, I could hear a hissing sound from one of the barrels. Two fibre pak type barrels with plastic liners had fallen over and the outside shell was deteriorated. Leakage from one of the fibre pak barrels had eaten through the wooden pallet it was resting on and had partially dissolved the cement at the edge of the pallet. There were definite dark colored stains leading from the storage area, under the fence and toward Bean Creek. At least two open top barrels contained rusted, disintegrated aerosol cans once containing material similar to WD-40.

Ground surface samples were collected from locations in this area as follows:

Sample #1 - Southwest of gate along west fence line--just east of fence

Sample #2 - Oilly area outside fence line about 10 feet southwest of sample #1

Sample #3 - Greenish colored runoff area inside fence about 10 feet southwest of sample #2

Sample #4 - Greenish yellow stained material below fallen over fibre pak. This area would have runoff tributary to sample site #3. Fibre pak with label still on it next to sample location indicated "corrosive" and contained brownish colored liquid

Analysis of the above samples showed the following:

Parameter	#1	#2	#3	#4
Oil and grease (mg/kg)	68,000	37,000	18,000	2,300
PCB A-1242 (µg/kg)	k200	k200	k200	k200
A-1254 (µg/kg)	k200	k200	k200	k200
A-1260 (µg/kg)	k200	k200	k200	k200
Cadmium (Mg/kg)	5	7	6	3
Chromium (Mg/kg)	640	1,000	14,000	36,000
Copper (Mg/kg)	1,100	2,300	2,100	400
Nickel (Mg/kg)	31	250	61	280
Lead (Mg/kg)	310	330	290	220
Zinc (Mg/kg)	11,000	57,000	12,000	3,600

Note: k means less than

Since the fibre pak barrels and the stainless steel drum marked "nitric acid", source of earlier noted hissing sound, could not be safely sampled during our inspection, the company was requested to collect samples for us once the barrels were in recovery drums and the "nitric acid" drum was depressurised.

Mssrs. Kashner, Fredrick and Huffaker were instructed that this "new" storage area must be cleaned up immediately. They were also told that any outside storage of raw materials or wastes must be curbed and/or diked and must be on an impervious pad.

We asked Mssrs. Kashner, Fredrick and Huffaker about storage or use of PCB's on the Occidental property. They emphatically denied the presence of any PCB in either hydraulic or electrical systems and stated that the systems had been tested and showed no detectable PCB. We then informed them of the PCB analysis from our May 18, 1982 samples. After some dis-

cussion, the company personnel reluctently agreed that someone could have returned a drum to them that contained other than their product and that in reality they had no way of knowing what was in all the drums in the storage area.

I told the company that we wanted them to do a study of the sediments and water in Bean Creek above and below their facility for organics, phosphates and metals and a hydrogeological study to determine groundwater quality and flow direction. The study plan was to be internally discussed with Occidental's corporate environmental personnel during a planned July 12-13, 1982 environmental audit with a letter being sent to us by July 23, 1982 committing to the study and giving us a date for a plan submittal. The south storage area (#6) that we had sampled was to be completely cleaned up by July 16, 1982.

Mr. Richard Speed from Occidental subsequently contacted the writer by telephone on June 24, 1982 and advised me that the environmental audit had been delayed until July 19-20, 1982. We agreed therefore, to meet with personnel from the Morenci facility and Occidental corporate staff on July, 9, 1982 to discuss the requested studies. This agreement and our study requirements were confirmed by letter of June 29, 1982 from the District I office.

July 9, 1982

Linda Koivuniemi and I met with the following personnel from Occidental Chemical Corporation on this date:

John Kashner, Plant Manager, Morenci
Richard Speed, Environmental Engineer, Morenci
Mike McLain, Project Engineer, Morenci
Robert Schuttler, Director, Environmental Health and Safety, Niagra Falls, N.Y.

Neither Lee Huffaker, Chemist, or Richard Fredrick, Production Superintendent, for Morenci were in attendance at this meeting.

Several items were discussed during our meeting. A summary of each major item follows:

PCB Sources - We verified with the company where we collected our May 18, 1982 samples.

The company is still unaware of any possible PCB sources on the site. Mr. Schuttler indicated that Occidental had collected a composite core of about the first six inches of soil depth in roughly the same area we collected our surface sample and found no detectable PCB. I stated that I did not see how this negated our data at all since their sample was from a different location and a vertical soil composite,

whereas our sample was scrappings of the organic layer on top of the concrete pad.

Site Clean up - The number six storage area clean up was completed by June 28, 1982. All on-site waste drums from all storage areas have now been either moved to inside storage or shipped off-site to Chemical Waste Management. The company has manifested 1300 drums for disposal. Of these, the company stated 400 to 500 drums were waste and the rest were bag house dust.

Company officials now indicate that the drum storage existed for about 18 months, placing the start of accumulation around January 1981. This is the third variation of an accumulation start date that the company has indicated.

The company agreed that a secure method of determining if a returned drum had been opened was necessary. They are working on devising a drum seal method for future shipments.

Bulk loading facility - The only materials that were bulk loaded into tank trucks were Bonderites. These materials would have contained metallic phosphate compounds. The hose drainage and wash out water from the bulk loading operation is the material discharged into the ground through the previously described stainless steel drum at the loading facility.

On-site organics would have been contained in various solvents and Bonderlub compoundings.

Hydrogeological and Bean Creek Studies - Although Mr. Kashner has implied all along that the Morenci plant supported our request for a groundwater study, Mr. Schuttler indicated that he did not feel that such a study was absolutely necessary. We showed him the pictures taken of the site and explained our concern relative to the leaky drums and the bulk loading facilities. Mr. Schuttler indicated he would reevaluate the need for a hydrogeological study and respond to us by August 4, 1982 as to the company position regarding this study.

Mr. Schuttler was concerned about the validity of sediment samples and interpretation of any resulting data from the requested Bean Creek study. He indicated that Occidental had been involved in similar requests at other facilities and the merit of the study was always questionable when it was completed. I volunteered that our Biology Section had been involved in numerous creek sediment studies and never seemed to have a problem collecting the samples or interpreting the resultant data. Finally, I volunteered that we would do the creek study and the company could do the groundwater study.

Linda requested the samples that the company saved for us from the fibre paks and stainless steel drum from area 6 (ref. June 22, 1982 inspection). The samples could not be located but the drum and fibre paks were still on-site. Linda accompanied Mr. Speed while company personnel collected new samples for us. The samples were transferred to the writer and were transported to the Environmental Services Laboratory for analysis. Custody was maintained on the samples. Sample locations and analytical results were as follows:

Sample XX1 - brownish yellow liquid from 3/4 full fibre pak drum

Sample XX2 - brownish yellow liquid residue from second fibre pak drum that had been in area 6

Sample XX3 - liquid contained in drum marked "nitric acid"

Parameter	#1	#2	#3
Total Flouride (mg/l)	7,000	5,200	1.7
pH (run w/pH paper)	0.1	0.1	0.1
Cadmium (ug/l)	k20	k20	60
Chromium (ug/l)	21,000,000	21,000,000	9,000
Copper (ug/l)	21,000	14,000	1,700
Nickel (ug/l)	270	190	730
Lead (ug/l)	75	k50	190
Zinc (ug/l)	720	1,300	3,000
PCB (ug/l) A-1242	k5,000	k5,000	k5,000
A-1254	k2,000	k2,000	k2,000
A-1260	k2,000	k2,000	k2,000
Scan 1 (Purgeable Halocarbons)	---	---	NOS
Scan 2 (Purgeable Aromatic Hydrocarbons)	---	---	NOS
Scan 4 (PCB and Organochlorine Pesticides)	U	U	U

Note: k means less than
U means undetected
NOS means "No sample received suitable for analysis requested"

In addition to the liquid samples, a sample of "bag house dust" was collected to verify its contents. The company stated the material should contain sodium metasilicate, sodium phosphate compounds, soda ash and possibly caustic. Analysis of the sample showed the following:

Total phosphate (mg/kg) - 120,000 NA
Silicate (leach)(mg/kg) - 13,000 NA
Cadmium (mg/kg) - k2
Chromium (mg/kg) - k5

Copper (mg/kg) - 1,800
Nickel (mg/kg) - 1,600
Lead (mg/kg) - 23
Zinc (mg/kg) 36

Note: k means less than
NA means "analytical method has not yet been approved by laboratory"

July 27, 1982

Jack Wuycheck and Dennis Swanson from the Biology Section met the writer in Morenci to do a stream study in Bean Creek. Sediment and water samples were collected upstream and downstream of Occidental Chemical. A report pertaining to this study is being complied by Jack Wuycheck.

While we were doing the study we noted two discharges from Occidental to the river and two sewage discharges from the Morenci system were noted. The north (upstream) discharge from Occidental changed colors several times while we observed it and collected samples. Color variations were grey, white, brownish and purple at various times.

After we collected our stream samples, we proceeded to Occidental Chemical and contacted Mssrs. Kashner and Fredrick about the discharge. We described the location where the pipe was entering the river and neither Mr. Kashner or Mr. Fredrick had any idea what the source could be. They were invited to go out and look at the discharge and we left the office and proceeded toward the creek. On the way, Mr. Fredrick disappeared to get a key for the gate that they forgot had to be opened. He joined us shortly afterward with a maintenance man with a drawing of part of the sewer system serving Occidental (see attachmentII). Although the drawing is no longer accurate relative to buildings shown and it is not to scale, it did show that the sewer system could by-pass to the Creek. We located IMH #106, opened the cover and discovered that the system was overflowing. The company then contacted Morenci DPW to have someone come out and stop the by-pass.

While we were waiting we pulled the adjoining cover and found the "regulator" chamber. The sewer system serving Occidental is part of the Village system, which is a combined sewer system. This particular "regulator" consisted of a slide-gate at the outfall end of the chamber with a two section low head dam/backwater gate arrangement on the west side of the chamber. We found a long metal pipe on the company property and tried to push the backwater gates shut but they would not stay closed. I noted that water was flowing through the slide-gate opening along only about 25% of the base. I stuck the pipe down along the gate base to see if it was blocked and dislodged a considerable amount of greyish colored sludge from in front of the gate. The flow immediately filled the whole gate base and the by-pass to the Creek stopped. Sludge similar in physical characteristics to that found in the gate chamber had also been noted previously at the outfall to Bean Creek.

Company personnel indicated that Morenci personnel routinely check the by-pass structures in the system following a heavy rainstorm. This was confirmed by the DPW person responding to the company's earlier telephone call. However, this by-pass and the two other by-passes on the same sewer system noted earlier, indicate that the Village surveillance, and company surveillance, of the sewer system may leave something to be desired since it had not rained for a couple weeks. During my discussion with Mr. Kashner, he indicated that Mr. Schuttler had contacted him and needed some more time prior to our previously proposed August 4, 1982 meeting. We agreed to wait until the report was available on our Bean Creek study, about 3-4 weeks, before meeting again.

Conclusions

1. The materials stored in the drum storage areas at Occidental Chemical Corporation in Morenci were in full or in part an "other waste material" as defined in section 261.2(b) of the Resource Conservation and Recovery Act (RCRA).

2. The materials stored in the drum storage areas at Occidental Chemical Corporation in Morenci were in full or in part a "hazardous waste" based on the following:

   a. Ignitability (ref. 261.21(a)(1)) - The flash point of drum samples #1 and #3 collected on May 27, 1982 were less than 70°F and less than 40°F respectively. Any liquid waste with a flash point less than 140°F is considered ignitable.

   b. Corrosivity (ref. 261.22(a)(1)) - The regulations state that an aqueous solution that has a pH less than or equal to 2 or greater than or equal to 12.5 is considered to be corrosive. Drum samples #2 and #3 collected on May 27, 1982 showed a pH of 1 and 14 respectively. The pH of all three drum samples collected on July 9, 1982 was indicated as 0.1.

   c. Listed waste under Subpart D (ref. 261.31) - Sample #1 and #3 from May 27, 1982 showed a "mixture including ethyl benzene and xylenes" and a trace of xylene respectively. Both xylene and ethylbenzene are listed under F003 in section 261.31.

3. The surface samples collected in storage area #2, #3 and #6 on May 18, 1982 and June 22, 1982 coupled with our visual observations of the storage areas show that the company allowed the discharge of materials from the stored drums onto the ground surface, contrary to the provisions of the RCRA regulations and section 6(a) of Act 245, P.A.1929, as amended, in that there was no designed protection afforded to the groundwaters or surface waters of the state that would preclude runoff from these storage areas from contributing a substance which is or may become injurious to the beneficial uses and/or aquatic environment associated with those waters.

4. Our observations of the bulk loading facilities and the company reported practice of draining hoses into the ground via the previously mentioned stainless steel drum indicate that Occidental Chemical Corporation is in violation of section 6(a) of Act 245, P.A. 1929, as amended and also section 7(1) of Act 245, P.A. 1929, as amended, in that the company does not have a valid permit for this discharge.

5. Occidental Chemical Corporation is in violation of Part 5 of the General Rules of the Water Resources Commission in that they were storing materials contained on the Critical Materials Register without adquate emergency containment (R323.1158) and the company did not have a Pollution Incident Prevention Plan addressing these materials (R323.1162).

Field Work by: Linda Koivuniemi
Roy Schrameck

Report by: Roy Schrameck

sc

Copies: USEPA (2)
Lyle Rowell - DNR Environmental Enforcement Division
John Bohunsky - DNR Water Quality Division

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

Form Approved

FORM 1 GENERAL

EPA

ENVIRONMENTAL PROTECTION AGENCY

GENERAL INFORMATION

Consolidated Permits Program

(Read the "General Instructions" before starting.)

I. EPA I.D. NUMBER: F MID058723867 3 D

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.

LABEL ITEMS	
I. EPA I.D. NUMBER	MID058723867
III. FACILITY NAME	OXY METAL ~~FINISHING~~ CORP
V. FACILITY MAILING ADDRESS	322 W MAIN ST MORENCI, MI 49256
VI. FACILITY LOCATION	322 W MAIN ST MORENCI, MI 49256

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	
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	
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	
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	
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	

III. NAME OF FACILITY

1 SKIP OXY METAL INDUSTRIES CORPORATION

IV. FACILITY CONTACT

A. NAME & TITLE *(last, first, & title)*	B. PHONE *(area code & no.)*
2 FREDRICK RICHARD G, PROD SUPT	517 458 2221

V. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX	B. CITY OR TOWN	C. STATE	D. ZIP CODE
3			
4			

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER	B. COUNTY NAME	C. CITY OR TOWN	D. STATE	E. ZIP CODE	F. COUNTY CODE *(if known)*
5	LENAWEE				
6					091

THE FRONT
(digit, in order of priority)

A. FIRST	B. SECOND
(specify) chemicals and chemical preparations, not elsewhere classified	7 (specify) N/A
C. THIRD	**D. FOURTH**
(specify) N/A	7 (specify) N/A

VIII. OPERATOR INFORMATION

A. NAME: OXY METAL INDUSTRIES CORPORATION

B. Is the name listed in Item VIII-A also the owner? ☒ 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 517 458 2221

E. STREET OR P.O. BOX: 322 WEST MAIN STREET

F. CITY OR TOWN	G. STATE	H. ZIP CODE
MORENCI	MI	49256

IX. INDIAN LAND
Is the facility located on Indian lands? ☐ YES ☒ NO

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water)	D. PSD (Air Emissions from Proposed Sources)
N N/A	9 P N/A
B. UIC (Underground Injection of Fluids)	**E. OTHER (specify)**
U N/A	9 N/A (specify)
C. RCRA (Hazardous Wastes)	**E. OTHER (specify)**
N/A	9 N/A (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. F9: A/50

XII. NATURE OF BUSINESS (provide a brief description)

Production of chemical specialty products for metal treating, metal drawing compound lubricants and rust resisting compounds.

F9: A/51

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
DENNIS W. POWERS VICE-PRESIDENT/GENERAL MANAGER	[signature]	11/17/80

COMMENTS FOR OFFICIAL USE ONLY

Use the unshaded areas only
Print or type in the unshaded areas only
Use elite type, i.e., 12 characters/inch)

Form Approved

EPA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

HAZARDOUS WASTE PERMIT APPLICATION

Consolidated Permits Program

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

I. EPA I.D. NUMBER: F M I D 0 5 8 7 2 3 8 6 7 3 1

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	2 7	0 4	0 1

☐ 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.

C DUP 3 1

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
X-1	S 0 2	600	G		5				
X-2	T 0 3	20	E		6				
1	S 0 1	Container 15,000000	G		7				
2	S 0 2	tank 4,000000	G		8				
3					9				
4					10				

ant.

(continued)

ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESSES (code "T04"). FOR EACH PROCESS ENTERED HERE SIGN CAPACITY.

N/A

. DESCRIPTION OF HAZARDOUS WASTES

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.

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.

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.

. 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.

OTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER — Hazardous wastes that can be described by ore 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.

XAMPLE 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 er 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 re 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 00 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

PA Form 3510-3 (6-80)

CONTINUE ON PAGE 3

HST-002

Occidental Chemical Corporation

RECEIVED 8/17/82

RECEIVED
AUG 16 1982
WASTE MANAGEMENT BRANCH
EPA, REGION V

August 5, 1982

EPA Region V
P.O. Box 7861
Chicago, IL 60680

REF: Permit No. RCRA MIDO 58723867 G,TSD,PA
Attention: Mr. Joseph Boyle

Dear Mr. Boyle:

This is to advise effective April 1, 1982 the name of Hooker Chemicals and Plastics Corporation was changed to Occidental Chemical Corporation. The address for notices remains unchanged.

Please advise if any application or forms are required to transfer this permit to the name of Occidental Chemical Corporation.

Very truly yours,
Occidental Chemical Corporation

Richard G. Fredrick
Facility Supervisor

RGF:dpc

OXY
PARKER Surface Treatment Products
322 W. Main Street, Morenci, Michigan 49256 517/458-2221

DKT

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

REPLY TO ATTENTION OF:

RCRA ACTIVITIES

JUN 02 1982

Richard G. Fredrick, Production
Superintendent
Oxy Metal Industries Corporation
322 West Main Street
Morenci, Michigan 49256

RE: Interim Status Acknowledgement USEPA ID No. MID 058 723 867
FACILITY NAME: OXY METAL INDUSTRIES CORP

Dear Mr. Fredrick:

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

Enclosure

cc: Dennis W. Powers

As further credence, I have attached a Federal Register copy, November 25, 1980, pp. 78540-78541.

I hope this satisfies you as to the origin of the material we are generating as waste; however, if further information is needed, please let me know.

Sincerely,

PARKER DIVISION

John D. Kashner
Manager-Manufacturing

JDK:bal

Attachment

cc: Joe Boyle, U.S. E.P.A., Waste Management Division, 230 South Dearborn, Chicago, Illinois 60604
R. J. Schuttler
R. G. Speed
A. E. Kluegel

for revealing proprietary data. In the face of these difficulties, some commenters went so far as to suggest that generators not be responsible for complying with the regulations unless they have actual knowledge of the product's chemical composition.

The Agency is taking a number of steps to deal with this problem. First, we are now preparing a directory of chemical products [8] which are hazardous wastes when discarded. The Directory will include generic names, other names by which the chemicals are known (e.g., myrbane oil for nitrobenzene) and the names of trade products which are regulated under § 261.33 as well as the applicable hazardous waste number. The Directory will be advisory, not part of the regulation itself, so that a defendant in an enforcement proceeding will still be able to show that a waste listed in the Directory is not a waste listed in § 261.33. By the same token, absence of a product name from the Directory is not a defense. The Agency will expand the Directory over time to try and provide as complete a list as possible.

A second form of Agency guidance is the recently-implemented RCRA Industry Assistance Hotline. Persons unsure whether the trade name product they are discarding is a hazardous waste may call this toll-free number and provide the name of the product. The Agency will then provide advice as to whether the product is a hazardous waste and its basis for the determination. As with the Directory, the Agency's response will be advisory, not a formal regulatory action. The hotline telephone number is 800-424-9348 (in Washington, D.C., 554-1404).

We also expect that persons unsure of the hazardousness of a given product will call the manufacturer of the product. Although manufacturers may not want to give out the formula for their products, the Agency believes it is reasonable to expect suppliers to inform customers if disposal of the product is regulated under either § 261.33(e) or § 261.33(f). Customers of course have the option of refusing to deal further with a supplier who will not divulge this information.

We disagree strongly with the suggestion that generators lacking actual knowledge of a product's chemical composition remain unregulated. Such a standard provides a strong incentive for generators not to determine whether discarded products are hazardous wastes. One purpose of RCRA is to require closer attention and inquiry into the potentially hazardous nature of discarded materials, and generators of discarded trade products are no exception. Suggestions for further means of dealing with the question of identity are, however, solicited.

IV. Interpretative Issues

As noted above, most interpretative questions involving § 261.33 will not be resolved until publication of a forthcoming RIM. Certain questions, however, can be dealt with in this preamble.

A. Are solid wastes that contain one or more of the chemicals listed in § 261.33 hazardous wastes by virtue of containing these materials?

Solid wastes which simply contain one of the chemicals listed in § 261.33 are not thereby hazardous. Where EPA intends to list such wastes, it will do so by listing them in §§ 261.31 and 261.32. This intention is in fact clearly expressed in the comment to § 261.33(d) which is part of the promulgated regulation. The purpose of § 261.33 is to regulate only the listed chemical products and intermediates and their trade name equivalents (and certain off-specification variants, emptied containers [9] and spill residues and debris thereof) as hazardous wastes when they are discarded or intended to be discarded.

However, when a solid waste is mixed with one of these discarded materials, the resulting mixture is a hazardous waste until delisted (with certain exceptions set forth in § 261.5(h)). See § 261.3(a)(2)(ii). As set out in § 261.3(b)(2), the solid waste becomes a hazardous waste when the mixing of the § 261.33 chemical takes place either as an act of discarding that chemical or the time the chemical is intended for later discard (*i.e.*, at the time the § 261.33 substance becomes a hazardous waste).

There are many situations where a solid waste becomes a hazardous waste by virtue of the actual or intended discarding of materials listed in § 261.33. Some of these situations are:

1. Where excess, expired or otherwise unwanted commercial chemical products or manufacturing chemical intermediates are discarded by discharging them into a wastewater stream or are discarded by being mixed into other solid wastes.

2. Where off-specification materials that, if they met specification, would be commercial chemical products or manufacturing chemical intermediates, are discarded by being discharged into a wastewater stream or discarded by being mixed into other solid wastes.

Where contaminated residues or debris from the clean-up of spills of listed chemicals are discarded by being mixed into other solid wastes.

B. Are the commercial products and manufacturing chemical intermediates listed in § 261.33 subject to regulation if they are used, reused, recycled or reclaimed in lieu of being discarded?

No. A commercial chemical product or manufacturing chemical intermediate listed in § 261.33 is a hazardous waste only if discarded or intended to be discarded. If it continues to be used or sold, it is not being discarded and therefore is not a hazardous waste. If it is an off-specification material and is reprocessed, recycled or reclaimed it is not being discarded and therefore is not a hazardous waste. Thus the provisions of § 261.6(b) are not intended to apply to reuses of § 261.33 materials, since in such cases the materials are never discarded. The reference in § 261.6(b) to wastes "listed in subpart D" is confusing. Wastes listed in §§ 261.31 and 261.32 are the only wastes intended to be included.

There are numerous situations where the above interpretations apply. Some of these are:

1. Where a customer receives an off-specification product listed in § 261.33 and returns it to the manufacturer for reprocessing, the product is not being discarded and is not a hazardous waste.

2. Where a commercial product becomes excess inventory or outlives its expiration date in a wholesale or retail outlet or in the hands of a user and the supplier takes the product back for resale or reprocessing, the product is not being discarded by the wholesaler, retailer or user and is not a hazardous waste.

3. Where there is breakage of containers holding § 261.33 chemicals and the supplier takes back the affected chemicals, including recovered spilled chemicals, for repackaging or reprocessing, the chemicals are not being discarded and are not hazardous wastes. If, however, some of the spilled chemicals are discarded or intended to be discarded because they cannot be returned (*e.g.*, they are mixed with dirt or other materials), these spilled chemicals (and associated spill cleanup residues and debris) are hazardous wastes.

These are examples of common practice which EPA believes should be encouraged because they avoid discarding valuable materials and

[8] SW-884, "Directory of Trade Name Products and Synonyms" will be available from Mr. Ed Cox, [illegible] West, Information, U.S. Environmental Protection Agency, 26 West St. Clair St., Cincinnati, Ohio 45268 (telephone number 513-684-6862).

[9] Regulation of containers which formerly held § 261.33 chemicals is addressed elsewhere in this Part X of the Federal Register.

thereby conserve resources, while at the same time avoiding the potential hazards associated with discarding of hazardous chemicals. The above practices also avoid causing many [illegible] sands of wholesalers, retailers and users from becoming generators of hazardous wastes because they will be able to return the materials for reuse instead of possibly discarding them. The Agency believes that many of these persons will be unfamiliar or not well acquainted with the regulations and may fail to properly perform the responsibilities of a generator if they have to discard the materials.

It is quite likely that, in some cases, a manufacturer or supplier will find it necessary to discard some portion of the materials returned to him because he is unable to reprocess, repackage, resell or use it. Where this occurs, that portion which is discarded becomes a hazardous waste when it is discarded or when a decision is made to discard the material. In this situation the manufacturer or supplier is the generator of a hazardous waste because he is the "person . . . whose act . . . produces hazardous waste . . . ." (see the definition of "generator" in § 260.10).

C. Are manufactured articles (such as battery and mercury vapor lights) that contain any of the chemicals listed in § .33 hazardous wastes by definition if they are discarded or intended to be discarded?

EPA intends that the materials listed in § 261.33 include only those commerical chemical products and manufacturing chemical intermediates that are known by the generic name of the chemicals listed in paragraphs (e) and (f) of that section. Manufactured articles that contain any of the chemicals listed in paragraphs (e) and (f) are rarely, if even, known by the generic name of the chemical(s) they contain and, therefore, are not covered by the § 261.33 listings. Should the Agency find it necessary to list any manufactured articles as hazardous wastes, it will initiate rulemaking to add these articles to § 261.33.

Date: November 20, 1980.

Douglas M. Costle,

Administrator.

PART 261—IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

Title 40, Part 261 of the Code of Federal Regulations is amended as follows:

1. Revise § 261.33 to read as follows:

§ 261.33 Discarded commercial chemical products, off-specification species, containers, and spill residues thereof.

The following materials or items are hazardous wastes if and when they are discarded or intended to be discarded:

(a) Any commercial chemical product, or manufacturing chemical intermediate having the generic name listed in paragraphs (e) or (f) of this section.

(b) Any off-specification commercial chemical product or manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in paragraphs (e) or (f) of this section.

(c) Any container or inner liner removed from a container that has been used to hold any commercial chemical product or manufacturing chemical intermediate having the generic name listed in paragraph (e) of this section, unless:

(1) The container or inner liner has been triple rinsed using a solvent capable of removing the commercial chemical product or manufacturing chemical intermediate; or

(2) The container or inner liner has been cleansed by another method that has been shown in the scientific literature, or by tests conducted by the generator, to achieve equivalent removal; or

(3) In the case of a container, the inner liner that prevented contact of the commercial chemical product or manufacturing chemical intermediate with the container, has been removed.

(d) Any residue or contaminated soil, water or other debris resulting from the cleanup of a spill, into or on any land or water, of any commercial chemical product or manufacturing chemical intermediate having the generic name listed in paragraphs (e) or (f) of this Section. [Comment: The phrase "commercial chemical product or manufacturing chemical intermediate having the generic name listed in . . ." refers to a chemical substance which is manufactured or formulated for commercial or manufacturing use which consists of the commercially pure grade of the chemical, any technical grades of the chemical that are produced or marketed, and all formulations in which the chemical is the sole active ingredient. It does not refer to a material, such as a manufacturing process waste, that contains any of the substances listed in paragraphs (e) or (f). Where a manufacturing process waste is deemed to be a hazardous waste because it contains a substance listed in paragraphs (e) or (f), such waste will be listed in either § § 261.31 or 261.32 or will be identified as a hazardous waste by the characteristics set forth in Subpart C of this Part.]

(e) The commercial chemical products or manufacturing chemical intermediates, referred to in paragraphs (a) through (d) of this section, are identified as acute hazardous wastes (H) and are subject to the small quantity exclusion defined in § 261.5(e). [Comment: For the convenience of the regulated community the primary hazardous properties of these materials have been indicated by the letters T (Toxicity), and R (Reactivity). Absence of a letter indicates that the compound only is listed for acute toxicity.] These wastes and their corresponding EPA Hazardous Waste Numbers are:

Hazardous waste No.	Substance
P023	Acetaldehyde, chloro-
P002	Acetamide, N-(aminothioxomethyl)-
P057	Acetamide, 2-fluoro-
P058	Acetic acid, fluoro-, sodium salt
P066	Acetimidic acid, N-[(methylcarbamoyl)oxy]thio-, methyl ester
P001	3-(alpha-acetonylbenzyl)-4-hydroxycoumarin and salts
P002	1-Acetyl-2-thiourea
P003	Acrolein
P070	Aldicarb
P004	Aldrin
P005	Allyl alcohol
P006	Aluminum phosphide
P007	5-(Aminomethyl)-3-isoxazolol
P008	4-Aminopyridine
P009	Ammonium picrate (R)
P119	Ammonium vanadate
P010	Arsenic acid
P012	Arsenic (III) oxide
P011	Arsenic (V) oxide
P011	Arsenic pentoxide
P012	Arsenic trioxide
P038	Arsine, diethyl-
P054	Aziridine
P013	Barium cyanide
P024	Benzenamine, 4-chloro-
P077	Benzenamine, 4-nitro-
P028	Benzene, (chloromethyl)-
P042	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-
P014	Benzenethiol
P028	Benzyl chloride
P015	Beryllium dust
P016	Bis(chloromethyl) ether
P017	Bromoacetone
P018	Brucine
P021	Calcium cyanide
P123	Camphene, octachloro-
P103	Carbamimidoselenoic acid
P022	Carbon bisulfide
P022	Carbon disulfide
P095	Carbonyl chloride
P033	Chlorine cyanide
P023	Chloroacetaldehyde
P024	p-Chloroaniline
P026	1-(o-Chlorophenyl)thiourea
P027	3-Chloropropionitrile
P029	Copper cyanides
P030	Cyanides (soluble cyanide salts), not elsewhere specified
P031	Cyanogen
P033	Cyanogen chloride
P039	Dichlorophenylarsine
P037	Dieldrin
P038	Diethylarsine
P039	O,O-Diethyl S-[2-(ethylthio)ethyl] phosphorodithioate
P041	Diethyl-p-nitrophenyl phosphate
P040	O,O-Diethyl O-pyrazinyl phosphorothioate
P043	Diisopropyl fluorophosphate
P044	Dimethoate
P045	3,3-Dimethyl-1-(methylthio)-2-butanone, O-[(methylamino)carbonyl] oxime
P071	O,O-Dimethyl O-p-nitrophenyl phosphorothioate

PARKER DIVISION
HOOKER CHEMICALS & PLASTICS CORP. • 322 Main Street, Morenci, Michigan 49256 • Tel. (517) 458-2221

June 1, 1982

Michigan Department of Natural Resources
Air Quality Division
2309 Shelby
Ann Arbor, Michigan 48103

Air Pollution Control
JUN 3 1982
RECEIVED

Attention: Linda Koivuniemi
Environmental Specialist

Dear Ms. Koivuniemi:

This is written to outline the Parker Company procedure and rational behind returned finished products from customers and the same for deciding when a product is considered obsolete and targeted for disposal.

We service the metal treatment industry which includes almost any industry that paints metal. Our products generally are mid-strength acids and alkalies which are classified as hazardous by both the D.O.T. and R.C.R.A.

In the nature of our business, the customers have occasion to switch from one of our products to a different one, or to a new formulation that gives them better performance. Since we may still have other customers using the switched from product, or we can rework the switched from product into a different blend, any unused product is accepted back from the customer for credit. In any case, we only accept back product that is still viable product that we sold.

In the event that there really is no other volume user and the product is destined to become dead inventory, we first determine; 1) if the product can be sold at a discount, and 2) if the product can be reworked. If no other option is feasible, we designate the product as scrap and dispose of it via our established R.C.R.A. procedure. Other items that never left our plant which do not sell, or were not made to spec. also are disposed of through the same procedure.

While a certain percentage of material we receive back from our customers does end up as a waste material, it would be impossible to tell at the time of shipment back which ones they would be. The unused finished product being returned to the manufacturer in the same form as it was shipped should not have to travel to our plant under manifest system. It does travel back under the D.O.T. regulations and descriptions as were required outbound. It only becomes waste when we determine no practical use exists.

PARKER DIVISION
HOOKER CHEMICALS & PLASTICS CORP. • 322 Main Street, Morenci, Michigan 49256 • Tel. (517) 458-2221

October 5, 1981

Mr. Joseph Boyle
EPA Region V
P.O. Box 7861
Chicago, Illinois 60680

Subject: RCRA

Dear Mr. Boyle:

Oxy Metal Industries Corporation was merged into its parent corporation, Hooker Chemicals & Plastics Corporation.

We presently have a permit in regard to the above, number MIDO 58723867, issued in the name of Oxy Metal Industries Corporation. Please provide us with the necessary application forms to transfer this permit to the name of Hooker Chemicals & Plastics Corporation, if required.

Sincerely,

HOOKER CHEMICALS & PLASTICS CORPORATION

Richard G. Speed

R. G. Speed
Technical Superintendent - Manufacturing

RGS:jh

xc: C. J. Hollenbeck
L. K. Huffaker
R. G. Fredrick
Environmental File - RCRA

RECEIVED 10/20/81

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 → MID058723867 REACKNOWLEDGEMENT

OXY METAL INDUSTRIES CORP
322 W MAIN ST
MORENCI MI 49256

INSTALLATION ADDRESS → 322 W MAIN ST
MORENCI MI 49256

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

Please print or type with ELITE type (1[illegible] characters/inch) in the unshaded areas only. GSA No. 0246-EPA-OT

U.S. ENVIRONMENTAL PROTECTION AGENCY

NOTIFICATION OF HAZARDOUS WASTE ACTIVITY

INSTALLATION'S EPA I.D. NO.	MID058723867
I. NAME OF INSTALLATION	~~OXY METAL FINISHING CORP~~
II. INSTALLATION MAILING ADDRESS	322 W MAIN ST MORENCI, MI 49256
III. LOCATION OF INSTALLATION	322 W MAIN ST MORENCI, MI 49256

000798 AUG 19 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 M1D058723867 2 | APPROVED: A | DATE RECEIVED (yr., mo., & day): 800818

I. NAME OF INSTALLATION

OXY METAL INDUSTRIES CORPORATION

II. INSTALLATION MAILING ADDRESS

STREET OR P.O. BOX: 3

CITY OR TOWN | ST. | ZIP CODE: 4

III. LOCATION OF INSTALLATION

STREET OR ROUTE NUMBER: 5

CITY OR TOWN | ST. | ZIP CODE: 6

IV. INSTALLATION CONTACT

NAME AND TITLE (last, first, & job title): 2 FREDRICK RICHARD PROD SUPT.

PHONE NO. (area code & no.): 517 458 2221

V. OWNERSHIP

A. NAME OF INSTALLATION'S LEGAL OWNER: 8 OXY METAL INDUSTRIES 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.: MID058723867

IX. DESCRIPTION OF HAZARDOUS WASTES

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

EPA Form 8700-12 (6-80)

CONTINUE ON REVERSE

AUG 18 1980

FOR OFFICIAL USE ONLY

W MID 058723867 27

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
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. Use additional sheets if necessary.

31 U123	32 U134	33 U154	34 U239	35	36
37	38	39	40	41	42
					43

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) [X] 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
Richard Fredrick	Richard G. Fredrick, Prod. Supt.	7-17-80

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

MID058723867

	X	
	X	
X		X
	X	
	X	

	X	
	X	
	X	
	X	
	X	

HENKEL CORPORATION PARKER + AMCHEM

RICHARD G SPEED TECH SUPT MFG 517 458 2221

322 WEST MAIN STREET

MORENCI MI 49256

322 WEST MAIN STREET

LENAWEE

MORENCI MI 49256

EPA Form 3510-1 (6-80)

CONTINUE ON REVERS

CONTINUED FROM THE FRONT

2899	(specify) Chemicals and chemical preparations, nec.		(specify) N A
	(specify) N A		(specify) N A

HENKEL CORPORATION, PARKER+AMCHEM ☐ ☒

P (specify) 313 583 9300

32100 STEPHENSON HWY

MADISON HEIGHTS MI 48071 ☐ ☒

NA	NA	
NA	NA	(specify)
NA	NA	(specify)

PRODUCTION OF CHEMICAL SPECIALTY PRODUCTS FOR METAL CLEANING, TREATING METAL DRAWING COMPOUND LUBRICANTS, AND RUST RESISTING COMPOUNDS.

A. NAME & OFFICIAL TITLE (type or print)	B. SIGNATURE	C. DATE SIGNED
ROGER F. WALKER V. P. OPERATIONS	Roger F Walker	3/21/97

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

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													T/A	C
F	M	I	D	0	5	8	7	2	3	8	6	7		1

1 2 - 12 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)*

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

C 8 — YR. 73 74 | MO. 75 76 | DAY 77 78 — FOR EXISTING FACILITIES, PROVIDE THE DATE *(yr., mo., & day)* OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED *(use the boxes to the left)*

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

YR. 73 74 | MO. 75 76 | DAY 77 78 — FOR NEW FACILITIES, PROVIDE THE DATE *(yr., mo., & day)* OPERATION BEGAN OR IS EXPECTED TO BEGIN

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

☒ 72 1. FACILITY HAS INTERIM STATUS

☐ 73 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				D	U	P								1

1 2 - 12 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	15,000	G		7				
2					8				
3					9				
4					10				
	16 - 18	19 - 27	28	29 - 32		16 - 18	19 - 27	28	29 - 32

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.

N A

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 characteristic and/or the toxic contaminant 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 in 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

CONTINUE ON PAGE 3

Continued from page 2.
NOTE: Photocopy this page before complet 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 I D 0 5 8 7 2 3 8 6 7 — T/A 1	W DUP — T/A 2 DUP

IV. 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))
1	D001	2.5	T	S01				
2	U154							INCLUDED WITH ABOVE
3	U239							INCLUDED WITH ABOVE
4	D002	300	T	S01				
5	U123							INCLUDED WITH ABOVE
6	U134							INCLUDED WITH ABOVE
7	D007	50	T	S01				
8	D003							INCLUDED WITH ABOVE
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
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)*

F	M	I	D	0	5	8	7	2	3	8	6	7	T/A	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 42 30	84 12 00

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 HENKEL CORPORATION	215-270-8100

3. STREET OR P.O. BOX	4. CITY OR TOWN	5. ST.	6. ZIP CODE
F 2200 Renaissance Blvd.	G Gulph Mills	PA	19406

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
ROBERT A. LURCOTT Executive Vice President		3/27/89

X. OPERATOR CERTIFICATION

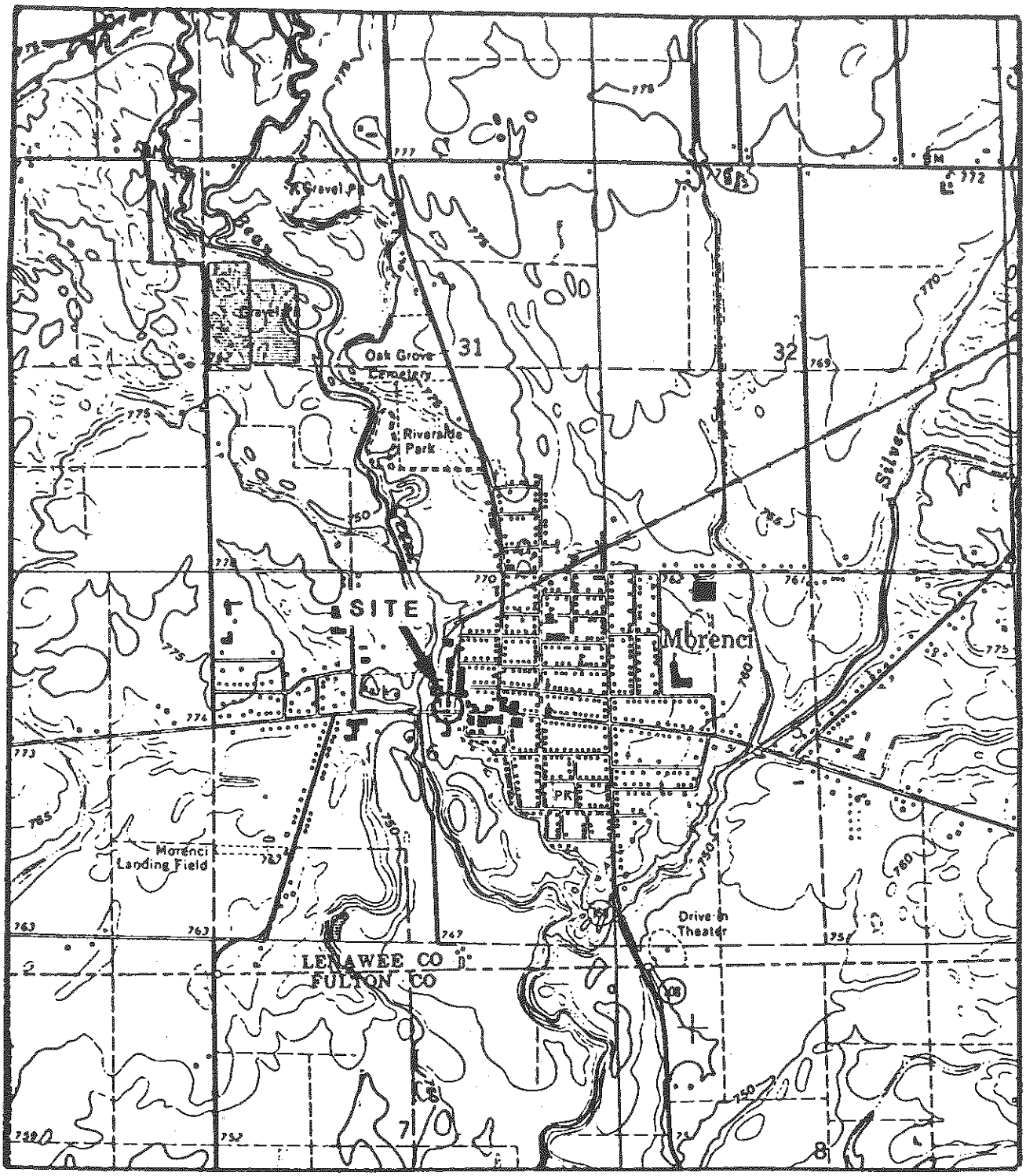
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, 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
ROGER F. WALKER V. P. OPERATIONS	Roger F. Walker	3/21/89

CONTINUE ON PAGE 5

FIGURE 1

LOCATION OF THE HENKEL CORPORATION, MORENCI

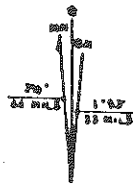


SCALE 1:24 000

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER



QUADRANGLE LOCATION

Continued from page 4.

V. FACILITY DRAWING *(see page 4)*

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

GENERAL INFORMATION

PLEASE PLACE LABEL IN THIS SPACE

	X			X	
	X			X	
X		X		X	
	X			X	
	X			X	

PARKER CHEMICAL COMPANY

JOHN D KASHNER MGR MFG 517 458 2221

322 WEST MAIN STREET

MORENCI M

322 WEST MAIN STREET

LENAWEE

MORENCI MI 49256

Richard G. Speed
Technical Superintendent

Parker Chemical Company
322 West Main Street, Morenci, Michigan 49256
517/458-2221

CONTINUED FROM THE FRONT

[illegible] CODES (4-digit, in order of priority)

A. FIRST		B. SECOND	
2899	(specify) chenicals and chemical preparations, not elsewhere classified	7	(specify) N/A
C. THIRD		**D. FOURTH**	
	(specify) N/A	7	(specify) N/A

[illegible] INFORMATION

A. NAME

PARKER CHEMICAL COMPANY

[illegible] (specify)

P (specify) 517 458 22[illegible]

322 WEST MAIN STREET

MORENCI MI 49256

N/A N/A

N/A N/A (specify)

N/A N/A (specify)

[illegible] proposed [illegible] it injects fluids underground [illegible]

[illegible] (provide a brief description)

Production of chemical specialty products for metal treating, metal drawing compound lubricants and rust resisting compounds.

[illegible]

[illegible] have personally examined and am familiar with the information submitted in this application and [illegible] on my inquiry of those persons immediately responsible for obtaining the information contained in [illegible] information is true, accurate and complete. I am aware that there are significant penalties for submitt[illegible] including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE (type or print)	B. SIGNATURE	C. DATE SIGNED
Ronald E. Goldsberry Vice President & General Manager	R. E. Goldsberry	9/28/83

COMMENTS FOR OFFICIAL USE ONLY

EPA Form 3510-1 (6-80) REVERSE

Please print or type in the unshaded areas only
(fill—in areas are spaced for elite type, i.e., 12 [illegible]ers/inch).

Form Approved OMB No. 158-S80004

FORM 3 RCRA

EPA

[illegible]VIRONMENTAL PROTECTION AGENCY

HAZARDOUS WASTE PERMIT APPLICATION

Consolidated Permits Program

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

I. EPA I.D. NUMBER

F M I D 0 5 8 7 2 3 8 6 7

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)*

YR. | MO. | DAY

☐ 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	R
CUBIC METERS	C	GALLONS PER HOUR	E	HECTARES	S
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.

C	DUP		T/A	C	1

LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY	LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT	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	128,400	G		7				
2					8				
3					9				
4					10				

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.

N/A

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 characteristic and/or the toxic contaminant of these 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

CONTINUE ON PAGE 3

Continued from page 2.
NOTE: Photocopy this page before completin[illegible] 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 I D 0 5 8 7 2 3 8 6 7	T/A C 1	W DUP	T/A C 2 DUP

IV. 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))
1	D001	2.5	T	S01				
2	U154							INCLUDED WITH ABOVE
3	U239							INCLUDED WITH ABOVE
4	D002	300	T	S01				
5	U123							INCLUDED WITH ABOVE
6	U134							INCLUDED WITH ABOVE
7	D007	50	T	S01				
8	D003							INCLUDED WITH ABOVE
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								

Continued from page 2.
NOTE: Photocopy this page before completin[illegible] 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 I D 0 5 8 7 2 3 8 6 7 T/A C 1	W DUP T/A C 2 DUP

IV. 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))
1	D001	2.5	T	S01				
2	U154							INCLUDED WITH ABOVE
3	U239							INCLUDED WITH ABOVE
4	D002	300	T	S01				
5	U123							INCLUDED WITH ABOVE
6	U134							INCLUDED WITH ABOVE
7	D007	50	T	S01				
8	D003							INCLUDED WITH ABOVE
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								

Continued from the front.

IV. DESCRIPTION OF HAZARDOUS WAST[illegible]tinued)

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

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

F M I D 0 5 8 7 2 3 8 6 7 T/A 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 42 30	84 12 00

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
Ronald E. Goldsberry Vice President & General Manager	R E Goldsberry	9/28/83

X. OPERATOR CERTIFICATION

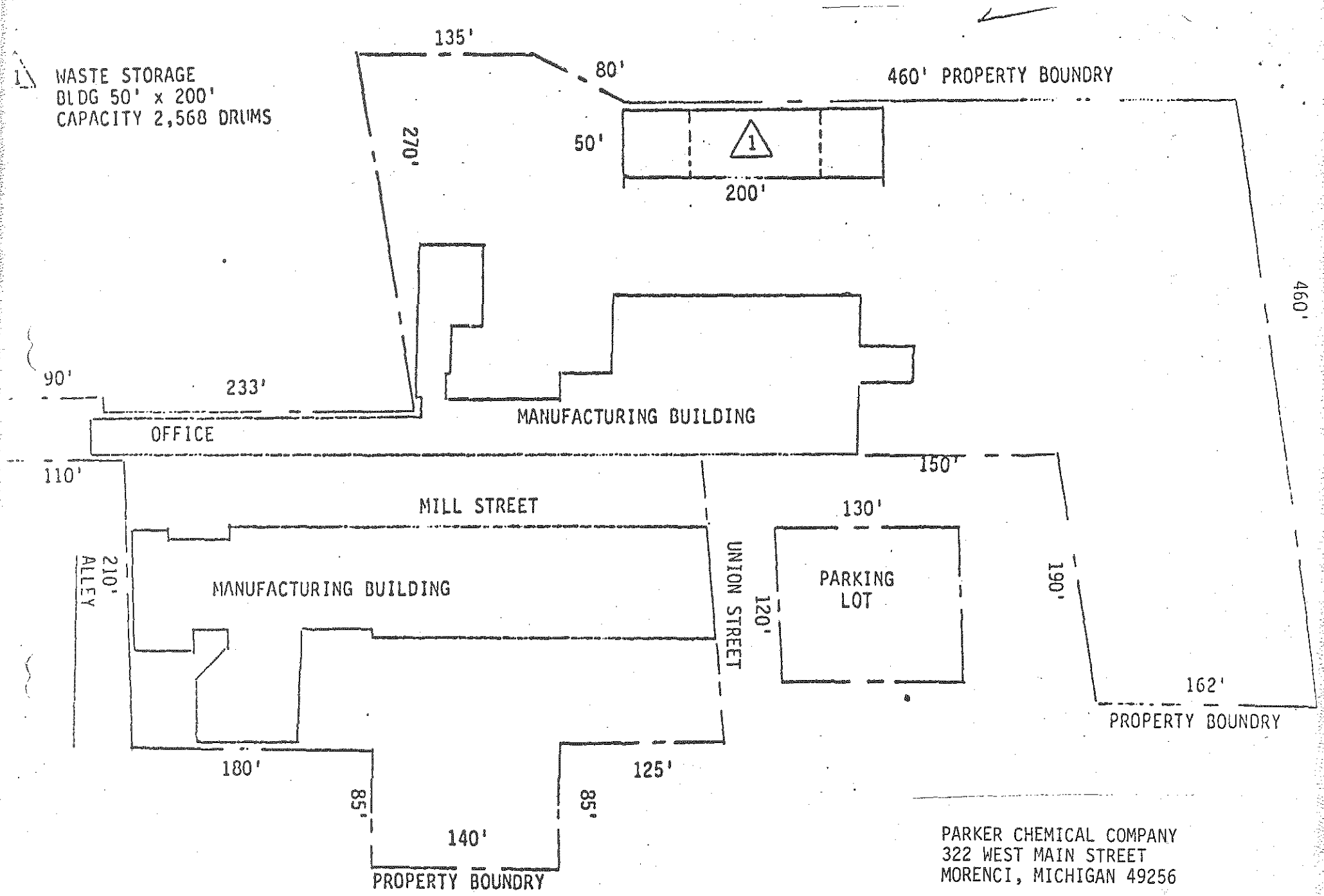
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, 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

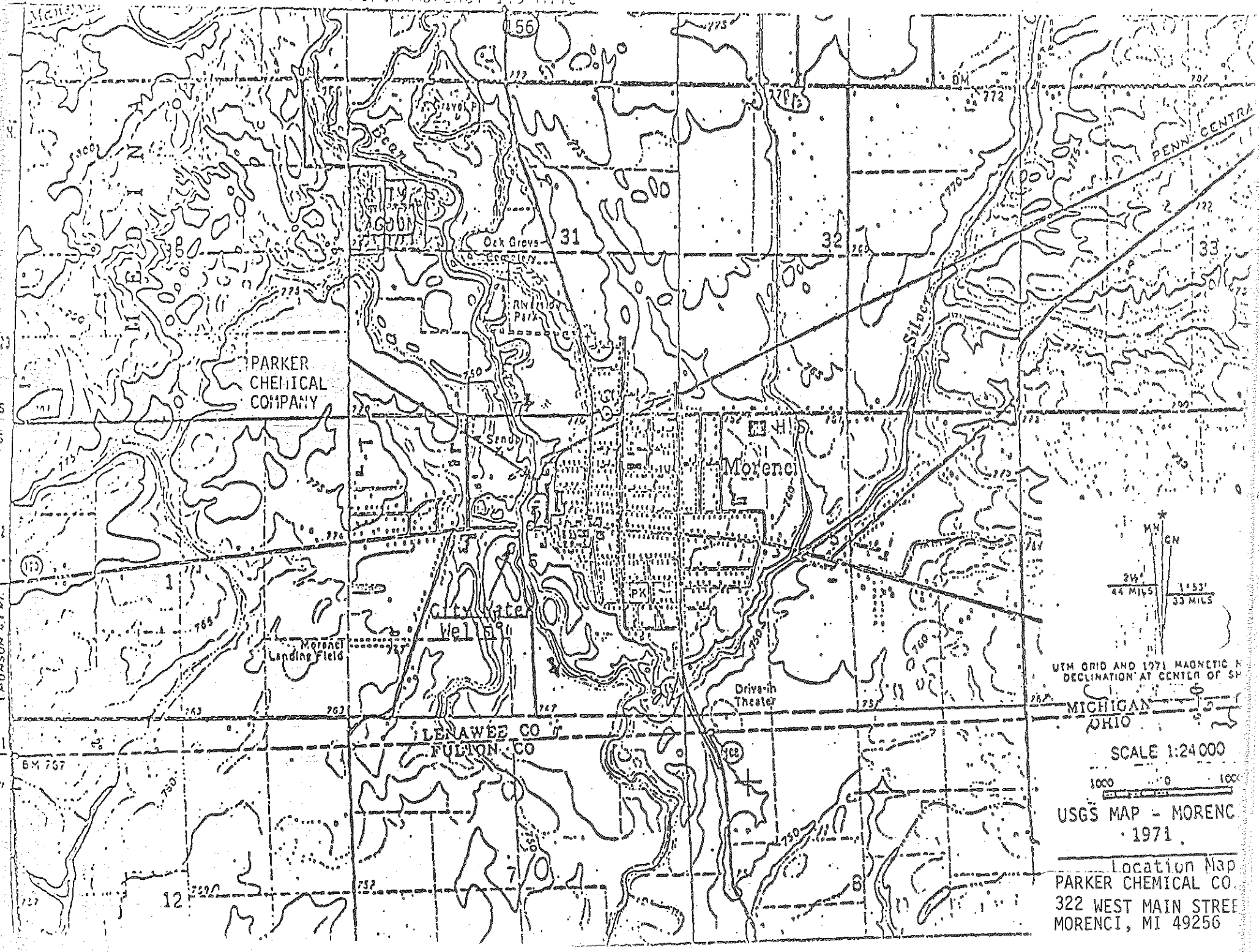
Continued from page 4.

V. FACILITY DRAWING *(see page 4)*



PARKER CHEMICAL COMPANY
322 WEST MAIN STREET
MORENCI, MICHIGAN 49256

SCALE 1" 100'-0" EPA ID NO. MID058723867 03-16-83



Location Map
PARKER CHEMICAL CO.
322 WEST MAIN STREE
MORENCI, MI 49256

Please print or type in the unshaded areas only
(fill-in areas are spaced for elite type, i.e., 1 [illegible] ters/inch).

Form Approved OMB No. 158-R0175

GENERAL

EPA

ENVIRONMENTAL PROTECTION AGENCY

GENERAL INFORMATION

Consolidated Permits Program

(Read the "General Instructions" before starting.)

I. EPA I.D. NUMBER

F D

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. EST[illegible] CHARACTERISTICS

[illegible] Section I, Part I, to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions you must submit the appropriate form(s) to the EPA unless indicating the question. Mark "X" in the box in the third column [illegible] "yes" to any questions, you need not submit any of these forms. You may answer "no" if your activity [illegible] 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
A. Is this a facility which currently results in discharges to waters of the U.S.?		X	
B. Is this a proposed facility (other than those described in A above) which will result in a discharge to waters of the U.S.? (FORM 2D)		X	
C. 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		X
D. Is this 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 1)		X	
E. Does or will this facility (*either existing or proposed*) include a concentrated animal feeding operation or concentrated aquatic production facility which results in a discharge to waters of the U.S.? (FORM 2B)		X	
F. 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	
G. 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	
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 coal, tar, oil shale, or recovery of geothermal energy? (FORM 4)		X	
I. 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 1)		X	

III. NAME OF FACILITY

PARKER CHEMICAL COMPANY

IV. FACILITY CONTACT

A. NAME & TITLE (last, first, & title)	B. PHONE (area code & no.)
JOHN D KASHNER MGR MFG	517 458 2221

V. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX: 322 WEST MAIN STREET

B. CITY OR TOWN	C. STATE	D. ZIP CODE
MORENCI	MI	49256

VI. FACILITY LOCATION

A. STREET OR OTHER IDENTIFIER: 322 WEST MAIN STREET

B. COUNTY NAME: LENAWEE

C. CITY OR TOWN	D. STATE	E. ZIP CODE	F. COUNTY CODE
MORENCI	MI	49256	

CONTINUED FROM THE FRONT

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

A. FIRST	B. SECOND
7 2 8 9 9 (specify) chenicals and chemical preparations, not elsewhere classified	7 (specify) N/A
C. THIRD	**D. FOURTH**
(specify) N/A	7 (specify) N/A

VIII. OPERATOR INFORMATION

A. NAME: PARKER CHEMICAL COMPANY

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, M = PUBLIC *(other than federal or state)*, S = STATE, O = OTHER *(specify)*, P = PRIVATE: P (specify)

D. PHONE *(area code & no.)*: A 517 458 2221

E. STREET OR P.O. BOX: 322 WEST MAIN STREET

F. CITY OR TOWN: MORENCI | G. STATE: MI | H. ZIP CODE: 49256

IX. INDIAN LAND
Is the facility located on Indian lands? [ ] YES [X] NO

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES *(Discharges to Surface Water)*	B. PSD *(Air Emissions from Proposed Sources)*
N N/A	P N/A
C. UIC *(Underground Injection of Fluids)*	**E. OTHER *(specify)***
U N/A	N/A (specify)
C. RCRA *(Hazardous Wastes)*	**E. OTHER *(specify)***
R N/A	N/A (specify)

XI. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. 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)*

Production of chemical specialty products for metal treating, metal drawing compound lubricants and rust resisting compounds.

XIII. CERTIFICATION *(see instructions)*

I hereby 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
Ronald E. Goldsberry Vice President & General Manager	R. E. Goldsberry	9/28/83

COMMENTS FOR OFFICIAL USE ONLY

(fill–in areas are spaced for elite type, i.e., 12 cha ers/inch).

Form Approved OMB No. 158-S80004

FORM 3 RCRA

EPA

ENVIRONMENTAL PROTECTION AGENCY

HAZ OUS WASTE PERMIT APPLICATION

Consolidated Permits Program

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

I. EPA I.D. NUMBER

F M I D 0 5 8 7 2 3 8 6 7 T/A C 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)*

YR. MO. DAY

☐ 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.

C DUP T/A C 1

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
X-1	S 0 2	~~600~~	G		5				
X-2	T 0 3	11-16-84 20	E		6				
1	S 0 1	15,000 ~~128,400~~	G		7				
2					8				
3					9				
4					10				

CONTINUE ON REVERSE

Continued from the front.

III. PROCESSES *(continued)*

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

N/A

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

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	
	D001	100	P	T03 D80	
X-4	D002				included with above

CONTINUE ON PAGE 3

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 I D 0 5 8 7 2 3 8 6 7 T/A 1	W DUP T/A 2 DUP

IV. 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	D001	2.5	T	S01	
2	U154				INCLUDED WITH ABOVE
3	U239				INCLUDED WITH ABOVE
4	D002	300	T	S01	
5	U123				INCLUDED WITH ABOVE
6	U134				INCLUDED WITH ABOVE
7	D007	50	T	S01	
8	D003				INCLUDED WITH ABOVE
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					

Continued from the front.

IV. DESCRIPTION OF HAZARDOUS WAS (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)*

F M I D 0 5 8 7 2 3 8 6 7 T/A C 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 42 30	84 12 00

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
Ronald E. Goldsberry Vice President & General Manager	R.E. Goldsberry	9/28/83

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

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

GENERAL INFORMATION

MID058723867

MID058723867

OXY METAL ~~FINISHING~~ CORP
322 W MAIN ST
MORENCI, MI 49256

322 W MAIN ST
MORENCI, MI 49256

	X	
	X	
X		X
	X	
	X	

	X	
	X	
	X	
	X	
	X	

OXY METAL INDUSTRIES CORPORATION

FREDRICK RICHARD G, PROD SUPT 517 458 2221

B. COUNTY NAME

LENAWEE

C. CITY OR TOWN | D. STATE | E. ZIP CODE

Ø91

EPA Form 3510-1 (6-80)

NOV 18 1980

CONTINUE ON REVERSE

CONTINUED FROM THE FRONT

2899 (specify) chemicals and chemical preparations, not elsewhere classified

(specify) N/A

(specify) N/A

(specify) N/A

NAME

OXY METAL INDUSTRIES CORPORATION

P (specify)

517 458 2221

322 WEST MAIN STREET

MORENCI MI 49256

N/A N/A

N/A N/A (specify)

N/A N/A (specify)

Production of chemical specialty products for metal treating, metal drawing compound lubricants and rust resisting compounds.

FQ: A/51

I 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 persons 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.

A. NAME & OFFICIAL TITLE (type or print)	B. SIGNATURE	C. DATE SIGNED
DENNIS W. POWERS VICE-PRESIDENT/GENERAL MANAGER		11/17/80

FOR OFFICIAL USE ONLY

EPA Form 3510-1 (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-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

F M I D Ø 5 8 7 2 3 8 6 7 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.)*

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	2 7	Ø 4	Ø 1

[ ] 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.

C DUP 3 1

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
X-1	S 0 2	600	G		5				
X-2	T 0 3	20	E		6				
1	S Ø 1	15,ØØØØØ	G		7				
2	S Ø 2	4,000000	G		8				
3					9				
4					10				

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.

N/A

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 int 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

FORM 3 RCRA

EPA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

HAZARDOUS WASTE PERMIT APPLICATION

Consolidated Permits Program

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

I. EPA I.D. NUMBER

F M I D 0 5 8 7 2 3 8 6 7 — Page 1

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)

☐ 2. NEW FACILITY *(Complete item below.)* (72)

C 8 (16) — YR. (73 74) MO. (75 76) DAY (77 78) — FOR EXISTING FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED *(use the boxes to the left)*

YR. (73 74) MO. (75 76) DAY (77 78) — FOR NEW FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR IS EXPECTED TO BEGIN

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

X ☒ X 1. FACILITY HAS INTERIM STATUS (72)

☐ 2. FACILITY HAS A RCRA PERMIT (73)

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	R
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.

C — DUP — T/A C 1

LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY	LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT	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	15,000	G		7				
2					8				
3					9				
4					10				

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.

N/A

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 in 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

CONTINUE ON PAGE 3

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 I D Ø 5 8 7 2 3 8 6 7 T/A 3 C 1	W DUP T/A 3 C 2 DUP

IV. 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))
Ø01 1	D Ø Ø 1	2.5ØØ	T	S Ø 1 S Ø 2	
Ø02 2	U 1 5 4				INCLUDED WITH ABOVE
Ø03 3	U 2 3 9				INCLUDED WITH ABOVE
Ø04 4	D Ø Ø 2	17ØØØØ	T	S Ø 1 S Ø 2	
Ø04 5	U 1 2 3				INCLUDED WITH ABOVE
Ø04 6	U 1 3 4				INCLUDED WITH ABOVE
Ø07 7	D 0 Ø 7	1ØØØØ	T	S Ø 1	
Ø07 8	D Ø Ø 3				INCLUDED IN ABOVE
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					

Continued from the front.

IV. DESCRIPTION OF HAZARDOUS WASTE (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)														
E	M	I	D	Ø	5	8	7	2	3	8	6	7	T/A 3	C 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)*. F6: A/55

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)*. F6:

VII. FACILITY GEOGRAPHIC LOCATION

LATITUDE (degrees, minutes, & seconds)	LONGITUDE (degrees, minutes, & seconds)
41 42 3ØØ	Ø84 12 Ø00

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 &
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
Dennis W. Powers Vice President-General Manager	[signature]	11/17/80

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

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 I D 0 5 8 7 2 3 8 6 7 T/A 1	W DUP T/A 2 DUP

IV. 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	D001	2.5	T	S01	
2	U154				INCLUDED WITH ABOVE
3	U239				INCLUDED WITH ABOVE
4	D002	300	T	S01	
5	U123				INCLUDED WITH ABOVE
6	U134				INCLUDED WITH ABOVE
7	D007	50	T	S01	
8	D003				INCLUDED WITH ABOVE
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					

Continued from the front.

IV. DESCRIPTION OF HAZARDOUS WASTE (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)

F MID058723867 T/A 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 42 30	84 12 00

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 PARKER CHEMICAL COMPANY	313-583-9300

3. STREET OR P.O. BOX	4. CITY OR TOWN	5. ST.	6. ZIP CODE
F 32100 Stephenson Highway	G Madison Heights	MI	48071

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
Ronald E. Goldsberry President & General Manager	[signature]	09/24/84

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.

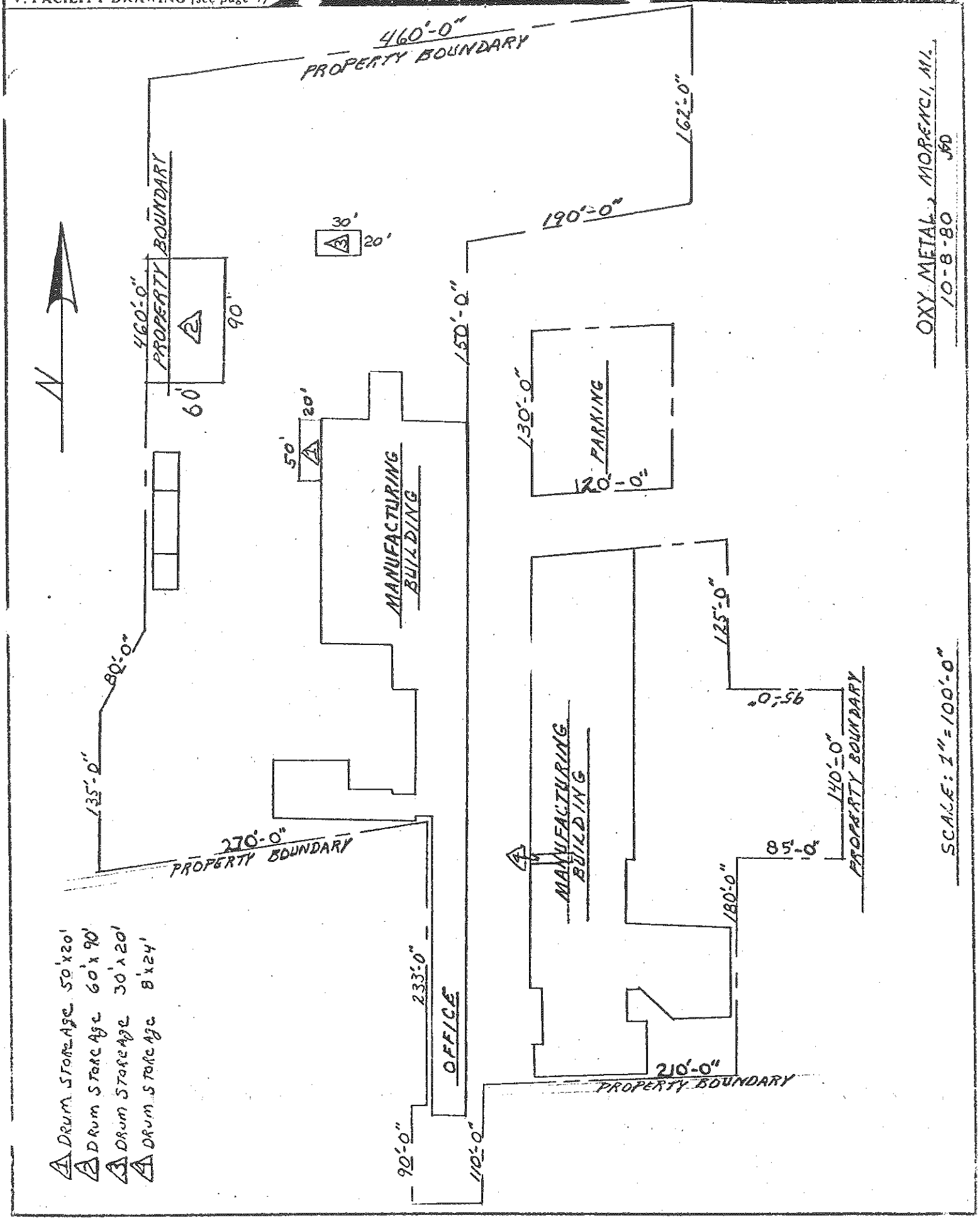
A. NAME (print or type)	B. SIGNATURE	C. DATE SIGNED

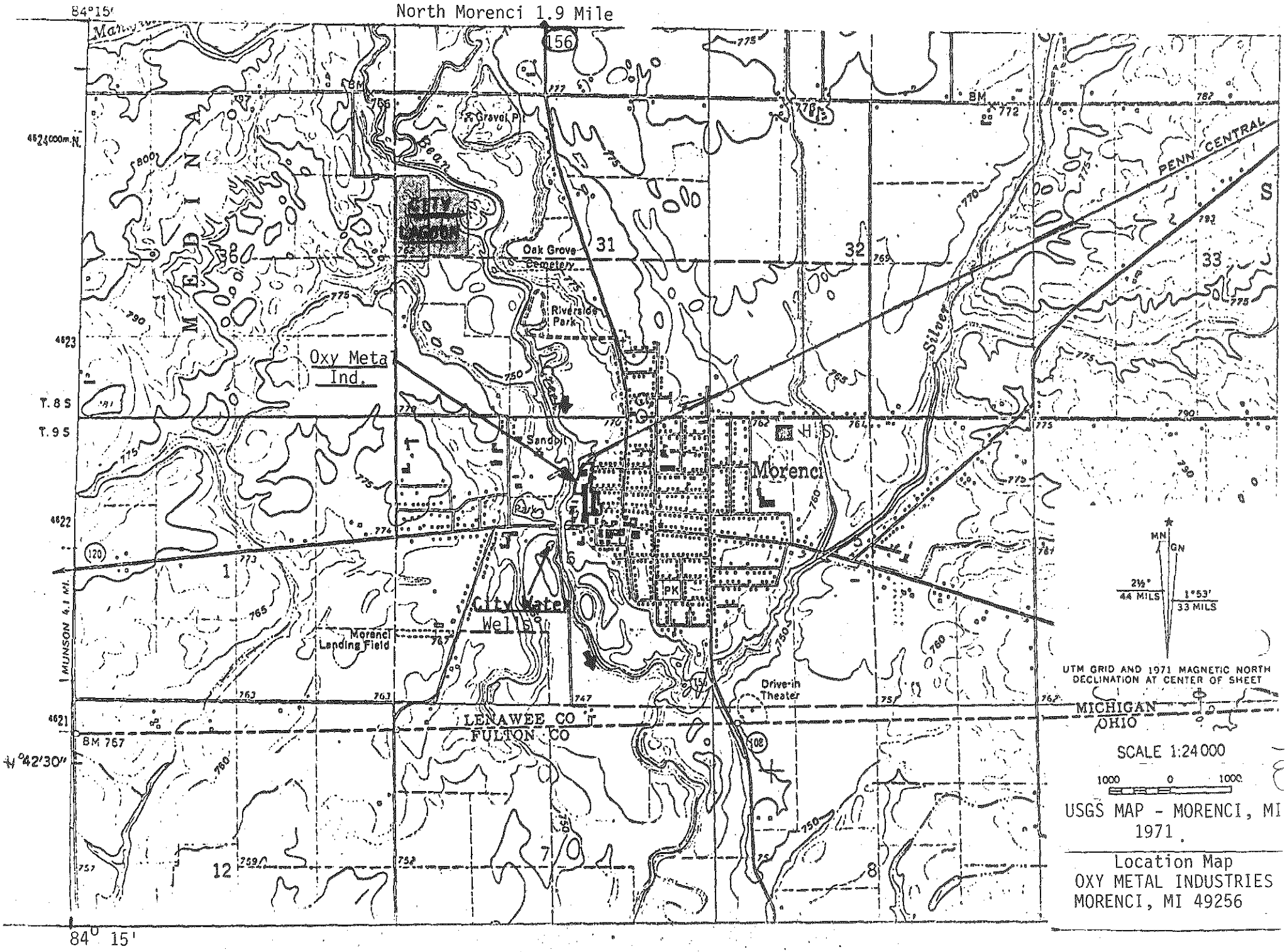
CONTINUE ON PAGE 5

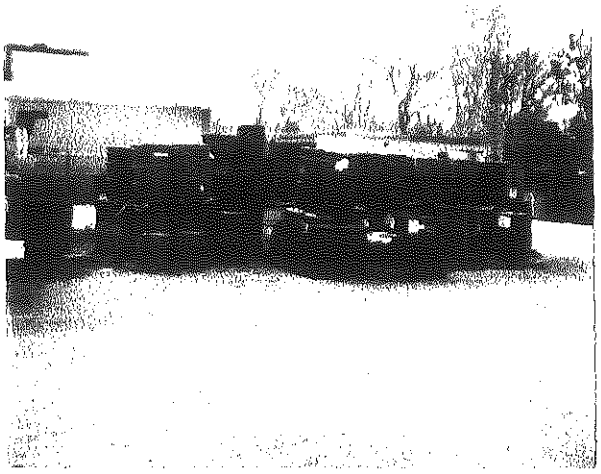
Continued from page 4.

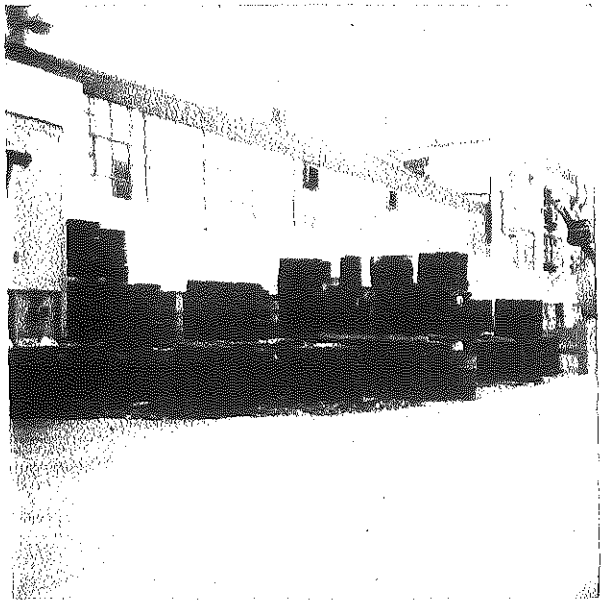
Form Approved OMB No. 158-S80004

V. FACILITY DRAWING *(see page 4)*

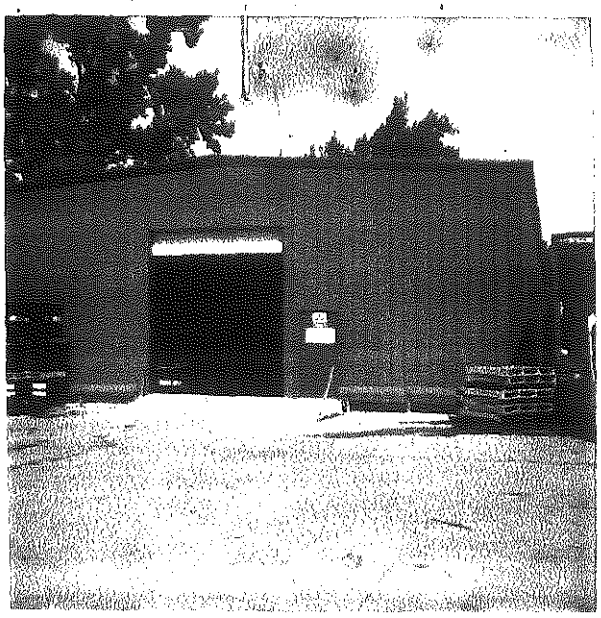



North Morenci 1.9 Mile
84°15'
156
Gravel Pit
Bean
CITY LAGOON
Oak Grove Cemetery
31
32
33
PENN CENTRAL
Silver
Riverside Park
Oxy Metal Ind.
T. 8 S
T. 9 S
Sandpit
Morenci
H.S.
Park
120
1
6
PK
City Water Wells
Morenci Landing Field
MUNSON 4.1 MI.
Drive-in Theater
LENAWEE CO
FULTON CO
MICHIGAN
OHIO
BM 767
N 42°30'
12
7
8
MN
GN
2½°
44 MILS
1°53'
33 MILS
UTM GRID AND 1971 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET
SCALE 1:24000
1000 0 1000
USGS MAP - MORENCI, MI
1971
Location Map
OXY METAL INDUSTRIES
MORENCI, MI 49256
84° 15'

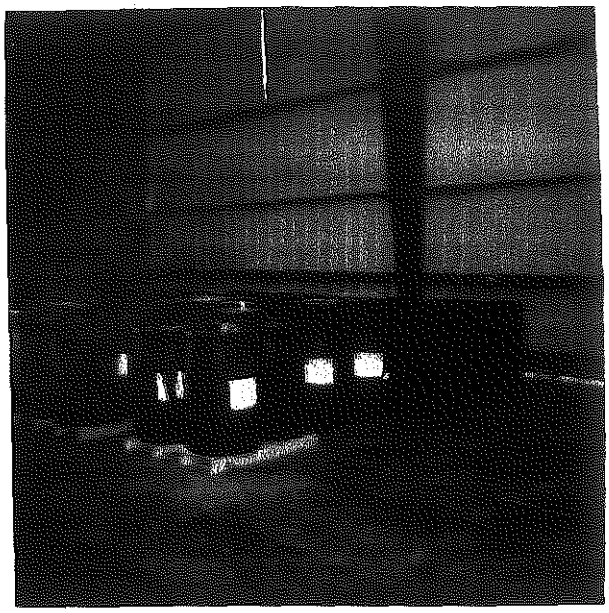




WASTE STORAGE



WASTE STORAGE



WASTE STORAGE

WASTE STORAGE

NVIRONMENTAL PROTECTION AGENC

GENERATOR BIENNIAL HAZARDOUS WASTE REPORT FOR 1983

This report is for ~~the calendar year ending December 31, 1983.~~ October 1, 1983 through 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 _____

II. GENERATOR'S EPA I.D. NUMBER

T/A C

F M I D O 5 8 7 2 8 8 6 7

1 2 13 14 15

C303 ENTRY (OFFICIAL USE ONLY) ☐

III. NAME OF INSTALLATION

P A R K E R C H E M I C A L C O M P A N Y

30 69

IV. INSTALLATION MAILING ADDRESS

3 3 2 2 W E S T M A I N S T R E E T

15 16 45

Street or P.O. Box

4 M O R E N C I M I 4 9 2 5 6

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

7 R I C H A R D F R E D R I C K

15 16 45

Name (last and first)

5 1 7 — 4 5 8 — 2 2 2 1

46 55

Phone No. (area code & no.)

VII. 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.

J. D. Kashner MGR-MFG John D. Kashner 2-27-84

Print/Type Name Title Signature of Authorized Representative Date Signed

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

Tear out here

Do Not Write in Shaded Area

ENVIRONMENTAL PROTECTION AGENCY

Generator Biennial Hazardous Waste Report for 1983 (cont.)

This report is for the calendar year ending December 31, 1983. October 1, 1983 through

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

T/A C

M I D 0 5 8 7 2 3 8 6 7

1 2 13 14 15

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

Chemical Waste Management, Inc.

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

A L D 0 0 0 6 2 2 4 6 4

16 28

XI. FACILITY ADDRESS

Highway 17, Mile Marker 163
Emelle, Alabama 35459

XII. TRANSPORTATION SERVICES USED

Chemical Waste Management, Incorporated, Springfield, Ohio
OHD000724161

XIII. WASTE IDENTIFICATION

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	COLA 66693/Chromium Free Aluminum Conversion Coating	0 2 (33 34)	D 0 0 2 (35 38)	(39 42)	2 1 6 5 0 (51 59)	P (60)
2	COLA 66696/Zinc Phosphate Bonderite	0 2	D 0 0 2		6 1 7 0	P
3	COLA 66698/Liquid Caustic Cleaner	0 2	D 0 0 2		9 5 0 0	P
4	COLA 66701/Chromium Containing Bonderite	0 2	D 0 0 2	D 0 0 7	3 6 0	P
5	COLA 66705/Liquid Cleaner Coater	0 2	D 0 0 2		5 0 0	P
6	COLA 66720/Liquid Acid Cleaner	0 2	D 0 0 2		1 7 1 0	P
7	COLA 66722/Iron Phosphate Bonderite	0 2	D 0 0 2		6 0 5	P
8	COLA 71531/Industrial Cleaner Samples	0 2	D 0 0 2		1 0 0 0	P
9	COLA 71532/Dry Caustic Cleaners	0 2	D 0 0 2		7 5 7 2	P
10	COLA 71552/Incinerator Ash	1 5	D 0 0 7		5 1 0 0	P
11	(B-72) Oxalic Acid Bonderite	0 2	D 0 0 2		4 5 0	P
12						

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

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

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~~ October 1, 1983 through 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

FMID058723867 (T/A C: 1)

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

PARKER CHEMICAL COMPANY

IV. FACILITY MAILING ADDRESS

3 322 WEST MAIN STREET

Street or P.O. Box

4 MORENCI

City or Town

State: MI

Zip Code: 49256

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

5

Street or Route number

6

City or Town

State

Zip Code

VI. FACILITY CONTACT

2 RICHARD FREDRICK

Name (last and first)

517-458-2221

Phone No. (area code & no.)

VII. COST ESTIMATES FOR FACILITIES

A. Cost Estimate for Facility Closure: $ 39,633

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

VIII. 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.

Print/Type Name	Title	Signature of Authorized Representative	Date Signed
J. D. Kashner	MGR-MFG	John D. Kashner	2-27-84

Tear out here

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

Do not make entries in shaded areas

VIRONMENTAL PROTECTION AGENCY

Facility Biennial Hazardous Waste Report for 1983 (cont.)

This report is for ~~the calendar year ending December 31, 1983~~ October 1, 1983 through December 31, 1983

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

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

PARKER CHEMICAL COMPANY ON-SITE ☒

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

F M I D 0 5 8 7 2 3 8 6 7 1

1 2 13 14 15

XII. GENERATOR ADDRESS

322 West Main Street
Morenci, MI 49256

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

G M I D 0 5 8 7 2 3 8 6 7

16 28

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

S01 8 7 5 4 2 (AMOUNT OF WASTE) P (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	COLA 66693/Chromium Free Aluminum Conversion Coating	33 36 D 0 0 2 41 44	37 40 45 48	D 8 3 49 51	1 0 9 0 52 60	P 61
	2	COLA 66693/Chromium Free Aluminum Conversion Coating	D 0 0 2		S 0 1	2 1 1 9 0	P
	3	COLA 66696/Zinc Phosphate Bonderite	D 0 0 2		D 8 3	1 7 4 0	P
	4	COLA 66698/Liquid Caustic Cleaner	D 0 0 2		D 8 3	7 4 5	P
	5	COLA 66701/Chromium Containing Bonderites	D 0 0 2	D 0 0 7	D 8 3	2 8 3 5	P
	6	COLA 66705/Liquid Cleaner Coater	D 0 0 2		D 8 3	1 9 0 0	P
	7	COLA 66715/Petroleum Based Rust Preventing Compound	D 0 0 1		D 8 0	2 5	P
	8	COLA 66717/Chlorinated Paint Stripper	U 0 8 0		D 8 0	4 0	P
	9	COLA 66722/Iron Phosphate Bonderite	D 0 0 2		D 8 3	2 3 2 0	P
	10	COLA 66727/Solvent/Oil Mixture or Solution	D 0 0 1		D 8 0	3 7 0	P
	11	COLA 71532/Industrial Dry Caustic Cleaners	D 0 0 2		D 8 0	3 9 8 5	P
	12	COLA 71544/Ferric Nitrate Solution	D 0 0 2		D 8 3	8 0	P

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

Tear out here

ENVIRONMENTAL PROTECTION AGENCY

Facility Biennial Hazardous Waste Report for 1983 (cont.)

