D.1.1

NATURAL RESOURCES
COMMISSION
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STATE OF MICHIGAN

JOHN ENGLER, Governor

DEPARTMENT OF NATURAL RESOURCES

John Hannah Building, P.O. Box 30241, Lansing, MI 48909

ROLAND HARMES, Director

April 19, 1993

RECEIVED SEP 14 1993
WMD RCRA
RECORD CENTER

Ms. Lydia Odgen Askew
Community Involvement Liaison
Division of Health Assessment and Consultation
Agency for Toxic Substances and Disease Registry
Mailstop E-32
1600 Clifton Road, N.E.
Atlanta, Georgia 30333

Dear Ms. Odgen Askew:

SUBJECT: Petitioned Public Health Assessment, Allen Park Clay Mine, Allen Park, Wayne County, Michigan
MID 980 568 711

Staff of the Waste Management Division (WMD) have reviewed the draft public health assessment for the Allen Park Clay Mine. Based on that review, the following comments are provided:

1. The data used by ATSDR to make their conclusions about public health implications only included data from 1980 through 1989. The WMD files contain a great deal of sampling data from 1989 through the present that was not considered in the assessment.

2. ATSDR should carefully consider the implications of the statement that "contaminants" have been detected in the groundwater beneath the facility. Contaminants infers a release from a known source. Without further information as to whether the constituents present in the groundwater represent a) upgradient or downgradient conditions; b) the total or dissolved fraction of the sample; and c) a natural occurrence versus a release; it seems more appropriate to state that elevated levels of some constituents are present in the groundwater.

   The assessment makes conclusions about metals contamination based strictly upon the laboratory derived number for chemical constituents. These metal levels may be the natural mineralized condition of this aquifer which makes it unusable. Also, the assessment does not appear to consider the limitations associated with using older metals data. For example, whether the analysis was performed upon the total or dissolved fraction of the sample. The majority of the maximum concentration values discussed in the assessment are results from sampling

performed 5 to 10 years ago. In the early to mid-1980's, laboratories typically analyzed water samples for total metals. Silty samples that are preserved without field filtration and are subsequently analyzed in the laboratory for total metals typically yield higher values for metals. When this occurs, the value obtained from the laboratory may not be indicative of groundwater contamination. The conclusions about the metals data needs to distinguish whether this is totals (TOT) or disolved (DISS) and not "combined."

3. ATSDR may want to consider moving the last paragraph on Page 16, Section C., "Eliminated Exposure Pathways," Groundwater, to the groundwater section on Page 11. The groundwater section entitled "On-Site Contamination" does not discuss the possibility/likelihood that sources other than the facility are responsible for the elevated constituents present in the groundwater. When discussing maximum concentration values for constituents present in the groundwater (Page 11, Groundwater), this section needs to address whether the sampling locations are upgradient or downgradient from the facility, and for the deep aquifer, the hydrogeologic factors that would limit the potential downward migration of contaminants. To help in this regard, Table 6 should identify the well location where each of the maximum concentration values were detected.

4. The summary at the beginning of the assessment states that "Metals have also been found in the on-site air." We recommend that this statement include that the concentrations were below the levels of public health concern.

5. For ease of reference, ATSDR should consider including an appendix in the back of the assessment containing copies of the analytical data. When comparing the maximum concentration values discussed in the assessment with the analytical data contained in WMD files, it appears that some of the information may be missing. For instance, Table 6 states that the maximum concentration for lead detected in the groundwater was 1000 ppb and that this value was detected during a March, 1985 sampling. When reviewing the data in WMD files from the March, 1985 sampling, the highest concentration noted for lead was 100 ppb. By providing copies of the analytical data in an appendix of the assessment, the reader will be able to quickly reference the information that ATSDR used to make their conclusions, in case questions arise about the data.

If you have any questions regarding these comments on the draft health assessment, please contact me.

Sincerely,

Peter Quackenbush
Senior Environmental Engineer
Waste Management Division
517-373-7397

cc: Mayor Gerald Richards, City of Allen Park
Mayor Thomas Coogan, City of Melvindale
Mayor Michael Guido, City of Dearborn
Mr. Richard Traub, U.S. EPA
Ms. Lorraine Kosik, U.S. EPA
Dr. Harold Humphrey, MDPH
Mr. Glen Brown, Wayne County Health Dept.
Mr. Ken Burda, DNR
Mr. Steve Buda, DNR
Ms. De Montgomery, DNR
HWP/C&E File

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 29 1990

RECEIVED
APR 2 - 1990
OFFICE OF RCRA
WASTE MANAGEMENT DIVISION
EPA, REGION V

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Mr. Jerome Amber, Principal Staff Engineer
Ford Motor Company
15201 Century Drive
Suite 608
Dearborn, Michigan 48120

Re: No-Migration Petition for Ford Allen Park Clay Mine Landfill - F-89-NMFP-FFFFF

Dear Mr. Amber:

I am writing in regard to your no-migration petition for the Ford Allen Park Clay Mine Landfill in which you sought an exemption from a prohibition of the disposal of a restricted hazardous waste, specifically K061- Electric Arc Furnace Baghouse Dust, in the Cell II unit. Following an initial review of the petition, we sent a letter to Mr. Douglas A. Painter on March 8, 1988 requesting the submission of additional information to enable EPA to evaluate your petition. To date we have not received a response to our information request.