This report is for ~~this calendar year ending December 31, 1983.~~ October 1, 1983 through December 31, 1983

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

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

T/A C

F M I D 0 5 8 7 2 3 8 6 7 1

1 2 13 14 15

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

G M I D 0 5 8 7 2 3 8 6 7

16 28

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

PARKER CHEMICAL COMPANY

ON-SITE ☒

XII. GENERATOR ADDRESS

322 West Main Street
Morenci, MI 49256

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

S01 AMOUNT OF WASTE P 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) (33–40, 41–48)	C. Handling Method (49–51)	D. Amount of Waste (52–60)	E. Unit of Measure (61)
	1	COLA 71552/Incinerator Ash	D007	D80	1800	P
	2					
	3					
	4					
	5					
	6					
	7					
	8					
	9					
	10					
	11					
	12					

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

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.~~ October 1, 1983 through December 31, 1983

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

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

F M I D 0 5 8 7 2 3 8 6 7 T/A C 1

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

C M I D 0 5 8 7 2 3 8 6 7

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

PARKER CHEMICAL COMPANY ON-SITE ☒

XII. GENERATOR ADDRESS

322 West Main Street
Morenci, MI 49256

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

S01 AMOUNT OF WASTE UOM P 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	COLA 66696/Zinc Phosphate Bonderites	D002		S01	6170	P
	2	COLA 66698/Liquid Caustic Cleaners	D002		S01	9500	P
	3	COLA 66701/Chromium Containing Bonderites	D002	D007	S01	360	P
	4	COLA 66705/Liquid Cleaner Coater	D002		S01	500	P
	5	COLA 66722/Iron Phosphate Bonderite	D002		S01	605	P
	6	COLA 71531/Solid Industrial Cleaner Samples	D002		S01	1000	P
	7	COLA 71532/Industrial Dry Caustic Cleaners	D002		S01	7672	P
	8						
	9						
	10						
	11						
	12						

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

Tear out here

Tear out here

ENVIRONMENTAL PROTECTION AGENCY

GENERATOR BIENNIAL HAZARDOUS WASTE REPORT FOR 1983

This report is for ~~the calendar year ending December 31, 1983.~~ January 1, 1983 through September 30, 198

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

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

☐ For 1983 Only ☐ Permanently

☐ Other _____

II. GENERATOR'S EPA I.D. NUMBER

T/A C

MID058723867 (1 2 … 13 14 15)

g, TSD

III. NAME OF INSTALLATION

PARKER DIVISION OCCIDENTAL CHEMICAL CORP (30 … 69)

IV. INSTALLATION MAILING ADDRESS

322 WEST MAIN STREET (15 16 … 45)

Street or P.O. Box

MORENCI (15 16) | MI (41 42) | 49256 (47 … 51)

City or Town | State | Zip Code

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

(15 16 … 45)

Street or Route number

(15 16) | (41 42) | (47 … 51)

City or Town | State | Zip Code

VI. INSTALLATION CONTACT

RICHARD FREDRICK (15 16 … 45)

Name (last and first)

517-458-2221 (46 … 55)

Phone No. (area code & no.)

VII. 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.

Dr. Alex Katona	Mgr. Solid Waste Occidental Chemical Corp.	alex Katona	2/23/84
Print/Type Name	Title	Signature of Authorized Representative	Date Signed

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

EI .RONMENTAL PROTECTION AGENCY

FACILITY BIENNIAL HAZARDOUS WASTE REPORT FOR 1983

This report is for ~~the calendar year ending December 31, 1983~~ January 1, 1983 through September 30, 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 I D 0 5 8 7 2 3 8 6 7 1

1 2 13 14 15

g, 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

P A R K E R D I V I S I O N O C C I D E N T A L C H E M I C A L C O R P

30 69

IV. FACILITY MAILING ADDRESS

3 3 2 2 W E S T M A I N S T R E E T

15 16 45

Street or P.O. Box

4 M O R E N C I M I 4 9 2 5 6

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 R I C H A R D F R E D R I C K

15 16 45

Name (last and first)

5 1 7 - 4 5 8 - 2 2 2 1

46 55

Phone No. (area code & no.)

VII. COST ESTIMATES FOR FACILITIES

$ 3 9 6 3 3 $, ,

16 19 22 25 28 31

A. Cost Estimate for Facility Closure

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

VIII. 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.

Dr. Alex Katona	Mgr. Solid Waste Occidental Chemical Corp	Alex Katona	2/23/84
Print/Type Name	Title	Signature of Authorized Representative	Date Signed

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

Do not make entries in shaded areas

ENVIRONMENTAL PROTECTION AGENCY

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 I D 0 5 8 7 2 3 8 6 7 T/A C 1 1

1 2 13 14 15

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

Chemical Waste Management, Inc.

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

F A L D 0 0 0 6 2 2 4 6 4

16 28

XI. FACILITY ADDRESS

Highway 17, Mile Marker 163
Emelle, Alabama 35459

XII. TRANSPORTATION SERVICES USED

Chemical Waste Management, Incorporated, Springfield, Ohio
OHD000724161

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	COLA 66693/Chromium Free Aluminum Conversion Coating	0 2	35 D 0 0 2 38	39 42	20725	P
			33 34	43 46	47 50	51 59	60
	2	COLA 66696/Zinc Phosphate Bonderite	0 2	D 0 0 2		16705	P
	3	COLA 66698/Liquid Caustic Cleaner	0 2	D 0 0 2		5525	P
	4	COLA 66701/Chromium Containing Bonderite	0 2	D 0 0 2	D 0 0 7	34345	P
	5	COLA 66705/Liquid Cleaner Coater	0 2	D 0 0 2		11395	P
	6	COLA 66710/Fatty Acid and Wax Emulsifiers	0 2	D 0 0 2		425	P
	7	COLA 66720/Liquid Acid Cleaner	0 2	D 0 0 2		945	P
	8	COLA 66722/Iron Phosphate Bonderite	0 2	D 0 0 2		5455	P
	9	COLA 71531/Solid Industrial Cleaner Samples	0 2	D 0 0 2		550	P
	10	COLA 71532/Industrial Dry Caustic Cleaners	0 2	D 0 0 2		8625	P
	11	COLA 71548/Contaminated Ammonium Bifluoride	0 2	D 0 0 2		245	P
	12	COLA 71552/Incinerator Ash	1 5	D 0 0 7		9300	P

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

r out here

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.~~ January 1, 1983 through September 30, 1983

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

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

T/A C

F M I D 0 5 8 7 2 3 8 6 7 1

1 2 13 14 15

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

G M I D 0 5 8 7 2 3 8 6 7

16 28

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

OCCIDENTAL CHEMICAL CORPORATION
PARKER SURFACE TREATMENT PROD. ON-SITE ☒

XII. GENERATOR ADDRESS

322 West Main Street
Morenci, MI 49256

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

S01 AMOUNT OF WASTE UOM P 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) (33–40, 41–48)	C. Handling Method (49–51)	D. Amount of Waste (52–60)	E. Unit of Measure (61)
	1	COLA 66693/Chromium Free Aluminum Conversion Coating	D002	D83	24520	P
	2	COLA 66693/Chromium Free Aluminum Conversion Coating	D002	S01	3295	P
	3	COLA 66696/Zinc Phosphate Bonderite	D002	D83	17980	P
	4	COLA 66698/Liquid Caustic Cleaner	D002	D83	4070	P
	5	COLA 66701/Chromium Containing Bonderites	D002 D007	D83	34705	P
	6	COLA 66705/Liquid Cleaner Coater	D002	D83	13000	P
	7	COLA 66711/Fluoride Accelerator/Additive	D002	D83	90	P
	8	COLA 66713/O-Cresol 50	D002	D80	250	P
	9	COLA 66714/1,1,1, Trichloroethane	U226	D80	1050	P
	10	COLA 66715/Petroleum Based Rust Prevention Compound	D001	D80	440	P
	11	COLA 66717/Chlorinated Paint Stripper	U080	D80	350	P
	12	COLA 66720/Liquid Acid Cleaner	D002	D83	1145	P

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

Tear out here

Do not make entries in shaded areas

ENVIRONMENTAL PROTECTION AGENCY

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 I D 0 5 8 7 2 3 8 6 7 T/A C 1

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

Chemical Waste Management, Inc.

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

F A L D 0 0 0 6 2 2 4 6 4

XI. FACILITY ADDRESS

Highway 17, Mile Marker 163
Emelle, Alabama 35459

XII. TRANSPORTATION SERVICES USED

Chemical Waste Management, Incorporated, Springfield, Ohio
OHD000724161

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	COLA 59212/Dry Caustic Cleaner With Potassium Permanganate	02	D002		500	P
	2	COLA 59218/Dry Acid/Chromate Cleaner	16	D007		150	P
	3	COLA 61656/Talc	15	D007		700	P
	4	Bonderite Accelerator With Sitol	02	D002		4850	P
	5	COLA 59210/Floor Sweepings	15	D007		4800	P
	6	COLA 61659/Soda Ash/Sodium Nitrite Mixture	16	D001		300	P
	7	COLA 71537/Mixed Oil and Solvents (Acetone and Xylene)	08	D001		100	P
	8	COLA 66726/Chlorate Accelerator	02	D002		150	P
	9	COLA 71539/Chromic Nitrate Solution	02	D002	D007	640	P
	10	COLA 66715/Petroleum Based Rust Preventing Compound	01	D001		330	P
	11	COLA 71544/Ferric Nitrate Solution	02	D002		80	P
	12	COLA 59221/Contaminated Glacial Acetone Acid	02	D001	D002	535	P

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

out here

Do not make entries in shaded areas

ENVIRONMENTAL PROTECTION AGENC

Facility Biennial Hazardous Waste Report for 1983 (cont.)

This report is for January 1, 1983 through September 30, 1983

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

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

F M I D 0 5 8 7 2 3 8 6 7 1

1 2 13 14 15

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

G M I D 0 5 8 7 2 3 8 6 7

16 28

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

OCCIDENTAL CHEMICAL CORPORATION
PARKER SURFACE TREATMENT PROD ON-SITE K

XII. GENERATOR ADDRESS

322 West Main Street
Morenci, MI 49256

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

S01 AMOUNT OF WASTE UOM P 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	COLA 66722/Iron Phosphate Bonderite	D002	D83	6510	P
	2	COLA 66727/Solvent/Oil Mixture or Solution	D001	D80	400	P
	3	COLA 71531/Solid Industrial Cleaner Samples	D002	D80	400	P
	4	COLA 71532/Industrial Dry Caustic Cleaners	D002	D80	7075	P
	5	COLA 71537/Mixed Oil/Solvents (Acetone and Xylene)	D001	D80	1100	P
	6	COLA 71539/Chromic Nitrate Solution	D002 D007	D83	1640	P
	7	COLA 71542/Surfactant/ Acetone Mixture	D001	D80	800	P
	8	COLA 71544/Ferric Nitrate Solution	D002	D83	1510	P
	9	COLA 71551/Bonderite Sludge	F006	D80	2975	P
	10	COLA 71552/Incinerator Ash	D007	D80	9625	P
	11	COLA 59202/Contaminated Sodium Bifluoride	D002	D80	500	P
	12	COLA 59210/Floor Sweepings	D007 D008	D80	1165	P

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

Tear out here

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 January 1, 1983 through September 30, 1983

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

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

F M I D 0 5 8 7 2 3 8 6 7 T/A C 1

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

OCCIDENTAL CHEMICAL CORPORATION
PARKER SURFACE TREATMENT PROD ON-SITE ☒

XII. GENERATOR ADDRESS

322 West Main Street
Morenci, MI 49256

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

G M I D 0 5 8 7 2 3 8 6 7

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

S01 AMOUNT OF WASTE UOM P 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	COLA 59211/Pad Sweepings	D007		D80	1525	P
	2	COLA 59212/Dry Caustic Cleaner With Potassium Permanganate	D002		D80	475	P
	3	COLA 59213/Dry Caustic/ Chromate Cleaner	D002	D007	D80	475	P
	4	COLA 59218/Dry Acid/ Chromate Cleaner	D007		D80	450	P
	5	COLA 59219/Polyrad 1110-A	D001		D80	450	P
	6	COLA 59220/Tert-Butyl Alcohol	D001		D80	3100	P
	7	COLA 59225/Contaminated Potassium Permanganate	D001	D002	D80	475	P
	8	COLA 61635/Contaminated Chromic Acid	D001	D007	D80	1200	P
	9	COLA 61640/Ammonium Dichromate/Sodium Metasilicate	D007		D80	300	P
	10	COLA 61655/Urethane Resin Solution	D001		T03	5400	P
	11	COLA 61656/Talc	D007		D80	840	P
	12	COLA 61659/Soda Ash/Sodium Nitrite Mixture	D001		D80	1150	P

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

Tear out here

Do not make entries in shaded areas

NVIRONMENTAL PROTECTION AGEN

Facility Biennial Hazardous Waste Report for 1983 (cont.)

This report is for ~~the calendar year ending December 31, 1983.~~ January 1, 1983 through September 30, 1983

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

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

F M I D 0 5 8 7 2 3 8 6 7 1

1 2 13 14 15

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

G M I D 0 5 8 7 2 3 8 6 7

16 28

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

OCCIDENTAL CHEMICAL CORPORATION
PARKER SURFACE TREATMENT PROD ON-SITE ☒

XII. GENERATOR ADDRESS

322 West Main Street
Morenci, MI 49256

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

S01 _____ AMOUNT OF WASTE P 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	COLA 61662/Alcohol/Surfactant Mixture	33 36 D 0 0 1 41 44	37 40 45 48	D 8 0 49 51	4 0 0 52 60	P 61
	2						
	3						
	4						
	5						
	6						
	7						
	8						
	9						
	10						
	11						
	12						

Tear out here

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

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.~~ January 1, 1983 through December 31, 1983

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

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

T/A C

F M I D 0 5 8 7 2 3 8 6 7 1

1 2 13 14 15

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

G M I D 0 5 8 7 2 3 8 6 7

16 28

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

OCCIDENTAL CHEMICAL CORPORATION
PARKER SURFACE TREATMENT PROD ON-SITE ☒

XII. GENERATOR ADDRESS

322 West Main Street
Morenci, MI 49256

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

S01 AMOUNT OF WASTE _____ UOM P
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)	C. Handling Method (49–51)	D. Amount of Waste (52–60)	E. Unit of Measure (61)
	1	COLA 66696/ZINC PHOSPHATE BONDERITES	D002 (41–44)	(45–48)	S01	11270	P
	2	COLA 66698/Liquid Caustic Cleaners	D002		S01	485	P
	3	COLA 66701/Chromium Containing Bonderites	D002	D007	S01	395	P
	4	COLA 66705/Liquid Cleaner Coater	D002		S01	1100	P
	5	COLA 66710/Fatty Acid and Wax Emulsifiers	D002		S01	425	P
	6	COLA 66720/Liquid Acid Cleaner	D002		S01	1710	P
	7	COLA 66722/Iron Phosphate Bonderite	D002		S01	730	P
	8	COLA 71531/Solid Industrial Cleaner Samples	D002		S01	250	P
	9	COLA 71532/Industrial Dry Caustic Cleaners	D002		S01	2465	P
	10	COLA 71548/Contaminated Ammonium Bifluoride	D002		S01	245	P
	11	COLA 71552/Incinerator Ash	D007		S01	5100	P
	12	COLA 59212/Dry Caustic Cleaner With Potassium Permanganate	D002		S01	500	P

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

Tear Out Here

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~~ January 1, 1983 through September 30, 1983

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

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

T/A C

F M I D 0 5 8 7 2 3 8 6 7 1

1 2 13 14 15

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

G M I D 0 5 8 7 2 3 8 6 7

16 28

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

OCCIDENTAL CHEMICAL CORPORATION
PARKER SURFACE TREATMENT PRODON-SITE ☒

XII. GENERATOR ADDRESS

322 West Main Street
Morenci, MI 49256

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

S01 AMOUNT OF WASTE P 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	COLA 59218/Dry Acid/Chromate Cleaner	D007	S01	150	P
	2	COLA 61656/Talc	D007	S01	400	P
	3	Bonderite Accelerator Containing Sitol	D002	S01	1940	P
	4	(B-72) Dry Bonderite Containing Oxalic Acid	D002	S01	450	P
	5					
	6					
	7					
	8					
	9					
	10					
	11					
	12					

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

Tear out here

Henkel

Henkel Corporation
Parker Amchem

March 31, 1989

US Environmental Protection Agency
Region 5, RCRA Permits Branch
230 South Dearborn Street
Chicago, Illinois 60604

RECEIVED
APR 3 1989
OFFICE OF RCRA
Waste Management Division
U.S. EPA, REGION V

RE: MID 058723867, Morenci, Michigan

Dear Sir:

In December 1988 Parker Chemical Company was merged into Henkel Corporation. We are now doing business as Henkel Corporation, Parker+Amchem.

We therefore attach a revised interim status RCRA Part A, Form 1 and 3 to reflect the change in the name of the owner and operator. Please advise any additional requirements and when the permit transfer is approved.

Very truly yours,

PARKER+AMCHEM

Richard G. Speed

Richard G. Speed, P.E.
Technical Supt. - Mfg.

RGS:vam

attachments

cc: James Roberts
Dept. of Natural Resources
Stevens T Mason Bldg.
Box 30028
Lansing, MI 48909

Michael Robinson
WARNER, NORCROSS, & JUDD
801 W. Norton Ave.
P.O. BOX 0417
Muskegon, MI 49443-0417

W. S. Person
K. R. Weigand
D. J. Zimmerman

32100 Stephenson Highway, Madison Heights, Michigan 48071 Telephone: (313) 583-9300

Notification file

PARKER CHEMICAL

PARKER CHEMICAL COMPANY
MORENCI PLANT

October 30, 1986

Technical, Permits & Compliance Section
U.S. EPA
RCRA Activities Attn: 5HW
Region V
P.O. Box A3587
Chicago, Illinois 60690

NO ACTION TAKEN
PENDING RECEIPT OF ADDITIONAL INFO
BY EPA STAFF
DATE 11-13-86

Subject: Withdrawal of Part A Application
Closure of Hazardous Waste Storage Area
Parker Chemical Co., Morenci, MI. Plant
U. S. EPA Facility ID. No.: MID 058723867 & TSD ff

In August 1980, the above referenced Parker facility submitted a Notification of Hazardous Waste Activity to EPA Region V in response to regulations promulgated under the Resource Conservation and Recovery Act (RCRA).

Since the notification and Permit Application were filed, we have further evaluated operations conducted at the facility and have reviewed applicable regulations and subsequent amendments. We now conclude that the facility should be categorized only as a "Generator" of hazardous waste in accordance with provisions of Section 262.34 of the regulations. Because no hazardous waste treatment/storage/disposal activities are now conducted at this facility, it has been determined that no RCRA permit application will be required.

We would therefore like to withdraw from the RCRA permit program and request that EPA update its records to reflect that this facility no longer conducts hazardous waste treatment/storage/disposal activities. The subject Parker Chemical facility is submitting this letter in accordance with the requirements of 40 CFR Part 265 of the Hazardous Waste Management Regulation. Formal notification is hereby given that closure of the Parker Plant's storage facility is scheduled to begin May 1, 1987.

The closure procedures and timing will be accordance with the attached closure plan. Prompt review and approval of this plan by EPA is hereby requested.

Very Truly Yours

John D. Kashner

John D. Kashner
Manager, Manufacturing

JDK:vam

attachments

PARAMETERS AND TEST METHODS

PARAMETERS	TESTS	REFERENCE
pH	Method 5.2	U.S. E.P.A. Manual S.W. 846 "Test Method for Evaluation of Solid Waste, Physical/Chemical Methods."
Flash Point	Peneky-Martena Closed Cup Tester, Method 4.0	U.S. E.P.A. Manual S.W. 846 "Test Method for Evaluation of Solid Waste, Physical/Chemical Methods."
Reactivity	Method 6.0	U.S. E.P.A. Manual S.W. 846 "Test Method of Evaluation of Solid Waste, Physical/Chemical Methods."
Corrosivity	Method 5.2	U.S. E.P.A. Manual S.W. 846 "Test Method of Evaluation of Solid Waste, Physical/Chemical Methods."
EP Toxicity Chromium	EP Toxicity Appendix II, 264.24	U.S. E.P.A. Manual S.W. 846 "Test Method of Evaluation of Solid Waste, Physical/Chemical Methods."

PARKER CHEMICAL COMPANY

MORENCI, MICHIGAN

MID058723867 CLOSURE PLAN

SUBPART G CLOSURE AND POST CLOSURE

265.110 APPLICABILITY

A. CLOSURE

This section applies to the storage of hazardous waste in the drum storage and tank storage areas.

B. POST CLOSURE

This section which applies to owners and operators of disposal facilities does not apply to the Parker, Morenci facility.

265.111 CLOSURE PERFORMANCE STANDARD

A. Hazardous wastes in storage will be removed to proper disposal site within 90 days after receiving the final volume of hazardous wastes.

B. The storage tank used for corrosive waste (D002) will be flushed with water to clean the tank and neutralized to neutral pH with an alkaline solution of caustic soda. Samples of rinse water will be analyzed for pH and parameters of waste types stored to ensure tank walls and bottom are clean. EPA approved sampling and analytical methods will be used.

C. The drum storage area will be cleaned with alkaline cleaners for neutralization of any spills. Samples of rinse water will be analyzed as in (B) above to insure area and concrete floor are decontaminated. Since any spills or leaks from containers are routinely cleaned up during normal operation, minimal cleaning will be required.

Drums are stored in an enclosed building with concrete floor and curbing with no outlet, so no liquids can escape to ground

D. Type of waste stored - inventory.

1. Tank Storage

D002- Acid waste containing dissolved zinc. This waste stream is now recycled and reused so no storage and disposal is anticipated.

2. Drum Storage - Total maximum: 300 Drums:

D001 - Ignitable - Anticipated storage: 4 drums (metal)

D002 - Corrosive - Anticipated storage: 283 drums (plastic)

D007 - E P Toxic - (chromium) - Anticipated storage: 13 drums (plastic)

265.112 CLOSURE PLAN

A. Written Plan

1. The storage areas will be closed upon closure of the main plant, which is not in the foreseeable future.

2. The maximum estimated inventory of hazardous waste in storage at any given time during the life of the facility is three hundred (300) 55-gallon drums, as listed above.

3. Drums of hazardous waste will be removed from facility to licensed disposal site at least 90 days after the date of receiving the final volume of hazardous waste.

All drum storage areas would be cleaned and decontaminated of any hazardous waste within 180 days after closure.

The storage areas, approximately 50' x 200', will be cleaned as per section 265.11, above.

Site clean up will be minimal since wastes are contained in drums, and any leaks or spills are immediately cleaned up using absorbent.

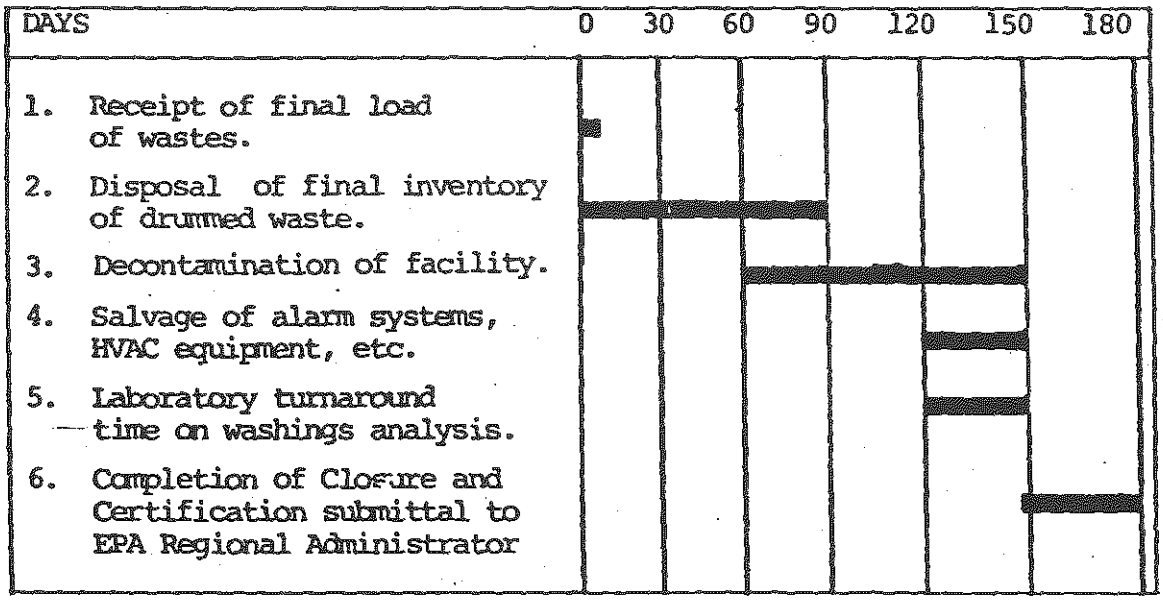
Estimated rinse water required is 100 gallons which will be pumped into drums for disposal.

A. Written Plan con't

4. Schedule for Closure

- Anticipated Date Last Wastes Received: January 1, 2085
- Anticipated Date Closure is Completed: July 1, 2085

FIGURE-1 - MILESTONE DATES



B. Ammendment of Closure Plan

Any changes in closure plan during the active life of the facility will result in an amended closure plan. Such amended plan will be amended within 60 days of the date of any changes affecting the closure of the hazardous waste storage facility (40CFR 265.112 (b)).

C. Submittal of Closure Plan

Parker will submit their closure plan to The Regional Administrator at least 180 days before beginning closure as per regulations.

A. [illegible] Plan con't

3. Continued

All wastewater and residues generated during cleanup of the site and/or equipment will be analyzed to see if waste is hazardous. If laboratory analysis indicates that the waste is hazardous, the material will be sent to off-site disposal at a licensed disposal/treatment center.

If laboratory analysis shows no evidence of contamination, the wastewater/residues will be discharged to the chemical wastewater treatment plant which discharges to the municipal sewer.

METHODS USED TO SAMPLE HAZARDOUS WASTE

HAZARDOUS WASTE	SAMPLING METHOD	DESCRIPTION OF SAMPLING	REFERENCE FOR SAMPLE
D001 IGNITABLE	Sampling a drum from "samplers and sampling procedures for hazardous waste streams", EPA 600/2-80-018, page 36.	Composite sample from multiple containers, reference section "D" random samples, p.67, EPA-600/2-80-018, January, 1980.	Test method for the evaluation of solid waste, physical/ chemical methods (S.W. -8463).
D002 CORROSIVE	Sampling a drum from "samplers and sampling procedures for hazardous waste streams", EPA-600/2-80-018, page 36.	Composite sample from multiple drums, ref. section "D", random sampling, p.67, EPA-600/2-80-018.	Test methods for the evaluation of solid waste, physical/ chemical methods (S.W.-8464).
D007 EP TOXIC	Sampling a drum from "samplers and sampling procedures for hazardous waste streams", EPA-600/2-80-018, page 36.	Composite sample from multiple drums, ref. section "D", random sampling, p.67, EPA 600/2-80-018.	Test methods for the evaluation of solid waste, physical/ chemical methods (S.W.08464).

[illegible] allow [illegible] from date of receiving the final volume of hazardous wastes to remove all stored wastes from the site and decontaminate equipment and/or storage areas.

2. The Morenci facility will notify and submit the closure plan to the Regional Administrator at least 180 days before the date closure will begin.

3. The Morenci facility will complete closure in accordance with the approved closure plan and within six months after receiving the final volume of hazardous waste.

265.114 DISPOSAL OR DECONTAMINATION OF EQUIPMENT

All equipment must be decontaminated. See section 265.111 and 265.112.

265.115 CERTIFICATION OF CLOSURE

When closure is completed the owner or operator must submit to the Regional Administrator certification both by the owner or operator and by an independent registered professional engineer that the facility has been closed in accordance with the specifications in the approved closure plan.

265.116 - 120

Applies only to disposal facilities. Does not apply to the Morenci facility.

NOV 1 0

PARKER CHEMICAL

PARKER CHEMICAL COMPANY
MORENCI PLANT
[illegible] W. MAIN STREET
MORENCI, MICHIGAN [illegible]
[illegible]

October 17, 1986

Technical Permits and Compliance Section
US EPA
RCRA Activities
Region V
P. O. Box A 3587
Chicago, IL 60690

MID058923867 G, TSD, PA

Gentlemen:

Our company is in the process of being sold. To transfer the RCRA permits we need new Part A Forms 1 and 3. Please send five (5) copies of forms and instructions to my attention at the heading adress. Thank you.

Sincerely,

Richard G. Speed. P.E.
Technical Supt. - Mfg.

RGS:vam

RECEIVED
OCT 20 1986
U.S. EPA, REGION V

Sent Copies
11-3-86

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION V
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

REPLY TO ATTENTION OF:
5HW-13

NOV 26 1984

John D. Kashner, Manufacturing Manager
Parker Chemical Company
322 West Main Street
Morenci, Michigan 49256

RE: Interim Status Acknowledgement U.S. EPA ID NO. MID 058 723 867
FACILITY NAME: Parker Chemical Company

Dear Mr. Kashner:

This is to acknowledge that the United States Environmental Protection Agency (U.S. EPA) 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 U.S. EPA 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 265 and 270, 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 270.71 and 270.72.

As stated in the first paragraph of this letter, you have met the requirements of 40 CFR Part 270.70(a); 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,

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

Enclosure

FACILITY NAME

Parker Chemical Company

EPA ID NUMBER

MID 058 723 867

FACILITY OPERATOR

Parker Chemical Company

FACILITY OWNER

Parker Chemical Company

FACILITY LOCATION

322 West Main Street
Morenci, Michigan 49256

PROCESS CODE	DESIGN CAPACITY	UNIT OF MEASURE
S01	15,000	G

KEY

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE	UNIT OF MEASURE	CODE
STORAGE:			GALLONS	G
			LITERS	L
CONTAINER	S01	G or L	CUBIC YARDS	Y
TANK	S02	G or L	CUBIC METERS	C
WASTE PILE	S03	Y or C	GALLONS PER DAY	U
SURFACE IMPOUNDMENT	S04	G or L	LITERS PER DAY	V
DISPOSAL:			TONS PER HOUR	D
			METRIC TONS/HOUR	W
INJECTION WELL	D79	G,L,U, or V	GALLONS/HOUR	E
LANDFILL	D80	A or F	LITERS/HOUR	H
LAND APPLICATION	D81	B or Q	ACRE-FEET	A
OCEAN DISPOSAL	D82	U or V	HECTARE-METER	F
SURFACE IMPOUNDMENT	D83	G or L	ACRES	B
TREATMENT:			HECTARES	Q
			POUNDS/HOUR	J
TANK	T01	U or V	KILOGRAMS/HOUR	R
SURFACE IMPOUNDMENT	T02	U or V	TONS PER DAY	N
INCINERATOR	T03	D,W,E,H or K	METRIC TONS/DAY	S
OTHER	T04	U,V,J,R,N, or S	BTU'S/HOUR	K

PARKER CHEMICAL

PARKER CHEMICAL COMPANY
MORENCI PLANT
322 W. MAIN STREET
MORENCI, MICHIGAN 49256
517/458-2221

September 25, 1984

RECEIVED
OCT 04 1984
WMD-RAIU
EPA, REGION V

U. S. Environmental Protection Agency
Region 5, RCRA Permits Branch
230 South Dearborn Street
Chicago, IL 60604

Reference: Part-A, Permit Number MID058723867
for Parker, Morenci, Michigan GTSD,PA

Attention: Mr. William H. Miner, Chief
Technical, Permits, and
Compliance Section File Number
5HW-13

Dear Mr. Miner:

We received your letter regarding submittal of the revised Part-A dated September 28, 1983. We have attached a revised Part-A, as requested, showing drum storage at the original figure of 15,000 gallons.

In reference to the 4,000 gallon storage tank we have deleted this item since it is no longer necessary for storing hazardous waste. The waste stored was an acid flush of some of our product lines. This acid is now recycled and used in our production so no waste is generated and the storage tank is now used for product storage.

Since the waste stream was eliminated and no waste was stored in the tank for more than 90 days we believe this can be deleted from the Part-A, as discussed between George Hamper, of your staff, and Richard G. Speed, Technical Superintendent, Parker Chemical Company, Morenci, Michigan.

Since no changes were required in Form-1 we have attached the revised Form-1 submitted in September 1983. A new Form-3 is attached as stated above.

Please advise in writing when the permit changes have been approved.

Thank you.

Very truly yours,

PARKER CHEMICAL COMPANY

John D. Kashner

John D. Kashner,
Manager-Manufacturing

JDK:dpc

Attachment

SHW-13

21 SEP 1984

John D. Kashner
Manufacturing Manager
Parker Chemical Company
322 West Main Street
Morenci, Michigan 49256

Re: Hazardous Waste Permit Application
MID 058723867

Dear Mr. Kashner:

This is in response to your submittal of a revised Part A dated September 26, 1983. Please submit a written explanation giving the reason that the 4000 gallon hazardous waste storage tank, which appeared on your original Part A, is not subject to regulation.

In addition, the capacity of your container storage area can only be increased from the 15,000 gallons shown on your original Part A to the 188,400 gallons shown on the revised Part A in two ways:

1. Submittal of a complete application (both Parts A and B) resulting in issuance of a hazardous waste permit, or;

2. Approval of a change under interim status under 40 CFR 270.72(b).

If you choose not to pursue either of these approaches at this time, please submit a revised Part A showing the capacity for container storage to be 15,000 gallons as indicated on your original Part A. A blank Part A is enclosed.

If you have any questions, please contact George Hamper, of my staff, at (312) 886-3719.

Sincerely yours,
ORIGINAL SIGNED BY
WILLIAM H. MINER

William H. Miner, Chief
Technical, Permits and Compliance Section

Enclosure

cc: Alan J. Howard

5HW-13:GHAMPER:mh:6-3719:9-18-84:6

	TYPIST	AUTHOR	STU #1 CHIEF	STU #2 CHIEF	STU #3 CHIEF	TPS CHIEF	WMB CHIEF	WMD DIRECTOR
INITIALS	MH				WEY	WHM		
DATE	9-19-84				9/20/84	9/20/84		

9/20/84

PARKER CHEMICAL

PARKER CHEMICAL COMPANY
MORENCI PLANT
322 W MAIN STREET
MORENCI MICHIGAN 49256
517/458-2221

February 27, 1984

RCRA Activities
EPA Region V
P.O. Box A-3587
Chicago, IL 60690

Subject: Annual Hazardous Waste Report
for 1983. EPA ID NO. MID058723867

Gentlemen:

On October 1, 1983 the Morenci, Michigan facility of Parker Divison of Occidental Chemical Corporation was sold to Parker Chemical Company.

Separate reports on hazardous waste management activity during 1983 were prepared for both the 1983 calendar year period January 1, 1983 through September 30, 1983 during which the facility was owned and operated by Occidental Chemical Corporation, and the calendar year October 1, 1983 through December 31, 1983 during which the facility was owned and operated by Parker Chemical Company.

Hazardous waste management activities occuring during the period of Occidental Chemical ownership have been certified by Dr. Alex Katona, Corporate Manager-Solid Waste, Occidental Chemical Corporation.

Very truly yours,

PARKER CHEMICAL COMPANY

Richard G. Speed

Richard G. Speed, P.E.
Technical Superintendent Manufacturing

RGS:dc

LAW OFFICES
LANDMAN, LUYENDYK, LATIMER, CLINK & ROBB

400 TERRACE PLAZA
P.O. BOX 29
MUSKEGON, MICHIGAN 49443
616/722-2671

GRAND RAPIDS, MICHIGAN 49503
400 CALDER PLAZA BLDG.
616/774-8031

GRAND HAVEN, MICHIGAN 49417
PACESETTER BANK BLDG.
616/842-6160

FREMONT, MICHIGAN 49412
OLD STATE BANK BLDG.
616/924-0780

M.L. BRADBURY, JR.
STEPHEN H. CLINK
FRED C. CULVER, JR.
ROBERT L. DeJONG
RICHARD J. HAINER
DAVID E. HATHAWAY
WILLIAM H. HERITAGE, JR.
CHARLES L. HITESMAN
MICHAEL W. IRISH
STEVEN C. KOHL
ANTHONY J. KOLENIC, JR.
RICHARD C. LAGUE
LOU L. LANDMAN
DAVID E. LEIGH
JOHN D.B. LUYENDYK
JOHN HARVEY MARTIN
JOHN H. McKENDRY, JR.
WILLIAM F. McNALLY
DAVID B. MERWIN
DAVID R. MUNROE
WILLIAM M. NEWMAN
RUSSELL E. PRICE
MARK E. PUTNEY
MICHAEL L. ROBINSON
ROBERT W. SIKKEL
I. JOHN SNIDER II

STANLEY J. STEK
FREDRIC A. SYTSMA
THOMAS H. THORNHILL
ALVIN D. TREADO
JON D. VANDER PLOEG
JOHN P. VAN EENENAAM
DONALD J. VELDMAN
RANDALL A. WHITE
J. WILLIAM WHITLOCK

CRAIG A. BERNTHAL
JEFFREY A. DeVREE
PAUL REUBEN JACKSON
PAUL M. KARA
CHRIS ANN McGUIGAN
DOUGLAS J. McNEIL
MICHAEL L. SHIPARSKI
ANNE M. VANDERMALE
ROBERT F. WARDROP, II

OF COUNSEL
H. WINSTON HATHAWAY

HAROLD W. CHARTER - 1978
CHARLES F. LATIMER - 1971
V.S. LAURIN, JR. - 1968
RICHARD A. ROBB - 1971

July 12, 1983

Regional Hearing Clerk
United States Environmental Protection
Agency
Region V
230 S. Dearborn Street
Chicago, Illinois 60604

Re: Occidental Chemical Corporation
EPA ID No. MID 058723867
Docket No. V-W-82-R-021
Our File M-5824-025

Ladies and Gentlemen:

Enclosed pursuant to the Consent Agreement and Final Order entered in the above-captioned matter please find a Cashiers Check in the amount of $25,000.00 representing Occidental's payment of the Civil penalty specified on page 4, paragraph B of said Consent Agreement.

Payment of the Civil penalty should finally conclude all matters involved in the above-captioned action. Please feel free to contact the undersigned with any questions or comments you may have.

Very truly yours,

J. Will Whitlock

J. William Whitlock
For the Firm
JWW/jr
Enclosure
cc: Robert Schuttler
Roger Walker
Sy Kashner
Toni Niborski
Mary Gade
William H. Miner

CITY NATIONAL BANK
MEMBER FIRST AMERICAN BANK CORPORATION
DETROIT, MICHIGAN 48226

17 041939

9-91
720

DATE July 8, 19 83

PAY TO THE ORDER OF * * * UNITED STATES TREASURY DEPARTMENT * * * * * * * * $ *25,000.00*

FIRST OF AMERICA 25000 AND 00 CTS DOLLARS

621-0282-60000

CASHIERS CHECK

AUTHORIZED SIGNATURE

SECOND AUTHORIZED SIGNATURE IF AMOUNT OVER $25,000.00

[redacted]

To Part A file

Occidental Chemical Corporation

June 6, 1983

RECEIVED

JUN 15 1983

WASTE MANAGEMENT BRANCH
EPA, REGION V

EPA Region V
RCRA Activities
P. O. Box 7861
Chicago, IL 60680 MID 058 723 867 PA, G, TSD PA51

Gentlemen:

Please forward to my attention ten copies each of the following forms. We need these on occasion to make resubmittals for change of company name, TDS revisions, etc., and prefer not to use xerox copies.

EPA form OMB number 158-579016, Notification of Hazardous Waste Activity.

Form 1 (EPA form 3510-1)

Form 3 (EPA form 3510-3)

Packet sent 6/15/83

Thank you.

Very truly yours,

Richard G. Speed

Richard G. Speed, P.E.
Technical Superintendent

RGS:dc

6/15/83

OXY

PARKER Surface Treatment Products
322 W. Main Street, Morenci, Michigan 49256 517 458-2221

RCRA

RESOURCE CONSERVATION & RECOVERY ACT

INTERIM STATUS

SECTION 265

PARKER - MORENCI

REVISED SEPTEMBER 15, 1982

PREPARED BY: RICHARD G. SPEED, TECHNICAL SERVICES SUPERINTENDENT
LELAND K. HUFFAKER, TECHNICAL SERVICES SUPERVISOR

RCRA

PART 265 Interim status standards for owner and operators of hazardous waste treatment, storage and disposal facilities.

SUBPART A GENERAL

SUBPART B GENERAL FACILITY STANDARDS

265.10 APPLICABILITY

The Parker, Morenci facility must comply with Part 265 as a storage facility.

265.11 I. D. NUMBER

The Parker, Morenci facility has EPA I.D. Number:

MID058723867

265.12 REQUIRED NOTICES:

a. Foregin waste shipments - none.

b. Notify new owner of the RCRA requirements. On January 1, 1982, Oxy Metal Industries Corporation was merged into Hooker Chemicals, & Plastics Corporation and is now the successor and legal name for our corporation. No change in local management was made; therefore, notification has been made. In April 1982 the name was changed to Parker Surface Treatment Products, Occidental Chemical Corporation.

EPA

ACKNOWLEDGEMENT OF NOTIFICATION OF HAZARDOUS WASTE ACTIVITY

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 → *MID058723367

OXY METAL INDUSTRIES CORPORATION
322 W MAIN ST
MORENCI MI 49256

INSTALLATION ADDRESS → 322 W MAIN ST
MORENCI MI 49256

EPA Form 3700-12A (4-80)

RCRA

SUBPART B

265.13 General Waste Analysis - Required by Parker, Morenci facility before treatment, storage or disposal of hazardous waste.

There are six major types of hazardous waste handled at the Morenci facility. (1) Obsolete products and raw materials, (2) Contaminated products and raw materials. (3) Dust from dust collectors, (4) Sludge from Panel Department, (5) Mixed out-dated holding samples, and (6) Mixed laboratory waste.

The drums and samples of product are numbered with a batch number consisting of the year followed by a consecutive number. The numbering system is repeated beginning each January first.

1. Waste Analysis Plan - Obsolete products and raw materials.

   Each batch is sampled when produced or received. The material to be sampled is homogenized as well as possible prior to sampling. Analysis of each product or raw material is known from the formula or supplier information. Monthly spot analysis checks will be made to varify analysis.

2. Contaminated products or raw materials.

   Each product is sampled when produced and raw materials when received. The material to be sampled is homogenized as well as possible prior to sampling. Analysis will be made following EPA methods or standard methods, depending on the meaterial and contaminant involved.

RCRA

SUBPART B

265.13 3. Bag house dust from dust collectors.

Sampling Methods - The material to be sampled will be mixed as near homogeneous as possible. Samples will be taken each time the dust collectors are emptied. A batch number will be assigned to each drum from a collector each time emptied and a corresponding batch number placed on the sample.

PARAMETERS	PROCEDURES
pH	EPA Method 150.1
Total phosphorous as PO4	Standard Methods 425D

pH will be determined on a 1:1 mix of dust and deionized water, thorough mixing and determination using a pH meter.

Frequency - Bag house dust will be analyzed approximately four times a year.

4. Sludge from Panel Departments.

Each batch of sludge cleaned out of the panel department will be sampled by hand prior to sealing the drums. Batch numbers will be assigned and placed on drums and corresponding samples. Sludge will be mixed as homogeneous as possible prior to sampling. A sufficient sample (50-100 g) will be taken and weighed into a clean, dry, tared porcelain crucible and dried to a constant weight in a convection oven at 105°C. All other analysis will be determined on this dried sample.

RCRA

SUBPART B

265.13 4. Sludge from Panel Departments continued

pH will be determined on a 1:1 mix of sludge with deionized water, thorough mixing and determination using a pH meter.

PARAMETERS	PROCEDURES
Per Cent Dry Weight Solids	EPA Method 160.3 - 1
pH	EPA Method 150.1
Total Phosphorous as PO_4	Standard Methods 425D
Total Calcium	EPA Method 215.1
Total Chromium	EPA Method 218.1
Total Zinc	EPA Method 289.1
Total Nickel	EPA Method 249.1
Total Cobalt	EPA Method 219.1
Oil and Grease	EPA Method 413.1

Frequency - Panel Department sludge will be analyzed annually.

5. Mixed holding sample wastes.

Each batch of products and raw materials is sampled when produced or received. These are retained for one year then discarded. Aqueous liquids are dumped to a POTW. Powdered materials are segregated according to hazard and placed in lined steel containers. A list of materials placed in these containers is kept and analysis determined from the formulas of materials placed therein.

RCRA

SUBPART B

265.13 6. Mixed laboratory waste.

Mixed laboratory waste consists of a variety of materials such as used solvents, Reactobond testing waste, and out-dated holding samples of solvents and oils. The parameters analyzed for these will depend on the waste material. For example, used solvents would be tested for flash point and per cent solids. All test methods will be EPA Standard Methods, when applicable and Standard Laboratory Methods when approved methods are not available. Samples will be analyzed that are representative of the total material. Each new or different lab waste will be analyzed as required.

All test data will be filed in the waste analysis file, logged by batch number and type of waste.

RCRA

SUBPART B

265.14 SECURITY -

a. The storage area is within secure fenced area on plant property.

b. No unauthorized personnel are allowed on the property.

c. Signs have been posted on entry gates leading to storage areas which state "DANGER - UNAUTHORIZED PERSONNEL KEEP OUT".

d. Plant buildings and fence gates are locked after working hours.

RCRA

SUBPART B

265.15 General Inspection Requirements - All areas at the Parket, Morenci facility where hazardous waste is stored will be inspected weekly. The inspector will look for malfunctions, deteriorations, operator errors, unusual discharges, corrosion to storage drums, leaking drums, bulging drums, compatibility of wastes, adequate aisle space and any other function considered detrimental to a safe operation. An inspection schedule and log will be maintained indicating problems found and remedial action taken. Any spills, deteriorated drums, or other conditions posing potential hazard must be corrected immediately.

INSPECTION LOG

DATE	INSPECTOR	PROBLEM	REMEDIAL ACTION

RCRA

SUBPART B

265.16 Personnel Training - Facility personnel involved with waste management or handling will receive on-the-job training which will cover the following topics:

1. Safety.
2. Waste Segregation, compatibility of chemicals.
3. Drum storage inspection.
4. Facility compliance requirements for waste analysis, manifest procedures, spill clean-up and emergency procedures.

The training will be directed by and will be designed to assure those trained are able to respond effectively to emergency situations. No employees will work in supervised positions until after completing the full training program. Once trained, an employee will take part in an annual review to assure continued proficiency.

TRAINING LOG

DATE	TRAINEE	JOB TITLE & DESCRIPTION	TRAINING RECEIVED

Job titles, names of those individuals filling the jobs, job descriptions, required training, and personnel records will be maintained for all jobs related to hazardous waste management.

RCRA

265.17 General Requirements for Ignitable, Reactive or Incompatible Wastes - At the Parker, Morenci facility ignitable waste is segregated and stored away from the main facility and other waste types. Reactive or incompatible waste is segregated and handled so to prevent accidental ignition or reaction.

"No Smoking" signs are conspicuously placed where ignitable waste is stored.

A waste segregation plan has been written for this facility and is outlined in the Plant's material handling plan.

RCRA

SUBPART C

265.30 This Subpart applies to the Morenci facility.

265.31 This facility will be maintained and operated to minimize the possibility of fire, explosion or any unplanned release of hazardous waste to air, soil or water which could threaten human health or the environment.

265.32 Required Equipment -

a. Internal communications or alarm system. Paging system is used throughtout the facility and can be used by any facility personnel through the telephone system.

b. Telephones are located throughout the facility.

c. Portable fire extinguisers are located throughout the facility.

d. Acid suit and breathing air tank and mask are located at receiving office--Building H, maintenance entrance--Building G, plant laboratory--Building S.

e. The production building is protected by automatic sprinkler system. Water hydrants are on property adjacent to building.

265.33 Testing and Maintenance of Equipment

a. The paging system and telephones are checked daily through normal use. Failure of the system is reported immediately for correction.

RCRA

265.33 b. Portable fire extinguishers are checked monthly and noted on log. Any extinguishers used or noted as discharged are recharged or replaced.

c. The fire protection sprinkler system is checked semi-annually by our insurance inspectors. All post indicator valves are checked and logged monthly to make sure they are locked in the open position.

d. The acid suits and breathing air systems are checked monthly to make sure they are ready for action.

265.34 Access to communications or alarm system.

Telephones are located throughout the facility for access, and can be used for public address system.

265.35 Required aisle space.

Adequate aisle space is maintained for truck traffic and emergency vehicles as required. Aisle space in the hazardous waste storage is provided for inspection of drums.

265.37 Arrangements with local authorities.

1. Fire Department - local volunteers, many of whom work at the Parker facility.

2. Emergency Response Teams - local volunteers many of whom work at the facility.

3. Heffron Industrial Clinic, Adrian, Michigan - approximately 40 minutes by automobile from the plant. Used for first-aid and medical treatment cases. Staff has toured facility every six months.

RCRA

265.37 4. Morenci Area Hospital - approximately 5-minutes from plant. Familiar with plant and chemicals handled. Little direct contact since Heffron took over medical duties, but available if necessary.

5. Copies of SPCC Plan and Emergency Plan have been given to each of the above local agencies and were reviewed with these agencies in September 1982. These agencies will be notified of all amendments to the plans, with periodic reviews of the plans scheduled as appropriate.

RCRA

SUBPART D

265.50 Applicability - This subpart does apply to the waste storage and the Morenci facility.

265.51 Purpose and implementation - The contingency plan is designed to minimize the hazards to human health or the environment from fires, explosions or unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil or surfact water.

265.52 Content of Contingency Plan

a. Emergency Plan - Evacuation Plan. (Copy Attached)

b. SPCC Plan. (Coppy Attached)

265.53 Copies of Contingency Plan

a. Facility copy.

b. Fire Department Copy.

c. Policy Department Copy.

d. Morenci CEC Copy.

e. HCC Environmental Copy.

f. Morenci Area Hospital Copy.

g. Heffron Clinic Copy.

RCRA

265.54 Amendment of Contingency Plan

a. Plan must be amended to keep it up to date and to correct failures or shortcomings of plan due to:

1. Changes in regulations.

2. Failure of plan in emergency.

3. Changes in facility.

4. Changes in personnel.

5. Changes in emergency equipment.

b. Latest revised plan was issued September 30, 1982.

265.55 Emergency Coordinator

At all times there must be at least one person either on the facility premises or on call with the authority required to and responsibility of coordinating all emergency response measures. Emergency Coordinator at Morenci is R. G. Fredrick, Production Superintendent. The alternate Emergency Coordinator is Leland K. Huffaker.

265.56 Emergency Procedures

a. Whenever there is an imminent or actual emergency situation, the emergency coordinator, or his designee when the emergency coordinator is on call, must immediately:

1. Activate internal facility alarms or communication systems where applicable, to notify all facility personnel, and

2. Notify appropriate State or local agencies with designated response roles if their help is needed.

RCRA

265.56 Emergency Procedures Continued:

b. Whenever there is a release, fire or explosion, the emergency coordinator must immediately identify the character, exact source, amount and a real extent of any released materials. He may do this by observation or review of facility records or manifests and, if necessary, by chemical analysis.

c. Concurrently, the emergency coordinator must assess possible hazards to human health or the environment that may result from the release, fire or explosion. This assessment must consider both direct and indirect effects of the release, fire or explosion, e.g., the effects of any toxic, irritating or asphyxiating gases that are generated, or the effects of any hazardous surface water run-offs from water or chemical agents used to control fire and heat-induced explosions.

d. If the emergency coordinator determines that the facility has had a release, fire or explosion which could threaten human health, or the environment, outside the facility, he must report his findings as follows:

1. If his assessment indicates that evacuation of local areas may be advisable, he must immediately notify appropriate local authorities. He must be available to help appropriate officials decide whether local areas should be evacuated and,

RCRA

265.56 Emergency Procedures Continued:

2. He must immediately notify either the government official designated as the on-scene coordinator for our geographical area, or the National Response Center (using their 24-hour toll free number 1-800-424-8602). The report must include:

(l) Name and telephone number of reporter.

(ii) Name and address of facility.

(iii) Time and type of incident, e.g., release, fire.

(iv) Name and quantity of material(s) involved, to the extent known.

(v) The extent of injuries, if any, and

(vi) The possible hazards to human health or the environment, outside the facility.

e. During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions and releases do not occur, recur, or spread to other hazardous waste at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.

RCRA

265.56 Emergency Procedure Continued:

f. If the facility stops operations in response to a fire, explosion or release, the emergency coordinator must monitor for leaks, pressure build-up, gas generation or ruptures in valves, pipes or other equipment, wherever this is appropriate.

g. Immediately after an emergency, the emergency coordinator must provide for treating, storing or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire or explosion at the facility.

COMMENT: Unless the recovered material is not a hazardous waste, it must be managed in accordance with all applicable requirements under RCRA.

h. The emergency coordinator must ensure that in the affected area(s) of the facility:

1. No waste that may be incompatible with the released material is treated, stored or disposed of until clean-up procedures are completed; and

2. All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

RCRA

265.56 Emergency Procedure Continued:

i. The Regional Administrator and appropriate State and local authorities must be notified that the facility is in compliance with paragraph (h) of this Section before operations are resumed in the affected area(s) of the facility.

j. The time, date and details of any incident that requires implementing the contingency plan will be noted in the plant operating record. Within 15 days after the incident, a written report will be submitted on the incident to the Regional Administrator. The report must include:

1. Name, address and telephone number of the owner or operator,

2. Name, address and telephone number of the facility,

3. Date, time and type of incident, e.g., fire, explosion,

4. Name and quantity of material(s) involved,

5. The extent of injuries, if any,

6. An assessment of actual of potential hazards to human health or the environment, where this is applicable, and

7. Estimated quantity and disposition of recovered material that resulted from the incident.

RCRA

SUBPART E MANIFEST SYSTEM

265.70 This section does apply for use of the manifest system as a generator and storer of hazardous waste only. This site is not used for disposal and the section does not apply to the extent different requirements are imposed on disposal facilities.

265.71 USE OF MANIFEST SYSTEM

All waste disposed of as hazardous waste will require manifest for proper disposal.

Copies of the RCRA, State and Hooker manifests will be filled out as required by regulation in accordance with plant procedures.

265.72 MANIFEST DISCREPANCIES

Any discrepancies in waste between transporter, disposer and generator must be reconciled within dates specified in regulations. Documentation will be reviewed no less frequently than monthly to verify and discrepancies found are so reconciled.

265.73 OPERATING RECORD

The manifest system will be part of the operating record as generator and storer.

265.74 AVAILABILITY, RETENTION AND DISPOSITION OF RECORDS

Records will be maintained at least three years. Manifest records will be maintained also, at Hooker headquarters.

265.75 ANNUAL REPORT

Annual report is due March 1, 1983. Required for the report are facility activities during the previous calendar year. will be responsible for assuring the report is prepared and timely filed.

RCRA

SUBPART E

265.73 Operating Records - In addition to the information recorded in the log, a record will be maintained by the Emergency Coordinator of Contingency Plan Summary reports, detailed Contingency Plan report when implemented and any monitoring, testing or analytical data as required. (See Attached).

DRUM NO.	PRODUCT NAME	DATE IN	DATE SMPLD	LOCATION BLDG	BAY	ROW	CWM APPR.	COLA	DATE SHPD	LOAD NO.	

265.76 UNMANIFESTED WASTE REPORT

No waste shipped from off-site will be accepted at the Morenci plant. In the event of damage to containers of returned product during transportation so as to render the returned product unusable and therefore waste, the material will be accepted only when transportation back to the sender is unsafe, in which case the Regional Administrator will be notified of the event within 15 days.

265.77 ADDITIONAL REPORTS

Additional reports beyond the annual report may be required and are specified elsewhere in this document.

SUBPART F GROUNDWATER MONITORING

Does not apply.

SUBPART G CLOSURE AND POST CLOSURE

265.110 Applicability

This subpart applies to the storage of hazardous waste at Morenci.

265.111 CLOSURE PERFORMANCE STANDARD

The storage facility must be closed in a manner that (a) minimizes the need for further maintenance and (b) controls, minimizes or eliminates, to the extent necessary to protect human health and the environment, post closure escape of hazardous waste, hazardous waste constituents, leachate, contaminated rainfall, or waste decomposition products to the ground water or surface water or to the atmosphere.

265.112 CLOSURE PLAN

1. The storage areas will be closed upon closure of the plant. Because the plant only stores, on a temporary basis hazardous waste, the operation of the hazardous waste manifest is not self-limiting due to space. Consequently, no estimated date of closure exists.

2. The maximum estimated inventory of hazardous waste in storage at any given time during the life of the facility is one (1) 4000 gallon tank and eighty (80) 55-gallon drums.

RCRA

265.112 CLOSURE PLAN CONTINUED

3. Decontamination of equipment would include washdown of ZAP waste storage tank and removal of the wash water to licensed disposal site.

4. Drums of hazardous waste would be removed from facility to licensed disposal site at least 60 days prior to closure of the facility.

5. All drum storage areas would be cleaned and decontaminated of any hazardous waste at least 60 days prior to closure.

265.113 TIME ALLOWED FOR CLOSURE

1. RCRA allows 90 days from date of receiving the final volume of hazardous wastes to remove all stored wastes from the site and decontaminate equipment and/or storage areas.

2. The Morenci facility will notify and submit the closure plan to the Regional Administrator at least 180 days before the date closure will begin or within such other time period as may be required by appropriate governmental agencies.

3. Closure will be completed in accordance with the approved closure plan and within six months after receiving the final volume of hazardous waste in the storage area.

265.114 DISPOSAL OR DECONTAMINATION OF EQUIPMENT

All equipment must be decontaminated.

RCRA

265.115 CERTIFICATION OF CLOSURE

When closure is completed, certification will be submitted to the Regional Administrator both by the Company and by an independent registered professional engineer that the facility has been closed in accordance with the specifications in the approved closure plan.

265.116 - 120

Applies only to disposal facilities. Does not apply to the Morenci facility.

SUBPART H FINANCIAL REQUIREMENTS

265.140 APPLICABILITY

Facility closure cost estimates are to be prepared annually within 30 days after the anniversary date of the first such estimate. The first estimate was prepared , 1981, and revisions will be prepared no later than the day of each year.

nonresponsive

RCRA

265.142 COST ESTIMATE FOR FACILITY CLOSURE - 1982

I. Drum Storage Area

a.	300 drums to Chemical Waste Management, Emelle, Alabama	$24,000.00
	Freight	45.00
	Fuel Charge	6,400.00
		$ 30,445.00
b.	Site Clean Up	
	80 Manhours @ $15 Per Hour	1,200.00
	Material Costs	200.00
		$1,400.00
c.	Total a and b	$ 31,845.00

II. Bulk Storage Area

a.	3,500 Gallon Zap to Ohio Liquid Disposal Vickery, OH, Disposal Cost 3,500 GAl.	840.00
	Loading Charge (2 hr. @$35/hr Demurrage)	70.00
	Freight (transport $.80/CWT x 45,000#	360.00
		$1,270.00
b.	Tank Clean Up	
	20	$ 300.00
	Ma	100.00
		$ 400.00
c.	Total a and b	$1,670.00

III. Certification

By independent registered professional engineer	Estimated	$2,000.00

IV. Facility Closure - Total Costs

Sum of I, II, III	35,515.00
Contingency @ 15%	5,327.00
TOTAL	$40,842.00

RCRA

SUBPART I USE AND MANAGEMENT OF CONTAINERS

265.170 APPLICABILITY

This subpart does apply to the Morenci facility.

265.171 CONDITION OF CONTAINERS

Containers must be in good condition. If leaks occur or containers are in unsuitable condition, waste must be transferred to another container.

265.172 COMPATIBILITY OF WASTE WITH CONTAINER

The container used must be compatible with the hazardous waste so the waste will be contained properly and safely.

265.173 MANAGEMENT OF CONTAINERS

a. Containers in storage must be kept closed.

b. Containers in storage must be handled properly so as not to cause breakage or leakage of contents.

265.174 INSPECTIONS

Storage areas will be inspected weekly (and logged) to look for leaks or deterioration of containers. Damaged or leaking containers must be transferred to good containers.

265.176 SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTE

These containers must be stored at least 15 meters from the facility property line.

RCRA

265.177 SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES

Incompatible wastes or materials will not be placed in the same containers, nor will hazardous waste be placed in an unwashed container which previously held an incompatible waste or material. Storage of wastes will assure that all incompatible waste or material will be sufficiently separated or otherwise protected.

SUBPART J TANKS

265.190 APPLICABILITY

This subpart applied to the waste storage tank at the Morenci facility.

265.192 GENERAL OPERATING REQUIREMENTS

a. Do not fill tank to more than within two feet of top of tank to allow for proper free board in tank.

b. When filling tank maintain visual check to shut-down transfer pump at proper tank level.

c. Any spills or leakage from tank or pipe connections must be properly cleaned up and collected.

265.193 WASTE ANALYSIS AND TRIAL TEST

No material can be stored in the tank unless waste analysis and trial storage tests show this waste is compatible with the tank and can be safely stored therein.

RCRA

265.194 INSPECTIONS - PRODUCTION FOREMAN

a. Check level in tank, piping and connections daily to ensure compliance with this section.

b. Check tank walls, bottom and structure and surrounding structures weekly to ensure no leaking or weakness has occurred.

c. Any deterioration or malfunction must be reported to Facility Superintendent and corrected immediately.

265.197 CLOSURE

At closure all waste must be removed from the tank and the tank and equipment must be decontaminated in accordance with the closure plan outlined above.

HST-003

HST-004

EPA Reporting

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

October 25, 1990

To: De Montgomery, Geotech Unit Supervisor, WMD

From: Jan Sealock, Environmental Quality Analyst, WMD Jan Sealock

Subject: Henkel Corporation - Parker + Amchem
MID 058 723 867

I have completed a data chart comparing soil samples taken at the Henkel Corporation to Michigan background data and Act 307, Type B criteria. Three core samples were analyzed at 6" and 18". It was found, however, that core #2 was sampled at a depth of 12" instead of 18". One core background sample was taken at 6" and 18". The Act 307 criteria was based on a comparison between two numbers. The list of concentrations provided by Brad Venman was compared to the local background concentration. If the local background for a specific parameter was greater than the concentration provided by Brad than the background levels would become Act 307, Type B criteria. One sample concentration was collected for background to be compared to Brad's list of criteria, this is not a true mean of local background. Two other samples were taken at the facility that are not included on the chart. These are the rinse water sample and the wipe sample. All volatile samples were found to be nondetect. The mean Michigan background level at 6" was considered topsoil. The mean Michigan background at 18" was considered sand after looking at the borings provided in the closure plan at 1'6". If you have any questions please see me.

CORE #,DEPTH PARAMETER	HENKEL CORP. SITE VALUES mg \ kg	MI BACKGROUND MEAN mg \ kg	ACT 307 Type B mg \ kg
Core 1, 6"			
Barium	27.6	36.2	100.0
Chromium	6.4	10.3	4.0
Copper	6.4	14.0	26.0
Lead	<0.6	11.2	6.2
Zinc	27.4	30.4	30.0
Core 1, 18"			
Barium	24.5	60.2	100.0
Chromium	7.5	4.4	7.5
Copper	5.5	6.0	26.0
Lead	<0.5	11.2	0.1
Zinc	23.4	16.9	30.0
Core 2, 6"			
Barium	27.5	36.2	100.0
Chromium	2.7	10.3	4.0
Copper	10.1	14.0	26.0
Lead	12.8	11.2	6.2
Zinc	155.0	30.4	30.0
Core 2, 12"			
Barium	29.0	60.2	100.0
Chromium	3.1	4.4	4.0
Copper	18.1	6.0	26.0
Lead	20.2	7.4	6.2
Zinc	190.0	16.9	30.0
Core 3, 6"			
Barium	57.2	36.2	100.0
Chromium	12.4	10.3	4.0
Copper	212.0	14.0	26.0
Lead	67.0	11.2	6.2
Zinc	489.0	30.4	30.0
Core 3, 18"			
Barium	22.1	60.2	100.0
Chromium	1.9	4.4	7.5
Copper	4.1	6.0	26.0
Lead	<0.6	11.2	0.1
Zinc	20.3	16.9	30.0
BG 2, 6"			
Barium	31.7	36.2	100.0
Chromium	4.0	10.3	4.0
Copper	8.1	14.0	26.0
Lead	6.2	11.2	6.2
Zinc	35.1	30.4	30.0

BG 2, 18"			
Barium	48.0	36.2	100.0
Chromium	7.5	10.3	4.0
Copper	12.0	14.0	26.0
Lead	<0.6	11.2	0.1
Zinc	40.5	30.4	30.0

HENKEL VALUES ABOVE ACT 307 TYPE B CRITERIA

CORE #. DEPTH PARAMETERS	HENKEL CORP. SITE VALUES mg\kg	ACT 307 TYPE B mg\kg
Core 1, 6"		
Chromium	6.4	4.0
Core 1,18"		
Lead	<0.5	0.1*
Core 2, 6"		
Lead	12.8	6.2
Zinc	155.0	30.0
Core 2, 12"		
Lead	20.2	6.2
Zinc	190.0	30.0
Core 3, 6"		
Chromium	12.4	4.0
Copper	212.0	26.0
Lead	67.0	6.2
Zinc	489.0	30.0
Core 3, 18"		
Lead	<0.6	0.1*
BG 2, 6"		
Zinc	35.1	30.0
BG 2, 18"		
Lead	<0.6	0.1*
Zinc	40.5	30.0

* 0.1 ppm is the 307 criteria issued for lead. It also says that the mean local background for lead may be used if this value is above the 307 criteria. I chose to keep the 307 criteria since the detection limit for lead is above the 307 criteria.

) **SUMMARY** (cont'd)

ganics were present in the soils underlying the storage facility. In dition, none of the collected samples indicated a corrosive nature. analysis of the collected samples for RCRA Metals indicates slightly evated levels of chromium, copper, lead and zinc. This does not pose concern, however, because it has been established that the background evels of metals are higher than any reported regional statistics for ie area. In addition, the levels of RCRA metals are significantly ower in the 18" level than the 6" level, confirming the lack of obility of these metals.

As a result, all of the hazardous waste in the storage facility as tested and transported off-site by Great Lakes Environmental ervices. The interior of the storage facility was then steam-cleaned, which proved to be inefficient. It was determined that a more aggressive approach to the remediation would be required. The next step utilized an acid wash to strip the elevated metals from the surface of the concrete floor. Additional testing indicated this step was successful, as none of the confirmation wipe samples indicated elevated levels of RCRA Metals.

From all information ascertained during the course of this study, it is the professional opinion of Testing Engineers & Consultants, Inc. that the hazardous waste storage building of the Morenci, Michigan Parker + Amchem Facility has been closed in accordance with the ifications of the approved closure plan and of the requirements of 40 CFR 264.115 and 265.115 (as of October 29, 1986).

.....continued

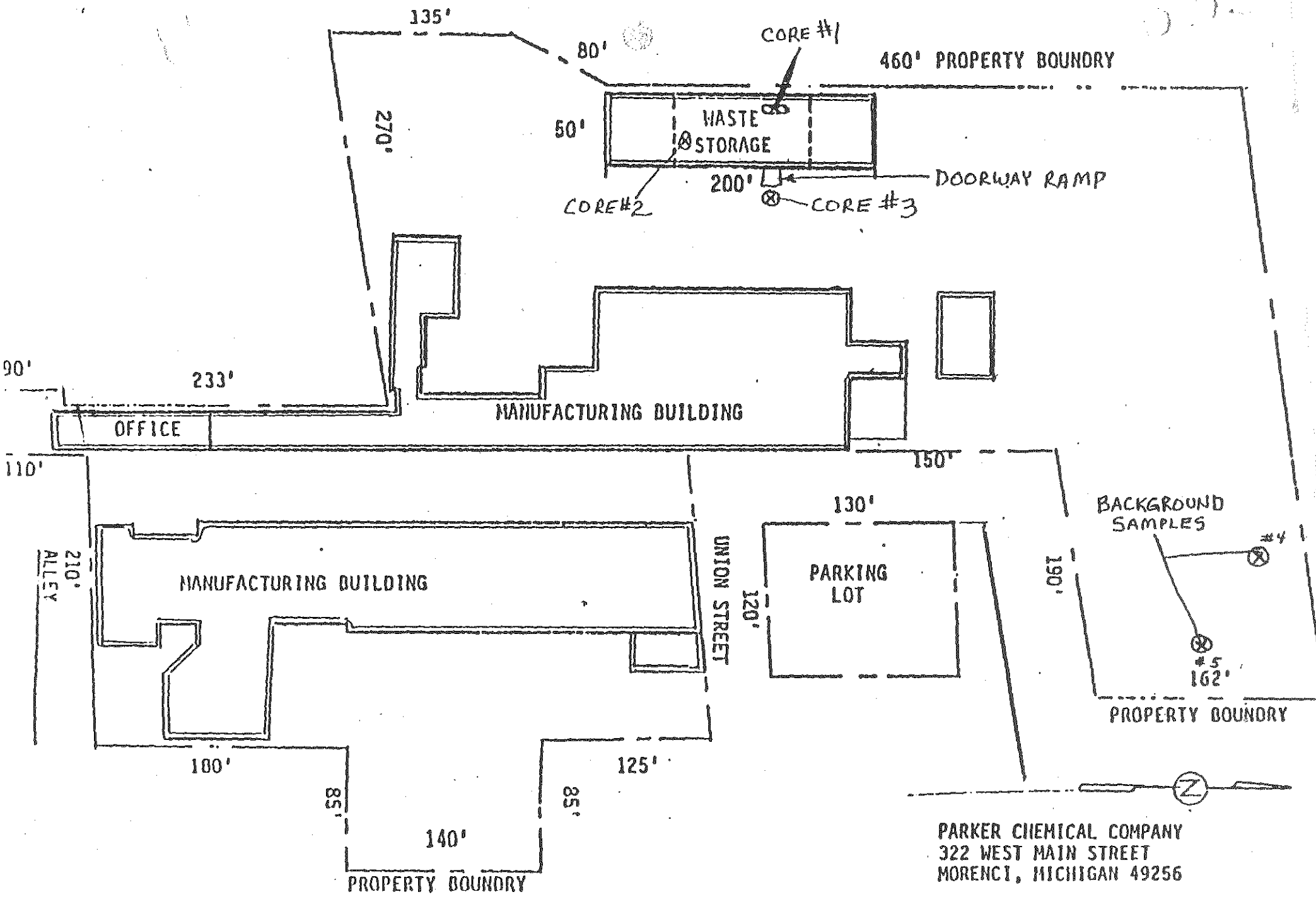


FIGURE TWO: SITE PLAN

RCRA LAND DISPOSAL RESTRICTION INSPECTION

Facility: HENKEL CORP. / PARKER + AMCHEM

U.S. EPA I.D. No. : MID 058 723 867

Street: 322 W. MAIN ST.

City: MORENCI State: MI Zip: 49256

Telephone: (517) 458-2221

Owner/Operator:

Street:

City: State: Zip:

Telephone:

Inspection Date: 9/24/90 Time: 2:00 - 5:00

Weather Conditions: Sunny T ~ 70°

	Name	Agency/Title	Telephone
Inspectors:	CAROLYN PARKER	MDNR/ENV. ENG.	(517) 788-9599
Facility Representative:	JANIS LIPPELS	PROJ. ENG	

	Generate	Transport	Treat	Store	Dispose
F-Solvent	✓				
Dioxin					
California List					
First Third					
Second Third					
THIRD THIRD	✓				

Revised 10-20-89

INSPECTION SUMMARY

Processes That Generate LDR Wastes

WASTE MINERAL SPIRITS (D001)
IS GEN. FROM CLEANING METAL PARTS
IN THE PANEL RM.
D001/D002 - GEN. FROM WASTE OBSOLETE OFFSPEC. PROD.
F003 WAS GEN. FROM LAB WASTES.

LDR Waste Management

IN ACCORDANCE WITH PART 268 REQ.S

Summary

NO LDR VIOLATIONS.

RCRA LAND DISPOSAL RESTRICTION INSPECTION

WASTE IDENTIFICATION

1. Does the facility handle the following wastes?

   a. F001 through F005 spent solvents

      Yes ✓ No ___ List* F003

   b. Dioxin-containing Wastes

      Yes ___ No ✓ List* ___

   c. California List Wastes

      Yes ___ No ✓ List* ___

   d. First and Second ~~Third~~ 3RD THIRD Wastes

      Yes ✓ No ___ List* D001, D002

      * List wastes if room allows or attach Appendix A.

      Note: Please be aware of potential misclassification of wastes (i.e., California list/"soft hammer"/characteristic waste applicabilities).

2. Does the facility handle the following wastes (national capacity variances)?

   a. F001 - F005 contaminated soil or debris resulting from a CERCLA response action or RCRA corrective action (effective date — 11/08/90).

      Yes ___ No ✓ Comments ___

   b. Dioxin contaminated soil and debris resulting from a CERCLA response action or a RCRA corrective action (effective date — 11/08/90).

      Yes ___ No ✓ Comments ___

   c. California list contaminated soil or debris resulting from a CERCLA response action or a RCRA corrective action (effective date — 11/08/90).

      Yes ___ No ✓ Comments ___

d. First Third wastes with the following waste codes: K048, K049, K050, K051, K052, or K071 (effective date - 08/08/90).

Yes ___ No ✓ Comments _____

e. First Third contaminated soil and debris which have a treatment standard based on incineration - K016, K018, K019, K020, K022, K024, K030, K037, K048-K052, K086, K087, K101, K102, K103, and K104 (effective date — 08/08/90).

Yes ___ No ✓ Comments _____

f. Second Third contaminated soil and debris which have a treatment standard based on incineration - F010, F024, K009, K010, K011, K013, K014, K023, K027, K028, K029, K038, K039, K040, K043, K093, K094, K095, K096, K113, K114, K115, K116, P039, P040, P041, P043, P044, P062, P071, P085, P089, P094, P097, P109, P111, U028, U058, U069, U087, U088, U102, U107, U109, U221, U223, U235 (effective date — 06/08/91).

Yes ___ No ✓ Comments _____

RCRA LAND DISPOSAL RESTRICTION INSPECTION

GENERATOR CHECKLIST

GENERATOR REQUIREMENTS

A. Treatability Group - Treatment Standards Identification

1. F-Solvent Wastes: Does the generator correctly determine the appropriate treatability group of the waste?

   Yes ✓ No ___ NA ___

   If yes, check the appropriate treatability group.

   ___ Wastewaters containing solvents (less than or equal to 1% total organic carbon (TOC) by weight)
   ✓ All other spent solvent wastes

2. First and Second Third Wastes: Does the generator correctly determine the appropriate treatability group of the waste?

   Yes ✓ No ___ NA ___

   If yes, list the waste code and check the correct treatability group.

Waste Code	Wastewater*	Non-wastewater
D001, U002		✓

* Less than 1% TOC by weight and less than 1% filterable solids.

3. California List Wastes: Has the generator correctly identified the required treatment technology [268.42]?

   a. For liquid hazardous waste that contains PCBs at concentrations greater than or equal to 50 but less 500 ppm, is the treatment in accordance with existing TSCA thermal treatment regulations for burning in high efficiency boilers (40 CFR 761.60) or incineration (40 CFR 761.70)?

      Yes ___ No ___ NA ✓

      If yes, specify the method: _____

b. For liquid hazardous waste that contains PCBs at concentrations greater than or equal to 500 ppm, is the waste incinerated [40 CFR 761.70] or disposed of by other approved alternate methods [40 CFR 761.60(e)]?

Yes ___ No ___ NA ✓

If an alternative method is used, specify the method and state whether the facility has received approval from the Regional Administrator or Director, Exposure Evaluation Division, for an exemption from the incineration requirement:

___

___

___

c. For hazardous waste that contains halogenated organic compounds (HOCs) in total concentrations greater than or equal to 1,000 mg/L or 1,000 mg/Kg (except dilute HOC wastewater), is the waste incinerated in accordance with existing requirements of 40 CFR Part 264 Subpart O or 40 CFR Part 265 Subpart O?

Yes ___ No ___ NA ✓

4. Does the generator mix restricted wastes with different treatment standards?

Yes ___ No ✓ Comments ___

If yes, did the generator select the most stringent treatment standards (268.41(b), 268.43(b))?

Yes ___ No ___ Comments ___

B. Waste Analysis

1. Does the generator determine whether the restricted waste exceeds treatment standards or prohibition levels at the point of generation by:

- Knowledge of waste Yes ✓ No ___

List the wastes for which "applied knowledge" was used and describe the basis of the applied knowledge determination.
BULK OF WASTES ARE UNUSABLE PRODUCTS W/VERY LITTLE QUESTION OF HOW TO DESIGNATE THE MATERIAL.

Was all supporting data retained on-site, [268.7(a)(5)]?

Yes ✓ No ___ MSDS, MFR.s INFo.

- TCLP Yes ___ No ✓ NA ___

List the wastes for which TCLP was used and provide the date of last test, the frequency of testing, and note any problems. Attach test results.

___

___

___

- Total constituent analysis Yes ___ No ✓ NA ___

List the wastes for which total constituent analysis was used and provide the date of last test, the frequency of testing, and note any problems. Attach test results.

___

___

___

- pH ≤ 2 Yes ✓ No ___ NA ___

List the wastes for which pH testing was used.

D002

- Paint Filter Liquid Test Yes ___ No ✓ NA ___

List the wastes for which PFLT was used.

___

2. Does the facility dilute the restricted waste as a substitute for adequate treatment [268.3]?

Yes ___ No ✓ NA ___

C. <u>Management</u>

1. On-Site Management

Is restricted waste treated, stored for greater than 90 days, or disposed on-site?

Yes ___ No ✓ Comments ___

If yes, the TSD Checklist must be completed.

2. Off-Site Management

a. Does the generator ship any waste that exceeds the treatment standards to an off-site treatment or storage facility?

Yes ✓ No ___ (If no, go to b)

If yes, identify waste code and off-site treatment or storage facilities:

Waste Code	Facilities	Treat/Store
D001	CHEM MET	T
D002		
F003	PETROCHEM	"

- Does the generator provide notification to the treatment or storage facility [268.7(a)(1)]?

Yes ✓ No ___

- Does notification contain the following?

EPA Hazardous waste number(s)	Yes ✓	No ___
Applicable treatment standards and prohibition levels	Yes ✓	No ___
Manifest number	Yes ✓	No ___
Waste analysis data, if available	Yes ✓	No ___

b. Does the facility ship any waste that meets the treatment standards to an off-site disposal facility?

Yes ___ No ✓ (If no, go to c)

If yes, identify waste code and off-site disposal facilities:

Waste Code	Facility

- Does the facility provide notification and certification to the disposal facility [268.7(a)(2)]?

  Yes ___ No ___

- Does notification contain the following?

EPA Hazardous waste number(s)	Yes ___	No ___
Applicable treatment standards and prohibition levels	Yes ___	No ___
Manifest number	Yes ___	No ___
Waste analysis data, if available	Yes ___	No ___
Certification that the waste meets treatment standards [wording in 268.7(a)(2)(ii)]	Yes ___	No ___

c. Is the waste subject to a nationwide variance, case-by-case extension (268.5), or no migration petition (268.6).

   Yes ___ No ✓ (If no, go to d)

- If yes, does the generator provide notification to the off-site receiving facility that the waste is not prohibited from land disposal [268.7(a)(3)]?

  Yes ___ No ___

- Does the notification contain the following information?

EPA hazardous waste number	Yes ___	No ___
The corresponding treatment standards and all applicable prohibitions	Yes ___	No ___
Manifest number	Yes ___	No ___
Waste analysis data, if available	Yes ___	No ___
Date the waste is subject to the prohibitions	Yes ___	No ___

d. Does the facility generate any First or Second Third "soft hammer" waste?

   Yes ___ No ✓ (If no, go to 4)

- Does the generator provide the following notification to the receiving facility with each shipment of waste [268.7(a)(4)]?

(i)	EPA hazardous waste number	Yes ___	No ___
(ii)	Applicable prohibition [268.33(f), 268.34(h)]	Yes ___	No ___
(iii)	Manifest number	Yes ___	No ___
(iv)	Waste analysis data, if available	Yes ___	No ___

3. "Soft Hammer" Demonstrations/Certifications

a. Are any "soft hammer" wastes or treatment residues destined for ultimate disposal in a landfill or surface impoundment?

Yes ___ No ___

b. Has the generator attempted to locate and contract with treatment and recovery facilities that provide treatment that yields the greatest environmental benefit [268.8(a)(1)]?

Yes ___ No ___

c. Has the generator submitted a demonstration and certification to the Regional Administrator to document its efforts to locate practically available treatment [268.8(a)(2)]?

Yes ___ No ___

- If yes, did the generator submit the documentation and certification prior to first shipment?

Yes ___ No ___

d. Does the demonstration contain the following information?

A list of facilities and facility officials contacted?	Yes ___	No ___
Addresses	Yes ___	No ___
Telephone numbers	Yes ___	No ___
Contact dates	Yes ___	No ___
Certification statement	Yes ___	No ___

Attach a copy of the demonstration and certification.

e. If there is no practically available treatment, has the generator included with the demonstration, a written discussion of why the generator was not able to obtain treatment or recovery for that waste [268.8(a)(2)(i)]?

Yes ___ No ___ NA ___

If yes, attach a copy of written discussion.

f. Does the generator ship its "soft hammer" waste off-site for treatment?

Yes ___ No ___

Describe the type of treatment and treatment facilities:

Waste Code	Type of Treatment	Treatment Facility

g. Did the generator send a copy of its demonstration and certification to the receiving facility with the first shipment of waste?

Yes ___ No ___

h. Does the generator provide certification with each subsequent shipment of wastes to receiving facilities?

Yes ___ No ___ NA ___

4. Records Retention

Does the facility retain on-site copies of all notifications, demonstrations, and certifications for a period of 5 years [268.7(a)(6)]?

Yes ✓ No ___ Comments _____

D. RCRA Corrective Action and CERCLA Response Action Waste

1. Has the facility disposed of contaminated soil and debris from a RCRA corrective action or a CERCLA response action in a landfill or surface impoundment?

   Yes ___ No ✓ Comments _____

2. Did the unit meet the minimum technology requirements (double liner, leachate collection system, and ground-water monitoring)?

   Yes ___ No ___ NA ✓ Comments _____

E. Treatment Using RCRA 264/265 Exempt Units or Processes

1. Is waste treated in RCRA 264/265 exempt units (i.e., boilers, furnaces, distillation units, wastewater treatment tanks, elementary neutralization, etc.)?

   Yes ___ No ___ THE FAC. HAS A ZN PHOSPHATING LINE FROM WHICH WASTEWATERS ARE TREATED AND DISCHARGED TO A POTW

   List types of waste treatment units and processes: SOLIDS ARE REMOVED AND SENT TO A SANITARY LANDFILL

Waste Code	Type of Treatment	Treatment Units and Processes

2. Are treatment residuals generated from these units?

   Yes ✓ No ___ Comments NON HAZ. ZN PHOSPHATE SLUDGE.

   If yes, the residues are subject to the LDR generator requirements.

3. Are these residuals further treated, stored for greater than 90 days, or disposed on-site?

   Yes ___ No ✓ NA ___ Comments _____

   If yes, the TSD checklist must be completed.

Gordon E. Guyer, Director
May 7, 1986

Parker Chemical Company
322 West Main Street
Morenci, MI 49256

Re: MID 058723867

Dear Mr. Speed:

On May 1,1986, staff of the Department of Natural Resources, acting as representatives of the United States Environmental Protection Agency, conducted an investigation of your facility located at 322 West Main Street in Morenci, Michigan to evaluate compliance of that facility with requirements of Subtitle C of the Resource Conservation and Recovery Act (RCRA), as amended. Attached is a copy of the inspection report.

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 that:

1. Adequate aisle space was not maintained to allow unobstructed movement of personnel and emergency equipment as required in 40 CFR 265.35. Specifically, there was no aisle space in flammable material area of the drum storage area.

2. Hazardous waste containers were not stored closed as required in 40 CFR 265.173. Specifically, the roll-off box used to hold sludge cake from the waste water treatment plant was outside, uncovered.

We request that you respond to this letter by May 23, 1986 providing documentation to this office regarding those actions taken to correct these violations.

If you have any questions regarding this matter, please feel free to contact me.

Sincerely,

Lee Carter
Env. Quality Analyst
DNR - Region III
P.O. Box 30028
Lansing, MI 48909
517-322-1300

LC/ms

Attachment

cc: U.S. EPA - Region V
Hazardous Waste Division

GORDON E. GUYER, DIRECTOR

June 10, 1986

Mr. Richard Speed, P.E.
Technical Superintendent
Parker Chemical Company
322 W. Main Street
Morenci, MI 49256

Re: MID 058723867

Dear Mr. Speed:

The Department of Natural Resources has received the material you submitted on May 15, 1986 in response to deficiencies revealed in the May 1, 1986 inspection, which this Department performed as a representative of the U.S. Environmental Protection Agency to determine compliance with the provisions of the Resource Conservation and Recovery Act, (RCRA).

Your submittal has addressed the concerns that were raised as a result of the inspection, and is adequate demonstration of compliance with the provisions of RCRA evaluated at the time of the inspection. Compliance with these requirements does not limit the applicability of other provisions of the RCRA regulations. Staff will return to your facility to verify compliance.

Should you have any questions, please contact me.

Sincerely,

Lee Carter
Env. Quality Analyst
DNR - Lansing District
HWD - Region III
P.O. Box 30028
Lansing, MI 48909
517-322-1300

LC/ms

cc: Hazardous Waste Division w/attachment
U.S. EPA - Region V w/attachment

PARKER CHEMICAL

PARKER CHEMICAL COMPANY
MORENCI PLANT
322 W. MAIN STREET
MORENCI, MICHIGAN 49256
517/458-2221

May 15, 1986

Michigan Dept. of Natural Resources
P.O. Box 30028
Lansing, Michigan 48909
Attn: Lee Carter, Env. Quality Analyst

RE: MID 058723867

Dear Mr. Carter,

We have received your letter and copies of the RCRA inspection report for the visit to the Parker, Morenci plant on May 1, 1986.

In response to the violations noted we have:

1. Provided adequate aisle space in the drum storage area to allow unobstructed movement of personnel and emergency equipment as required in 40 CFR 265.35. This was completed by May 5, 1986.

2. Secured covers for the sludge cake roll-off boxes for compliance with 40 CFR 265.173. This was completed by May 13, 1986.

Both of the above items were re-emphasized to the personnel responsible for the hazardous waste storage and handling at this facility.

If you have any further questions regarding this matter, please feel free to contact me.

Sincerely,

Richard G. Speed, P.E.
Technical Superintendent-MFG.

RGS:vam

cc: J. D. Kashner
A. E. Kluegel
R. F. Walker
D. L. Huffman

RCRA Inspection Report

Identification Number: M I D 0 5 8 7 2 3 8 6 7

Installation Name: Parker Chemical Co

Location Address: 322 W. Main

City: Morenci, State: Mi 49256

Date of inspection: [redacted] Time of inspection (from) 10:35 (to) 1:30

Person(s) interviewed	Title	Telephone
Mr Richard Speed	Technical Super	517/ 458 2221
Leland HUFFAKER	PROCESS ENG	"

Inspector(s)	Agency/Title	Telephone
Lee Carter	MIDNR/EGA	322 1300
Robert Basch	MIDNR-DIST Super	"

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

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	[X]	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	[ ]	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?		✓		
b. Facility expansion?		✓		Now waste water treatment system on line
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?	✓			includes sludge, cake from above system
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?	✓			

*t 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)?	✓			weekly
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?	✓			
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?	✓			May 1985
6. If required, are the following special requirements for ignitable, reactive, or incompatible wastes addressed? 265.17				
a. Special handling?	✓			
b. No smoking signs?	✓			
c. Separation and protection from ignition sources?	✓			

Section C: PREPAREDNESS AND PREVENTION: (Part 265 Subpart C)

1. Maintenance and Operation of Facility: 265.31

	YES	NO	NI	Remarks
Is there any evidence of fire, explosion, or release of hazardous waste or hazardous waste constituent?		✓		
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:

City water / wells for process water

3. Testing and Maintenance of Emergency Equipment: 265.33

	YES	NO	NI	Remarks
a. Has the owner or operator established testing and maintenance procedures for emergency 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?		✓		Not in flammable storage area
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
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
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?		✓		No Emergency has occurred

Section E: MANIFEST SYSTEM, RECORDKEEPING, AND REPORTING: (Part 265 Subpart E)

	YES	NO	NI	Remarks
** 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.)				
b. Are records of past shipments retained for 3 years?				does not accept waste from off site sources
** 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.)			N/A	
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?	✓			None occurred
vi. All closure and post closure costs as applicable?	✓			
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?				
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.

	YES	NO	NI	Remarks
8. Has the owner or operator developed an outline of a comprehensive groundwater quality assesment program that is capable of determining: 265.93				
a. Whether hazardous waste or hazardous waste constituents have entered the groundwater?				
b. The rate and extent of migration of hazardous waste or hazardous waste constituents in the groundwater?				
c. The concentration of hazardous waste or hazardous waste constituents in the groundwater?				
*9. Has the owner or operator performed a statistical analysis of his groundwater monitoring data as required in 265.93(b)?			X	
*10. Was there a statistically significant increase (or pH decrease) detected in any well?			X	
a. If "yes," has the owner or operator responded in accordance with the procedures prescribed in 265.93 paragraphs c through f?			X	
Skip to number 14				
11. Has the owner or operator prepared a written groundwater monitoring waiver demonstration for the facility?				
a. Is the waiver demonstration maintained at the facility?				
b. Has the waiver demonstration been certified by a qualified geologist or geotechnical engineer?				

Note: Inspectors should request a copy of the waiver document.

c. Skip questions 12, 13, and 14.

*These requirements do not take effect until the first 6 months after November 19, 1982. The latest date for compliance with these requirements is May 19, 1983.

Section G - CLOSURE AND POST CLOSURE (Part 265 Subpart G)

	YES	NO	NI	Remarks
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?	✓			
v. schedule of closure activities?	✓			
c. Has closure begun?		✓		
***2. Post-Closure 265.118**				
a. Is the post-closure plan available for inspection?				
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	✓			
4. Are containers stored closed?		✓	*	see below
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	✓			
8. Are containers of incompatible waste separated or protected from each other by physical barriers or sufficient distance?	/			

waste water treatment sludge stored in roll-off box. When box full moved outside left uncovered

Section J - TANKS (Part 265, Subpart J)

	YES	NO	NI	Remarks
Are tanks used to store only those wastes which will not cause corrosion, leakage or premature failure of the tank? 265.192				NO TANKS
2. Do uncovered tanks have at least 60 cm (2 feet) of freeboard, or dikes or other containment 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? 265.193				
5. Are required daily and weekly inspections done? 265.194				
6. Are reactive & ignitable wastes in tanks protected or rendered non-reactive or non-ignitable? 265.198 Indicate if waste is ignitable or reactive. (If waste is rendered non-reactive or non-ignitable, see treatment requirements.)				
7. Are incompatible wastes stored in separate tanks? 265.199 (If not, the provisions of 40 CFR 265.17(b) apply.)				

8. Has the owner or operator observed the National Fire Protection Associations buffer zone requirements for tanks containing ignitable or reactive wastes?

Tank capacity: _____ gallons

Tank diameter: _____ feet

Distance of tank from property line _____ feet

(See table 2 - 1 through 2 - 6 of NFPA's "Flammable and Combustible Liquids Code - 1977" to determine compliance.)

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. ± 50				
(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)?	✓			Great Lakes Environment
d. Name, address, and EPA ID Number Designated permitted facility and alternate facility?	✓			Wayne
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
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	✓			

Section E: - INTERNATIONAL SHIPMENTS (Part 262, Subpart E)

	YES	NO	NI	Remarks
1. Has the installation imported or exported Hazardous Waste? 262.50			N/A	

(If answered Yes, complete the following as applicable.)

a. Exporting Hazardous waste; has a generator:

August 15, 1985

Mr. Richard Speed
Technical Superintendent
Parker Chemical Company
322 West Main Street
Morenci, MI 49256

Re: MID 058723867

Dear Mr. Speed:

On August 13, 1985, staff of the Department of Natural Resources conducted an investigation of your facility located at 322 West Main Street in Morenci, Michigan to evaluate compliance of that facility with requirements of Subtitle C of the Resource Conservation and Recovery Act (RCRA), as amended.

This inspection revealed that your facility was in compliance with the RCRA requirements evaluated at the time of the inspection. Compliance with these requirements does not limit the applicability of other provisions of the RCRA regulations. Enclosed is a copy of the inspection report for your information.

If you have any questions regarding this matter, please feel free to contact me.

Sincerely,

Mr. Lee Carter
Water Quality Specialist - HWD
DNR - Region III
P.O. Box 30028
Lansing, MI 48909
517-322-1300

ms/LC

Enclosure

cc: Hazardous Waste Division
U.S. EPA - Region V

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION V

IN THE MATTER OF:	)	
	)	
OCCIDENTAL CHEMICAL CORPORATION,	)	Docket No. V-W-82-R-021
PARKER SURFACE TREATMENT	)	
DIVISION,	)	
	)	
Respondent.	)	

ORDER GRANTING EXTENSION OF TIME

Counsel for Respondent having by Motion dated February 1, 1983, moved for enlargement of time for accomplishing an exchange of prehearing information for the reasons that the parties are actively involved in informal settlement negotiations, Respondent has submitted documents to Complainant for review and has agreed to submit additional documents at the request of Complainant, and the parties have scheduled an additional meeting for March 1, 1983 to discuss settlement.

RECEIVED
WASTE MANAGEMENT BRANCH

THEREFORE, the time in which the parties may accomplish the prehearing exchange directed by the ALJ's letter dated December 7, 1982, as extended by Order dated January 3, 1983, is extended to and including March 15, 1983.

Dated: Feb 8, 1983.

Spencer T. Nissen
Administrative Law Judge

29 JUN 1983

Mr. J. William Whitlock
Landman, Luyendyk, Latimer,
Clink & Robb
400 Terrace Plaza
Post Office Box 29
Muskegon, Michigan 49443

Re: Occidental Chemical Corporation
Consent Agreement and Final Order
MID 058723867
Docket No. V-W-82-R-021

Dear Mr. Whitlock:

This is to acknowledge receipt of the Consent Agreement and Final Order signed by you. A fully executed copy of each Consent Agreement and Final Order is enclosed for your files.

Your cooperation in resolving this matter is appreciated.

Very truly yours,

William H. Miner, Chief
Technical, Permits and Compliance Section

Enclosure

cc: Alan Howard
Michigan Department of Natural Resources

Michigan Attorney General's Office

bcc: Royle, State Implementation Officer, w/enclosure
Regional Hearing Clerk, w/original
Swanson, w/enclosure
Gade, Regional Counsel w/enclosure
TPCS Secretary, w/enclosure
B. Springer, w/enclosure

MINER/dmr 6-6135 6-29-83

6/29/83

LAW OFFICES
LANDMAN, LUYENDYK, LATIMER, CLINK & ROBB

400 TERRACE PLAZA
P.O. BOX 29
MUSKEGON, MICHIGAN 49443
616/722-2671

GRAND RAPIDS, MICHIGAN 49503
400 CALDER PLAZA BLDG.
616/774-8031

GRAND HAVEN, MICHIGAN 49417
PACESETTER BANK BLDG.
616/842-6160

FREMONT, MICHIGAN 49412
OLD STATE BANK BLDG.
616/924-0780

M.L. BRADBURY, JR.
STEPHEN H. CLINK
FRED C. CULVER, JR.
ROBERT L. DeJONG
RICHARD J. HAINER
DAVID E. HATHAWAY
WILLIAM H. HERITAGE, JR.
CHARLES L. HITESMAN
MICHAEL W. IRISH
STEVEN C. KOHL
ANTHONY J. KOLENIC, JR.
RICHARD C. LAGUE
LOU L. LANDMAN
DAVID E. LEIGH
JOHN D.B. LUYENDYK
JOHN HARVEY MARTIN
JOHN H. McKENDRY, JR.
WILLIAM F. McNALLY
DAVID B. MERWIN
DAVID R. MUNROE
WILLIAM M. NEWMAN
RUSSELL E. PRICE
MARK E. PUTNEY
MICHAEL L. ROBINSON
ROBERT W. SIKKEL
I. JOHN SNIDER II

STANLEY J. STEK
FREDRIC A. SYTSMA
THOMAS H. THORNHILL
ALVIN D. TREADO
JON D. VANDER PLOEG
JOHN P. VAN EENENAAM
DONALD J. VELDMAN
RANDALL A. WHITE
J. WILLIAM WHITLOCK

CRAIG A. BERNTHAL
JEFFREY A. DeVREE
PAUL REUBEN JACKSON
PAUL M. KARA
CHRIS ANN McGUIGAN
DOUGLAS J. McNEIL
MICHAEL L. SHIPARSKI
ANNE M. VANDERMALE
ROBERT F. WARDROP, II

OF COUNSEL
H. WINSTON HATHAWAY

HAROLD W. CHARTER - 1978
CHARLES F. LATIMER - 1971
V.S. LAURIN, JR. - 1968
RICHARD A. ROBB - 1971

June 10, 1983

Ms. Mary A. Gade
United States Environmental Protection
Agency
Region V
230 South Dearborn Street
Chicago, Illinois 60604

Re: Our File M-5824-025

Dear Mary:

* Enclosed is an original and five copies of a Consent Agreement and Final Order which I believe incorporates all of the language finally agreed upon. Please note that the original and each of the copies has been executed by Mike Robinson of our office on behalf of Occidental. Please contact me in event there are any difficulties or unanticipated delays in the finalization of this matter. In the absence of hearing from you, we will await receipt of a fully executed Consent Agreement and Final Order and then attend to making payment as required in the Order.

Very truly yours,

J. William Whitlock
For the Firm

JWW/jr

* Enclosures
cc: Mr. Michael Rudick
Mr. Robert J. Schuttler
Mr. Arthur E. Kluegel

1/27/83 GES code D

EPA

RCRA Inspection Report

A Identification Number: M I D 0 5 8 7 2 3 8 6 7

Installation Name: OCCIDENTAL CHEMICAL CORPORATION

Location Address: 322 W. Mainstreet

City: Morenci State: Michigan 49256

Date of inspection: Dec 21, 1983 Time of inspection (from) 10:05 AM (to) 12:00

Person(s) interviewed	Title	Telephone
Richard G. SPEED	Tech Superintendent, Production	(517) 458-2221

Inspector(s)	Agency/Title	Telephone
HIEN Q. NGUYEN	MICH. DNR / Env. Engr.	(517) 322-1687

Installation Activity (mark only one box)	Inspection Form(s)
☒ ~~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

No Deficiency

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	[✓]	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	[✓]	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.

NONE

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?	N/A			
b. Facility expansion?	N/A			
c. Change of owner or operator?	N/A			
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?	NA			*No haz. wastes from off-site source
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?	N/A			not required
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?	✓			
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?	NA			no new personnel working with haz. wastes
g. Do personnel training records indicate that personnel have taken part in an annual review of initital training?	✓			annual review: July 16, 1982
6. If required, are the following special requirements for ignitable, reactive, or incompatible wastes addressed? 265.17				
a. Special handling?	✓			
b. No smoking signs?	✓			
c. Separation and protection from ignition sources?	✓			

Section C: PREPAREDNESS AND PREVENTION: (Part 265 Subpart C)

Maintenance and Operation of Facility: 265.31	YES	NO	NI	Remarks
Is there any evidence of fire, explosion, or release of hazardous waste or hazardous waste constituent?		✓		
2. If required, does the facility have the following equipment: 265.32				
a. Internal communications or alarm systems?	✓			Paging System
b. Telephone or 2-way radios at the scene of operations?	✓			
c. Portable fire extinguishers, fire control, spill control equipment and decontamination equipment?	✓			Portable fire extinguish + protective clothes & equipment

Indicate the volume of water and/or foam available for fire control:

50,000 gallon tank + City water

3. Testing and Maintenance of Emergency Equipment: 265.33				
a. Has the owner or operator established testing and maintenance procedures for emergency 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
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?	✓			3 Emergency Coordinators
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?	N/A			

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.)	✓			
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?	N/A			
vi. All closure and ~~post closure costs~~ as applicable?	✓			$ 39,6330 (1983 cost
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				NA
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?				
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 F - GROUNDWATER MONITORING (Part 265 Subpart F)

Complete this section for facilities that treat, store, or dispose of hazardous waste in landfills, surface impoundments and/or by land treatment.

	YES	NO	NI	Remarks
1. Has the owner or operator of the facility implemented a groundwater monitoring system? 265.90	___	___	___	_____
If "no", Skip to number 11.				
2. Has the owner or operator of the facility implemented an alternate groundwater monitoring system as described in 265.90(d)?	___	___	___	_____
If "yes", skip to number 12. If "no", continue				
3. Does the groundwater monitoring system meet the following requirements of 265.91:				
a. At least one well installed hydraulically up-gradient from the limit of the waste management area?	___	___	___	_____
Indicate the total number of up-gradient wells.				
b. At least three wells installed hydraulically down-gradient at the limit of the waste management area?	___	___	___	_____
Indicate the total number of downgradient wells.	_____			
c. Are the number, locations, and depths of all wells sufficient to yield groundwater samples that are representative of groundwater under the facility?	___	___	___	_____

Sketch the locations of the wells relative to the waste management area.

	YES	NO	NI	Remarks
d. Are the monitoring wells constructed in accordance with 265.91(c) (e.g. properly cased, screened, etc.)?	___	___	___	_____
4. Has the owner or operator developed a written groundwater sampling and analysis plan that includes procedures and techniques for: 265.92				
a. Sample collection?	___	___	___	_____
b. Sample preservation and shipment?	___	___	___	_____
c. Analytical procedures?	___	___	___	_____
d. Chain of custody control?	___	___	___	_____
5. Does the owner or operator follow his groundwater sampling and analysis plan?	___	___	___	_____
6. Is the groundwater sampling and analysis plan maintained at the facility?	___	___	___	_____
7. Has the owner or operator determined the concentration or value of all the groundwater monitoring parameters of 265.92(b) in accordance with paragraphs c and d of 265.92?	___	___	___	_____

	YES	NO	NI	Remarks
8. Has the owner or operator developed an outline of a comprehensive groundwater quality assesment program that is capable of determining: 265.93				
a. Whether hazardous waste or hazardous waste constituents have entered the groundwater?				
b. The rate and extent of migration of hazardous waste or hazardous waste constituents in the groundwater?				
c. The concentration of hazardous waste or hazardous waste constituents in the groundwater?				
*9. Has the owner or operator performed a statistical analysis of his groundwater monitoring data as required in 265.93(b)?			X	
*10. Was there a statistically significant increase (or pH decrease) detected in any well?			X	
a. If "yes," has the owner or operator responded in accordance with the procedures prescribed in 265.93 paragraphs c through f?			X	
Skip to number 14				
11. Has the owner or operator prepared a written groundwater monitoring waiver demonstration for the facility?				
a. Is the waiver demonstration maintained at the facility?				
b. Has the waiver demonstration been certified by a qualified geologist or geotechnical engineer?				

Note: Inspectors should request a copy of the waiver document.

c. Skip questions 12, 13, and 14.

*These requirements do not take effect until the first 6 months after November 19, 1982. The latest date for compliance with these requirements is May 19, 1983.

	YES	NO	NI	Remarks
12. Has the owner or operator submitted an alternate groundwater monitoring system to the Regional Administrator?	___	___	___	_____
a. Has the plan been certified by a qualified geologist or geotechnical engineer?	___	___	___	_____

Note: If the plan for an alternate groundwater monitoring system was not submitted to the Regional Administrator the inspector should request a copy for review.

13. Does the alternate groundwater monitoring plan address the requirements of 265.90(d)?	___	___	___	_____
14. Does the owner or operator submit reports and maintain records as required in 265.94?	___	___	___	_____

Section - 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?	✓			300 drums.
ii. maximum hazardous waste inventory?	✓			
iv. estimated year of closure?	N/A			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				

*Applies only to disposal facilities.

Section I - [illegible] AND MANGEMENT OF CONTAINERS ([illegible]rt 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 only
7. Are incompatible wastes stored in separate containers? (If not, the provisions of 40 CFR 265.17(b) apply). 265.177	N/A			
8. Are containers of incompatible waste separated or protected from each other by physical barriers or sufficient distance?	N/A			

Note: The drums are stored in a building w/ concrete floor and dikes + "No smoking" signs.

Section J - TANKS (Part 265, Subpart J)

	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? 265.192	___	___	___	_____
2. Do uncovered tanks have at least 60 cm (2 feet) of freeboard, or dikes or other containment 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? 265.193	___	___	___	_____
5. Are required daily and weekly inspections done? 265.194	___	___	___	_____
6. Are reactive & ignitable wastes in tanks protected or rendered non-reactive or non-ignitable? 265.198 Indicate if waste is ignitable or reactive. (If waste is rendered non-reactive or non-ignitable, see treatment requirements.)	___	___	___	_____
7. Are incompatible wastes stored in separate tanks? 265.199 (If not, the provisions of 40 CFR 265.17(b) apply.)	___	___	___	_____

8. Has the owner or operator observed the National Fire Protection Associations buffer zone requirements for tanks containing ignitable or reactive wastes?

Tank capacity: _____gallons

Tank diameter: _____feet

Distance of tank from property line _____ feet

(See table 2 - 1 through 2 - 6 of NFPA's "Flammable and Combustible Liquids Code - 1977" to determine compliance.)

Section K - SURFACE IMPOUNDMENTS (Part 265, Subpart K)

	YES	NO	NI	Remarks
1. Do surface impoundments have at least 60 cm (2 feet) of freeboard? 265.222				
2. Do earthen dikes have protective covers? 265.223				
3. Are waste analyses done when the impoundment is used to store a substantially different waste than before? 265.225				
4. Is the freeboard level inspected at least daily? 265.226				
5. Are the dikes inspected weekly for evidence of leaks or deterioration?				
6. Are reactive & ignitable wastes rendered non-reactive or non-ignitable before storage in a surface impoundment? (If waste is rendered non-reactive or non-ignitable, see treatment requirements.) 265.229				
7. Are incompatible wastes stored in different impoundments? (If not, the provisions of 40 CFR 265.17(b) apply.) 265.230				

Section L - WASTE PILES (40 CFR Part 265, Subpart L)

	YES	NO	NI	Remarks
1. Are waste piles covered or protected from dispersal by wind? 265.251	___	___	___	_____
2. Is each in-coming movement of waste analyzed before being added to the waste pile? 265.252	___	___	___	_____
3. Are leachate, run-off, and run-on controlled as per the requirements of 265.253? 265.253	___	___	___	_____
4. Are reactive & ignitable wastes rendered non-reactive or non-ignitable before storage in a pile? Indicate if waste is ignitable or reactive. (If waste is rendered non-reactive or non-ignitable, see treatment requirements.) 265.256	___	___	___	_____
5. Are piles of reactive or ignitable waste protected from materials or conditions that might cause them to ignite or react?	___	___	___	_____
6. Are incompatible wastes stored in different piles? (If not, the provisions of 40 CFR 265.17(b) apply.) 265.257	___	___	___	_____
7. Are piles of incompatible waste protected by barriers or distance from other waste?	___	___	___	_____

Section M - LAND TREATMENT (Part 265, Subpart M)

	YES	NO	NI	Remarks
1. Is treated hazardous waste capable of biological or chemical degradation? 265.272	___	___	___	_____
2. Are run-off and run-on diverted from the facility or collected				
3. Is waste analyzed according to 265.273?	___	___	___	_____
4. If food chain crops are grown at the facility, has the owner or operator addressed the requirements of 265.276?	___	___	___	_____
5. Is an unsaturated zone monitoring plan designed and implemented to detect the vertical migration of hazardous waste and provide information on the background concentrations of the hazardous waste available? 265.278	___	___	___	_____
6. Does the unsaturated zone monitoring plan address the minimum information specified in 265.278?	___	___	___	_____
7. Are records kept regarding application dates and rates, quantities, and locations, of all hazardous waste placed in the facility? 265.279	___	___	___	_____
8. Are the special requirements fulfilled regarding land treatment of ignitable or reactive wastes? (Indicate if waste is ignitable or reactive.) 265.281	___	___	___	_____
9. Are incompatible wastes land treated? (If yes, 265.17(b) applies) 265.282	___	___	___	_____

Section N - LANDFILLS (Part 265, Subpart N)

	YES	NO	NI	Remarks
General Operating Requirements 265.302 Does the facility provide the following:				
a. Diversion of run-on away from active portions of the fill?	___	___	___	_____
b. Collection of run-off from active portions of the fill?	___	___	___	_____
c. Is collected run off treated?	___	___	___	_____
d. Control of wind dispersal of hazardous waste?	___	___	___	_____
2. Surveying and Recordkeeping 265.309 Does the Operating Record Include:				
a. A map showing the exact location and dimensions of each cell?	___	___	___	_____
b. The contents of each cell and the location of each hazardous waste type withing each cell?	___	___	___	_____
3. Special requirements for ignitable or reactive waste. Are ignitable or reactive wastes treated so the resulting mixture is no longer ignitable or reactive? (Indicate if waste is ignitable or reactive.) 265.312	___	___	___	_____
4. Special Requirements for Incompatible Wastes. 265.313 Does the owner or operator dispose of incompatible waste in separate cells? (If not, the provisions of 40 CFR 265.17(b) apply.)	___	___	___	_____

Note: If waste is rendered non-reactive or non-ignitable see treatment requirements. If not, the provisions of 40 CFR 265.17(b) apply.

	YES	NO	NI	Remarks
5. Special requirements for liquid waste 265.314				
a. Are bulk or non-containerized liquids placed in the landfill? If "yes," complete items i, ii, and iii.				
i. Does the landfill have a chemically and physically resistant liner system?				
ii. Does the landfill have a functional leachate collection system?				
iii. Are free liquids stabilized prior to or immediately after placement in the landfill?				
b. Have containers holding free liquids been placed in landfill since March 22, 1982?				
6. Special requirements for Containers 265.315 Are empty containers crushed flat, shredded, or similarly reduced in volume before being buried beneath the surface of the landfill?				

Section O/P - INCINERATION AND THERMAL TREATMENT (40 CFR Part 265, Subparts O and P)

Determination of Steady State

I=incinerator T=thermal

a. Type of unit (i.e., type of incinerator or thermal treatment): _____

b. Components and steady state condition: I 265.343 T 265.373

Was each component at steady state prior to adding waste?

Component	YES	NO	NI	Remarks

2. Waste Analysis I 265.345 T 265.375

a. Minimum requirements, for wastes not previously burned/treated.

i. Required analyses; has an analysis been performed for the following?

Heating value				
Halogen content				
Sulfur content				

ii. Has documented or written data been substituted for analysis of either:

Lead?				
Mercury:				

b. List other paramters for which the waste is tested to enable owner or operator to establish steady state or determine the types of pollutants which may be emitted. (Note in Remarks any which you feel should be tested.)

	YES	NO	NI	Remarks
3. Monitoring and Inspections I 265.347 T 265.37				
a. Are combustion/emission control instruments monitored at least every 15 minutes?	___	___	___	_____
b. Is steady state maintained or corrections attempted?	___	___	___	_____
c. Is stack plume observed at least hourly for normal color and opacity?	___	___	___	_____
d. Did any stack observations made by owner or operator show a plume different than normal?**	___	___	___	_____
e. If "yes" to (d) above, were corrections made to return emissions to normal appearance?**	___	___	___	_____
f. Are the complete unit and associated equipment inspected daily for leaks, spills, and fugitive emissions?	___	___	___	_____

**Specify in Remarks for what period of time this was checked.

g. Are emergency shutdown controls and system alarms checked daily for proper operation?	___	___	___	_____

4. Open Burning T 265.382 (open burning does not apply to incineration)

a. Only complete this part if the facility open burns hazardous waste.

i. Does this facility burn only waste explosives? (A No answer means other hazardous waste is open-burned).	___	___	___	_____

	YES	NO	NI	Remarks
ii. It this facility open-burns waste explosives, does it burn the waste at a distance greater than or equal to the minimum specified distance (below)	___	___	___	_____

Pounds of waste explosives or propellants	Minimum distance from open burning or detonation to the property of others	
0 to 100.....	204 m	670 ft
101 to 1,000.....	380 m	1,250 ft
1,001 to 10,000.....	530 m	1,730 ft
10,0001 to 30,000.....	690 m	2,260 ft

Section Q - CHEMICAL, PHYSICAL AND BIOLOGICAL TREATMENT (Part 265, Subpart Q)

	YES	NO	NI	Remarks
1. Is equipment used to treat only those wastes which will not cause leakage, corrosion, or premature failure? 265.401	___	___	___	_____
2. Is a continuously fed system equipped with a means of hazardous waste inflow stoppage or control (e.g., cut-off system)?	___	___	___	_____
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? 265.405	___	___	___	_____
6. Are incompatible wastes treated? (If yes, 265.17(b) applies.) 265.406	___	___	___	_____

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 neutralize wastes which are hazardous only because they exhibit the corrosivity characteristics under 40 CFR §261.22, or are listed as hazardous wastes in Subpart D of 40 CFR Part 261 only for this reason.

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. 6				
(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. NONE

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. NONE

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

NA

	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	NA			

(If answered Yes, complete the following as applicable.)

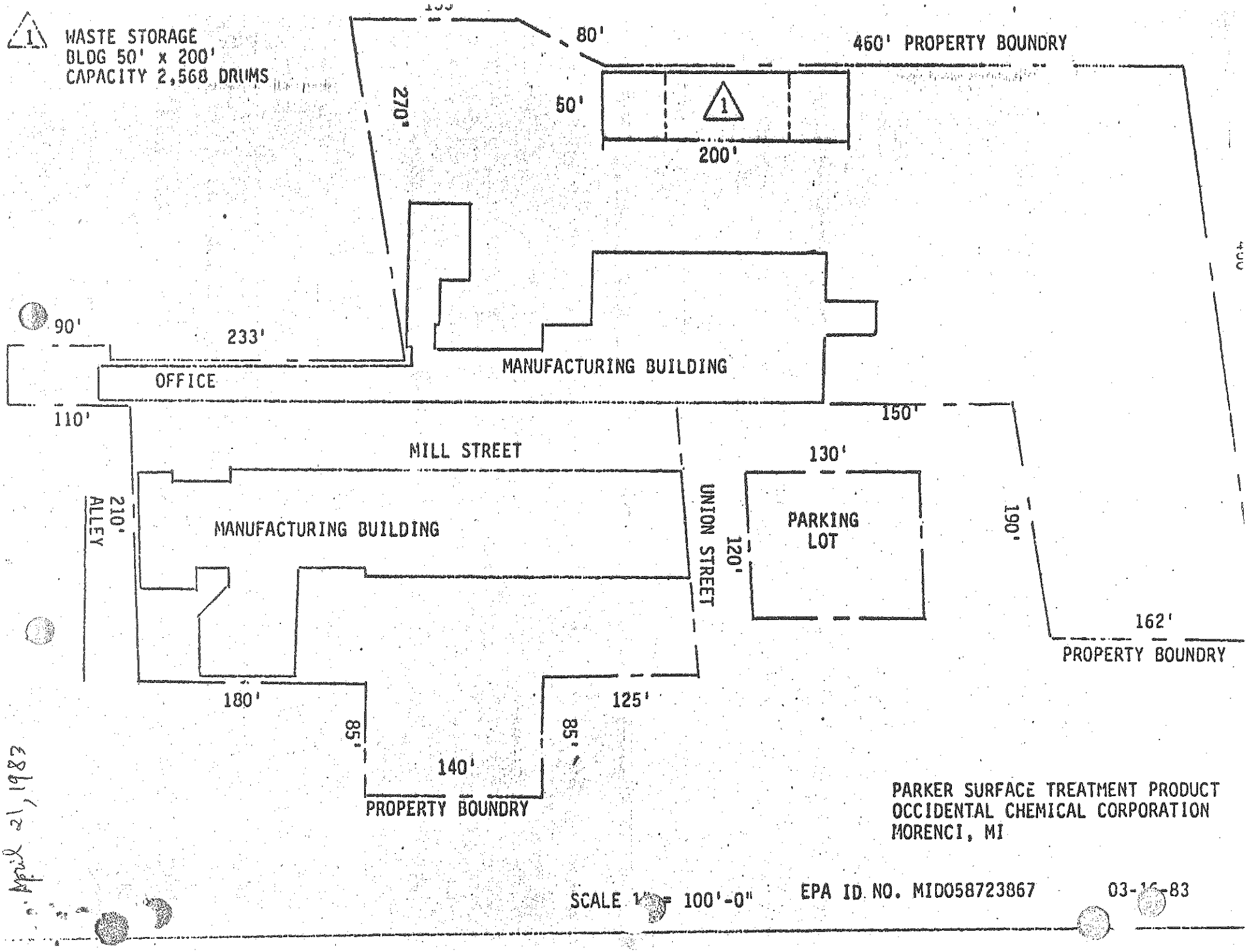
a. Exporting Hazardous waste; has a generator:

	YES	NO	NI	Remarks
i. Notified the Administrator in writing?				
ii. Obtained the signature of the foreign consignee confiming delivery of the waste(s) in the foreign country?				
iii. Met the Manifest requirements?				
b. Importing Hazardous Waste; has the generator met the manifest requirements?				

Appendix TR

N A

	YES	NO	NI	Remarks
Section A: SCOPE:				
1. Complete this Appendix if the owner or operator transports hazardous waste subject to 40 CFR 263.10.				
2. Does the transporter transport hazardous waste into the U.S. from abroad?				
3. Does the transporter transport hazardous waste out from the U.S.?				
4. Does the transporter mix hazardous waste of different DOT shipping descriptions by placing them into a single container?				
Section B: MANIFEST SYSTEM AND RECORDKEEPING (Part 263, Subpart B)				
1. Are copies of completed manifests available for review and retained for three years. 263.22				
2. Estimate the number of manifests for shipments completed during the part 6 months.				
3. Examine a representative number of manifests. Indicate number examined.				
4. Did transporter properly sign and date the manifests examined?				
5. Do any manifests indicate shipments delivered to other than the designated facility? 263.21				
If (5) is "no," skip 6 and 7.				
6. Do any manifests indicate shipments delivered to other than an alternate facility?				
7. Are shipments delivered to alternate facilities only because emergency prevents delivery to the designated facility?				



PARKER SURFACE TREATMENT PRODUCT
OCCIDENTAL CHEMICAL CORPORATION
MORENCI, MI

SCALE 1" = 100'-0" EPA ID NO. MID058723867 03-16-83

April 21, 1983

RECORD OF COMMUNICATION	☐ PHONE CALL ☐ DISCUSSION ☐ FIELD TRIP ☐ CONFERENCE ☐ OTHER (SPECIFY) (Record of item checked above)	
TO: Jollynn Traub	FROM: Sally Swanson	DATE 6-15-83 TIME

SUBJECT

SUMMARY OF COMMUNICATION

On June 2, 1983, I called John Bohunsky of MDNR. I requested a followup inspection of Occidental Chemical Corp, Morenci Michigan. I explained U.S. EPA's Compliance Order negotiations to him.

He indicated he would check into scheduling it and call me back.

Rick Lundgren called today to inform me that an ISS inspection will be done at Oxy on Monday, June 20 by his staff. They will call me with the results.

CONCLUSIONS, ACTION TAKEN OR REQUIRED

INFORMATION COPIES TO: FILE

EPA Form 1300-6 (7-72) REPLACES EPA HQ FORM 8300-8 WHICH MAY BE USED UNTIL SUPPLY IS EXHAUSTED.

5HW

JUN 10 1983

Mr. Michael Robinson
Landman, Luyendyk, Latimer,
Clink & Robb
400 Terrance Plaza
P. O. Box 29
Muskegon, Michigan 49443

Re: Occidental Chemical Corporation-Parker
Surface Treatment Products Division
EPA ID No. MID 058723867

Dear Mr. Robinson:

As part of settlement negotiations on the Compliance Order which this Agency issued to Occidental Chemical Corporation-Parker Surface Treatment Products Division on September 2, 1982, your client requested a letter addressing the adequacy of its recently developed materials handling plan. During settlement negotiations, you provided information relating to the company's practice of accepting returned chemical products from its customers.

Returned products and hazardous wastes generated on-site and from off-site generators were stored together at the Morenci facility. Occidental lacked sufficient documentation to show which containers held hazardous waste and which held returned products awaiting evaluation and either reprocessing, resale, or disposal. Consequently, your client developed and recently submitted to this Agency a copy of its materials handling document for the Morenci facility, which includes policies and procedures for the management of hazardous wastes and returned products. The contents of the document appears consistent with the spirit of the law regarding proper handling of hazardous waste.

The United States Environmental Protection Agency appreciates the Company's timely action to correct the deficiencies noted at the time of the inspections and the Company's cooperation in resolving the Compliance Order.

Should you have any questions regarding this matter, do not hesitate to contact this office.

Sincerely,

Basil G. Constantelos, Director
Waste Management Division

bcc: Gade, ORC

@mr 6/7/83

TYPIST	AUTHOR	STU #1 CHIEF	STU #2 CHIEF	STU #3 CHIEF	TPS CHIEF	WMB CHIEF	WMB DIRECTOR

RECORD OF COMMUNICATION	☐ PHONE CALL ☐ DISCUSSION ☐ FIELD TRIP ☐ CONFERENCE ☐ OTHER (SPECIFY) (Record of item checked above)	
TO: Occidental Chemical Corp File	FROM: Sally Swanson	DATE 5-26-83 and subsequent dates. TIME

SUBJECT
Followup compliance inspection of Occidental, Morenci

SUMMARY OF COMMUNICATION

I called for Roy Schramek, MDNR Grosse Ile, MI, to see if a follow up inspection has been done at this site. He was not in. 313-675-0860

5-31-83 Roy Schramek - no longer involved w/ RCRA. Suggested I call John Bohunsky - compliance supervisor - Haz Waste Div 517-373-2730.

Looked around and saw barrels moved etc. but didn't do a RCRA insp. (was a Water/groundwater insp). Alot of drums observed in shipping/receiving bldg.
At most recent site visit.

6-1-83 called; left message for John Bohunsky.
6-2-83 called: Bohunsky not in. Will call again after lunch.
6-2-83. Talked w/ John Bohunsky. He will check to see whether Occidental has been inspected recently (followup) and if not, will sked. May not be able to get insp. done before 6-15-83. He will call me back.

CONCLUSIONS, ACTION TAKEN OR REQUIRED

INFORMATION COPIES
TO:

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION V
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

REPLY TO ATTENTION OF:

13 MAY 1983

Mr. Spencer T. Nissen
Administrative Law Judge
Office of Administrative
Law Judges (A-110)
United States Environmental
Protection Agency
401 M. Street, S.W.
Washington, D.C. 20460

Re: Docket No. V-W-82-R-021
Occidental Chemical Corporation,
Parker Surface Treatment Division

Dear Judge Nissen:

By Order dated April 14, 1983, you directed the parties to this action to accomplish a prehearing exchange of information by May 15, 1983. With the concurrence of counsel for Respondent, I am seeking an extension to and including June 15, 1983. A Consent Agreement and Final Order satisfactory to both parties to this action has been drafted. Counsel for Respondent has advised me that the document has been signed by his client and will be forward to the United States Environmental Protection Agency (U.S.EPA) for signature shortly. The only remaining issue is the language for a letter that the Respondent has requested from U.S. EPA on Occidental Chemical Corporation's newly developed materials handling plan. U.S. EPA is preparing this letter at this time and anticipates receiving Respondent's concurrence on it within the next week. Accordingly, I have enclosed for your consideration a Motion to Enlarge Time for Prehearing Exchange of Information. Please note that a proposed Order to Enlarge Time has been attached to the Motion.

Sincerely,

Mary A. Gade

Mary A. Gade
Attorney for Complainant

cc: Michael Robinson
Regional Hearing Clerk

Enclosures

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION V

IN THE MATTER OF: Occidental Chemical Corporation, Parker Surface Treatment Division	)	DOCKET NO. V-W-82-R-021

MOTION TO ENLARGE TIME FOR PREHEARING EXCHANGE OF INFORMATION

The Complainant, by its counsel, Mary A. Gade, Assistant Regional Counsel, moves the Presiding Officer to enlarge the time for performing a prehearing exchange of information in the above captioned Complaint. The following facts and argument are offered in support of this motion:

1. By Order dated December 7, 1983, the parties were instructed to perform a prehearing exchange of information by January 17, 1983.

2. Several Motions have been filed in the above-captioned case requesting extensions of time in which to complete the prehearing exchange of information as the parties attempted to negotiate an informal settlement.

3. The most recent Order dated April 14, 1983, requires the parties to accomplish a prehearing exchange of information by May 15, 1983.

4. The parties have drafted a Consent Agreement acceptable to both parties. This document has been executed by Respondent and will be forwarded to Complainant for signature upon agreement by the parties on the text of a letter the Respondent has requested from Complainant on its newly developed materials handling plan.

5. Complainant believes that no useful purpose would be served by exchanging the information required by the December 7, 1982 Order, as extended, since settlement of this matter is imminent.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION V

IN THE MATTER OF: OCCIDENTAL CHEMICAL CORPORATION, PARKER SURFACE TREATMENT DIVISION, RESPONDENT.	)	DOCKET NO. V-W-82-R-021

ORDER GRANTING EXTENSION OF TIME

Counsel for Complainant having by Motion dated May 13, 1983, moved for enlargement of time for accomplishing an exchange of prehearing information for the reasons that the parties have reached informal settlement, are presently resolving one outstanding issue, and are executing a Consent Agreement and Final Order.

THEREFORE, the time in which the parties may accomplish the prehearing exchange directed by the Administrative Law Judge's letter dated December 7, 1982, as previously extended, is further extended to and including June 15, 1983.

Dated: _____, 1983

_____
Spencer T. Nissen
Administrative Law Judge

CERTIFICATE OF SERVICE

I hereby certify that I have caused a copy of the foregoing Motion to Enlarge Time for Prehearing Exchange of Information and proposed Order to be served upon, Michael L. Robinson, Attorney, Occidental Chemical Corporation, Landman, Luyendyk, Latimer, Clink & Robb, 400 Terrace Plaza, Muskegon, Michigan 49443, by placing it in a Government franked envelope and depositing it in the mail on the date indicated below.

I have further caused the original and one copy of the foregoing Motion to Enlarge Time for Prehearing Exchange of Information and a copy of the proposed Order and this Certificate of Service to be personally served on the Regional Hearing Clerk, Office of Regional Counsel, U.S. EPA, Region V, 230 South Dearborn, Chicago, Illinois 60604 on the date below.

Dated this 13th day of May, 1983.

Mary A. Gade

Mary A. Gade
Attorney for Complainant

U. ENVIRONMENTAL PROTECTION AGENC
REGION V

5HW-13

DATE: MAY 6 1983

SUBJECT: Proposed CAFO for Occidental Chemical Corp.

FROM: Sally K. Swanson SKS
Environmental Protection Specialist

TO: Mary A. Gade
Assistant Regional Counsel

I have reviewed Occidental's proposed CAFO and your memo of May 4, 1983. My comments follow:

1. Concur that the change on p. 2 is unacceptable; the Agency cannot waive its enforcement initiative.

2. Concur.

3. Concur.

4. Paragraph 5(b) concludes "...until such time as Respondent intends to discard such material." Is "intends to discard" explicit enough to assure that returned products will be managed as a hazardous waste as soon as the reuse or disposal determination is made? I would be uncomfortable with the Agency signing a CAFO with a potenetial loophole. As the subject matter of this particular paragraph is important to the Respondent in terms of settlement, it will be acceptable, although I would not elect to include it were I drafting the original document.

cc: Miner
Grimes
Enforcement File ✓

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE: May 4, 1983

SUBJECT: CAFO for Occidental Chemical Corporation

FROM: Mary Gade MG
Assistant Regional Counsel

TO: Roger Grimes
David Ulrich
William Miner
Sally Swanson

On May 2, 1983, Occidental Chemical Corporation received the proposed Consent Agreement and Final Order for resolving the RCRA Complaint issued to its Parker Surface Treatment Products Division in Morenci, Michigan. Counsel for Occidental called me yesterday with suggested changes to the document and magna-faxed a corrected copy to me today. I have highlighted the changed portions of the document in red on each of your copies. I would like your recommendations on the acceptability of the changes as soon as possible but no later than May 9, 1983. A Prehearing Exchange of Information is due to the Administrative Law Judge on May 15, 1983 unless accord is reached. Although I can and will seek another extension, I would like to know that the differences between Occidental's proposal and our draft are reconcilable prior to asking for an extension on the pre-hearing exchange.

My position on the changes is as follows:

P. 2 change is unacceptable as an attempt to limit our rights to take any criminal action against Occidental and as an attempt to limit our rights to take action against parties who have not participated in this settlement.

P. 3, paragraph 2 change is acceptable.

P. 3, Paragraph 4 changes are acceptable in that they merely change the tense of the verb from "had" to "has".

P. 3 and 4, Paragraph 5 changes are unnecessary and an attempt to gain our assurance that Respondent's return product practices will be acceptable in the future. Nonetheless, I do not have strong objections to this change.

Attachment

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION V
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

REPLY TO ATTENTION OF:

11 APR 1983

RECEIVED
APR 12 1983
WASTE MANAGEMENT BRANCH

Mr. Spencer T. Nissen
Administrative Law Judge
Office of Administrative
Law Judges (A-110)
United States Environmental
Protection Agency
401 M. Street, S.W.
Washington, D.C. 20460

Re: Docket No. V-W-82-R-021
Occidental Chemical Corporation,
Parker Surface Treatment Division

Dear Judge Nissen:

As I discussed with your secretary in an April 8, 1983 telephone conversation, negotiations between the parties to this action are continuing. Occidental Chemical Corporation has agreed to pay the penalty contained in the Complaint if satisfactory language can be drafted for the Consent Agreement and Final Order. Accordingly, both parties will be focusing their efforts on developing an acceptable agreement in the next weeks. By Order dated March 14, 1983, you directed the parties to accomplish a prehearing exchange of information by April 15, 1983. Since such an exchange will be unnecessary if a final accord is reached, I have enclosed for your consideration a Motion to Enlarge Time for Prehearing Exchange of Information. With the concurrence of Counsel for Respondent, I am seeking an extension to and including May 15, 1983. Please note that a proposed Order to Enlarge Time has been attached to the Motion.

Sincerely,

Mary A. Gade

Mary A. Gade
Attorney for Complainant

cc: Michael Robinson
Regional Hearing Clerk

Enclosures

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION V

IN THE MATTER OF: Occidental Chemical Corporation, Parker Surface Treatment Division	)	DOCKET NO. V-W-82-R-021

MOTION TO ENLARGE TIME FOR PREHEARING EXCHANGE OF INFORMATION

The Complainant, by its counsel, Mary A. Gade, Assistant Regional Counsel, moves the Presiding Officer to enlarge the time for performing a prehearing exchange of information in the above captioned Complaint. The following facts and argument are offered in support of this motion:

1. By Order dated December 7, 1983, the parties were instructed to perform a prehearing exchange of information by January 17, 1983.

2. Several Motions have been filed in the above-captioned case requesting extensions of time in which to complete the prehearing exchange of information as the parties attempted to negotiate a settlement informally.

3. The most recent Order dated March 14, 1983, requires the parties to accomplish a prehearing exchange of information by April 15, 1983.

4. The parties have recently reached preliminary agreement on settlement. Accordingly, they are now attempting to draft a Consent Agreement acceptable to both parties.

5. Complainant believes that no useful purpose would be served by exchanging the information required by the December 7, 1982 Order as extended while the parties are negotiating a settlement.

6. Counsel for Respondent has been contacted and supports this request for an extension of time.

WHEREFORE, Complainant moves for an extension of time for performing the prehearing exchange of information to and including May 15, 1983.

Respectfully submitted,

MARY A. GADE
Attorney for Complainant
Office of Regional Counsel
U.S. EPA, Region V
230 South Dearborn Street
Chicago, Illinois 60604

Dated: April 11, 1983

UNITED STATES ENVIRONMENTAL PROIECTION AGENCY

REGION V

IN THE MATTER OF: OCCIDENTAL CHEMICAL CORPORATION, PARKER SURFACE TREATMENT DIVISION, Respondent,	)	DOCKET NO. V-W-82-R-021

ORDER GRANTING EXTENSION OF TIME

Counsel for Complainant having by Motion dated April 11, 1983, moved for enlargement of time for accomplishing an exchange of prehearing information for the reasons that the parties are actively involved in informal settlement negotiations in which they are negotiating a Consent Agreement and Final Order.

THEREFORE, the time in which the parties may accomplish the prehearing exchange directed by the ALJ's letter dated December 7, 1982, as previously extended is further extended to and including May 15, 1983.

Dated: _____, 1983.

_____
Spencer T. Nissen
Administrative Law Judge

CERTIFICATE OF SERVICE

I hereby certify that I have caused a copy of the foregoing Motion to Enlarge Time for Prehearing Exchange of Information and proposed Order to be served upon, Michael L. Robinson, Attorney, Occidental Chemical Corporation, Landmand, Luyendyk, Latimer, Clink & Robb, 400 Terrace Plaza, Muskegon, Michigan 49443, by placing it in a Government franked envelope, first class and depositing it in themail on the date below.

I have further caused the original and one copy of the foregoing Motion to Enlarge Time for Prehearing Exchange of Information and a copy of the proposed Order and this Certificate of Service to be personally served on the Regional Hearing Clerk, Office of Regional Counsel, U.S. EPA, Region V, 230 South Dearborn Street, Chicago, Illinois 60604 on the date below.

Dated this 11 day of April, 1983.

Mary A. Gade
Mary A. Gade
Attorney for Complainant

SALLY

LAW OFFICES
LANDMAN, LUYENDYK, LATIMER, CLINK & ROBB
400 TERRACE PLAZA
P.O. BOX 29
MUSKEGON, MICHIGAN 49443
616/722-2671

GRAND RAPIDS, MICHIGAN 49503
400 CALDER PLAZA BLDG.
616/774-6031

GRAND HAVEN, MICHIGAN 49417
FACESETTER BANK BLDG.
616/842-6160

FREMONT, MICHIGAN 49412
OLD STATE BANK BLDG.
616/924-0780

M.L. BRADBURY, JR.
STEPHEN H. CLINK
FRED C. CULVER, JR.
ROBERT L. DeJONG
RICHARD J. HAINER
DAVID E. HATHAWAY
WILLIAM H. HERITAGE, JR.
CHARLES L. HITESMAN
MICHAEL W. IRISH
STEVEN C. KOHL
ANTHONY J. KOLENIC, JR.
RICHARD C. LAGUE
LOU L. LANDMAN
DAVID E. LEIGH
JOHN D.B. LUYENDYK
JOHN HARVEY MARTIN
JOHN H. McKENDRY, JR.
WILLIAM F. McNALLY
DAVID B. MERWIN
DAVID R. MUNROE
WILLIAM M. NEWMAN
RUSSELL E. PRICE
MARK E. PUTNEY
MICHAEL L. ROBINSON
ROBERT W. SHIREL
I. JOHN SNIDER II

STANLEY J. STEK
FREDRIC A. SYTSMA
THOMAS H. THORNHILL
ALVIN D. TREADO
JON D. VANDER PLOEG
JOHN P. VAN EENENAAM
DONALD J. VELDMAN
RANDALL A. WHITE
J. WILLIAM WHITLOCK

CRAIG A. BERNTHAL
JEFFREY A. DeVREE
PAUL REUBEN JACKSON
PAUL M. KARA
CHRIS ANN McGUIGAN
DOUGLAS J. McNEIL
MICHAEL L. SHIPARSKI
ANNE M. VANDERMALE
ROBERT F. WARDROP, II

OF COUNSEL
H. WINSTON HATHAWAY

HAROLD W. CHARTER - 1976
CHARLES F. LATIMER - 1971
V.S. LAURIN, JR. - 1968
RICHARD A. ROBB - 1971

March 29, 1983

Ms. Mary Gade
United States Environmental
Protection Agency
Region V
230 South Dearborn Street
Chicago, Illinois 60640

Re: Occidental Chemical Corporation
Docket No. V-W-82-R-02

Dear Mary:

By this correspondence we propose to you a penalty to be assessed to achieve settlement of the above captioned matter without formal hearing or adjudication. As indicated to you previously, we feel that, considering all relevant factors, the $25,000 assessed by the compliance order is excessive. A Consent Agreement and Final Order incorporating our proposal regarding a civil fine is also being forwarded to you for your review.

This correspondence is being sent to you in the course of our settlement negotiations. In the event a formal hearing on this matter does occur, we will raise several defenses. We are not waiving any rights or modifying the Answer previously filed on behalf of the Company by this correspondence. Among the defenses we may raise in the event of a hearing is the argument that §3008 and regulations do not permit imposition

of a penalty for most if not all of the alleged violations without first providing the Company with notice of violation and opportunity to comply.

We have considered the following factors in developing our proposal for a civil penalty:

1. "A Framework for the Development of a Penalty Policy for Resource Conservation and Recovery Act (RCRA)";

2. A number of administrative decisions and settlements for alleged RCRA violations;

3. The seriousness and extent of the alleged violations;

4. The actual quantity of non-hazardous/hazardous waste at the facility;

5. The distinction between "waste" and "returned product" available for resale or reworking; and

6. The Company's voluntary cooperative efforts throughout this proceeding.

We note that some of the conditions which were alleged are stated in the complaint to violate several regulatory provisions. While we recognize the EPA policy of assessing separate penalties for separate violations occurring at the same time, we feel separate penalties for a single condition which may be governed by more than one section of the regulations may not be appropriate. Several separate violations are alleged solely as the result of allegations that waste containers were in poor condition, leaking, etc.

A reasonable evaluation of the Complaint suggests allegations of four Class I violations and three Class II violations under the draft penalty policy. Attached to this correspondence is

a brief explanation of our classification of violations as well as a breakdown of the penalty amount computations set forth herein. Our initial evaluation of each of these alleged violations is that each violation could reasonably be classified as "minor" both with respect to "damage" and "conduct". This is particularly true in light of the fact that much of the stored material at the time of inspection was not hazardous waste subject to RCRA either because it was not waste (returned product) or was not a listed or characteristic waste.

Using the matrices and dollar amounts of the draft policy, this assumption would suggest a total base penalty range of $2,300 to $14,950. The midpoint is $8,625.

A review of a number of other settlements involving violations of a nature similar to those alleged in this matter suggests that an appropriate fine to be assessed for Class II violations is $1,300 per violation. Based upon the draft policy, these fines would fall in the upper range of violations deemed to be minor/conduct and minor/damage. Class I violations in those settlements reviewed appear to be in the $3,500 range, or classified as upper scale fines for moderate/conduct and minor/damage. Even assuming upper range assessments were appropriate, this would establish a base penalty amount of around $18,000 under our facts.

Rather than outlining our specific evaluation of each alleged violation and classifying each in accordance with the draft policy, suffice it to say our conclusions drawn from that exercise indicate a penalty range between $8,000 and $18,000.

You have received copies of the documentation developed to meet the concerns expressed through the Complaint, even where the Company did not believe itself to be in violation of the Act or regulations. The Company's voluntary cooperation in this matter justifies, in our opinion, some reduction in penalties.

Number and Classification of Alleged Violations

The Complaint, by Paragraphs 4-13, alleges violations of 40 CFR 265.17, 265.31, 265.32(a), 265.35, 265.73, 265.76, 265.171, 265.173(a), and 122.23(c)(2). Alleged violations of 40 CFR §§265.31, 265.171, 265.173(a) and 265.173(b) all involve allegations of improper storage. A portion of the allegations under 40 CFR 265.17 also involved "open" containers. Since each of these regulations is in the same "class" under the draft penalty policy, we have combined allegations under 40 CFR 265.31, 265.171, 265.173(a) and 265.173(b) as one violation for purposes of these computations. We have viewed allegations under 40 CFR 265.17 as a separate violation due to the fact that the lack of "no smoking" signs was a part of that charge and is not duplicative of other charges.

Based upon the draft penalty policy, we have classified the alleged violations as follows:

40 CFR 265.17	Class I
40 CFR 265.42(a)	Class I
40 CFR 265.35	Class I
40 CFR 265.73	Class II
40 CFR 265.76	Class II
combined	Class I

Using the classification rationale discussed in the draft policy, we have considered the alleged violation of 40 CFR 122(c)(2) as a Class II violation. So, our computations involve four Class I violations and three Class II violations.

Penalty Computations

I. A. Assumptions:

1. Harm or potential harm from each violation was "minor".

2. Conduct as to each violation was "minor".

These assumptions are based upon nature and quantity of hazardous waste, relative severity of actual conditions, initial disagreement over treatment of returned product, etc.

We propose to settle this matter as follows:

1. The Company neither admits nor denies the factual allegations nor the alleged violations.

2. The Company's use of its Material Handling Plan and RCRA Compliance Document results in RCRA compliance.

3. The Company's policy and practice with respect to returned product is in accordance with RCRA and the regulations.

4. The clerical error contained in the initial Part A application may be rectified by the filing of a corrected Part A and will not be considered an amendment to or modification of actual design storage capacity at the facility.

5. The Company will pay a civil penalty in the amount of $15,000.

After you have had an opportunity to review this correspondence and the Consent Agreement and Final Order, please contact me.

Very truly yours,

Michael L. Robinson

Michael L. Robinson
For the Firm

MLR/al

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION: 230 SOUTH DEARBORN STREET
CHICAGO ILLINOIS 60640

IN THE MATTER OF:

OCCIDENTAL CHEMICAL CORPORATION,
PARKER SURFACE TREATMENT PRODUCTS
DIVISON
MORENCI, MICHIGAN

- Respondent

Docket No. V-W 82-R-02

CONSENT AGREEMENT
AND FINAL ORDER

PRELIMINARY STATEMENT

This proceeding for compliance and assessment of a civil penalty was initiated pursuant to Section 3003 of the Resource Conservation and Recovery Act (RCRA) 42 USC 6928. The Complaintant in this proceeding, the United States Environmental Protection Agency (EPA) issued a Complaint and Findings of Violations and Compliance Order (Complaint) to Respondent, Occidental Chemical Corporation, Parker Surface Treatment Products Division, on or about September 2, 1982.

The Complaint charges Respondent with violations of Subtitle C of RCRA, Section 3004 of RCRA, 42 USC 6924, Section 3005 of RCRA, 42 USC 6925, and regulations 40 CRF 265.17, 265.31, 265.32(a), 265(35), 265.73, 265.76, 265.171, 265.173(a), 265.173(b) and 122.23(c)(2). Respondent was ordered to comply with said statute and regulations within time periods specified by the EPA. By the Complaint, EPA further seeks assessment of a civil penalty.

Complaintant and Respondent, through their attorneys, have agreed to a settlement in this matter without adjudication of

LAW OFFICES OF
LANDMAN,
LUYENDYK,
LATIMER,
CLINK
& ROOD
MUSKEGON,
GRAND RAPIDS,
GRAND HAVEN
AND
FERMONT,
MICHIGAN
3/25/83 58/4341

fact or law. For the purposes of this proceeding, Respondent admits the jurisdictional allegations of the Complaint. Respondent neither admits nor denies the specific factual allegations in the Complaint and as set forth in the Findings of Fact below. Respondent neither admits nor denies the Conclusions of Law in Paragraph 2 below. This agreement shall constitute the final disposition of this matter so long as the terms and conditions set forth herein are met. Respondent hereby explicitly waives its right to receive a hearing on any issue of fact or law set forth herein. Respondent and Environmental Protection Agency consent to the Order hereinafter recited, agree to the payment of a penalty in the amount set out in the Order, and agree to comply with the provisions of said Order.

FINDINGS OF FACT

1. EPA made numerous findings as set forth in the Complaint. Those Findings, numbered 1-13 and appearing on Pages 1 through 5 of said Complaint are incorporated by reference herein.

CONCLUSIONS OF LAW

2. Respondent has violated Section 3004 of RCRA, 42 USC 6924, Section 3005 of RCRA, 42 USC 6925, and regulations 40 CFR 265.17, 265.31, 265.32(a), 265.35, 265.71, 265.76, 265.171, 265.173(a), 265.173(b) and 122.23(c)(2).

3. Respondent's receipt of material at its facility, which material had been sold to a customer and returned to Respondent in accordance with the policies and procedures set

LAW OFFICES OF
LANDMAN,
LUVENDYK,
LATIMER,
CLINK
& ROBB
MUSKEGON,
GRAND RAPIDS,
GRAND HAVEN
AND
FREMONT,
MICHIGAN

forth in Respondent's Material Handling Plan, a copy of which has been supplied to EPA, does not constitute receipt of waste material subject to manifest requirements or other regulations under RCRA.

Respondent's policy and procedure (as set forth in its Material Handling Plan) for accepting returned product from its customers and subsequently testing such returned product to determine whether the returned product should, at that time, be classified as waste under RCRA, is in compliance with RCRA and the regulations thereunder.

4. Adherence by Respondent to the policies and procedures set forth in Respondent's Material Handling Plan, RCRA Complaince Document, and related documents, copies of which have been provided to the EPA, will result in compliance by Respondent with applicable RCRA provisions.

PENALTIES

As a result of mitigating circumstances regarding Respondent's alleged violation of the above cited statute and regulations, including without limitation Respondent's improvements of its waste handling methods, it has been agreed through settlement negotiations that Respondent's penalty for the above stated alleged violations is Fifteen Thousand Dollars ($15,000.00).

CONSENT ORDER

A. Pursuant to Section 3008 of RCRA, 42 USC 6928, IT IS HEREBY ORDERED, that Respondent, Occidental Chemical Corporation, Parker Surface Treatment Products Division, shall oper-

LAW OFFICES OF
LANDMAN,
LUYENDYK,
LATIMER,
CLINK
& ROHR
MUSKEGON,
GRAND RAPIDS,
GRAND HAVEN
AND
FREMONT,
MICHIGAN

ate the facility at Morenci, Michigan, in compliance with regulations 40 CFR 265.17, 265.31, 265.32(a), 265.35, 265.73, 265.76, 265.171, 265.173(a), 265.173(b) and 122.23(c)(2).

B. It is further ordered that Respondent Occidental Chemical Corporation, Parker Surface Treatment Products Division pay a civil penalty in the amount of Fifteen Thousand Dollars ($15,000.00) within 30 days of receipt of an executed copy of a Consent Agreement and Final Order. Payment shall be made by cashier's or certified check payable to the United States Treasury and forwarded to the Regional Hearing Clerk, United States Environmental Protection Agency, Region V, 230 South Dearborn Street, Chicago, Illinois 60640.

RESPONDENT: By _____
Michael L. Robinson, Esq., of Landman, Luyendyk, Latimer, Clink Robb
400 Terrace Plaza, Muskegon, Michigan 49443
Attorneys for Occidental Chemica Corporation Parker Surface Treatme Products Division, Morenci, Michigan 49256

Dated: _____, 1983

COMPLAINTANT: By _____
Mary Gade
Attorney, Office of Regional Counsel, U.S. Environmental Protection Agency, Region V

Dated: _____, 1983

IT IS SO ORDERED. This Order shall become effective immediately.

_____
Regional Administrator
U.S. Environmental Protection Agen
Region V

Dated: _____, 1983

LAW OFFICES OF
LANDMAN,
LUYENDYK,
LATIMER,
CLINK
& ROBB
MUSKEGON,
GRAND RAPIDS,
GRAND HAVEN
AND
FRANKFORT,
MICHIGAN

B. Computations based on Matrices:

Class	Low	High	Midpoint
I	$ 500	$2,500	$1,500
II	$ 100	$1,050	$ 875

Class I: Low 4 x $500 = $2,000
High 4 x $2,500 = $10,000
Midpoint 4 x $1,500 = $6,000

Class II: Low 3 x $100 = $300
High 3 x $1,650 = $4,950
Midpoint 3 x $875 = $2,625

Totals: Low $2,000 + $300 = $2,300
High $10,000 + $4,950 = $14,950
Midpoint $6,000 + $2,625 = $8,625

II. A. Assumptions:

1. Harm or potential harm from each violation was "minor".

2. Conduct as to each violation was "moderate" with respect to Class I violations, "minor" with respect to Class II violations.

These assumptions are based upon evaluation of several settlement agreements and formal hearing results involving analogous allegations of violations. The "typical" penalty amounts are based upon our evaluation of the settlement and hearing results reviewed.

B. Computations based on Matrices:

Class	Low	High	Midpoint	Typical
I	$2,700	$3,600	$3,500	$3,500
II	$ 100	$1,650	$ 875	$1,300

Class I Low 4 x $2,700 = $10,800
High 4 x $3,600 = $14,400
Midpoint 4 x $3,150 = $12,600
Typical 4 x $3,500 = $14,000

Class II	Low	3 x $1,100 = $ 300
	High	3 x $1,650 = $ 4,950
	Midpoint	3 x $ 875 = $ 2,625
	Typical	3 x $1,350 = $ 3,900
Totals:	Low	$10,800 + $ 300 = $11,100
	High	$14,400 + $4,950 = $19,350
	Midpoint	$12,600 + $2,625 = $15,225
	Typical	$14,000 + $3,900 = $17,900

RECORD OF COMMUNICATION	☒ PHONE CALL ☐ DISCUSSION ☐ FIELD TRIP ☐ CONFERENCE ☐ OTHER (SPECIFY) (Record of item checked above)	
TO: Oxy File	FROM: Sally Swanson	DATE 3-28-83 TIME 8:45

SUBJECT
Call from Mike Robinson (Oxy Counsel)

SUMMARY OF COMMUNICATION

Mike Robinson called with a question concerning Murro Builders, which is the "smoking gun" firm. He said Murro (now under a different name, possibly different owner, he wasn't clear) received a visit from "two EPA inspectors". ~~He wt~~ Murro contacted him to find out why they were there; hence he called me.

I told him that I was unaware of any EPA investigation/inspection scheduled, and when asked if Mary Gade would know, I expressed my doubts.

CONCLUSIONS, ACTION TAKEN OR REQUIRED

INFORMATION COPIES
TO: Gade

EPA Form 1300-6 (7-72) REPLACES EPA HQ FORM 8300-3 WHICH MAY BE USED UNTIL SUPPLY IS EXHAUSTED.

RECORD OF COMMUNICATION

☒ PHONE CALL ☐ DISCUSSION ☐ FIELD TRIP ☐ CONFERENCE
☐ OTHER (SPECIFY)

(Record of item checked above)

TO: Mary Gade

FROM: Mike Robinson

DATE 3/25/83

TIME

SUBJECT
Occidental RCRA Compliance Order

SUMMARY OF COMMUNICATION

Mike Robinson called me to tell me Oxy's decision on whether or not to pay the $25,000 penalty stipulated in the RCRA Compliance Order for this site. We had established today as the deadline for Oxy's decision during our March 15, 1983 meeting. Mike said that Oxy was sending EPA a proposal on Monday which would contain a draft consent decree and a proposed penalty. He said that the penalty would be less than $25,000 and based on Oxy's research into penalties imposed in other RCRA administrative actions. I asked what the penalty would be and he declined to answer since he did not have authority yet from his client. I did not indicate that we would accept or reject their proposal.

RECEIVED

WASTE MANAGEMENT BRANCH

CONCLUSIONS, ACTION TAKEN OR REQUIRED

Upon receipt of Oxy's proposal, we should convene a meeting of Gade, Swanson, Miner and Grimes to discuss viability of the offer.

INFORMATION COPIES TO: Swanson, Grimes, Miner

EPA Form 1300-6 (7-72) REPLACES EPA HQ FORM 5300-3 WHICH MAY BE USED UNTIL SUPPLY IS EXHAUSTED.

RECORD OF COMMUNICATION

☑ PHONE CALL ☐ DISCUSSION ☐ FIELD TRIP ☐ CONFERENCE
☐ OTHER (SPECIFY)

(Record of item checked above)

TO:	FROM:	DATE
Mary Gade	Michael Robinson	3/18/83
		TIME

SUBJECT

Oxy Negotiations

SUMMARY OF COMMUNICATION

Mike called to discuss the results of Oxy's inquiries to the ALJ. Mike said he had copies of six decisions plus the Fisher Calo decision. He said that Oxy felt that the penalties in these cases were substantially less than the one we've assessed (in the range of $2000 to $7000). It's his opinion that the violations we sited are no worse than the ones identified in these cases. He pressed once again for a listing of the factors that went into our determination that a $25,000 penalty was appropriate. I reiterated the factors we identified in our meeting with him last week: severity of violation, duration, threat to human health and the environment. He was not satisfied. He mentioned that he thought OXY would respond next week by making a counter offer. I indicated that I felt the $25000 was not negotiable and that we would reject a counter penalty and proceed to hearing. He was distressed by this. He also asked whether we would make an assurance that the Materials Handling Plan they submitted was adequate to prevent future violations of RCRA. I said we could not do that. His real concern seems to be over the returned product/hazardous waste issue. I said we could put some language in a consent decreee that reiterated the CFR language on returns and the November 25. 1981 Federal Register Notice but that was all.

CONCLUSIONS, ACTION TAKEN OR REQUIRED

INFORMATION COPIES
TO:

Swanson

EPA Form 1306-6 (7-72) REPLACES EPA HQ FORM 5300-9 WHICH MAY BE USED UNTIL SUPPLY IS EXHAUSTED.

LAW OFFICES
LANDMAN, LUYENDYK, LATIMER, CLINK & ROBB
400 TERRACE PLAZA
P.O. BOX 29
MUSKEGON, MICHIGAN 49443
616/722-2671

GRAND RAPIDS, MICHIGAN 49503
400 CALDER PLAZA BLDG.
616/774-8031

GRAND HAVEN, MICHIGAN 49417
PACESETTER BANK BLDG.
616/842-6160

FREMONT, MICHIGAN 49412
OLD STATE BANK BLDG.
616/924-0780

M.L. BRADBURY, JR.
STEPHEN H. CLINK
FRED C. CULVER, JR.
ROBERT L. DEJONG
RICHARD J. HAINER
DAVID E. HATHAWAY
WILLIAM H. HERITAGE, JR.
CHARLES L. HITESMAN
MICHAEL W. IRISH
STEVEN C. KOHL
ANTHONY J. KOLENIC, JR.
RICHARD C. LAGUE
LOU L. LANDMAN
DAVID E. LEIGH
JOHN D.B. LUYENDYK
JOHN HARVEY MARTIN
JOHN H. McKENDRY, JR.
WILLIAM F. McNALLY
DAVID B. MERWIN
DAVID R. MUNROE
WILLIAM M. NEWMAN
RUSSELL E. PRICE
MARK E. PUTNEY
MICHAEL L. ROBINSON
ROBERT W. SIKKEL
I. JOHN SNIDER II

STANLEY J. STEK
FREDRIC A. SYTSMA
THOMAS H. THORNHILL
ALVIN D. TREADO
JON D. VANDER PLOEG
JOHN P. VAN EENENAAM
DONALD J. VELDMAN
RANDALL A. WHITE
J. WILLIAM WHITLOCK

CRAIG A. BERNTHAL
JEFFREY A. DEVREE
PAUL REUBEN JACKSON
PAUL M. KARA
CHRIS ANN McGUIGAN
DOUGLAS J. McNEIL
MICHAEL L. SHIPARSKI
ANNE M. VANDERMALE
ROBERT F. WARDROP, II

OF COUNSEL
H. WINSTON HATHAWAY

HAROLD W. CHARTER - 1978
CHARLES F. LATIMER - 1971
V.S. LAURIN, JR. - 1968
RICHARD A. ROBB - 1971

March 15, 1983

Mary Gade, Esq.
USEPA, Region V
230 South Dearborn
Chicago, Illinois 60604

Re: Occidental Chemical Corporation,
Parker Division

Dear Ms. Gade:

With respect to the item raised in the letter which accompanied the Compliance Order for the Morenci Plant I wish to inform you that Mr. Richard Speed of the Morenci Plant, during September, 1982, hand delivered copies of the Facility Contingency Plan to the local authorities involved with emergency response and emergency services as requested in the September 2, 1982 letter of the USEPA. Specifically the delivery was made to the local Fire Department, the Emergency Response Teams (who are local volunteers many of whom work at the Parker Morenci Plant), the Heffron Industrial Clinic (Adrian, Michigan) and the Morenci Area Hospital. Staff from the Heffron Industrial Clinic have toured the plant every six months.

Very truly yours,

Michael L. Robinson

Michael L. Robinson
For Occidental Chemical Corporation

MLR:rad

LAW OFFICES
LANDMAN, LUYENDYK, LATIMER, CLINK & ROBB
LANDMAN, HATHAWAY, LATIMER, CLINK & ROBB - LUYENDYK, HAINER, HATHAWAY & DEJONG
400 TERRACE PLAZA
P.O. BOX 29
MUSKEGON, MICHIGAN 49443
616/722-2671

GRAND RAPIDS, MICHIGAN 49503
400 CALDER PLAZA BLDG.
616/774-8031

GRAND HAVEN, MICHIGAN 49417
PACESETTER BANK BLDG.
616/842-6160

FREMONT, MICHIGAN 49412
OLD STATE BANK BLDG.
616/924-0780

M.L. BRADBURY, JR.
STEPHEN H. CLINK
FRED C. CULVER, JR.
ROBERT L. DEJONG
RICHARD J. HAINER
DAVID E. HATHAWAY
WILLIAM H. HERITAGE, JR.
CHARLES L. HITESMAN
MICHAEL W. IRISH
STEVEN C. KOHL
ANTHONY J. KOLENIC, JR.
RICHARD C. LAGUE
LOU L. LANDMAN
DAVID E. LEIGH
JOHN D.B. LUYENDYK
JOHN HARVEY MARTIN
JOHN H. McKENDRY, JR.
WILLIAM F. McNALLY
DAVID B. MERWIN
DAVID R. MUNROE
WILLIAM M. NEWMAN
RUSSELL E. PRICE
MARK E. PUTNEY
MICHAEL L. ROBINSON
ROBERT W. SIKKEL

I. JOHN SNITCER II
STANLEY J. STEK
FREDRIC A. SYTSMA
THOMAS H. THORNHILL
ALVIN D. TREADO
JON D. VANDER PLOEG
JOHN P. VAN EENENAAM
DONALD J. VELDMAN
RANDALL A. WHITE
J. WILLIAM WHITLOCK

CRAIG A. BERNTHAL
PAUL REUBEN JACKSON
PAUL M. KARA
CHRIS ANN McGUIGAN
MICHAEL L. SHIPARSKI
ANNE M. VANDERMALE
ROBERT F. WARDROP, II

OF COUNSEL
H. WINSTON HATHAWAY

HAROLD W. CHARTER - 1978
CHARLES F. LATIMER - 1971
V.S. LAURIN, JR. - 1968
RICHARD A. ROBB - 1971

February 23, 1983

Ms. Jane Schulteis
Office of Regional Counsel
U. S. Environmental Protection Agency
16th Floor
280 South Dearborn Street
Chicago, Illinois 60604

Re: Occidental Chemical Corporation
Docket No. V-W-82-R-021
Our File M-5824-025

Dear Ms. Schulteis:

We are enclosing for your review a number of documents in accordance with the agreement reached during the meeting at your offices last month. A brief summary of the enclosed documents follows:

* 1. Plant Procedures. The enclosed material handling plan is intended to provide a description of policy regarding handling of materials at the site, including returned product accepted from customers. More specific policy and practice, particularly as they relate to environmental issues, are included in the SPCC, RCRA compliance document, and other documents attached to the plan. Most of the policies have been in existence for some time in substantially the same form as reflected in the enclosed materials, although active review and revision has occurred over the last several months.

* 2. Material Flow. You previously raised the question of the source of waste transported from the Morenci site.

Using the time period of May 26, 1982 to November 1, 1982, we have attempted to identify material flow at the plant to respond to this inquiry. A flow chart illustrating the
* source of waste is enclosed, and is accompanied by a narrative explanation. Records regarding return product and waste disposal during that time are also included. It is important to note that, because material flow is continual and only a sample time period is used the figures of waste generated and waste disposed do not correlate precisely.

The plant records have been reviewed back to November 19, 1980, the effective date of the RCRA regulations. This review indicates no additional instances of receipt of hazardous waste from customers. This is in accordance with the recollection of Mr. Steve Pollack who has been Sales Administrator since January of 1981. Mr. Pollack indicated that on at least three occasions during the time period since November 19, 1980, Parkes personnel assisted customers in arranging for transfer of waste material located at the customer's site to a chemical waste management disposal site.

We will be happy to discuss any of the above matters or explain the enclosures in more detail during our meeting on March 1, 1983. In the meantime, please contact our office with any questions you may have.

Very truly yours,

J. William Whitlock
For the Firm

JWW:md
*Enc.

LAW OFFICES

LANDMAN, LUYENDYK, LATIMER, CLINK & ROBB

400 TERRACE PLAZA
P.O. BOX 29
MUSKEGON, MICHIGAN 49443
616/722-2671

GRAND RAPIDS, MICHIGAN 49503
400 CALDER PLAZA BLDG.
616/774-8031

GRAND HAVEN, MICHIGAN 49417
PACESETTER BANK BLDG.
616/842-6160

FREMONT, MICHIGAN 49412
OLD STATE BANK BLDG.
616/924-0780

M.L. BRADBURY, JR.
STEPHEN H. CLINK
FRED C. CULVER, JR.
ROBERT L. DEJONG
RICHARD J. HAINER
DAVID E. HATHAWAY
WILLIAM H. HERITAGE, JR.
CHARLES L. HITESMAN
MICHAEL W. IRISH
STEVEN C. KOHL
ANTHONY J. KOLENIC, JR.
RICHARD C. LAGUE
LOU L. LANDMAN
DAVID E. LEIGH
JOHN D.B. LUYENDYK
JOHN HARVEY MARTIN
JOHN H. McKENDRY, JR.
WILLIAM F. McNALLY
DAVID B. MERWIN
DAVID R. MUNROE
WILLIAM M. NEWMAN
RUSSELL E. PRICE
MARK E. PUTNEY
MICHAEL L. ROBINSON
ROBERT W. SIKKEL
I. JOHN SNIDER II

STANLEY J. STEK
FREDRIC A. SYTSMA
THOMAS H. THORNHILL
ALVIN D. TREADO
JON D. VANDER PLOEG
JOHN P. VAN EENENAAM
DONALD J. VELDMAN
RANDALL A. WHITE
J. WILLIAM WHITLOCK

CRAIG A. BERNTHAL
JEFFREY A. DEVREE
PAUL REUBEN JACKSON
PAUL M. KARA
CHRIS ANN McGUIGAN
DOUGLAS J. McNEIL
MICHAEL L. SHIPARSKI
ANNE M. VANDERMALE
ROBERT F. WARDROP, II

OF COUNSEL
H. WINSTON HATHAWAY

HAROLD W. CHARTER - 1978
CHARLES F. LATIMER - 1971
V.S. LAURIN, JR. - 1968
RICHARD A. ROBB - 1971

March 15, 1983

Ms. Mary Gade
USEPA, Region V
230 South Dearborn
Chicago, Illinois 60604

Re: Occidental Chemical Corporation,
Parker Division

Dear Ms. Gade:

At our January 27, 1983 meeting at your offices you asked for information concerning constituents for five of the Parker products. The following information is submitted in response to your request:

1) Bonderite EP-3:

Zinc Phosphate 10-20%
Nitric Acid 4-5%
Hydroflourosalicic 1-3%
Nickel Nitrate 1-3%

2) Accelerator 170:

Sodium Biflouride

3) a) Bonderite 722A

Chromic Acid 3-6%

b) Bonderite 722B

Potassium Ferrocyanide Solution 15-23%

c) Bonderite 722C

Chromic Acid 5-10%

4) Parcolac 2948

Petroleum 75%

Mineral Oil 10%

Balance as emulsifiers

Flash Point 149°F

5) PTD 1368-AL

Stearic Acid 85%

Balance is Adol (wetting agent).

Very truly yours,

Michael L. Robinson

Michael L. Robinson
For Occidental Chemical Corporation

MLR:aef

LAW OFFICES

LANDMAN, LUYENDYK, LATIMER, CLINK & ROBB

LANDMAN, HATHAWAY, LATIMER, CLINK & ROBB · LUYENDYK, HAINER, HATHAWAY & DEJONG

400 TERRACE PLAZA

P.O. BOX 29

MUSKEGON, MICHIGAN 49443

616/722-2671

GRAND RAPIDS, MICHIGAN 49503
400 CALDER PLAZA BLDG.
616/774-8031

GRAND HAVEN, MICHIGAN 49417
PACESETTER BANK BLDG.
616/842-6160

FREMONT, MICHIGAN 49412
OLD STATE BANK BLDG.
616/924-0780

M.L. BRADBURY, JR.
STEPHEN H. CLINK
FRED C. CULVER, JR.
ROBERT L. DEJONG
RICHARD J. HAINER
DAVID E. HATHAWAY
WILLIAM H. HERITAGE, JR.
CHARLES L. HITESMAN
MICHAEL W. IRISH
STEVEN C. KOHL
ANTHONY J. KOLENIC, JR.
RICHARD C. LAGUE
LOU L. LANDMAN
DAVID E. LEIGH
JOHN D.B. LUYENDYK
JOHN HARVEY MARTIN
JOHN H. MCKENDRY, JR.
WILLIAM F. MCNALLY
DAVID B. MERWIN
DAVID R. MUNROE
WILLIAM M. NEWMAN
RUSSELL E. PRICE
MARK E. PUTNEY
MICHAEL L. ROBINSON
ROBERT W. SIKKEL

I. JOHN SNIDER II
STANLEY J. STEK
FREDRIC A. SYTSMA
THOMAS H. THORNHILL
ALVIN D. TREADO
JON D. VANDER PLOEG
JOHN P. VAN EENENAAM
DONALD J. VELDMAN
RANDALL A. WHITE
J. WILLIAM WHITLOCK

CRAIG A. BERNTHAL
PAUL REUBEN JACKSON
PAUL M. KARA
CHRIS ANN MCGUIGAN
MICHAEL L. SHIPARSKI
ANNE M. VANDERMALE
ROBERT F. WARDROP, II

OF COUNSEL
H. WINSTON HATHAWAY

HAROLD W. CHARTER - 1978
CHARLES F. LATIMER - 1971
V.S. LAURIN, JR. - 1968
RICHARD A. ROBB - 1971

February 1, 1983

Ms. Mary A. Gade
Assistant Regional Counsel
United States Environmental Protection Agency
Region V
230 South Dearborn Street
Chicago, Illinois 60640

Re: Docket No. V-W-82-R-021
Occidental Chemical Corporation,
Parker Surface Treatment Division
Our File M-5824-025

Dear Mary:

* Enclosed are copies of the Motion, proposed Order, and Certificate of Service, recently filed in the above-captioned matter with respect to a request for an additional extension of time in which to complete the prehearing exchange of information. We also enclose
* for your records a copy of the Affidavit of J. D. Kashner. We had previously provided you with a copy of a telecopy of that Affidavit.

Please feel free to contact the undersigned with any questions you might have.

Very truly yours,

J. William Whitlock

JWWjr:aef

*Enclosures

LAW OFFICES

LANDMAN, LUYENDYK, LATIMER, CLINK & ROBB

LANDMAN, HATHAWAY, LATIMER, CLINK & ROBB · LUYENDYK, HAINER, HATHAWAY & DEJONG

400 TERRACE PLAZA

P.O. BOX 29

MUSKEGON, MICHIGAN 49443

616/722-2671

GRAND RAPIDS, MICHIGAN 49503
400 CALDER PLAZA BLDG.
616/774-8031

GRAND HAVEN, MICHIGAN 49417
PACESETTER BANK BLDG.
616/842-6160

FREMONT, MICHIGAN 49412
OLD STATE BANK BLDG.
616/924-0780

M.L. BRADBURY, JR.
STEPHEN H. CLINK
FRED C. CULVER, JR.
ROBERT L. DEJONG
RICHARD J. HAINER
DAVID E. HATHAWAY
WILLIAM H. HERITAGE, JR.
CHARLES L. HITESMAN
MICHAEL W. IRISH
STEVEN C. KOHL
ANTHONY J. KOLENIC, JR.
RICHARD C. LAGUE
LOU L. LANDMAN
DAVID E. LEIGH
JOHN D.B. LUYENDYK
JOHN HARVEY MARTIN
JOHN H. MCKENDRY, JR.
WILLIAM F. MCNALLY
DAVID B. MERWIN
DAVID R. MUNROE
WILLIAM M. NEWMAN
RUSSELL E. PRICE
MARK E. PUTNEY
MICHAEL L. ROBINSON
ROBERT W. SIKKEL

I. JOHN SNIDER II
STANLEY J. STEK
FREDRIC A. SYTSMA
THOMAS H. THORNHILL
ALVIN D. TREADO
JON D. VANDER PLOEG
JOHN P. VAN EENENAAM
DONALD J. VELDMAN
RANDALL A. WHITE
J. WILLIAM WHITLOCK

CRAIG A. BERNTHAL
PAUL REUBEN JACKSON
PAUL M. KARA
CHRIS ANN MCGUIGAN
MICHAEL L. SHIPARSKI
ANNE M. VANDERMALE
ROBERT F. WARDROP, II

OF COUNSEL
H. WINSTON HATHAWAY

HAROLD W. CHARTER - 1978
CHARLES F. LATIMER - 1971
V.S. LAURIN, JR. - 1968
RICHARD A. ROBB - 1971

February 1, 1983

Mr. Spencer T. Nissen
Administrative Law Judge
Office of Administrative Law Judges (A-110)
United States Environmental Protection Agency
401 M Street, S.W.
Washington, D. C. 20460

Re: Docket No. V-W-82-R-021
Occidental Chemical Corporation,
Parker Surface Treatment Division
Our File M-5824-025

Dear Judge Nissen:

Representatives of each of the parties in the above-captioned matter recently met in Chicago in further effort to reach an informal settlement of this Civil administrative matter. During the course of that meeting, documentation which had been requested by Complainant and supplied by Respondent was discussed. Complainant requested additional information from Respondent, and Respondent has agreed to provide that information. The parties agreed that this additional documentation would be supplied on or before March 1, 1983, at which time an additional meeting is scheduled for the purpose of further pursuing the possibilities of informal settlement.

During the course of the meeting, the utility of completing the prehearing exchange of information prior

to the next meeting scheduled between the parties was discussed. Counsel for Complainant agreed that an extension of the time within which to complete such exchange of information to March 15, 1983 should be requested. It is further our understanding that Counsel for Complainant will be on an annual leave during the next few weeks and that consequently little could be accomplished as a result of the exchange of information prior to March.

* We therefore enclose a Motion To Enlarge Time For Pre-hearing Exchange of Information requesting an extension of the time for the exchange of this information to March 15, 1983. We also enclose for your consideration
* a proposed Order to that effect.

Please feel free to contact our office with any questions you may have.

Very truly yours,

Michael L. Robinson

Michael L. Robinson

MLR:aef

*Enclosures

cc: Ms. Mary Gade
Regional Hearing Clerk

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION V

IN THE MATTER OF:	)	
	)	
OCCIDENTAL CHEMICAL CORPORATION,	)	Docket No. V-W-82-R-021
PARKER SURFACE TREATMENT	)	
DIVISION,	)	
	)	
Respondent.	)	

ORDER GRANTING EXTENSION OF TIME

Counsel for Respondent having by Motion dated February 1, 1983, moved for enlargement of time for accomplishing an exchange of prehearing information for the reasons that the parties are actively involved in informal settlement negotiations, Respondent has submitted documents to Complainant for review and has agreed to submit additional documents at the request of Complainant, and the parties have scheduled an additional meeting for March 1, 1983 to discuss settlement.