The "No-Migration Variances to the Hazardous Waste Land Disposal Prohibition: A Guidance Manual for Petitioners" (Draft Interim Final) August 1989, states that if the additional information is not received within 180 days of the initial request the petition may be dismissed (see attached). This policy was developed to facilitate processing of complete petitions by avoiding burdensome, iterative requests for needed information.

In accordance with this policy, I am writing to inform you that we have dismissed your petition from the no-migration petition process since you did not respond to our information request. The effect of this dismissal is to remove your petition from the review system and close your petition file. Please note that your petitioned wastes are subject to the land disposal restrictions and must still be managed as such.

If you choose to submit a new petition, you will need to provide all of the information outlined in the March 8, 1988 information request letter. Furthermore, since your original submission, EPA now requires additional information to be provided

to demonstrate that migration will not occur. These new procedural and informational requirements are a result of the promulgation of the Land Disposal Restrictions First Third Rule (53 FR 31138, August 17, 1988). See 40 CFR 268.6. The attached Guidance Manual describes these additional requirements.

Your new petition would be assigned a new petition number and reviewed in chronological order along with all new petitions. Please forward new petition (6 copies) to the following address:

Chief, Assistance Branch, Office of Solid Waste (OS-343)
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

If you have any questions regarding the dismissal of your no-migration petition, or information that is needed to prepare a complete petition, please contact Jim Michael at (202) 382-2231.

Sincerely,

Matt Hale

for Joseph S. Carra, Director
Permits and State Programs Division
Office of Solid Waste (OS-343)

Attachment

cc: Matt Hale, OSW
Elizabeth Cotsworth, OSW
Karl Bremer, Region V
Rich Traub, Region V
Dave Petrovski, Region V
Pete Quackenbush, Michigan DNR

D.1.4

Ford's response to the EPA corrective action letter indicates that leachate from closed landfill cells was released to surface waters on the site prior to 1982. The company stated that action was taken to prevent further releases of leachate, however, they did not indicate that any remedial actions to determine the extent of any contamination and to clean it up were taken. A review of the Wayne County health Department files indicates that leachate outbreaks from the solid waste landfill cells occurred in 1984 and 1985 showing that the actions taken to correct the problem in 1982 were not adequate. Those files also indicated that spill of fuel oil occurred near the sedimentation basin in 1981 and there was no documentation that the contaminated soil was removed.

There is quite a bit of hydrogeological information on this site. Much of the work has been done by Ford to support their request for a groundwater monitoring waiver. This work has confirmed the extensive clay overlying the artesian aquifer. It appears that groundwater monitoring of the artesian aquifer will be waived.

Recommendations

A site investigation (SI) should be carried out for this facility. The site investigation should include inspection and sampling program to determine the location and extent of contamination, if any, from releases of hazardous wastes or hazardous constituents at the facility. The Part B application needs to be updated to address EPA and MDNR's latest review comments and include the revised plans for closure of cell 1 and design cell 2. A RCRA permit should be issued for this facility with a compliance schedule for Ford to perform an approved SI.

Schedule

7/86 EPA NOD to Ford requesting required information to complete the Part B application. (Including proposal for SI)

9/86 Ford submits the requested information.

10/86 EPA and MDNR review submittal and comment to Ford in NOD if necessary.

12/86 If application is adequate draft RCRA permit with compliance schedule for SI.

EPA
ATTACHMENT 7

NAME OF PREPARER Peter Quackenbush

PREPARER IS: USEPA EMPLOYEE ☐

STATE EMPLOYEE ☑

DATE 1/6/86

RECEIVED
JAN 28 1986
SOLID WASTE BRANCH
U.S. EPA, REGION V

TREATMENT, STORAGE, DISPOSAL FACILITY
INITIAL SCREENING
FOR
ENVIRONMENTAL SIGNIFICANCE

FACILITY NAME Ford Motor Company, Allen Park Clay Mine

FACILITY ID # MID980568711

FACILITY LOCATION 17250 Oakwood Blvd.
STREET ADDRESS

Allen Park Wayne MI 48101
CITY COUNTY STATE ZIP CODE

LIST ALL CURRENT INTERIM STATUS PROCESS CODES

D80

LIST ALL PROCESS CODES PROPOSED IN PART B APPLICATION (IF APPLICABLE)

D80

INSTRUCTIONS

FOR EACH OF ITEMS 1 THROUGH 11 BELOW, MARK ONE AND ONLY ONE BOX, BASED ON YOUR KNOWLEDGE OF THE FACILITY. USE THE "RATING DISCUSSION" TO ELABORATE, IF DESIRED. NOTE THAT ANY ENVIRONMENTAL CONCERN RATING OF HIGH CONSTITUTES YOUR RECOMMENDATION THAT THIS FACILITY IS "SUFFICIENTLY ENVIRONMENTALLY SIGNIFICANT" TO WARRANT PREPARATION OF A FACILITY MANAGEMENT PLAN. IN ORDER FOR YOU TO RECOMMEND THAT A FACILITY MANAGEMENT PLAN NEED NOT BE PREPARED, EACH AND EVERY ITEM MUST BE MARKED EITHER LOW OR N/A.