THEREFORE, the time in which the parties may accomplish the prehearing exchange directed by the ALJ's letter dated December 7, 1982, as extended by Order dated January 3, 1983, is extended to and including March 15, 1983.

Dated: _____, 1983.

_____
Spencer T. Nissen
Administrative Law Judge

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION V

IN THE MATTER OF:

Occidental Chemical Corporation,
Parker Surface Treatment
Products Division

Docket No. V-W-82-R-201

CERTIFICATE OF SERVICE

I hereby certify that I have caused a copy of the foregoing Motion To Enlarge Time For Prehearing Exchange Of Information to served upon:

Ms. Mary A. Gade
Assistant Regional Counsel
United States Environmental Protection Agency
Region V
230 South Dearborn Street
Chicago, Illinois 60640

on the date below by causing said copies to be deposited in the United States mail, first class, with certified return receipt requested, postage prepaid, at Muskegon, Michigan, in an envelope addressed as stated above.

I have further caused the original and one copy of said Motion and this Certificate to be filed with the Regional Hearing Clerk, office of Regional Counsel, United States EPA, Region V, 230 South Dearborn Street, Chicago, Illinois, to be deposited in the United States mail, first class, with certified return receipt requested, postage prepaid, at Muskegon, Michigan, in an envelope addressed to said Regional Hearing Clerk at the Office of Regional Counsel at the address stated above.

Dated: February 1, 1983

J. William Whitlock [P-27341], of
LANDMAN, LUYENDYK, LATIMER, CLINK
& ROBB
Counsel for Respondent
Business Address:
400 Terrace Plaza
Muskegon, Michigan 49443
Tel. No. (616) 722-2671

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION V

IN THE MATTER OF:	)	
	)	Docket No. V-W-82-R-021
OCCIDENTAL CHEMICAL CORPORATION,	)	
PARKER SURFACE TREATMENT	)	MOTION TO ENLARGE TIME FOR
DIVISION	)	PREHEARING EXCHANGE OF
	)	INFORMATION

Respondent, by its Counsel, Michael L. Robinson and J. William Whitlock of Landman, Luyendyk, Latimer, Clink & Robb, moves the Presiding Officer to enlarge time for performing a prehearing exchange of information in the above captioned Complaint. In support of the Motion Respondent states the following:

1. By Order dated December 7, 1982, the parties were instructed to perform a prehearing exchange of information by January 17, 1982.

2. Complainant filed a Motion dated December 22, 1982 requesting an extension of time within which to complete the prehearing exchange of information for the reasons set forth in said Motion, which reasons included the efforts of the parties to resolve the matter through informal settlement proceedings as encouraged by Complainant's policy set forth in 40 CFR 22.18.

3. Under Order dated January 3, 1983, Complainant's Motion was granted, and the date for completion of the prehearing exchange of information was extended to February 15, 1983.

4. Representatives of the parties met on January 27, 1983 in a further attempt to reach an informal settlement of this matter.

5. During the course of the meeting Respondent agreed to the request of Complainant to supply additional information not previously requested to Complainant on or before March 1, 1983.

The parties agreed to meet again on or about March 1, 1983 for the purpose of further pursuing settlement.

6. Respondent believes substantial progress has been made toward informal settlement of this matter and that no useful purpose would be served by exchanging the information required by the Order of December 7, 1982 during the course of active informal settlement negotiations.

7. This request for extension of time was discussed by the parties during the January 27, 1983 meeting and Counsel for Complainant supports this request.

WHEREFORE Respondent moves for an extension of time for performing the prehearing exchange of information to March 15, 1983.

Respectfully submitted,

Michael L. Robinson

Michael L. Robinson [P-23160, Michigan]

and

J. William Whitlock

J. William Whitlock [P-27341, Michigan]

of LANDMAN, LUYENDYK, LATIMER, CLINK & ROBB
Attorneys for Respondent
400 Terrace Plaza
Muskegon, Michigan 49443
Telephone No. (616) 722-2671

Dated: February 1, 1983.

AFFIDAVIT

STATE OF MICHIGAN)
) ss.
COUNTY OF LENAWEE)

J. D. KASHNER, being first duly sworn, states that:

1. He is Plant Manager of the Morenci, Michigan facility of Parker Surface Treatment Products, Occidental Chemical Corporation, and has been so employed for all times relevant hereto.

2. The facts stated herein are within his personal knowledge and, if sworn as a witness in any legal proceeding, he can competently testify thereto.

3. It is and has been at all times relevant hereto the policy of the Company not to receive hazardous waste from off-site sources at the Morenci facility.

4. After proper authorization, material consisting of product returned by customers has been accepted at the facility. In accordance with the above stated Company policy, it has always been his intention in supervising the facility's operation that no returned product accepted at the facility be hazardous waste at the time of acceptance.

Further deponent saith not.

J. D. Kashner

Subscribed and sworn to before me, a Notary Public, in and for said County of Lenawee, Michigan, this 26th day of January, 1983.

Wanda P. Gier
Notary Public, Lenawee County, Michigan
My Commission Expires: September 21, 1985

28 JAN 1983

Mr. Michael Robinson, Esq.
Landman, Luyendyk, Latimer, Clink & Robb
400 Terrace Plaza
P.O. Box 29
Muskegon, Michigan 49443

Dear Mr. Robinson:

Sally Swanson and I appreciated the opportunity to meet with you and Bob Schuttler yesterday to continue our negotiations. At this meeting, you requested that I send you a copy of the October 1982 Fisher-Calo Chemicals and Solvents Corporation decision. A copy is enclosed.

We also agreed at the meeting that you would file a motion with the Administrative Law Judge seeking an extension of time for the prehearing exchange of information until March 15, 1983. In addition, we scheduled another meeting for March 1, 1983. You have indicated that you will produce documents responding to issues and questions we raised yesterday at this meeting.

Sincerely,

Mary A. Gade
Assistant Regional Counsel

RECEIVED
FEB 01 1983
WASTE MANAGEMENT BRANCH

AFFIDAVIT

STATE OF MICHIGAN)
) ss.
COUNTY OF LENAWEE)

J. D. KASHNER, being first duly sworn, states that:

1. He is Plant Manager of the Morenci, Michigan facility of Parker Surface Treatment Products, Occidental Chemical Corporation, and has been so employed for all times relevant hereto.

2. The facts stated herein are within his personal knowledge and, if sworn as a witness in any legal proceeding, he can competently testify thereto.

3. It is and has been at all times relevant hereto the policy of the Company not to receive hazardous waste from off-site sources at the Morenci facility.

4. After proper authorization, material consisting of product returned by customers has been accepted at the facility. In accordance with the above stated Company policy, it has always been his intention in supervising the facility's operation that no returned product accepted at the facility be hazardous waste at the time of acceptance.

Further deponent saith not.

J. D. Kashner

Subscribed and sworn to before me, a Notary Public, in and for said County of Lenawee, Michigan, this 26th day of January, 1983.

Wanda F. Gier
Notary Public, Lenawee County, Michigan
My Commission Expires: September 21, 1985

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION V
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

REPLY TO ATTENTION OF:

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Judge Spencer T. Nissen
Administrative Law Judge
Office of Administrative Law
Judges (A-110)
U.S. Environmental Protection
Agency
401 M. Street, S.W.
Washington, D.C. 20460

DEC 22 1982

Re: Docket No. V-W-82-R-021
Occidental Chemical Corporation,
Parke Surface Treatment Division

Dear Judge Nissen:

In response to your letter, and in accordance with your Order dated December 7, 1982, the Complainant submits this statement on settlement in the above captioned case. Representatives of the parties to this action met in Chicago, Illinois on October 26, 1982 in an attempt to reach an informal settlement of this civil administrative matter. Negotiations are continuing between the parties. The Complainant requested and has received numerous documents from the Respondent. The Complainant is currently reviewing these documents. The parties expect to meet again in Chicago, Illinois during the week of January 24, 1983 to further discuss settlement.

Accordingly, please find enclosed a Motion to Enlarge Time for responding to the Order requiring a prehearing exchange of information by January 17, 1983. Please note that a proposed Order to Enlarge Time has been attached to the Motion. Mr. Michael Robinson, Counsel for Respondent, has indicated his approval of this request.

Sincerely,

Mary A. Gade
Attorney for Complainant

cc: Michael Robinson
Regional Hearing Clerk

Enclosure

UNITED STATE ENVIRONMENTAL PROTECTION AGENCY

REGION V

IN THE MATTER OF:	)	
	)	
Occidental Chemical Corporation,	)	Docket No. V-W-82-R-021
Parker Surface Treatment Division	)	

MOTION TO ENLARGE TIME FOR PREHEARING
EXCHANGE OF INFORMATION

The Complainant, by its counsel, Mary A. Gade, Assistant Regional Counsel, moves the Presiding Officer to enlarge the time for performing a prehearing exchange of information in the above captioned Complaint. The following facts and argument are offered in support of this motion.

1. Representatives of the parties to this action met in Chicago, Illinois on October 26, 1982 in an attempt to reach an informal settlement of this matter.

2. As a result of this meeting, Complaint requested and has received numerous documents and anticipates receiving additinal documents from the Respondent. Complainant is currently reviewing these documents.

3. Representatives of the parties to this action intend to meet again in Chicago, Illinois during the week of January 24, 1983 to further discuss settlement. Additional meetings of the parties may be necessary.

4. On December 7, 1982, an Order requiring a prehearing exchange of information by January 17, 1982 was issued.

5. The Agency has a policy encouraging settlement of proceedings which is set forth in 40 C.F.R. §22.18.

6. While informal settlement negotiations are ongoing, no useful purpose would be served by exchanging the information required by the December 7, 1982 Order.

7. Counsel for Respondent has been contacted and does not oppose this request for an extension of time.

WHEREFORE, Complainant moves for an extension of time for performing the prehearing exchange of information to February 15, 1983.

Respectfully submitted,

MARY A. GADE
Attorney for Complainant
Office of Regional Counsel
U.S. EPA, Region V
230 South Dearborn Street
Chicago, Illinois 60604
312/886-6668

Dated: December , 1982

CERTIFICATE OF SERVICE

I hereby certify that I have caused a copy of the foregoing Motion to Enlarge Time for Prehearing Exchange of Information and proposed Order to be served upon, Michael L. Robinson, Attorney, Occidental Chemical Corporation, Landman, Luyendyk, Latimer, Clink & Robb, 400 Terrace Plaza, Muskegon, Michigan 49443, by placing it in a Government franked envelope, first class, cetified receipt requested and depositing it in the mail on the date below.

I have further caused the original and one copy of the foregoing Motion to Enlarge Time for Prehearing Exchange of Information and a copy of the proposed Order and this Certificate of Service to be personally served on the Regional Hearing Clerk, Office of Regional Counsel, U.S. EPA, Region V, 230 South Dearborn Street, Chicago, Illinois 60604 on the date below.

Dated this ___ day of December, 1982.

Mary A. Gade
Attorney for Complainant

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION V

IN THE MATTER OF:	)	
	)	
Occidental Chemical Corporation,	)	DOCKET NO. V-W-82-R-021
Parker Surface Treatment Division	)	
	)	

ORDER TO ENLARGE TIME FOR PREHEARING
EXCHANGE OF INFORMATION

Having duly considered Complainant's Motion to Enlarge Time for Prehearing Exchange of Information, pursuant to 40 C.F.R. §22.16(c), I hereby ORDER:

> A prehearing exchange of the information specified in my December 7, 1982 Order pursuant to 40 C.F.R. §22.19 will be accomplished on or before February 15, 1983 by providing responses to the Regional Hearing Clerk, to the other party, and to the undersigned.

Spencer T. Nissen
Administrative Law Judge

Dated:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

Office of Administrative Law Judges

Mail Code A-110

OFFICE OF
THE ADMINISTRATOR

December 7, 1982

Michael L. Robinson, Esq.
Landman, Luyendyk, Latimer,
Clink & Robb
400 Terrace Plaza
Muskegon, Michigan 49443

Mary A. Gade, Esq.
Office of Enforcement Counsel
Environmental Protection Agency
Region V
230 South Dearborn Street
Chicago, Illinois 60604

Subject: Occidental Chemical Corporation, Parker Surface Treatment Division, Docket No. V-W-82-R-021

Dear Counsellors:

As you have previously been informed, the undersigned has been designated to preside at the subject proceeding under Section 3008 of the Solid Waste Disposal Act, as amended (42 U.S.C. 6928).

Section 22.18(a) of the Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation or Suspension of Permits (40 CFR Part 22) sets forth Agency policy concerning settlements and the parties may be attempting to settle this matter. Counsel for Complainant is directed to file a statement on or before December 30, 1982 as to whether this matter has been or will be settled. If this matter is not settled by that date, I propose to accomplish some of the purposes of a prehearing conference by this letter as permitted by Section 22.19(e) of the Rules of Practice.

Accordingly, the parties are directed to accomplish the following prehearing exchange:

By Complainant and Respondent

1. Furnish desired or required place for the hearing (see Sections 22.19(d) and 22.21(d) of the Rules of Practice).

2. To the extent not covered by specific requests below, furnish a list of expected witnesses, a summary of their anticipated testimony and a copy of each exhibit or document intended to be offered in evidence at the hearing.

By Complainant

1. Provide copies of reports of inspection of Respondent's facility conducted on May 14, May 18 and May 27 and June 15 and June 22, 1982.

2. Furnish summary of evidence to establish that container referred to in Paragraph 4 of findings was subject to sources of ignition within the meaning of 40 CFR 265.17.

3. Furnish summary of evidence to establish allegations of Paragraph 5 of findings to the effect that contents of containers therein mentioned were hazardous, that the contents were leaking onto the ground, were open and releasing hazardous waste to the atmosphere and that there was evidence of hazardous waste run-off into the river.

4. Furnish summary of evidence to establish that storage areas mentioned in Paragraph 6 of findings did not have an alarm or internal communications system as required by 40 CFR 265.32(a) at the time of the inspections referred to in Paragraph 1 above.

5. Furnish summary of evidence to establish that adequate aisle space within the meaning of 40 CFR 265.35 was needed at the facility in question and Respondent was not in compliance therewith at time of the mentioned inspections as alleged in Paragraph 7 of the findings.

6. Furnish summary of evidence to establish that record keeping requirements of 40 CFR 265.73 were applicable to wastes or product here involved (Paragraph 8 of findings).

7. Furnish summary of evidence to establish that at time of mentioned inspections Respondent had unmanifested hazardous waste from off-site sources as alleged in Paragraph 9 of findings.

8. Furnish summary of evidence to establish allegation in Paragraph 10 of findings that at time of mentioned inspections Respondent stored hazardous waste in containers which were leaking or in poor condition or otherwise failed to properly manage said waste as required by 40 CFR 265.171.

9. Supply a statement as to number of containers involved in allegation in Paragraph 11 of findings.

10. Furnish summary of evidence to establish that 40 CFR 265.173(b) is applicable to containers involved in Paragraph 12 of findings.

11. Provide copy of Part A permit application and summary of evidence to establish that containers involved held hazardous wastes in excess of process design capacity as stated in said application.

12. Furnish details of calculation of proposed penalty including risk to health or environment of violations alleged, Respondent's history of compliance with the Act and evidence or lack thereof of good faith.

By Respondent

1. Furnish summary of evidence to establish that container referred to in Paragraph 4 of findings was stored in a proper area and protected from accidental ignition.

2. Provide statement as to date "no smoking" signs were posted.

3. Furnish summary of evidence to establish that leaks referred to in Paragraph 5 were onto a cement pad rather than the ground, that much of the releases therein mentioned were not of hazardous wastes and that most of the drums contained non-volatile solutions or inorganic compounds.

4. Furnish summary of evidence to establish that communication system referred to in Paragraph 6 of answer complies with 40 CFR 265.32(a).

5. Furnish summary of evidence to establish condition of aisle space at time of inspections referred to Paragraph 3 of findings and extent of program to reduce inventory of stored products and empty containers.

6. Furnish summary of evidence to identify returned product referred to in Paragraph 8 of answer and extent of improvement of record keeping for hazardous waste.

7. Furnish summary of evidence to establish that Respondent does not receive or store hazardous wastes from off-site.

8. Furnish summary of evidence to establish that most of wastes referred to in Paragraph 10 of findings were not hazardous and number of defective containers.

9. Furnish evidence as to number of open containers holding hazardous wastes and identification of such waste (Paragraph 11 of findings).

10. Furnish summary of evidence to establish quantity of hazardous waste referred to in Paragraph 12 of answer and date or dates the defective containers were replaced or otherwise corrected.

furnish summary of evidence to establish that process design capacity application was in error and that most of material in storage at time of inspections was returned product and not hazardous waste.

Responses to this letter will be furnished to the Regional Hearing Clerk, to the other party and to the undersigned on or before January 17, 1983.

Upon receipt and review of the responses, a determination will be made as to whether further correspondence would serve any useful purpose or whether this matter should be set for hearing without further delay.

Sincerely yours,

Spencer T. Nissen

Spencer T. Nissen
Administrative Law Judge

CERTIFICATE OF SERVICE

This is to certify that the original of this Letter, dated December 7, 1982, was mailed to the Regional Hearing Clerk, Reg.V, and a copy was mailed to each addressee.

December 7, 1982

Helen F. Handon
Helen F. Handon
Secretary

RECORD OF COMMUNICATION

☒ PHONE CALL ☐ DISCUSSION ☐ FIELD TRIP ☐ CONFERENCE
☐ OTHER (SPECIFY)

(Record of item checked above)

TO:	FROM:	DATE
Mike Robinson (Occidental) 616/722-2671	Mary GAde	12/3/82
		TIME

SUBJECT

Occidental Chemical Company RCRA Order

SUMMARY OF COMMUNICATION

I returned Mike's call. He wanted to let me know the status of the materials handling plan they're developing for the Morenci plant. He said that he'd been busy and that when he looked at the plan felt it was not well organized. Thus, he asked the company to redraft and organize it. He said they would not be able to get it to us until the end of the year. I told him that would be fine since we considered the plan something nice to have but were more concerned with the documentation that they have already provided us on the ~~##########~~ ~~returned product vs. hazardous waste issue.~~ He said he would call me the week before Christmas to set up a meeting sometime the first two weeks in January. I indicated that I would not be here for most of February so that we definitely needed to meet early in January.

CONCLUSIONS, ACTION TAKEN OR REQUIRED

INFORMATION COPIES

TO: ~~SCHAEFER~~ ## ~~ULLRICH~~ ### ~~ANDERSEN/WALKER~~ ## Sally Swanson

LAW OFFICES

LANDMAN, LUYENDYK, LATIMER, CLINK & ROBB

LANDMAN, HATHAWAY, LATIMER, CLINK & ROBB - LUYENDYK, HAINER, HATHAWAY & DEJONG

400 TERRACE PLAZA

P.O. BOX 29

MUSKEGON, MICHIGAN 49443

616/722-2671

GRAND RAPIDS, MICHIGAN 49503
400 CALDER PLAZA BLDG.
616/774-8031

GRAND HAVEN, MICHIGAN 49417
PACESETTER BANK BLDG.
616/842-6160

FREMONT, MICHIGAN 49412
OLD STATE BANK BLDG.
616/924-0780

M.L. BRADBURY, JR.
STEPHEN H. CLINK
FRED C. CULVER, JR.
ROBERT L. DEJONG
RICHARD J. HAINER
DAVID E. HATHAWAY
WILLIAM H. HERITAGE, JR.
CHARLES L. HITESMAN
MICHAEL W. IRISH
STEVEN C. KOHL
ANTHONY J. KOLENIC, JR.
RICHARD C. LAGUE
LOU L. LANDMAN
DAVID E. LEIGH
JOHN D.B. LUYENDYK
JOHN HARVEY MARTIN
JOHN H. McKENDRY, JR.
WILLIAM F. McNALLY
DAVID B. MERWIN
DAVID R. MUNROE
WILLIAM M. NEWMAN
RUSSELL E. PRICE
MARK E. PUTNEY
MICHAEL L. ROBINSON
ROBERT W. SIKKEL

I. JOHN SNIDER II
STANLEY J. STEK
FREDRIC A. SYTSMA
THOMAS H. THORNHILL
ALVIN D. TREADO
JON D. VANDER PLOEG
JOHN P. VAN EENENAAM
DONALD J. VELDMAN
RANDALL A. WHITE
J. WILLIAM WHITLOCK

CRAIG A. BERNTHAL
PAUL REUBEN JACKSON
PAUL M. KARA
CHRIS ANN McGUIGAN
MICHAEL L. SHIPARSKI
ANNE M. VANDERMALE
ROBERT F. WARDROP, II

OF COUNSEL
H. WINSTON HATHAWAY

HAROLD W. CHARTER - 1978
CHARLES F. LATIMER - 1971
V.S. LAURIN, JR. - 1968
RICHARD A. ROBB - 1971

November 22, 1982

Ms. Mary A. Gade
Assistant Regional Counsel
U.S. Environmental Protection Agency
230 South Dearborn Street
Chicago, Illinois 60604

Re: Occidental Chemical Corporation
Docket No. V-W-82-R-021
Our File M-5824-025

Dear Ms. Gade:

* Enclosed please find copies of the waste disposal manifests indicating shipments from the Occidental Morenci Michigan facility. Please contact our office with any questions you may have.

Very truly yours,

J. William Whitlock
For the Firm

JWW/jr

* Enclosures

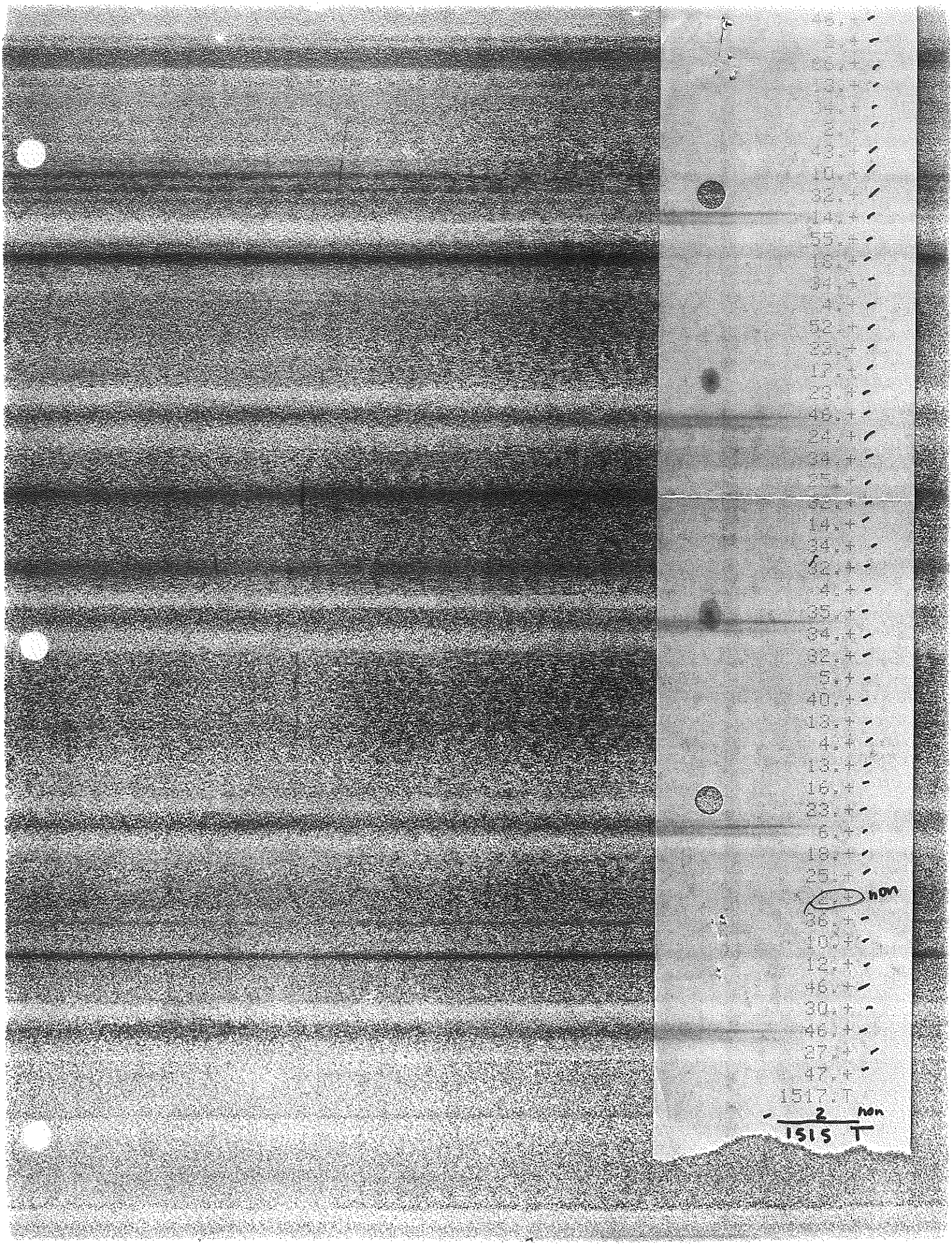
OCCIDENTAL CHEMICAL CORP., PARKER SURFACE TREATMENT DIVISION, MORENCI MICHIGAN
SUMMARY OF MANIFEST SHIPMENTS OFF-SITE SUBMITTED TO USEPA 11-22-82

DATE SHIPPED	WASTE SUMMARY	QUANTITY	
#1 5-26-82	corrosive materials-haz	82 drums	
#2 5-28-82	corrosive materials-haz	78 drums	
#3 6-1-82	corrosive materials-haz	64 drums	
	non-RCRA wastes	13 drums	
#4 6-2-82	waste oil, non-RCRA	7 drums	
	non-RCRA wastes	33 drums	
	corrosive materials-haz	40 drums	
#5 6-9-82	waste chemicals, non-RCRA	27 drums	
	waste oil, non-RCRA	2 drums	
	corrosive materials-haz	46 drums	
#6 6-11-82	combustible waste-haz	2 drums	
	corrosive materials-haz	66 drums	
	waste chemicals, non-RCRA	7 drums	
#7 6-14-82	waste chemicals, non-RCRA	13 drums	
	waste chemicals, oil, and cleaning compound, non-RCRA	13 drums	
	corrosive materials-haz	13 drums	
	corrosive materials-haz	34 drums	
#8 6-15-82	waste chemicals and oils, non-RCRA	32 drums	
	combustible liquid-haz	2 drums	
	corrosive materials-haz	43 drums	
#9 6-17-82	waste cleaning compound, non-RCRA	16 drums	
	waste chemicals, non-RCRA	22 drums	
	combustible and corrosive-haz	10 drums	
	corrosives-haz	32 drums	
#10 6-22-82	waste chemicals & oil, Non-RCRA	11 drums	
	corrosive materials-haz	14 drums	
	corrosive materials-haz	55 drums	
#11 6-21-28	waste cleaning compound, non-RCRA	88 drums	----5 drums refused by disposal-improper man listing
#12 6-25-82	waste chemicals, oils, non-RCRA	15 drums	
	waste chemicals, oils, non-RCRA	12 drums	
	corrosive wastes-haz	18 drums	
	corrosive wastes-haz	34 drums	
#13 6-29-82	waste chemicals, non-RCRA	1 drum	
	waste chemicals, non-RCRA	23 drums	
	corrosive wastes-haz	4 drums	
	corrosive wastes-haz	52 drums	

DATE SHIPPED	WASTE SUMMARY	QUANTITY
#14 6-30-82	waste chemicals and oils, non-RCRA	19 drums
	waste chemicals and oils, non-RCRA	21 drums
	corrosive materials-haz	23 drums
	corrosive materials-haz	17 drums
#15 7-2-82	waste cleaning compound, non-RCRA	88 drums
#16 7-6-82	waste chemicals, non-RCRA	11 drums
	corrosive material-haz	23 drums
	corrosive materials-haz	46 drums
#17 7-9-82	waste chemicals, non-RCRA	10 drums
	waste chemicals and oil,non-RCRA	12 drums
	corrosive materials-haz	24 drums
	corrosive materials-haz	34 drums
#18 7-21-82	corrosive material-haz	25 drums
	waste chemicals and oils, non-RCRA	23 drums
	corrosive materials-haz	32 drums
#19 7-28-82	waste chemicals and oils, non-RCRA	28 drums
	waste chemicals, non-RCRA	4 drums
	corrosive materials-haz	14 drums
	corrosive materials-haz	34 drums
#20 7-30-82	waste chemicals, non-RCRA	48 drums
	corrosive materials-haz	32 drums
#21 8-5-82	waste chemicals and oils, non-RCRA	40 drums
	corrosive materials-haz	4 drums
	corrosive materials-haz	35 drums
#22 8-18-82	corrosive materials-haz	34 drums
	waste chemicals and oils, non-RCRA	46 drums
#23 9-1-82	corrosive materials-haz	32 drums
	corrosive materials-haz	5 drums
	waste chemicals and oils-non-RCRA	24 drums
	waste cleaning compounds, non-RCRA	19 drums
#24 9-3-82	waste cleaning compounds, non-RCRA	11 drums
	waste chemicals and oils, non-RCRA	16 drums
	corrosive materials-haz	40 drums
	combustible and corrosives-haz	13 drums
#25 9-29-82	waste chemicals and oils, non-RCRA	63 drums
	corrosive materials-haz	4 drums
	corrosive materials-haz	13 drums
#26 10-1-82	waste chemicals, non-RCRA	4 drums
	waste chemicals, non-RCRA	17 drums
	waste chemicals, non-RCRA	20 drums
	corrosive materials-haz	16 drums
	corrosive materials-haz	23 drums

DATE SHIPPED	WASTE SUMMARY	QUANTITY
#27 10-5-82	waste chemicals, non-RCRA	39 drums
	waste chmeicals, oils, non-RCRA	17 drums
	corrosive and flammable-haz	6 drums
	corrosives and combustible-haz	18 drums
#28 10-7-82	waste sodium flouride, non-RCRA	1 drum
	waste chemicals, non-RCRA	45 drums
	waste chemicals, non-RCRA	9 drums
	corrosive materials-haz	25 drums
#29 10-8-82	waste chemicals, non-RCRA	41 drums
	waste cupru sulfate-haz	2 drums
	waste sodium flouride, non-RCRA	1 drum
	corrosive materials-haz	36 drums
#30 10-11-82	combustible, corrosives-haz	10 drums
	corrosive materials-haz	12 drums
	waste chemicals, non-RCRA	18 drums
	waste chemicals, non-RCRA	21 drums
	waste chemicals, oils, non-RCRA	19 drums
#31 10-13-82	waste sodium flouride, non-RCRA	4 drums
	waste chemicals, non-RCRA	30 drums
	corrosive materials-haz	46 drums
#32 10-24-82	waste sodium sulfate, non-RCRA	(3 drums
	and cupric sulfate-haz	(6 drums
	waste chemicals, non-RCRA	41 drums
	corrosive materials-haz	30 drums
#33 10-20-82	waste chemicals, non-RCRA	32 drums
	waste sodium flouride, non-RCRA	2 drums
	corrosive materials-haz	46 drums
#34 10-22-82	waste chemicals, non-RCRA	50 drums
	corrosive materials-haz	27 drums
	waste cupric sulfate, non-RCRA	5 drums
#35 11-1-82	corrosive material-haz	47 drums
	waste sodium slft, cu slft	16 drums
	waste chemicals, non-RCRA	17 drums
	hazardous waste shipped	1515 drums
	non-hazardous waste shipped	1280 drums
	total waste shipped	2795 drums

compiled on 12-9-82 and 12-10-82
S. K. SWANSON



1517.T
2 non
1515 T

E
34

OCCIDENTAL CHEMICAL CORP., PARKER SURFACE TREATMENT DIVISION, MORENCI MICHIGAN
SUMMARY OF MANIFEST SHIPMENTS OFF-SITE SUBMITTED TO USEPA 11-22-82

DATE SHIPPED	WASTE SUMMARY	QUANTITY
#1 5-26-82	corrosive materials-haz	[redacted]
#2 5-28-82	corrosive materials-haz	[redacted]
#3 6-1-82	corrosive materials-haz	[redacted]
	non-RCRA wastes	13 drums
#4 6-2-82	waste oil, non-RCRA	7 drums
	non-RCRA wastes	33 drums
	corrosive materials-haz	[redacted]
#5 6-9-82	waste chemicals, non-RCRA	27 drums
	waste oil, non-RCRA	2 drums
	corrosive materials-haz	[redacted]
#6 6-11-82	combustible waste-haz	[redacted]
	corrosive materials-haz	
	waste chemicals, non-RCRA	7 drums
#7 6-14-82	waste chemicals, non-RCRA	13 drums
	waste chemicals, oil, and cleaning compound, non-RCRA	13 drums
	corrosive materials-haz	[redacted]
	corrosive materials-haz	[redacted]
#8 6-15-82	waste chemicals and oils, non-RCRA	32 drums
	combustible liquid-haz	[redacted]
	corrosive materials-haz	
#9 6-17-82	waste cleaning compound, non-RCRA	16 drums
	waste chemicals, non-RCRA	22 drums
	combustible and corrosive-haz	[redacted]
	corrosives-haz	
#10 6-22-82	waste chemicals & oil, Non-RCRA	11 drums
	corrosive materials-haz	[redacted]
	corrosive materials-haz	
#11 6-21-28	waste cleaning compound, non-RCRA	88 drums----5 drums refused by disposal-improper man listing
#12 6-25-82	waste chemicals, oils, non-RCRA	15 drums
	waste chemicals, oils, non-RCRA	12 drums
	corrosive wastes-haz	[redacted]
	corrosive wastes-haz	
#13 6-29-82	waste chemicals, non-RCRA	1 drum
	waste chemicals, non-RCRA	23 drums
	corrosive wastes-haz	[redacted]
	corrosive wastes-haz	

689 haz
23 non

DATE SHIPPED	WASTE SUMMARY	QUANTITY
#14 6-30-82	waste chemicals and oils, non-RCRA	19 drums
	waste chemicals and oils, non-RCRA	21 drums
	corrosive materials-haz	[redacted]
	corrosive materials-haz	[redacted]
#15 7-2-82	waste cleaning compound, non-RCRA	88 drums
#16 7-6-82	waste chemicals, non-RCRA	11 drums
	corrosive material-haz	[redacted]
	corrosive materials-haz	[redacted]
#17 7-9-82	waste chemicals, non-RCRA	10 drums
	waste chemicals and oil,non-RCRA	12 drums
	corrosive materials-haz	[redacted]
	corrosive materials-haz	[redacted]
#18 7-21-82	corrosive material-haz	[redacted]
	waste chemicals and oils, non-RCRA	23 drums
	corrosive materials-haz	[redacted]
#19 7-28-82	waste chemicals and oils, non-RCRA	28 drums
	waste chemicals, non-RCRA	4 drums
	corrosive materials-haz	[redacted]
	corrosive materials-haz	[redacted]
#20 7-30-82	waste chemicals, non-RCRA	48 drums
	corrosive materials-haz	[redacted]
#21 8-5-82	waste chemicals and oils, non-RCRA	40 drums
	corrosive materials-haz	[redacted]
	corrosive materials-haz	[redacted]
#22 8-18-82	corrosive materials-haz	[redacted]
	waste chemicals and oils, non-RCRA	46 drums
#23 9-1-82	corrosive materials-haz	[redacted]
	corrosive materials-haz	[redacted]
	waste chemicals and oils-non-RCRA	24 drums
	waste cleaning compounds, non-RCRA	19 drums
#24 9-3-82	waste cleaning compounds, non-RCRA	11 drums
	waste chemicals and oils, non-RCRA	16 drums
	corrosive materials-haz	[redacted]
	combustible and corrosives-haz	[redacted]
#25 9-29-82	waste chemicals and oils, non-RCRA	63 drums
	corrosive materials-haz	[redacted]
	corrosive materials-haz	[redacted]
#26 10-1-82	waste chemicals, non-RCRA	4 drums
	waste chemicals, non-RCRA	17 drums
	waste chemicals, non-RCRA	20 drums
	corrosive materials-haz	[redacted]
	corrosive materials-haz	[redacted]

DATE SHIPPED	WASTE SUMMARY	QUANTITY
#27 10-5-82	waste chemicals, non-RCRA	39 drums
	waste chmeicals, oils, non-RCRA	17 drums
	corrosive and flammable-haz	[redacted]
	corrosives and combustible-haz	[redacted]
#28 10-7-82	waste sodium flouride, non-RCRA	1 drum
	waste chemicals, non-RCRA	45 drums
	waste chemicals, non-RCRA	9 drums
	corrosive materials-haz	[redacted]
#29 10-8-82	waste chemicals, non-RCRA	41 drums
	waste cupru sulfate-haz	[redacted] X
	waste sodium flouride, non-RCRA	1 drum
	corrosive materials-haz	[redacted]
#30 10-11-82	combustible, corrosives-haz	[redacted]
	corrosive materials-haz	[redacted]
	waste chemicals, non-RCRA	18 drums
	waste chemicals, non-RCRA	21 drums
	waste chemicals, oils, non-RCRA	19 drums
#31 10-13-82	waste sodium flouride, non-RCRA	4 drums
	waste chemicals, non-RCRA	30 drums
	corrosive materials-haz	[redacted]
#32 10-24-82	waste sodium sulfate, non-RCRA	(3 drums
	and cupric sulfate-haz	[redacted] X
	waste chemicals, non-RCRA	41 drums
	corrosive materials-haz	[redacted]
#33 10-20-82	waste chemicals, non-RCRA	32 drums
	waste sodium flouride, non-RCRA	2 drums
	corrosive materials-haz	[redacted]
#34 10-22-82	waste chemicals, non-RCRA	50 drums
	corrosive materials-haz	[redacted]
	waste cupric sulfate, non-RCRA	5 drums
#35 11-1-82	corrosive material-haz	[redacted]
	waste sodium slft, cu slft	16 drums
	waste chemicals, non-RCRA	17 drums

1515 haz
1260

B525

RECORD OF COMMUNICATION

☒ PHONE CALL ☐ DISCUSSION ☐ FIELD TRIP ☐ CONFERENCE
☐ OTHER (SPECIFY)

(Record of item checked above)

	FROM:	DATE
Mary Gade	Mike Robinson, Att'y. Occidental Chemical	11/17/82
		TIME pm

SUBJECT

Production of documents demonstrating that materials returned product not hazardous waste

SUMMARY OF COMMUNICATION

Mike said that he had sent out a two inch high stack of information to me on Tuesday afternoon. ~~Mike~~ He characterized it as documents demonstrating the receipt of material by the company such as invoices, bills of lading, etc. He said that by next week the company will also be sending us information relating to waste handling such as manifests. Finally, he indicated that the materials handling plan was being revised to conform with actual plant conditions and would also be forwarded to us by next week. I gave him permission to submit this info to us on this schedule despite the fact that it extends beyond our agreed upon November 18, 1982 date.

CONCLUSIONS, ACTION TAKEN OR REQUIRED

RECEIVED
NOV 18 1982
WASTE MANAGEMENT BRANCH
EPA. REGION V

INFORMATION COPIES TO: ~~SCHAEFER ULLRICH ANDERSEN WALKER~~

LAW OFFICES
LANDMAN, LUYENDYK, LATIMER, CLINK & ROBB
LANDMAN, HATHAWAY, LATIMER, CLINK & ROBB - LUYENDYK, HAINER, HATHAWAY & DEJONG
400 TERRACE PLAZA
P.O. BOX 29
MUSKEGON, MICHIGAN 49443
616/722-2671

GRAND RAPIDS, MICHIGAN 49503
400 CALDER PLAZA BLDG.
616/774-8031

GRAND HAVEN, MICHIGAN 49417
PACESETTER BANK BLDG.
616/842-6160

FREMONT, MICHIGAN 49412
OLD STATE BANK BLDG.
616/924-0780

M.L. BRADBURY, JR.
STEPHEN H. CLINK
FRED C. CULVER, JR.
ROBERT L. DEJONG
RICHARD J. HAINER
DAVID E. HATHAWAY
WILLIAM H. HERITAGE, JR.
CHARLES L. HITESMAN
MICHAEL W. IRISH
STEVEN C. KOHL
ANTHONY J. KOLENIC, JR.
RICHARD C. LAGUE
LOU L. LANDMAN
DAVID E. LEIGH
JOHN D.B. LUYENDYK
JOHN HARVEY MARTIN
JOHN H. McKENDRY, JR.
WILLIAM F. McNALLY
DAVID B. MERWIN
DAVID R. MUNROE
WILLIAM M. NEWMAN
RUSSELL E. PRICE
MARK E. PUTNEY
MICHAEL L. ROBINSON
ROBERT W. SIKKEL

I. JOHN SNIDER II
STANLEY J. STEK
FREDRIC A. SYTSMA
THOMAS H. THORNHILL
ALVIN D. TREADO
JON D. VANDER PLOEG
JOHN P. VAN EENENAAM
DONALD J. VELDMAN
RANDALL A. WHITE
J. WILLIAM WHITLOCK

CRAIG A. BERNTHAL
PAUL REUBEN JACKSON
PAUL M. KARA
CHRIS ANN McGUIGAN
MICHAEL L. SHIPARSKI
ANNE M. VANDERMALE
ROBERT F. WARDROP, II

OF COUNSEL
H. WINSTON HATHAWAY

HAROLD W. CHARTER - 1978
CHARLES F. LATIMER - 1971
V.S. LAURIN, JR. - 1968
RICHARD A. ROBB - 1971

November 15, 1982

Ms. Mary A. Gade
Assistant Regional Counsel
U.S. Environmental Protection
Agency
230 South Dearborn Street
Chicago, Illinois 60604

Re: Occidental Chemical Corporation
Docket No. V-W-82-R-021
Our File M-5824-025

Dear Ms. Gade:

As requested we are enclosing for your review copies of
* old material handling records from the Occidental Chemical Corporation's Morenci Michigan Plant.

We anticipate receiving from company officials the revised material handling plan within the next day or two and will promptly forward it on to you for your review. Company officials are completing their compilation of waste manifest records and we anticipate sending these documents to you within the next few days as well.

Please do not hesitate to contact our office with any questions you might have.

Very truly yours,

Michael L. Robinson

Michael L. Robinson
For the Firm

MLR/jr
* Enclosure

vember 21, 1982

Sally,

Attached is my inventory of the Oxy invoices. It took me about four hours to do and I suspect I should have included other info as I was doing it. For example, each of the invoices contains a blank for "Disposition". This is generally marked either "quarantined" or "available". In theory, available product should never have been kept in the storage areas because a determination had already been made as to its salability. Can we, therefore, discount these invoices and quantities in our tally? On my inventory, I have asterisked some items. These are things that I couldn't figure out or that contain incriminating statements. Be sure and look at the 12/4/82 Mirro Builders Products one. Also, I used the date from the first page of any stapled items. Thus, in many instances, the product was returned sometime before then (up to several months).

Mary

OCCIDENTAL CHEMICAL COMPANY

DATE	COMPANY NAME	PRODUCT	QUANTITY
6/8/82	Bethlehem Steel Corporation	Parco Cleaner 2323 (#201176)	1 - 475lb. c
2/24/82	Leslie Metal Arts Co. Inc.	Parcolene Z (#200086)	3 - 125lb. c
		Parco Coater 2555	2 - 580lb. d
		Parco Cleaner 142	3 - 40 lb. d
		Parco Coater 2557L	2 - 525lb. d
		Parco Cleaner 2076	4 - 425lb. d
		Parco Coater 2558	7 - 155lb. d
		Parco Cleaner 2053	10 - 450lb. d
9/23/82	GMC- Pontiac Motor Div.	Parco Cleaner 451B	36 - 475lb. d
		Parco Cleaner 2348	22 - 475lb. d
7/28/82	Philips Ind-Lau Div.	Bonderite 1030B	3 - 560lb. d
7/23/82	Coyne Cylinder Co.	Accelerator 131	7 - 600lb. d
		Spra Bonderite 111-X	12 - 690lb. d
7/20/82	Hoover Co.-Die Casting Div.	Bonderite 1000	6 - 575lb. d
		Parco Coater 2556	2 - 475lb. d
		Parcolene 3	1 - 345lb. d
		Black Velvet 2400	2 - 400lb. d
6/10/82	Chicago Finished Metals Inc.	Bonderite 1776A	3 - 530lb. d
		Bonderite 1776B	2 - 465lb. d
* 6/1/82	American Sunroof Mfg.	Accelerator 131	5 - 600lb. d
		Bonderite 411	13 - 700lb. d
		Parco Cleaner 742	7 - 425lb. d
		Parco Cleaner 2361	1 - 475lb. d
		Parco Cleaner 2510	5 - 510lb. d
		Parco Neutralizer 2013	1 - 375lb. d
		Parcolene 1	1 - 180lb. d
6/1/82	Kelvinator Inc--G.R. MFG Div.	Parco Cleaner 2234	4 - 625lb. d
		Parco Cleaner 2333	9 - 425lb. d
		Bonderite 1014	22 - 445lb. d
		Parco Cleaner 2323	12 - 475lb. d
5/4/82	General Motors Assembly Div.	Parco Cleaner 241	12 - 491lb. d
		Parco Cleaner 241	3 - 150lb. d
		Parco Cleaner 241	2 - 50 lb. d
5/25/82	Alcan Aluminum Corp-Alcan Sheet Plate	Bonderite 7227	8 - 500lb. d
4/14/82	Steelcase Inc.	Parco Cleaner 2331	20 - 425lb. d
4/19/82	Central Screw Co.	Parco Shield 90W	1 - 400lb. d
4/13/82	Norandex Inc.	Parco Cleaner 339R	9 - 450lb. d

DATE	COMPANY NAME	PRODUCT	QUANTITY
4/2/82	American Spring Wire Corp.		
3/30/82	McGraw Edison Co. Inc.	Parco Coater 2554	1 - 475lb.
* 3/30/82	Aluminum Co. of America	Bonderite 721A Bonderite 721R Bonderite 721S Parco Cleaner 338	3 - 475lb. 1 - 505lb. 8 - 470lb. 8 - 475lb.
* 3/26/82	Republic Builders Products Co.	Bonderite 901RB	19 - 505lb.
* 3/25/82	Metal Matic Inc.	Miscellaneous TD	1 - Drum
* 3/18/82	Kaiser Aluminum & Chem Corp.	?	?
3/18/82	Chrysler Corp.-Eldon Ave. Axle Plant	Bonderite 160X	3 - 655lb.
7/23/82	Sheller Globe Corp.	Accelerator 3	3 - 495lb.
* 3/10/82	GM Assembly Div--GMC	?	
3/10/82	Mid Mark Corp-Medical Div.	Parco Cleaner 147	3 - 465lb.
3/9/82	Kaiser Aluminum and Chem. Corp.	Parcolene 10	3 - 345lb.
* 3/5/82	Modern Materials Corp.	Parco Neutralizer K700 Bonderite 787 Parco Cleaner 8001 Bonderite 787	3 - 40lb. 1 - 470lb. 1 - 450lb. 1 - 455lb.
3/4/82	Miller Co.	Parco Cleaner 2224	2 - 480lb.
3/3/82	Federal Screw Works	Accelerator 131 Parcolene 24	2 - 600lb. 3 - 490lb.
* 3/3/82	Chicago Finished Metals Inc.	?	
3/3/82	Kidde Walter Co.	Parcolene 21	2 - 400lb.
3/3/82	Addison Products Co.	Bonderite 404	12 - 615lb.
3/2/82	PDI Atec Industries	Parco Stripper 2874	4 - 490lb.
3/2/82	Cooper Energy Services	Parco Lubrite 2	3 - 160lb.
* 2/16/82	Alcan Sheet Plate Div.	Parcolene 88A Bonderite 785 Make-up Parco K-700	1 Drum 3 Drums 1 Drum

DATE	COMPANY NAME	PRODUCT	QUANTITY
		Bonderite 785	1 Drum
		TD 1500 CL	1 Drum
		Parco 2192	1 Drum
		TD 1325 AT	2 Drums
		TD 1325 DW	1 Drum
		TD 1325 DX	1 Drum
		Bonderite 785-0	1 Drum
12/22/81	Prestolite Electrical Prod.	Parco Lubrite 2	6 - 160lb.
* 12/22/81	McGraw Edison Co.	Bonderlube 243	1 - 250lb.
12/21/81	American Metals Corp.	Bonderite 1310	7 - 475lb.
12/21/81	GR MFG. Co.-Kelvinator Inc.	Parcolac 77	2 - 370lb.
12/21/81	Chrysler Corp.	Bonderite EP 1	10 - 650lb.
		Bonderite MU	2 - 615lb.
		Parco Cleaner 348	5 - 450lb.
* 12/15/81	Auto Tap Inc.	Buret Assembly	
12/4/82	Republic Steel Corp.	Bonderite 411	11 - 700lb.
		Parcolene 85A	1 - 495lb.
		Titrating Sol.	4 - 1 gal.
12/4/82	Litho Strip Company	Parco Cleaner	2 - 450lb.
12/4/82	Norandex Inc.	Bonderite 1415A	3 - 465lb.
* 12/4/82	Lone Star Steel Co.-Northwest Ind.	Miscellaneous	
12/4/82	Kewaunee Scientific Equip. Corp.	Parco Cleaner	1 - 475lb.
12/4/82	Republic Steel Corp.	Bonderite 3400	11 - 570lb.
		Accelerator 3400	6 - 495lb.
*** 12/4/82	Mirro Builders Products	Disposal at $100 a drum	
* 11/25/81	Metal Matic Inc.	Accelerator 171	1 - 250lb.
11/24/81	General Electric Co.	Bonderite 800 R	4 - 575lb.
		Bonderite 800 MU	3 - 610lb.
11/23/81	Cyclops Corp.	Bonderite 800 MU	3 - 615lb.
		Bonderite 800 R	4 - 560lb.
11/23/81	American Spring Wire Corp.	Indicator 8	3 -1/2 pt.
11/23/81	Ford Motor Company	Bonderite 411 NF	3 - 615 lb.

DATE	COMPANY NAME	PRODUCT	QUANTITY
11/9/81	Cathodic Electrocoating Co.	Parco Cleaner 339	6 - 450 lb.
11/9/81	Chrysler Corporation	Parco Cleaner 241	2 - 490 lb.
11/2/81	John Deere Company	Parcolene 60A	15 - 555 lb.
		Bonderite EP 2 MU	10 - 615 lb.
10/28/81	Republic Steel Corp.	Miscellaneous	
10/23/81	Float-Away Door Div.	Parco Cleaner 323	3 - 450 lb.
10/12/81	Hoover Co.--Die Casting Div.	Black Velvet 2400	3 - 400 lb.
9/25/81	United States Steel-Fairfield Wks.	Reagent Sol. 34	4 - 1 qt.
		Titrating Sol. 30	1 - 1 qt.
		Indicator 2	1 - 1 qt.
9/25/81	Spectrum Industries Inc.	Parcolene 87A	1 - 130lb.
		Parco Cleaner 3323	2 - 450lb.
9/25/81	Bendix Corp.	Bonderite 880 MU	10 - 675lb.
9/25/81	Delco Moraine Div.-GMC	Parco Cleaner 2050	4 - 475lb.
9/25/81	Aurora Steel Prod. Div.-White Ind.	Parco Coater 2555	4 - 580lb.
		Parcolene 85B	1 - 140 lb.
		Parcolene 85A	1 - 135 lb.
		Parcolene 6	1 - 195 lb.
9/25/81	Sealmore Corp.	Parco Cleaner 346	1 - 450 lb.
		Bonderite 160	2 - 690 lb.
		Parcolene 85B	1 - 140 lb.
		Parcolene 85A	1 - 135 lb.
9/17/81	Bendix Corporation	Parco Cleaner 2274	3 - 555 lb.
8/25/81	Supracote Inc.	Bonderite 1415A	6 - 465 lb.
8/25/81	Republic Steel Corp.	P C CL 2325	5 - 475 lb.
		Bonderite 3400	5 - 570 lb.
		Accelerator 3400	5 - 495 lb.
		Parcolene 85 B	1 - 140 lb.
		Accelerator 3400	8 - 495 lb.
		Bonderite 3400	6 - 570 lb.
		Accelerator 3400	1 - 495 lb.
		P C CL 2325	2 - 475 lb.
8/25/81	Tecumseh Products Co.	Parcolene M	1 - 100 lb.
8/25/81	Westinghouse Electric Corp.	Parco Additive 2867W	3 - 475 lb.
		Parco Additive 2867W	1 - 475 lb.

DATE	COMPANY NAME	PRODUCT	QUANTITY
		Parco Stripper 2278	5 - 655 lb
7/21/81	General Electric Co.	Bonderite 1077 RB	1 - 145 lb
7/21/81	Float-Away Door Div.	Bonderite EP-10	6 - 575 lb
		Bonderite EP-10B	1 - 545 lb
7/21/81	Western Industries	Accelerator 445	4 - 625 lb
		Bonderite 445	4 - 660 lb
		Additive 400	1 - 660 lb
6/23/81	Torin Corp.	Parco Stripper 2874	2 - 490 lb
6/23/81	Steelcraft Mfg. Co.	Parco Cleaner 3323	5 - 450 lb
6/23/81	Rockwell Int'l Corp.	Parco Lubrite 5	16 - 580 lb
* 6/23/81	Westinghouse Electric Corp.	Parco Electric. Res. Ctg.	16 - 500 lb
6/23/81	Mueller Brass Co.	Bonderite 170X MU	3 - 595 lb
		Bonderite 170 X	1 - 510 lb
* 6/18/81	Apache Container Corp.-Anheuser Busch	Parco Cleaner 465	7 - 475 lb
		Accelerator 45-C	2 - 490 lb
6/17/81	General Electric Co.	Parco Cleaner 2192	4 - 475 lb
		Parco Cleaner 2323	1 - 475 lb
		Bonderite 414	2 - 685 lb
		Bonderite 1000	3 - 575 lb
6/16/81	Aactron Inc.	Parcolene M	5 - 100 lb
5/20/81	Waukesha Engine Div.	Parcolac 2945	1 - 420 lb
5/11/81	Sheller Globe Corp.	Bonderite EP-3	7 - 570 lb
5/11/81	Webster City Products-White Ind.	Bonderite 35B	15 - 635 lb
		Bonderite 1000	5 - 575 lb
		Bonderite 1000B	4 - 545 lb
5/11/81	Smith A O Corp.	Bonderite 1030B	1 - 560 lb
5/7/81	Acorn Bldg. Components Inc.	Accelerator 709	2 - 490 lb
5/8/81	Columbus Industries	Parcolac 2948A	1 - 419 lb
4/23/81	Amron Industries	Additive 10	3 - 525 lb
		Parco Compound 3R	4 - 680 lb
		Bonderite 880 MU	2 - 675 lb
		Bonderite 880R	1 - 660 lb
		Parco Cleaner 2191	1 - 475 lb

DATE	COMPANY NAME	PRODUCT	QUANTITY
4/23/81	Addison Products Co.	Parco Stripper 2874	5 - 490 lb.
		Parco Spray Booth Comp.	4 - 475 lb.
		Parco Cleaner 2352	1 - 475 lb.
		Bonderite 404 Rep. B	8 - 635 lb.
4/24/81	Leslie Metal Arts Co. Inc.	Parco Coater 2557L	3 - 525 lb.
		Parco Cleaner 2076	6 - 425 lb.
**3/23/81	Cambridge Mfg. Co.		
3/23/81	Atlas Plating Inc.	Parco Stripper 2874	4 - 490 lb.

total 744 cont.

2+1

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

October 29, 1982

TO: Files

FROM: Roy Schrameck RS

RE: Occidental Chemical Corp
Morenci

On October 26, 1982, I participated in a RCRA settlement conference pursuant to an EPA violation notice/compliance order sent to Occidental Chemical Corporation in Morenci, Michigan. The order was a result of RCRA inspections conducted by Linda Kouvenemi in which I participated primarily under the auspices of Act 245 but also as back up under RCRA for Linda. EPA requested my presence at the conference since I had been on the site during the inspections.

In attendance at the conference were the following people:

EPA

Mary Gade - Assistant Regional Counsel
Sally Swanson - Environmental Protection Sepecialist

Occidental Chemical Corporation (Niagra Falls, N.Y.)

Paul Schuttler - Director, Environmental
Michael Rudick - Associate General Counsel
Michael Robinson - outside counsel for Occidental

Michigan DNR

Roy Schrameck

RECEIVED
NOV 3 1982
WASTE MANAGEMENT BRANCH
EPA, REGION V

EPA started the conference by reviewing the basis of the complaint from a legal and technical standpoint. Michael Robinson then responded from the company's viewpoint. The company feels that they have addressed and corrected all the violations cited in the complaint, in that all material storage is now inside and the site has been cleaned up. The new storage facility has an internal communication system and drums are being stored with adequate aisle space.

The company disagrees with EPA's contention that the way Occidental handled the old drum storage resulted in spills or leakage. I stated that based on our observations, i.e., liquid on the ground in the middle of storage site number 2, that you could not get to, the way the drums were being handled definitely could have led to spills and leaks. The company dropped further pursuit of this item.

The company contended that charging them with a violation of the ignitable waste storage provisions because of one drum partially filled with 70% ethylamine was essentially regulatory overkill since there were no other ignitables on site. I indicated that there was at least one other drum, marked Junk Solvent, that had a low flash point and so there was more than one drum. The company representatives seemed to be unaware of this Junk Solvent drum.

Mr. Robinson indicated that the company underestimated their storage capacity when they originally filed their RCRA Part A form and that Occidental would refile. The inspection plan requested by the EPA cover letter transmitting the compalint is near completion and the requested Contingency Plan has already been submitted to EPA.

The remaining outstanding matter was the EPA/DNR position that the materials stored at Occidental were hazardous waste vs. the company's contention that it was returned product and not subject to RCRA regulations. The differences regarding these two positions was not resolved but the company proposed to submit a "materials handling program" for Morenci which would address all drummed materials regardless of what they were. Additionally, EPA requested that Occidental submit all their records regarding origin and disposition of the drummed materials on-site during our inspections within two weeks.

The conference was then adjourned to a future date to be established following Occidental's submittal of the requested records.

sc

cc: Sally Swanson
John Bohunsky/WQD files
Lyle Rowell
Al Howard

Parker and EPA disagree on definition of "waste"

(Continued From Page 1)

Parker could not provide bills of sale or of lading (for shipping) for the materials as proof.

Kashner said the company doesn't have the bills of lading or sale because "much of the material had been brought back and consolidated. The bills of lading didn't exist because the materials had always been there."

But Swanson remarked, "they should have some record of what the stuff is."

Schramacka said some of the material was undergoing analysis to determine just that.

Kashner said as the material is approved for shipping and the necessary paperwork and permits are received, the material is being shipped out for disposal. He estimates it takes 100 man-hours to prepare paperwork prior to shipping 80 drums of wastes.

Much of the material has been shipped already, he added.

The materials awaiting shipment or classification are now being stored in a new storage building, Kashner reported. Parker was only 30 days shy of completing the structure when the site was inspected, he continued.

"We expected the EPA to slap us on the wrist, but they came down hard," he observed. The company expected leniency because it was attempting to remedy the situation when inspected, he explained.

He thinks the fine, which he said is the maximum allowed by the law, is excessive.

Swanson noted the fine is negotiable. The final amount will be determined after the EPA meets with Parker representatives, she explained. The groups have planned to meet in an informal hearing soon. Swanson said much can be accomplished in such meetings.

Parker has until October 7 to formally respond to the notice of complaint.

Swanson said the action and proposed fines were warranted by the nature of the violations, which she termed "fairly serious."

Schramacka also agreed the situation "needed attention." However he went on to say, "things are pretty well in hand there at this point."

Swanson remarked Parker will probably be subject to closer scrutiny until the EPA is convinced its conditions have been met.

Parker to contest some charges

Sally

EPA cites violations, fines Parker Division

The Parker Surface Treatment Products Division in Morenci has been cited and fined by the U. S. Environmental Protection Agency for alleged violations at the plant involving hazardous waste materials.

Parker is a subsidiary of the Occidental Chemical Corporation, which recently changed its name from Hooker Chemical.

The EPA notice of complaint lists 12 regulations the Morenci plant is purported to have violated. The EPA has assessed a $25,000 civil penalty against Parker.

The violations were discovered during five inspections of the plant conducted in May and June by the Michigan Department of Natural Resources for the EPA.

The EPA report states at the time of the inspections conditions were found that "could threaten human health or the environment."

Inspectors found hazardous waste containers leaking contents onto the ground and stored open, subject to evaporation. "Evidence also existed of run-off into a river (Bean Creek) from the container storage area," the report stated.

The EPA further charged there was a lack of written records concerning the receipt and methods of treatment, storage or disposal and of the quantity and location of the hazardous wastes in the facility.

Parker is also charged with having more hazardous wastes on site than its permit allows and that ignitable wastes were stored in an open container unprotected from ignition sources.

Other charges concerned the general condition of the storage containers, the lack of warning signs, internal communications and alarm systems and inadequate aisle space.

Sy Kashner, manager of the manufacturing division, said Parker will contest some of the charges. Others, which resulted from "less than adequate housekeeping," have been cleaned up, he reported.

Kashner admitted there was some improper storage of waste and that some containers had leaked, their contents onto the ground in two locations. But he contended no harm was done to the environment and that the health of area residents wasn't threatened by this or other in-plant conditions.

Concerning run-off from the site into Bean Creek, Kashner said, "there was run-off from one drum, but whether it reached the creek would be a matter of speculation."

The DNR has taken sediment and water samples from Bean Creek both above and downstream from the plant in order to test for possible contamination. The results are not yet known, though.

Roy Schramacka of the Grosse Ile office of the DNR noted, Parker "has had everything cleaned up that we asked them to" and has cooperated with them.

According to Schramacka, the DNR wants Parker to conduct a ground water study to determine if there's been any ground water contamination. He said the company is considering the proposal.

Kashner and Schramacka both noted one "hotbed" of PCB, a toxic industrial lubricant, was discovered at the plant. The area was scraped clean and replaced with clean fill dirt.

Kashner said he has received a report that states the PCB did not spread to other areas.

Most of the materials involved in the case are considered hazardous because of their corrosive properties. "They were not toxic in the amounts we had on hand," Kashner explained.

The materials included some acids, organics, metallics and dry compounds. Kashner described them as "our products."

The EPA and Parker disagree on what should be classified as hazardous wastes, Kashner and Sally Swanson, an environmental protection specialist with the EPA's regional office in Chicago, both stated.

The EPA contends Parker had approximately 1,385 drums of toxic waste on site at the time of the inspections. Its storage facility site plan calls for a maximum capacity of 350 of the 55 gallon drums, said Swanson.

Parker, she continued, is maintaining much of the material in the drums was not hazardous waste, but instead was returned product that it had yet to decide whether to reclaim, recycle or dispose.

The EPA took issue with that claim, said Swanson, because

(Continued On Page 8)

LAW OFFICES

LANDMAN, LUYENDYK, LATIMER, CLINK & ROBB

LANDMAN, HATHAWAY, LATIMER, CLINK & ROBB - LUYENDYK, HAINER, HATHAWAY & DEJONG

400 TERRACE PLAZA

P.O. BOX 29

MUSKEGON, MICHIGAN 49443

616/722-2671

GRAND RAPIDS, MICHIGAN 49503
400 CALDER PLAZA BLDG.
616/774-8031

GRAND HAVEN, MICHIGAN 49417
PACESETTER BANK BLDG.
616/842-6160

FREMONT, MICHIGAN 49412
OLD STATE BANK BLDG.
616/924-0780

M.L. BRADBURY, JR.
STEPHEN H. CLINK
ED C. CULVER, JR.
BERT L. DEJONG
RICHARD J. HAINER
DAVID E. HATHAWAY
WILLIAM H. HERITAGE, JR.
CHARLES L. HITESMAN
MICHAEL W. IRISH
STEVEN C. KOHL
ANTHONY J. KOLENIC, JR.
RICHARD C. LAGUE
LOU L. LANDMAN
DAVID E. LEIGH
JOHN D.B. LUYENDYK
JOHN HARVEY MARTIN
JOHN H. McKENDRY, JR.
WILLIAM F. McNALLY
DAVID B. MERWIN
DAVID R. MUNROE
WILLIAM M. NEWMAN
RUSSELL E. PRICE
MARK E. PUTNEY
MICHAEL L. ROBINSON
ROBERT W. SIKKEL

I. JOHN SNIDER II
STANLEY J. STEK
FREDRIC A. SYTSMA
THOMAS H. THORNHILL
ALVIN D. TREADO
JON D. VANDER PLOEG
JOHN P. VAN EENENAAM
DONALD J. VELDMAN
RANDALL A. WHITE
J. WILLIAM WHITLOCK

CRAIG A. BERNTHAL
PAUL REUBEN JACKSON
PAUL M. KARA
CHRIS ANN McGUIGAN
MARK A. RENTENBACH
MICHAEL L. SHIPARSKI
ROBERT F. WARDROP, II

OF COUNSEL
H. WINSTON HATHAWAY

HAROLD W. CHARTER - 1978
CHARLES F. LATIMER - 1971
V.S. LAURIN, JR. - 1968
RICHARD A. ROBB - 1971

October 28, 1982

Ms. Mary A. Gade, Assistant Regional Counsel
U. S. Environmental Protection Agency
230 South Dearborn Street
Chicago, Illinois 60604

Re: Occidental Chemical Corporation
Docket No. V-W-82-R-021

Dear Ms. Gade:

I am writing to you to confirm our agreement of October 26, 1982 in which we agreed to adjourn the informal conference held with reference to the above matter on October 26, 1982 to a date to be agreed upon between USEPA and Occidental. We would expect to reconvene the informal conference in approximately three weeks. I will be back in touch with you next week to propose a specific date for reconvening the informal conference. In the meanwhile the company is working on the various items which we discussed in the informal conference on October 26, 1982.

Very truly yours,

Michael L. Robinson

Michael L. Robinson
For Occidental Chemical Corporation

MLR:aef

cc: Mr. Robert J. Schuttler
Mr. Michael Rudick
Mr. Arthur E. Kluegel
Mr. Sy Kashner

RECEIVED
WASTE MANAGEMENT BRANCH
EPA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: November 3, 1982

SUBJECT: Telephone Memo: Mike Robinson of Occidental Chemical Company

FROM: Mary Gade

TO: Files

Mike Robinson called today to give me dates on which Occidental intends to provide us with the information we requested at the informal settlement conference. The company is developing a materials handling policy which he expects to get to us by November 18, 1982--although the proposed policy makes some distinctions between hazardous and non-hazardous chemicals, it will essentially treat them the same. He also assured me that it would require a determination shortly after the products are returned whether or not they would be reprocessed or whether they would be discarded.

He also told me that the company has had good success in pulling the documentation we requested concerning the returned product issue. He promised it to us no later than November 18, 1982 but will try to get it to us before then. Irequested that he get them to us before the November 18th date.

LENAWEE COUNTY HEALTH DEPARTMENT
1301 N. Main Street - (517) 263-2131
Adrian, MI 49221

October 13, 1982

Ms. Sally Swanson
United States Environmental Protection Agency
5HW-TUB
111 W. Jackson Blvd.
Chicago, Illinois 60604

Dear Ms. Swanson:

Enclosed is a copy of the Morenci newspaper of September 29, 1982 regarding the Parker/Hooker plant in Morenci, Michigan. As of this date, the story has not been published in the Daily Telegram, the only daily paper in Lenawee County, however we are expecting the story to break soon.

If you have any information you wish to share or request any other information, please feel free to contact me.

Sincerely,

F. Keeslar

Frederick L. Keeslar, R.S., M.S.P.H.
Director of Environmental Health

FLK/su
enc.

RECEIVED
OCT 1 9 1982
WASTE MANAGEMENT BRANCH
EPA REGION V

M

LAW OFFICES

LANDMAN, LUYENDYK, LATIMER, CLINK & ROBB

LANDMAN, HATHAWAY, LATIMER, CLINK & ROBB · LUYENDYK, HAINER, HATHAWAY & DEJONG

400 TERRACE PLAZA

P.O. BOX 29

MUSKEGON, MICHIGAN 49443

616/722-2671

GRAND RAPIDS, MICHIGAN 49503
400 CALDER PLAZA BLDG.
616/774-8031

GRAND HAVEN, MICHIGAN 49417
PACESETTER BANK BLDG.
616/842-6160

FREMONT, MICHIGAN 49412
OLD STATE BANK BLDG.
616/924-0780

M.L. BRADBURY, JR.
STEPHEN H. CLINK
FRED C. CULVER, JR.
ROBERT L. DEJONG
RICHARD J. HAINER
DAVID E. HATHAWAY
WILLIAM H. HERITAGE, JR.
CHARLES L. HITESMAN
MICHAEL W. IRISH
STEVEN C. KOHL
ANTHONY J. KOLENIC, JR.
RICHARD C. LAGUE
LOU L. LANDMAN
DAVID E. LEIGH
JOHN D.B. LUYENDYK
JOHN HARVEY MARTIN
JOHN H. McKENDRY, JR.
WILLIAM F. McNALLY
DAVID B. MERWIN
DAVID R. MUNROE
WILLIAM M. NEWMAN
RUSSELL E. PRICE
MARK E. PUTNEY
MICHAEL L. ROBINSON
ROBERT W. SIKKEL

I. JOHN SNIDER II
STANLEY J. STEK
FREDRIC A. SYTSMA
THOMAS H. THORNHILL
ALVIN D. TREADO
JON D. VANDER PLOEG
JOHN P. VAN EENENAAM
DONALD J. VELDMAN
RANDALL A. WHITE
J. WILLIAM WHITLOCK

CRAIG A. BERNTHAL
PAUL REUBEN JACKSON
PAUL M. KARA
CHRIS ANN McGUIGAN
MARK A. RENTENBACH
MICHAEL L. SHIPARSKI
ROBERT F. WARDROP, II

OF COUNSEL
H. WINSTON HATHAWAY

HAROLD W. CHARTER - 1978
CHARLES F. LATIMER - 1971
V.S. LAURIN, JR. - 1968
RICHARD A. ROBB - 1971

October 4, 1982

Director, Waste Management Division
Region V
United States Environmental Protection Agency
230 South Dearborn Street
Chicago, Illinois 60604

Attention: Technical, Permits, and Compliance Section

Re: Occidental Chemical Corporation
Docket No. V-W-82-R-021

Dear Sir:

* Enclosed is our Response to the recent Findings of Violation and Compliance Order issued by the EPA September 2, 1982. Included in our Response is a notification as to our compliance with that Order.

Very truly yours,

Michael L. Robinson

Michael L. Robinson
For Occidental Chemical Corporation

MLR:aef

*Enclosure

RECEIVED
OCT 1 1982
WASTE MANAGEMENT BRANCH
EPA, REGION V

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION V

IN THE MATTER OF

OCCIDENTAL CHEMICAL CORPORATION,
PARKER SURFACE TREATMENT
PRODUCTS DIVSION
EPA ID NO MID 058723867

Docket No. V-W-82-R-021

APPEARANCE

Landman, Luyendyk, Latimer, Clink & Robb, by Michael L. Robinson and J. William Whitlock, partners in said law firm, hereby enter their appearance as counsel for and on behalf of Occidental Chemical Corporation, Parker Surface Treatment Products Division, in the above stated cause.

Dated: October 1, 1982.

Michael L. Robinson [P-23160]

J. William Whitlock [P-27341]

Landman, Luyendyk, Latimer, Clink & Robb
Counsel for Respondent
Business Address:
400 Terrace Plaza
Muskegon, Michigan 49443
Telephone: 616/722-2671

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION V

IN THE MATTER OF

OCCIDENTAL CHEMICAL CORPORATION,
PARKER SURFACE TREATMENT
PRODUCTS DIVSION
EPA ID NO MID 058723867

Docket No. V-W-82-R-021

REQUEST FOR HEARING

The above named respondent, by its attorneys, Landman, Luyendyk, Latimer, Clink & Robb, hereby requests a hearing upon the Complaint and Findings of Violations dated August 26, 1982 and filed in the above stated cause. An answer to said Complaint and Findings of Violations setting forth respondent's answers to the factual allegations contained in said Complaint, the circumstances and arguments which constitute the grounds of defense, and the facts which respondent intends to place at issue is being filed contemporaneously with this request for hearing.

Dated: October 1, 1982.

Michael L. Robinson [P-23160]

J. William Whitlock [P-27341]

Landman, Luyendyk, Latimer, Clink & Robb
Counsel for Respondent
Business Address:
400 Terrace Plaza
Muskegon, Michigan 49443
Telephone: 616/722-2671

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION V

IN THE MATTER OF

OCCIDENTAL CHEMICAL CORPORATION,
PARKER SURFACE TREATMENT
PRODUCTS DIVISION
EPA ID NO MID 058723867

Docket No. V-W-82-R-201

CERTIFICATE OF SERVICE

I hereby certify that I have caused a copy of the Appearance, Request for Hearing, and Answer to Complaint and Findings of Violations to be served upon:

Ms. Mary A. Gade
Assistant Regional Counsel
United States Environmental Protection Agency
Region V
230 South Dearborn Street
Chicago, Illinois 60640

on the date below by causing said copies to be deposited in the United States mail, first class, with certified return receipt requested, postage prepaid, at Muskegon, Michigan, in an envelope addressed as stated above.

I have further caused the originals of said documents and this Certificate to be filed with the Regional Hearing Clerk located at the same address stated above by causing said original documents to be deposited in the United States mail, first class, with certified return receipt requested, postage prepaid, at Muskegon, Michigan, in an envelope addressed to said Regional Hearing Clerk at the Office of Regional Counsel at the address stated above.

Dated: October 1, 1982.

J. William Whitlock [P-27341], of
LANDMAN, LUYENDYK, LATIMER, CLINK & ROBB
Counsel for Respondent
Business Address:
400 Terrace Plaza
Muskegon, Michigan 49443
Telephone: 616/722-2671

5HW-TUB

SEP 17 1982

Mr. Ken Walker
824 North Street
Morenci, Michigan 49256

Dear Mr. Walker:

As we discussed in telephone conversations on September 16, 1982, I am sending you a copy of the Compliance Order this agency issued to Occidental Chemical Corp., Parker Surface Treatment Products Division. The Order cites violations of hazardous waste management regulations under the Resource Conservation and Recovery Act.

Thank you for your concern in this matter. If you have any questions or wish to discuss the Order further, please contact me at (312) 886-7482.

Sincerely,

Sally K. Swanson
Environmental Protection Specialist

Enclosure

cc: Alan J. Howard, Chief
Office of Hazardous Waste Management
Michigan Department of Natural Resources

bcc: Gade, ORC

S.Swanson:rita:5HW-TUB:6-7444:9-17-82

	TYPIST	AUTHOR	PEU CHIEF	STU #1 CHIEF	[illegible] Chief	TPS CHIEF	WMD CHIEF	AHMD DIRECTOR
INITIALS	Rita Williams	SKS						
DATE	9-17-82	9-17-82						

RECORD OF COMMUNICATION	☒ PHONE CALL ☐ DISCUSS ☐ FIELD TRIP ☐ CONFERENCE ☐ OTHER (SPECIFY) (Record of item checked above)	
TO: Ken Walker Morenci, MI Citizen/City Council	FROM: Sally Swanson	DATE 9-16-82 TIME 4:10

SUBJECT
EPA Enforcement Action At Parker/OXY/Hooker

SUMMARY OF COMMUNICATION

Mr. Walker called with questions about the C.O. we sent to OXY Chemical Corp, Parker Surface Treatment Div. He called as a citizen and concerned member of the city council. He had heard from a friend in town (Parker employee) that EPA took some kind of enf. action and that the fine was a "slap on the wrist".

He called to find out specifically what the order contained and what would happen. I went over the order with him and then discussed our administrative procedures. I told him I would send a copy of the order for his information

Ken Walker
824 North Street
Morenci Michigan 49256
517-458-7422

CONCLUSIONS, ACTION TAKEN OR REQUIRED

INFORMATION COPIES
TO:

EPA Form 1300-6 (7-72) REPLACES EPA HQ FORM 6300-3 WHICH MAY BE USED UNTIL SUPPLY IS EXHAUSTED.

PARKER DIVISION
OCCIDENTAL CHEMICAL CORPORATION
PARKER SURFACE TREATMENT PRODUCTS

SPILL PREVENTION, CONTROL & COUNTERMEASURE PLAN FOR

MORENCI, MICHIGAN FACILITY

PREPARED BY: R. G. SPEED
TECHNICAL SUPERINTENDENT

REVISED: SEPTEMBER 15, 1982

APPROVALS AND NOTIFICATION FOR SPCC PLAN

APPROVAL BY CORPORATE ENVIRONMENTAL

STATEMENT OF APPROVAL BY REGISTERED PROFESSIONAL ENGINEER:

"I have examined this facility and am familiar with the provisions of 40CFR112, and attest that the Spill Prevention, Control and Countermeasure Plan for this facility has been prepared in accordance with good engineering practice."

SIGNED: Richard G Speed

DATE: Sept 15, 1982

DATE OF NEXT REVIEW: May 1983

NOTIFICATION AND RESPONSE PROCEDURE

A. In the event of a spill to the environment of reportable quantities of material, the following people and agencies are to be notified as soon as possible.

1. Richard G. Fredrick Production Superintendent and Emergency Coordinator. . . .
   Telephone: Office: 517-458-2221
   Residence: 419-237-2487

2. Leland K. Huffaker, Technical Supervisor and Alternate Emergency Coordinator. . . .
   Telephone: Office: 517-458-2221
   Residence: 517-458-7407

3. National Response Center is to be called within one hour after spill.
   Telephone: 1-800-424-8802

   Information required in call to National Response Center shall be:
   a. Time and location of spill.
   b. Type and amount of material spilled.
   c. Facility location.
   d. Direction of spill flow.
   e. Clean-up and emergency procedures being followed.

   NOTE: Obtain the name of duty officer to whom spill is reported.

4. Morenci City Superintendent. . . .
   Telephone: 517-458-6650

NOTIFICATION AND RESPONSE PROCEDURE CONTINUED

5. Morenci Fire Department.....
   Telephone: 511

6. Morenci Police Department.....
   Telephone: 711

B. After the immediate emergency is contained, the following persons shall be notified:

1. J. D. Kashner, Manager-Manufacturing.....
   Telephone: Office: 517-458-2221
   Residence: 517-265-8988

2. R. G. Speed, Technical Superintendent, Production.....
   Telephone: Office: 517-458-2221
   Residence: 517-458-7377

3. L. K. Huffaker, Division CERP Coordinator....
   Telephone: Office: 517-458-2221
   Residence: 517-458-7407

C. Technical expertise for neutralization or clean-up may be requested from the following:

1. J. A. Scalise, Product Acceptance Manager.....
   Telephone: Office: 313-583-9300
   Residence: 313-422-6907

2. L. K. Huffaker, Technical Service Supervisor.....
   Telephone: Office: 517-458-2221
   Residence: 517-458-7407

HISTORY AND POTENTIAL FAILURE

A. TANK STORAGE - OUTSIDE

1. Tank farm located west side of Building F:

MATERIAL	TANK	CAPACITY
Hydrofluosilicic, 30%	G1	10,000 Gal.Steel Construction R.L.
Nitric Acid, 42°BE'	G2	10,000 S.S. Chrome Iron Construction
Nitric Acid, 42°BE'	G3	10,000 S.S. Chrome Iron Construction
Nitric Acid, 42°BE'	G4	10,000 S.S. Chrome Iron Construction
Nitric Acid, 42°BE'	G5	10,000 S.S. Chrome Iron Construction
Nitric Acid, 42°BE'	G6	10,000 S.S. Chrome Iron Construction
Phosphoric Acid, 75%	G7	15,000 Gal.Steel Construction R.L.
Phosphoric Acid, 75%	G8	15,000 Gal.Steel Construction R.L.
Phosphoric Acid, 75%	G9	15,000 Gal.Steel Construction R.L.
Phosphoric Acid, 75%	G10	15,000 Gal.Steel Construction R.L.
Phosphoric Acid, 75%	G11	15,000 Gal.Steel Construction R.L.
Phosphoric Acid, 75%	G12	15,000 Gal.Steel Construction R.L.
66°BE' Sulfuric Acid	G13	10,000 Gal.Mild Steel Construction
Hydrochloric Acid, 20°BE'	G14	12,000 Gal.R.L. Rated 30 Pounds
Hydrofluoric Acid, 70°BE'	G15	6,000 Gal.M.S. Rated 30 Pounds

2. Tank storage located west of Building G:

Methylene Chloride	G16	7,000 Gal Steel Construction

3. Tanks in items 1 and 2 above are located within dikes with capacity greater than largest tank. Diked areas are filled with limestone for neutralization with clay floor.

HISTORY AND POTENTIAL FAILURE CONTINUED

4. Inside bulk storage located Building G Addition Basement:

MATERIAL	TANK	CAPACITY
50% Caustic Soda	G16	4,000 Gal. 9'x9' Stl. Construction
50% Caustic Soda	G17	4,000 Gal. 9'x9' Stl. Construction
N.N.Solution	G18	4,000 Gal. 9'x9' Stl. Construction
Z.N.Solution	G19	4,000 Gal. 9'x9' Stl. Construction
Product	G20-P	4,000 Gal. 9'x9' Koreseal Lined
Product	G21-P	4,000 Gal. 9'x9' Koreseal Lined
Product	G22-P	4,000 Gal. 9'x9' Koreseal Lined
Product	G23-P	4,000 Gal. 9'x9' Koreseal Lined

Inside bulk storage located Building E Basement:

ZAP	E-1-Z	4,000 Gal. Polyfiber, 9'x9'
ZAP	E-2-Z	4,000 Gal. Polyfiber, 9'x9'
ZAP	E-3-Z	4,000 Gal. Polyfiber, 9'x9'
ZAP	F-5-Z	5,000 Gal. 316 S.S. 9'x10'6"

Leaks or spills from these tanks would enter the plant sewers which discharge to the Morenci City sewer system.

Any other spills from tanks or equipment inside the building would enter the plant sewer system.

5. No above ground oil storage is located at this plant except for some drummed raw materials. Any spills or leakage from these drums is absorbed and swept up for disposal within the plant building.

HISTORY AND POTENTIAL FAILURE CONTINUED

6. Dry materials bulk storage located in Area 5, outside:

MATERIAL	SILO	CAPACITY
Caustic Soda	S-1	169,260 pounds
Sodium Metasilicate	S-2	169,260 pounds
Sodium Tripolyphosphate	S-3	112,140 pounds
Soda Ash	S-4	74,760 pounds
Soda Ash	S-5	112,140 pounds

7. Bulk underground tanks

MATERIAL	CAPACITY
No. 2 Fuel Oil	8200 Gal., 6'x9" x 30'
No. 2 Fuel Oil	6200 Gal., 6'x0" x 29'5"
No. 2 Fuel Oil	8000 Gal., 7'x0" x 28'

8. Mixing tanks located Building G and G Addition

DESCRIPTION	CAPACITY	TANK #
316 S.S. Jacketed	300 Gallon	1
316 S.S. Plate Coil	1000 Gallon	2
316 S.S. Plate Coil	1000 Gallon	3
316 S.S. Plate Coil	600 Gallon	4
M.S.R.L. Jacketed	500 Gallon	5
M.S.R.L. Jacketed	500 Gallon	6
316 S.S. Plate Coil	1000 Gallon	7
316 S.S. Plate Coil	750 Gallon	8
316 S.S. Plate Coil	750 Gallon	9
316 S.S. Plate Coil	750 Gallon	10
PVC Lined MS Jacketed	100 Gallon	11
PVC Lined MS Jacketed	2500 Gallon	12
316 S.S. Jacketed	2500 Gallon	13
316 S.S. Jacketed	2500 Gallon	14

HISTORY AND POTENTIAL FAILURE CONTINUED

8. Mixing tanks located Building G and G Addition continued:

DESCRIPTION	CAPACITY	TANK #
P.V.C. Lined Jacketed	2500 Gallon	41
316 S.S. Jacketed	750 Gallon	42
Mild Steel Jacketed	200 Gallon	43
Mild Steel Jacketed	1000 Gallon	44

B. Tank Truck Loading/Unloading

There is a maximum potential of 4,000 gallons from a tank truck if the trailer were ruptured. It is anticipated that if a hose connection to the trailer broke during transfer, approximately 200-300 gallons could be lost before valves could be shut off.

Material spilled would travel across the concrete pad and into the city sewer system.

C. History of spills:

During the past ten years of operation, two instances of leakage and two of overfills have occurred. The first instance was an HCL tank rupture. Approximately 200 gallons were contained in the diked area. The remaining volume was transferred to drums. The second instance of leakage was the solvent tank. Approximately 2900 gallons were contained in the diked areas. Both cases of overfill were with HF/ Approximately ten gallons were lost in each case. The overfill was passed through a scrubber then transferred to the city sewer.

HISTORY AND POTENTIAL FAILURE CONTINUED

C. History of spills continued:

One tank truck spill has happened. Approximately 300 gallons of sulfuric acid was spilled. The spill was neutralized and transferred to the city sewer.