RECEIVED
JAN 28 1986
OSTI

nvironmental Concern Rating

	HIGH	LOW	N/A
1. Rate concern relative to the CERCLA Program, and discuss -(National Priority List sites should automatically be high concern; significant past handlers of CERCLA cleanup wastes should automatically be high concern; facilities that have absolutely no 'CERCLA connection' should be rated N/A)	☐	☒	☐
2. Rate concern relative to status as a commercial handler, and discuss -- (facilities that handle significant amounts of waste from a variety of sources should be rated high; (facilities that handle only their own company's off-site waste could be rated low; facilities that only handle on-site generated wastes should be rated N/A)	☐	☒	☐
3. Rate concern relative to facility's financial condition (facilities which have or are expected to declare financial insolvency should be rated high)	☐	☒	

RATING DISCUSSION: They handle only Food wastes.

RATING DISCUSSION:

Environmental Concern Rating

	HIGH	LOW	N/A
4. Rate concern relative to facility's 40 CFR Part265 compliance status/history, (High Priority Violators and Significant Non-Compliers should be rated high; for proposed facilities, rating is N/A)	☐	☒	☐
5. Based on the waste management processes employed (to be employed) at the facility, rate the concern, and discuss -- (processes subject to ground water monitoring will most often dictate a rating of high; incinerators will most often dictate a rating of high; "contained" storage/treatment such as in drums/tanks will most often rate low)	☒	☐	
6. Based on the presence, absence, significance of old Solid Waste Management Units & whether releases from old or current units are known, suspected, corrected; rate the concern, and discuss -- (known & seriously suspected releases should dictate a rating of high, unless felt to be insignificant/de minimis)	☒	☐	

RATING DISCUSSION: No major violations

RATING DISCUSSION:

RATING DISCUSSION: Known releases of leachate from solid waste landfill area

Environmental Concern Rating

	HIGH	LOW	N/A
7. Rate concern, based only on the volume and type of waste handled, and discuss -- (low volumes of extremely toxic wastes could rate a high; very heavy volumes of waste could rate a high, though wastes are not particulary dangerous)	☐	☒	
8. Rate concern relative to facility's NON-hazardous waste general environmental regulatory status/history, and discuss --	☐	☒	☐
9. Rate concern relative to facility's physical location(proximity to population or to sources of accidents or dangers which would tend to increase the facility's inherent danger)	☒	☐	

RATING DISCUSSION: Low volumes of waste have been handled

RATING DISCUSSION: Company has had some violations but attempted to remedy them expeditiously

RATING DISCUSSION: Located in highly populated area and major freeway

Environmental Concern Rating

	HIGH	LOW	N/A
10. Rate public concern, for whatever reason	☒	☐	
11. Other	☐	☐	☐

RATING DISCUSSION: Located in a highly populated area sensitive to hazardous waste issues.

DISCUSS: _____

BASED ON ABOVE ANALYSIS, RECOMMENDATION IS THAT

Ford Motor Company, Allen Park Clay Mine

FACILITY NAME

IS ENVIRONMENTALLY SIGNIFICANT AND A FACILITY MANAGEMENT PLAN WILL BE PREPARED ☒

IS NOT, AT THIS TIME, CONSIDERED TO BE ENVIRONMENTALLY SIGNIFICANT, AND A FACILITY MANAGEMENT PLAN WILL NOT BE PREPARED ☐

SUMMARY OF FACILITY SCREENING FOR ENVIRONMENTAL SIGNIFICANCE

FACILITY NAME Ford Motor Company Allen Park Clay Mine

FACILITY ID # MID980568711

	Environmentally Significant YES	NO
STATE'S RECOMMENDATION OF 1/10/86 DATE	☒	☐
U.S. EPA RECOMMENDATION OF DATE	☐	☐
JOINT STATE - U.S. EPA DETERMINATION	☐	☐

Discussion of resolution of issues, if any, in arriving at joint recommendation. Include date(s), location, participants at any resolution meetings.

(Date of Draft: 5/6/8

Attachment 2

Name of Preparer: L. A. Buchan
Date: 5/14/86

Model Facility Management Plan

1. Facility Name: Ford Motor Company - Allen Park Clay Mine
2. Facility I.D. Number: MID 980568711
3. Owner and/or Operator: Ford Motor Company
4. Facility Location: Oakwood Blvd & Southfield
   Street Address

   Allen Park (City) Wayne (County) Michigan (State) ' (Zip Code)

5. Facility Telephone (if available): (313) 322-0700
6. Interim Status or Permitted Hazardous Waste Units and Capacities of Each Unit:

Type of Units	Years of Operation (indicate active or closed)	Size or Capacity
____ Storage in Tanks or Containers		
____ Incinerator		
X Landfill	operated as claymine and landfill since 1955	260 acres 17 acres for hazwaste
____ Surface Impoundment		
____ Waste Pile		
____ Land Treatment		

7. Interim Status or Permitted Hazardous Waste Process(es) and Capacities of Each:

Type of Process	Years in Operation	Capacity
D80	A80 Interim Status	17 acres

8. Permit Application Status: Notification Aug 11, 1980
   Initial Part B Submission Date: ____
   Completed Application Submission Date: ____
   Notice of Deficiency Date(s): ____

9. Identification of Hazardous Waste Generated, Treated, Stored or Disposed at the Facility:

Type of Waste	Quantity	Generated, Treated, Stored or Disposed (note appropriate categories)
K087		
K061		

See Attachment A

10. Date Questionaire Re Solid Waste Management Units sent out 4/23/85

11. Date response to Questionaire received May 14, 1985

12. Review of Response indicates: (check one)

X Solid Waste Management Units exist (other than previously identified RCRA units)

_____ No Solid Waste Management Units exist (other than previously identified RCRA units)

_____ It is unclear from review of questionaire whether or not any solid Waste Management Units exist

_____ Respondent indicates that does not know if any Solid Waste Management Units exist

13. If the response to question 12 is that Solid Waste Management Units exist, than check one of the following:

X Releases of hazardous waste or constituents have occurred or are thought to have occurred

_____ Releases of hazardous waste or constituents have not occurred

_____ It is not known whether a release of hazardous waste or constituents has occurred

14. Description of All Available Monitoring Data for Facility:

Type of Data	Date	Author	Summary of Results or Conclusions

Attachment B

15. Description of Enforcement Status:

Type of Action	Date	Local, State or Federal	Result or Status

Attachment C

16. Description of Any Complaints from Public:

Source of Complaint	Date	Recipient	Subject and Response

Attachment D

17. Description of All Inspection Reports for Facility:

Date of Inspection	Inspector (Local, State, Federal)	Conclusions or Comments

Attachment E

18. During inspection of this facility did the inspector note any evidence of past disposal practices not currently regulated under RCRA such as piles of waste or rubbish, ponds or surface impoundments that might contain waste or active or inactive landfills?

X* Yes - give date if inspection and describe observation

* This inspector has not noted a release however has been documented recently by WCHD inspections of solid waste area

_____ No

_____ Don't know

19. Do inspection reports indicate observations of discolored soils or dead vegetation that might be caused by a spill, discharge or disposal of hazardous wastes or constituents?

X Yes - indicate date of report and describe observations

See Attachment E

_____ No

_____ Don't know

20. Do inspection reports indicate the presence of any tanks at the facility which are located below grade and could possibly leak without being noticed by visual observation?

_____ Yes - date of inspection and describe information in report

_____

_____

_____

X No

_____ Don't know

21. Does a groundwater monitoring system exist at the facility? yes

22. If answer to question 18 is yes, is the groundwater system capable of monitoring both regulated RCRA units and other Solid Waste Management Units? yes

Explain - GW waiver pending - facility granted partial waiver

23. Is the groundwater monitoring system in compliance with applicable RCRA groundwater monitoring standards? yes

If no, explain deficiency _____

24. Decribe all information on facility subsurface geology or hydrogeology available.

Type of Information	Author	Date	Summary of Conclusions

25. Did the facility submit a 103(c) notification pursuant to CERCLA? ?

_____ Yes Date of Notification _____

_____ No

26. If answer to 22 is yes, briefly summarize content of that notification. (waste management units identified, type of waste concerned)

27. Has a CERCLA Preliminary Assessment/Site Investigation (PA/SI) been completed for this facility?

_____ Yes ?

_____ No

28. If answer to question 27 is yes, briefly describe conclusions of the PA/SI focusing on types of environmental contamination found, wastes and sources of contamination.