BULK LOADING AND UNLOADING PROCEDURES

SCOPE: The following procedures and plan are to be used for loading or unloading tank trucks for bulk liquid at the Morenci facility. They must be strictly adhered to to prevent spillage and/or to minimize any accidental spillage.

1. All bulk liquid loading or unloading will take place only under the supervision of an employee designated and trained as bulk operator. The bulk operator will be present at all times during connection, loading or unloading and disconnection.

2. The bulk operator will be responsible for making sure that proper loading/unloading procedures are followed according to Parker, Morenci Procedures (see attached).

3. In the event of any spill, plant supervision and the Emergency Coordinator will be notified immediately. All small spills will be neutralized and cleaned up by bulk operator or other immediately available employee trained and qualified to undertake the clean up. In the event of a large or major spill, the bulk operator will sound the emergency alarm so that plant supervision and personnel can take immediate action. Upon arrival, the Emergency Coordinator will assume supervision of all clean up activities.

4. The following material is to be stored at all times by the tank farm gate to dike and neutralize acid spills:

   a. One (1) thirty gallon drum of sand.
   b. One (1) thirty gallon drum of soda ash.
   c. One (1) fifty-five gallon drum of dry absorbent.
   d. One (1) shovel.
   e. One (1) five gallon pail for collecting drip pan.

5. In the event of large spill:

   a. Bulk operator or other will sound alarm.

   b. If safe to do so, truck valves will be closed. Acid suit may be required if safe approach is not possible with normal protective equipment.

c. Plant supervision will direct the operator in using sand or absorbent in making temporary dikes and/or using soda ash for neutralizing spills, if necesssary.

d. For major spills requiring outside assistance and notification, the Emergency Coordinator will follow notification and response procedure outlined in Section I.

e. For spills within the plant which go into the plant sewer system, notification must be provided by the Emergency Coordinator at Morenci sewer district to protect the waste treatment plant.

f. All major spills must be reported by the Emergency Coordinator to Parker Division Central Environmental Control and Hooker Environmental as per Parker Procedure No. 18:01:02, Environmental Incident Reporting.

LIQUID BULK STORAGE INSPECTION PLAN

SCOPE: The following procedure is to be used to ensure that all bulk tanks are inspected and any leakage noted is corrected.

1. Storage tanks, floors, dike walls, pumps and piping will be inspected monthly. Results of the inspection will be noted in the monthly safety report. Any deficiencies or malfuntion will be reported to supervision by the bulk operator and corrected. The bulk operator will inspect area daily for leaks, spills, etc.

2. During non-working hours valves on storage tanks will be closed. When valves are open they will be under observation by the bulk operator to make sure there is no leakage.

PERSONNEL TRAINING

All plan personnel will become familiar with this entire SPCC Plan. The plan will be reviewed at six-month intervals or upon any changes in the plan.

Records of training sessions and sign-off by personnel will be kept and attached to the SPCC Plan for record.

Training sessions will also be reported on the monthly environmental report when the sessions occur.

SECTION VI

MORENCI BULK UNLOADING PROCEDURE

UNLOADING INSTRUCTIONS
HYDROFLUORIC ACID, 70% -- CODE 4012

HAZARDS:

70% Hydrofluoric Acid is the MOST DANGEROUS MATERIAL WE USE. It is extremely corrosive and produces severe, slow healing burns on contact with skin. Hydrofluoric Acid vapor is highly irritating to eyes and mucous membranes.

SPECIAL PRECAUTIONS:

Have a functioning safety shower available to flush person or equipment if splashed. Avoid breathing fumes.

FIRST AID:

Minor Burns (Small Area): Flush with water for at least 15 minutes. Remove any contaminated clothing. Get prompt medical attention.

Large Burns (Large Area): Drench with large quantities of water, preferably from a safety shower with a deluge-type head. While under the shower, remove all clothing and remain under the shower at least 15 minutes. Get immediate medical attention.

Acid Under Fingernails: Flush with water for at least 15 minutes. Get immediate medical attention.

In Eyes: Irrigate immediately with large quantities of clean water. The eyelids should be held apart and irrigation done for a minimum of 15 minutes. Get immediate medical attention.

PROTECTIVE CLOTHING:

X	Bump Cap
X	Splash Proof Goggles
X	Face Shield
X	Rubber Jacket
X	Rubber Overalls
X	Rubber Gloves
X	Rubber Overshoes or Boots

March 19, 1979
JIM:bal

UNLOADING TANK TRAILER

HYDROFLUORIC ACID, 70% -- CODE 4012

1. Check driver's shipping papers for raw material to be unloaded.
2. Truck must be weighed in by the bulk shipping and receiving personnel.
3. Bulk shipping and receiving operator to obtain and wear required protective clothing and equipment before making any connections or opening any valves.
4. Sample (8 oz or 1 pint) must be taken and tested before unloading can begin.
5. Check storage tank liquid level. Never fill tank above 18" below top.
6. Turn storage tank air supply OFF.
7. Bleed air pressure from tank via relief valve. CAUTION, always stand to windward-side of valve to avoid mist-laden air. Leave relief valve open.
8. Shipping and receiving bulk operator to connect discharge line from tank trailer to inlet line of storage tank. (Inspect connecting hose and rinse with water if dirty.)
9. Connect plant compressed air lines to tank trailer.
10. Open all tank trailer discharge valves.
11. Turn on air to tank trailer, not to exceed 25 P.S.I.
12. Let run until air flushes line free of acid.
13. Turn off air supply to tank trailer and disconnect air line.
14. Close all discharge valves.
15. Disconnect hose and rinse thoroughly with water.
16. Close tank air outlet.
17. Reopen air supply to storage tank.
18. Hose down any contaminated areas with water.
19. Truck must be weighed out by shipping and receiving bulk operator.

March 19, 1979
JIM:bal

UNLOADING INSTRUCTIONS

NITRIC ACID, 42° BE' -- CODE 4025

HAZARDS:

42° BE' Nitric Acid is severely corrosive and produces painful burns on contact with skin. Vapor from nitric acid is very irritating and should be avoided.

SPECIAL PRECAUTIONS:

Have a functioning safety shower available to flush person or equipment. Nitric Acid is an oxidizing agent. Remove and rinse, with water, splashed clothing.

FIRST AID:

On Skin: Drench with water for at least 15 minutes. Remove any contaminated clothing. Get prompt medical attention.

In Eyes: Irrigate immediately with large quantities of clean water for at least 15 minutes. The eyelids should be held apart during irrigation. Get medical attention immediately.

PROTECTIVE CLOTHING:

X	Bump Cap
X	Splash Proof Goggles
X	Face Shield
X	Rubber Jacket
X	Rubber Overalls
X	Rubber Gloves
X	Rubber Overshoes or Boots

March 19, 1979
JIM:bal

UNLOADING INSTRUCTIONS

SULFURIC ACID, 66° BE' -- CODE 4042

HAZARDS:

66° BE' Sulfuric Acid is severely corrosive and produces painful burns on contact with skin. Sulfuric Acid vapor is highly irritating to the eyes, nose and throat.

SPECIAL PRECAUTIONS:

Have a functioning safety shower available to flush person or equipment if splashed. Avoid breathing fumes.

FIRST AID:

On Skin: Drench with water for at least 15 minutes. Remove any contaminated clothing. Get prompt medical attention.

In Eyes: Irrigate immediately with large amounts of clean water for at least 15 minutes. The eyelids should be held apart during irrigation. Get immediate medical attention.

PROTECTIVE CLOTHING:

X	Bump Cap
X	Splash Proof Goggles
X	Face Shield
X	Rubber Jacket
X	Rubber Overalls
X	Rubber Gloves
X	Rubber Overshoes or Boots

March 19, 1979
JIM:bal

UNLOADING TANK TRAILER

SULFURIC ACID, 66° BE' -- CODE 4042

1. Check driver's shipping papers for raw material to be unloaded.
2. Truck must be weighed in by the bulk shipping and receiving personnel.
3. Bulk shipping and receiving operator to obtain and wear required protective clothing and equipment before making any connections or opening any valves.
4. Sample (8 oz or 1 pint) must be taken and tested before unloading can begin.
5. Check storage tank liquid level. Never fill above 12" below top of tank.
6. Shipping and receiving bulk operator to connect discharge line from tank trailer to inlet line of storage tank. (Inspect connecting hose and rinse with water, if dirty.)
7. Connect plant compressed air line to tank trailer.
8. Open all tank trailer discharge valves.
9. Turn on air to tank trailer, not to exceed 25 P.S.I.
10. Let run until air flushes discharge line free of sulfuric acid.
11. Turn off air supply to tank trailer and disconnect air line.
12. Close all discharge valves.
13. Disconnect hose and rinse thoroughly with water.
14. Hose down any contaminated areas with water.
15. Truck must be weighed out by shipping and receiving bulk operator.

March 19, 1979
JIM:bal

UNLOADING INSTRUCTIONS

PHOSPHORIC ACID, 75% -- CODE 4030

HAZARDS:

75% Phosphoric Acid is corrosive and irritating to the skin.

SPECIAL PRECAUTIONS:

Have a functioning safety shower available to flush person or equipment if splashed. Get immediate medical attention.

FIRST AID:

On Skin: Flush with water for at least 15 minutes. Remove any contaminated clothing.

In Eyes: Irrigate with large quantities of clean water for at least 15 minutes. Get prompt medical attention.

PROTECTIVE CLOTHING:

X	Bump Cap
X	Splash Proof Goggles
X	Face Shield
X	Rubber Jacket
X	Rubber Overalls
X	Rubber Gloves
X	Rubber Overshoes or Boots

March 19, 1979
JIM:bal

UNLOADING TANK TRAILER

PHOSPHORIC ACID, 75% -- CODE 4030

1. Check driver's shipping papers for raw material to be unloaded.
2. Truck must be weighed in by the bulk shipping and receiving personnel.
3. Bulk shipping and receiving operator to obtain and wear required protective clothing and equipment before making any connections or opening any valves.
4. Sample (8 oz or 1 pint) must be taken and tested before unloading can begin.
5. Check storage tank liquid level. Never fill above 12" below top of tank.
6. Shipping and receiving bulk operator to connect discharge line from tank trailer to inlet line of storage tank. (Inspect connecting hose and rinse with water if dirty.)
7. Connect plant compressed air line to tank trailer.
8. Open all tank trailer discharge valves.
9. Turn on air to tank trailer, not to exceed 25 P.S.I.
10. Let run until air flushes discharge line free of phosphoric acid.
11. Turn off air supply to tank trailer and disconnect air line.
12. Close all discharge valves.
13. Disconnect hose and rinse thoroughly with water.
14. Hose down any contaminated areas with water.
15. Truck must be weighed out by shipping and receiving bulk operator.

March 19, 1979
JIM:bal

UNLOADING INSTRUCTIONS

HYDROFLUOSILICIC ACID, 30% -- CODE 4137

HAZARDS:

Hydrofluosilicic Acid, 30%, is corrosive and irritating to the skin. It can cause burns on contact. The vapor is also irritating to eyes, nose and throat.

SPECIAL PRECAUTIONS:

Have a functioning safety shower available to flush person or equipment if splashed. Avoid breathing fumes.

FIRST AID:

On Skin: Flush with water for at least 15 minutes. Remove any contaminated clothing. Get prompt medical attention.

In Eyes: Irrigate immediately with large quantities of clean water for at least 15 minutes. The eyelids should be held apart during irrigation. Get immediate medical attention.

PROTECTIVE CLOTHING:

X	Bump Cap
X	Splash Proof Goggles
X	Face Shield
X	Rubber Jacket
X	Rubber Overalls
X	Rubber Gloves
X	Rubber Overshoes or Boots

March 19, 1979
JIM:bal

UNLOADING TANK TRAILER

HYDROFLUOSILICIC ACID, 30% -- CODE 4137

1. Check driver's shipping papers for raw material to be unloaded.
2. Truck must be weighed in by the bulk shipping and receiving personnel.
3. Bulk shipping and receiving operator to obtain and wear required protective clothing and equipment before making any connecting or opening any valves.
4. Sample (8 oz or 1 pint) must be taken and tested before unloading can begin.
5. Check storage tank liquid level. Never fill tank above 18" below top.
6. Turn storage tank air supply OFF.
7. Bleed air pressure from tank via relief valve. CAUTION, always stand to windward-side of valve to avoid mist-laden air. Leave relief valve open.
8. Shipping and receiving bulk operator to connect discharge line from tank trailer to inlet line of storage tank. (Inspect connecting hose and rinse with water if dirty.)
9. Connect plant compressed air lines to tank trailer.
10. Open all tank trailer discharge valves.
11. Turn on air to tank trailer, not to exceed 25 P.S.I.
12. Let run until air flushes line free of acid.
13. Turn off air supply to tank trailer and disconnect air line.
14. Close all discharge valves.
15. Disconnect hose and rinse thoroughly with water.
16. Close tank air outlet.
17. Reopen air supply to storage tank.
18. Hose down any contaminated areas with water.
19. Truck must be weighed out by shipping and receiving bulk operator.

March 19, 1979
JIM:bal

UNLOADING INSTRUCTIONS

50% CAUSTIC SODA SOLUTION -- CODE 4320

HAZARDS:

50% Caustic Soda Solution is highly corrosive and causes severe, slow healing burns on contact with skin. It is extremely dangerous to the eyes.

SPECIAL PRECAUTIONS:

Have a functioning safety shower available to flush person or equipment if splashed.

FIRST AID:

On Skin: Drench with water for at least 15 minutes. Remove any contaminated clothing. Get prompt medical attention.

NOTE: If there is caustic soda on the head and face DO NOT remove goggles until after this area has been thoroughly flushed with water.

In Eyes: Irrigate immediately with large quantities of clean water for at least 15 minutes. The eyelids should be held apart during irrigation. Get immediate medical attention.

PROTECTIVE CLOTHING:

X	Bump Cap
X	Splash Proof Goggles
X	Face Shield
X	Rubber Jacket
X	Rubber Overalls
X	Rubber Gloves
X	Rubber Overshoes or Boots

March 19, 1979
JIM:bal

UNLOADING TANK TRAILER

50% CAUSTIC SODA -- CODE 4320

1. Check driver's shipping papers for raw material to be unloaded.
2. Truck must be weighed in by the bulk shipping and receiving personnel.
3. Bulk shipping and receiving operator to obtain and wear required protective clothing and equipment before making any connections or opening any valves.
4. Sample (8 oz or 1 pint) must be taken and tested before unloading can begin.
5. Check storage tank liquid level. Never fill above 12" below top of tank.
6. Shipping and receiving bulk operator to connect discharge line from tank trailer to inlet line of storage tank. (Inspect connecting hose and rinse with water if dirty.)
7. Connect plant compressed air line to tank trailer.
8. Open all tank trailer discharge valves.
9. Turn on air to tank trailer, not to exceed 25 P.S.I.
10. Let run until air flushes discharge line free of 50% caustic soda.
11. Turn off air supply to tank trailer and disconnect air line.
12. Close all discharge valves.
13. Disconnect hose and rinse thoroughly with water.
14. Hose down any contaminated areas with water.
15. Truck must be weighed out by shipping and receiving bulk operator.

March 19, 1979
JIM:bal

UNLOADING INSTRUCTIONS

HYDROCHLORIC ACID, 20° BE' -- CODE 4011

HAZARDS:

Hydrochloric Acid is irritating and produces burns on contact with skin. The vapor is irritating to eyes, nasal passages and lungs.

SPECIAL PRECAUTIONS:

Have a functioning safety shower available to flush person or equipment if splashed. Avoid breathing fumes.

FIRST AID:

On Skin: Drench with water for at least 15 minutes. Remove any contaminated clothing. Get prompt medical attention.

In Eyes: Irrigate immediately with large quantities of clean water for at least 15 minutes. The eyelids should be held apart during irrigation. Get immediate medical attention.

PROTECTIVE CLOTHING:

X	Bump Cap
X	Splash Proof Goggles
X	Face Shield
X	Rubber Jacket
X	Rubber Overalls
X	Rubber Gloves
X	Rubber Overshoes or Boots

March 19, 1979
JIM:bal

UNLOADING TANK TRAILER

HYDROCHLORIC ACID, 20° BE' -- CODE 4011

1. Check driver's shipping papers for raw material to be unloaded.
2. Truck must be weighed in by the bulk shipping and receiving personnel.
3. Bulk shipping and receiving operator to obtain and wear required protective clothing and equipment before making any connections or opening any valves.
4. Sample (8 oz or 1 pint) must be taken and tested before unloading can begin.
5. Check storage tank liquid level. Never fill tank above 18" below top.
6. Turn storage tank air supply OFF.
7. Turn scrubber water on.
8. Bleed air pressure from tank into scrubber.
9. Shipping and receiving bulk operator to connect discharge line from tank trailer to inlet line of storage tank. (Inspect connecting hose and rinse with water if dirty.)
10. Connect plant compressed air lines to tank trailer.
11. Open all tank trailer discharge valves.
12. Turn on air to tank trailer, not to exceed 25 P.S.I.
13. Let run until air flushes line free of acid.
14. Turn off air supply to tank trailer and disconnect air line.
15. Close all discharge valves.
16. Disconnect hose and rinse thoroughly with water.
17. Close tank air outlet.
18. Reopen air supply to storage tank.
19. Turn off water into scrubber.
20. Hose down any contaminated areas with water.
21. Truck must be weighed out by shipping and receiving bulk operator.

March 19, 1979
JIM:bal

UNLOADING INSTRUCTIONS

METHYLENE CHLORIDE -- CODE 4223

HAZARDS:

Methylene Chloride is mildly irritating. Prolonged or frequently repeated contact may cause a burn.

SPECIAL PRECAUTIONS:

Have a functioning safety shower available to flush person or equipment if splashed. Avoid breathing fumes.

FIRST AID:

On Skin: Flush with plenty of water for at least 15 minutes. Remove contaminated clothing. Get medical attention if irritaion develops.

In Eyes: Irrigate with large amounts of clean water for at least 15 minutes. Get immediate medical attention.

PROTECTIVE CLOTHING:

X	Bump Cap
X	Splash Proof Goggles
X	Face Shield
X	Rubber Jacket
X	Rubber Overalls
X	Rubber Gloves
X	Rubber Overshoes or Boots

March 19, 1979
JIM:bal

UNLOADING TANK TRAILER

METHYLENE CHLORIDE -- CODE 4223

1. Check driver's shipping papers for raw material to be unloaded.
2. Truck must be weighed in by the bulk shipping and receiving personnel.
3. Bulk shipping and receiving operator to obtain and wear required protective clothing and equipment before making any connections or opening any valves.
4. Sample (8 oz or 1 pint) must be taken and tested before unloading can begin.
5. Check storage tank liquid level. Never fill above 12" below top of tank.
6. Shipping and receiving bulk operator to connect discharge line from tank trailer to inlet line of storage tank.
7. Connect plant compressed air line to tank trailer.
8. Open all tank trailer discharge valves.
9. Turn on air to tank trailer, not to exceed 25 P.S.I.
10. Let run until air flushes discharge line free of Methylene Chloride.
11. Turn off air supply to tank trailer and disconnect air line.
12. Close all discharge valves.
13. Disconnect hose and rinse thoroughly with water.
14. Hose down any contaminated areas with water.
15. Truck must be weighed out by shipping and receiving bulk operator.

March 19, 1979
JIM:bal

UNLOADING INSTRUCTIONS

ASHLAND 529-3 SOLVENT -- CODE 4538

HAZARDS:

Ashland 529-3 Solvent is a combustible liquid and an irritant.

SPECIAL PRECAUTIONS:

Have a functioning safety shower available to flush person or equipment if splashed. Avoid breathing fumes.

FIRST AID:

On Skin: Flush with water for at least 15 minutes. Remove any contaminated clothing.

In Eyes: Irrigate with clean water for at least 15 minutes. Get prompt medical attention.

PROTECTIVE CLOTHING:

X	Bump Cap
X	Splash Proof Goggles
X	Face Shield
X	Rubber Jacket
X	Rubber Overalls
X	Rubber Gloves
X	Rubber Overshoes or Boots

March 19, 1979
JIM:bal

UNLOADING TANK TRAILER

METHYLENE CHLORIDE -- CODE 4223

1. Check driver's shipping papers for raw material to be unloaded.
2. Truck must be weighed in by the bulk shipping and receiving personnel.
3. Bulk shipping and receiving operator to obtain and wear required protective clothing and equipment before making any connections or opening any valves.
4. Sample (8 oz or 1 pint) must be taken and tested before unloading can begin.
5. Check storage tank liquid level. Never fill above 12" below top of tank.
6. Shipping and receiving bulk operator to connect discharge line from tank trailer to inlet line of storage tank.
7. Connect plant compressed air line to tank trailer.
8. Open all tank trailer discharge valves.
9. Turn on air to tank trailer, not to exceed 25 P.S.I.
10. Let run until air flushes discharge line free of Methylene Chloride.
11. Turn off air supply to tank trailer and disconnect air line.
12. Close all discharge valves.
13. Disconnect hose and rinse thoroughly with water.
14. Hose down any contaminated areas with water.
15. Truck must be weighed out by shipping and receiving bulk operator.

March 19, 1979
JIM:bal

UNLOADING TANK TRAILER

ASHLAND 529-3 SOLVENT -- CODE 4538

1. Check driver's shipping papers for raw material to be unloaded.
2. Truck must be weighed in by the bulk shipping and receiving personnel.
3. Bulk shipping and receiving operator to obtain and wear required protective clothing and equipment before making any connections or opening any valves.
4. Sample (8 oz or 1 pint) must be taken and tested before unloading can begin.
5. Check storage tank liquid level. Never fill above 12" below top of tank.
6. Shipping and receiving bulk operator to connect discharge line from tank trailer to inlet line of storage tank.
7. Connect plant compressed air line to tank trailer.
8. Open all tank trailer discharge valves.
9. Turn on air to tank trailer, not to exceed 25 P.S.I.
10. Let run until air flushes discharge line free of 529-3 Solvent.
11. Turn off air supply to tank trailer and disconnect air line.
12. Close all discharge valves.
13. Disconnect hose and rinse thoroughly with water.
14. Hose down any contaminated areas with water.
15. Truck must be weighed out by shipping and receiving bulk operator.

March 19, 1979
JIM:bal

LOADING TANK TRAILERS

FINISHED PRODUCT BULKLOADS

1. Check driver's shipping papers for finished product to be loaded.
2. Truck must be weighed in by the shipping and receiving bulk personnel.
3. Bulk shipping and receiving operator to obtain and wear required protective clothing and equipment before making any connections or opening any valves.
4. Shipping and receiving bulk personnel to visually inspect tank trailer for cleanliness.
5. Check hold tank for correct finished product.
6. Sample (8 oz of 1 Pint) must be taken and tested after tank truck is loaded (tank trailer is not to leave until tests are completed).
7. Truck must be weighed out by shipping and receiving bulk personnel.

PROTECTIVE EQUIPMENT:

X	Bump Cap
X	Splash Proof Goggles
X	Face Shield
X	Rubber Jacket
X	Rubber Overalls
X	Rubber Gloves
X	Rubber Overshoes or Boots

March 19, 1979
JIM:bal

UNLOADING INSTRUCTIONS

SOLIDS DRY

SODIUM METASILICATE.....CODE 4038
SODIUM TRIPOLYPHOSPHATE.....CODE 4144

SODA ASH, DENSE.....CODE 4257
SODA ASH, LIGHT.....CODE 4034

HAZARDS:

All the above are alkaline materials and can irritate human skin with prolonged contact.

SPECIAL PRECAUTIONS:

Have a functioning safety shower available to flush person or equipment if splashed.

FIRST AID:

On Skin: Drench with water for at least 15 minutes. Remove any contaminated clothing.

In Eyes: Irrigate immediately with large quantities of clean water for at least 15 minutes. The eyelids should be held apart during irrigation. Get prompt medical attention.

PROTECTIVE CLOTHING:

X	Bump Cap
X	Splash Proof Goggles
X	Face Shield
X	Rubber Jacket
X	Rubber Overalls
X	Rubber Gloves
X	Rubber Overshoes or Boots

March 19, 1979

JIM:bal

UNLOADING TANK TRAILER

SODIUM METASILICATE.....CODE 4038
SODIUM TRIPOLYPHOSPHATE.....CODE 4144

SODA ASH, DENSE.....CODE 4257
SODA ASH, LIGHT.....CODE 4034

1. Check driver's shipping papers for raw material to be unloaded.
2. Truck must be weighed in by the bulk shipping and receiving personnel.
3. Bulk shipping and receiving operator to obtain and wear required protective clothing and equipment before making any connections or opening any valves.
4. Take sample from top of load, digging down into load as far as practical with sampling hoe. Run bulk density determination on Code 4144 before unloading. Quality Control Lab personnel must visually inspect all materials before unloading.
5. Truck driver secures unloading hose to truck. Shipping and receiving bulk operator secures hose to proper silo.
6. Material is unloaded with forced air, truck driver watches gauge to avoid excessive air pressure (8-10 P.S.I. maximum). Make sure hatch covers are closed on top of silo after unloading is complete. Excessive pressure while unloading may cause hatch covers to open discharging hazardous dust. (Air supply to be from Parker make-up unit.)
7. Hose down any contaminated area with water or sweep-up and dispose of properly in a sealed container.
8. Truck must be weighed out by shipping and receiving bulk operator.

March 19, 1979
JIM:bal

UNLOADING INSTRUCTIONS

CAUSTIC SODA -- CODE 4129

HAZARDS:

Caustic Soda is severely corrosive and produces painful burns on contact with skin. It is extremely dangerous to the eyes.

SPECIAL PRECAUTIONS:

Have a functioning safety shower available to flush person or equipment if splashed.

FIRST AID:

On Skin: Drench with water for at least 15 minutes. Remove any contaminated clothing. Get prompt medical attention.

NOTE: If there is Caustic Soda on the head or face do not remove goggles until after this area has been thoroughly flushed with water.

In Eyes: Irrigate immediately with large quantities of clean water for at least 15 minutes. The eyelids should be held apart during irrigation. Get immediate medical attention.

PROTECTIVE CLOTHING:

X	Bump Cap
X	Splash Proof Goggles
X	Face Shield
X	Rubber Jacket
X	Rubber Overalls
X	Rubber Gloves
X	Rubber Overshoes or Boots

March 19, 1979
JIM:bal

UNLOADING TANK TRAILER

CAUSTIC SODA - - CODE 4129

1. Check driver's shipping papers for raw material to be unloaded.
2. Truck must be weighed in by bulk shipping and receiving personnel.
3. Bulk shipping and receiving operator to obtain and wear required protective clothing and equipment before making any connections or opening any valves.
4. Take sample from top of load, digging down into load as far as practical with sampling hoe. Run bulk density determination before unloading. Quality Control Lab personnel must visually inspect all materials before unloading.
5. Truck driver secures unloading hose to truck. Shipping and receiving bulk operator secures hose to proper silo.
6. Material is unloaded with forced air, truck driver watches gauge to avoid excessive air pressure (8-10 P.S.I. maximum). Make sure hatch covers are closed on top of silo after unloading is complete. Excessive pressure while unloading may cause hatch covers to open discharging hazardous dust. (Air supply to be from Parker make-up unit.)
7. If initial hopper is not unloaded 30 minutes after start up, notify your supervisor immediately.
8. Hose down any contaminated area with water or sweep-up and dispose of properly in a sealed container.
9. Truck must be weighed out by shipping and receiving bulk operator.

March 19, 1979
JIM:bal

SECTION VII

MORENCI EMERGENCY PLAN

SPECIALTY CHEMICAL - MORENCI EMERGENCY PLAN

1. Purpose

2. Order of Responsibility

3. Disaster Alert Instruction

4. Plant Emergency Organization

5. Plant Rescue Squad

6. Duties of Emergency Personnel

7. Employee Action During Emergency

8. Plant Evacuation

9. Emergency Evacuation Routes

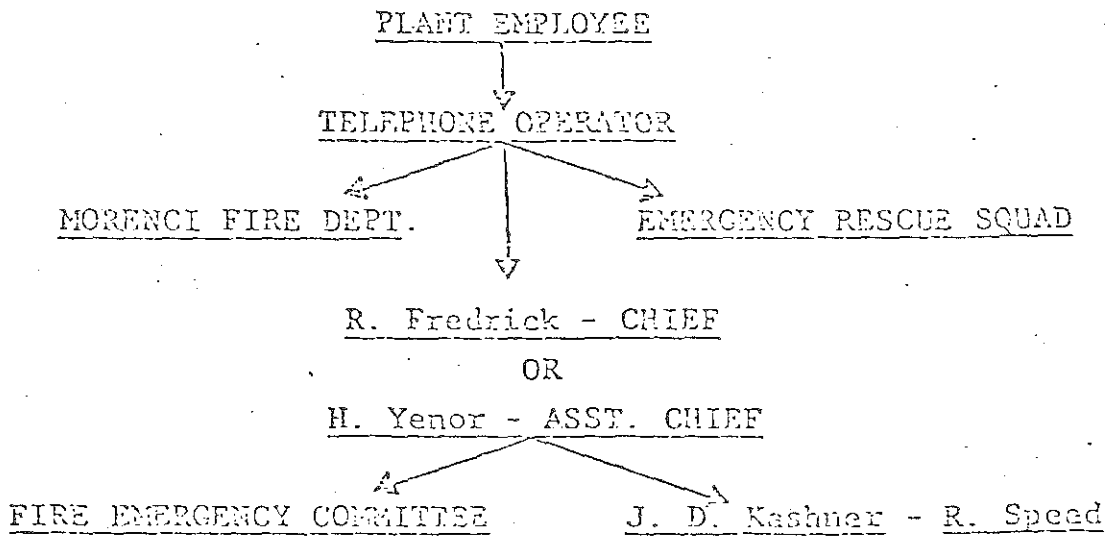
Approved _____
J. D. Kashner, Works Manager

Date _____
Revised September 15, 1982

:dc

3. DISASTER ALERT INSTRUCTIONS

During the normal working hours, 7:00 A.M. to 5:00 P.M., the following pyramid alert system will be used for reporting a fire or other emergency situations.



After normal hours, on evenings shift or on Saturdays, the plant employee will report the emergency to the foreman and the Fire Department, if required.

9-1-76

jh

REV: 3-27-79

EMERGENCY TELEPHONE NUMBERS

PLANT SWITCHBOARD----------0

FIRE DEPARTMENT----------(9)-511

POLICE DEPARTMENT----------(9)-711

DRS. WHITEHOUSE & DICCION OFFICE----------(9)-458-6848

MORENCI AREA HOSPITAL----------(9)-458-2236

HEFFRON CLINIC, ADRIAN, MICHIGAN----------(9) -1-265-2175

SPECIALTY CHEMICAL, MADISON HEIGHTS, MICHIGAN-----(9)-1-313-583-9300

J. D. KASHNER, ADRIAN, MICHIGAN----------(9) -1-265-8988

R. G. SPEED----------(9)-458-7377

H. W. YENOR----------(9)-458-6664

R. G. FREDRICK----------(9)-1-419-237-2487

L. K. HUFFAKER----------(9)-458-7407

Revised September 15, 1982

:dc

EMERGENCY PLAN FOR SPECIALTY CHEMICAL - MORENCI, MICHIGAN

1. PURPOSE

In the event of emergency at the Morenci plant due to fire, explosion, flood, tornado or other disaster a definite plan is necessary to protect all personnel at the plant. A trained crew can minimize the risk involved in an emergency and will play a vital role in reducing injuries, preventing loss of life, and keeping property damage to a minimum.

It is the purpose of this plan to set up such a trained crew and to organize a plan of action to follow when an emergency occurs.

2. ORDER OF RESPONSIBILITY FOR EMERGENCY PLAN

1. J. D. KASHNER, MANAGER OF MANUFACTURING

2. R. G. FREDRICK, PRODUCTION SUPERINTENDENT

Revised September 15, 1982

:dc

PLANT EMERGENCY ORGANIZATION
SPECIALTY CHEMICAL - MORENCI

FIRST SHIFT

R. FREDRICK
CHIEF

H. YENOR
ASST. CHIEF

TRAFFIC & INFORMATION	FIRE SQUAD	SPRINKLER & PIPER	ELECTRICIAN	SALVAGE	EMERGENCY RESCUE SQUAD
WEST SIDE H. KUTZLEY G. WALTON, ALT. EAST SIDE R. DEATRICK J. SALLOWS, ALT	WEST SIDE J. NOEZINGER D. HUFFMAN, ALT EAST SIDE M. GRIEDER F. MCVAY, ALT	E. VANDERPOOL A. FERRIS, ALT.	WEST SIDE J. SCHAFFER D. DICKERSON, ALT EAST SIDE L. HUFFAKER E. JOHNSTON, ALT	R. RESTIS L. SIMPKINS J. MCDOWELL W. COLE	J. VANDERPOOL J. ZUVERS A. FERRIS L. DICKERSON T. TURNWALD R. RECKNER G. BRINK

SECOND SHIFT

J. DICCION
CHIEF

EMERGENCY RESCUE SQUAD

L. ROBERTSON
R. FORD

ELEVATORS & AISLE WAYS

WEST SIDE

G. VEREECKE
R. RECKNER, ALT.

EAST SIDE

K. TAYLOR
D. HAWKINS, ALT.

Revised 0-01-82

PROCEDURE FOR REPORTING AN EMERGENCY SITUATION REQUIRING THE SERVICES OF THE "PLANT RESCUE SQUAD".

When in need of the Plant Rescue Squad go to the nearest phone and dial "0" (plant switchboard), or nearest Terry phone and report situation.

Tell the operator an emergency situation exists and in what precise area the Rescue Squad is needed. Operator will then page or call the members of the Plant Rescue Squad and also inform management.

If a supervisor and Plant Rescue Squad decide they need the City Rescue Squad, a supervisor or the operator will call and tell the city Rescue Squad what door and building to come to. The Plant Rescue Squad will have the person(s) at the door.

If an emergency situation occurs in one of the (9) nine designated alarm areas, depress the alarm button and the Plant Rescue Squad will respond to the area.

So that the Rescue Squads can move quickly and efficiently handle the situation, ALL unauthorized employees and persons are to refrain from entering or loitering in the emergency area.

MEMBERS OF THE PLANT RESCUE SQUAD:

E. Vanderpool
T. Turnwald
J. Zuvers
G. Brink
L. Dickerson
R. Reckner
A. Ferris

EFFECTIVE: 07-31-71
REVISED: 09-15-82

Safety Committee

3. DUTIES OF EMERGENCY PERSONNEL

CHIEF

1. Take necessary action when emergency occurs.

2. Work closely with local fire department.

ALTERNATE CHIEF

1. Takes over when Chief is absent.

TRAFFIC & INFORMATION

1. See that all mobile equipment is removed from hazard area.

2. Set up traffic directors to move traffic as needed.

FIRE SQUAD MEMBER

1. Fight fire until local fire department arrives.

2. Know location of fire extinguishers.

3. Know which extinguishers to use on which type fires..

4. Know how to operate various extinguishers.

SPRINKLERS - VALVE CONTROL MAN

1. Know location of valves.

2. Know how to operate valves to make sure that controlling the fire area is open and stays until ordered shut.

3. Know how to test valves to be sure they are

(6. DUTIES OF EMERGENCY PERSONNEL CONTINUED)

THE ELECTRICIAN

1. Know location of all switches.

2. Shut down electrical fans.

THE PIPER

1. Know layout of piping

2. Shut off flammable gas and liquid systems in the fire area.

SALVAGE SQUAD

1. Move or cover machinery to protect from possible water damage.

2. Move raw materials or finished products which could add to the hazard or which would be damaged by water.

EMERGENCY RESCUE SQUAD

1. To give emergency treatment and move injured personnel to proper medical aid.

2. Seek proper medical aid if injured person can't be moved.

ELEVATORS & AISLE WAYS

1. To make sure the elevators are empty.

2. Clear aisle ways to the elevators and exit doors in the event of an emergency.

7. EMPLOYEE ACTION DURING EMERGENCY

(A) In event you discover a fire, report area to switchboard operator (who will call Fire Department). Clear area of personnel and await Emergency Crew personnel.

(B) The affected area of emergency will be isolated. Employees within the affected area will be directed to a safer area by those controlling the emergency situation. Employees will remain in their regular work areas and stay away from the emergency area. In the event it is deemed advisable to evacuate the plant the Evacuation of the Plant Procedure (8) will be followed. Traffic control in the parking lot will be directed for employee evacuation and safety.

8. PLANT EVACUATION

(A) Know your Evacuation Route. Charts showing the proper routes are on all bulletin boards.

(B) Leave building immediately when instructed by a supervisor to do so and go to the parking lot.

(C) Remain in parking lot until instructed by a supervisor to go home or re-enter building.

jh

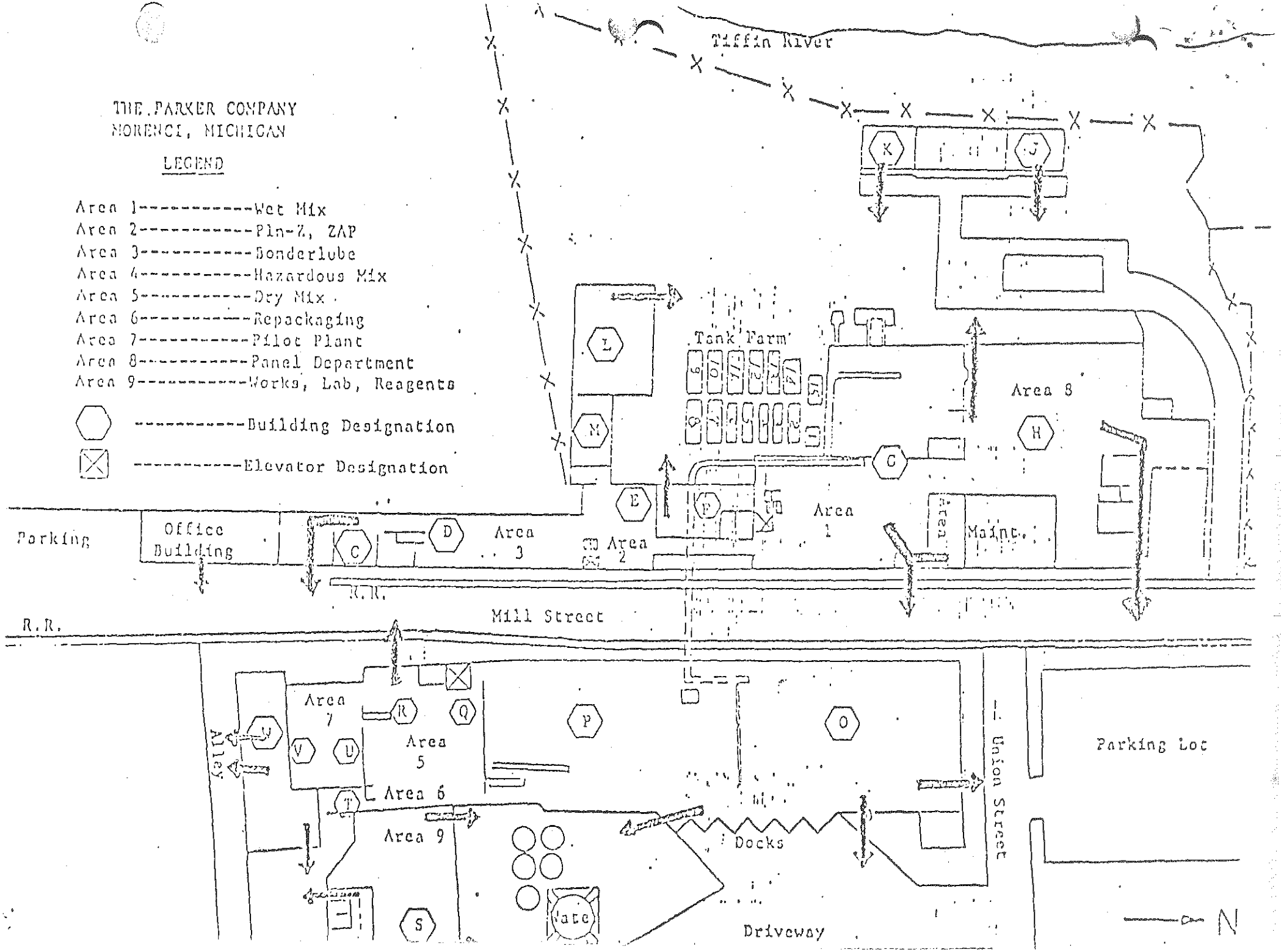
THE PARKER COMPANY
NORENCI, MICHIGAN

LEGEND

Area 1----------Wet Mix
Area 2----------Pln-Z, ZAP
Area 3----------Bonderlube
Area 4----------Hazardous Mix
Area 5----------Dry Mix
Area 6----------Repackaging
Area 7----------Pilot Plant
Area 8----------Panel Department
Area 9----------Works, Lab, Reagents

⬡ ----------Building Designation

⊠ ----------Elevator Designation



SECTION VIII

MORENCI EMERGENCY EQUIPMENT

EMERGENCY EQUIPMENT

1. FIRE EXTINGUISHERS

TYPE	SIZE	LOCATION
ABC	10#	Office South End
ABC	10#	Office North End
ABC	9½#	Building D, 1st Floor, South End
ABC	10#	Building D, 1st Floor, Middle
ABC	10#	Building D, Basement
ABC	9½#	Building D, 2nd Floor, North End
BC	5#	Building D, 2nd Floor, South End
ABC	10#	Building E, 3rd Floor, East Side
ABC	10#	Building E, 2nd Floor, Middle
ABC	10#	Building E, 1st Floor, Middle
CO2	50#	Building E, 1st Floor, Middle
BC	10#	Building M, 1st Floor, East Side
ABC	10#	Building L, 1st Floor, East Side
ABC	10#	Tank Farm - West Side
ABC	10#	Building J, South Section
ABC	20#	Building J, South Section
ABC	10#	Building J, Center Section
ABC	20#	Building J, Center Section
ABC	10#	Building J, North Section
ABC	20#	Building J, North Section
ABC	10#	Building F, Basement East Side
BC	5#	Building F, Basement North Side
ABC	10#	Building F, 1st Floor, Corridor
ABC	10#	Building F, 2nd Floor, Corridor
CO2	50#	Building G, 2nd Floor, North End
CO2(BC)	15#	Building G, 1st Floor, South End
CO2(BC)	15#	Building G, 1st Floor, North End
ABC	10#	Building G, Basement South End
ABC	10#	Building G, Basement, North End
BC	10#	Building G, Basement, North End
CO2(BC)	5#	Building G Addition, 2nd Floor, Lab
CO2(BC)	5#	Building G Addition, 2nd Floor, By Lab Door
ABC	10#	Building G Addition, 2nd Floor, East Side
ABC	10#	Building G Addition, 2nd Floor, East Side
ABC	10#	Building G Addition, 2nd Floor, Stair South Wall

EMERGENCY EQUIPMENT

1. FIRE EXTINGUISHERS continued

TYPE	SIZE	LOCATIONS
CO2(BC)	15#	Area 4, 1st Floor, South
ABC	10#	Area 4, 1st Floor, West Side
BC	15#	Building G Addition, EAst Side, 1st Floor
ABC	10#	Building G Addition, North Side, 1st Floor
ABC	10#	Building G Addition, Basement, North Side
ABC	10#	Building G Addition, Basement, South Side
BC	15#	Building H Basement, South Wall
ABC	10#	Building H Basement, West Wall
ABC	10#	Building H Basement, North Wall
ABC	10#	Building H Basement, East Wall
ABC	10#	Building H Basement, East Wall
CO2 (4)	50#	Building H, 1st Floor, For Polishers
ABC	10#	Building H, 1st Floor, South Side
ABC	10#	Building H, 1st Floor, Middle-East
ABC	10#	Building H, 1st Floor, Middle
BC	15#	Building H, 1st Floor, By Office
ABC	10#	Building O, North End, East
ABC	10#	Building O, Middle, East
ABC	10#	Building O, South End East
ABC	10#	Building P, North End, East
ABC	10#	Building P, North End, West
BC	2-3/4#	Building P, South-East
ABC	10#	Building P, South-East
ABC	10#	Building R, Basement, North End
ABC	10#	Building R, Basement, West Side
ABC	10#	Building R, 1st Floor, West Side
BC	5#	Building R, 1st Floor, West Side
BC	5#	Building R, 1st Floor, Middle
ABC	10#	Building R, 1st Floor, East
BC	10#	Building R, 2nd Floor, Middle
ABC	10#	Building R, 2nd Floor, South

EMERGENCY EQUIPMENT

1. FIRE EXTINGUISHERS continued

TYPE	SIZE	LOCATIONS
ABC	10#	Building S, 1st Floor, West Side
BC	15#	Building S, 1st Floor, East Side
ABC	10#	Building S, 1st Floor, Office
BC	15#	Building S, 1st Floor, Office
ABC	10#	Building S, Basement, West Side
ABC	10#	Building S, 2nd Floor, Middle
ABC	10#	Building S, 2nd Floor, Middle
None		Building S, Penthouse
ABC	10#	Building V, Basement, Middle
ABC	10#	Building V, 1st Floor, East Side
ABC	10#	Building V, 1st Floor, North Wall
ABC	10#	Boiler Room - South Wall
ABC	10#	Boiler Room - North Wall

2. ACID SUITS

DESCRIPTION	QTY.	LOCATIONS
CHEM-PRO	3	Building C, 1st Floor

3. BREATHING AIR TANKS AND MASKS

DESCRIPTION	QTY.	LOCATIONS
MSA (30 Minutes)	1	Building C, 1st Floor
MSA (30 Minutes)	1	Building S, Lab, 1st Floor
MSA (30 Minutes)	1	Building O, Shipping Office
MSA (30 Minutes)	1	Building H, Receiving Office
Emergency Oxygen	1	Building H, Receiving Office
Emergency Oxygen	1	Building S, Lab, 1st Floor Office

4. FIRE HYDRANTS

DESCRIPTION	LOCATION
4" Main Line	North End, Building O

5. SPILL CLEAN UP - NEUTRALIZING (SODA ASH) CONTAINERS

SIZE	LOCATION
30 Gal.	Building G Addition, 1st, 2nd, and 3rd Floor Stairwell
50 Pounds	Absorption Material, Area 1, 1st, 2nd, 3rd, Floor Shipping, Main Floor, Receiving, Main Floor.

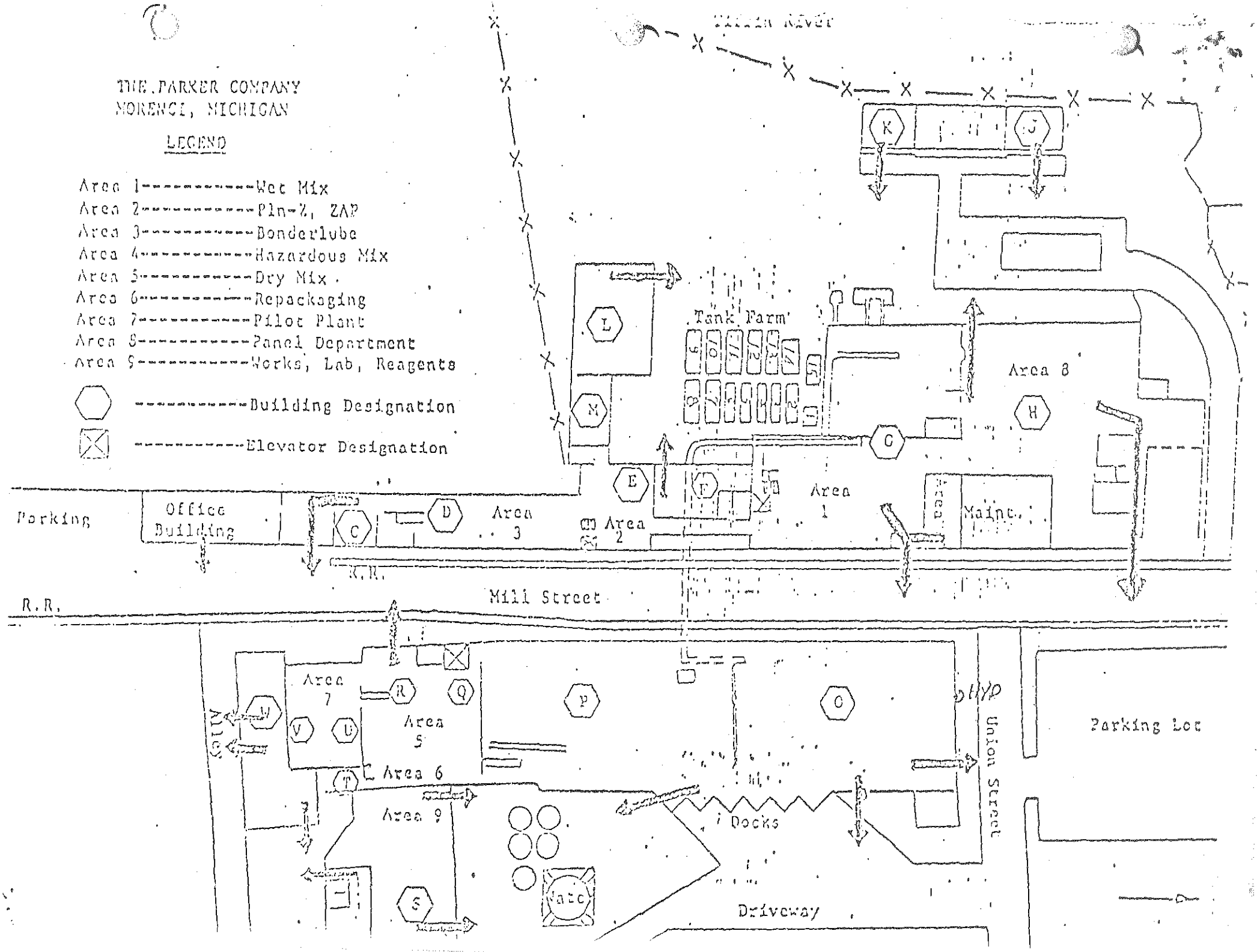
THE PARKER COMPANY
MORENCI, MICHIGAN

LEGEND

Area 1----------Wet Mix
Area 2----------Pln-Z, ZAP
Area 3----------Bonderlube
Area 4----------Hazardous Mix
Area 5----------Dry Mix
Area 6----------Repackaging
Area 7----------Pilot Plant
Area 8----------Panel Department
Area 9----------Works, Lab, Reagents

----------Building Designation

----------Elevator Designation



SEP 2 1982

5HW-TUB

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

The Corporation Company
Registered Agent for Occidental
Chemical Corporation
Parker Surface Treatment Products
Division
615 Griswall
Detroit, Michigan 48226

RE: Findings of Violation and
Compliance Order
Occidental Chemical Corporation
Parker Surface Treatment Products
Division
EPA ID# MID058723867

V-W- 82 R-021

Dear Sir:

Enclosed please find a Compliance Order which specifies this Agency's determination of certain violations by Occidental Chemical Corporation of the Resource Conservation and Recovery Act (RCRA) as amended, 42 U.S.C. §6901 et seq. based on information in our files about its facility at 322 West Main Street, Morenci, Michigan 49256.

The Compliance Order states the reason for such a determination, establishes a compliance schedule, and assesses civil penalties. This Order is issued pursuant to Section 3008 of RCRA (42 U.S.C. §6928).

In addition to the items required in the Compliance Order, Occidental Chemical Corporation must comply with the following RCRA requirements. Occidental Chemical Corporation shall develop and maintain a written schedule for inspecting all monitoring, safety, emergency, and operating equipment at the facility, pursuant to 40 CFR 265.15(b). A copy of the facility contingency plan and all revisions to the plan shall be submitted to all local police departments, fire departments, hospitals, and State and local emergency response teams that may be called on to provide emergency services, pursuant to 40 CFR 265.53(b). A copy of said inspection schedule and documentation of said submittal shall be provided to this Agency within 30 days of receipt of this letter.

Accompanying the Compliance Order is a Notice of Opportunity for Hearing and a copy of the "Consolidated Rules of Practice Governing the Adminstrative Assessment of Civil Penalties and the Revocation or Suspension of Permits". It is recommended that the enclosed Compliance Order and Rules of Practice, 40 CFR Part 22, 45 Fed. Reg. 24360 (April 9, 1980) as amended by Fed. Reg. 79808 (December 2, 1980) be carefully read and analyzed to determine the

alternatives available in responding to the Order and opportunity for a hearing. Should Occidental Chemical Corporation desire to contest the Compliance Order, a written request for a hearing is required within 30 days from receipt of this Compliance Order. A copy of the hearing request should be sent to Ms. Mary A. Gade, Assistant Regional Counsel, U.S. EPA, 230 South Dearborn Street, Chicago, Illinois 60604. Regardless of whether Occidental Chemical Corporation chooses to request a hearing within the prescibed time limit following service of the Compliance Order, the opportunity to request an informal settlement conference is extended.

Please contact Ms. Sally Swanson, Waste Management Division, 111 West Jackson Blvd., Chicago, Illinois 60604, at (312) 886-7482 with any questions or to request an informal conference for purpose of settlement.

Sincerely,

Basil G. Constantelos, Director
Waste Management Division

Enclosure

cc: Alan J. Howard, Chief
Office of Hazardous Waste Management
Michigan Department of Natural Resources

Dennis W. Powers, Vice President-
General Manager
Occidental Chemical Corporation
Parker Surface Treatment Products
Division

bcc: Regional Hearing Clerk
Biros, WH527
Gade, ORC
Secretary, TPCS

S. SWANSON:gigi:5HW-TUB:6-7444:7/21/82:Corrections

	TYPIST	AUTHOR	PEU CHIEF	STU #1 CHIEF	STU #2 CHIEF
INITIALS	[signature]	SKS 8-5-82 8-17		[signature]	
DATE	8/4/82	MG 8-17		8/9/82 8/17/82	

5HW-TUB Swanson

P 203 787 715

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL
(See Reverse) 5HW-TUB

SENT TO The Corporation Co.
STREET AND NO. 615 Griswall
P.O., STATE AND ZIP CODE Detroit, MI 48226

POSTAGE			$
CONSULT POSTMASTER FOR FEES	CERTIFIED FEE		¢
	OPTIONAL SERVICES	SPECIAL DELIVERY	¢
		RESTRICTED DELIVERY	¢
	RETURN RECEIPT SERVICE	SHOW TO WHOM AND DATE DELIVERED	¢
		SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	¢
		SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	¢
		SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	¢
TOTAL POSTAGE AND FEES			$
POSTMARK OR DATE			

MID 058723867

CHICAGO, IL LOOP STA. SEP 3 1982 USPO

PS Form 3800, Apr. 1976

25

26/82

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

IN THE MATTER OF: Occidental Chemical Corporation Parker Surface Treatment Products Division 322 West Main Street Morenci, Michigan 49256 EPA ID NO. MID 058723867	)	DOCKET NO. V—W— 82 R-021 COMPLAINT AND FINDINGS OF VIOLATIONS

This complaint is pursuant to Section 3008 of the Resource Conservation and Recovery Act of 1976, as amended (RCRA), 42 U.S.C. 6928, and is equivalent to a Compliance Order referred to in that Section. The Complainant is the Director, Waste Management Division, Region V, United States Environmental Protection Agency (EPA). The Respondent is Occidental Chemical Corporation, Parker Surface Treatment Products Division, located at 322 West Main Street, Morenci, Michigan (Occidental Chemical).

Pursuant to 42 U.S.C. 6928(a) and based on compliance inspections conducted by an authorized representative of EPA on May 14, 1982, May 18, 1982, May 27, 1982, June 15, 1982, and June 22, 1982, it has been determined that Occidental Chemical is in violation of Subtitle C of RCRA, Section 3004, 42 U.S.C. 6924 and Section 3005, 42 U.S.C. 6925, and regulations 40 CFR 265.17, 265.31, 265.32(a), 265.35, 265.73, 265.76, 265.171, 265.173(a), 265.173(b) and 122.23(c)(2).

FINDINGS

This determination is based on the following:

1. The Respondent owns and operates a facility at 322 West Main Street, Morenci, Michigan. The Respondent is a New York Corporation whose registered

agent in Michigan is The Corporation Company, 615 Griswall, Detroit, Michigan 48226.

2. The Respondent submitted a notification of hazardous waste activity by August 18, 1980, as required by RCRA, Section 3010. In addition, the respondent submitted a Part A permit application as required by RCRA, Section 3005(e) on November 18, 1980, under the name Oxy Metal Industries Corporation. The Respondent has Interim Status under RCRA and is required to comply with all Interim Status Standards (ISS), as found in 40 CFR 265, and with permit requirements found in 40 CFR 122, after that date.

3. RCRA ISS compliance inspections were conducted by the Michigan Department of Natural Resources (MDNR) as authorized representatives of EPA on May 14, 1982, May 18, 1982, May 27, 1982, June 15, 1982, and June 22, 1982.

4. Pursuant to 40 CFR 265.17, the owner/operator must take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. This waste must be separated and protected from sources of ignition or reaction. "No Smoking" signs must be conspicuously placed wherever there is a hazard from ignitable or reactive waste. At the time of the inspections, the owner/ operator was storing an ignitable waste (70% ethylamine) in an open container which was not protected from sources of ignition. At the

time of the inspections, the owner/operator also did not have conspicuous "No Smoking" signs posted. These are violations of 40 CFR 265.17.

5. Pursuant to 265.31, the owner/operator must maintain the facility so as to minimize the possibility of a release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment. At the time of the inspections, hazardous waste container contents were leaking onto the ground. Hazardous waste containers also were stored open and releasing hazardous waste into the atmosphere. Evidence existed of run-off into a river from container storage areas. These are violations of 40 CFR 265.31.

6. Pursuant to 40 CFR 265.32(a), the owner/operator is required to equip the facility with an alarm or internal communication systems capable of providing immediate emergency instructions to facility personnel. At the time of the inspections, the owner/operator did not provide either of the above systems in the storage areas located outside the buildings, a violation of 40 CFR 265.32(a).

7. Pursuant to 40 CFR 265.35, the owner/operator must maintain space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of facility operation. At the time of the inspections, the owner/operator did not provide adequate aisle space to allow the unobstructed movement of emergency response equipment and personnel, a violation of 40 CFR 265.35.

8. Pursuant to 40 CFR 265.73, the owner/operator must keep a written operating record at his facility. The following information must be recorded: (1) A description and the quantity of each hazardous waste received, and the methods and dates of its treatment, storage, or disposal; and (2) The location of each hazardous waste within the facility and the quantity at each location. At the time of the inspections, the owner/operator did not have a written operating record specifying the description and quantity of hazardous waste received, the methods and dates of its treatment, storage, or disposal, and the location and quantity of hazardous waste at the facility, a violation of 40 CFR 265.73.

9. Pursuant to 40 CFR 265.76, if a facility accepts for treatment, storage or disposal any hazardous waste from an off-site source without an accompanying manifest, then the owner/operator must prepare and submit a report to the Regional Administrator within 15 days after receiving the waste. At the time of the inspections, the owner/operator had unmanifested hazardous waste from off-site facilities in storage without having reported such waste to the Regional Administrator, a violation of 40 CFR 265.76.

10. Pursuant to 40 CFR 265.171, the owner/operator is required to transfer hazardous waste from containers leaking or in poor condition to proper containers, or to manage the hazardous waste in a manner that complies with 40 CFR 265 requirements. At the time of the inspections, the owner/operator stored hazardous waste in containers which were in poor condition and leaking, a violation of 40 CFR 265.171.

11. Pursuant to 40 CFR 265.173(a), the owner/operator is required to keep all hazardous waste containers closed except to add or remove waste. At the time of the inspections, containers holding hazardous waste were found to be stored open, a violation of 40 CFR 265.173(a).

12. Pursuant to 40 CFR 265.173(b), the owner/operator is required to manage containers holding hazardous waste in a manner which will prevent the container from rupturing or leaking. At the time of the inspections, the owner/operator stored hazardous waste in containers with holes and leaking, a violation of 40 CFR 265.173(b).

13. Pursuant to 40 CFR 122.23(c)(2), the owner/operator is required to submit a revised Part A permit application and obtain EPA approval prior to increasing a facility's design capacity. At the time of the inspections, containers held hazardous wastes in excess of the process design capacity stated in the Respondent's Part A permit application. This violates 40 CFR 122.23(c)(2).

ORDER

IT IS HEREBY ORDERED that Occidental Chemical Corporation, Parker Surface Treatment Products Division, Morenci, Michigan, achieve compliance with Subtitle C of RCRA, Section 3004, 42 U.S.C. 6924 and Section 3005, 42 U.S.C. 6925, and regulations 40 CFR 265.17, 265.31, 265.32(a), 265.35, 265.73, 265.76, 265.171, 265.173(a) 265.173(b) and 122.23.(c)(2), by taking proper actions, including but not limited to the following:

1. The owner/operator shall within 30 days of receipt of this Order achieve compliance with the following requirements:

a. "No Smoking" signs shall be conspicuously placed wherever there is a hazard from ignitable or reactive waste.

b. At appropriate locations throughout the facility, alarm or internal communication systems shall be installed to provide emergency instruction to all personnel.

c. Aisle space allowing unobstructed movement shall be provided in all areas of the facility where emergency response equipment and personnel may be necessary during emergencies.

d. All hazardous waste containers shall be provided with lids and kept sealed, except during transfer of wastes into or out of containers.

e. All hazardous waste stored or treated in containers which leak, are corroded, or otherwise allow the waste to leave the container shall be transferred to containers or tanks in good condition.

f. All hazardous waste discharges shall be cleaned up in accordance with 40 CFR 265, so that they do not pose a threat to human health and the environment.

2. The owner/operator within 90 days of receipt of this Order shall not store hazardous waste in excess of the process design capacity specified on the Respondent's Part A permit application.

3. The owner/operator shall immediately upon receipt of this Order:

   a. Place all wastes received or generated by the facility in containers or tanks which are in good condition and compatible with the waste.

   b. Report all unmanifested hazardous waste to the Regional Administrator within 15 days.

   c. Establish and maintain a written operating record containing a description and the quanitity of hazardous wastes received, the method and dates of its treatment, storage, or disposal, and the location and quantity of hazardous wastes at the facility.

4. The Respondent shall notify EPA in writing upon acheiving compliance with this Order and any part thereof. This notification shall be submitted no later than the times stipulated above to the Director, Waste Management Division, Region V, United States Environmental Protection Agency, Attention: Technical, Permits, and Compliance Section, 230 South Dearborn Street, Chicago, Illinois 60604.

A civil penalty of $25,000.00 (TWENTY-FIVE THOUSAND DOLLARS) is assessed for the violations set forth in the Findings above, pursuant to Sections 3008(c) and 3008(g) (42 U.S.C. 6928), payable within 30 days.

Failure to comply with any requirement of this Compliance Order shall subject the above named Respondent to liability for a civil penalty of up to $25,000.00 (TWENTY-FIVE THOUSAND DOLLARS) for each day of continued

noncompliance. EPA is authorized to assess such penalties pursuant to Section 3008(a)(3).

The proposed penalty has been set at the indicated level based upon an analysis of the seriousness of the violations cited herein, the potential harm to human health and the environment, the conduct of the Respondent, and the ability of the Respondent to pay penalties.

NOTICE OF OPPORTUNITY FOR HEARING

The above named Respondent is hereby notified that the above Order shall become final unless said person has requested in writing a hearing on the Order no later than 30 days from the date this Order is served. You have the right to request a hearing to contest any factual allegation set forth in the Complaint or the appropriateness of any proposed compliance schedule or penalty. In the event that you wish to request a hearing, and to avoid having the Compliance Order become final without further proceedings, you must file a written answer to this Complaint with the Regional Hearing Clerk, U. S. EPA, Region V, 230 South Dearborn Street, Chicago, Illinois 60604, within 30 days of your receipt of this notice. A copy of this answer and any subsequent document filed in this action should also be sent to Ms. Mary A. Gade, Assistant Regional Counsel, at the same address. Your answer should clearly and directly admit, deny, or explain each of the factual allegations of which you have knowledge. Said answer should contain (1) a definite statement of the facts which constitute the grounds of defense, and (2) a concise statement of the facts which you intend to place at issue in the hearing. The

denial of any material fact or the raising of any affirmative defense shall be construed as a request for a hearing.

A copy of the Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation or Suspension of Permits (40 CFR 22, 45 Fed. Reg. 24363 as amended by 45 Fed. Reg. 79808), accompanies this Complaint. These Regulations are applicable to this Administrative action.

SETTLEMENT CONFERENCE

Whether or not you request a hearing, you may confer informally with EPA concerning (1) whether the alleged violations in fact occurred as set forth above, (2) the appropriateness of the compliance schedule, (3) the appropriateness of any proposed penalty in relation to the size of your business, the gravity of the violations, and the effect of the proposed penalty on your ability to continue in business. You may request an informal settlement conference at any time by contacting this office. However, any such request will not affect the 30 day time limit for responding to this Complaint or requesting a formal hearing on the violation alleged herein. EPA encourages all parties to pursue the possibilities of settlement through informal conferences. Request for an informal conference or service of document should be made to Ms. Sally K. Swanson, Waste

Management Division, at the above named address, telephone number (312) 886-7482.

Dated this 26th day of August, 1982

Basil G. Constantelos, Director
Waste Management Division
U. S. Environmental Protection Agency
Region V

CERTIFICATE OF SERVICE

I hereby certify that I have caused a copy of the foregoing Complaint to be served upon the persons designated below, on the date below, by causing said copies to be deposited in the U.S. Mail, First Class (certified return receipt requested, postage prepaid) at Chicago, Illinois, in an envelope addressed to:

The Corporation Company
Registered Agent for Occidental
Chemical Corporation
Parker Surface Treatment Products
Division
615 Griswall
Detroit, Michigan 48226

I have further caused the original of the complaint and this certificate of service to be served in the office of the Regional Hearing Clerk located in the Office of Regional Counsel, USEPA, Region V, at 230 South Dearborn Street, Chicago, Illinois 60604, on the date below.

This is said person's last known address to the subscriber.

Dated, this 2nd day of September, 1982.

Denise M. Reape

Denise M. Reape
Technical, Permits, and
Compliance Section

RECORD OF COMMUNICATION

☒ PHONE CALL ☐ DISCUSSION ☐ FIELD TRIP ☐ CONFERENCE
☐ OTHER (SPECIFY)

(Record of item checked above)

TO: Michigan Secretary of State's Office of Corporate Registration

FROM: Sally Swanson

DATE 7-13-82

TIME 3:30

SUBJECT
MID 058723867
Registered Corporate name for Hooker Chemical/Oxy Metals, Morenci, MI.

SUMMARY OF COMMUNICATION

As so many names are associated w/ and used by this company, it was somewhat confusing to trace the corporate background, as the S.of S. doesn't have addresses for actual ~~corp~~ locations in State, just registered agent.

Name on Part A - Oxy Metal Industries Corp.

- Oxy Metal Industries Corp. (Intra Inc).
  # 607-789 - DISSOLVED 5-3-82
  California Corporation
  registered agent
  The Corporation Company
  615 Griswall
  Detroit 48226

Occidental Chemical Corporation, Parker Surface Treatment Div.
608-903
NY corporation
→ same Registered Agent
was Hooker Chemical & Plastic Co. until 6-4-82
was Hooker Electro Chemical Co. prior to 6-16-82.

CONCLUSIONS, ACTION TAKEN OR REQUIRED

Larry Kyte, ORC, suggested we use the name which the company told the inspector, Occidental Chemical —

INFORMATION COPIES
TO: FILE

EPA Form 1300-6 (7-72) REPLACES EPA HQ FORM 6300-3 WHICH MAY BE USED UNTIL SUPPLY IS EXHAUSTED.

DEPARTMENT OF NATURAL RESOURCES
AIR QUALITY DIVISION

ACTIVITY REPORT

AQ-42

- [ ] COMPLAINT RECEIVED
- [ ] PERMIT ACTION
- [ ] ANNUAL COMPLIANCE INVESTIGATION COMPLETED
- [ ] NESHAP
- [ ] NSPS
- [ ] REVISED STATUS

ESTABLISHMENT: Hooker Chemicals and Plastics Corp. (formerly Parker Chemical)	NO. B2422	DATE MM/DD/YY: 07-09-82	
		QUARTER: JULY	NO. 03
NUMBER AND STREET: 322 W. Main Street	CITY: Adrian	STAFF: L. Koivuniemi	NO. 97
CONTACT: John Kashner	TITLE: Manager-Mfg.	COUNTY: Lenawee	NO. 46
PRIMARY ACTIVITY: Chemical Prodution-Mixing		DISTRICT: Ann Arbor	NO. 08

REMARKS:

RCRA (Resource Conservation Recovery Act):

RCRA Inspection follow-up with Roy Schrameck, Water Quality District Engineer.

Meeting with the following company officials:

Robert J. Schuttler: Director, Environmental Health & Safety, Plastics and Chemicals Specialty Group; Niagara Falls, N.Y. telephone (716) 286-3102.

Mike McLin, Project Engineer, Morenci
Richard Speed, Environmental Engineer, Morenci
John Kashner, Plant Manager, Morenci

Lee Huffaker, Chemist, and Richard Fredrick, Production Superintendent, both of Morenci and usually involved in RCRA inspections were both absent from today's meeting and follow up inspection.

Source of PCB's:

Sample #2 in area 2 collected 5-18-82 had 2,500,00 µg/kg or 0.25% PCB's. (Not 2.5%, as was incorrectly reported in 6-22-82 Activity Report).

The company could not or would not explain how high levels of PCB's were found in this storage area 2

Returned Drums:

Company agreed to set up a system of sealing their drums, so when a product is returned it can be easily determined if the barrel had been opened. A returned, opened barrel may have been the source of the PCB's. But, in any case, the company should not have allowed the waste to be leaked and spilled onto the ground in violation to RCRA and Act 245 (Michigan's Water Law).

Picture #35 of area 6 :

Mr. Kashner thought the brown-yellow on the surface of

PROJECT	
01	MAJOR SOURCE
02	MINOR SOURCE
03	RESIDENCE
04	MEETING – CONFERENCE
05	TRAINING
07	
08	
09	
10	
00	OTHER (explain)

SURVEY ACTION		TYPE	NO.
01	EMISSION POINTS INVESTIGATED		
02	VISIBLE EMISSION EVALUATION		
03	SOURCE TEST (STAFF)		
04	SOURCE TEST (COMPANY)		
05	GRAB SAMPLE		
06	PICTURES TAKEN		
09			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
00	OTHER (explain)		

COMPLIANCE STATUS	
A.	IN COMPLIANCE
B.	UNKNOWN COMPLIANCE
C.	OUT OF COMPLIANCE NOT ON A SCHEDULE
D.	ON A SCHEDULE MEETING INCREMENTS
E.	ON A SCHEDULE, NOT MEETING INCREMENTS
F.	ON A SCHEDULE, NOT KNOWN IF MEETING INCREMENTS

DEPARTMENT OF NATURAL RESOURCES
AIR QUALITY DIVISION

ACTIVITY REPORT

AQ-42

- [ ] COMPLAINT RECEIVED
- [ ] PERMIT ACTION
- [ ] ANNUAL COMPLIANCE INVESTIGATION COMPLETED
- [ ] NESHAP
- [ ] NSPS
- [ ] REVISED STATUS

		DATE MM/DD/YY: 07-09-82	
ESTABLISHMENT: Hooker Chemicals and Plastics Corp.	NO.: B2422	QUARTER: JULY	NO.: 03
NUMBER AND STREET	CITY	STAFF: L. Koivuniemi	NO.: 97
CONTACT	TITLE	COUNTY: Lenawee	NO.: 46
PRIMARY ACTIVITY: Page 2		DISTRICT: Ann Arbor	NO.: 08

REMARKS:

the pad in picture #35 taken 6-22-82 was Bismark Brown R. (Toulene-2,4-diazo-bis-meta-toluyene diamine hydrochloride is the chemical name, Condensed Chemical Dictionary.)

Flush Drum: Outgoing Hooker Product including acids with Nickel and Chromium from flushing of loading lines was being allowed to drain through a limestone, containing barrel into ground. Roy again, informed the company this likely could have contaminated the ground water; and therefore, because of this practice and the leaking waste in storage a hydrogeologic study must be done by the company to determine extent of contamination and possible need for clean-up.

Hydrogeological Study:

All along in our discussions, Mr. Kashner and Mr. Speed agreed to do this hydrogeological study, but now Mr. Schuttle is not convinced it is necessary.

I gave Mr. Schuttler a copy of the 38 pictures I took documenting the company's recent hazardous waste disposal practices. After seeing these pictures and hearing about the flush drum, supra, Mr. Schuttler said he would re-evaluate whether they would do this hydro-study. Mr. Schuttler will have a decision by August 4, 1982, and will inform Roy Schrameck.

Storage of Waste:

The material has been cleaned up outside the storage building. No leaking drums were noted outside the storage building. Although, I did detect some oil-like, dark liquid on the floor inside the storage building. I informed Mr. Speed and Mr. Kashner, again, of the RCRA requirements of inspecting the drums and logging problems and correcting them when found. The company seems to be still not concerned enough to follow all of the safe hazardous waste practices required by RCRA.

PROJECT	
01	MAJOR SOURCE
02	MINOR SOURCE
03	RESIDENCE
04	MEETING – CONFERENCE
05	TRAINING
07	
08	
09	
10	
00	OTHER (explain)

	SURVEY ACTION	TYPE	NO.
01	EMISSION POINTS INVESTIGATED		
02	VISIBLE EMISSION EVALUATION		
03	SOURCE TEST (STAFF)		
04	SOURCE TEST (COMPANY)		
05	GRAB SAMPLE		
06	PICTURES TAKEN		
09			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
00	OTHER (explain)		

COMPLIANCE STATUS	
A.	IN COMPLIANCE
B.	UNKNOWN COMPLIANCE
C.	OUT OF COMPLIANCE NOT ON A SCHEDULE
D.	ON A SCHEDULE MEETING INCREMENTS
E.	ON A SCHEDULE, NOT MEETING INCREMENTS
F.	ON A SCHEDULE, NOT KNOWN IF MEETING INCREMENTS

R5642
3/77

DEPARTMENT OF NATURAL RESOURCES
AIR QUALITY DIVISION

ACTIVITY REPORT

AQ-42

- [ ] COMPLAINT RECEIVED
- [ ] PERMIT ACTION
- [ ] ANNUAL COMPLIANCE INVESTIGATION COMPLETED
- [ ] NESHAP
- [ ] NSPS
- [ ] REVISED STATUS

ESTABLISHMENT: Hooker Chemicals and Plastics Corp.	NO. B2422	DATE MM/DD/YY: 07-09-82	
		QUARTER: JULY	NO. 03
NUMBER AND STREET	CITY	STAFF: L. Koivuniemi	NO. 97
CONTACT	TITLE	COUNTY: Lenawee	NO. 46
PRIMARY ACTIVITY: Page 3		DISTRICT: Ann Arbor	NO. 08

REMARKS:

Samples Collected:

Mr. Speed and I watched as the company (Jose) collected three samples of waste liquid from drums which had been in storage area 6, but had been moved inside the storage building. Samples were split with company.

#xx-1. 3/4 full fiberpac drum, see picture #31. Barrel on left side of this picture. Collected 2:20pm.

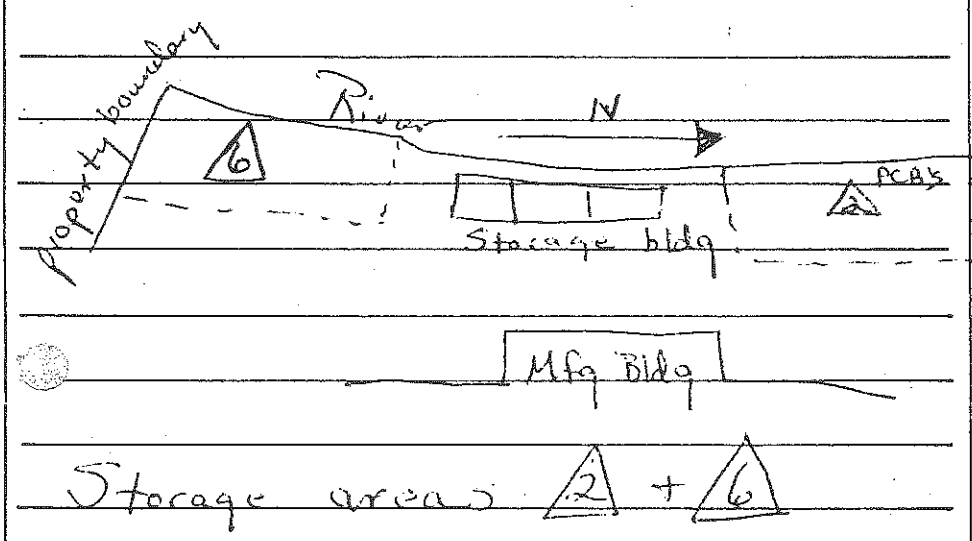
#xx-2. 3" of liquid on side of fiberpac barrel: Note, "side of barrel" because barrel was lying on its side as it was in picture #31. Barrel on right side of this picture #31.

The liquid from the above two barrels appeared to be the same; it was brown-yellow in the barrrel, but appeared reddish-brown when placed in sample bottle.

#xx-3. Drum labeled nitric acid.

Roy is maintaining chain of custody and taking the samples to the ESD Lab. to check for pH and heavy metals.

cc: OHWM
US EPA
Roy Schrameck



PROJECT	
01	MAJOR SOURCE
02	MINOR SOURCE
03	RESIDENCE
04	MEETING – CONFERENCE
05	TRAINING
07	
08	
09	
10	
00	OTHER (explain)

	SURVEY ACTION	TYPE	NO.
01	EMISSION POINTS INVESTIGATED		
02	VISIBLE EMISSION EVALUATION		
03	SOURCE TEST (STAFF)		
04	SOURCE TEST (COMPANY)		
05	GRAB SAMPLE		
06	PICTURES TAKEN		
09			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
00	OTHER (explain)		

COMPLIANCE STATUS	
A.	IN COMPLIANCE
B.	UNKNOWN COMPLIANCE
C.	OUT OF COMPLIANCE NOT ON A SCHEDULE
D.	ON A SCHEDULE MEETING INCREMENTS
E.	ON A SCHEDULE, NOT MEETING INCREMENTS
F.	ON A SCHEDULE, NOT KNOWN IF MEETING INCREMENTS

R5642

DEPARTMENT OF NATURAL RESOURCES
AIR QUALITY DIVISION

ACTIVITY REPORT

AQ-42

- [ ] COMPLAINT RECEIVED
- [ ] PERMIT ACTION
- [ ] ANNUAL COMPLIANCE INVESTIGATION COMPLETED
- [ ] NESHAP
- [ ] NSPS
- [ ] REVISED STATUS

ESTABLISHMENT (Formerly Parker Chemical)		DATE MM/DD YY	
Hooker Chemicals and Plastics Corporation	NO. B-2422	05-14-82	
		QUARTER: MAY	NO. 02
NUMBER AND STREET: 322 W. Main Street	CITY: Morenci	STAFF: L. Koivuniemi	NO. 97
CONTACT: Richard Fredrick	TITLE: Prod. Sup't.	COUNTY: Lenawee	NO. 46
PRIMARY ACTIVITY: Chemical Production-Mixing		DISTRICT: Ann Arbor	NO. 08

REMARKS:

As an authorized representative of the U.S. EPA, on May 14, 1982, I conducted a site investigation to evaluate Hooker Chemicals and Plastics Corporation in Morenci for compliance of Subtitle C of the Resource Conservation Recovery Act (RCRA).

During the investigation, I completed the form: RCRA Inspection Report. The company has applied for storage only on their Part A application, no treatment or disposal.

During this inspection, I observed one hazardous waste drum storage area on the bank of a river on a concrete pad on the north side of a storage building. I observed the following problems with this drum storage (labeled 2 in the Part A application):

(1) Leaking, corroded metal drums (approximately 1,000 drums in storage).
(2) Uncovered drums.
(3) One drum with an apparent forklift hole near the bottom-drum was empty - except a few inches of liquid below the hole.
(4) On the surface of the concrete in between the rows of drums, ooze and colored waste material had collected. It looked as if these drums had been stored and waste had been leaking for a considerable period of time.
(5) Drums were collapsed and falling into the fence on the bank of the river.
(6) One partially burried drum between the fence and the river at the north end of the storage building.
(7) While walking on the east side of this drum storage area, I observed a strong, irritating odor. I asked Richard Fredrick what the odor was; he said he could not smell anything. I then asked and received permission to inspect the roof to determine if this odor was emanating from a process stack. While on the roof, I could not detect the odor. I asked Mr. Fredrick to follow up on this and determine where it was coming from, and also said I would be back to investigate further.

PROJECT	
01	MAJOR SOURCE
02	MINOR SOURCE
03	RESIDENCE
04	MEETING CONFERENCE
05	TRAINING
07	
08	
09	
10	
00	OTHER (explain)

SURVEY ACTION		TYPE	NO.
01	EMISSION POINTS INVESTIGATED		
02	VISIBLE EMISSION EVALUATION		
03	SOURCE TEST (STAFF)		
04	SOURCE TEST (COMPANY)		
05	GRAB SAMPLE		
06	PICTURES TAKEN		
09			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
00	OTHER (explain)		

COMPLIANCE STATUS	
A	IN COMPLIANCE
B	UNKNOWN COMPLIANCE
C	OUT OF COMPLIANCE NOT ON A SCHEDULE
D	ON A SCHEDULE MEETING INCREMENTS
E	ON A SCHEDULE, NOT MEETING INCREMENTS
F	ON A SCHEDULE, NOT KNOWN IF MEETING INCREMENTS

R5042
3/77

DEPARTMENT OF NATURAL RESOURCES
AIR QUALITY DIVISION

ACTIVITY REPORT

AQ-42

- [ ] COMPLAINT RECEIVED
- [ ] PERMIT ACTION
- [ ] ANNUAL COMPLIANCE INVESTIGATION COMPLETED
- [ ] NESHAP
- [ ] NSPS
- [ ] REVISED STATUS

		DATE MM DD/YY: 05-14-82	
ESTABLISHMENT: Hooker Chemicals and Plastics Corporation	NO.: B-2422	QUARTER: MAY	NO.: 02
NUMBER AND STREET	CITY	STAFF: L. Koivuniemi	NO.: 97
CONTACT	TITLE	COUNTY: Lenawee	NO.: 46
PRIMARY ACTIVITY: Page 2 of 2		DISTRICT: Ann Arbor	NO.: 08

REMARKS:

(8) There was not enough aisle space to allow the unobstructed movement of personnel and spill control equipment in violation of RCRA-265.35.

This hazardous waste storage area had many violations under RCRA of which I will do more investigating, but there also appeared to be Act 245 or water discharge violations. Therefore, I will contact Water Quality Division and Al Howard, Environmental Services Division, Office of Hazardous Waste Management to arrange further investigations and documentation of this hazardous waste storage facility's unacceptable storage area.

PROJECT

- 01 MAJOR SOURCE
- 02 MINOR SOURCE
- 03 RESIDENCE
- 04 MEETING – CONFERENCE
- 05 TRAINING
- 07
- 08
- 09
- 10
- 00 OTHER (explain)

SURVEY ACTION	TYPE	NO.
01 EMISSION POINTS INVESTIGATED		
02 VISIBLE EMISSION EVALUATION		
03 SOURCE TEST (STAFF)		
04 SOURCE TEST (COMPANY)		
05 GRAB SAMPLE		
06 PICTURES TAKEN		
09		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
00 OTHER (explain)		

COMPLIANCE STATUS

- A. IN COMPLIANCE
- B. UNKNOWN COMPLIANCE
- C. OUT OF COMPLIANCE NOT ON A SCHEDULE
- D. ON A SCHEDULE MEETING INCREMENTS
- E. ON A SCHEDULE, NOT MEETING INCREMENTS
- F. ON A SCHEDULE, NOT KNOWN IF MEETING INCREMENTS

R5642
3/77

DEPARTMENT OF NATURAL RESOURCES
AIR QUALITY DIVISION

ACTIVITY REPORT

AQ-42

- [ ] COMPLAINT RECEIVED
- [ ] PERMIT ACTION
- [ ] ANNUAL COMPLIANCE INVESTIGATION COMPLETED
- [ ] NESHAP
- [ ] NSPS
- [ ] REVISED STATUS

		DATE MM-DD-YY: 05-18-82	
ESTABLISHMENT: Hooker Chemicals and Plastics Corporation (Formerly Parker Chemical)	NO.: B-2422	QUARTER: MAY	NO.: 02
NUMBER AND STREET: 322 W. Main Street	CITY: Morenci	STAFF: L. Koivuniemi	NO.: 97
CONTACT: Richard Fredrick	TITLE: Prd'n Sup't.	COUNTY: Lenawee	NO.: 46
PRIMARY ACTIVITY: Chemical Production-Mixing RCRA Inspection #2:		DISTRICT: Ann Arbor	NO.: 08

REMARKS:

Conducted a joint investigation of this company's hazardous waste storage practices with Roy Schrameck, District Engineer, Water Quality District #1. As stated in my previous activity report of 05-14-82, there appeared to be Act 245 (Water Law) violations due to this company's hazardous waste drum storage area, i.e. open or leaking drums. Therefore, Roy and I conducted this follow up inspection.