_____

_____

_____

_____

_____

29. If available, having reviewed the CERCLA notification, RCRA Part A and RCRA Part B, it appears that:

_____ RCRA and CERCLA units are same at this facility

___X___ RCRA and CERCLA units are clearly different units

_____ There is an overlap between the RCRA and CERCLA units (some are the same, some are different)

30. The facility is on the National Priorities List or a proposed update of the List

_____ Yes - indicate NPL or update

___X___ No

31. Description of Any Past Releases or Environmental Contamination:

Type/Source of Release	Date	Material Released	Quantity	Response

Numerous leachate seeps noted with discharges to surface drains. See Attachment E

32. Identification of Reports or Documentation Concerning Each Release Described in Item 14.

Title/Type of Report	Date	Author	Recipients	Contents

See Attachment E

33. Highlight any information gaps in the file - describe any plans to obtain additional needed information.

Prior to 1974 no information on previous fill areas

Recommendation for Regional Approach to the Facility: Rank in order of appropriateness for this Facility one through seven

2 Permit Compliance Schedule

3 Corrective Action Order (may include compliance schedule)

4 Other Administrative Enforcement

5 Judicial Enforcement

6 Referral to CERCLA for Federally Financed or Enforcement Activity

1 Voluntary/Negotiated Action

7 State Action

Brief narrative in explanation of selection of ranking: _____

Corrective action should involve evaluation of the SW area containment areas, de-water solid waste leachate head & engineer a permanent solution to prevent leachate buildup and the leachate seeps.

If Permit Alternative is Selected: Projected Schedule

Date of Part B Submission: _____

Date of Completeness Check: _____

Date for Additional Submissions (if required): _____

Date of Completion of Technical Review: _____

Completion of Draft Permit/Permit Denial: _____

Public Notice for Permit Decision: _____

Date of Hearing (if appropriate): _____

Date for Final Permit or Denial Issuance: _____

Description of any corrective action provisions to be included in permit -

If Corrective Action Order Alternative is Selected:

Estimated Date for Order Issuance: _____

Description of Provisions of the Order to be Completed by Facility: _____

_____

_____

Description of Compliance Schedule to be Contained in Order:

_____

_____

_____

If Other Administrative Enforcement Action is Selected:

Projected Date for Issuance of the Order: _____

Description of Provisions of the Order: _____

_____

_____

If Judicial Enforcement Alternative Selected:

Date of Referral to Office of Regional Counsel: _____

If Referral to CERCLA for Action Selected:

Date of Referral to CERCLA Sections: _____

If Voluntary/Negotiated Action Alternative if Selected:

Date of Initial Contact with Facility: _____

Description of Goals of Contact or Discussions with Facility: _____

Secure Solid Waste Area & remove leachate.

Devise system to permanently manage leachate

_____

Date for Termination of Discussions if Not Successful:

_____

Date of Finalization of Settlement if Negotiation Successful:

_____

If State Action Alternative is Selected:

Date for Referral to State: _____

State Contact: _____

Attachment A-1

WAYNE COUNTY DEPARTMENT OF HEALTH

ENVIRONMENTAL HEALTH DIVISION

3669 METRO PLACE MALL
WAYNE, MICHIGAN 48184
Telephone: (313) 326-4900

DENNIS J. DILWORTH
Director

JOHN S. STOCK
Deputy Director

September 13, 1983

Mr. Hakim Shakir
Michigan Dept. of Natural Resources
Ground Water Quality Division
1120 State Fair
Detroit, Michigan 48203

REFERENCE: Allen Park Clay Mine Landfill
License Application
Solid Waste Facility #82-001

Dear Hakim:

This Department has reviewed the revised engineering plans, as well as the license application for the above mentioned facility and recommends approval of the plans and the license renewal. The license, when issued, should stipulate the following:

1. Variances to Rule R 299.4315(4) and R 299.4316(1) are granted provided only the following wastes are accepted:

   Blast furnace flue dust
   BOF flue dust
   Blast furnace filter cake
   Foundry sand
   BOF KISH
   Fly ash
   Lime dust
   Coke breeze
   Waste water treatment plant sludge
   Scrap glass or cullet
   Construction and demolition wastes

Prior to accepting any additional waste streams, approval must be received from the Wayne County Health Department or the variances cited above will be rescinded.

Mr. Hakim Shakir
Dept. of Natural Resources
Ground Water Quality Division

September 13, 1983
- Page Two -

2. Water quality monitoring must continue as indicated in Ford's May 5, 1983 letter to the Wayne County Health Department until approved otherwise.

Enclosed are three sets of the engineering drawings for the clay mines landfill. Please stamp these plans approved when the license is issued and then please return two copies to this office. We will then forward one copy to Ford Motor Company.

If you have any questions, please contact me at 326-4900, extension 70.

Very truly yours,

Robert N Ratz

Robert N. Ratz
Public Health Engineer
Division of Environmental Health

RNR/jt
Encls.

cc: Ben Tretheway
(Ford Motor Co.- 3001 Miller Rd., Dearborn, MI 48121)

cc: Gordon Ruttan
Wayne County Planning Commission
730 City County Bldg., Detroit, MI

Attachment A-2

ANNUAL
ESTIMATED AMOUNT OF REFUSE FOR CLAY MINE DUMP

Area	Material	Cubic Yards
Dearborn Engine	Mud	18,000
Frame Plant	General Refuse	9,000
Specialty Foundry	Sand - Cores	41,000
Blast Furnace	Flue Dust	58,000
Glass Plant	Scrap Cullet	4,000
BOF	BOF Dust	33,000
Power House	Fly Ash	115,000
Lagoons	Sluice	17,500
MCC	Sand	100,000
Miscellaneous	General Refuse	10,000
		405,500

1/27/77

MPD-EK

Attachment A-
Inspector's Copy

STATE OF MICHIGAN
DEPARTMENT OF NATURAL RESOURCES

Hazardous Waste Disposal Facility
Operating License

1. In compliance with the provisions of the Michigan Hazardous Waste Management Act (1979 PA 64, as amended),

17307 Oakwood
Allen Park, MI

Ford Motor Company
Allen Park Clay Mine Landfill

is authorized to operate a hazardous waste disposal facility located at

Oakwood Boulevard and Southfield Freeway
Allen Park, Michigan

in accordance with the provisions set forth in Parts I and II hereof.

2. The license shall become effective on the date of issuance and shall expire 4 years from the date of issuance.

3. This license is comprised of the following 35 pages, the operating license application and all addendums to the application