Roy and I informed the company that I would be collecting more information for my RCRA report (as an authorized representative of the U.S. EPA) and Roy would be inspecting the company for possible Act 245 violations. Since the MDNR's Office of Hazardous Waste Management (OHWM) does not have field staff; they did not have anyone at this inspection. I had contacted OHWM and informed them of the huge number of leaking drums and, also that Roy and I would follow up with an inspection and sampling. OHWM was in agreement with the need for a more complete inspection to determine the contents of the leaking drums located in the company's hazardous waste storage area.

When I checked the company's inspection log of the drums the company generally had not been noting and correcting the problems of leaking drums, open drums and inadequate aisle space. One problem was cited in April 1982: a barrel of 70% ethylamine (no longer used raw material - not a Hooker product) had been expanding due to warm weather. Mr. Fredrick corrected this problem by "rupturing and venting" to release the pressure in the drum. This was the source of the strong, irritating odor that I had detected during my first or May 14, 1982 site investigation. This waste ethylamine storage drum was not in the same storage area 1 that I had been shown on my first inspection, but in storage area 3 approximately 20 feet west of storage area 2 (diagram attached).

The company informed Roy and I that the drums had been accumulating since April 1981. This is apparently a violation of Act 64, P. A. 1979-long term storage, which requires a permit.....

PROJECT	
01	MAJOR SOURCE
02	MINOR SOURCE
03	RESIDENCE
04	MEETING -- CONFERENCE
05	TRAINING
07	
08	
09	
10	
00	OTHER (explain)

SURVEY ACTION		TYPE	NO.
01	EMISSION POINTS INVESTIGATED		
02	VISIBLE EMISSION EVALUATION		
03	SOURCE TEST (STAFF)		
04	SOURCE TEST (COMPANY)		
05	GRAB SAMPLE		
06	PICTURES TAKEN		
09			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
00	OTHER (explain)		

COMPLIANCE STATUS	
A.	IN COMPLIANCE
B.	UNKNOWN COMPLIANCE
C.	OUT OF COMPLIANCE NOT ON A SCHEDULE
D.	ON A SCHEDULE MEETING INCREMENTS
E.	ON A SCHEDULE, NOT MEETING INCREMENTS
F.	ON A SCHEDULE, NOT KNOWN IF MEETING INCREMENTS

R5642
3/77

DEPARTMENT OF NATURAL RESOURCES
AIR QUALITY DIVISION

ACTIVITY REPORT

AQ-42

- [ ] COMPLAINT RECEIVED
- [ ] PERMIT ACTION
- [ ] ANNUAL COMPLIANCE INVESTIGATION COMPLETED
- [ ] NESHAP
- [ ] NSPS
- [ ] REVISED STATUS

		DATE MM/DD/YY: 05-18-82	
ESTABLISHMENT: Hooker Chemicals and Plastics Corporation	NO.: B-2422	QUARTER: MAY	NO.: 02
NUMBER AND STREET:	CITY:	STAFF: L. Koivuniemi	NO.: 97
CONTACT:	TITLE:	COUNTY: Lenawee	NO.: 46
PRIMARY ACTIVITY: Page 2		DISTRICT: Ann Arbor	NO.: 08

REMARKS:

if storing longer than one year.

Mr. Fredrick informed us that the only reason the drums were still on site was because they had problems getting approval from Cecos; therefore, the company switched to Chemical Waste Management in Alabama and was working on a contract and getting a truck in to ship the waste. The shipping date had not been set yet.

Accepting Unmanifested Hazardous Waste:

When asked why the drums were in such bad shape, i.e. leaking and corroded, Mr. Fredrick said many of the drums had arrived that way as returned product or off spec material from companies which Hooker had originally supplied, as well as, it was a bad winter. Most of these companies returning this waste pay Hooker a disposal cost of $120 per drum, occasionally a company may get a credit toward their next purchase from Hooker.

When I asked to see the manifests for these off-spec or returned products, the company informed me that the waste was not manifested because Hooker made the decision after the returned drum contents were inspected by Hooker to determine if Hooker could use or recycle the waste. I informed Mr. Fredrick and Richard Speed that the material "being beneficially used or reused or legitimately recycled or reclaimed" 40CFR 261.6, need not be manifested. But at the point Hooker has decided it can not reclaim this material and therefore the waste is to be disposed of, it is a waste, and also, Hooker has accepted an unmanifested hazardous waste if it is hazardous (40 CFR Part 261, Identification of Hazardous Waste).

Roy Schrameck informed Mr. Fredrick and Richard Speed that it appeared Hooker may be required to conduct a MDNR approved hydrogeological survey to determine if Hooker's practices of waste disposal had created ground water contamination. The company did not react negatively to Roy's suggestion for a hydro-survey.

PROJECT	
01	MAJOR SOURCE
02	MINOR SOURCE
03	RESIDENCE
04	MEETING - CONFERENCE
05	TRAINING
07	
08	
09	
10	
00	OTHER (explain)

	SURVEY ACTION	TYPE	NO.
01	EMISSION POINTS INVESTIGATED		
02	VISIBLE EMISSION EVALUATION		
03	SOURCE TEST (STAFF)		
04	SOURCE TEST (COMPANY)		
05	GRAB SAMPLE		
06	PICTURES TAKEN		
09			
10			
11			
12			
13			
14			
15			
16			
18			
19			
00	OTHER (explain)		

COMPLIANCE STATUS	
A.	IN COMPLIANCE
B	UNKNOWN COMPLIANCE
C.	OUT OF COMPLIANCE NOT ON A SCHEDULE
D.	ON A SCHEDULE MEETING INCREMENTS
E.	ON A SCHEDULE, NOT MEETING INCREMENTS
F.	ON A SCHEDULE, NOT KNOWN IF MEETING INCREMENTS

R5642
3/77

DEPARTMENT OF NATURAL RESOURCES
AIR QUALITY DIVISION

ACTIVITY REPORT

AQ-42

- [ ] COMPLAINT RECEIVED
- [ ] PERMIT ACTION
- [ ] ANNUAL COMPLIANCE INVESTIGATION COMPLETED
- [ ] NESHAP
- [ ] NSPS
- [ ] REVISED STATUS

ESTABLISHMENT: Hooker Chemicals and Plastics Corporation	NO.: B-2422	DATE MM/DD/YY: 05-18-82	
NUMBER AND STREET	CITY	QUARTER: MAY	NO.: 02
CONTACT	TITLE	STAFF: L. Koivuniemi	NO.: 97
PRIMARY ACTIVITY		COUNTY: Lenawee	NO.: 46
Page 3 of 3		DISTRICT: Ann Arbor	NO.: 08

REMARKS:

Request for Pictures and Samples:

Roy and I asked the company officials if they had any objections to our taking pictures and samples. Richard Speed asked John D. Cashner, Plant Manager, for permission. Mr. Cashner came in to Mr. Speed's office where we were waiting and said it was all right.

I took twenty-two pictures and Roy took three samples from the ground, (description attached). We saw six different drum storage areas. Apparently, pictures were lost in processing since they were not returned to me from Kodak.

Mr. Fredrick insisted that the company was not presently storing ignitible or reactive waste as reported in their Part A application to the U.S. EPA. I observed in storage area 2 at least one drum labeled Industrial Solvents; therefore, I am not convinced that Mr. Fredrick was accurate in this statement. Therefore, since Roy and I did not have the proper equipment to sample drums, I will be returning to Hooker with the proper sampling equipment to verify what is in some of the drums, and compare these samples to what Hooker has in their operating record (as required by 40 CFR 265.73).

Roy and I also looked at an area of 4,000 gallon storage tanks in the basement of the west manufacturing building, used to store corrosive products going out (e.g. nickel nitrate). These tanks may be used to store hazardous waste if needed in the future.

Hooker's Prdt labeling system:

yr. area Batch #

9 1 2373 The 9 refers to 1979.

91273-cold cleaner lying on its side next to fence area 2

Size of storage area 1 (estimated): 29 drums X 3 drums X 15 drums equals approximately 1,300 drums.

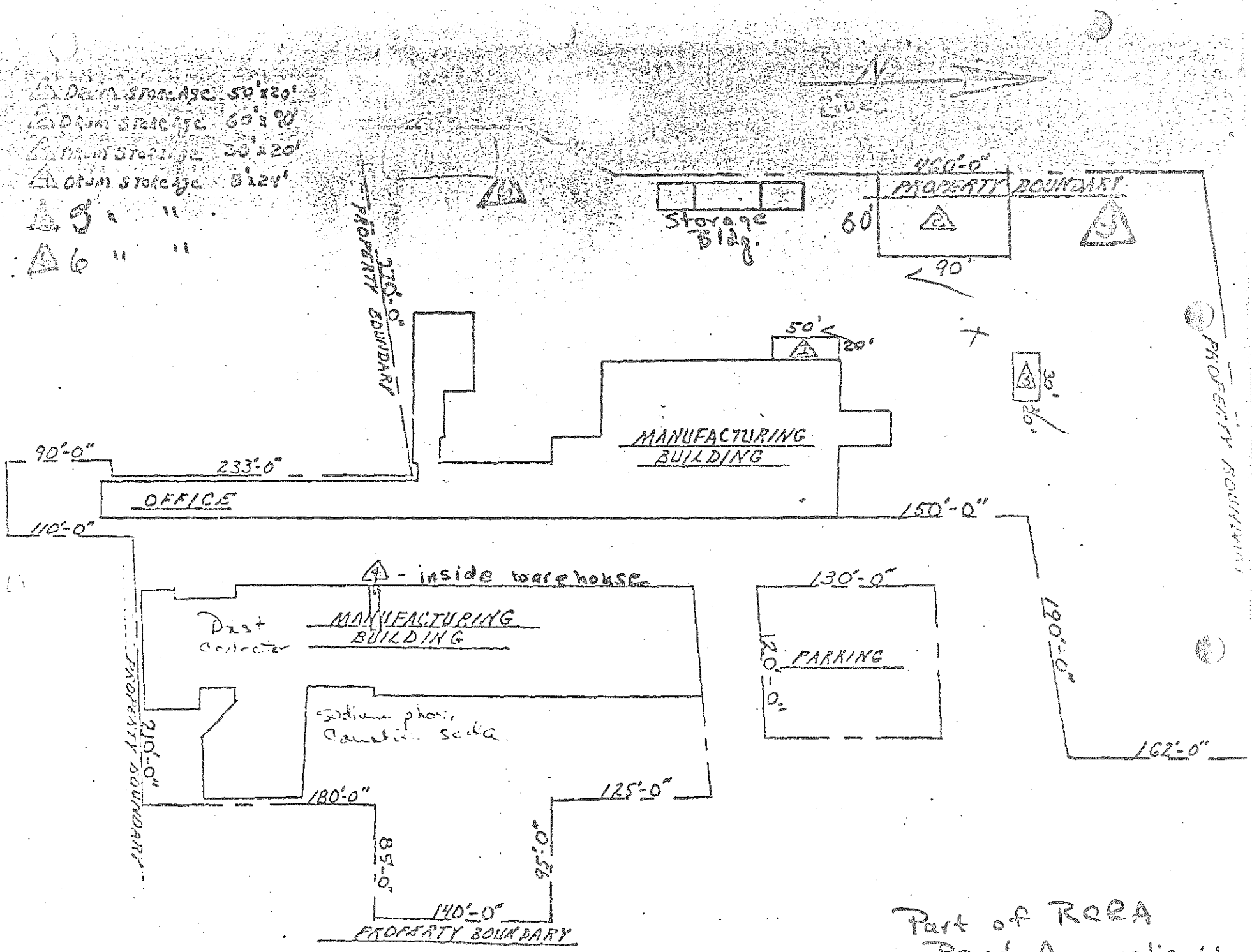
Mr. Fredrick said he "had 935 drums stored in back and 150 across the street". Also, in the future the company hoped to have only 80 drums in storage at a time.

PROJECT	
01	MAJOR SOURCE
02	MINOR SOURCE
03	RESIDENCE
04	MEETING – CONFERENCE
05	TRAINING
07	
08	
09	
10	
00	OTHER (explain)

	SURVEY ACTION	TYPE	NO.
01	EMISSION POINTS INVESTIGATED		
02	VISIBLE EMISSION EVALUATION		
03	SOURCE TEST (STAFF)		
04	SOURCE TEST (COMPANY)		
05	GRAB SAMPLE		
06	PICTURES TAKEN		
09			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
00	OTHER (explain)		

COMPLIANCE STATUS	
A.	IN COMPLIANCE
B.	UNKNOWN COMPLIANCE
C.	OUT OF COMPLIANCE NOT ON A SCHEDULE
D.	ON A SCHEDULE MEETING INCREMENTS
E.	ON A SCHEDULE, NOT MEETING INCREMENTS
F.	ON A SCHEDULE, NOT KNOWN IF MEETING INCREMENTS

D5642



Part of RCRA
Part A - application

EPA Form 5510-3 (6-80)

DEPARTMENT OF NATURAL RESOURCES
AIR QUALITY DIVISION

ACTIVITY REPORT

AQ-42

(Formerly Parker Chemical)

- [ ] COMPLAINT RECEIVED
- [ ] PERMIT ACTION
- [ ] ANNUAL COMPLIANCE INVESTIGATION COMPLETED
- [ ] NESHAP
- [ ] NSPS
- [ ] REVISED STATUS

		DATE MM/DD/YY: 05-27-82	
ESTABLISHMENT: Hooker Chemicals and Plastics Corp.	NO.: B-2422	QUARTER: MAY	NO.: 02
NUMBER AND STREET: 322 W. Main Street	CITY: Morenci	STAFF: L. Koivuniemi	NO.: 97
CONTACT: Richard Fredrick	TITLE: Prod. Sup't.	COUNTY: Lenawee	NO.: 46
PRIMARY ACTIVITY: Chemical Production-Mixing		DISTRICT: Ann Arbor	NO.: 08

pg 1 of 4

REMARKS:

RCRA Inspection #3: Sampled four (4) drums with Roy Schrameck, District Engineer for Water Quality District #1.

Collected four (4) liquid samples from four (4) different drums of hazardous waste, retained custody and delivered to ESD Lab on Friday, May 28, 1982 at 5:05 p.m.-log #9450. All four (4) samples were split with Mr. Fredrick.

Area 2 and 3 are listed on Hooker's Part A RCRA application dated 10-08-80. I have used this labeling all through my RCRA investigation reports.

Sample #1 F003

a. 55-gallon drum labeled: Junk Solvent with Flammable Label located in area 2 approximately 55 feet from property line.

haz-flash pt <70° pH 3

b. Sample collected 11:50 a.m. Roy dropped a small glass bottle into the bulk waste 55 gallon drum to collect the sample; we could not get our metal collecting tubes to pull up the waste liquid. We split this sample, as well as the other three (3) samples with Richard Fredrick. Mr. Fredrick was helpful to us in our sample collection; he supplied us with two polyethylene bottles, because he was concerned there may have been H-F contamination.

c. Collected in a glass container-dark liquid.

d. Mr. Huffaker said this drum was waste Hooker solvents and was mainly acetone, xylene, oil and phosphoric.

e. Lab analyses request: volatile hydrocarbons scan, flash point and pH.

PROJECT

- 01 MAJOR SOURCE
- 02 MINOR SOURCE
- 03 RESIDENCE
- 04 MEETING -- CONFERENCE
- 05 TRAINING
- 07
- 08
- 09
- 10
- 00 OTHER (explain)

SURVEY ACTION	TYPE	NO.
01 EMISSION POINTS INVESTIGATED		
02 VISIBLE EMISSION EVALUATION		
03 SOURCE TEST (STAFF)		
04 SOURCE TEST (COMPANY)		
05 GRAB SAMPLE		
06 PICTURES TAKEN		
09		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
00 OTHER (explain)		

COMPLIANCE STATUS

- A IN COMPLIANCE
- B. UNKNOWN COMPLIANCE
- C. OUT OF COMPLIANCE NOT ON A SCHEDULE
- D. ON A SCHEDULE MEETING INCREMENTS
- E ON A SCHEDULE, NOT MEETING INCREMENTS
- F ON A SCHEDULE, NOT KNOWN IF MEETING INCREMENTS

DEPARTMENT OF NATURAL RESOURCES
AIR QUALITY DIVISION

ACTIVITY REPORT

AQ-42

- [ ] COMPLAINT RECEIVED
- [ ] PERMIT ACTION
- [ ] ANNUAL COMPLIANCE INVESTIGATION COMPLETED
- [ ] NESHAP
- [ ] NSPS
- [ ] REVISED STATUS

ESTABLISHMENT: Hooker Chemical and Plastics Corp.	NO.: B-2422	DATE MM/DD/YY: 05-27-82	
		QUARTER: MAY	NO.: 02
NUMBER AND STREET	CITY	STAFF: L. Koivuniem	NO.: 97
CONTACT	TITLE	COUNTY: Lenawee	NO.: 46
PRIMARY ACTIVITY		DISTRICT: Ann Arbor	NO.: 08

Page 2 of 4

REMARKS:

Sample #2 pH-1

a. 55-gallon drum in area 2 located near the drum sampled and listed as Sample #1 (supra). Drum was painted green and labeled 615473.

b. Sample collected at 12:04 p.m. with metal tube. This red liquid waste was extremely corrosive and attacked the metal tube which was used to collect the sample. Sample was placed in a polyethylene bottle. Based on the above reaction we decided our metal collecting tubes may have been aluminum.

c. Company said the drum contents was PARCO Cleaner FP-5, Code 1267, Batch 615473 and was surfactant, phosphoric acid and H_2O.

d. Lab analyses request: pH and phosphate.

Sample #3 F003 - pH 14, flashpt. <40°

a. 55 gallon drum labeled ethylamine 70%. Drum had bung removed and therefore was open to environment. Mr. Fredricks had removed the plug in April, 1982, to allow the ethylamine to dissipate. Strong ammonia odor, volatile liquid and flammable are the properties of ethylamine; therefore, this drum should not have been stored, uncovered, outdoors. Drum was located in area 3.

b. Collected at 12:16 in polyethylene bottle.

c. Lab analyses request: flash point, identify and pH.

PROJECT	
01	MAJOR SOURCE
02	MINOR SOURCE
03	RESIDENCE
04	MEETING – CONFERENCE
05	TRAINING
07	
08	
09	
10	
00	OTHER (explain)

SURVEY ACTION		TYPE	NO.
01	EMISSION POINTS INVESTIGATED		
02	VISIBLE EMISSION EVALUATION		
03	SOURCE TEST (STAFF)		
04	SOURCE TEST (COMPANY)		
05	GRAB SAMPLE		
06	PICTURES TAKEN		
09			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
00	OTHER (explain)		

COMPLIANCE STATUS	
A.	IN COMPLIANCE
B.	UNKNOWN COMPLIANCE
C.	OUT OF COMPLIANCE NOT ON A SCHEDULE
D.	ON A SCHEDULE MEETING INCREMENTS
E.	ON A SCHEDULE, NOT MEETING INCREMENTS
F.	ON A SCHEDULE, NOT KNOWN IF MEETING INCREMENTS

DEPARTMENT OF NATURAL RESOURCES
AIR QUALITY DIVISION

ACTIVITY REPORT

AQ-42

- [ ] COMPLAINT RECEIVED
- [ ] PERMIT ACTION
- [ ] ANNUAL COMPLIANCE INVESTIGATION COMPLETED
- [ ] NESHAP
- [ ] NSPS
- [ ] REVISED STATUS

ESTABLISHMENT: Hooker Chemical and Plastics Corp.	NO.: B-2422	DATE MM/DD/YY: 05-27-82	
NUMBER AND STREET	CITY	QUARTER: MAY	NO.: 02
CONTACT	TITLE	STAFF: L. Koivuniemi	NO.: 97
PRIMARY ACTIVITY		COUNTY: Lenawee	NO.: 46
		DISTRICT: Ann Arbor	NO.: 08

Page 3 of 4

REMARKS:

Sample #4 F003, F005 pH 3, flash pt ~190°

a. 55-gallon drum of brown-yellow, viscous liquid with sludge/solids at bottom. No labeling visible on drum which was covered with a layer of an oil-wax like substance in area B. Took a picture of Roy Schrameck sampling this drum.

b. Sample collected at 12:24 p.m. While collecting this sample, it started to rain.

c. Sample collected with a metal tube into a glass sample bottle.

d. Lee Huffaker said this drum was probably: oil and emulsifier additive used to protect machined metal from rusting.

e. Lab analyses request: Flash point, pH and PCB scan.

Sampling Summary:

Richard Fredrick was with Roy and me while we collected the four (4) different drum samples. We split our samples with Mr. Fredrick. I took one picture of Roy Schrameck taking the fourth sample and promised to send the company a copy of this picture along with the pictures I took on May 18, 1982. The company was very cooperative and did not seem to mind our unannounced follow-up sampling and questions on their waste storage practices. It was 5:30 p.m. before I left the company, after asking more questions concerning Hooker's operating record for RCRA.

Length of Time Drums have been in Storage:

During my earlier investigation (05-18-82) I questioned Mr. Fredrick about the reason the drums were in such terrible condition, i.e. leaking; he said they were returned to Hooker that way and had only been accumulating

PROJECT

01 MAJOR SOURCE
02 MINOR SOURCE
03 RESIDENCE
04 MEETING -- CONFERENCE
05 TRAINING
07
08
09
10
00 OTHER (explain)

SURVEY ACTION	TYPE	NO.
01 EMISSION POINTS INVESTIGATED		
02 VISIBLE EMISSION EVALUATION		
03 SOURCE TEST (STAFF)		
04 SOURCE TEST (COMPANY)		
05 GRAB SAMPLE		
06 PICTURES TAKEN		
09		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
00 OTHER (explain)		

COMPLIANCE STATUS

A. IN COMPLIANCE
B. UNKNOWN COMPLIANCE
C. OUT OF COMPLIANCE NOT ON A SCHEDULE
D. ON A SCHEDULE MEETING INCREMENTS
E. ON A SCHEDULE, NOT MEETING INCREMENTS
F. ON A SCHEDULE, NOT KNOWN IF MEETING INCREMENTS

DEPARTMENT OF NATURAL RESOURCES
AIR QUALITY DIVISION

ACTIVITY REPORT

AQ-42

- [ ] COMPLAINT RECEIVED
- [ ] PERMIT ACTION
- [ ] ANNUAL COMPLIANCE INVESTIGATION COMPLETED
- [ ] NESHAP
- [ ] NSPS
- [ ] REVISED STATUS

		DATE MM/DD/YY: 05-27-82	
ESTABLISHMENT: Hooker Chemical and Plastics Corp.	NO.: B-2422	QUARTER: MAY	NO.: 02
NUMBER AND STREET	CITY	STAFF: L. Koivuniemi	NO.: 97
CONTACT	TITLE	COUNTY: Lenawee	NO.: 46
PRIMARY ACTIVITY		DISTRICT: Ann Arbor	NO.: 08

Page 4 of 4

REMARKS:

since April 1981. I told him they looked like they had been in storage much longer, but he insisted-"No, they were returned that way and it had been a bad winter."

During this inspection, while discussing the problem of accepting unmanifested waste with Lee Huffaker, Mr. Huffaker said that "many of the returned product waste had been returned prior to November 19, 1980; therefore, they possibly did not come under the manifest requirement." At this, Mr. Cashner, the Plant Manager, said he did not care about the waste on site, as much as, the continuing problem of requiring his customers to manifest Hookers "returned product."

Mr. Cashner promised to write me a letter explaining Hooker's position on returned product not being a waste.

During this investigation I reviewed the U.S. EPA RCRA inspection report and corrected some of my responses on this form based on the information I had obtained during these three separate investigations. (May 14, 18 and 27, 1982).

Attached are three documents that Hooker gave me during this inspection in order to show they were working on getting compliance with RCRA.

Attachment A: Inter-Company Memorandum

Attachment B: Waste Manifests (May 26, 1982)

Attachment C: Purchase Agreement with Chemical Waste Management (1st page)

June 1, 1982 telephone call from Mr. Cashner:

On June 1, 1982 I received a call from Mr. Cashner. Mr. Cashner is sending me a letter stating why the returned "waste-product" is not a waste until Hooker makes the determination that they can't use or recycle the material. Mr. Cashner is carbon copying Joe Boyle of U.S. EPA Region V Chicago.

PROJECT	
01	MAJOR SOURCE
02	MINOR SOURCE
03	RESIDENCE
04	MEETING – CONFERENCE
05	TRAINING
07	
08	
09	
10	
00	OTHER (explain)

SURVEY ACTION		TYPE	NO.
01	EMISSION POINTS INVESTIGATED		
02	VISIBLE EMISSION EVALUATION		
03	SOURCE TEST (STAFF)		
04	SOURCE TEST (COMPANY)		
05	GRAB SAMPLE		
06	PICTURES TAKEN		
09			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
00	OTHER (explain)		

COMPLIANCE STATUS	
A.	IN COMPLIANCE
B.	UNKNOWN COMPLIANCE
C.	OUT OF COMPLIANCE NOT ON A SCHEDULE
D.	ON A SCHEDULE MEETING INCREMENTS
E.	ON A SCHEDULE, NOT MEETING INCREMENTS
F.	ON A SCHEDULE, NOT KNOWN IF MEETING INCREMENTS

10642

..RKER DIVISION / INTER-COMPANY MEMORANDUM | Attachment A

rec'd May 27, 198
by Linda Koivu

Date: May 14, 1982

From: J. E. Hutchison

Dept/Loc: Manufacturing-Morenci

Subject: RCRA Inspection

On May 14, 1982, Linda Koivuniemi, representative for the Michigan Department of Natural Resources, Air Quality Division, performed a RCRA inspection of the Morenci facility. Those asked to give their input were Richard Speed, Richard Fredrick, Leland Huffaker, and Joyce Hutchison.

Listed below are the items that were suggested by Ms. Koivuniemi to assist us in our RCRA compliance.

- Log dates of outgoing manifests and date of returned certificate of disposal and signed manifests.
- List of waste materials consisting of quality, quantity, and/or volume.
- Follow up RCRA training with employees, train Jose' Diccion.
- For our Waste Analysis Plan - keep a record and copies of all tests run on wastes, including Panel Department sludge. The records are to be kept at Morenci. An operating log must be kept as per Section 265.73.
- Institute a log for inspection of our fence that perimeters our waste material. This inspection should be done once a week, along with inspection of storage area as per Section 265.15.
- Review RCRA Plan annually.
- Store waste two drums wide with a suitable aisle to walk thru for inspections.
- All leaking containers must be transferred immediately to good containers, and all spills promptly and properly cleaned up.
- Submit Emergency Contingency Plan to local authorities, police chief and fire chief. A letter should accompany plan requesting their signature to confirm that they received such information.

Copies:

- Closure Plan - cost estimate must be updated once a year, by May 19. Be sure to date the cost estimate as per Section 265.75.

- Training of employees should be updated at least once per year and recorded as per Section 265.16.

- The RCRA Interim Status Manual prepared in 1981 by R. G. Speed and L. K. Huffaker, which addressed all of the above items as well as the complete Section 265, texts were most helpful to the inspector. This manual should be updated and reissued.

7:30 A.M.

WASTE DISPOSAL SHIPMENT:

DATE: May 26, 1982 Wed

TO: CHEMICAL WASTE MANAGEMENT, INC.
EMELLE FACILITY
P.O. BOX 55
EMELLE, ALABAMA 35459

ALABAMA HAZARDOUS WASTE MANIFEST NO. CWMA 40020

MICHIGAN WASTE DISPOSAL MANIFEST NO. MI 0095722

OXY METAL INDUSTRIES CORP. STRAIGHT BILL OF LADING/HAZARDOUS WASTE MANIFEST NO. 05081

TRANSPORTER:

CHEMICAL WASTE MANAGEMENT, INC.
3106 SYNDER-DOMER ROAD
SPRINGFIELD, OHIO 45502

Reg # No. 36361

Attachment B
rec'd May 27, 82
by Linda Koivunomi

PRODUCT NAME	PRODUCT CODE	CWCA WASTE CODE	NUMBER DRUMS	DRUM WEIGHT	TOTAL WEIGHT	LABELS REQUIRED
PLN 62R	01117	COLA66701	16	555	8880	3.16, 3.47 compound, Rust Prevent.
Chrome Waste	N/A	COLA66701	56	480	26880	3.16, 3.47 compound, Rust Prevent.
B785R	01571	COL A66693	8	460	3680	~~[illegible]~~, 3.8, 3.16 compound, Rust Prevent.
					39440	

STATE OF MICHIGAN

WASTE DISPOSAL MANIFEST

[X] Act 64 Waste (HAZARDOUS) [ ] Act 136 Waste (OTHER) MI 0095722

IDENTIFICATION

Generator's Name	Primary Transporter's Name	Treatment, Storage or Disposal Facility
Parker Div., Occidental Chemical Corp.	Chemical Waste Management, Inc.	Chemical Waste Management, Inc.
Site Address: 322 West Main Street, Morenci, MI 49256	Transporters Address: 3106 Snyder-Domer Road, Springfield, OH 45502	Facility Address: Emelle Facility, P.O. Box 55, Emelle, Alabama 35459
Phone Number: (517) 458-2221	Phone Number: (513) 969-8346	Phone Number: (205) 652-9531
Generator's Site EPA I.D. Number: MID058723857	Transporter's EPA I.D. Number: OHD000724161	Facility Site EPA I.D. Number: ALT000522464

If more than one Transporter is to be utilized, give the Name and EPA I.D. Number of each:

WASTE INFORMATION

LOT NO.	U.S. D.O.T. Shipping Name	D.O.T. Hazard Class	U.N./N.A. No.	Haz. Class Code	Container No.	Container Type	Form: Solid	Form: Liquid	Form: Gas	Form: Sludge	Weight or Volume	Units	Hazardous Waste Number
1.	Waste Compound, Rust Preventing	Corrosive Material	NA1760	02	72	DR		X			35760	LB	D001
2.	Waste Compound, Rust Preventing	Corrosive Material	NA1760	02	8	DR		X			3680	LB	D001
3.													
4.													
5.													
6.													

COMMENTS

Include Safety precautions and special handling instructions.

SID Number 2-146-02
SID Number 2-140-82

GENERATOR COMPLETES

GENERATOR CERTIFICATION: I certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and U.S. EPA. I further certify that the information contained on the manifest is factual. I understand that the failure to accurately report all information requested by the manifest constitutes a violation of 1979 PA64 and/or PA136. I further understand that this manifest may be used in administrative and court proceedings.

Generator Signature ① Richard G. Fredrick

Date Shipped MO. DAY YEAR: 05 26 88

TRANSPORTER COMPLETES

HAULER'S CERTIFICATION: I certify acceptance of the above identified wastes for transportation. I further certify that I shall deliver the hazardous wastes, together with this manifest, only to the destination specified by the generator on this manifest. I understand that this manifest can be used in administrative and court proceedings.

Transporter Vehicle I.D. No.: No. 1

Subsequent Transporter Vehicle I.D. No's:

Transporter Signature ②

Subsequent transporter(s) signature(s) ③

Date(s) Received:

If the shipment cannot be delivered, describe the reasons for non-delivery.

TSDF COMPLETES

TSDF CERTIFICATION: I certify receipt at this facility of the above identified wastes and that this facility is licensed to accept those wastes. I also certify that the wastes were accompanied by a manifest properly certified by both the generator and hauler and that this facility is the d[illegible]on indicated on the manifest. I understand that this manifest can be used in administrative and court proceedings.

TSDF Signature ④

Facility Site EPA I.D. Number

[ ] Accepted
[ ] Rejected

Date Received

Describe any significant discrepancies between manifest and shipment.

AIGHT BILL OF LADING/HAZARDOUS WASTE MANIFEST

Original - Not Negotiable

PER (GENERATOR)
Parker Division, Occidental Chemical Corp.
ESS 322 West Main Street

enci,

EPA I.D. NO. 46 47 MIDO 58723867 58
DATE 59 05 / 26 / 82 64
PHONE NO. 39 40 (517) 458-2221 49
STATE 34 35 MI 36
ZIP CODE 37 49256 41
PLACARDS: AFFIXED [ ] PROVIDED [X]

IAL INSTRUCTIONS:

STATE INSTRUCTIONS
ALL SPILLS MUST BE REPORTED TO MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM (517) 373-7660

CHARGES ARE TO BE PREPAID

is to certify that the herein-named materials are properly classified, described, packaged, marked, and labeled, and are in proper condition ransportation according to the applicable regulations of the Department of Transportation and the U.S. Environmental Protection Agency.

Richard G. Fredrick
SIGNATURE OF SHIPPER'S AGENT
DATE 05 /26 /82

TRANSPORTER (CARRIER)

NSPORTER 1 46
Chemical Waste Management, Inc.
DRESS 39
3106 Snyder-Domer Road
Y
Springfield, O
STATE 34 35 OH
ZIP CODE 36 37 45502 41

EPA I.D. NO. 21)000724161
22 PHONE NO. 31 (513 969-8346
32 DATE SHIPPED 37 05/26/82
SHIPPER NO. 17
18 Vehicle or Car Initials or No. 28 13/2-1917 0
TIME IN 7:00A
TIME OUT 9:00A
UTE 49 Chemical Waste Management
ME (PRINT) 49 Lynn Montgomery
ertify (or declare) that the materials in the quantities described below are received me for shipment to the destination below.
GNATURE Lynn Montgomery
DATE 10 15 5/26/82

TRANSPORTER 2 46
10
ADDRESS 69
40
CITY 42
STATE 66 67
ZIP CODE 68 69 73
38 EPA I.D. NO. 49
50 PHONE NO. 59 ( )
60 DATE SHIPPED 65 / /
29 SHIPPER NO. 36
37 Vehicle or Car Initials or No. 47
TIME IN
TIME OUT
ROUTE 49
NAME (PRINT) 49
I certify (or declare) that the materials in the quantities described below are received by me for shipment to the destination below
SIGNATURE
DATE 16 21 / /

CONSIGNEE (DISPOSER)

ONSIGNEE-DISPOSER 1 46
Chemical Waste Management, Inc.
DDRESS 39
Emelle Facility
P.O. Box 55
ITY
Emelle
STATE 34 35 Alabama
ZIP CODE 36 37 35459
EPA I.D. NO. 21 T000622464
22 PHONE NO. 31 (205) 652 9531
32 PERMIT NO. 36
I certify (or declare) that the materials in the quantities described below are received by me.
SIGNATURE
DATE 10 15 / /

CONSIGNEE-DISPOSER 2 46
10
ADDRESS 69
40
CITY 42
STATE 66 67
ZIP CODE 68 69 73
37 EPA I.D. NO. 48
49 PHONE NO. 58 ( )
59 PERMIT NO. 62
I certify (or declare) that the materials in the quantities described below are received by me.
SIGNATURE
DATE 16 21 / /

DESCRIPTION OF MATERIALS (INCLUDE PROPER SHIPPING NAME)	TOTAL QUANTITY	UNIT WT.	PACKAGING	HAZARDOUS MATERIAL	TYPE OF PACKAGES	HCC WASTE CODE			
10 43 Waste Compound, Rust Preventing Corrosive Material 66701 NA1760 (COL A ~~[illegible]~~)	44 52 35,760 LB	53 P	54 55 02	56 59 D007	60 68 37M	69 71 72	72 73	74 75 LQ	76 D81
Waste Rust Preventing Compound, Corrosive Material, NA 1760 (COl A 66693)	3,680 LB	P	02	D002	37M	8		LQ	D81

CARRIER: IN THE EVENT OF A SPILL CONTACT THE NATIONAL RESPONSE CENTER U.S. COAST GUARD 800 424 8802 FOR EMERGENCY ASSISTANCE. IN ADDITION TO OTHER REPORTING REQUIREMENTS UNDER THE LAW AND REGULATIONS, THE SHIPPER REQUIRES CARRIERS TO CALL CHEMTREC 800 424 9300 FOR ASSISTANCE AND TO REPORT ANY CHEMICAL DISCHARGE OR EXPOSURE

[illegible] the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, [illegible] agrees to carry to its usual

ALABAMA HAZARDOUS WASTE MANIFEST

CWMA No. 40[illegible]

IDENTIFICATION INFORMATION

	NAME	ADDRESS	PHONE	EPA ID CODE
GENERATOR	Parker Div., Occidental Chemical Corp.	320 West Main Street Moriaci, [illegible]	(517) 458-[illegible]	[illegible]
TRANSPORTER NO. 1	Chemical Waste Mgmt.	3135 Snyder-Troy Rd. Springfield, OH 45502	(513) 859-3346	OHD000[illegible]
TRANSPORTER NO. 2				
DISPOSER	Chemical Waste Management, Inc. Emelle Facility	P. O. Box 55 Emelle, Alabama 35459	205-652-9531	ALT000622464

WASTE INFORMATION

CONTAINER NO.	CONTAINER TYPE	DESCRIPTION/CLASS	TOTAL QUAN.	UNIT	EPA Hazardous Waste ID No.	CWMA WASTE CODE	WEIGHT
72	Drums	Waste Compound, Rust Preventing Corrosive Material	72	LB	D007	COL A5[illegible]01	35,760
3	Drums	Waste Compound, Rust Preventing Corrosive Material	3	LB	D007	COL A5[illegible]03	3,[illegible]

EMERGENCY INFORMATION

EMERGENCY NOS.: DISPOSER — (205) 652-9531 ; GENERATOR —( ) US COAST GUARD 1-800-424-8802

SPECIAL INSTRUCTIONS:

CERTIFICATION

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation, the U.S. Environmental Protection Agency:

[illegible] Fredrick Generator	Production Superintendent Title	05-25-82 Date

This is to certify acceptance of the hazardous waste shipment described above:

Transporter #1	Title	Date
Transporter #2	Title	Date

This is to certify acceptance of the hazardous waste shipment described above for treatment, storage or disposal:

Disposer	Title	Date

DISPOSAL INFORMATION

CWMA WASTE CODE	QUANTITY	UNIT	PROCESS CODE	LOCATION TRENCH	LOCATION LEVEL	LOCATION QUAD	COMMENTS

PRODUCER NO. 1

INVOICE

Chemical Waste Management, Inc.

3106 Snyder-Domer Road
Springfield, Ohio 45502
(513) 969-8346

Nº 03994

MO. DAY YR.
052682

MANIFEST NUMBER

Remit To:
Chemical Waste Management, Inc.
P. O. Box 833
Fremont, Ohio 43420

CUSTOMER P. O. #

SHIPPER (From) [illegible]

ADDRESS [illegible] STATE [illegible] COUNTY

DESTINATION (To) [illegible] PROCESSING SITE [illegible]

ADDRESS [illegible] STATE [illegible] COUNTY

HM	DESCRIPTION	# OF UNITS	UNIT PRICE	AMOUNT
	Waste Compound, Rust Preventing Corrosive Material Col A66701	72 Drums		
	Waste Compound, Rust Preventing Corrosive Material Col A66693	8 Drums		

INVOICE TOTAL

THIS IS TO CERTIFY THAT THE ABOVE NAMED ARTICLES ARE PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED, AND LABELED AND ARE IN PROPER CONDITION FOR TRANSPORTATION ACCORDING TO THE APPLICABLE REGULATIONS OF THE DEPARTMENT OF TRANSPORTATION AND THE ENVIRONMENTAL PROTECTION AGENCY.

[illegible] 5-6-87 SIGNATURE

SPECIAL COMMENTS

LEFT SITE | START LOAD | END UNLOADING | TOTAL TIME

START LOAD AT CUSTOMER'S SITE | END LOAD AT CUSTOMER'S SITE | TOTAL TIME

TRUCK | TRAILER [illegible] | TRACTOR [illegible] | DRIVER [illegible]

COPIES TO: Gold-*Shipper* / Pink-*Disposal Site* / Canary-*Hauler* / White-*Hauler*

OMI

OXY METAL INDUSTRIES CORPORATION

Chemical Waste Management, Inc.

2941 Kenny Road, Suite 220

Columbus, OH 43221

SHIP TO PLANT MARKED

	Dock No. 21441 Hoover Rd Warren, Mich. 48089
	29620 Parkway, Roseville, Mich. 48066
	12100 Shrykerman Hwy Madison Heights, Mich. 48071
XX	322 W. Main Street, Morenci, Mich. 49256
	75 River Road, Nutley, N.J. 07110
	5640 Knott Ave., Buena Park, Calif. 90620

REQUISITION

36361

P. O. NUMBER

If no P.O. number refer to Req. No.

Ins	F.O.B.	TAX	Ship Via	Notify	When Required	Promised	Date of P.O.
30	Morenci	Yes ☐ No ☐	Your Pick Up	R. Fredrick	5-26-82	5-26-82	5-26-82

Quantity	Description	Charge Ind.	Acct.	Dept.	Product Code or P.S.O. No.	Amount
	Pick up and transport material as listed below	02	565	503		
	as agreed in the National Purchasing Agreement					
	No. 100-0080, with Chemical Waste Management					
	and between Occidental Chemical Corporation					
	dated November 7, 1980.					
	Disposal of material to meet all government and					
	state requirements					
80	drums. consisting of the following material approved by CWM to be shipped 05-26-82					
72	drums COL A66001 - SID Number 2-146-82					
8	drums COL A66693 - SID Number 2-140-82					
	Michigan Manifest No. M 0095722					
	Alabama Hazardous Waste Manifest No. CWMA 40020					
	OMIC Straight Bill of Lading/Hazardous Waste Manifest No. 05001					
	Price approximately					$5,500

SIGNED BY [signature] DATE 5-26-82

Richard G. Fredrick

John D. Kashner

SS OTHERWISE AUTHORIZED, SHIP 0-50 POUNDS VIA U.P.S., OVER 50 POUNDS VIA

NOT INSURE. WHERE THE RATE IS DEPENDENT ON RELEASED VALUE, RELEASE E VALUE WHICH PRODUCES THE LOWEST FREIGHT CHARGES.
REIGHT SHIPPED ON ONE DAY MUST BE BILLED ON ONE SHIPPING DOCUMENT.

HEREBY CERTIFY THAT THE ARTICLES COVERED HEREBY ARE PURCHASED FOR USE OR SUMPTION IN INDUSTRIAL PROCESSING OR FOR RESALE AND THEREFORE ARE NOT TO SALES OR USE TAX.

ON DAY OF SHIPMENT, MAIL INVOICES IN TRIPLICATE, SHOWING OUR PURCHASE ORDER NUMBER, AND ORIGINAL BILL OF LADING OR OTHER SHIPPING DOCUMENTS TO:

OXY METAL INDUSTRIES CORPORATION
P.O. BOX 1273A, DETROIT, MICH. 48232

36361

THIS RELEASE IS SUBJECT TO TERMS AND CONDITIONS STATED ON BLANKET ORDER.

1001 (4/79)

RETAIN BY ORIGINATOR

Attachment C

rec'd May 27, 82 by Linda Koivunsemi

NATIONAL PURCHASING AGREEMENT

Summary of Corporate Agreement with CHEMICAL WASTE MANAGEMENT (CWM)

AGREEMENT NO: 100-0080

AGREEMENT TERM: November 7, 1980 - March 15, 1982 (under Revision)

SERVICES:
a) Hazardous Waste Disposal
b) Hazardous Waste Transportation
c) Major Environmental Clean-up Services
d) Lease of Waste Containers

PRICE: CWM will price services on bid basis, and pricing will be firm for the term of the agreement. (1 year)

PAYMENT TERMS: Net 30

FREIGHT TERMS:
a) CWM Equipment or CWM arranged Equipment - F.O.B. Shipping Point.
b) Hooker/Occidental Equipment - F.O.B. Delivery Point.

PROCEDURE: The intent of this National agreement is to simplify the execution of Waste Disposal services from a contractual/liability standpoint. The following procedure has been developed with, and is being circulated to CWM locations. This will enable CWM to perform transactions with Hooker/OXY Chemical locations in a consistent fashion. Additionally, the HCC Hazardous Waste Manifest procedure (which is an EPA mandated requirement) is to be followed once the business relationship has been established and waste disposal or transportation services are started.

Step 1: For wastes to be considered under the contract, a Generator's Waste Profile Sheet (Exhibit C) must be filled out and signed by either of the authorized HCC/OXY representatives shown on Exhibit B (authorized signatures and locations). Technical assistance is available from the local CWM representative or Hooker Chemical Environmental, Health & Safety staff if required. This form is then forwarded to CWM, from which will be developed dispoal and transportation pricing - (Note: Each individual Generator's Waste Profile Sheet will have its own unique Code No.)

RCRA Inspection Report

EPA Identification Number: MID 058723867

Installation Name: Parker Chemical

Location Address: 322 W. Main Street

City: Morenci State: MI 49256

Date of inspection: 8-13-86 Time of inspection (from) 10:40 (to) 11:45

Person(s) interviewed	Title	Telephone
Sy Kashner	Mgr Mfg.	517/458-2221

Inspector(s)	Agency/Title	Telephone
Lee Carter	MDNR Water Quality Specialist	517-322-1300

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

Send inspection reports to R. Speed.

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?	N/A			
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?	✓			Private + ADT
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?	✓			bldg locked during working hours
iv. operating and structural equipment (i.e. dikes, pumps, etc.)?	N/A			
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?	✓			
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?	✓			signed/dated
e. Did facility personnel receive the required training by 5-19-81?	✓			
f. Do new personnel receive required training within six months?	N/A			
g. Do personnel training records indicate that personnel have taken part in an annual review of initital training?	✓			none assigned to handle hazardous waste signed/dated with outline
6. If required, are the following special requirements for ignitable, reactive, or incompatible wastes addressed? 265.17				
a. Special handling?	✓			
b. No smoking signs?	✓			DO smoking
c. Separation and protection from ignition sources?	✓			corrosive

Section C: PREPAREDNESS AND PREVENTION: (Part 265 Subpart C)

Maintenance and Operation of Facility: 265.31	YES	NO	NI	Remarks
Is there any evidence of fire, explosion, or release of hazardous waste or hazardous waste constituent?		✓		
2. If required, does the facility have the following equipment: 265.32				
a. Internal communications or alarm systems?	✓			alarms/phone
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:

city/well water

3. Testing and Maintenance of Emergency Equipment: 265.33				
a. Has the owner or operator established testing and maintenance procedures for emergency 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?	✓			hospital/police fire

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?			N/A	None has occurred

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.)	N/A			Generates only
b. Are records of past shipments retained for 3 years?	N/A			
** 2. Does the owner or operator meet requirements regarding manifest discrepancies? 265.72	N/A			

** 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	N/A			not disposal

*** 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.)				
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?	✓			none has occurred
vi. All closure and post closure costs as applicable?	✓			
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?			N	
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.			N	

** Not applicable to owners or operators of on-site facilities that do not receive any hazardous from off-site sources.

	YES	NO	NI	Remarks
8. Has the owner or operator developed an outline of a comprehensive groundwater quality assesment program that is capable of determining: 265.93				
a. Whether hazardous waste or hazardous waste constituents have entered the groundwater?				
b. The rate and extent of migration of hazardous waste or hazardous waste constituents in the groundwater?				
c. The concentration of hazardous waste or hazardous waste constituents in the groundwater?				
*9. Has the owner or operator performed a statistical analysis of his groundwater monitoring data as required in 265.93(b)?			X	
*10. Was there a statistically significant increase (or pH decrease) detected in any well?			X	
a. If "yes," has the owner or operator responded in accordance with the procedures prescribed in 265.93 paragraphs c through f?			X	
Skip to number 14				
11. Has the owner or operator prepared a written groundwater monitoring waiver demonstration for the facility?				
a. Is the waiver demonstration maintained at the facility?				
b. Has the waiver demonstration been certified by a qualified geologist or geotechnical engineer?				

Note: Inspectors should request a copy of the waiver document.

c. Skip questions 12, 13, and 14.

*These requirements do not take effect until the first 6 months after November 19, 1982. The latest date for compliance with these requirements is May 19, 1983.

Sectir G - CLOSURE AND POST CLOSURE (rt 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?	✓			2085
v. schedule of closure activities?	✓			
c. Has closure begun?		✓		
*2. Post-Closure 265.118				
a. Is the post-closure plan available for inspection?		N/A		
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				

*plies 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	✓			
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?				

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. 12				
(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. _____

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	✓			

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:

JES
10-19-84
Code D

August 29, 1984

Mr. Richard G. Speed
Technical Superintendent
[redacted]
322 W. Main Street
Morenci, MI 49256

Re: [redacted]

Dear Mr. Speed:

On August 29, 1984 staff of the Department of Natural Resources conducted an investigation of your facility located at 322 W. Main Street in Morenci, Michigan to evaluate compliance of that facility with requirements of Subtitle C of the Resource Conservation and Recovery Act (RCRA), as amended.

My inspection revealed that your facility was in compliance with the RCRA requirements evaluated at the time of the inspection. Compliance with these requirements does not limit the applicability of other provisions of the RCRA regulations. Enclosed is a copy of the inspection report for your information.

If you have any questions regarding this matter, please feel free to contact me.

Sincerely,

HAZARDOUS WASTE DIVISION

Thomas C. Bailey
Water Quality Specialist
517-322-1687

TCB/mj

Enclosure

cc: Hazardous Waste Division
U.S. EPA - Region V

RCRA INSPECTION OVERSIGHT

I. Installation: [redacted] Chemical (Parker ~~Chemical~~ Division)

EPA ID.#: [redacted]

Check Either: [redacted] Major Installation

____ Non-Major Installation

Installation Activities:

✓ Generator

____ Transporter

✓ Treatment/Storage/Disposal Facility

Authorized State?: ____ Yes ✓ No

II. Inspector: Tom Bailey

Organization: Michigan DNR

Telephone: (517) 322-1687

III. Evaluator: Ron Kolzow

Organization: U.S. EPA

Telephone: (312) 886-5145

IV. Date of Inspection: [redacted] Time: (from) 10:00 (to) 12:00

V. Inspection Evaluation

A) Pre-inspection Preparation	Yes	No	Remarks
1) Did the inspector have a complete set of RCRA regulations with him?	✓		
2) Did the inspector review the Part A application or effective permit before beginning the inspection?	✓		

PLEASE FORWARD A COPY OF THE FRONT SHEET ONLY OF THIS EVALUATION FORM WITHIN 5 DAYS FROM THE DATE OF INSPECTION TO Ken Skahn, 5HW, STU #2. (THE ORIGINAL SHOULD GO TO THE STATE COMPLIANCE OFFICER FOR ENTRY INTO HWDMS AND FILING IN THE INSTALLATION COMPLIANCE FILE.)

	Yes	No	Remarks
3) Did the inspector have the appropriate personal safety equipment?	✓		
B) Owner/Operator Interview			
1) Did the inspector present an identity document showing the authority to perform RCRA inspections?	✓		MDNR ID
2) Did the inspector advise the owner/operator of the purpose of the inspection and briefly describe the agenda?	✓		
3) Was the inspector helpful to the owner/operator by giving explanations and guidance?	✓		
C) Document Inspection			
1) Documents reviewed by the inspector:			
a) Part A application or issued permit		✓	
b) Operator inspection log and schedule	✓		
c) Personnel training record	✓		
d) Operating record	✓		
e) Contingency plan	✓		
f) Waste analysis plan	✓		
g) Closure & Post Closure plan	✓		
h) Financial Instruments		✓	
i) Manifests	✓		
j) Ground Water Monitoring Reports			N/A
k) Other SPCC	✓		

	Yes	No	Remarks
2) Were documents reviewed thoroughly?	✓		
D) Facility Inspection			
1) Did the inspector observe all required items and correctly record the observations?	✓		
2) Did the inspector ask pertinent questions regarding the processes and wastes management practices used at the facility?	✓		
3) Did the inspector ask questions about non-regulated activities of the facility?	✓		
4) Did the inspector identify any activities which are regulated but not on the Part A or Permit?			N/A
E) Knowledge of the Regulations			
1) Was the inspector knowledgeable of RCRA regulations applicable to the facility?	✓		
2) Was the inspector aware of recent amendments to the regulations that may affect the conduct of this inspection?			N/A
3) Was the inspector able to answer questions accurately?	✓		
4) Did the inspector commit to get answers to questions that couldn't be answered during the inspection?	✓		
F) Completion of Inspection Forms			
1) Did the inspector fully complete the inspection forms during the inspection?	✓		

	Yes	No	Remarks
2) Did the inspector make adequate use of written comments to clarify the report?			Not observed
3) Were the inspector's comments factual observations rather than opinion?	✓		
4) Does the inspector's report accurately reflect your observations at the facility?	✓		

G) Remarks

1) What is your overall assessment of the inspection and the inspection report?

Inspection was thorough and well planned. Inspector knowledgable of facility prior to inspection.

2) What, if anything, would you recommend that the inspector do differently?

None

3) Additional remarks from other sections:

None

HST-005

PRC Environmental Management, Inc
233 North Michigan Avenue
Suite 1621
Chicago, IL 60601
312-856-8700
Fax 312-938-0118

HST-005

PRC

RCRA TREATMENT, STORAGE, AND DISPOSAL FACILITIES CORRECTIVE ACTION PRIORITIZATION

FINAL REPORT

ATTACHMENT 1

CUMULATIVE SCORING SUMMARY FOR 1,696 FACILITES

Prepared for

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Waste Programs Enforcement
Washington, D.C. 20460

Work Assignment No.	:	R05001
EPA Region	:	5
Site No.	:	Various
Date Prepared	:	September 30, 1994
Contract No.	:	68-W4-0007
PRC No.	:	070-R0500101PR
Prepared by	:	PRC Environmental Management, Inc.
Contractor Project Manager	:	Shin H. Ahn
Telephone No.	:	312/856-8700
EPA Work Assignment Manager	:	Kevin Pierard
Telephone No.	:	312/886-4448

contains recycled fiber and is recyclable

HENKEL CORPORATION, PARKER AND AMCHEN (MID 058 723 867)

Henkel Corporation, Parker and Amchen, formerly Parker Surface Treatment Products, produces metal-treating chemicals. The facility is located in Morenci, Michigan, and has been in operation since 1928. Extensive site contamination has been documented, probably as the result of improperly stored drums. These drums were removed in 1982. The facility is presently permitted to store 15,000 gallons in containers (S01) of D001, D002, D003, and D007 listed wastes. Henkel has submitted a closure plan for their container storage area.

The groundwater route was scored based on limited data indicating the presence of heavy metals such as lead, zinc, and cyanide in the aquifer of concern. The metals were contained in improperly stored, leaking drums. The groundwater is the drinking water source and wells are located 50 yards from the site.

Henkel does not maintain an NPDES permit. Heavy metals and PCBs were detected in Bean Creek, which runs along the site boundary. The contamination detected in the creek was probably the result of reported leaking barrels. The use of Bean Creek for recreation is assumed. The distance to a sensitive environment is greater than 2 miles from the site.

No observed release was scored for the air route. The facility does have an air operating permit. However, no permit violations have been documented. Drums located outdoors did not have covers and because baghouse dust fiber packs were strewn across the property. Several organics are stored in these drums. Residences are located within 1/4 mile of the facility.

On-site contamination from PCB and heavy metals was observed. The access to this site is unrestricted.

References:

Parker Chemical Co. 1988. Revised Closure Plan. May 12.

MDNR. 1985. CERCLA PA of Parker Surface Treatment Products, Morenci, Michigan.

EPA. 1990. RCRA Part A Permit and Compliance Files.

PRC. 1994. "NCAPS Information Request - Michigan." Received by Facsimile from MDNR on February 14.

PRC Environmental Management, Inc.
233 North Michigan Avenue
Suite 1621
Chicago, IL 60601
312-856-8700
Fax 312-938-0118

RCRA TREATMENT, STORAGE, AND DISPOSAL FACILITIES CORRECTIVE ACTION PRIORITIZATION

FINAL REPORT

VOLUME 2

NARRATIVES AND SCORING SHEETS FOR FACILITIES RANKED 1 THROUGH 56 (PAGES 134 THROUGH 197)

Prepared for

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Waste Programs Enforcement
Washington, D.C. 20460

Work Assignment No.	:	R05001
EPA Region	:	5
Site No.	:	Various
Date Prepared	:	September 30, 1994
Contract No.	:	68-W4-0007
PRC No.	:	070-R0500101PR
Prepared by	:	PRC Environmental Management, Inc.
Contractor Project Manager	:	Shin H. Ahn
Telephone No.	:	312/856-8700
EPA Work Assignment Manager	:	Kevin Pierard
Telephone No.	:	312/886-4448

contains recycled fiber and is recyclable

TABLE 1

SUMMARY OF PRIORITIZATION SCORES FOR RCRA TREATMENT, STORAGE, AND DISPOSAL FACILITIES
(NUMERICAL ORDER BY REGIONAL RANK)

RANK	SITE NAME AND EPA ID NO.	LOCATION CITY AND STATE	ROUTES M	GW	SW	AIR	SITE	SCORES DATES	PRIORITY	COMMENTS
1	U.S.S. LEAD REFINERY, INC. IND 047030226	EAST CHICAGO, IN	87.36	100.00	68.41*	76.47*	100.00*	08/09/91	H	
2	OCONOMOWOC ELECTROPLATING CO. WID 006100275	ASHIPPUN, WI	78.77	100.00*	68.41*	11.76	100.00*	07/26/91	H	
3	PPG INDUSTRIES INC. OHD 004198917	BARBERTON, OH	77.19	100.00*	68.09*	43.01	85.71*	03/18/94	H	
4	DOW CHEMICAL COMPANY MID 000724724	MIDLAND, MI	75.93	100.00*	68.09	32.89	85.71*	08/27/91	H	
5	SESTER AND SON ILD 106923360	KIRKLAND, IL	75.91	100.00	72.34*	21.63	85.71*	09/29/92	H	
6	MATHESON GAS PRODUCTS, INC. ILD 005115753	JOLIET, IL	75.20	84.62*	66.89	31.37	100.00*	03/28/94	H	
7	IRONTON COKE CORPORATION OHD 082739632	IRONTON, OH	72.14	100.00*	57.61*	12.33	85.71*	08/27/91	H	
8	RCA CORPORATION OHD 043736644	CIRCLEVILLE, OH	70.78	100.00*	45.33	25.30	85.71*	08/28/91	H	aka CONSUMER ELECTRONIC HOLDINGS INC.
9	STANLEY WORKS-STANLEY TOOL DIV MID 099124299	FOWLERVILLE, MI	70.61	100.00*	49.75	11.01	85.71*	12/23/92	H	
10	U.S. NAVAL WEAPONS (CRANE) IN5 170023498	CRANE, IN	70.38	100.00*	87.23	19.19	42.86*	08/26/91	H	
11	HARGRO FLEXIBLE PACKAGING IND 040299828	EDINBURGH, IN	70.24	100.00*	37.49	31.37	85.71*	09/22/93	H	aka REXHAM
12	HENKEL CORP. PARKER AND AMCHEN MID 058723867	MORENCI, MI	69.33	88.46*	60.23*	20.66	85.71*	03/18/94	H	aka OCCIDENTAL CHEMICAL
13	ADDISON PRODUCTS MID 005056304	JONESVILLE, MI	68.61	96.15*	40.01	25.30	85.71*	06/26/92	H	

* AN OBSERVED RELEASE WAS SCORED FOR THIS ROUTE.

M - MIGRATION GW - GROUND WATER SW - SURFACE WATER AIR - AIR SITE - ON SITE

PRIORITY:

L - LOW M - MEDIUM H - HIGH

HST-006

Work Plan
Groundwater Sampling
Henkel Surface Technologies Facility
Morenci, Michigan
MID 058 723 867

Dragun Corporation

Scientists ▪ Engineers

Work Plan
Groundwater Sampling
Henkel Surface Technologies Facility
Morenci, Michigan
MID 058 723 867

Prepared for
Mr. Jack Garavanta, Director
Regulatory Affairs and Product Acceptance
Henkel Corporation - Henkel Surface Technologies
32100 Stephenson Highway
Madison Heights, Michigan 48071

Prepared by
The Dragun Corporation
30445 Northwestern Highway, Suite 260
Farmington Hills, Michigan 48334
Phone: (248) 932-0228
Fax: (248) 932-0618
Project #1004-06

February 26, 2001

K:\1991\1004-06\1004-06 GWWORKPLAN1.DOC

Dragun Corporation

30445 Northwestern Hwy. • Suite 260 • Farmington Hills, MI, USA 48334 • 248-932-0228 • FAX 248-932-0618

February 26, 2001

Mr. Jack Garavanta, Director
Regulatory Affairs and Product Acceptance
Henkel Corporation - Henkel Surface Technologies
32100 Stephenson Highway
Madison Heights, Michigan 48071

SUBJECT: Work Plan for Groundwater Sampling
Former Morenci Facility
Morenci, Michigan
Project #1004-06

Dear Mr. Garavanta:

Enclosed is the Work Plan to conduct one groundwater-sampling event at the Henkel Surface Technologies (HST) property located in Morenci, Michigan. This Work Plan was prepared in response to the December 7, 2000, meeting between representatives of the United States Environmental Protection Agency (USEPA) Region 5 and HST.

During that meeting, it was decided that in lieu of signing a Voluntary Corrective Action Agreement or entering into a Consent Order, HST would conduct a groundwater-sampling event to evaluate current groundwater quality at the site. This information would be used to further establish that the USEPA's Environmental Indicator, migration of contaminated groundwater, has been achieved. The USEPA has already agreed that the Environmental Indicator concerning human exposures at the site is under control and has been achieved.

As discussed in the meeting with the USEPA, the Work Plan has been prepared utilizing the general format and including many components of the USEPA Region 5 Model Quality Assurance Project Plan (QAPP). However, since the sampling event is relatively minor (i.e., four monitoring wells and a single event), full compliance with the Model QAPP was not necessary.

If you have any questions regarding this information, please contact me at (248) 932-0228.

Sincerely,

THE DRAGUN CORPORATION

Jeffrey A. Bolin, M.S., CHMM
Environmental Scientist

Allan Clifford Lawton, M.Sc.
Geologist

Attachment

JAB/lrs

K:\1991\1004-06\1004-06 GWWORKPLAN1.doc

TABLE OF CONTENTS

TITLE	PAGE
LIST OF FIGURES	2
LIST OF APPENDICES	3
INTRODUCTION	4
BACKGROUND	4
Interim Soil Report - Closure Activities	5
Groundwater Investigation Report - Closure Activities	5
Soil Characterization Report	5
Groundwater Sampling Report	6
Limited Soil Removal Report	6
Meeting with USEPA Region 5	7
SCOPE OF WORK	8
Task 1: Collection and Laboratory Testing of Groundwater Samples	8
Task 2: Preparation of a Summary Report	9
PROJECT SCHEDULE	10
PROJECT MANAGEMENT AND ORGANIZATION	10

LIST OF FIGURES

FIGURE	DESCRIPTION
1	Site Location Map
2	Site Map

LIST OF APPENDICES

APPENDIX	DESCRIPTION
A	STANDARD OPERATING PROCEDURES GROUNDWATER SAMPLING
B	STANDARD OPERATING PROCEDURES CHAIN-OF-CUSTODY PROCEDURES
C	LABORATORY QAPP
D	STANDARD OPERATING PROCEDURES DECONTAMINATION PROCEDURES
E	STANDARD OPERATING PROCEDURES CALIBRATION PROCEDURES
F	RESUMES

INTRODUCTION

At the request of Mr. Jack Garavanta of Henkel Surface Technologies (HST), The Dragun Corporation prepared this Work Plan to conduct groundwater sampling at the HST facility located in Morenci, Michigan (see Figure 1). This Work Plan was prepared in response to the December 7, 2000, meeting between representatives of the United States Environmental Protection Agency (USEPA) Region 5 and HST.

During that meeting, it was decided that in lieu of signing a Voluntary Corrective Action Agreement or entering into a Consent Order, HST would conduct a groundwater-sampling event to evaluate current groundwater quality at the site. This information would be used to further establish that the USEPA's Environmental Indicator, migration of contaminated groundwater, has been achieved. The USEPA has already agreed that the Environmental Indicator concerning human exposures at the site is under control and has been achieved.

As discussed in the meeting with the USEPA, the Work Plan has been prepared utilizing the general format and including many components of the USEPA Region 5 Model Quality Assurance Project Plan (QAPP). However, since the sampling event is relatively minor (i.e., four monitoring wells and one event), full compliance with the Model QAPP was not necessary.

This Work Plan presents the locations to be sampled and the proposed sampling and laboratory methodologies that will be utilized to assess this issue.

BACKGROUND

During 1992, HST submitted to the MDEQ a revised Closure Plan outlining the closure of seven hazardous waste storage pads at the former HST Morenci Facility. During 1995, HST submitted two reports (1) Interim Soil Report - Closure Activities, Parker Amchem, Hazardous Waste Storage Pads, Morenci, Michigan Facility, dated January 31, 1995; and (2) Groundwater Investigation Report - Closure Activities, Parker Amchem, Hazardous Waste Storage Pads, Morenci, Michigan Facility, dated March 27, 1995. In addition, HST submitted a Soil Characterization Report, dated October 27, 1997, and a Groundwater Sampling Report, dated January 28, 1999. A summary of these reports with respect to metals in soil is presented in the following text:

Interim Soil Report - Closure Activities

The soil investigation was conducted in accordance with the Approved Closure Plan dated November 24, 1993, addressing the closure of seven former hazardous waste storage areas. The soil investigation was conducted on April 5 - 9, 1994, and July 29, 1994.

Review of laboratory data revealed that copper, chromium, lead, and zinc were detected at concentrations in excess of the site-specific background concentrations in several soil samples. None of the soil samples contained concentrations of these metals in excess of their respective Michigan Department of Natural Resources (MDNR) Type B direct contact criteria. In addition, assessment of the leaching potential of soil indicated that all of the metals could remain on site at these concentrations.

Groundwater Investigation Report - Closure Activities

With respect to metals in groundwater, the groundwater investigation consisted of (1) four quarterly groundwater sampling events conducted during April 1994, July 1994, October 1994, and January 1995; and (2) the collection and laboratory testing of 19 groundwater samples for the presence of dissolved chromium, dissolved copper, dissolved lead, and dissolved zinc.

Review of the results of the groundwater testing revealed that these metals were not detected at concentrations in excess of the MDNR Type B cleanup criteria.

Soil Characterization Report

HST submitted a Soil Characterization Report dated October 27, 1997, that documented soil sampling activities and test results with respect to soil sampling conducted during August 1997. The soil testing was conducted to determine whether concentrations of lead and chromium detected in soil at the subject property constituted a hazardous waste. Based on the results presented in the Soil Characterization Report, the MDEQ agreed that concentrations of chromium and lead in soil at the subject property do not constitute a hazardous waste.

The 1992 Closure Plan established site-specific background concentrations for metals in soil and indicated that soil at the hazardous waste storage areas would be cleaned up to "Type B criteria" (site-specific background). Consequently, although the MDEQ concluded that concentrations of chromium and lead did not constitute a hazardous waste, in the MDEQ's opinion, additional investigation was necessary to confirm that concentrations of chromium, copper, lead, and zinc, which were historically detected in soil at the subject property, will not leach to groundwater; thus, meeting Type B criteria as specified in the Closure Plan.

Based on a conference call on December 10, 1997, between representatives of the MDEQ and HST, the MDEQ stated that if HST conducted two groundwater-sampling events, the results of which would show that metals are not leaching into groundwater, the Type B criteria established in the Closure Plan would be met.

Groundwater Sampling Report

HST submitted a Groundwater Sampling report dated January 28, 1999, that documented groundwater sampling activities and test results with respect to two groundwater sampling events conducted during August and November 1998. The groundwater testing was conducted to confirm concentrations of chromium, copper, lead, and zinc detected in soil at the subject property were not leaching into groundwater.

Based on results presented in the Groundwater Sampling Report, the MDEQ concurred in a letter dated March 8, 1999, that these metals in soil at the subject property are not leaching to groundwater. Therefore, with the exception of Hazardous Waste Storage Area #6 that contained soil with concentrations of lead in excess of the direct contact cleanup criterion of 400 mg/kg, the other storage areas are closed. Closure of Hazardous Waste Storage Area #6 would require a limited removal of soil containing lead at concentrations above 400 mg/kg or the installation of an exposure barrier.

Limited Soil Removal Report

The Dragun Corporation on behalf of Mr. Jack Garavanta, HST, directed limited soil removal activities at the HST facility located in Morenci, Michigan. The purpose of the limited soil removal was to remove soil from the former Hazardous Waste Storage Area #6 that contained concentrations of lead in excess of the residential and commercial direct cleanup criterion of 400 milligrams per kilogram (mg/kg).

This limited soil removal was conducted in response to the MDEQ - WMD letter dated March 8, 1999, regarding the previously submitted Groundwater Monitoring Report dated January 28, 1999. In the letter, the MDEQ concurred that metals in soil at the subject property are not leaching to groundwater. Consequently, only soil with metal concentrations above direct contact cleanup criteria require removal to meet the "Type B" cleanup criteria presented in the Revised Closure Plan approved during 1992. Based on previous testing at the subject property, only a limited amount of soil in former Hazardous Waste Storage Area #6 required removal to meet these criteria.

To address these concerns, The Dragun Corporation directed the removal of soil from former Hazardous Waste Storage Area #6 and collected verification samples to confirm that a sufficient volume of soil was removed. These activities were conducted between August 19, 1999, and

October 15, 1999, in accordance with the approved Work Plan dated April 14, 1999.

In general, these activities included (1) excavation and off-site disposal of approximately 1,560 cubic yards of soil and (2) collection and laboratory testing of 85 verification soil samples for the presence of total lead. The final excavation measured approximately 160 feet by 80 feet and varied in depth between approximately two and four feet. Approximately 1,560 cubic yards of soil were excavated from this area and disposed off site at a Type II landfill. The excavation was backfilled with clean sand fill material.

All of the applicable verification samples contained concentrations of lead less than the residential direct contact criterion of 400 mg/kg. Based on this information and the previously submitted reports to the MDEQ, the closure requirements outlined in the revised Closure Plan submitted to the MDEQ during 1992 have been obtained.

Meeting with USEPA Region 5

A meeting was conducted between representatives of the USEPA and HST at the USEPA Region 5 offices in Chicago, Illinois on December 7, 2000. The meeting was conducted to discuss potential Corrective Action (CA) activities pursuant to the Resource Conservation and Recovery Act (RCRA) at the former Morenci, Michigan facility owned by HST.

The following significant topics were discussed at the meeting:

- USEPA policy and agenda regarding Achievement of Environmental Indicators (EIs)

  "Current Human Exposures Under Control"
  "Migration of Contaminated Groundwater Under Control"

- Current status and achievement of EIs at the subject site

- Use of cleanup criteria pursuant to Part 201 of Michigan's Natural Resources and Environmental Protection Act (NREPA)

- Flexibility of the language in the Draft Voluntary Corrective Action Agreement (VCAA)

- Michigan Department of Environmental Quality (MDEQ) role and responsibility

As a result of these discussions, the USEPA and HST agreed to the following:

- Tom Manning will contact the MDEQ to discuss the status of site closure relating to soils.

- Postponement of the implementation of the VCAA between USEPA and HST.

- HST will provide a letter describing a course of action to address an additional groundwater-sampling event at the subject property. A separate Work Plan will be prepared describing the groundwater sampling and testing and will be provided for the USEPA's review. The Work Plan will be developed consistent with the Region 5 USEPA QAPP Policy dated May 1998.

The following Scope of Work presents the locations to be sampled and the proposed sampling and laboratory methodologies that will be utilized during the additional groundwater-sampling event.

SCOPE OF WORK

To assess the presence of volatile organic chemicals (VOCs) in groundwater at the subject property, one groundwater-sampling event will be conducted. The proposed scope of work will require the completion of the following tasks:

Task 1: Collection and Laboratory Testing of Groundwater Samples

To evaluate the groundwater quality at the HST site, The Dragun Corporation will sample groundwater from the four existing monitoring wells (see Figure 2). The sampling will be conducted in a manner consistent with previous sampling events. Groundwater sampling is further discussed in the following text.

Monitoring Well Sampling. Groundwater samples will be collected from the four monitoring wells at the site. The screen lengths for the four monitoring wells range in length from 10.6 to 23.5 feet. An inflatable packer will be installed in each of the wells to limit the well screen exposed to the groundwater to five feet in length. The packer will be positioned in each of the monitoring wells with a stainless steel wire, such that the upper five feet of the well screen is exposed. The exposed components of the packer are composed of Buna-N and stainless steel. The packer will be inflated using an air pump.

To ensure that representative groundwater samples are collected, temperature, conductivity, Eh, and pH measurements will be collected following the removal of each well volume. A groundwater sample will be collected following stabilization of field chemistry and removal of at least three well volumes. Field data sheets detailing field chemistry measurements, preservation methods, and sampling observations will be prepared for each well sampled. Additionally, site observations will be recorded in a site dedicated field book. Additional groundwater sampling procedures are presented in the attached Standard Operating Procedure (SOP, see Appendix A).

Each monitoring well will be sampled using a positive displacement pump dedicated to each well or with a disposable, high-density polyethylene (HDPE) bailer and polypropylene rope. Groundwater samples will be collected in Series 200, ICHEM laboratory containers (or equivalent) using standard USEPA sampling protocols, chain-of-custody documentation, and sample shipment procedures. Chain-of-custody procedures are presented in the attached SOP (See Appendix B).

Groundwater samples will be submitted to KAR Laboratories, Inc. (KAR) of Kalamazoo, Michigan (Laboratory procedures are outlined in the Laboratory QAPP [see Appendix C), and tested for the presence of VOCs utilizing USEPA method 8260. One duplicate groundwater sample will be collected from one monitoring well and tested for the presence of VOCs utilizing USEPA method 8260. One trip blank will be prepared and tested for the presence of VOCs utilizing USEPA method 8260.

Prior to sampling each well, the sampling and field chemistry equipment will be decontaminated with a solution of phosphate-free detergent and distilled water, followed by a distilled water rinse. Additional decontamination procedures are presented in the attached SOP (see Appendix D).

Decontamination water and purge water will be placed on the ground surface adjacent to the soil boring. Additionally, field chemistry equipment will be calibrated according to the manufactures procedures. Calibration procedures for the field chemistry equipment are presented in the attached SOP (see Appendix E)

Task 2: Preparation of a Summary Report

Following completion of groundwater sampling and receipt of laboratory results, The Dragun Corporation will prepare a summary report. This report will present the methods of investigation, the results of the investigation, and an interpretation of the groundwater results with respect to the cleanup criteria pursuant to Part 201 of the Natural Resources and Environmental Protection Act, Public Act 451, 1994, as amended.

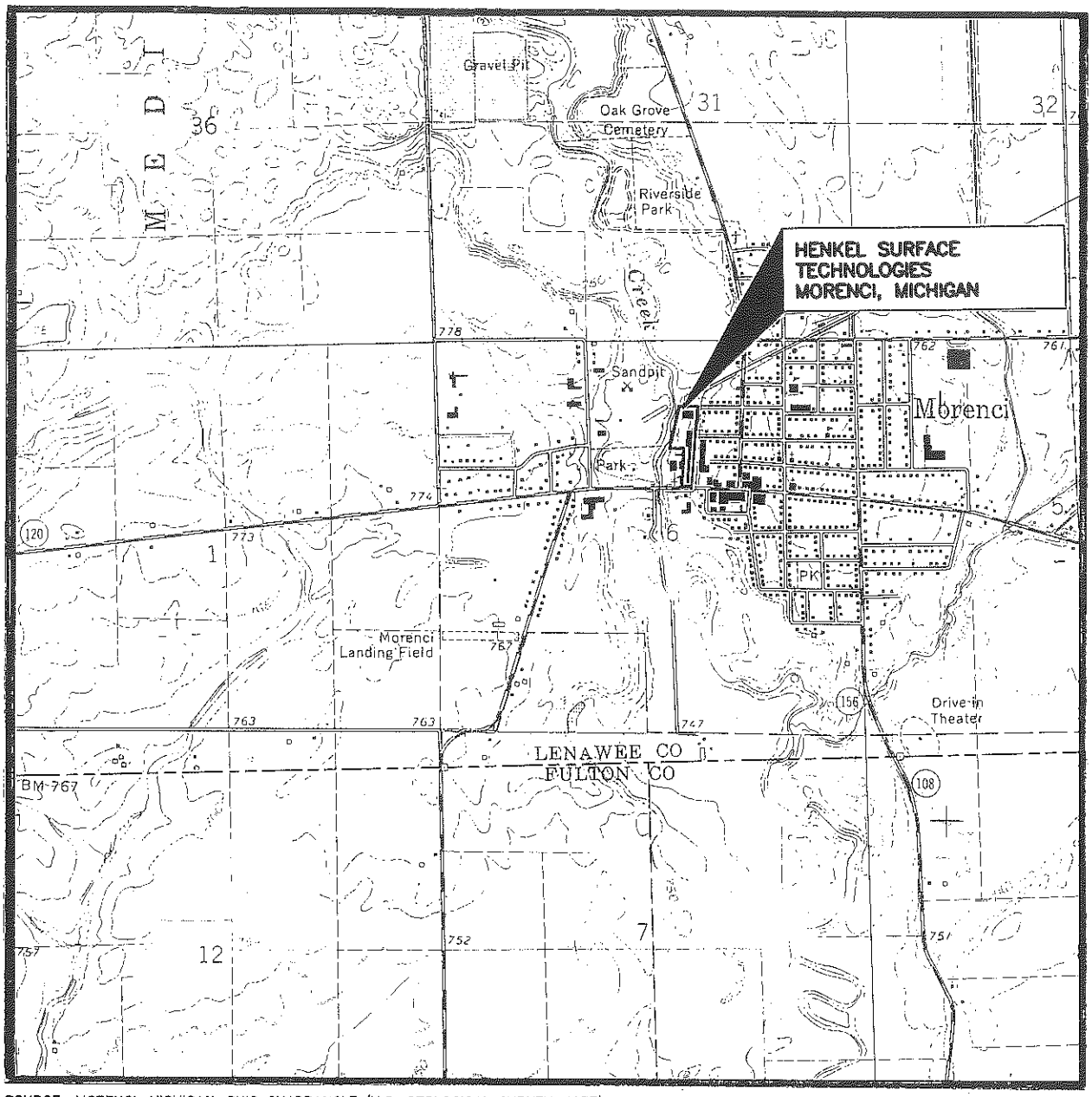
PROJECT SCHEDULE

The Dragun Corporation will schedule work associated with this project upon receipt of written authorization from HST and following written approval of this Work Plan from the USEPA. The Dragun Corporation anticipates fieldwork for the groundwater-sampling event will begin within ten working days following authorization. The field activities associated with this scope of work will take approximately one day to complete. Laboratory testing is anticipated to take approximately two to three weeks. The summary report will be completed three to four weeks following receipt of all of the laboratory data.

PROJECT MANAGEMENT AND ORGANIZATION

Mr. Jeff Bolin will be The Dragun Corporation's Project Manager. As project manager Mr. Bolin will be responsible for the daily management, coordination of project activities, and report preparation. Mr. Allan Clifford Lawton will be The Dragun Corporation's Field Coordinator (Field Leader) and will provide technical support for field activities. Mr. Ryan Brzak and Mr. Eric Olson will be The Dragun Corporation's technical field associates. Resumes are presented in Appendix F.

FIGURES



SOURCE: MORENCI, MICHIGAN–OHIO QUADRANGLE (U.S. GEOLOGICAL SURVEY, 1977)

N

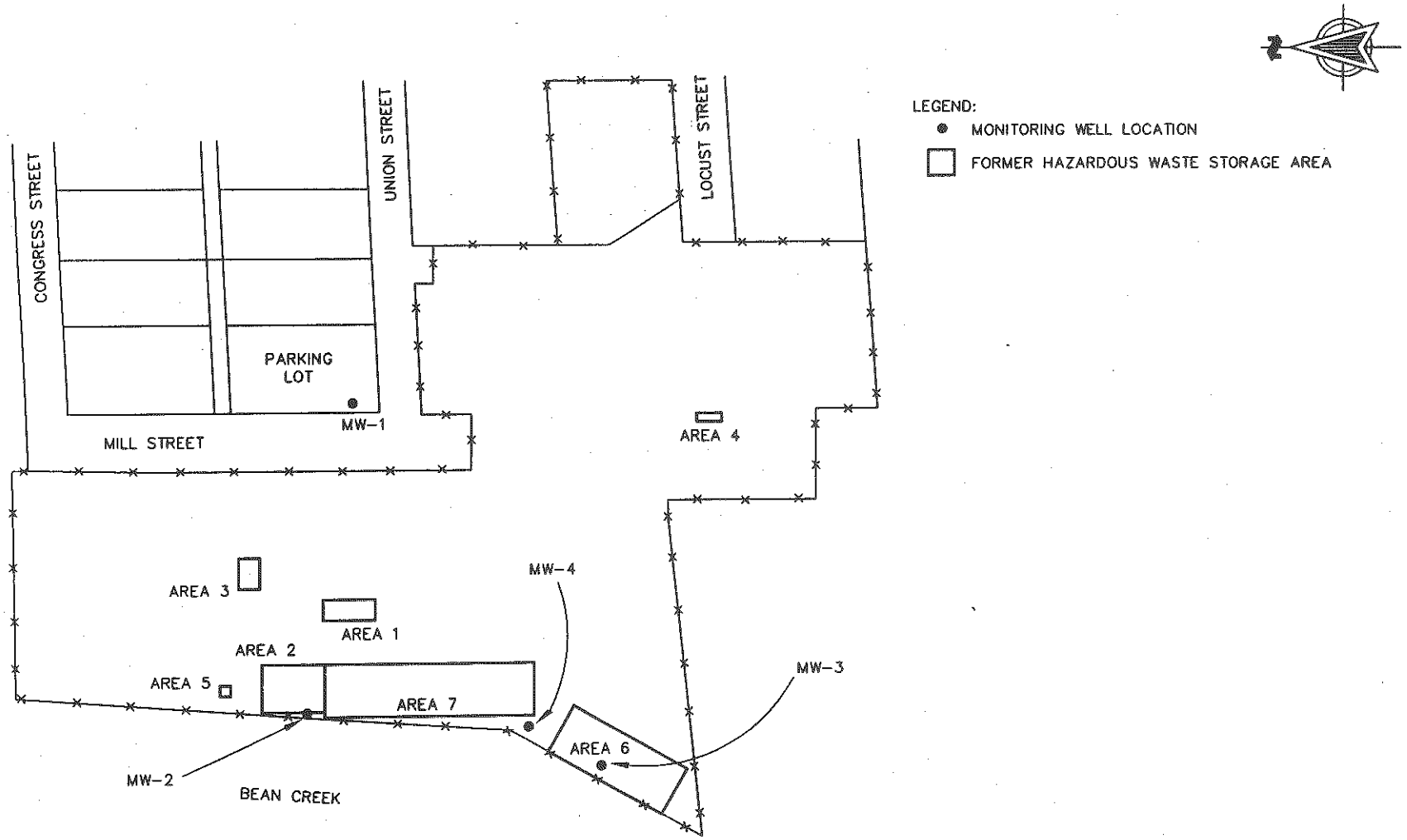
SCALE

0 2000 FEET

FIGURE 1
SITE LOCATION MAP
HENKEL SURFACE TECHNOLOGIES
MORENCI, MICHIGAN

1004\02-22-95\1004-01 02/23/95 T.S.

The Dragun Corporation



SCALE

0 150 FEET

FIGURE 2
MONITORING WELL LOCATION MAP
HENKEL SURFACE TECHNOLOGIES
MORENCI, MICHIGAN

The Dragun Corporation

1004-18 [LAYOUT1] 02.14.01

APPENDIX A

STANDARD OPERATING PROCEDURES
GROUNDWATER SAMPLING

GROUNDWATER SAMPLING FROM WELLS

1.0 Purpose:

The purpose of this document is to establish recommended standard operating procedures for the collection of groundwater from wells.

2.0 Procedures:

1. Prior to sampling the well, the Myron L Company Ultrameter (Model 6P) should be calibrated for conductivity and pH.

2. The well should be opened at least 30 minutes or until equilibrium prior to taking a water level measurement. Several successive measurements should be taken to make certain that the water level has equilibrated.

3. Using the diameter of the well, calculate the well volume for purging:

   1-inch diameter well = 0.041 gal/ft.

   2-inch diameter well = 0.16 gal/ft.

   3-inch diameter well = 0.37 gal/ft

   4-inch diameter well = 0.67 gal/ft.

   0.53-inch diameter (Geoprobe) = 43.38 ml/ft.

   Calculate the well volume by multiplying the feet of water in the well by one of the above conversion factors. (NOTE: The above conversion factors **do not** include the volume of the annulus of the well. If you need to purge the annulus also, you must determine the conversion factor.)

4. Starting with an initial sample of the stagnant water and with every successive volume, all field chemistry parameters (i.e., temperature, conductivity, pH, Eh) should be noted on a groundwater sampling sheet.

5. At least three well volumes need to be purged from the well prior to sampling. It may be necessary to purge more than three well volumes, if the chemistry was not stable after the three volumes.

6. Care should be taken when pouring the sample from a bailer or other device not to agitate the sample and cause a loss of volatile organic contaminants.

7. The samples should be collected in the following order:

   - Volatile organics
   - Purgeable organic carbons
   - Purgeable organic halogens
   - Total organic halogens
   - Total organic carbon
   - Base neutrals/Acid extractables
   - TPHC/Oil & Grease
   - PCBs/Pesticides
   - Total metals
   - Dissolved metals
   - Phenols
   - Cyanide
   - Sulfate and Chloride
   - Turbidity
   - Nitrate and ammonia
   - Preserved inorganics
   - Radionuclides
   - Non-preserved inorganics
   - Bacteria

8. Samples should immediately be placed in a cooler with ice. If necessary, the sample should be field filtered prior to preservation.

9. As soon as possible, the sample(s) should be delivered to the laboratory for analysis.

3.0 Records and Documentation:

All field chemistry must be recorded on a groundwater-sampling sheet with the other appropriate information. It should be noted in a field book when the Myron L Company Ultrameter (Model 6P) is calibrated.

4.0 Special Notes:

None.

5.0 Applicable Standards and References:

USEPA; "Handbook - Groundwater Volume II: Methodology", 1991.

NJDEPE; "Field Sampling Procedures Manual", 1992.

APPENDIX B

STANDARD OPERATING PROCEDURES
CHAIN-OF-CUSTODY

SAMPLE CUSTODY

1.0 Purpose:

Sample custody procedures are designed to comply with EPA requirements, ASTM standards for sample control, and New Jersey Department of Environmental Protection and Energy Field Sampling Procedures Manual. Stringent chain-of-custody procedures are followed to maintain and document sample possession.

2.0 Procedures:

The field personnel are personally responsible for the care and custody of the samples until they are personally delivered to the contracted analytical laboratory or entrusted to a carrier.

Chain-of-custody forms are completed with all the necessary information prior to sample shipment. These forms are filled out in a legible manner. Sample identification information is provided on a sample label that is securely attached to the sample bottle.

Transferring Samples

The following procedures are used when transferring custody of samples.

1. Samples will be accompanied by a chain-of-custody form. When transferring samples, the individuals relinquishing and receiving them sign, date, and note the time on the record.

2. All shipments are accompanied by the chain-of-custody form identifying the contents. The white and yellow copies accompany the shipment and the field sampler retains the pink copy.

Sample Shipment Procedures

The following procedures will be followed when shipping samples for laboratory analysis.

1. Samples requiring refrigeration will be promptly chilled with ice or "Blue Ice" to a temperature of approximately 40E Fahrenheit (4E Celsius) and packaged in an insulated cooler for transport to the laboratory.

2. The shipping containers are sealed with tape, if being shipped by overnight courier. Tape will not be used if a laboratory representative that supplies their own cooler and ice picks up samples.

3. Shipment will be via overnight courier, hand delivery, or laboratory courier.

Field Documentation Responsibilities

It will be the responsibility of the project site manager to secure all documents produced in the field (i.e., geologists' daily logs, soil boring logs, sampling sheets, communications, etc.) at the end of each day.

3.0 Records and Documentation:

All records of the sample custody (pink copies from Chain-of-custody forms) must be given to the project manager. These copies will remain on file.

4.0 Applicable Standards and References:

ASTM D 3370-82 – "Standard Practices for Sampling Water"- ASTM Standards on Environmental Sampling, 1995, pp 110-116.

ASTM D 4220-89 – "Standard Practices for Preserving and Transporting Soil Samples"- ASTM Standards on Environmental Sampling, 1995, pp 174-183.

ASTM D 4448-85a – "Standard Guide for Sampling Groundwater Monitoring Wells" - ASTM Standards on Environmental Sampling, 1995, pp 220-233.

ASTM D 4840-88 – "Standard Practice for Sampling Chain of Custody Procedures"- ASTM Standards on Environmental Sampling, 1995, pp 333-337.

New Jersey Department of Environmental Protection and Energy, 1992. "Field Sampling Procedures Manual" - Chapter 7 - Sample Collection, pp 133- 207.

APPENDIX C

LABORATORY QAPP

KAR *Laboratories, Inc.*

STATEMENT OF QUALIFICATIONS

January 19, 2001

KAR Laboratories, Inc.
4425 Manchester Road
Kalamazoo, MI 49001
616-381-9666
Fax: 616-381-9698
email: info@karlabs.com
http://www.karlabs.com

TABLE OF CONTENTS

1. LABORATORY PROFILE / HISTORY

2. LABORATORY CERTIFICATIONS, LICENSES AND CERTIFICATES

3. LABORATORY ORGANIZATION CHART

4. KEY PERSONNEL

5. STAFF CURRICULUM VITAE

6. FACILITIES & MAJOR EQUIPMENT

7. CAPABILITIES, METHODS & STANDARD OPERATING PROCEDURES

8. CLIENT LIST

1. A BRIEF PROFILE OF KAR LABORATORIES

KAR Laboratories, Inc. was established in 1956 in Kalamazoo, Michigan, in response to a need for a variety of laboratory services not available to area companies. The firm became incorporated in 1983 as part of an expansion of services emphasizing the environmental demands in today's society. Through the years many changes have occurred as services were developed, expanded, or modified to meet the needs of clients. Early work emphasized industrial formulations, quality control, forensic investigations and agricultural chemicals. Later, clinical analyses became an important area of service. Starting in the mid 1970's, environmental analyses began to be required by many clients. This began a shift of services that continued throughout the 1980's culminating in KAR Laboratories, Inc. becoming a full service environmental testing laboratory. In 1999, pharmaceutical testing using GLP protocols were first offered. Now, most KAR projects are still related to environmental concerns or regulations, while pharmaceutical testing is expanding at a rapid pace.

KAR Laboratories, Inc. is proud to continue building on a solid reputation for cooperation and reliable analytical testing. The firm has served clients in many states and several foreign countries, but primarily serves southern Michigan. Services have been provided to all types of industry, municipalities, consultants and commercial establishments as well as to individuals and regulatory agencies. The company will consider any project, but will undertake only those where it is felt a beneficial service can be rendered to KAR's client.

KAR Laboratories, Inc. offers a wide range of analytical services. KAR also assists clients in interpretation of data, in development of potential solutions to problems, and in selection of the best solution for their problem. Consultation or development services are available on an individual basis. KAR Laboratories' sole business is to provide service to fulfill the needs of its clients.

2. CERTIFICATIONS, LICENSES, AND CERTIFICATES

CERTIFICATIONS:

KAR Laboratories, Inc. maintains certification from the Michigan Department of Environmental Quality (Lab No. 0047), Indiana State Department of Health (Lab No. C-MI-04) and the U.S. Environmental Protection Agency (Lab No. MI00041), expires 9/10/2003, for the following:

- Biological Examination
- Total Trihalomethanes
- Regulated and Unregulated Volatile Organic Chemicals
- Regulated and Unregulated Synthetic Organic Chemicals
- Regulated and Unregulated Inorganic Chemicals

U.S. Army Corps of Engineers Validated (Expires January 11, 2003) for:

- Anions in water
- Cyanide in water & solids
- Oil & Grease in water
- Organochlorine Pesticides in water & solids
- PCB's in water & solids
- Semivolatile Organics in water & solids
- TAL Metals in water & solids
- TPH - DRO/GRO in water & solids
- TRPH in water
- Volatile Organics in water & solids

LICENSES & CERTIFICATES:

- Controlled Substance License issued by the State of Michigan, Board of Pharmacy, expires 6/30/2001
- Controlled Substance Registration Certificate issued by U.S. Department of Justice, Drug Enforcement Administration, expires 12/31/2001
- FDA Registration Number 18187500

STATE OF MICHIGAN

JOHN ENGLER, Governor

DEPARTMENT OF ENVIRONMENTAL QUALITY

"Better Service for a Better Environment"

REGISTERED MAIL: P.O. BOX [illegible], LANSING MI [illegible]

INTERNET: [illegible]

RUSSELL J. HARDING, Director

REPLY TO:

LABORATORY SECTION
DRINKING WATER & RADIOLOGICAL
PROTECTION DIVISION
3350 MARTIN L. KING JR. BLVD
PO BOX [illegible]
LANSING MI 48909-7775

September 6, 2000

Mr. William Rauch
KAR Laboratories, Inc.
1425 Manchester Road
Kalamazoo, MI 49001

Laboratory No: 0047

Dear Mr. Rauch:

SUBJECT: Laboratory Certification

The information that was prepared and submitted to this office by NSF International and your laboratory has been reviewed. Based on this information, the Department of Environmental Quality (DEQ) has certified your laboratory for compliance monitoring under the Safe Drinking Water Act, 1976 PA 399, as amended. Our certification for your laboratory by parameter is as follows:

Microbiology
Full Certification:

Total Coliform (via Standard Methods, 19th Edition, Method 9222 B)
E.coli (via the EC -MUG Method)
Total Coliform and E.coli (via Standard Methods, 19th Edition, Method 9223B)
Heterotrophic Bacteria (via Standard Methods, 19th Edition, Method 9215 B)

Inorganic Chemistry
Full Certification:

Cyanide (via Standard Methods, 19th Edition, Method 4500-CN-C and E)
Nitrate and Nitrite (via EPA Method 353.2)
Fluoride and Sulfate (via U.S. EPA Method 300.0)
Mercury (via U.S. EPA Method 245.2)
Sodium (via U.S. EPA Method 200.7)
Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Copper, Lead, Nickel, Selenium, and Thallium (via U.S. EPA Method 200.8)

Organic Chemistry
Full Certification:

Regulated and Unregulated Volatile Organic Chemicals and Total Trihalomethanes (via U.S. EPA Method 524.2)
Ethylene Dibromide (EDB) and Dibromochloropropane (DBCP) (via U.S. EPA Method 504.1)
2,4-D, 2,4,5-TP, Dalapon, Dicamba, Dinoseb, Pentachlorophenol and Picloram (via U.S. EPA 515.1)
Aldrin, Alachlor, Atrazine, Benzo(a)pyrene, Butachlor, Butylbenzylphthalate, Chlordane, Di(2-ethylhexyl)adipate, Di(2-ethylhexyl)phthalate, Dieldrin, Endrin, Heptachlor, Heptachlor Epoxide, Hexachlorobenzene, Hexachlorocyclopentadiene, Lindane, Metolachlor, Methoxychlor, Metribuzin, Propachlor, Simazine, and Toxaphene (via U.S. EPA Method 525.2)

Our certification of KAR Laboratories, Inc., for the microbiological and chemical examination of drinking water is contingent on your continued compliance with state and feceral regulations. Additionally, your certification is contingent on the submission of acceptable performance evaluation sample results from a State-approved supplier on a running 12-month basis.

Our certification of your facility will expire on September 10, 2003. At your option, you may display the enclosed certificates.

If you have questions or comments regarding this information, please contact me, at 517-335-8812.

Sincerely,

George L. Krisztian
Laboratory Certification Officer
Laboratory Section
Drinking Water and Radiological
Protection Division

gk/cc

Enclosures

cc: Mr. Thomas Bruursema, NSF International
DEQ DWRPD Plainwell District Office
Kalamazoo County Health Department

State of Michigan
Department of Environmental Quality
Drinking Water and Radiological Protection Division

CERTIFIES:

KAR LABORATORIES, INC.

HAS BEEN EVALUATED AND IS APPROVED FOR THE FOLLOWING PARAMETERS FOR THE ANALYSIS OF DRINKING WATER:

FULL CERTIFICATION

INORGANIC CHEMISTRY

Cyanide
Nitrate and Nitrite
Fluoride and Sulfate
Mercury
Sodium
Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Copper, Lead, Nickel, Selenium, and Thallium

This certification requires maintenance of an acceptable quality assurance program, use of approved methodology and equipment, and satisfactory performance on evaluation samples. This certification does not guarantee validity of data generated.

September 10, 2003
Expiration Date

Director, Laboratory Services

September 6, 2000
Issuance Date

Laboratory Certification Officer

0047
Laboratory Number

EQC 2510 10/98
Authority: Act 399, PA 1976

State of Michigan
Department of Environmental Quality
Drinking Water and Radiological Protection Division

CERTIFIES:

KAR LABORATORIES, INC.

HAS BEEN EVALUATED AND IS APPROVED FOR THE FOLLOWING PARAMETERS FOR THE ANALYSIS OF DRINKING WATER:

FULL CERTIFICATION

MICROBIOLOGY

Total Coliform
E.coli
Heterotrophic Bacteria

This certification requires maintenance of an acceptable quality assurance program, use of approved methodology and equipment, and satisfactory performance on evaluation samples. This certification does not guarantee validity of data generated.

September 10, 2003
Expiration Date

Director, Laboratory Services

September 6, 2000
Issuance Date

Laboratory Certification Officer

0047
Laboratory Number

BOC 2510 10/98
Authority: Act 399, PA 1976

State of Michigan
Department of Environmental Quality
Drinking Water and Radiological Protection Division

DEQ

CERTIFIES:

KAR LABORATORIES, INC.

HAS BEEN EVALUATED AND IS APPROVED FOR THE FOLLOWING PARAMETERS FOR THE ANALYSIS OF DRINKING WATER:

FULL CERTIFICATION

ORGANIC CHEMISTRY

Total Trihalomethanes (TTHMs), Regulated and Unregulated Volatile Organic Chemicals (VOCs)
Ethylene Dibromide (EDB) and Dibromochloropropane (DBCP)
2,4-D, 2,4,5-TP, Dalapon, Dicamba, Dinoseb, Pentachlorophenol and Picloram
Aldrin, Alachlor, Atrazine, Benzo(a)pyrene, Butachlor, Butylbenzylphthalate, Chlordane, Di(2-ethylhexyl)adipate, Di(2-ethylhexyl)phthalate, Dieldrin, Endrin, Heptachlor, Heptachlor Epoxide, Hexachlorobenzene, Hexachlorocyclopentadiene, Lindane, Metolachlor, Methoxychlor, Metribuzin, Propachlor, Simazine, and Toxaphene

This certification requires maintenance of an acceptable quality assurance program, use of approved methodology and equipment, and satisfactory performance on evaluation samples. This certification does not guarantee validity of data generated.

September 10, 2003
Expiration Date

Director, Laboratory Services

September 6, 2000
Issuance Date

Laboratory Certification Officer

0047
Laboratory Number

EQC 2310 10/98
Authority: Act 196, PA 1978

Frank L. O'Bannon
Governor

Richard D. Feldman, M.D.
State Health Commissioner

Indiana State Department of Health

An Equal Opportunity Employer

CERTIFIED MAIL NO. Z 349840204
RETURN RECEIPT REQUESTED

August 25, 1998

William Rauch
KAR Laboratories, Inc.
4425 Manchester Road
Kalamazoo, Michigan 49001

Dear Mr. Rauch:

The Laboratory Improvement Section, Environmental Laboratory Division, Laboratory Resource Center, Indiana State Department of Health, has reviewed your request to become a certified laboratory for chemical analyses of drinking water in the state of Indiana, pursuant to the requirements under the Safe Drinking Water Act (SDWA) 42 U.S.C. 300f et seq., the National Primary Drinking Water Regulations (NPDWR) 40 CFR 141 and 142, and the Indiana Primary Drinking Water Regulations (IPDWR) 327 IAC 8-2. Your submittal package contained certification information for the state of Michigan and copies of performance evaluation (PE) reports for the most current USEPA Water Supply (WS) studies from NERL-Ci

Based on Indiana's policy of approving laboratories that are certified for drinking water analyses by states whose programs are approved by USEPA, and based on the results of the WS studies provided, the ISDH issues the following determination, pursuant to IC 4-21.5-3-5

- The laboratory is hereby granted full certification for: *antimony, arsenic, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium, thallium, copper, lead, nitrate, nitrite, the regulated volatile organic compounds, vinyl chloride, total trihalomethanes, 2,4-D, 2,4,5-TP, alachlor, atrazine, benzo(a)pyrene, chlordane, dalapon, DBCP, di(2-ethylhexyl)adipate, di(2-ethylhexyl)phthalate, dinoseb, EDB, endrin, heptachlor, heptachlor epoxide, hexachlorobenzene, hexachlorocyclopentadiene, lindane, methoxychlor, pentachlorophenol, picloram, simazine and toxaphene* (as indicated on the Michigan certification letter or certificate).

- The laboratory has been assigned laboratory number C-MI-04. This number is to be used on all reports used for compliance monitoring of public water supplies to the Indiana Department of Environmental Management.

The expiration of Indiana certification will be the date that the laboratory's Michigan certification expires (September 10, 2000). The status of Indiana certification will be reviewed, and if necessary, downgraded by Indiana, when: (1) an on-site evaluation by Michigan is completed and

a report of unsatisfactory performance is submitted by Michigan to the Indiana certification officer, or (2) the laboratory does not successfully analyze two (2) WS PE samples in one year.

In addition, the laboratory is required to provide the certification officer with the following documents, as they become available: (1) any change in certification status or expiration date of the Michigan certificate, and (2) reports of USEPA WS PE sample analysis.

If you wish to seek review or stay of the effectiveness of this determination, pursuant to IC 4-21.5-3-7, you are required to submit, in writing, a petition, on or before September 14,1998, to:

Office of the Secretary
Indiana State Department of Health
2 North Meridian Street
Indianapolis, IN 46204

The petition for review or stay must include facts demonstrating that:

- The petitioner is a person to whom the determination is specifically directed;
- The petitioner is aggrieved or adversely affected by the agency determination; or,
- The petitioner is entitled to review under any law.

Questions concerning the certification status granted by this letter should be directed to Philip Zillinger, Chemistry Laboratory Certification Officer, Laboratory Improvement Section, 317/233-8071.

Dated at Indianapolis, Indiana, this 25th day of August, 1998.

Sincerely,

Arthur L. Logsdon

Arthur L. Logsdon
Assistant Commissioner
Consumer Regulatory Services Commission

A copy of this letter was sent on the above date, postage prepaid first class mail, to:

Stacy Jones
Indiana Department of Environmental Management
Drinking Water Branch
P O Box 7148
Indianapolis, IN 46207-7148

JOHN ENGLER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF CONSUMER & INDUSTRY SERVICES

J 647948

BOARD OF PHARMACY

ANALYTICAL LABORATORY
CONTROLLED SUBSTANCE LICENSE

DEAN EDWARD HAAN
KAR LABORATORIES
4425 MANCHESTER RD
KALAMAZOO MI 49001

PERMANENT I.D. NO.	EXPIRATION DATE	
5304001823	06/30/2001	4995373

THIS DOCUMENT IS ONLY ISSUED UNDER THE LAWS OF THE STATE OF MICHIGAN

CONTROLLED SUBSTANCE REGISTRATION CERTIFICATE

UNITED STATES DEPARTMENT OF JUSTICE

DRUG ENFORCEMENT ADMINISTRATION

WASHINGTON, D.C. 20537

Sections 304 and 1008 (21 U.S.C. 824 and 958) of the Controlled Substances Act of 1970, as amended, provide that the Attorney General may revoke or suspend a registration to manufacture, distribute, dispense, import or export a controlled substance.

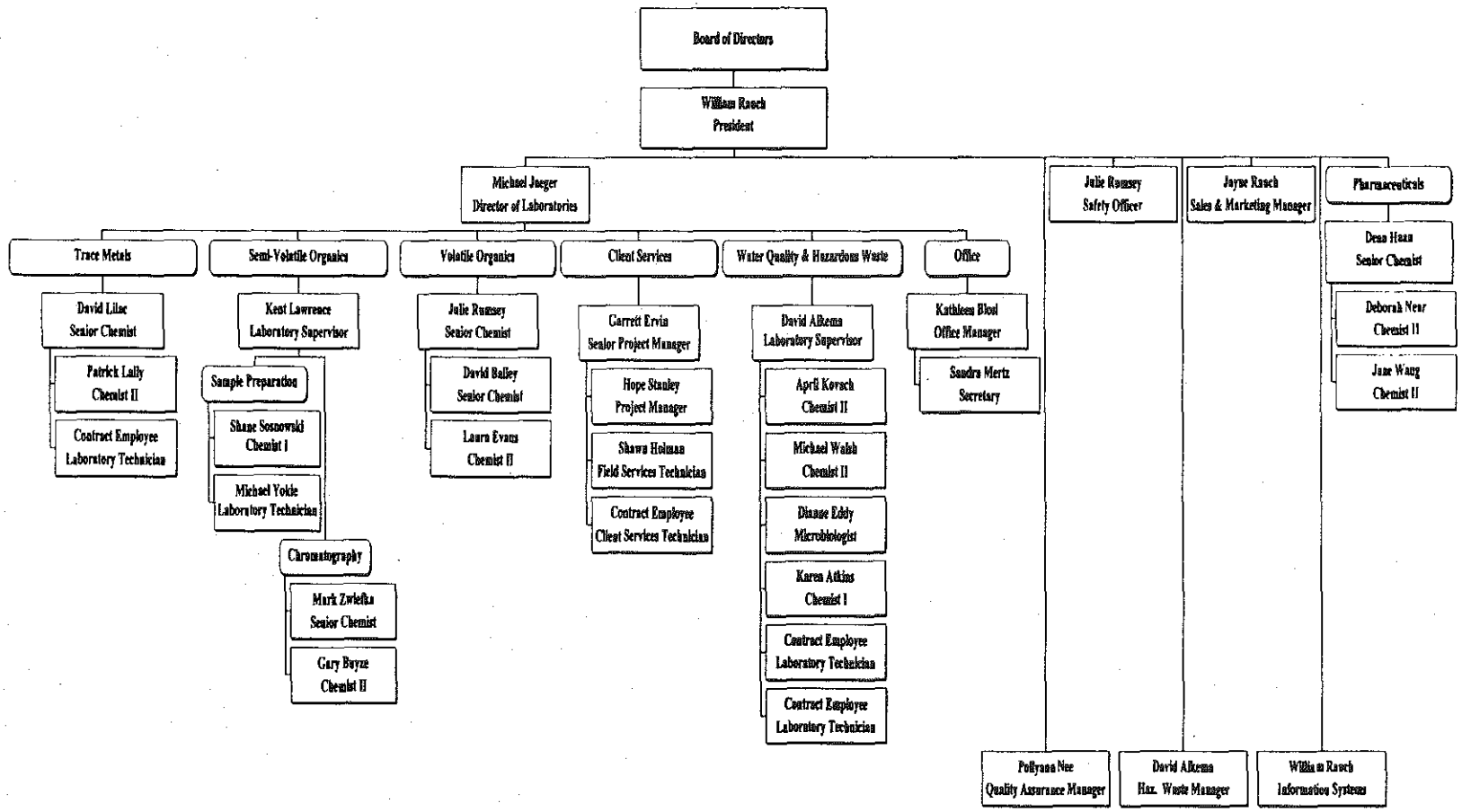
DEA REGISTRATION NUMBER	THIS REGISTRATION EXPIRES	FEE PAID

SCHEDULE	BUSINESS ACTIVITY	DATE ISSUED

THIS CERTIFICATE IS NOT TRANSFERABLE ON CHANGE OF OWNERSHIP, CONTROL, LOCATION, BUSINESS ACTIVITY, OR VALID AFTER THE EXPIRATION DATE.

KAR Laboratories, Inc.

ORGANIZATION CHART



January 19, 2001

4. KEY PERSONNEL

Employee	Title	Years @ KAR	Years in Industry
William G. Rauch	Corporate President	15	21
Michael J. Jaeger	Corporate Vice President Director of Laboratories	7	21
Pollyann W. Nee	Quality Assurance Manager		24
David R. Alkema	Laboratory Supervisor Water Quality/Haz. Waste Laboratory	11	20
Garrett J. Ervin	Senior Project Manager	6	6
Julie A. Rumsey	Senior Chemist Volatile Organic Laboratory	14	17
David L. Bailey	Senior Chemist Volatile Organic Laboratory	2	14
Dean. E. Haan	Senior Chemist	3	10
Kent T. Lawrence	Laboratory Supervisor Semi-volatile Org. Laboratory	6	14
David B. Lilac	Senior Chemist Metals Laboratory	10	13

Curriculum Vitae for key technical staff follow.

nonresponsive

nonresponsive

nonresponsive

nonresponsive

[redacted]

nonresponsive

nonresponsive

nonresponsive

nonresponsive

8. CLIENT LIST

Sector	Representative Client
Manufacturing	
Auto/Transportation	General Motors Corporation, Checker Motors, Canadian National Railroad
Automotive	Eaton Corporation, Denso (Nippondenso), Atwood Automotive, Michigan Auto Compressor
Chemicals	Bofors-Nobel, Cytec, Sun Chemical, Haviland
Electronics	General Electric, Stryker Instruments, Abex/NWL Richard-Allen Scientific
Food	Coca-Cola, General Foods, Kraft Foods, Post Cereal Division, The Kellogg Co., Ore-Ida, Ralston Foods, Shafer Bakeries, Swift Eckrich, The Minute Maid Co.
Metal	Sturgis Foundry, Marshall Brass, Durametallic, Bear Metals, Wells Aluminum, Parker Hannifin, Roto-Finish
Paper	James River, Simpson, Crown Vantage, Georgia-Pacific, International Paper, Mead Products, Fox River, Menasha
Petroleum	Lakeside Refining, Knapp Oil, Brandli Oil, IMI Petroleum
Pharmaceuticals	Pharmacia & Upjohn, Inc., Abbott Laboratories, Perrigo, Mead Johnson, Proctor & Gamble
Plastic	Triple S Plastics, Preferred Plastics, T-H Plastics
Wood Products	Weyerhaeuser
Consulting	
Attorneys	Warner Norcross & Judd, Bush & Bush
Environmental	RMT, Dragun, SEC Donohue, GeoTrans, Bay West
Engineering, Civil	Barr Eng., Delta Eng., Wightman, The Austin Co., CEI
Engineering, Sanitary	Dames & Moore, EarthTech, Ayres, Lewis, Norris & May
Geology/Hydro.	American Hydrogeology Corp., Envirologic Technologies
Industrial Hygiene	BDN, DeLisle Assoc., Clayton Environmental
Limnology	LimnoTech, Kieser & Associates
Paper Industry	NCASI
Pharm/Toxicology	MPI Research, HRP
Commercial	
Banks	First of America, Standard Federal, Great Lakes Bancorp, Old Kent

KP066	01	HPLC analysis of GI262570X in 0.5% HPMC/0.1% Tween 80 dosing solutions	5/2/2000
KP067	02	HPLC Analysis of Myristamine Oxide and Cetyl Betaine in C31G Oral Rinse	9/13/2000
KP068	02	HPLC Analysis of Decabromodiphenyl Oxide (DBDPO) in Corn Oil	9/14/2000
KP069	02	HPLC analysis of CTDP 31,003 dosing suspensions in 1% Methyl Cellulose Formulation	6/12/2000
KP070	02	GC Analysis of VP 63843 in Rat Plasma with Electron Capture Detection	8/4/2000
KP071	02	HPLC analysis of CTDP 30,251 dosing suspensions in 1% Methyl Cellulose Formulation	8/15/2000
KP072	04	HPLC Analysis of NAPVSIPQ in Buffered Dose Formulation	9/14/2000
KP073	02	HPLC analysis of Huperzine-A deionized water dose formulations	9/25/2000
KP074	01	HPLC analysis of CTDP 31,107 dosing suspensions in 0.9% Saline Solution Formulation	9/14/2000
KP075	02	HPLC analysis of CTDP 31,003 dosing solutions in 0.9% Saline solution Formulation	9/13/2000
KP076	01	HPLC analysis of GW427353B in Solution formulation	9/19/2000
KP077	01	HPLC Analysis of GI181771X Suspension Formulation	9/25/2000

KP024	01	Pharmaceutical SOP Deviation Request Procedure	
KP025	01	Recording, Editing, Reviewing and Retention of Data	9/25/2000
KP026	01	Monitoring and Maintenance of Refrigerators and Freezers	
KP027	01	Rounding and Reviewing of Numerical Results	9/20/2000
KP028	01	Documentation Using GxPs	9/25/2000
KP029	01	Pharmaceutical Internal Audit/Inspection Program	
KP030		Assignment of Primary Data Packets	
KP050	Rev 01	HPLC analysis of VP50406 dosing suspensions in Methyl Cellulose Formulation	9/27/1999
KP051	Rev02	Extraction and analysis of VP50406 in Rat or Dog Plasma	1/26/2000
KP052	Rev.01	HPLC analysis of AG-7352 dosing solutions in Sorbitol vehicles	12/13/1999
KP053	Rev01	Analysis of CTDP 31,107 in Deionized Water	5/15/2000
KP054	Rev 02	Analysis of VX-745 in PEG400 suspension	1/19/2000
KP055	05	Analysis of VX-745 in dog plasma	8/31/2000
KP056	02	HPLC analysis of VP 63843 dosing suspensions in Methyl Cellulose Formulation	8/30/2000
KP057	03	HPLC Analysis of Myristamine Oxide and Cetyl Betaine in C31G Gel Formulation with Refractive Index Detection	9/13/2000
KP058	02	GC Analysis of VP 63843 in Dog Plasma with Electron Capture Detection	8/10/2000
KP059	02	HPLC Analysis of Emtricitabine in 0.5% Methylcellulose Suspension with UV Detection	4/20/2000
KP060	01	HPLC analysis of CTDP 31,107 dosing suspensions in 2% Methyl Cellulose Formulation	4/5/2000
KP061	02	HPLC analysis of CTDP 31,003 dosing suspensions in 2% Methyl Cellulose Formulation	6/12/2000
KP062	03	HPLC analysis of CTDP 30,251 dosing suspensions in 2% Methyl Cellulose Formulation	9/14/2000
KP063	02	HPLC analysis of GBR 12,909 dosing suspensions in 2% Methyl Cellulose Formulation	4/7/2000
KP064	02	HPLC analysis of ALT-711 deionized water dose formulations	8/21/2000
KP065	02	HPLC analysis of Naltrexone in Dog Muscle Tissue	8/30/2000

KAR PHARMACEUTICAL SOP INDEX

September 25, 2000

SOP No.	Last Rev. Ver:	Title	Date Issued
KP001	03	Run Criteria: Formulation Acceptance Criteria and Guidelines	8/11/2000
KP002	01	Validation of Bioanalytical Assays	2/14/2000
KP003	01	Run Criteria: Bioanalytical Acceptance Criteria and Guidelines	2/14/2000
KP004	03	Validation of Formulation Assays	8/16/2000
KP005	01	Calibration of Pharmaceutical Chromatography Systems	2/17/2000
KP006	01	Calibration of Detectors Used for Pharmaceutical Analysis	2/21/2000
KP007	01	Calibration of HPLC Pumps Used for Pharmaceutical Analysis	2/21/2000
KP008	01	Calibration of HPLC Autosamplers Used for Pharmaceutical Analysis	2/21/2000
KP009	01	Generation and Maintenance of Pharmaceutical SOPs	2/25/2000
KP010	01	Preparation, Storage and Disposal of Quality Control Standards for Bioanalytical Studies	3/6/2000
KP011	01	Calibration of Pipettes Used for Pharmaceutical Analysis	3/6/2000
KP012	01	Glossary of Terms	9/21/2000
KP013	02	Training File Generation and Maintenance	9/21/2000
KP014	02	Reagent Preparation Documentation and Labeling Requirements	8/16/2000
KP015	01	Installation, Operation and Performance Qualification (IQ/OQ/PQ)	5/17/2000
KP016	02	Calibration of Gas Chromatographs with Electron Capture Detection	9/20/2000
KP017	01	Investigation and Reporting of Out of Specification Results	6/16/2000
KP018	01	Calibration of Analytical and Top-Loading Balances	6/14/2000
KP019	02	Receipt, Log-in and Handling of Pharmaceutical Samples	8/16/2000
KP020	01	Change Control	6/20/2000
KP021	01	Calibration of pH Meters	
KP022	01	Calibration of Thermometers	
KP023	01	Naming Conventions Used for Pharmaceutical Analysis	8/1/2000

KG463	Dry Weight Solids at 103-105°C
KG464	Fixed and/or Volatile Solids at 550°C
KG466	Total, Fixed and/or Volatile Dissolved Solids at 180°C
KG468	Total, Fixed and/or Volatile Suspended Solids at 103-105°C
KG470	Sulfate, Manual, Turbidimetric
KG475	Sulfate, Automated, Turbidimetric
KG530	Sulfides, total and dissolved
KG540	Sulfide, reactive/releasable
KG545	Dissolved Copper(I) and/or Copper(II) in Water by the Bathocuproine Method
KG550	Turbidity using UV-VIS Spectrophotometer
KG600	Determination of Fluoride, Chloride, Nitrite, Nitrate, Bromide, Phosphate and/or Sulfate in Water by Ion Chromatography
KW220	The Management of Laboratory Waste: Client Samples

KG251	The Determination of Total Cyanide in Water
KG260	Cyanide, Weak Acid Dissociable
KG270	Cyanide, Weak and Dissociable
KG290	Fluoride
KG300	Formaldehyde
KG310	Hardness, Calculation Method
KG311	Hardness, EDTA Titration Method
KG320	Petroleum Hydrocarbons
KG340	MBAS
KG350	Ammonia-Nitrogen by Ion-specific-Electrode
KG355	Ammonia-Nitrogen by Flow Injection Analysis
KG360	Nitrate-Nitrogen, Electrode
KG365	Nitrate/Nitrite-Nitrogen, Automated Continuous Flow
KG370	Nitrite-Nitrogen, Manual, Colorimetric
KG380	Chloride by Lachat
KG390	Determination of Organic Nitrogen and/or Total Kjeldahl Nitrogen Using the Hach Digesdahl Apparatus
KG392	Determination of Organic Nitrogen and/or Total Kjeldahl Nitrogen Using the Scientific Block Digestor
KG395	Total Nitrogen
KG400	Oil and Grease
KG405	TPH or Oil & Grease in Water by the Partition/Infrared Method
KG410	Dissolved Oxygen
KG425	Soil pH
KG430	Phenolics, Spectrophotometric, manual 4-AAP with Distillation
KG440	Hexavalent Chromium (colorimetric)
KG450	Total Phopshorus
KG455	Phosphorus Adsorption/Bray P1
KG460	Silica, Molybdosilicate Method
KG461	Silica, Heteropoly Blue Method
KG462	Total Solids at 103-105°C

KW40	Specific Gravity
KW45	Burning Rate Test for DOT 4.1 Classification
KW50	Halogens
KW60	Reactivity: Interaction with water
KW65	Toxicity Characteristic Leaching Procedure
KW70	Sulfur
KW80	Viscosity
KW90	Determination of Water Content using Fisher Model 391 K-F
KW100	The Characterization of Materials of Unknown Composition
KW200	The Management of Laboratory Waste: Organic Solvents
KW210	The Management of Laboratory Waste: PCB-Contaminated Materials

Water Quality

KG064	Use and Care of the Equatherm Water Bath
KG070	Cleaning of Glassware Using a Chromic/Sulfuric Acid Solution
KG100	O'haus G-160 Balance
KG117	Total Organic Carbon and/or Total Organic Matter in Soil by the Walkley-Black Method
KG120	Carbonate/Bicarbonate Alkalinity
KG130	BOD - Oxygen Demand, Biochemical
KG135	Boron, Low-level, Curcumin Method
KG140	Bromide
KG190	Chloride
KG200	Residual Chlorine
KG205	Chlorine Demand
KG210	COD - Oxygen Demand, Chemical
KG222	Sulfite
KG230	Monitoring and Maintenance of the Laboratory Water Deionization System
KG240	Free Cyanide
KG250	Cyanide, Total and Amenable

KO8082	Analysis of PCB by EPA Method 8082
KO8150.DZO	Diazomethane Generation for Method 8150A)
KO8151	Herbicides by EPA Method 8151A
KO8151A	Herbicide Sample Prep by EPA Method 8151A
KO8270C	Semi-Volatile Compounds by GC/MS (8270C)
KO8270_DRO	Diesel Range Organics - Total Petroleum Hydrocarbons by GC-MS
KO8315.1667	Aldehyde Sample Preparation and Analysis by High Performance Liquid Chromatography (HPLC)
KOSURRTABLE	Surrogate and Spike Chart for SVOA Lab
KOTURBO.VAP	TurboVap Concentrator

Volatile Organics

KO524.MS1	VOC's by 524.2 using MS1
KO524.MS6	VOC's by 524.2 using MS6
KO5035H	VOA Soil Preparation, High Level
KO5035L	VOA Soil Preparation, Low Level
KO8021	Volatiles by PTA30WS-Tracor 9000 PID-HALL
KO8260HP	The Determination of Volatile Organics by GC/MS by 8260B using H-P 5972B GC/MS
KO8260_GRO	Gasoline Range Organics - TPH by H-P 5972B GC-MS
KO9060A	Non-Purgeable Organic Carbon
KOTO-14_1	Toxic Organics in Air by EPA TO-14 (SUMMA - GC-MS)
KOTO-14F_1	Field Sampling Toxic Organics in Air by EPA TO-14

Waste

KW05	ASTM Water-Shake Extraction
KW10	Heat of Combustion/BTU
KW20	Extraction Procedure (EP) Toxicity
KW25	Ignitability
KW30	Flash Point
KW35	Corrosivity

KM6010B-ARL	Trace Metal Analysis using the ARL 3560 Inductively Coupled Plasma Atomic Emission Spectrometer
KM6010B-PE	Trace Metals Analysis using the PE 3000 XL Inductively Coupled Plasma Atomic Emission Spectrometer
KM6020	Metals by HP 4500 ICP-MS using EPA Method 6020
KM7195	Aqueous Sample Preparation for Hexavalent Chromium Analysis
KM7197	Preparation Of Sample For Hexavalent Chromium Analysis
KM7470	Aqueous Sample Preparation for Mercury Analysis
KM7471A	Mercury in Soils, Solids and Wastes

Semi-Volatiles

KO005	Organic Prep Laboratory Glassware Washing
KO504.1	1,2 Dibromomethane (EDB) and 1,2-Dibromo-3-Chloropropane (DBCP) by EPA Method 504.1
KO515_1	Chlorinated Phenoxy-acid Herbicides in Drinking Water by HRGC/ECD
KO515_1.PRE	Herbicide Sample Prep - 515.1
KO1664	Hexane Extractable Material (HEM) and Silica Gel-Treated N-Hexane Extractable Material (SGT-HEM) by Extraction and Gravimetry
KO3500B	TurboVap Concentration
KO3510	Separatory Funnel Extraction by Method EPA 3510C
KO3520	Continuous Liquid-Liquid Extraction by Method 3520
KO3545	Accelerated Solvent Extraction (3545)
KO3550	Sonication Extraction (except PCB) by Method 3550
KO36XX	Semi-Volatile Sample Cleanup
KO525	Semi-Volatile Compounds by GC-MS
KO8000.1	Analysis of Methanol by GC-FID
KO8000.2	Analysis of Triethanolamine by GC-FID
KO8000.3	Analysis of Triethylamine by GC-FID
KO8000FI.PRE	GC-FID Soil Prep
KO8081.OIL	Analysis of PCBs in Oil
KO8081A	Analysis of Pesticides by EPA Method 8081A

Microbiology

KB010	Autoclave Calibration Procedure
KB030	Heterotrophic Plate Count
KB035	Pseudomonas
KB050	Monitoring Requirements/Instrument Maintenance for Microbiology
KB060	Preparation of Phosphate Buffered Rinse/Dilution Water
KB100	Bacteria, Total Coliform Membrane Filter Procedure
KB110	Bacteria, Total Coliform ONPG-MUG (Colilert) Procedure
KB150	Bacteria, Total Coliform Multiple Tube Fermentation Procedure
KB200	Bacteria, Fecal Coliform Membrane Filter Procedure
KB300	The Detection and Quantitation of Salmonella Bacteria
KB600	Yeast & Mold

Trace Metals

KG551	Turbidity using Orbeco-Hellige Turbidity Meter
KM010	Glassware Washing - Trace Metals Laboratory
KM200.7-ARL	Metals by ARL 3560 ICP-AES using EPA Method 200.7
KM200.7-PE	Metals by PE-3000XL ICP-AES using EPA Method 200.7
KM200.8	Metals by HP 4500 ICP-MS using EPA Method 200.8
KM245.2	Mercury in Water
KM300	Acid Digestion of Aqueous Samples and/or TCLP, SPLP, and EPTOX Extracts
KM301	Aqueous Sample Preparation by Acid Digestion for Trace Metals Analysis using the Environmental Express Block Digester
KM3050B	Acid Digestion of Sediments, Sludges and Soils for Metals
KM355	Mercury Analysis Using VGA-76 Continuous-Flow Vapor Generator
KM400	Acid Digestion of Sediments, Soils, Sludges and Wastes
KM500	Analysis of Trace Metals by Atomic Absorption Spectrophotometry
KM600	Analysis of Metals by Flame AAS
KM1631	Analysis for Ultra-Trace Mercury by Oxidation, P&T, CVAFP
KM1631B	Sampling Procedure for Ultra-Trace Mercury

APPENDIX F

KAR LABORATORIES ENVIRONMENTAL
STANDARD OPERATING PROCEDURE (SOP) INDEX

General/QA

KG010	Thermometer Calibration
KG021	Assignment and Archiving of Laboratory Notebooks and Logbooks
KG022	Environmental Internal Audit/Inspection Program
KG023	Generation and Maintenance of Environmental SOPs
KG032	Data Reduction, Validation and Reporting
KG033	Faxing Completed Laboratory Reports
KG062	Use, Calibration and Care of Automatic Pipettors
KG066	Assigning an Expiration Date to Chemicals Received Without a Manufacturer's Expiration Date
KG990	Electronic Data Deliverables
KQSDWA	QC Policy for Safe Drinking Water Act Compliance
KO010	Raw Data Package Format for Chromatographic Methods
KO015	Peer Review of Trace Metals and Organic Instrumental data

Client Services (Sample Receipt/Handling)

KB120	The Collection of Residential Water Samples for the Analysis of Bacteria
KG020	Sample Receipt, Handling and Storage (Chain-of-Custody)
KG030	Sample Login
KG031	Login of Domestic Drinking Water Samples
KG055	Total Toxic Organics Sampler Bottle and Grab Bottle Cleaning
KG220	Conductivity
KG420	pH

Parr Oxygen Bomb Calorimeter with Pellet Press

Parr Model 1710 Calorimeter Controller w/ digital thermometer

(2) Pensky-Martens Closed Cup Flash Point Testers

Fisher Scientific Karl Fischer Moister Analyzer

Brookfield RVT Viscometer

Major Equipment for the Carbon Laboratory:

Tekmar-Dohrmann DC-180 Carbon Analyzer with Autosampler and printer

Fisher XT410 Top Loading Electronic Balance

Major Equipment for the Air Toxics Laboratory:

TO-14 System

Finnigan-MAT ITD-800 GC-MS Gas Chromatograph-Mass Spectrometer with PC and printer

Entech Model 7000 Preconcentrator

(2) Entech Model 7016CA Canister Autosamplers

Entech Model 3000 Canister Cleaning System

(78) 6-Liter Summa canisters

Linde FM4660 Mass Flowmeter/Flow Controller/Totalizer

Entech SmartLab 7100/7000 Concentrator Software

MSC

(6) SKE Battery-operated Personal Sampling Pumps, with cyclones, chargers, and accessories

(1) Dragar Air Sampling & Analysis Kit, with Hand Pump and tubes

(1) Supelco Tedlar Bag Evacuation Chamber

(32) 250mL 2-Valve Glass Gas Sampling Bombs

(1) EPA Method 25E (Vapor Pressure) Field Sampling Apparatus

Major Equipment for the Microbiology Laboratory:

Nikon SMZ-2T Stereoscopic Microscope
Nikon Labophot Microscope with photographic capabilities
Napco Model 8000-DSE Autoclave
Precision Scientific Model 260 Circulating Water Bath
Equatherm Water Bath
(2) Precision Scientific Gravity Convection Incubators
Tuttnauer Brinkmann 2540-E Incubator
Quebec Colony Counter
Schuco Vacuum Pump
Sanplatec Drykeeper Desiccator
(2) Excellence 4.5 cub. ft. Refrigerators
Sartorius H160 Top-loading Balance

Major Equipment for the Hazardous Waste Laboratory:

OHaus G160 Analytical Balance
Fisher XD-800 Top-loading Balance
(8) Associated Design Zero Headspace Extractors
(2) Associated Design Gas-tight Syringes
Excellence 4.5 cub. ft. Refrigerator
Welbilt 4.5 cub. ft. Refrigerator
Blue M Model SW-17TA-1 Convection Oven
Lindberg/Blue M OV-480A Convection Oven
Precision Scientific Model 4 Convection Oven
Blue M Model M25A-2A Muffle Furnace
Precision DD20 Vacuum Pump
Sanplatec Drykeeper Desiccator
International Equipment Floor Centrifuge
TCLP Dual Rotary Extractor
Labconco Protector 72 Fume Hood

Major Equipment for the Physical Properties Laboratory:

Major Equipment for the Water Quality Laboratories:

Lachat QuikChem AE Flow Injection Analysis autoanalyzer with 486-based PC and printer

Lachat QuikChem 8000 Ion Chromatograph with Pentium-based PC and printer

Hewlett-Packard 8452 Diode Array Scanning UV-Vis Spectrophotometer with Pentium-based PC, General Purpose and Advanced Software, and Printer.

Milton Roy Spectronic 21 UV/Vis Spectrophotometer

Bausch & Lomb Spectronic 20 Spectrophotometer (UV-Vis)

Hach DR/2 Spectrophotometer (UV-Vis)

Perkin-Elmer 1600 Fourier Transform Infrared Spectrophotometer (FTIR)

Mettler PM460 Top-loading Balance

Sartorius B120S Analytical Balance

Orion 720SA pH/ISE Meter

Orion 611 pH/ISE Meter

Orion 520A pH/ISE Meter

(2) Orion Model 97-08 Dissolved Oxygen Probes

Orion Model 607 Switchbox

Labconco RapidStill I Steam Distillation Unit

Princo Nova Barometer

YSI Model 32 Conductance Meter

(3) Incutrol/2 BOD Incubator Regulators

(5) White-Westinghouse 17.5 cub. ft. Refrigerators

Kelvinator 13.8 cub. ft. Refrigerator

General Electric 11.5 cub. ft. Refrigerator

Excellence 8.5 cub. ft. Refrigerator

(2) Labconco Protector 72 Fume Hoods

Labconco Protector 48 Fume Hood

(2) Labconco Acid Digestion Hoods

Miele G7733 Laboratory Glassware Dishwasher

Sanplatec Drykeeper Desiccator

Scientific Model AD-40 Block Digestor

Lachat BD-46 Block Digestor

Hach COD Reactor

Lachat Micro Distillation System

(2) Kontes 10-place Midi-Vap 2000 Cyanide Distillation Systems

(1) Waters 600c Multi-Solvent Delivery system, Model 486 Programmable UV/VIS Detector, and Model 717 Plus Autosampler with Heater/Chiller

(2) Waters Model 470 Programmable Scanning Fluorescence HPLC Detectors

(1) Waters Model 410 Differential Refractometer HPLC Detector

(1) ESA Coulechem II Electrolytic Conductivity HPLC Detector

(2) St. Charles 48 inch fume hoods with low face velocity warning sensor

Miele G7733 Laboratory Glassware Washer

Cahn C-33 Ultra-Microbalance, 0.001 milligram resolution

CHROMATOGRAPHY DATA SYSTEMS

(2) Justice Innovations Chromatography Data Systems (8-channels each) with ChromPerfect for Windows software running on Pentium-based PC's with printers

Major Equipment for the Organic Prep Lab:

Dionex ASE-200 Accelerated Solvent Extractor Workstation

Tekmar AutoTrace 6 position automated Solid Phase Extraction Workstation

(4) Zymark Turbovap Automated Sample Concentrators

(4) Heat Systems XL2020 Sonic Dismembrators

International Equipment Co. Size 2 Centrifuge

Heraeus Instruments Megafuge 1.0 centrifuge

Eppendorf 5415C Ultra-Centrifuge

(13) Continuous Liquid-Liquid Extractors

Kontes Automatic Concentrator

(3) St. Charles 72 inch fume hoods with low face velocity warning sensors and explosive vapor alarms

Labconco 72-inch Protector Laboratory Hood

Fisher Scientific 72-inch Laboratory Hood

Central Scientific Drying Oven

VW1310E Drying Oven

(3) Sample Refrigerators

Precision Scientific Water Bath

Mettler PM 4600 Analytical Balance

Supelco Model 5-7030M Vacuum Manifold

(3) Wheaton Milli-mole Diazomethane Generators

Miele G7733 Laboratory Glassware Dishwasher

Conductivity (HECD) Detectors, Tekmar LSC-2000 Purge & Trap Liquid Sample Concentrator and Dynatech PTA-30 Purge & Trap Autosampler

MSC

(2) Fisher XT410 Top Loading Electronic Balances

Westinghouse refrigerator

Northland Imperial refrigerator

Justice Innovations Chromatography Data System (4-channnel) with ChromPerfect for Windows software running on a Pentium-based PC with printer

Major Equipment for the Semi-Volatiles Laboratory:

GC/MS

(2) Finnigan MAT Magnum Gas Chromatograph-Mass Spectrometers with Leap Technologies A200S Autosampler, Compaq 486 PC and printer

GC

(2) Tremetrics 9001 Gas Chromatographs with dual Electron Capture Detectors (EC) and Leap Technologies A200S Autosampler

Tremetrics 9001 Gas Chromatograph with dual Flame Ionization Detectors (FID) and Dynatech GC411V Autosampler

Tremetrics 9000 Gas Chromatograph with Nitrogen-Phosphorus Detector (NPD) and Photoionization Detector (PID) with Dynatech GC411V Autosampler

(2) Tremetrics 541 Gas Chromatographs with dual Flame Ionization Detectors (FID) and Dynatech GC411V Autosampler

CHROMATOGRAPHY DATA SYSTEMS

(3) Justice Innovations Chromatography Data Systems (8-channels each) with ChromPerfect for Windows software running on Pentium-based PC's with printers

Major Equipment for the HPLC Laboratory

HPLC

(5) Waters LC Module 1 High Performance Liquid Chromatographs (HPLC), binary gradient, with Model 486 Programmable UV Detector, 717 Autosampler and Thermostatic Column Chamber

(ICP-AES), autosampler, data system and printer

ARL 3560 Simultaneous Inductively Coupled Plasma Atomic Emission Spectrometer (ICP-AES) with 24 channels, Gilson Peristaltic Pump, Constant Power Source, Autosampler, Compaq 486 PC and printer

Varian AA-400 Zeeman Atomic Absorption/Atomic Emission (AA/AE) Spectrophotometer with GTA96Z Graphite Tube Atomizer, PSD-96Z Programmable Sample Changer, PC and printer

(3) Varian AA-20 Atomic Absorption/Atomic Emission (AA/AE) Spectrophotometers with GTA96 Graphite Tube Atomizer, PSC-56 Programmable Sample Changer and printer

Varian VGA-76 Vapor Generator Accessory

PS Analytical Millennium Merlin Ultra-Trace Mercury Analyzer system, with H-P 4150 Pentium-based notebook PC and printer

Miele G7783 Laboratory Glassware Washer

(2) Environmental Express 54-place Block Digesters

(2) Environmental Express fume hoods with HEPA filters

AirClean AC3000 36" polypropylene Ductless acid hood with HEPA filtration, filter and airflow monitor and alarm

Precision Scientific Controlled Temperature Water Bath

Major Equipment for the Volatile Organics Laboratory:

GC-MS

Hewlett-Packard 5972B Gas Chromatograph-Mass Spectrometer (GC-MS) with H-P 3000 Purge & Trap Liquid Sample Concentrator, Dynatech PTA-30 W/S Purge & Trap Autosampler, H-P Kayak 350 PC running WIndows NT 4.0 and H-P Laserjet 4 Plus printer

Hewlett-Packard 5971 Gas Chromatograph-Mass Spectrometer (GC-MS) with Tekmar LSC-2000 Purge & Trap Liquid Sample Concentrator, OI Analytical 4552 Water/Soil Autosampler, H-P Kayak 350 PC running Windows NT 4.0 and H-P Laserjet Series 5 printer

Finnigan-MAT Magnum Gas Chromatograph-Mass Spectrometer (GC-MS) with Tekmar LSC-2000 Purge & Trap Liquid Sample Concentrator, Dynatech PTA-30 W/S Purge & Trap Autosampler , 486 PC and printer

GC

Tracor 9000 Gas Chromatograph with Photoionization (PID) and Hall Electrolytic Conductivity (HECD) Detectors, Tekmar LSC-2000 Purge & Trap Liquid Sample Concentrator and Dynatech PTA-30 W/S Purge & Trap Autosampler

(2) Varian 3600 Gas Chromatographs with Tracor 703 Photoionization (PID) and Hall 1000 Electrolytic

(2) digital (ISDN) modems

(4) Intel 10/100 Fast Ethernet 24-port Switches

(6) 10/100 Fast Ethernet Hubs

(6) Osicom NetPrint Print Servers

(2) Axis Print Servers

Ascend Pipeline 75 ISDN Bridge/Router

APC Smart-UPS Rack 3000 Battery Backup running PowerChute Web/SNMP software

(4) APC Smart-UPS 1000 Battery Backups running PowerChute for Netware software

(4) Novell Intranetware 4.2 Network Operating Systems

Novell BorderManager 3.5 Communications Server software

KAR-developed and supported LIMS software

Infinite Technologies ExpressIT! Electronic Mail System and Router (software)

Infinite Technologies InterChange Internet Electronic Mail Server (software)

Infinite Technologies Scheduler (group scheduling software)

Computer Associates FaxServeIT for Netware server-based faxing software

Computer Associates InnoculanIT for Netware server-based anti-virus software

Wildcat! Server computer bulletin board software

Major Equipment shared among Laboratories

Ionpure Series 120 Reverse Osmosis System including hot/cold tap water feed, carbon pre-filtration, water softener, RO stage, anionic and cationic exchange beds, UV treatment and final ultra-filtration

Walk-in sample cooler (12' x 10') with alarm

So-Low Environmental Equip. Co. C85-12 Freezer (-85°C) with alarm

Balston 75-80 Zero Air Generator

Balston 75-76 Nitrogen Generator System

Whatman 75-32NA Hydrogen Generator (99.99999%)

Whatman 75-34NA Hydrogen Generator (99.99999%)

Msc. Electronic flow meters, Electronic leak detectors

Major Equipment for the Trace Metals Lab:

Hewlett-Packard 4500 Inductively Coupled Plasma Mass Spectrometer (ICP-MS) with Autosampler, data system and printer

Perkin-Elmer Optima 3000 Sequential Inductively Coupled Plasma Atomic Emission Spectrometer

6. FACILITIES AND MAJOR EQUIPMENT

KAR Laboratories occupies a 21,000 square foot facility. Individual laboratories include Trace Metals, Metals Sample Prep, Volatile Organic, Semi-volatile Organic, Organic Sample Prep, Water Quality, Microbiology, Hazardous Waste and Physical Properties, Air Toxics, HPLC and Pharmaceuticals. Most of these Laboratories have dedicated utilities and equipment, such as heating/cooling systems, sinks, fume hoods, gas supplies, and glassware. Major equipment includes the following:

Data Handling/LIMS Computerized System

(1) Hewlett-Packard NetServer LH-3 Pentium III - based file server, 512MB RAM, six 10,000rpm 9.1GB SCSI3 drives, spanned (stripped) & duplexed (RAID 0)

(3) Hewlett-Packard NetServer E-60 Pentium III - based file servers, 320MB RAM, two 10,000rpm 9.1GB SCSI3 drives, duplexed

(1) Hewlett-Packard NetServer E-800 Pentium III - based file servers, 384MB RAM, two 10,000rpm 9.1GB SCSI3 drives, duplexed

(1) Hewlett-Packard NetServer LC-2 Pentium II - based file server, 256MB RAM, two 4.2GB SCSI2 drives duplexed

(1) Hewlett-Packard NetServer LH Pro Pentium Pro - based file server, 512 MB RAM, four SCSI2 4.2GB drives, spanned & duplexed

(1) Hewlett-Packard NetServer LH Pentium - based file server, 256 MB RAM, two 2.1GB drives, duplexed

(24) Intel Pentium III, Pentium II, Pentium Pro or Pentium PC's

(32) Intel Pentium-based notebook PC's

(10) Intel 80486-based PC's

(9) digital scanners

(1) Hewlett-Packard Color LaserJet 8550DN printer, 24 pages-per-minute, with Duplexer, 3000-sheet capacity, 3GB Hard Disk Drive, 96MB RAM and 8-bin Multi-user Mailbox

(1) Hewlett-Packard Color LaserJet 8500DN printer, 24 pages-per-minute, with Duplexer, 3000-sheet capacity, 2GB Hard Disk Drive, 64MB RAM and 8-bin Multi-user Mailbox

(20) dot matrix printers

(7) Hewlett-Packard laser printers

(5) Ink-jet color printers

Rose Electronics ServeView 12-channel monitor/keyboard/mouse switch

Computer Associates ArcServeIT for Netware tape backup software

DAT tape changer, 24 gigabyte x 6

DAT tape changer, 8 gigabyte x 6

DAT tape drive, 8 gigabyte

DAT tape drive, 2.3 gigabyte

nonresponsive

nonresponsive

nonresponsive

nonresponsive

nonresponsive

nonresponsive

nonresponsive

nonresponsive

nonresponsive

nonresponsive

nonresponsive

nonresponsive

nonresponsive

nonresponsive

nonresponsive

[redacted]

nonresponsive

nonresponsive

nonresponsive

KAR *Laboratories, Inc.*

ENVIRONMENTAL LABORATORY QUALITY ASSURANCE MANUAL

November 7, 2000

KAR Laboratories, Inc.
4425 Manchester Road
Kalamazoo, MI 49001
616-381-9666
Fax: 616-381-9698
email: info@karlabs.com
Internet: http://www.karlabs.com

Vision: Be the Best Environmental Laboratory

Mission: Focus on the following key areas

Clients	*All resources are applied to satisfy or exceed clients' needs*
Employees	*The work environment provides a high degree of worker satisfaction*
Ethics	*All company and employee actions are legal and ethical*
Image	*KAR's image accurately reflects the company's commitment to excellence*
Profits	*KAR Laboratories is profitable for its shareholders and employees*
Quality	*Superior quality is provided in all aspects of performance*

TABLE OF CONTENTS

1. INTRODUCTION

1.1 Quality Control and Quality Assurance

1.2 The Quality Assurance Officer

1.3 The Laboratory Information Management System (LIMS)

1.4 What to Ask For

2. SAMPLING

2.1 The Importance of Proper Sample Collection

2.2 Elements of the Sampling Plan

3. SAMPLE RECEIPT AND HANDLING WITHIN THE LABORATORY

3.1 Sample Receipt

3.2 Sample Handling

3.3 Chain-of-Custody

4. LABORATORY SUPPLIES, CHEMICALS AND EQUIPMENT

4.1 Laboratory Glassware

4.2 Chemicals and Reagents

5. ANALYTICAL METHODOLOGY

5.1 Analytical Methods

5.2 Standard Operating Procedures

5.3 Auditing Performance

5.4 Method Validation

6. INSTRUMENT PERFORMANCE

6.1 Sensitivity, Specificity, Stability

6.2 Monitoring Performance

6.3 Calibration

6.4 Maintenance

7. DATA HANDLING AND RECORD KEEPING

7.1 What Records to Keep, and How Long

7.2 Protocols and Forms

7.3 Important Aspects of Documentation and Qualifying Data

7.4 Reporting Results

8. DATA CHALLENGES AND PROCEDURES FOR CORRECTING DATA

8.1 Data Challenges and Auditing Data Validity

8.2 Data Correction and Notification Procedures

9. PERSONNEL

9.1 Training

APPENDICES

A. Required Containers, Preservation, and Holding Times

B. Sampling Receipt & Chain-of-Custody Record

C. Sample Labels

D. Incubator, Freezer and Sample Refrigeration Temperature Log

E. Daily Calibration Check Log

F. Quarterly Balance Calibration Log

G. Standard Operating Procedures Index

H. Analysis of water samples for the Safe Drinking Water Act

I. QC Review Form

J. Initial Demonstration of Capability (IDC) Form

1. INTRODUCTION

1.1 Quality Control and Quality Assurance

1.1.1 This manual is intended to be a general overview of the quality assurance program at KAR Laboratories, Inc. Detailed, step-by-step procedures regarding Quality Control can be found in the appropriate Standard Operating Procedure (SOP). For example, the general requirements for sample receipt is outlined in this document, but the exact steps are found in the SOP.

1.1.2 **Definition of Laboratory Quality Assurance**: A program of techniques and procedures to assure that the reported results of analytical procedures are of satisfactory utility.

1.1.3 **Definition of Laboratory Quality Control**: The techniques whereby the variables of the analytical processes are monitored and maintained within an established limit.

1.2 The Quality Assurance Officer

It is the responsibility of the Quality Assurance Officer to design, implement, manage and enforce the laboratory's overall Quality Assurance Program that assures laboratory data is produced and evaluated in conformance to quality standards. Assessment of the overall laboratory compliance is performed through periodic reviews of the facilities, systems and processes. To ensure that the QA Officer has adequate authority, the individual shall be a manager above individual laboratory managers and supervisors on the Organization Chart. The QA Officer is appointed by the president of the company.

1.3 The Laboratory Information Management System (LIMS)

The computerized LIMS system is at the center of storage, management and retrieval of KAR's QC information. The statistical nature and volume of QC data favors a computerized system. Because every staff member has access to LIMS through their own networked personal computer at their desk and a notebook PC in every laboratory, all information regarding samples and the associated quality information becomes immediately and easily available.

Every step of quality is tracked, and QC control charts are automatically generated and displayed during data entry. LIMS assists Quality as follows:

- ✓ Printed sample labels
- ✓ Work lists that can be customized by the department supervisor
- ✓ Automatic uploading of instrumental data for Matrix Spikes and Matrix Spike Duplicates, calculations of Relative Percent Difference and Percent Recovery and comparison to method-specific limits
- ✓ Validation routines
- ✓ Report generation by several formats via hardcopy or electronic media
- ✓ Minimum and maximum values are assigned to Date fields and format limited to mo/da/yr for consistency
- ✓ Extensive use of "Lookup" tables to provide exactly the same naming in Client information, test names, units, qualification codes and sample types and other areas as well
- ✓ Automatic data-entry validity checks for completeness (all of the following: concentration, units, date analyzed, analyst)
- ✓ Correct units for the sample type
- ✓ Impossible concentration for the units specified (example <0% or >100%)
- ✓ Rounding, concentration/dilution factoring and significant figure manipulations for instrumental data uploads
- ✓ Spike and Duplicate data must be within statistically-based QC limits for the matrix type with required "Reason for QC Failure" documentation upon acceptance of data which falls outside of QC limits

- ✓ Quality Control Charting is available for the parameter by pressing one key
- ✓ Automatic Audit Trail of all changes made to unvalidated data
- ✓ Denied access to Validated data
- ✓ Automatic Validation Checks:
  - ★ Missing units
  - ★ Concentration outside the range for the units
  - ★ Concentration outside the likely range for the test
  - ★ Missing digit preceding a decimal point
  - ★ Holding time exceeded
  - ★ Missing comma separator on numbers >9999
  - ★ "Dissolved" concentrations greater than "Total"
  - ★ Unlikely relative BOD, COD and/or TOC relationships
  - ★ Hexavalent Chromium exceeding Total Chromium
  - ★ Printed copy of test results sorted via "test" (a proof-reading aid)
  - ★ Printed copy of complete Ion Balance calculations with anion/cation listing, measured Solids vs. calculated Dissolved Solids agreement and measured Conductivity vs calculated Conductivity agreement
  - ★ Printed copy of all client correspondence, additions, deletions and changes that relate to the project

1.4 What to Ask For

Upon completion of a project KAR Labs issues a Standard Analytical Report which generally does not contain QA data. If QA data is desired, a "QA Analytical Report" should be requested (at no charge). This report contains spiked sample, duplicate sample, and analytical batch data with statistical calculations, instrument detection limits, sample analysis date, analyst, method used and miscellaneous other data. All Quality requests and inquiries should be directed to the QA Officer, William Rauch.

If a client requires special or unique data quality objectives, those objectives must be addressed prior to the sampling event.

2. SAMPLE COLLECTION

2.1 The Importance of Proper Sample Collection

Sampling is considered to be the single most important factor in an analytical scheme since all subsequent steps in data generation can only be a reflection of the sample that was submitted for analysis. For this reason, it is imperative that no analytical program be conducted without an adequate sampling plan which will ensure that representative samples will be collected and that the integrity of those samples will not be compromised.

2.2 Elements of the Sampling Plan

A sampling plan must be designed by an individual who is familiar with both the various sampling devices and also the analytical requirements. This familiarity is essential because (1) certain sampling devices are made of materials that may contaminate the sample, (2) cross contamination of samples may occur if the sampling device is not cleaned properly, (3) routine sampling methods may not be applicable to a sample which is to be analyzed for a unique parameter, and (4) the method of employing the sampling device may affect the integrity of the sample.

Whether the sampling responsibility lies with the client or KAR Laboratories, the following items must be in place to ensure the reliability of the data:

2.2.1. A properly designed sampling plan.

2.2.2. Sampling containers that have been properly cleaned for their intended use.

2.2.3. Containers that satisfy requirements for sample size which will likely include provisions for field duplicates and field blanks.

2.2.4. Containers which optimize conditions necessary for replication of results and preservation of the chemical integrity of the sample.

2.2.5. Chemical preservatives or refrigeration to satisfy the requirements of the analytical method and/or regulatory requirements.

2.2.6. Special provisions for project-specific data quality objectives.

3. SAMPLE RECEIPT AND HANDLING WITHIN THE LABORATORY

3.1 Sample Receipt

Sample integrity can be seriously compromised if samples are not preserved and stored in a proper and timely manner after they are received. Sample integrity may also suffer when samples are analyzed in an untimely manner because a record of time of sampling and or time of arrival has not been kept.

It is the responsibility of the Login team in the Client Services Department to record (input) EVERYTHING about a sample or sample set (KAR calls this a "Project") into the computerized Laboratory Information Management System (LIMS) system. This must be done as soon as possible and always the same day that the samples were received. Because all staff members have their own networked personal computer at their desk and a notebook PC in every laboratory running LIMS, this information becomes immediately available to the entire staff including the analyst responsible for the test. The information is available to management and clerical staff to track work progress to ensure that no sample or test is overlooked.

Subsampling is often necessary because of varying preservation requirements. Such subdivisions are performed to ensure the identity and integrity of sub-portions without deterioration or introduction of contaminants at sample login by a member of the sample login team.

Preservation, storage, and holding times are observed in accordance with EPA guidelines. These are automatically tracked by the Laboratory Information Management System, and violations are automatically flagged on internal and final reports. Long term storage time of samples depend upon several factors which include the clients' request, expiration of holding time, hazardous properties, legal evidence or possibility of legal evidence, and amount of sample. Samples are always maintained at least until the holding time has expired or one month time has passed since the analytical report has been mailed, whichever is longer.

3.2 Sample Handling

This procedure outlines the elements and steps involved in the handling of samples received for analysis at KAR Laboratories.

3.2.1 Samples are received from client or other carrier. Sample Receipts and Chain-of-Custody documents are prepared at this time. Indelible Ink shall be used for all recordings.

3.2.2 The project is activated by logging the project onto the computerized Laboratory Information Management System (LIMS). The LIMS assigns a Project Number which is entered into the master projects data base. The established format shall be followed by entering all requested information.

3.2.3 Each sample is assigned a unique identification number. This is a numerical or sometimes alphabetical appendix separated from the Project Number by a hyphen (example 891234-01). The assigned identification number shall be printed onto the LIMS-generated sample label or written onto the sample or sample container in ink or other permanent marker.

3.2.4 All pertinent information which is provided with the sample is then entered into the LIMS. A hard copy is then prepared as a final check on the information that was entered into the computer. This document is peer-reviewed for accuracy.

3.2.5 Samples are preserved and/or subsampled by the login team. Samples are then routed to the proper laboratory for storage. The type of environment chosen for sample storage shall be consistent with method protocol. All sample and subsample labels shall include a minimum of the KAR Laboratories Project Code # and the chemical preservative used, if any. Computer-generated labels shall be used wherever possible.

3.2.6 Analyses are carried out according to specified procedures.

3.2.7 After all testing is complete, samples are returned to their respective storage area and retained for a period of time which is consistent with approved holding times for the tests.

3.3 Chain-of-Custody

To ensure that the necessary chain-of-custody procedures are in place for the varying requirements of its clients, KAR Laboratories may implement one of several systems.

All samples received for analysis must use at least a KAR Laboratories Sample Receipt/Chain-of-Custody Record. Some clients may prefer to use their own chain-of-

custody form. This is usually acceptable but may be supplemented by other documentation if necessary.

KAR Laboratories has tamper-proof Custody Seals available which can be used on sample containers. These Custody Seals are made of a special adhesive foil, and once installed at the bottle-cap interface, they cannot be removed without clearly indicating that the container was opened.

Upon request, a sample custodian may be assigned the responsibility of safeguarding the samples and ensuring that the chain-of-custody is maintained. To achieve this end, a locked storage receptacle accessible only to the sample custodian is used.

4. LABORATORY SUPPLIES, CHEMICALS AND EQUIPMENT

4.1 Laboratory Glassware

4.1.1 **Specifications.** Glassware, chemicals and equipment used at KAR Laboratories are selected to conform to the specifications defined in the method of analysis. Items not specifically mentioned in a particular method of analysis should conform to good laboratory practices. For example, Class A volumetric glassware is used for all measurements which require a volume determination. If an item is available in a disposable configuration, then that option is sometimes preferred to avoid cross-contamination or introduction of other contaminants to a sample. Once it has been established that a particular supplier or manufacturer has a good record of supplying an item of suitable utility, ordering that item from a different source should be avoided.

4.1.2 **Calibration Checks.** All repeating pipetters are calibrated weekly and balances are calibrated daily.

4.1.3 **Cleaning Procedures**

4.1.3.1 General labware-washing will include (at a minimum) a detergent wash in hot water, three rinses with tap water, and three rinses with ASTM Type II reagent water. The labware is then inverted and suspended by external means to dry.

4.1.3.2 Labware for trace metals analysis - includes a detergent wash in hot water, three tap water rinses, one rinse with 1:1 nitric acid, one rinse with 1:1 hydrochloric acid, followed by three rinses with ASTM Type II reagent water. The labware is stoppered and stored wet.

4.1.3.3 Purgeable hydrocarbon labware - consists of cleaning as outlined in 4.1.3.1 with a final baking at 105 degrees C for a minimum of two hours.

4.1.3.4 Pesticides and acid/base-neutral extractables labware - incorporates the cleaning outlined in 4.1.3.1 followed by one rinse using pesticide-grade acetone and one rinse using pesticide-grade hexane. The containers are then inverted and suspended by external support to dry.

4.1.3.5 In all cases the sample bottle cleaning recommendations of the appropriate method and/or SOP should be followed.

4.1.4 **Testing for Contamination.** Contamination is monitored on a routine basis by the analysis of Laboratory Method Blanks (LMB). Reagent water is carried through all steps of an analysis parallel to the samples being analyzed. In this manner, any laboratory-born contamination introduced by reagents, glassware or utensils should be obvious, since any level of analyte above the method detection limit present in the LMB suggests contamination. A systematic trouble-shooting scheme may then be implemented, with any new or different variable being the most likely suspect.

The LMB is used throughout the laboratory. Most wet chemical methods include a LMB as part of the Standard Operating Procedure. Organic instrumental analysis includes a LMB after every calibration standard, and also as a means of verification that sample component carry-over from a previous high-level sample has not occurred.

4.1.5 **Storage.** KAR Laboratories has adequate storage capability and therefore has greater flexibility in providing an appropriate environment for special applications. Labware for everyday use is stored on shelves at a location isolated from potential contaminants. Specially cleaned labware such as those designated for the Organic Laboratory are stored separately in the Organic Prep Lab in a covered enclosure. Labware designated for trace metals analysis are stored in the Trace Metals Laboratory in a covered cabinet to avoid potential dust contamination. Light, heat, and/or moisture sensitive items are stored in a special room intended for this use. Other items not demanding any special storage considerations are stored to provide the most efficient retrieval of the item.

4.2 Chemicals and Reagents

4.2.1 **Purity Specifications.** All chemical reagents and gases are selected to meet or exceed the specifications defined in the method of analysis.

4.2.2 **Receipt procedures.** All chemicals, reagents, gases, and other expendables must be labeled upon receipt with the date received. Upon opening the date must be recorded on the label.

4.2.3 **Shelf Life.** Many reagents have a limited shelf life. Supplies of this nature will be labeled with the date the reagent was prepared and the name or initials of the analyst who prepared it. Some laboratory Standard Operating Procedures require that associated reagents be prepared fresh daily. Other reagents such as prepared standard solutions and calibration compounds for atomic absorption and gas chromatography are replaced on an expiration basis. If an expiration date is known when opening a new reagent, that expiration date must be recorded on the container. In no case may a calibration standard be used after 1 year has elapsed. In most cases a 6 month, 1 month or shorter expiration date is required. The appropriate SOP or method guidelines must always be followed.

4.2.4 **Laboratory Reagent Water.** ASTM Type II reagent water (also called RO and DI water) is supplied by an on-site Reverse Osmosis system with an on-demand high capacity storage tank. This system is centrally plumbed to provide reagent water to all laboratories. Reagent water purity (conductivity) is continuously monitored and recorded daily. Monthly, all common parameters including organics, trace metals, general water quality parameters and microbiology are analyzed. If the

concentration of any contaminant approaches the laboratory's reporting limits, reporting of that parameter to external clients must be suspended until the problem is corrected.

4.2.5 To document traceability of chemicals and reagents, the manufacture and lot number of the item used is recorded as part of the laboratory assay preparation documentation.

5. ANALYTICAL METHODOLOGY

5.1 Analytical Methods

The following sources for analytical procedures are used at KAR Laboratories:

5.1.1 Standard Methods for the Examination of Water and Wastewater. American Public Health Association, American Water Works Association, Water Environment Federation.

5.1.2 Methods for Chemical Analysis of Water and Wastes. Revised March 1983, U.S.EPA.

5.1.3 Annual Book of ASTM Standards. American Society for Testing and Materials.

5.1.4 Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods. SW-846 Third Edition, U.S.EPA.

5.1.5 Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater. Revised Oct. 1984, U.S.EPA.

5.2 The Standard Operating Procedure (SOP)

KAR Laboratories maintains an SOP Manual which contains SOP's of all test procedures routinely performed at KAR Laboratories. All new SOP's or revisions to existing SOP's must be approved by the QA Officer and are tracked and controlled by QA. The following format is suggested when preparing an SOP:

5.2.1 **Title/Header.** The property, analyte, or class of compounds being measured. Also includes the SOP number, date issued and next required review date.

5.2.2 **Principle Reference.** A published reference, usually regulatory approved, which defines the basic analytical methodology.

5.2.3 **Application.** Types of sample matrices with which the method may be used.

5.2.4 **Discussion.** Information about the procedure or background information that aids the analyst in understanding the purpose of the method.

5.2.5 **Summary of Method.** A brief description of the procedural elements of the method.

5.2.6 **Sample Handling.** Any specific concerns with samples or reagents that alerts the analyst of potential problems.

5.2.7 **Interferences.** A general overview of matrices or conditions which have the potential for interfering with an accurate measurement. Also includes any steps that will compensate for the interference.

5.2.8 **Apparatus**

5.2.8.1 Instrument - The manufacturer and model.

5.2.8.2 Labware - Includes any special conditioning, class, or required assembly.

5.2.9 **Chemicals and Reagents.** Specifies chemicals needed for the test and indicates required purity. Includes instructions on reagent preparation, shelf life, standardization, and/or disposal if applicable.

5.2.10 **Safety.** Includes safety considerations which are unique to the method.

5.2.11 **Preparation of Standards.** This section details the proper method for making all quality controls used in the analysis.

5.2.12 **Procedure.** A step-by-step protocol describing each step that is actually to be used in the laboratory.

5.2.13 **Calculations.** The mathematical steps used to complete the analysis. Includes a sample calculation if it will be helpful and also specifies the number of significant figures to report. Include a blank analytical bench form if it will help explain any calculations.

5.2.14 **QA/QC**

5.2.14.1 QA procedures specific to the method, especially equipment and reagent checks that should be performed routinely.

5.2.14.2 QC parameters specific to the method: Batch size, reference materials, data handling, etc.

5.2.14.3 Quantitation Limit - The concentration below which all results are reported as "less than", based upon the written procedure which specifies the sample size and any dilution or concentration inherent to the test.

5.2.15 **Data Reporting/Electronic Systems Interface.** A detailed description of what to report, significant figures, units, and use of LIMS to facilitate reporting.

5.3 Auditing Performance

The Quality Assurance department follows an internal audit/inspection program to build laboratory strengths and detect/eliminate deficiencis.

Method performance is checked in the following ways:

5.3.1 KAR uses 2 standard deviations from the mean (95% assurance) for warning limits and 3 standard deviations from the mean (99% assurance) for control limits.

If the maximum allowable range is set by regulation then the statistical range may not exceed the regulated maximum.

When statistical data is unavailable then +/- 20% will be used unless a regulation exists which is more restrictive.

Values which are out of control will be investigated. Data which has failed QC limits (out of control) will be qualified (flagged as failing QC) on the final report to the client.

5.3.2 Duplicate analyses are performed on one in every ten samples. If the difference between duplicate sample results exceeds that specified in the SOP, the cause must be determined and the samples may have to be reanalyzed. All duplicate measurements is automatically tracked and charted by LIMS.

5.3.3 Spiked samples are analyzed on one in every ten samples. If the recovery falls outside the range specified in the SOP, the cause must be determined and the sample reanalyzed if necessary. All spike measurements is automatically tracked and charted by LIMS.

5.3.4 KAR Laboratories subscribes to a commercially available QC check sample program for wastewater and Priority Pollutants on a quarterly basis.

5.3.5 Performance Evaluation Samples are analyzed and the results are submitted to the EPA for certain drinking water parameters on a quarterly basis.

5.3.6 EPA QC Check Samples are analyzed on a routine basis.

5.3.7 Split samples with other labs and regulatory agencies are analyzed.

5.3.8 Surrogate compounds are used routinely in organic analyses to monitor recovery.

5.4 Method Validation

In most cases method and/or operator verification/validation will be established by the successful completion of a Method Detection Limit Study (MDL). This study establishes the accuracy, precision and minimum detectable level on reagent water. This is true for EPA methods and Standard Methods, which comprise the vast majority of methods used at KAR Laboratories.

In cases where a written validated method is unavailable, whatever method development or modification is undertaken shall be done so in a context that concludes with at least an informal method validation study. Most commonly this will involve a combination of spiked samples, replicate samples, linearity study, and confirmation of positive results by at least one other method or technique.

6. INSTRUMENT PERFORMANCE

6.1 Sensitivity and Stability

An analytical instrument which is not performing adequately to allow the acquisition of data at the required sensitivity (the Limit of Detection for the method) will not be used for analyzing low-level samples until the sensitivity has been restored. Also, if the instrument is not sufficiently stable so as to allow the acquisition of data within the documented precision of the method, the instrument shall not be used to analyze

samples until the instability has been corrected.

Some sample matrices will not allow low Limits of Detection. Samples of this type are noted as such on the analytical report along with the estimated Limit of Detection. In all cases sensitivity must be maintained to meet regulatory requirements. All acceptable cleanup procedures should be employed when necessary. Unnecessary or arbitrary sample dilutions are not allowed.

6.2 Monitoring Performance

6.2.1 **Monitoring Performance for General Parameters.** Instrument Performance is monitored in several ways. When a problem occurs, frequently it will appear during the daily calibration. At that time it will often become apparent from the response if the instrument can achieve the necessary performance. Quality control check samples are used frequently. Blanks serve as a check on contamination. Replicate samples and spike samples are used at a frequency of approximately one in ten samples. Any sample that is out of control according to the control chart must be investigated and documented. If, after investigation, the measurement continues to be out of control, the data must be flagged accordingly on the final report.

6.2.2 Monitoring Performance for Trace Metals

PARAMETERS	SDWA ICV & CCV	Wastewater Waste&other ICV & CCV	ICB & CCB Calibration Blank	Dup. RPD	Spike Recovery
Furnace Metals	90-110%	85-115%	<DL	20	85-115
ICP and Flame Metals	95-105%	90-110%	<DL	20	75-125
Mercury Cold Vapor	85-115%	80-120%	<DL	20	75-125

Calibration Curves:
- Correlation coefficient (r) = 0.995 or greater
- Must have a secondary standard, ampule or standard from a different source (ICV).
- Measured concentration must be 90-110% of true concentration.

QC Requirements:
- ICV after calibration
- ICB after ICV
- CCV and CCB after every 10 analyses
- One spike and one duplicate every 10 samples
- LMB for every preparation batch
- Spike recoveries have to meet statistical base limits

Codes:
- ICV initial calibration verification
- ICB initial calibration blank
- CCV continuing calibration verification
- CCB continuing calibration blank
- LMB laboratory method blank
- RPD relative percent difference

Notes:
- Analysis is halted if there is a bad calibration, ICV, ICB, CCV, or CCB.
- Spike, duplicate and laboratory method blank results which do not satisfy criteria

should be brought to Senior Chemist's attention.

6.2.3 **Monitoring Performance for Gas Chromatography.** Method performance requirements are written into the SOP. In most cases this will result in one matrix spike/matrix spike duplicate analysis for each analytical batch.

6.3 Calibration

Sample refrigeration temperature is checked daily, incubators twice daily, freezers weekly and balances are checked weekly with Class S weights. All completed Log Sheets shall be forwarded to the QA Officer and are then available for inspection.

Instruments are calibrated prior to each day's use in accordance with the method used or the SOP, and repeated periodically throughout the day as required. The usual procedure is to first establish a linearity graph consisting of a blank and at least three (3) standards. The purpose of this is to establish the linear working range for the instrument. Once the linear range has been established and documented, the calibration is performed daily with at least two (2) points, a blank and a standard. If the results of this daily calibration demonstrate agreement with the established calibration curve, then it may not be necessary to run additional standards. These calibration procedures will vary from method to method and in all cases the appropriate Standard Operating Procedure should be consulted.

6.4 Maintenance

Instruments are installed and maintained to maximize their usefulness and to minimize downtime. Every analytical instrument system has a log book to record maintenance procedures, recurring problems which are intermittent in frequency and therefore may

not allow immediate repair, and incidents of troubleshooting. All factors which may affect the system are to be recorded. Each entry shall be dated and signed, and any suggestions or recommendations should also be included. All balances are checked and serviced annually by an outside contractor.

7. DATA HANDLING AND RECORD KEEPING

Record keeping must receive considerable attention in the overall scheme of maintaining the quality of analytical measurements. If all the variables which can affect the results of an analysis are carefully evaluated and controlled but no records were made, the final results could still be questioned. Only by properly maintaining permanent records in meaningful, exact terms can one clearly demonstrate that the analytical data generated is reliable.

7.1 What Records to Keep, and How Long

It is the responsibility of each individual employed by KAR Laboratories to maintain complete records of his/her work in the detail and format prescribed by his/her supervisor and/or SOP. The minimum requirement shall be that all experimental work shall be described in sufficient detail to make it understandable to one familiar with analytical chemistry, yet not directly connected with the work. All such records (termed raw data) will be retained for a minimum of 7 years, then destroyed.

7.2 Protocol and Forms

All experimental data will be recorded in indelible ink, usually in a bound laboratory notebook. Entry errors, deletions, or corrections shall be indicated as such by drawing one single line through the text, table, drawing, or graph that is to be canceled. Erasures and use of "white out" will not be permitted. Transcriptions shall be avoided

whenever possible. The name of the analyst shall be clearly indicated so that there is no question who is responsible for the work. All numerical data shall comply with the following format: (1) a digit must always precede a decimal point, and (2) a comma separator shall be used for all numbers 5 digits or larger.

All laboratory record books are the property of KAR Laboratories and may not be removed from the premises without proper authorization. Individuals who wish to maintain other records may do so but must get approval by supervision. These additional records shall be in addition to the complete and permanent records mentioned above. Any notation intended to indicate the same value (such as "ditto" marks, arrows, etc.) is acceptable except for recording sample weights. In this case, each weight is individually measured and recorded contemporaneously.

Data in the form of charts, instrument recordings, and printouts will be given suitable identification and maintained in a manner similar to written records.

All analytical results, when entered into the LIMS system shall include the date analyzed and the analyst's name or initials. Any other information relevant to the test should be included in the comments field.

All LIMS data is hard copied and filed on a project basis. All electronic data is backed-up daily onto magnetic tape and kept for 7 years, then destroyed.

7.3 Important Aspects of Documentation and Qualifying Data

In view of the possible legal implications that accompany the generation of analytical data, all data shall be recorded in such a way as to preclude its discrediting at any time. Any deviation from the method protocol that may affect the results should be reported on the analysis report. This would include such items as expired holding times or

improperly collected samples.

7.4 Reporting Results

7.4.1 **Significant Figures.** KAR Laboratories uses "significant figures" when reporting results. This means that all digits in a reported result are expected to be known definitely except for the last digit, which may be in doubt. If more than a single doubtful digit is carried, the extra digits are not significant, and therefore should not be reported. Analysts shall report only such figures that are justified by the accuracy of the work. Rounding and significant figures only apply to the final, reported results. Intermediate calculations necessary to arrive at a final result shall not be rounded.

7.4.2 **Rounding.** Digits that are not significant will be dropped. If the digit 6, 7, 8 or 9 is dropped, the preceding digit is increased by one unit; if the digit 0, 1, 2, 3 or 4 is dropped, the preceding digit is not altered. If the digit 5 is dropped, the preceding digit is rounded to the nearest even number, unless non-zero digit(s) to the right of that 5 were also dropped. In this case, the preceding digit should be rounded up.

7.4.3 **Format.** Values which contain a decimal point shall always be preceded by an integer or zero (e.g., 0.31). Units shall always accompany a result except in cases where units do not apply.