4. Issued this 22nd day of October, 1982 for the Michigan Department of Natural Resources.

Howard A. Tanner
Director

17250 Oakwood Boulevard
Allen Park 48120

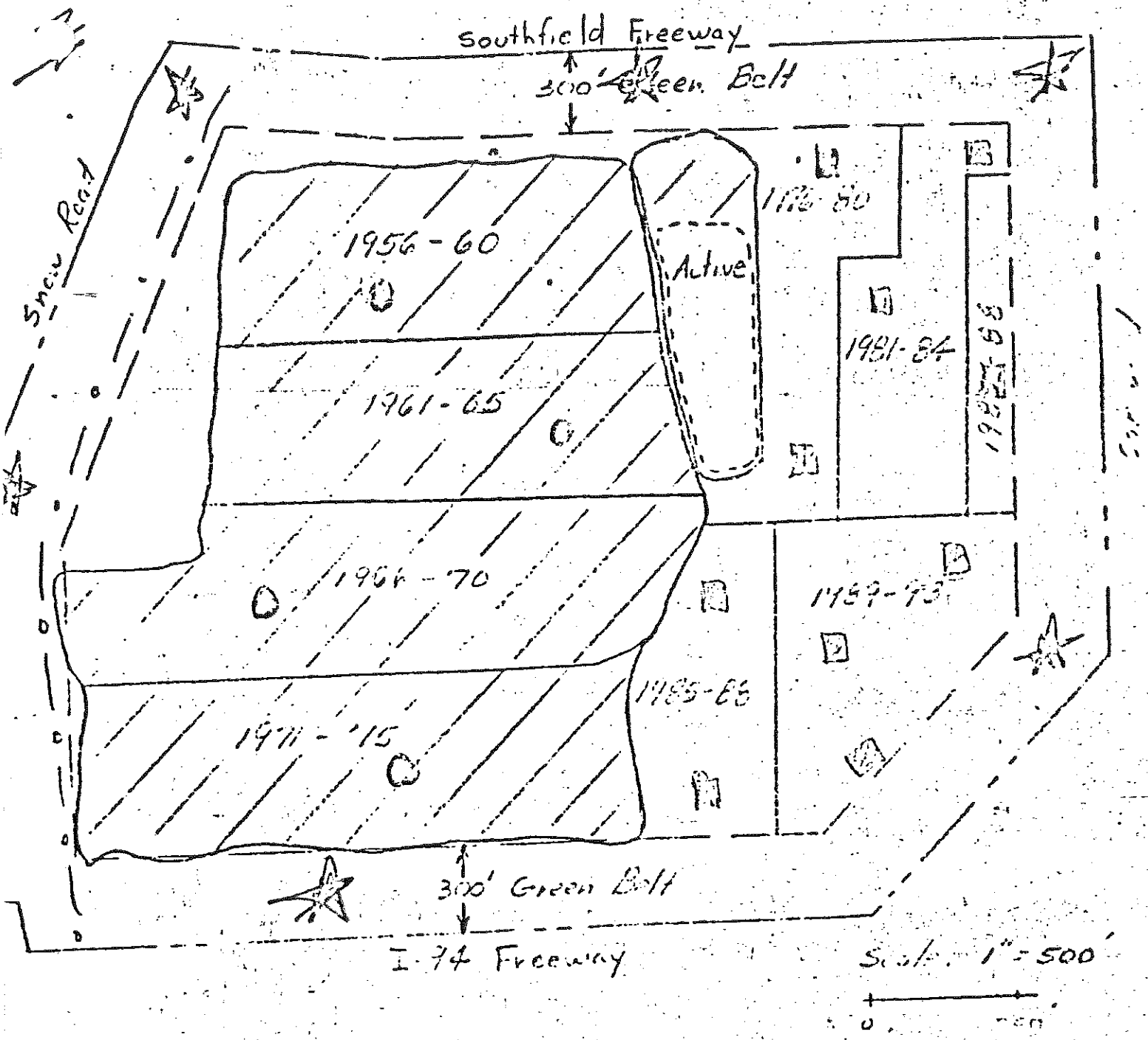
RECEIVED
NOV 2 1982
RESOURCE RECOVERY
S.E. MICHIGAN REGION
DIVISION OFFICE

TABLE 1

Acceptable Waste Types
and
Annual Quantity Limitations

Hazardous Waste Code	Waste Description	Quantity Limit per year
K061	Emission control dust/sludge from the primary production of steel in electric furnaces	19,074 tons
K087	Decanter tank tar from coking operations	5,170 cu. yd.

Attachment A-4
255 Ac GWQ File



Gdwater obs + monitor

Existing Fill

Soil exploratory

Open Excavation

Leachate obs + MONI

Open Drain

Attachment B

Monitoring Data

Type of Data	Date	Author	Summary of Results
Surface pond	7/9/76	MDNR	Cl - 2300 mg/l ; SO_4 1320 pH 12.7 - Contaminated
Surface waters	11/30/76	MDNR	Contamination noted
GW	3/8/78 - 7/27/79	FMC	No contamination
GW	7/30/80	FMC	No contamination
GW	11/17/80	MDNR	No contamination
GW	11/20/80	MDNR	No contamination
GW	7/14/82	FMC	No contamination
"	10/26/82	FMC	" "
Waste analysis	12/14/82	FMC	
Sediment Pond	2/23/83	"	No contamination
GW	2/24/83	"	" "
GW	4/26/83	"	" "
Leachate	7/8/83	"	" "
Leachate	4/3/84	MDNR	Phenol contamination
GW	7/12/84	"	No contamination

Allen Park Clay Mine Wastes
Typical as Received Analyses (mg/kgm)

	Decanter Tank Tar Sludge	Electric Arc Furn. Dust	Blast Furn. Flue Dust	BOF Flue Dust	Blast Furn. Filter Cake	Foundry Sand	BOF Kish	Fly Ash	Lime Dust	Coke Breeze
EP Toxic	No	Yes(Zn,Pb,Cd)	No	No	No	No	No	Exempt	No	No
Iron	----	350,000	122,000	560,000	150,000	1,200	490,000	34,500	----	5,000
Carbon	----	4,700	520,000	7,400	404,000	6,600	240,000	194,000	----	880,000
Arsenic	----	50	19	42	2	20	78	----	----	15
Barium	----	<1	<1	<1	20	<1	<1	----	----	<1
Cadmium	----	95	<1	50	8	<1	<1	----	----	<1
Chromium	----	500	<1	130	70	<1	60	----	----	1
Lead	----	<4,500	<1	3,000	350	44	<1	----	----	69
Mercury	----	<1	<1	<1	<1	<1	<1	----	----	<1
Selenium	----	120	98	<1	<1	35	70	----	----	3
Silver	----	6	<1	<1	9	<1	<1	----	----	19
Manganese	----	39,000	7,500	10,000	4,500	79	2,800	----	----	70
Zinc	----	150,000	120	22,000	400	40	194	----	----	110
Phosphorus	----	450	200	190	300	400	170	----	----	90
Sulfur	----	3,600	4,000	1,600	4,000	200	850	3,100	----	7,300
Calcium	----	61,000	18,000	2,000	20,000	60	580	13,100	714,700	300
Magnesium	----	11,000	7,500	9,600	13,000	100	3,800	5,400	----	300
Aluminum	----	2,400	2,200	<2	3,700	<2	1,600	147,200	----	<2
Silicon	----	15,000	28,000	8,000	83,000	450,000	25,000	201,700	----	20,000
Potassium	----	5,900	980	5,000	2,200	170	640	9,700	----	220
Sodium	----	5,200	440	2,300	1,500	390	630	3,700	----	650
Fluorine	----	26	10	23	4	<1	48	----	----	<1
Cyanide	14	<1	<1	<1	3	<1	<1	----	----	2
Phenol	1,800	<1	<1	<1	3	<1	2	----	----	3
Naphthalene	2,700	----	----	----	----	----	----	----	----	----

SSECO
12/14/02

COLL BY L. Blumenthal TRANSFERED TO L. H. Dahl RECEIVED AT LAB EXAMINER

ON Allied Chem Mich, Alled Pond, Mich. SAMPLE REMARKS supernatant analyzed SEND RESULTS TO (NAME & SECTION) T. Jankiewicz, Reserve Recovery

"DO NOT PUNCH"

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	PHENOL T. REC UG/L 32730	CN TOTAL MG/L 00720	S= TOTAL MG/L S 00745	BOD-5 TOTAL MG/L 00310
Decantation Well	I01		201120	1400		11414								
	I02													
	I03													
	I04													
	I05													
	I06													
	I07													
	I08													
	I09													
	I10													