7.4.4 **Detection Limits.** A "less than" sign (<) will precede the detection limit in cases where the analyte is not detected. Calculated values less than the detection limit shall be stated as such without rounding. For example, a calculated final results of 0.98 for a test that has a detection

limit of 1 shall be reported as "<1" and not rounded up to 1.

8. DATA CHALLENGES AND PROCEDURES FOR CORRECTING DATA

8.1 Data Challenges and Auditing Data Validity

End-users (clients) of laboratory data are encouraged to challenge any data that does not fit their expectations by requesting a data review from the Quality Assurance Officer or the Project Manager. All information shall be recorded on the KAR **QC Review Form** (Appendix I). Similarly, laboratory staff who suspects that data may be incorrect or inaccurate for any reason must immediately report the incident. The request will then be routed directly to the supervisor. In the event the supervisor is unavailable and the review cannot wait, then the group leader of the area should be consulted. The supervisor will then be notified of the request via e-mail or other means, but in no case should the supervisor go unaware of a data change/inquiry request. This is necessary to allow the supervisor to monitor system and analyst performance and ensure corrective actions are taken.

8.2 Data Correction and Notification Procedures

The Quality Assurance Officer will be notified of all report revisions containing data changes. It is the laboratory's responsibility to contact the client immediately by telephone and inform the client of the results of an error, or in the case of a review initiated by the client, within eight working hours. The telephone call is then followed up with a printed Revised Report mailed to the client if a review results in the finding of a reporting error. If a systematic or other long-term condition is found which could effect data quality and/or accuracy, an attempt must be made to ensure that all reported data that might be affected be handled in the manner specified above.

9. PERSONNEL

9.1 Training

The training for specific tasks is performed under the guidance of a laboratory supervisor or an experienced analyst in conjunction with written Standard Operating Procedures. In all cases an analyst must first demonstrate competency for any assigned test by successfully meeting precision, accuracy and detection limit requirements defined in the SOP or the Method. This shall appear in the MDL database and tracked by LIMS, and documented using the Initial Demonstration of Capability (IDC) Form (Appendix J) which is placed in the individual's training folder located in the quality assurance office. Employees (temporary or otherwise) without formal laboratory training and/or experience will not be assigned any analytical tasks unless approved by the Quality Assurance Officer. This includes (but is not limited to) measuring samples, labeling samples and filtering.

Formal educational backgrounds for technicians include a minimum of an associates degree or equivalent. Chemists and Microbiologists require a four year science degree or 3 years experience. Continuing education is encouraged for all employees, the expense of which is covered by KAR Laboratories according to current company policy.

9.2 Safety

KAR Laboratories maintains an active safety program which includes a designated Safety Officer. The facility operates in a manner that is safe for both the employees and the environment. Protective equipment is worn and wastes generated in the lab are disposed of in a safe and environmentally sound manner. All chemicals are appropriately labeled and Material Safety Data Sheets are maintained on the property, easily accessible to all employees.

CONTAINERS, PRESERVATION TECHNIQUES, AND HOLDING TIMES FOR AQUEOUS MATRICES[A]

Name	Container[1]	Preservation	Maximum holding time
Bacterial Tests:			
Coliform, total	P, G	Cool, 4°C, 0.008% $Na_2S_2O_3$	6 hours
Inorganic Tests:			
Chloride	P, G	None required	28 days
Cyanide, total and amenable to chlorination	P, G	Cool, 4°C; if oxidizing agents present add 5 mL O.1N $NaAsO_2$, per L or 0.06 g of ascorbic acid per L; adjust pH>12 with 50% NaOH. See Method 9010 for other interferences.	14 days
Hydrogen ion (pH)	P, G	None required	24 hours
Nitrate	P, G	Coo1, 4°C	48 hours
Sulfate	P, G	Cool, 4°C	28 days
Sulfide	P, G	Cool, 4°C, add zinc acetate	7 days
Metals:			
Chromium VI	P, G	Cool, 4°C	24 hours
Mercury	P, G	HNO_3 to pH<2	28 days
Metals, except chromium VI and mercury	P, G	HNO_3 to pH<2	6 months
Organic Tests:			
Acrolein and Acrylonitrile	G, Teflon-lined septum	Cool, 4°C, 0.008% $Na_2S_2O_3$[3], Adjust pH to 4-5	14 days
Benzidines	G, Teflon-lined cap	Cool, 4°C, 0.008% $Na_2S_2O_3$[3] Adjust pH to 6-9, store in dark	7 days until extraction, 40 days after extraction
Chlorinated hydrocarbons	G, Teflon-lined cap	Cool, 4°C, 0.008% $Na_2S_2O_3$[3]	7 days until extraction, 40 days after extraction
Dioxins and Furans	G, Teflon-lined cap	Cool, 4°C, 0.008% $Na_2S_2O_3$[3]	7 days until extraction, 40 days after extraction
Haloethers	G, Teflon-lined cap	Cool, 4°C, 0.008% $Na_2S_2O_3$[3]	7 days until extraction, 40 days after extraction
Nitroaromatics and Cyclic ketones	G, Teflon-lined cap	Cool, 4°C, 0.008% $Na_2S_2O_3$[3] store in dark	7 days until extraction, 40 days after extraction
Nitrosamines	G, Teflon-lined cap	Cool, 4°C, 0.008% $Na_2S_2O_3$[3] store in dark	7 days until extraction, 40 days after extraction
Oil and grease	G	Cool, 4°C[2]	28 days
Organic carbon, total (TOC)	P, G	Cool, 4°C[2]	28 days
PCBs	G, Teflon-lined cap	Cool, 4°C	7 days until extraction, 40 days after extraction
Pesticides	G, Teflon-lined cap	Cool, 4°C	7 days until extraction, 40 days after extraction
Phenols	G, Teflon-lined cap	Cool, 4°C, 0.008% $Na_2S_2O_3$[3]	7 days until extraction, 40 days after extraction
Phthalate esters	G, Teflon-lined cap	Cool, 4°C	7 days until extraction, 40 days after extraction
Polynuclear aromatic hydrocarbons	G, Teflon-lined cap	Cool, 4°C, 0.008% $Na_2S_2O_3$[3] store in dark	7 days until extraction, 40 days after extraction
Purgeable aromatic hydrocarbons	G, Teflon-lined septum	Cool, 4°C, 0.008% $Na_2S_2O_3$[2,3]	14 days
Purgeable Halocarbons	G, Teflon-lined septum	Cool, 4°C, 0.008% $Na_2S_2O_3$[3]	14 days
Total organic halides (TOX)	G, Teflon-lined cap	Cool, 4°C[2]	28 days
Radiological Tests:			
Alpha, beta and radium	P, G	HNO_3 to pH<2	6 months

[A]Table excerpted, in part, from Table II, 49 FR 209, October 26, 1984, p 28.
[1]Polyethylene (P) or Glass (G)
[2]Adjust to pH<2 with H_2SO_4, HCL or solid $NaHSO_4$.
[3]Free chlorine must be removed prior to addition of HCl by the appropriate addition of $Na_2S_2O_3$.

APPENDIX A

KAR *Laboratories, Inc. (616-381-9666)* **www.karlabs.com** **(Client please complete shaded areas)**

Client:

Attn:

Phone: ( ) *Fax: ( )*

Project Name:

Project #

P.O. #

Sampled by: ☐ *KAR* ☐ *Client* *Initials* ___

Requested Analyses

KAR use only

*Proj#:*_____
*Login:*_____
Date: _____

c-of-c	Y	N
labels	Y	N
LODs	Y	N
contain	Y	N
headspace	Y	N
amount	Y	N
hold time	Y	N
rush cost	Y	N
preservation	Y	N
intact	Y	N

Turnaround Time:
- ☐ *10-business days*
- ☐ *5-business days (x 1.5)*
- ☐ *3-business days (x 2.0)*
- ☐ *Emergency (quote)*
- ☐ *Monthly*

Waste characterization: *Yes* *No*
Part 201: *Yes* *No*
Part 213: *Yes* *No*

#	Sample Identification	Sample Info: Date	Time	Matrix	Sample Containers: Type	Size	#										Remarks

Relinquished By:	Received By:	Date/Time:	Notes:
Relinquished By:	Received By:	Date/Time:	

APPENDIX B

Client- _____

Location- _____

Date- _____ Time- _____

Sampled By- _____

Instructions- _____

ID # _____

KAR Laboratories Inc.
4425 Manchester Road
Kalamazoo, MI 49002
(616) 381-9666

KAR LABORATORIES, INC.
4425 Manchester Road
Kalamazoo, MI 49002 • (616) 381-9666

SITE NAME	DATE / INITAL
LOCATION	TIME
ANALYSIS	PRESERVATIVE

PLEASE LEAVE THIS SPACE BLANK

KAR LABORATORIES, INC.
4425 Manchester Road
Kalamazoo, MI 49002 • (616) 381-9666

SITE NAME	DATE / INITAL
LOCATION	TIME
ANALYSIS	PRESERVATIVE
KAR NO.	

KAR LABS 4425 MANCHESTER KALMAZOO MI 49002	SITE NAME		DATE/INITIAL
	LOCATION		TIME
	KAR NO.	ANALYSIS	

APPENDIX C

REFRIGERATOR DAILY TEMPERATURE LOG

Refrigerators are to be checked first thing in the morning. Acceptable Range is **1, 2, 3 or 4°C**. All corrective actions MUST be recorded in "Comments" column, use back side if needed. Submit to QA Dept. immediately upon form completion.

Date	Time	Init.	LI2	LI3	WI C	BA 1	BA 2	BA 3	WQ 1	V1	V2	SV 1	SV 2	SV 3	SV 4	Comments

DO	Door was recently Opened	TR	Thermometer Replaced
TSI	Temperature Setting was Increased	RB	Refrigerator Broken
TSD	Temperature Setting was Decreased	RR	Refrigerator Repaired
TB	Thermometer Broken	RD	Refrigerator Defrosted

Date: _____

Reviewed by: _____

F:\WPDOCS\QA Manual and Forms\QA Manual Oct2000.wpd
October 3, 2000

SOP: KP018

DAILY CALIBRATION LOG

BALANCE NAME_____

S/N WEIGHT/S_____

Laboratory Location_____

Manufacturer specifications_____

Operating Range (100 x 0.01)g

Daily Check Weight _____

IF CHECK FAILS
CONTACT QA IMMEDIATELY

DAILY CALIBRATION CHECK

DATE	ANALYST	MASS(g)	OBSERVED MASS (g)	LIMITS	PASS	FAIL	ACTIONS/ COMMENTS
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			
				+/- 0.0005			

REVIEWED BY_____ DATE_____

APPENDIX E

SOP: KP018

QUARTERLY BALANCE CALIBRATION LOG

BALANCE NAME _____

External calibration mass (100g) Class S Weights S/N _____

Laboratory Location_____

Manufacturer specifications_____

OPERATING RANGE (100 X 0.01)g

BALANCE LEVELED

BALANCE CLEANED

LINEARITY CHECK

MASS	OBSERVED MASS (g)	LIMIT
0.0100g	_____	+/- 0.0002g
0.1000g	_____	+/- 0.0002g
10.0000	_____	+/- 0.0002g
100.0000	_____	+/- 0.0002g

MEETS CRITERIA

FAILS CRITERIA Contact QA Immediately

REPRODUCIBILITY CHECK

MASS USED _____G

MASS (g)
_____
_____
_____
_____
_____
_____
_____
_____

CALCULATIONS

		LIMIT
MEAN	_____	
STD DEV	_____	+/-0.0001
%RSD	_____	+/-0.002

MEETS CRITERIA

FAILS CRITERIA Contact QA Immediately

ACTIONS/COMMENTS: _____

ANALYST_____ DATE_____

REVIEWED BY_____ DATE_____

*Refererence:

APPENDIX F

APPENDIX G

KAR LABORATORIES ENVIRONMENTAL STANDARD OPERATING PROCEDURE (SOP) INDEX

General/QA

KG010	Thermometer Calibration
KG021	Assignment and Archiving of Laboratory Notebooks and Logbooks
KG022	Environmental Internal Audit/Inspection Program
KG023	Generation and Maintenance of Environmental SOPs
KG032	Data Reduction, Validation and Reporting
KG033	Faxing Completed Laboratory Reports
KG062	Use, Calibration and Care of Automatic Pipettors
KG066	Assigning an Expiration Date to Chemicals Received Without a Manufacturer's Expiration Date
KG990	Electronic Data Deliverables
KQSDWA	QC Policy for Safe Drinking Water Act Compliance
KO010	Raw Data Package Format for Chromatographic Methods
KO015	Peer Review of Trace Metals and Organic Instrumental data

Client Services (Sample Receipt/Handling)

KB120	The Collection of Residential Water Samples for the Analysis of Bacteria
KG020	Sample Receipt, Handling and Storage (Chain-of-Custody)
KG030	Sample Login
KG031	Login of Domestic Drinking Water Samples
KG055	Total Toxic Organics Sampler Bottle and Grab Bottle Cleaning
KG220	Conductivity
KG420	pH

Microbiology

KB010	Autoclave Calibration Procedure
KB030	Heterotrophic Plate Count
KB035	Pseudomonas
KB050	Monitoring Requirements/Instrument Maintenance for Microbiology
KB060	Preparation of Phosphate Buffered Rinse/Dilution Water
KB100	Bacteria, Total Coliform Membrane Filter Procedure
KB110	Bacteria, Total Coliform ONPG-MUG (Colilert) Procedure
KB150	Bacteria, Total Coliform Multiple Tube Fermentation Procedure
KB200	Bacteria, Fecal Coliform Membrane Filter Procedure
KB300	The Detection and Quantitation of Salmonella Bacteria
KB600	Yeast & Mold

Trace Metals

KG551	Turbidity using Orbeco-Hellige Turbidity Meter
KM010	Glassware Washing - Trace Metals Laboratory
KM200.7-ARL	Metals by ARL 3560 ICP-AES using EPA Method 200.7
KM200.7-PE	Metals by PE-3000XL ICP-AES using EPA Method 200.7
KM200.8	Metals by HP 4500 ICP-MS using EPA Method 200.8
KM245.2	Mercury in Water
KM300	Acid Digestion of Aqueous Samples and/or TCLP, SPLP, and EPTOX Extracts
KM301	Aqueous Sample Preparation by Acid Digestion for Trace Metals Analysis using the Environmental Express Block Digester
KM3050B	Acid Digestion of Sediments, Sludges and Soils for Metals
KM355	Mercury Analysis Using VGA-76 Continuous-Flow Vapor Generator
KM400	Acid Digestion of Sediments, Soils, Sludges and Wastes
KM500	Analysis of Trace Metals by Atomic Absorption Spectrophotometry

KM600	Analysis of Metals by Flame AAS
KM1631	Analysis for Ultra-Trace Mercury by Oxidation, P&T, CVAFP
KM1631B	Sampling Procedure for Ultra-Trace Mercury
KM6010B-ARL	Trace Metal Analysis using the ARL 3560 Inductively Coupled Plasma Atomic Emission Spectrometer
KM6010B-PE	Trace Metals Analysis using the PE 3000 XL Inductively Coupled Plasma Atomic Emission Spectrometer
KM6020	Metals by HP 4500 ICP-MS using EPA Method 6020
KM7195	Aqueous Sample Preparation for Hexavalent Chromium Analysis
KM7197	Preparation Of Sample For Hexavalent Chromium Analysis
KM7470	Aqueous Sample Preparation for Mercury Analysis
KM7471A	Mercury in Soils, Solids and Wastes

Semi-Volatiles

KO005	Organic Prep Laboratory Glassware Washing
KO504.1	1,2 Dibromomethane (EDB) and 1,2-Dibromo-3-Chloropropane (DBCP) by EPA Method 504.1
KO515_1	Chlorinated Phenoxy-acid Herbicides in Drinking Water by HRGC/ECD
KO515_1.PRE	Herbicide Sample Prep - 515.1
KO1664	Hexane Extractable Material (HEM) and Silica Gel-Treated N-Hexane Extractable Material (SGT-HEM) by Extraction and Gravimetry
KO3500B	TurboVap Concentration
KO3510	Separatory Funnel Extraction by Method EPA 3510C
KO3520	Continuous Liquid-Liquid Extraction by Method 3520
KO3545	Accelerated Solvent Extraction (3545)
KO3550	Sonication Extraction (except PCB) by Method 3550
KO36XX	Semi-Volatile Sample Cleanup
KO525	Semi-Volatile Compounds by GC-MS

KO8000.1	Analysis of Methanol by GC-FID
KO8000.2	Analysis of Triethanolamine by GC-FID
KO8000.3	Analysis of Triethylamine by GC-FID
KO8000FI.PRE	GC-FID Soil Prep
KO8081.OIL	Analysis of PCBs in Oil
KO8081A	Analysis of Pesticides by EPA Method 8081A
KO8082	Analysis of PCB by EPA Method 8082
KO8150.DZO	Diazomethane Generation for Method 8150A)
KO8151	Herbicides by EPA Method 8151A
KO8151A	Herbicide Sample Prep by EPA Method 8151A
KO8270C	Semi-Volatile Compounds by GC/MS (8270C)
KO8270_DRO	Diesel Range Organics - Total Petroleum Hydrocarbons by GC-MS
KO8315.1667	Aldehyde Sample Preparation and Analysis by High Performance Liquid Chromatography (HPLC)
KOSURRTABLE	Surrogate and Spike Chart for SVOA Lab
KOTURBO.VAP	TurboVap Concentrator

Volatile Organics

KO524.MS	VOC's by 524.2 using MS1
KO5035H	VOA Soil Preparation, High Level
KO5035L	VOA Soil Preparation, Low Level
KO8021	Volatiles by PTA30WS-Tracor 9000 PID-HALL
KO8260HP	The Determination of Volatile Organics by GC/MS by 8260B using H-P 5972B GC/MS
KO8260_GRO	Gasoline Range Organics - TPH by H-P 5972B GC-MS
KO9060A	Non-Purgeable Organic Carbon
KOTO-14_1	Toxic Organics in Air by EPA TO-14 (SUMMA - GC-MS)
KOTO-14F_1	Field Sampling Toxic Organics in Air by EPA TO-14

Waste

KW05	ASTM Water-Shake Extraction
KW10	Heat of Combustion/BTU
KW20	Extraction Procedure (EP) Toxicity
KW25	Ignitability
KW30	Flash Point
KW35	Corrosivity
KW40	Specific Gravity
KW45	Burning Rate Test for DOT 4.1 Classification
KW50	Halogens
KW60	Reactivity: Interaction with water
KW65	Toxicity Characteristic Leaching Procedure
KW70	Sulfur
KW80	Viscosity
KW90	Determination of Water Content using Fisher Model 391 K-F
KW100	The Characterization of Materials of Unknown Composition
KW200	The Management of Laboratory Waste: Organic Solvents
KW210	The Management of Laboratory Waste: PCB-Contaminated Materials

Water Quality

KG064	Use and Care of the Equatherm Water Bath
KG070	Cleaning of Glassware Using a Chromic/Sulfuric Acid Solution
KG100	O'haus G-160 Balance
KG117	Total Organic Carbon and/or Total Organic Matter in Soil by the Walkley-Black Method
KG120	Carbonate/Bicarbonate Alkalinity
KG130	BOD - Oxygen Demand, Biochemical

KG135	Boron, Low-level, Curcumin Method
KG140	Bromide
KG190	Chloride
KG200	Residual Chlorine
KG205	Chlorine Demand
KG210	COD - Oxygen Demand, Chemical
KG222	Sulfite
KG230	Monitoring and Maintenance of the Laboratory Water Deionization System
KG240	Free Cyanide
KG250	Cyanide, Total and Amenable
KG251	The Determination of Total Cyanide in Water
KG260	Cyanide, Weak Acid Dissociable
KG270	Cyanide, Weak and Dissociable
KG290	Fluoride
KG300	Formaldehyde
KG310	Hardness, Calculation Method
KG311	Hardness, EDTA Titration Method
KG320	Petroleum Hydrocarbons
KG340	MBAS
KG350	Ammonia-Nitrogen by Ion-specific Electrode
KG355	Ammonia-Nitrogen by Flow Injection Analysis
KG360	Nitrate-Nitrogen, Electrode
KG365	Nitrate/Nitrite-Nitrogen, Automated Continuous Flow
KG370	Nitrite-Nitrogen, Manual, Colorimetric
KG380	Chloride by Lachat
KG390	Determination of Organic Nitrogen and/or Total Kjeldahl Nitrogen Using the Hach Digesdahl Apparatus

KG392	Determination of Organic Nitrogen and/or Total Kjeldahl Nitrogen Using the Scientific Block Digestor
KG395	Total Nitrogen
KG400	Oil and Grease
KG405	TPH or Oil & Grease in Water by the Partition/Infrared Method
KG410	Dissolved Oxygen
KG425	Soil pH
KG430	Phenolics, Spectrophotometric, manual 4-AAP with Distillation
KG440	Hexavalent Chromium (colorimetric)
KG450	Total Phopshorus
KG455	Phosphorus Adsorption/Bray P1
KG460	Silica, Molybdosilicate Method
KG461	Silica, Heteropoly Blue Method
KG462	Total Solids at 103-105°C
KG463	Dry Weight Solids at 103-105°C
KG464	Fixed and/or Volatile Solids at 550°C
KG466	Total, Fixed and/or Volatile Dissolved Solids at 180°C
KG468	Total, Fixed and/or Volatile Suspended Solids at 103-105°C
KG470	Sulfate, Manual, Turbidimetric
KG475	Sulfate, Automated, Turbidimetric
KG530	Sulfides, total and dissolved
KG540	Sulfide, reactive/releasable
KG545	Dissolved Copper(I) and/or Copper(II) in Water by the Bathocuproine Method
KG550	Turbidity using UV-VIS Spectrophotometer
KG600	Determination of Fluoride, Chloride, Nitrite, Nitrate, Bromide, Phosphate and/or Sulfate in Water by Ion Chromatography
KW220	The Management of Laboratory Waste: Client Samples

The following methods are used for the analysis of drinking water for Safe Drinking Water Act Compliance Monitoring.

Microbiological:

Total Coliform - Membrane Filter Technique
Fecal Coliform - EC Broth Technique
Heterotrophic Plate Count - Poured Plate Technique

Inorganic Chemistry:

Antimony - U.S.EPA Method 200.8
Arsenic - U.S. EPA Method 200.8
Barium - U.S. EPA Method 200.8
Beryllium - U.S. EPA Method 200.8
Cadmium - U.S. EPA Method 200.8
Chromium - U.S. EPA Method 200.8
Copper - U.S. EPA Method 200.8
Cyanide - U.S. EPA Method 335.4
Fluoride - Standard Methods 4500F-C.
Lead - U.S. EPA Method 200.8
Mercury - U.S. EPA Method 245.1
Nickel - U.S. EPA Method 200.8
Nitrate - U.S. EPA Method 353.2
Nitrite - U.S. EPA Method 353.2
Selenium - U.S. EPA Method 200.8
Sulfate - Standard Methods 4500-SO4-D
Sodium - U.S. EPA Method 200.7
Thallium - U.S. EPA Method 200.8

Organic Chemistry:

Total Trihalomethanes, Regulated and Unregulated
Volatile Organic Chemicals, Vinyl Chloride - U.S. EPA Method 524.2
Dibromochloropropane, Ethylene Dibromide - U.S. EPA Method 504.1
Alachlor, Atrazine, Benzo(a)pyrene, Chlordane, Endrin, Heptachlor, Heptachlor Epoxide, Hexachlorobenzene, Hexachlorocyclopentadiene, Lindane, Methoxychlor, Simazine, Toxaphene - U.S. EPA Method 525.2
Dalapon, Dinoseb, Pentachlorophenol, Picloram, 2,4-D, 2,4,5-TP - U.S. EPA Method 515.2

Drinking water samples have special requirements under Safe Drinking Water Act regulations. Quality control requirements are both regulatory and method specific. Analysts are reminded of those QC requirements when entering results in LIMS. Special reporting requirements are required for drinking water samples that exceed MCLs. These requirements can be found in specific SOP's but generally require notifying a supervisor in the event of an MCL failure All samples with a sample type designated "SDWA" require that only the above methods be used for analysis and all other SDWA requirements apply.

APPENDIX H

QC REVIEW FORM

Project No: [redacted]

Requested By: _____ **Date** _____ **Time** _____ **Through:** _____
(Project Manager) (@KAR)

_____ **Phone #** (____) _____-_____
(Company name)

Lead Investigator: **Mike J.** **Bill R.** **Dave A.**

Specific question or focus of this inquiry: _____

Investigative:

Log-in OK?	☐Yes	☐ No	☐ Not applicable
Sample Labeled Correctly?	☐Yes	☐ No	☐ Not applicable
Raw data in order and presentable?	☐Yes	☐ No	☐ Not applicable
Math correct?	☐Yes	☐ No	☐ Not applicable
System clean (Lab Method Blank)?	☐Yes	☐ No	☐ Not applicable
Initial calibration acceptable?	☐Yes	☐ No	☐ Not applicable
Calibration verified?	☐Yes	☐ No	☐ Not applicable
Precision and accuracy verified?	☐Yes	☐ No	☐ Not applicable

Findings: _____

Client was contacted on: Date _____ **Time** _____ **by** _____ **with the following information:**

_____

Inquiry resolved/closed: _____ **Date** _____
(QA Officer)

This form is required under Section 8.1 of the KAR Quality Assurance Manual. File the completed form with the original project paperwork. ***Our goal: Initial response within 8 working hours.***
F:\WPDOCS\QA Manual and Forms\QC Review Form.wpd

APPENDIX I

Initial Demonstration of Capability (IDC)
Training Record Certificate

TEST : _____

METHOD : _____

ANALYST : _____

_____The analyst has read the Reference Method and understand its contents.
Initials & Date

_____The analyst has read the KAR SOP and understand its contents.
Initials & Date

The analyst has demonstrated proficiency in using the method as follows:

- ☐ Blank is acceptable and in-control
- ☐ Method Detection Limit (MDL) is acceptable (from MDL study)
- ☐ Precision and Accuracy is acceptable (from MDL study)
- ☐ Performance Evaluation sample (unknown sample) is acceptable

Comments:

Signature: _____ Date: _____
Quality Assurance Officer, Laboratory Supervisor, or Laboratory Director

APPENDIX J

APPENDIX D

STANDARD OPERATING PROCEDURES
DECONTAMINATION PROCEDURES

DECONTAMINATION - GROUNDWATER SAMPLING EQUIPMENT

1.0 Purpose:

The purpose of this document is to establish standard operating procedures for the decontamination of groundwater sampling equipment.

2.0 Procedures:

1. Put on a fresh pair of vinyl gloves.

2. Wipe off all excess contamination. Wash all parts in a solution of Alconox and distilled water. Follow with two distilled water rinses.

3. Dry with a clean paper towel, or allow to air dry.

4. If equipment blanks are required, pour distilled water through the sampler and collect the water in the appropriate sample containers. Immediately place the properly labeled equipment blank in a cooler with ice.

5. Dispose of all towelling, and gloves in a manner consistent with accepted procedures.

3.0 Records and Documentation:

Record all details of decontamination in the project specific field book.

4.0 Special Notes:

Decontamination of disposable bailers is not necessary. Alert the project manager if any deviations are to be made from the above procedures. Special circumstances may require specialized decontamination. The project manager should outline the necessary steps for the specialized decontamination.

5.0 Applicable Standards and References:

Minnesota Pollution Control Agency, 1995. Ground Water Sampling Guidance, Development of Sampling Plans, Protocols and Reports, January 1995.

APPENDIX E

STANDARD OPERATING PROCEDURES
CALIBRATION PROCEDURE

STANDARD OPERATING PROCEDURES - CALIBRATION AND CARE
ULTRAMETER – MODEL 6P
MYRON L COMPANY

1.0 Purpose:

The purpose of this document is to establish Standard Operating Procedures for the calibration and care of the Ultrameter 6P meter.

2.0 Procedures (Conductivity Calibration)

1. Calibration should occur every day the meter is to be used. Prior to calibration of the Ultrameter, all solutions should be at room temperature.

2. Begin by rinsing the conductivity cell three times with Standard Conductivity Calibration Solution. Refill the conductivity cell with the same solution. Press the "Cond" button, take note of the temperature displayed, and then press the "Cal" button to begin calibration.

3. Use the arrow keys to scroll the displayed value up or down towards the standard value. **Note:** Standard values along with corresponding temperatures are labeled on the conductivity solution bottle. To obtain the appropriate conductivity calibration standard value, match the temperature displayed on the Ultrameter with the same temperature on the bottle.

4. Once the arrow keys are used to scroll to the standard value, press the "Cal" button. Conductivity has been calibrated. **Note:** Occasionally, during calibration, "Fac" will be displayed. This display indicates factory calibration setting. If this is relatively close to the standard value, one may accept the factory setting. If this value greatly differs, certain problems may exist. One common problem is that of cold weather. Allow solutions and Ultrameter time to warm up for ease of calibration.

3.0 Procedures (pH Calibration)

1. Calibration should occur every day the meter is to be used. Prior to calibration of the Ultrameter, all solutions should be at room temperature.

2. Rinse sensor well 3 times with pH 7.00 buffer solution. Press the "pH" button to verify the pH calibration, and press the "Cal" button to begin the calibration.

3. Use the arrow keys to scroll the displayed value up or down towards the standard pH value. **Note:** pH values along with corresponding temperatures are labeled

on the buffer solution bottle. To obtain the appropriate pH value, match the temperature displayed on the Ultrameter with the same temperature on the bottle.

4. Once the arrow keys are used to scroll to the pH value, press the "Cal" button. pH Zero Calibration is now complete.

5. Now the Ultrameter is ready for pH Gain Calibration. The two solutions to be used are pH 4.00 (acidic) solution and pH 10.00 (basic) solution. The Ultrameter currently should be displaying blinking "Acd" and "Bas" icons.

6. Rinse sensor well 3 times with acid or base buffer solution.

7. Scroll up or down with the arrow keys until the display agrees with the buffer value (See Step 3, but use value displayed on the respective bottles for acid or base solutions). Press the "Cal" button to accept the second point of calibration. Now the display will show the next type of buffer to be used.

8. To continue with third point calibration, use basic buffer if acidic buffer was used in the second point calibration, or vice versa. Again, match the display to the known buffer value as in Step 3.

9. Repeat Steps 6 & 7 using opposite buffer solution. Press the "Cal" button to accept the third point of calibration, which ends the Calibration procedure.

10. Fill sensor well with pH 4.00 solution and replace protective cap. **Note:** When using Ultrameter, triple rinse wells and then fill both wells with sample. Be sure sample in each well does not rise above each individual well lid. Measurements are now ready to be taken.

4.0 Procedures (Care):

1. General care practices are conducted on the Ultrameter 6P such as keeping it relatively clean and dry, cleaning the electrode well when necessary, exhibiting proper care of the pH probe, or replacing the battery whenever "LO BAT" appears on the display. Also, when the Ultrameter is not in use, **always** pour pH 4.00 solution in the sensor well with protective cap attached (for storage). **Note**: pH probe should **never** be allowed to dry out.

.5.0 Applicable Standards and References:

Instruction Manual "Ultrameter Operation Manual – Model 6P" Myron L Company.

APPENDIX F

RESUMES

JEFFREY A. BOLIN
Environmental Scientist

Professional Experience

Mr. Bolin has over 20 years experience in environmental project management and consulting with attorneys, bankers, and industrial clients. Mr. Bolin has conducted and overseen hundreds real estate assessments of industrial manufacturing and processing facilities, commercial real estate, tool and die shops, robotic facilities, fertilizer storage and manufacturing, and fuel storage facilities in eight states and Canadian Provinces.

Mr. Bolin conducts environmental audits and assesses facility compliance under the Clean Air Act, Toxic Substance and Control Act, Resource Conservation and Recovery Act, Clean Water Act, and United States Environmental Protection Agency (USEPA) emergency planning and notification requirements.

Mr. Bolin directs and conducts field sampling for (a) building materials, soil, and groundwater in conjunction with Phase II and Phase III Environmental Site Assessments of commercial and industrial property; (b) wastewater and industrial effluent in conjunction with NPDES permits and Industrial Pretreatment Programs; (c) groundwater and soil assessments in accordance with RCRA, Superfund, and State regulations; (d) waste for RCRA waste characterization analyses; and (e) spill cleanup verification for PCB releases, leaking underground storage tanks, and site specific remediation. In addition, Mr. Bolin trains field staff in sampling methodologies and safety procedures.

Education

M.S. Hazardous Waste Management, Wayne State University, 1994

Graduate Certificate in Hazardous Waste Control, Wayne State University, Detroit, Michigan, 1990

B.S. in Environmental Sciences, Minor in Chemistry, Lake Superior State College, Sault Ste. Marie, Michigan, 1980

Honors and Appointments

Invited instructor of Certified Hazardous Materials Manager (CHMM) certification exam review courses in 1992 and 1994. Areas of instruction include managing hazardous wastes under the Resource Conservation and Recovery Act, requirements for Treatment, Storage and Disposal Facilities, and Asbestos, Lead, and PCBs.

Registrations and Certifications

Advanced EMS auditors Course for Both Quality & Environmental professionals (USA), Course is registered by the EARA. Certificate Number 145808003

Auditing of Environmental Management Systems Course, Course is registered by IRCA. Certificate Number 145808003

Hazardous Materials Manager, 1990, Institute of Hazardous Materials Management, 5010 Nicholson Lane, Rockville, MD 20852. Phone: (301) 984-8969. Certificate Number 2437.

Asbestos Building Inspector, 1990, USEPA-approved course, 24 hours, The Hazardous Materials Institute, Inc., 1550 Old Henderson Road, Suite N-232, Columbus, OH 43220. Phone: (800) 678-1105. Certificate Number 6507.

OSHA Hazwoper Training, 40-hour, 8-hour refresher, confined space entry.

Certified Underground Storage Tank Professional, State of Michigan, Michigan Underground Storage Tank Financial Assurance Act.

Publications

Bolin, JA and Hahn A. 1999. A Boon for Urban Redevelopment. Detroiter. February 1999. Detroit, Michigan.

Bolin JA and Hahn A. 1997. No Need to be Fazed by Phase I. Detroiter. October 1997. Detroit, Michigan.

Bolin JA and Ainslie AM. 1996. Federal Funds for Environmental Clean Up. In Commercial Inc. Volume 9, Number 3, pp 8-9. Detroit, Michigan

Barkach JH, Bolin JA, and Berger RS. 1994. An overview of the ASTM Phase I ESA and transaction screen processes. IN Proceeding of the Engineering Society of Detroit Environmental Response Planning Conference. May 9-10, 1994, Hyatt Regency, Dearborn, Michigan.

Bolin JA. 1993. Finding an Underground Storage Tank. Michigan Forward. December 1993. Lansing, Michigan.

Bolin JA, Berger RS, Barkach JH, and Ehmke C. 1993. Conducting an environmental compliance audit: Effective interviewing skills. IN Technical Papers of the Third Annual Environmental Management and Technology Conference/North America. October 12-14, 1993, Detroit, Michigan.

Berger RS, Barkach JH, and Bolin JA. 1992. Conducting an environmental compliance audit. IN Proceedings of the Fifteenth Annual Madison Waste Conference. September 23-24, 1992,

Department of Engineering Professional Development, University of Wisconsin-Madison (in press).

Barkach JH, Dragun J, Mason SA, and Bolin JA. 1991. The regulatory impact of the historic use of foundry sand waste as fill material. E^{2}m, The Journal of Environmental Engineering and Management. Summer 1993. Vol.3, Issue 2. St. Clair Shores, Michigan.

ALLAN CLIFFORD LAWTON
Geologist

Professional Experience

Mr. Lawton is a geologist with nine years experience in environmental consulting. His responsibilities include the management and conduct of Phase I Environmental Site Assessments (ESAs) and Phase II ESAs, the writing of Baseline Environmental Assessments, Remedial Action Plans (RAPs), and Due Care Analyses, and the field coordination of large high profile RCRA and Act 201environmental site assessments and implementation of remedial action plans. Mr. Lawton has conducted numerous real estate assessments of industrial manufacturing, commercial, and private properties in Michigan and Canada.

Mr. Lawton supervises and conducts sampling of soil, water, and waste in conjunction with Phase II and Phase III ESAs. These activities have been conducted at the following facilities: automotive foundries, metal stamping plants, fertilizer manufacturing facilities, landfills, chemical surfacing facilities, chemical production facilities, plastic injection factories, electronics manufacturing, commercial buildings, plating facilities, gasoline stations, and hospitals. He has extensive experience in sampling, logging, and testing of soil samples. Additionally, Mr. Lawton has a considerable background examining glacial, ice marginal, lacustrine, and fluvial stratigraphy. He has a background conducting fieldwork in physically demanding environments including extreme heat and cold, swamps, marshes, and helicopter fly camps (isolated forest sites).

Mr. Lawton also has three years experience with engineering construction inspection and testing and is a certified Geoprobe operator. Mr. Lawton has designed and implemented The Dragun Corporation's respirator and confined space entry programs and has supervised the yearly training for these programs. Additionally, he reviews the Standard Operating Procedures for field operations and sampling and has experience writing site-specific health and safety plans.

Through Mr. Lawton's many years of experience, he has acquired the skills to design and supervise multi-task field operations to complete Phase II ESAs in a cost efficient and timely manner.

Professional Affiliations

Asbestos Supervisor accreditation with the State of Michigan Department of Public Health, 1993

National Groundwater Association, 1993 to present

Education

B.Sc. in Geology, The University of Western Ontario, Canada, 1985

M.Sc. in Geology, The University of Western Ontario, Canada, 1989

OSHA 40 Hour Safety Training, DeLisle Associates Limited, Kalamazoo, Michigan, 1993

OSHA 8 Hour Safety Training update, 29 CFR 1910.120(e), Michigan, 1993 -1999

OSHA 8-Hour Supervisor Training Coarse, Semcosh Hazardous Waste Worker Training, Detroit, Michigan, 1994

Confined Space Training, Michigan Department of Public Health, Detroit, Michigan, 1993 and 1996

Asbestos Contractor/Supervisor Training, Barton Associates, Inc., Ann Arbor, Michigan, 1993 and 1995

Standard First Aid, American Red Cross, Detroit, Michigan, 1993, 1996, and 1999

Adult CPR, American Red Cross, Detroit, Michigan, 1993 through 1999

Respirator Training, John A. Reardon and Associates, West Bloomfield, Michigan, 1995

Papers

Invited presentation at the Waterloo Quaternary Discussion Group, 1987

Honors & Awards

Ontario Graduate Scholarship, 1987-88

Graduate Studies Admission Scholarship, 1986

University of Western Ontario Scholarship, 1984-85

The Faculty Association President's Scholarship, 1985

Aleksis Dreimanis Prize, 1985

Gordon Dixon Memorial Prize, 1985

Honors & Awards (cont'd)

The Stanley E. Slipper Award, 1985

Canadian Society of Petroleum Geologists, Student Industry Field Trip, 1984

Mineralogical Association of Canada Award, 1983

Appendix D

Risk-Based Screening Levels

A. INTRODUCTION

The Human Health Risk-Based Screening Levels (RBSLs) contained in this Appendix are intended to support QAPP ELEMENT 3: PROJECT DESCRIPTION. As explained in QAPP ELEMENT 3, the RBSLs have two essential purposes: 1) to assist in the selection of chemical constituent detection limits/reporting limits that will result in analytical data with appropriate sensitivity for entry into a risk assessment; and 2) to provide generic constituent screening concentrations (i.e., for soil and groundwater samples) which may be compared to the site-specific constituent concentration data obtained during the RFI. The purpose of the comparison is to support decisions for "no further action" or "no further investigation" for individual chemical constituents at a particular Solid Waste Management Unit (SWMU) or Area of Concern (AOC).

The rationale for the risk-based screening approach is explained in detail in the following U.S. EPA documents: 1) *Soil Screening Guidance: User's Guide* (OSWER Publication 9355.4-23; April 1996); 2) *Soil Screening Guidance: Technical Background Document* (OSWER Publication 9355.4-17A; EPA/540/R-95/128; May 1996); and *Corrective Action for Releases from Solid Waste Management Units at Hazardous Waste Management Facilities: Advanced Notice of Proposed Rulemaking* (Federal Register 61: 19432-19464, 1996).

These guidance documents explain EPA's intention to implement the risk-based screening approach for the Agency's major site remediation and corrective action programs (i.e., Superfund and RCRA). According to this approach, individual chemical constituents present at a facility undergoing corrective action may be eliminated from further investigation/action by comparison of each site-specific constituent concentration to a pre-determined screening concentration level. Please note that effective site characterization of chemical constituents (i.e., identity, concentration, media type, migration potential, etc.) is the key factor which ensures that comparison of site-specific analytical data with pre-determined screening levels will result in accurate and protective decisions.

The *Technical Background Document* includes tables of generic soil screening levels (SSLs) which were developed for the chemicals detected most frequently at Superfund sites. The calculated generic screening levels rely on specific risk-based assumptions and parameters that result in the following limitations:

A. The SSLs were calculated for approximately 110 chemicals. However, RCRA corrective

action can include a much larger list of potential chemicals of concern. Therefore, many potential RCRA constituents are not included in the SSL guidance.

B. The SSLs were calculated using parameters that are based on residential land use. If non-residential land uses (e.g., industrial, agricultural, recreational) are proposed and appropriate, then screening levels based on the proposed non-residential uses must be developed.

C. The SSLs are based on default exposure pathways (direct soil ingestion and inhalation of contaminants or particulate matter) as well as modeled pathways (migration of chemicals from soil to ground water). If other exposure pathways (e.g., dermal exposure, food chain exposure) apply to a facility because of location, the type of chemicals of concern, or the potential receptors, then these additional pathways must be included in the development of the screening levels.

B. CONTENTS OF TABLE

In order to address the limitations described above and provide generic risk-based screening levels for a wide range of potential target constituents, the Region 5 RCRA program has adopted the following approaches in developing the attached **TABLE of RBSLs**:

1. For constituents which have generic SSLs established and listed in Appendix A of the *Technical Background Document*, the Table of RBSLs displays the same values. The generic SSLs are presented in separate columns based on the major pathways of potential exposure, which are: direct **ingestion** of soil, **inhalation** of volatiles for organic constituents and mercury, and **inhalation** of fugitive particles for inorganic constituents. A third column displays the generic SSL values for **Protection of Ground Water** in order to account for migration of soil contaminants to ground water. The value displayed is based on the use of a default dilution-attenuation factor (DAF) of 20 to account for natural processes which reduce contaminant concentrations in the subsurface.

   NOTE: The following general criteria should be employed to select the appropriate RBSL for a specific chemical constituent: if more than one exposure pathway to soil contaminants is possible at a particular SWMU or AOC, then the pathway with the lowest SSL should be used as the RBSL.

2. For additional chemical constituents (i.e., RCRA constituents) which do not have generic SSL values established in the *Technical Background Document*, the soil RBSLs displayed in the Table of RBSLs were adopted from the EPA *Region 9 Preliminary Remediation Goals (PRGs)* (EPA Region 9; August 1996). In the Region 9 approach, the soil PRGs were established based on exposure of the same receptor to a combination of soil ingestion, inhalation of volatiles or fugitive particles, and dermal exposure.

3. The RBSLs discussed in items #1 and #2 above apply only to the current and/or future residential land use scenario. At many RCRA corrective action sites, it may also be appropriate to assume that a current and/or future industrial land use scenario should apply. For this situation, the "Industrial Soil" RBSL values displayed in the Table of RBSLs were also adopted from the EPA Region 9 PRGs.

4. For chemical constituents in groundwater, EPA has a throughout-the-plume/unit boundary point of compliance policy for ground water, and expects all usable ground waters to be returned to their maximum beneficial uses wherever practicable. Consequently, for screening purposes, the ground water RBSLs should always account for the potential residential use of ground water. Therefore, for risk-based screening of chemical constituents in ground water, Maximum Contaminant Levels (MCLs) have been adopted as ground water RBSLs. Chemical constituents which possess final MCLs are listed in a separate column in the Table of RBSLs. However, MCLs exist for less than 100 chemicals (*Drinking Water Regulations and Health Advisories; EPA 822-B-96-002; October 1996*). For chemical constituents which do not have a final MCL, the EPA Region 9 PRG value for drinking water should be used as the ground water RBSL. These values are listed in the final column in the Table of RBSLs. **NOTE:** As stated earlier in QAPP ELEMENT 3, some States have ground water remediation criteria that are more stringent than Federal MCL values for certain chemical constituents. It is suggested that QAPP writers and RCRA project managers should review the appropriate State ground water remediation standards before deciding on final ground water RBSLs for a given site.

CAS No.	Constituent	Soil Screening Level (mg/kg)					GW Screening Level (ug/L)	
					Region 9 PRG			
		Ingestion	Inhalation	Protection of GW [a]	Residential	Industrial	MCL	R9 PRG [b]
83-32-9	Acenaphthene	4700	---	570	NA	1.1E+02	---	3.7E+02
208-96-8	Acenaphthylene	---	---	---	---	---	---	---
67-64-1	Acetone	7800	100000	16	NA	8.8E+03	---	6.1E+02
75-05-8	Acetonitrile; Methyl cyanide	---	---	---	2.2E+02	1.2E+03	---	7.1E+01
98-86-2	Acetophenone	---	---	---	4.9E-01	1.6E+00	---	4.2E-02
53-96-3	2-Acetylaminofluorene; 2-AAF	---	---	---	---	---	---	---
107-02-8	Acrolein	---	---	---	1.0E-01	3.4E-01	---	4.2E-02
107-13-1	Acrylonitrile	---	---	---	1.9E-01	4.7E-01	---	3.7E+00
309-00-2	Aldrin	0.04	3	0.5	NA	1.1E-01	---	4.0E-03
107-05-1	Allyl chloride	---	---	---	3.2E+03	3.3E+04	---	1.8E+03
92-67-1	4-Aminobiphenyl	---	---	---	---	---	---	---
62-53-3	Aniline	---	---	---	1.9E+01	2.0E+02	---	1.1E+01
120-12-7	Anthracene	23000	---	12000	NA	5.7E+00	---	1.8E+03
7440-36-0	Antimony	31	---	5	NA	6.8E+02	---	1.5E+01
140-57-8	Aramite	---	---	---	1.8E+01	7.6E+01	---	2.7E+00
7440-38-2	Arsenic	0.4	750	29	NA	2.4E+00	---	4.5E-02
7440-39-3	Barium	5500	690000	1600	NA	1.0E+05	---	2.6E+03
71-43-2	Benzene	22	0.8	0.03	NA	1.4E+00	5	3.9E-01
56-55-3	Benzo[a]anthracene; Benzanthracene	0.9	---	2	NA	2.6E+00	---	9.2E-02
205-99-2	Benzo[b]fluoranthene	0.9	---	5	NA	2.6E+00	---	9.2E-02
207-08-9	Benzo[k]fluoranthene	9	---	49	NA	2.6E+01	---	9.2E-01
191-24-2	Benzo[g,h,i]perylene	---	---	---	---	---	---	---
50-32-8	Benzo[a]pyrene	0.09	---	8	NA	2.6E-01	0.2	9.2E-03
100-51-6	Benzyl alcohol	---	---	---	2.0E+04	1.0E+05	---	1.1E+04
7440-41-7	Beryllium	0.1	1300	63	NA	1.1E+00	---	1.6E-02
319-84-6	alpha-BHC	0.1	0.8	0.0005	NA	3.0E-01	---	1.1E-02
319-85-7	beta-BHC	0.4	---	0.003	NA	1.1E+00	---	3.7E-02
319-86-8	delta-BHC	---	---	---	---	---	---	---
58-89-9	gamma-BHC; Lindane	0.5	---	0.009	NA	1.5E+00	0.2	5.2E-02
111-91-1	Bis(2-chloroethoxy)methane	---	---	---	---	---	---	---
111-44-4	Bis(2-chloroethyl)ether	0.6	0.2	0.0004	NA	9.7E-02	---	9.8E-03

See text for source references. "—" = value is not currently available. "NA" = value is not applicable for this constituent: refer to the SSL values given in the columns labeled "Ingestion", "Inhalation" and "Protection of GW."

CAS No.	Constituent	Soil Screening Level (mg/kg)					GW Screening Level (ug/L)	
					Region 9 PRG			
		Ingestion	Inhalation	Protection of GW [a]	Residential	Industrial	MCL	R9 PRG [b]
	Bis(2-chloro-1-methylethyl) ether; 2,2-							
108-60-1	Dichlorodiisopropyl ether	---	---	---	6.3E+00	2.7E+01	---	9.6E-01
117-81-7	Bis(2-ethylhexyl) phthalate	46	31000	3600	NA	1.4E+02	---	4.8E+00
75-27-4	Bromodichloromethane	10	3000	0.6	NA	1.4E+00	---	1.8E-01
75-25-2	Bromoform; Tribromomethane	81	53	0.8	NA	2.4E+02	---	8.5E+00
101-55-3	4-Bromophenyl phenyl ether	---	---	---	---	---	---	---
85-68-7	Butyl benzyl phthalate; Benzyl butyl phthalate	16000	930	930	NA	9.3E+02	---	7.3E+03
7440-43-9	Cadmium	78	1800	8	NA	8.5E+02	---	1.8E+01
75-15-0	Carbon disulfide	7800	720	32	NA	2.4E+01	---	2.1E+01
56-23-5	Carbon tetrachloride	5	0.3	0.07	NA	5.0E-01	---	1.7E-01
57-74-9	Chlordane	0.5	20	10	NA	1.5E+00	---	5.2E-02
106-47-8	p-Chloroaniline	310	---	0.7	NA	2.7E+03	---	1.5E+02
108-90-7	Chlorobenzene	1600	130	1	NA	2.2E+02	---	3.9E+01
510-15-6	Chlorobenzilate	---	---	---	1.6E+00	7.1E+00	---	2.5E-01
59-50-7	p-Chloro-m-cresol	---	---	---	---	---	---	---
75-00-3	Chloroethane; Ethyl chloride	---	---	---	1.1E+03	1.6E+03	---	7.1E+02
67-66-3	Chloroform	100	0.3	0.6	NA	5.3E-01	---	1.6E-01
91-58-7	2-Chloronaphthalene	---	---	---	1.1E+02	1.1E+02	---	4.9E+02
95-57-8	2-Chlorophenol	390	53000	4	NA	3.7E+02	---	3.8E+01
7005-72-3	4-Chlorophenyl phenyl ether	---	---	---	---	---	---	---
126-99-8	Chloroprene	---	---	---	3.6E+00	1.2E+01	---	1.4E+01
7440-47-3	Chromium (total)	390	270	38	NA	4.5E+02	---	---
218-01-9	Chrysene	88	---	160	NA	7.2E+00	---	9.2E+00
7440-48-4	Cobalt	---	---	---	4.6E+03	9.7E+04	---	2.2E+03
7440-50-8	Copper	---	---	---	2.8E+03	6.3E+04	---	1.4E+03
108-39-4	m-Cresol	---	---	---	3.3E+03	3.4E+04	---	1.8E+03
95-48-7	o-Cresol	3900	---	15	NA	3.4E+04	---	1.8E+03
106-44-5	p-Cresol	---	---	---	3.3E+02	3.4E+03	---	1.8E+02
57-12-5	Cyanide	1600	---	40	NA	1.4E+04	---	7.3E+02
94-75-7	2,4-D; 2,4-Dichlorophenoxyacetic acid	---	---	---	6.5E+02	6.8E+03	70	3.7E+02
72-54-8	4,4'-DDD	3	---	16	NA	7.9E+00	---	2.8E-01

See text for source references. "---" = value is not currently available. "NA" = value is not applicable for this constituent: refer to the SSL values given in the columns labeled "Ingestion", "Inhalation" and "Protection of GW."

CAS No.	Constituent	Soil Screening Level (mg/kg)					GW Screening Level (ug/L)	
					Region 9 PRG			
		Ingestion	Inhalation	Protection of GW [a]	Residential	Industrial	MCL	R9 PRG [b]
72-55-9	4,4'-DDE	2	---	54	NA	5.6E+00	---	2.0E-01
50-29-3	4,4'-DDT	2	---	32	NA	5.6E+00	---	2.0E-01
2303-16-4	Diallate	---	---	---	7.3E+00	3.1E+01	---	1.1E+00
53-70-3	Dibenz[a,h]anthracene	0.09	---	2	NA	2.6E-01	---	9.2E-03
132-64-9	Dibenzofuran	---	---	---	1.4E+02	1.4E+02	---	2.4E+01
124-48-1	Dibromochloromethane; Chlorodibromomethane	8	1300	0.4	NA	2.3E+01	---	1.0E+00
96-12-8	1,2-Dibromo-3-chloropropane; DBCP	---	---	---	3.2E-01	1.4E+00	0.2	4.8E-02
106-93-4	1,2-Dibromoethane; Ethylene	---	---	---	4.9E-03	2.0E-02	---	7.6E-04
84-74-2	Di-n-butyl phthalate	7800	2300	2300	NA	6.8E+04	---	3.7E+03
95-50-1	o-Dichlorobenzene	7000	560	17	NA	7.0E+02	600	3.7E+02
541-73-1	m-Dichlorobenzene	---	---	---	5.0E+02	8.6E+02	---	1.8E+02
106-46-7	p-Dichlorobenzene	27	---	2	NA	8.5E+00	75	4.7E-01
91-94-1	3,3-Dichlorobenzidine	1	---	0.007	NA	4.2E+00	---	1.5E-01
110-57-6	trans-1,4-Dichloro-2-butene	---	---	---	---	---	---	---
75-71-8	Dichlorodifluoromethane	---	---	---	9.4E+01	3.1E+02	---	3.9E+02
75-34-3	1,1-Dichloroethane	7800	1300	23	NA	1.7E+03	---	8.1E+02
107-06-2	1,2-Dichloroethane	7	0.4	0.02	NA	5.5E-01	5	1.2E-01
75-35-4	1,1-Dichloroethylene	1	0.07	0.06	NA	8.0E-02	7	4.6E-02
156-60-5	trans-1,2-Dichloroethylene	1600	3100	0.7	NA	2.7E+02	100	1.2E+02
120-83-2	2,4-Dichlorophenol	230	---	1	NA	2.0E+03	---	1.1E+02
87-65-0	2,6-Dichlorophenol	---	---	---	---	---	---	---
78-87-5	1,2-Dichloropropane	9	15	0.03	NA	6.8E-01	5	1.6E-01
542-75-6	1,3-Dichloropropene (mixture)	4	0.1	0.004	NA	5.5E-01	---	8.1E-02
10061-01-5	cis-1,3-Dichloropropene [d]	---	---	---	---	---	---	---
10061-02-6	trans-1,3-Dichloropropene [d]	---	---	---	---	---	---	---
60-57-1	Dieldrin	0.04	1	0.004	NA	1.2E-01	---	4.2E-03
84-66-2	Diethyl phthalate	63000	2000	470	NA	1.0E+05	---	2.9E+04
297-97-2	O,O-Diethyl O-2-pyrazinyl phosphorothioate; Thionazin	---	---	---	---	---	---	---
60-51-5	Dimethoate	---	---	---	1.3E+01	1.4E+02	---	7.3E+00
60-11-7	p-(Dimethylamino)azobenzene	---	---	---	---	---	---	---

See text for source references. "---" = value is not currently available. "NA" = value is not applicable for this constituent: refer to the SSL values given in the columns labeled "Ingestion", "Inhalation" and "Protection of GW."

CAS No.	Constituent	Soil Screening Level (mg/kg)					GW Screening Level (ug/L)	
					Region 9 PRG			
		Ingestion	Inhalation	Protection of GW [a]	Residential	Industrial	MCL	R9 PRG [b]
57-97-6	7,12-Dimethylbenz[a]anthracene	---	---	---	---	---	---	---
119-93-7	3,3-Dimethylbenzidine	---	---	---	4.8E-02	2.1E-01	---	7.3E-03
122-09-8	alpha, alpha-Dimethylphenethylamine	---	---	---	---	---	---	---
105-67-9	2,4-Dimethylphenol	1600	---	9	NA	1.4E+04	---	7.3E+02
131-11-3	Dimethyl phthalate	---	---	---	1.0E+05	1.0E+05	---	3.7E+05
99-65-0	m-Dinitrobenzene	---	---	---	6.5E+00	6.8E+01	---	3.7E+00
534-52-1	4,6-Dinitro-o-cresol	---	---	---	---	---	---	---
51-28-5	2,4-Dinitrophenol	160	---	0.3	NA	1.4E+03	---	7.3E+01
121-14-2	2,4-Dinitrotoluene	0.9	---	0.0008	NA	1.4E+03	---	7.3E+01
606-20-2	2,6-Dinitrotoluene	0.9	---	0.0007	NA	6.8E+02	---	3.7E+01
88-85-7	Dinoseb; DNBP; 2-sec-Butyl- 4,6-dinitrophenol	---	---	---	6.5E+01	6.8E+02	7	3.7E+01
117-84-0	Di-n-octyl phthalate	1600	10000	10000	NA	1.0E+04	---	7.3E+02
123-91-1	1,4-Dioxane	---	---	---	4.0E+01	1.7E+02	---	6.1E+00
122-39-4	Diphenylamine	---	---	---	1.6E+03	1.7E+04	---	9.1E+02
298-04-4	Disulfoton	---	---	---	2.6E+00	2.7E+01	---	1.5E+00
115-29-7	Endosulfan (mixture)	470	---	1.80E+01	---	4.1E+03	---	2.2E+02
959-98-8	Endosulfan I [d]	---	---	---	---	---	---	---
33213-65-9	Endosulfan II [d]	---	---	---	---	---	---	---
1031-07-8	Endosulfan sulfate	---	---	---	---	---	---	---
72-20-8	Endrin	23	---	1	NA	2.0E+02	2	1.1E+01
7421-93-4	Endrin aldehyde	---	---	---	---	---	---	---
100-41-4	Ethylbenzene	7800	400	13	NA	2.3E+02	700	1.3E+03
97-63-2	Ethyl methacrylate	---	---	---	1.4E+02	1.4E+02	---	5.5E+02
62-50-0	Ethyl methanesulfonate	---	---	---	---	---	---	---
52-85-7	Famphur	---	---	---	---	---	---	---
206-44-0	Fluoranthene	3100	---	4300	NA	2.7E+04	---	1.5E+03
86-73-7	Fluorene	3100	---	560	NA	9.0E+01	---	2.4E+02
76-44-8	Heptachlor	0.1	4	23	NA	4.2E-01	0.4	1.5E-02
1024-57-3	Heptachlor epoxide	0.07	5	0.7	NA	2.1E-01	0.2	7.4E-03
118-74-1	Hexachlorobenzene	0.4	1	2	NA	1.2E+00	1	4.2E-02

See text for source references. "---" = value is not currently available. "NA" = value is not applicable for this constituent: refer to the SSL values given in the columns labeled "Ingestion", "Inhalation" and "Protection of GW."

CAS No.	Constituent	Soil Screening Level (mg/kg)					GW Screening Level (ug/L)	
					Region 9 PRG			
		Ingestion	Inhalation	Protection of GW [a]	Residential	Industrial	MCL	R9 PRG [b]
87-68-3	Hexachlorobutadiene	8	8	2	NA	2.4E+01	---	8.6E-01
77-47-4	Hexachlorocyclopentadiene	550	10	400	NA	4.6E+03	50	2.6E+02
67-72-1	Hexachloroethane	46	55	0.5	NA	1.4E+02	---	4.8E+00
70-30-4	Hexachlorophene	---	---	---	2.0E+01	2.0E+02	---	1.1E+01
1888-71-7	Hexachloropropene	---	---	---	---	---	---	---
591-78-6	2-Hexanone	---	---	---	---	---	---	---
193-39-5	Indeno(1,2,3-cd)pyrene	0.9	---	14	NA	2.6E+00	---	9.2E-02
78-83-1	Isobutyl alcohol	---	---	---	1.1E+04	1.0E+05	---	1.8E+03
465-73-6	Isodrin	---	---	---	---	---	---	---
78-59-1	Isophorone	670	4600	0.5	NA	2.0E+03	---	7.1E+01
120-58-1	Isosafrole	---	---	---	---	---	---	---
143-50-0	Kepone	---	---	---	2.5E-02	1.1E-01	---	3.7E-03
7439-92-1	Lead	400	---	---	NA	4.0E+02	---	4.0E+00
7439-97-6	Mercury (total)	23	10	2	NA	5.1E+02	---	1.1E+01
126-98-7	Methacrylonitrile	---	---	---	2.0E+00	8.1E+00	---	1.0E+00
91-80-5	Methapyrilene	---	---	---	---	---	---	---
72-43-5	Methoxychlor	390	---	160	NA	3.4E+03	40	1.8E+02
74-83-9	Methyl bromide; Bromomethane	110	10	0.2	NA	2.3E+01	---	8.7E+00
74-87-3	Methyl chloride; Chloromethane	---	---	---	1.2E+00	2.6E+00	---	1.5E+00
56-49-5	3-Methylcholanthrene	---	---	---	---	---	---	---
74-95-3	Methylene bromide; Dibromomethane	---	---	---	6.5E+02	6.8E+03	---	3.7E+02
75-09-2	Methylene chloride; Dichloromethane	85	13	0.02	NA	1.8E+01	---	4.3E+00
78-93-3	Methyl ethyl ketone; MEK	---	---	---	7.1E+03	2.7E+04	---	1.9E+03
74-88-4	Methyl iodide; Iodomethane	---	---	---	---	---	---	---
80-62-6	Methyl methacrylate	---	---	---	7.6E+02	2.8E+03	---	4.9E+02
66-27-3	Methyl methanesulfonate	---	---	---	---	---	---	---
91-57-6	2-Methylnaphthalene	---	---	---	---	---	---	---
298-00-0	Methyl parathion; Parathion methyl	---	---	---	1.6E+01	1.7E+02	---	9.1E+00
108-10-1	4-Methyl-2-pentanone; Methyl isobutyl ketone	---	---	---	7.7E+02	2.8E+03	---	1.6E+02

See text for source references. "---" = value is not currently available. "NA" = value is not applicable for this constituent: refer to the SSL values given in the columns labeled "Ingestion", "Inhalation" and "Protection of GW."

CAS No.	Constituent	Soil Screening Level (mg/kg)					GW Screening Level (ug/L)	
					Region 9 PRG			
		Ingestion	Inhalation	Protection of GW [a]	Residential	Industrial	MCL	R9 PRG [b]
62-44-2	Phenacetin	---	---	---	---	---	---	---
85-01-8	Phenanthrene	---	---	---	---	---	---	---
108-95-2	Phenol	47000	---	100	NA	1.0E+05	---	2.2E+04
106-50-3	p-Phenylenediamine	---	---	---	1.2E+04	1.0E+05	---	6.9E+03
298-02-2	Phorate	---	---	---	1.3E+01	1.4E+02	---	7.3E+00
109-06-8	2-Picoline	---	---	---	---	---	---	---
23950-58-5	Pronamide	---	---	---	4.9E+03	5.1E+04	---	2.7E+03
107-12-0	Propionitrile; Ethyl cyanide	---	---	---	---	---	---	---
129-00-0	Pyrene	2300	---	4200	NA	1.0E+02	---	1.8E+02
110-86-1	Pyridine	---	---	---	6.5E+01	6.8E+02	---	3.7E+01
94-59-7	Safrole	---	---	---	---	---	---	---
7782-49-2	Selenium	390	---	5	NA	8.5E+03	50	1.8E+02
7440-22-4	Silver	390	---	34	NA	8.5E+03	---	1.8E+02
93-72-1	Silvex; 2,4,5-TP	---	---	---	5.2E+02	5.5E+03	50	2.9E+02
100-42-5	Styrene	16000	1500	4	NA	6.8E+02	---	1.6E+03
18496-25-8	Sulfide	---	---	---	---	---	---	---
93-76-5	2,4,5-T; 2,4,5-Trichlorophenoxyacetic acid	---	---	---	6.5E+02	6.8E+03	---	3.7E+02
1746-01-6	2,3,7,8-TCDD; 2,3,7,8-Tetrachlorodibenzo-p-dioxin	---	---	---	3.8E-06	2.4E-05	---	4.5E-07
95-94-3	1,2,4,5-Tetrachlorobenzene	---	---	---	2.0E+01	2.0E+02	---	1.1E+01
630-20-6	1,1,1,2-Tetrachloroethane	---	---	---	2.4E+00	5.4E+00	---	4.3E-01
79-34-5	1,1,2,2-Tetrachloroethane	3	0.6	0.003	NA	1.1E+00	---	5.5E-02
127-18-4	Tetrachloroethylene; Perchloroethylene; Tetrachloroethene	12	11	0.06	NA	1.7E+01	5	1.1E+00
58-90-2	2,3,4,6-Tetrachlorophenol	---	---	---	2.0E+03	2.0E+04	---	1.1E+03
3689-24-5	Tetraethyl dithiopyrophosphate	---	---	---	2.0E+03	2.0E+04	---	1.1E+03
7440-28-0	Thallium (total)	---	---	0.7	5.4E+00	1.2E+02	2	---
7440-31-5	Tin	---	---	---	4.6E+04	1.0E+05	---	2.2E+04
108-88-3	Toluene	16000	650	12	NA	8.8E+02	1000	7.2E+02
95-53-4	o-Toluidine	---	---	---	---	---	---	---

See text for source references. "---" = value is not currently available. "NA" = value is not applicable for this constituent: refer to the SSL values given in the columns labeled "Ingestion", "Inhalation" and "Protection of GW."

HST-007

Henkel

Henkel Surface Technologies

February 28, 2001

Mr. Tom Manning
Corrective Action Project Manager
Corrective Action Section
USEPA - Region 5
77 West Jackson Blvd.
Chicago, Illinois 60604

Sent via Overnight Mail

Subject: Work Plan for Groundwater Monitoring
Former Morenci Michigan Facility
Morenci, Michigan
MID 058 723 867

Dear Mr. Manning:

Enclosed is the Work Plan to conduct one (1) groundwater sampling event at the Henkel Surface Technologies (HST) property located in Morenci, Michigan. This Work Plan, created by The Dragun Corporation, was prepared as a result of the December 7, 2000 meeting between representatives of the United States Environmental Protection Agency (USEPA) Region 5 and HST.

During that meeting, it was decided that in lieu of signing a Voluntary Corrective Action Agreement or entering into a Consent Order, HST would conduct a groundwater sampling event to evaluate current groundwater quality at the site. This information would be used to further establish that the USEPA's Environmental Indicator, migration of contaminated groundwater, has been achieved. The USEPA has already agreed that the Environmental Indicator concerning human exposures at the site is under control and has been achieved.

As further discussed in the meeting with the USEPA, the Work Plan has been prepared utilizing the general format and including many components of the USEPA Region 5 Model Quality Assurance Project Plan (QAPP). However, since the sampling event is relatively minor (i.e., four monitoring wells and a single event), full compliance with the Model QAPP was not necessary.

Henkel Surface Technologies is prepared to implement this Work Plan upon receipt of written approval from the USEPA.

If you have any questions regarding this Work Plan, please do not hesitate to contact me at (248) 589 – 4830.

Henkel Corporation
32100 Stephenson Highway Madison Heights Michigan 48071
Telephone (248) 583-9300

HST007

HST-008

HST 008
COMPLETED ORIGINALLY BY TOM MANNING
ORIGINAL FILE DATE – 3/13/2000

DOCUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION

Interim Final 2/5/99

RCRA Corrective Action
Environmental Indicator (EI) RCRIS code (CA725)

Current Human Exposures Under Control

Facility Name:	Henkel Corporation
Facility Address:	322 West Main Street
Facility EPA ID #:	MID 058 723 867

1. Has **all** available relevant/significant information on known and reasonably suspected releases to soil, groundwater, surface water/sediments, and air, subject to RCRA Corrective Action (e.g., from Solid Waste Management Units (SWMU), Regulated Units (RU), and Areas of Concern (AOC)), been **considered** in this EI determination?

X If yes - check here and continue with #2 below.

____ If no - re-evaluate existing data, or

____ if data are not available skip to #6 and enter"IN" (more information needed) status code.

BACKGROUND

Definition of Environmental Indicators (for the RCRA Corrective Action)

Environmental Indicators (EI) are measures being used by the RCRA Corrective Action program to go beyond programmatic activity measures (e.g., reports received and approved, etc.) to track changes in the quality of the environment. The two EI developed to-date indicate the quality of the environment in relation to current human exposures to contamination and the migration of contaminated groundwater. An EI for non-human (ecological) receptors is intended to be developed in the future.

Definition of "Current Human Exposures Under Control" EI

A positive "Current Human Exposures Under Control" EI determination ("YE" status code) indicates that there are no "unacceptable" human exposures to "contamination" (i.e., contaminants in concentrations in excess of appropriate risk-based levels) that can be reasonably expected under current land- and groundwater-use conditions (for all "contamination" subject to RCRA corrective action at or from the identified facility (i.e., site-wide)).

Relationship of EI to Final Remedies

While Final remedies remain the long-term objective of the RCRA Corrective Action program the EI are near-term objectives which are currently being used as Program measures for the Government Performance and Results Act of 1993, GPRA). The "Current Human Exposures Under Control" EI are for reasonably expected human exposures under current land- and groundwater-use conditions ONLY, and do not consider potential future land- or groundwater-use conditions or ecological receptors. The RCRA Corrective Action program's overall mission to protect human health and the environment requires that Final remedies address these issues (i.e., potential future human exposure scenarios, future land and groundwater uses, and ecological receptors).

Duration / Applicability of EI Determinations

EI Determinations status codes should remain in RCRIS national database ONLY as long as they remain true (i.e., RCRIS status codes must be changed when the regulatory authorities become aware of contrary information).

2. Are groundwater, soil, surface water, sediments, or air **media** known or reasonably suspected to be **"contaminated"**[1] above appropriately protective risk-based "levels" (applicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria) from releases subject to RCRA Corrective Action (from SWMUs, RUs or AOCs)?

	Yes	No	?	Rationale / Key Contaminants
Groundwater	X			volatiles
Air (indoors)[2]		X		
Surface Soil (e.g., <2 ft)		X		
Surface Water		X		
Sediment		X		
Subsurf. Soil (e.g., >2 ft)		X		
Air (outdoors)		X		

____ If no (for all media) - skip to #6, and enter "YE," status code after providing or citing appropriate "levels," and referencing sufficient supporting documentation demonstrating that these "levels" are not exceeded.

X If yes (for any media) - continue after identifying key contaminants in each "contaminated" medium, citing appropriate "levels" (or provide an explanation for the determination that the medium could pose an unacceptable risk), and referencing supporting documentation.

____ If unknown (for any media) - skip to #6 and enter "IN" status code.

Rationale and Reference(s):

Key ground water contaminants include: **The last time that MDEQ took groundwater samples (split with consultants) at Henkel (Morenci, Michigan) was on 08/04/1998. Four wells were sampled-three of these were non-detect for volatiles (Method 8260). One well, MW-3, had the following volatiles detected: vinyl chloride (5.4 ppb); 1,1-dichloroethene (1.1 ppb); cis-1,2-dichloroethene (46 ppb); and trichloroethene (17 ppb).**

---

[1] "Contamination" and "contaminated" describes media containing contaminants (in any form, NAPL and/or dissolved, vapors, or solids, that are subject to RCRA) in concentrations in excess of appropriately protective risk-based "levels" (for the media, that identify risks within the acceptable risk range).

[2] Recent evidence (from the Colorado Dept. of Public Health and Environment, and others) suggest that unacceptable indoor air concentrations are more common in structures above groundwater with volatile contaminants than previously believed. This is a rapidly developing field and reviewers are encouraged to look to the latest guidance for the appropriate methods and scale of demonstration necessary to be reasonably certain that indoor air (in structures located above (and adjacent to) groundwater with volatile contaminants) does not present unacceptable risks.

3. Are there **complete pathways** between "contamination" and human receptors such that exposures can be reasonably expected under the current (land- and groundwater-use) conditions?

Summary Exposure Pathway Evaluation Table

Potential **Human Receptors** (Under Current Conditions)

"Contaminated" Media	Residents	Workers	Day-Care	Construction	Trespassers	Recreation	Food[3]
Groundwater	_no__	_no__	_no__	_yes_			_yes
Air (indoors)	_no__	_no__	_no__				
~~Soil (surface, e.g., <2 ft)~~	___	___	___	___	___	___	___
Surface Water	_yes__	_no__			_no__	_no__	_yes
Sediment	_yes__	_no__			_no__	_no__	_yes
~~Soil (subsurface e.g., >2 ft)~~				___			_no
Air (outdoors)	_no__	_no__	_no__	_no__	_no__		

Instructions for Summary Exposure Pathway Evaluation Table:

1. Strike-out specific Media including Human Receptors' spaces for Media which are not "contaminated" as identified in #2 above.

2. enter "yes" or "no" for potential "completeness" under each "Contaminated" Media -- Human Receptor combination (Pathway).

Note: In order to focus the evaluation to the most probable combinations some potential "Contaminated" Media - Human Receptor combinations (Pathways) do not have check spaces ("___"). While these combinations may not be probable in most situations they may be possible in some settings and should be added as necessary.

____ If no (pathways are not complete for any contaminated media-receptor combination) - skip to #6, and enter "YE" status code, after explaining and/or referencing condition(s) in-place, whether natural or man-made, preventing a complete exposure pathway from each contaminated medium (e.g., use optional Pathway Evaluation Work Sheet to analyze major pathways).

_X_ If yes (pathways are complete for any "Contaminated" Media - Human Receptor combination) - continue after providing supporting explanation.

____ If unknown (for any "Contaminated" Media - Human Receptor combination) - skip to #6 and enter "IN" status code.

Rationale and Reference(s): **Releases to groundwater have occurred and these releases may have entered Bean Creek immediately adjacent to the facility property.**

[3] Indirect Pathway/Receptor (e.g., vegetables, fruits, crops, meat and dairy products, fish, shellfish, etc.)

4. Can the **exposures** from any of the complete pathways identified in #3 be reasonably expected to be **"significant"**[4] (i.e., potentially "unacceptable" because exposures can be reasonably expected to be: 1) greater in magnitude (intensity, frequency and/or duration) than assumed in the derivation of the acceptable "levels" (used to identify the "contamination"); or 2) the combination of exposure magnitude (perhaps even though low) and contaminant concentrations (which may be substantially above the acceptable "levels") could result in greater than acceptable risks)?

X If no (exposures can not be reasonably expected to be significant (i.e., potentially "unacceptable") for any complete exposure pathway) - skip to #6 and enter "YE" status code after explaining and/or referencing documentation justifying why the exposures (from each of the complete pathways) to "contamination" (identified in #3) are not expected to be "significant."

____ If yes (exposures could be reasonably expected to be "significant" (i.e., potentially "unacceptable") for any complete exposure pathway) - continue after providing a description (of each potentially "unacceptable" exposure pathway) and explaining and/or referencing documentation justifying why the exposures (from each of the remaining complete pathways) to "contamination" (identified in #3) are not expected to be "significant."

____ If unknown (for any complete pathway) - skip to #6 and enter "IN" status code

Rationale and Reference(s): **Releases to groundwater have occurred and these releases may have entered Bean Creek immediately adjacent to the facility property. The pathway is from groundwater under the facility entering Bean Creek. This pathway encompasses sediments in Bean Creek. Based on analytical results for groundwater at the facility, dated August, 1998, levels of contamination are only slightly above residential limits and can not be reasonably expected to be significant.**

---

[4] If there is any question on whether the identified exposures are "significant" (i.e., potentially "unacceptable") consult a human health Risk Assessment specialist with appropriate education, training and experience.

5. Can the "significant" **exposures** (identified in #4) be shown to be within **acceptable** limits?

_____ If yes (all "significant" exposures have been shown to be within acceptable limits) - continue and enter "YE" after summarizing and referencing documentation justifying why all "significant" exposures to "contamination" are within acceptable limits (e.g., a site-specific Human Health Risk Assessment).

_____ If no (there are current exposures that can be reasonably expected to be "unacceptable")- continue and enter "NO" status code after providing a description of each potentially "unacceptable" exposure.

_____ If unknown (for any potentially "unacceptable" exposure) - continue and enter "IN" status code

Rationale and Reference(s):

6. Check the appropriate RCRIS status codes for the Current Human Exposures Under Control EI event code (CA725), and obtain Supervisor (or appropriate Manager) signature and date on the EI determination below (and attach appropriate supporting documentation as well as a map of the facility):

X YE - Yes, "Current Human Exposures Under Control" has been verified. Based on a review of the information contained in this EI Determination, "Current Human Exposures" are expected to be "Under Control" at the **Henkel Corporation** facility, EPA ID # **MID 058 723 867**, located at **322 West Main Street, Morenci, MI**, under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.

____ NO - "Current Human Exposures" are NOT "Under Control."

____ IN - More information is needed to make a determination.

Completed by (signature) _____ Date _____
(print) _____
(title) _____

Supervisor (signature) _____ Date _____
(print) _____
(title) _____
(EPA Region or State) _____

Locations where References may be found:
Region 5 records center (7th floor).

Contact telephone and e-mail numbers

(name) Thomas Manning
(phone #) (312) 886-6943
(e-mail) manning.thomas@epa.gov

FINAL NOTE: THE HUMAN EXPOSURES EI IS A QUALITATIVE SCREENING OF EXPOSURES AND THE DETERMINATIONS WITHIN THIS DOCUMENT SHOULD NOT BE USED AS THE SOLE BASIS FOR RESTRICTING THE SCOPE OF MORE DETAILED (E.G., SITE-SPECIFIC) ASSESSMENTS OF RISK.

DOCUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION

Interim Final

2/5/99

RCRA Corrective Action
Environmental Indicator (EI) RCRIS code (CA750)

Migration of Contaminated Groundwater Under Control

Facility Name:	Henkel Corporation
Facility Address:	322 West main Street
Facility EPA ID #:	MID 058 723 867

1. Has **all** available relevant/significant information on known and reasonably suspected releases to the groundwater media, subject to RCRA Corrective Action (e.g., from Solid Waste Management Units (SWMU), Regulated Units (RU), and Areas of Concern (AOC)), been **considered** in this EI determination?

X If yes - check here and continue with #2 below.

____ If no - re-evaluate existing data, or

____ if data are not available skip to #6 and enter"IN" (more information needed) status code.

BACKGROUND

Definition of Environmental Indicators (for the RCRA Corrective Action)

Environmental Indicators (EI) are measures being used by the RCRA Corrective Action program to go beyond programmatic activity measures (e.g., reports received and approved, etc.) to track changes in the quality of the environment. The two EI developed to-date indicate the quality of the environment in relation to current human exposures to contamination and the migration of contaminated groundwater. An EI for non-human (ecological) receptors is intended to be developed in the future.

Definition of "Migration of Contaminated Groundwater Under Control" EI

A positive "Migration of Contaminated Groundwater Under Control" EI determination ("YE" status code) indicates that the migration of "contaminated" groundwater has stabilized, and that monitoring will be conducted to confirm that contaminated groundwater remains within the original "area of contaminated groundwater" (for all groundwater "contamination" subject to RCRA corrective action at or from the identified facility (i.e., site-wide)).

Relationship of EI to Final Remedies

While Final remedies remain the long-term objective of the RCRA Corrective Action program the EI are near-term objectives which are currently being used as Program measures for the Government Performance and Results Act of 1993, GPRA). The "Migration of Contaminated Groundwater Under Control" EI pertains ONLY to the physical migration (i.e., further spread) of contaminated ground water and contaminants within groundwater (e.g., non-aqueous phase liquids or NAPLs). Achieving this EI does not substitute for achieving other stabilization or final remedy requirements and expectations associated with sources of contamination and the need to restore, wherever practicable, contaminated groundwater to be suitable for its designated current and future uses.

Duration / Applicability of EI Determinations

EI Determinations status codes should remain in RCRIS national database ONLY as long as they remain true (i.e., RCRIS status codes must be changed when the regulatory authorities become aware of contrary information).

2. Is **groundwater** known or reasonably suspected to be **"contaminated"**[1] above appropriately protective "levels" (i.e., applicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria) from releases subject to RCRA Corrective Action, anywhere at, or from, the facility?

____ If yes - continue after identifying key contaminants, citing appropriate "levels," and referencing supporting documentation.

____ If no - skip to #8 and enter "YE" status code, after citing appropriate "levels," and referencing supporting documentation to demonstrate that groundwater is not "contaminated."

_X_ If unknown - skip to #8 and enter "IN" status code.

Rationale and Reference(s):

[1] "Contamination" and "contaminated" describes media containing contaminants (in any form, NAPL and/or dissolved, vapors, or solids, that are subject to RCRA) in concentrations in excess of appropriate "levels" (appropriate for the protection of the groundwater resource and its beneficial uses).

3. Has the **migration** of contaminated groundwater **stabilized** (such that contaminated groundwater is expected to remain within "existing area of contaminated groundwater"[2] as defined by the monitoring locations designated at the time of this determination)?

_____ If yes - continue, after presenting or referencing the physical evidence (e.g., groundwater sampling/measurement/migration barrier data) and rationale why contaminated groundwater is expected to remain within the (horizontal or vertical) dimensions of the "existing area of groundwater contamination"[2]).

_____ If no (contaminated groundwater is observed or expected to migrate beyond the designated locations defining the "existing area of groundwater contamination"[2]) - skip to #8 and enter "NO" status code, after providing an explanation.

_____ If unknown - skip to #8 and enter "IN" status code.

Rationale and Reference(s):

---

[2] "existing area of contaminated groundwater" is an area (with horizontal and vertical dimensions) that has been verifiably demonstrated to contain all relevant groundwater contamination for this determination, and is defined by designated (monitoring) locations proximate to the outer perimeter of "contamination" that can and will be sampled/tested in the future to physically verify that all "contaminated" groundwater remains within this area, and that the further migration of "contaminated" groundwater is not occurring. Reasonable allowances in the proximity of the monitoring locations are permissible to incorporate formal remedy decisions (i.e., including public participation) allowing a limited area for natural attenuation.

4. Does "contaminated" groundwater **discharge** into **surface water** bodies?

_____ If yes - continue after identifying potentially affected surface water bodies.

_____ If no - skip to #7 (and enter a "YE" status code in #8, if #7 = yes) after providing an explanation and/or referencing documentation supporting that groundwater "contamination" does not enter surface water bodies.

_____ If unknown - skip to #8 and enter "IN" status code.

Rationale and Reference(s):

5. Is the **discharge** of "contaminated" groundwater into surface water likely to be **"insignificant"** (i.e., the maximum concentration[3] of each contaminant discharging into surface water is less than 10 times their appropriate groundwater "level," and there are no other conditions (e.g., the nature, and number, of discharging contaminants, or environmental setting), which significantly increase the potential for unacceptable impacts to surface water, sediments, or eco-systems at these concentrations)?

_____ If yes - skip to #7 (and enter "YE" status code in #8 if #7 = yes), after documenting: 1) the maximum known or reasonably suspected concentration[3] of key contaminants discharged above their groundwater "level," the value of the appropriate "level(s)," and if there is evidence that the concentrations are increasing; and 2) provide a statement of professional judgement/explanation (or reference documentation) supporting that the discharge of groundwater contaminants into the surface water is not anticipated to have unacceptable impacts to the receiving surface water, sediments, or eco-system.

_____ If no - (the discharge of "contaminated" groundwater into surface water is potentially significant) - continue after documenting: 1) the maximum known or reasonably suspected concentration[3] of each contaminant discharged above its groundwater "level," the value of the appropriate "level(s)," and if there is evidence that the concentrations are increasing; and 2) for any contaminants discharging into surface water in concentrations[3] greater than 100 times their appropriate groundwater "levels," the estimated total amount (mass in kg/yr) of each of these contaminants that are being discharged (loaded) into the surface water body (at the time of the determination), and identify if there is evidence that the amount of discharging contaminants is increasing.

_____ If unknown - enter "IN" status code in #8.

Rationale and Reference(s):

6. Can the **discharge** of "contaminated" groundwater into surface water be shown to be "**currently**

---

[3] As measured in groundwater prior to entry to the groundwater-surface water/sediment interaction (e.g., hyporheic) zone.

8. Check the appropriate RCRIS status codes for the Migration of Contaminated Groundwater Under Control EI (event code CA750), and obtain Supervisor (or appropriate Manager) signature and date on the EI determination below (attach appropriate supporting documentation as well as a map of the facility).

____ YE - Yes, "Migration of Contaminated Groundwater Under Control" has been verified. Based on a review of the information contained in this EI determination, it has been determined that the "Migration of Contaminated Groundwater" is "Under Control" at the _____ _____facility , EPA ID # _____ , located at_____. Specifically, this determination indicates that the migration of "contaminated" groundwater is under control, and that monitoring will be conducted to confirm that contaminated groundwater remains within the "existing area of contaminated groundwater" This determination will be re-evaluated when the Agency becomes aware of significant changes at the facility.

____ NO - Unacceptable migration of contaminated groundwater is observed or expected.

_X_ IN - More information is needed to make a determination.

Completed by (signature) _____ Date _____
(print) _____
(title) _____

Supervisor (signature) _____ Date _____
(print) _____
(title) _____
(EPA Region or State) _____

Locations where References may be found:
Region 5 Records Center (7th floor).

Contact telephone and e-mail numbers

(name) Thomas Manning
(phone #) (312) 886-6943
(e-mail) manning.thomas@epa.gov