NO2 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	ALK. TOTAL MG/L 00410	BICARB HCO3- MG/L 00440	CARB. CO3= MG/L 00445	
	C 0.17	0.06	0.39	C 0.73													
	C			C							120		860	380	C 10	C	
	C			C											C	C	
	C			C											C	C	
	C			C											C	C	
	C			C											C	C	
	C			C											C	C	
	C			C											C	C	
	C			C											C	C	
	C			C											C	C	
	C			C											C	C	

ESD-03201 REV. 05/80

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

IB 6731 PROJ CODE 6B COST CENTER 96009 PR 4 COLLECTED BY F. Bellomaidich TRANSFERED TO L. A. Bucher RECEIVED AT LAB BC EXAMINER JP

CATION MPLED Allen Park Clay Mine, Allen Park, Mich. SAMPLE REMARKS

"DO NOT PUNCH" SEND RESULTS TO (NAME & SECTION) J. Janisch, Resource Recovery

D	DESCRIPTION OF SAMPLING SITE OR SAMPLE	REF NO. P	STORET NUMBER	START DATE YYMMDD	TIME MIL TTTT	DEPTH FEET	LAB NO. 2 00003	FE-OIL MG/L 00560	A-1242 PCB UG/L 39496	A-1254 PCB UG/L 39504	A-1260 PCB UG/L 39508
03	Observation Well	I01		801120	1400		19404		K0.3	K0.1	K0.1
		I02									
		I03									
		I04									
		I05									
		I06									
		I07									
		I08									
		I09									
		I10									

oHD Original-File

HIGAN DEPT. OF NATURAL RESOURCES, ENVIRONMENTAL LABORATORY ANALYSIS -- PHYSICAL & BIOLOGICAL - WATER - GENERAL USAGE

6731 PROJ CODE 6B COST CENTER 96007 PR 4 COLLECTED BY E. Beldbraidish TRANSFERED TO L. AuBuch RECEIVED AT LAB BC EXAMINER GW

ATION LED Allen Park Clay Mine, Allen Park, Mich SAMPLE REMARKS SEND RESULTS TO (NAME & SECTION) J. Janiczek, Resource Recovery

"DO NOT PUNCH"

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	COND. 25 C US/CM 00095	RES-NF SS-105 MG/L 00530	RES-TF TDS180 MG/L 70300
Observation Well	I01		801120	1400		14404				8.4	1940	36	1600
	I02												
	I03												
	I04												
	I05												
	I06												
	I07												
	I08												
	I09												
	I10												

ESD-03301 REV. 05/80

NATURAL RESOURCES, ENVIRONMENTAL LABORATORY ANALYSIS -- ENIVRONMENTAL QUALITY - WATER - GENERAL USAGE

PROJ CODE 65 COST CENTER 96007 PR 4 COLLECTED BY F. Bellorradich J. Janiczek TRANSFERED TO RECEIVED AT LAB EXAMINER

Allen Park Clay Mine; Allen Park, Mich. SAMPLE REMARKS Supernatant analyzed on 19108-10 except S= SEND RESULTS TO (NAME & SECTION) J. Janiczek, Resource Recovery

"DO NOT PUNCH"

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	PHENOL T. REC UG/L 32730	CN TOTAL MG/L 00720	S= TOTAL MG/L S 00745	BOD-5 TOTAL MG/L 00310
Well Water	I01		801117	1545		19106			30	11	9		42.02	
	I02		801117	1600		19107			290	80	30		40.02	
Reservoir Well	I03		801117	1130		19108			320	78	8		.06	
	I04		801117	1305		19109			29	11	45		.21	
	I05		801117	1345		19110			39	12	8		40.02	
	I06													
	I07													
	I08													
	I09													
	I10													

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 MG/L 01032	F TOTAL MG/L 00951	CL TOTAL MG/L 00940	SI REACT. MG/L 00958	SO4= TOTAL MG/L 00945	ALK. TOTAL MG/L 00410	BICARB HCO3- MG/L 00440	CARB. CO3= MG/L 00445
C [illegible]	<0.01	0.01	C 0.92			0.06				20		140	64	C 78	C 0
C 0.12	0.05	8.0	C 11.			0.08				830		200	630	C 770	C 0
C 0.10	0.02	0.06	C 0.71			0.01				450		140	240	C 285	C 0
C 0.11	0.02	0.59	C 1.3			0.02				93		910	98	C 120	C 0
C			C											C	C
C 2.07	.02	.39	C .93							120		860	86	C 102	C .1
C			C											C	C
C			C											C	C
C			C											C	C
C			C											C	C

ESD-03201 REV.05/80

DEPT. OF NATURAL RESOURCES, ENVIRONMENTAL LABORATORY ANALYSIS -- INORGANICS - WATER - GENERAL USAGE DEC 8 1980

PROJ CODE 6B COST CENTER 96007 PR 4 COLLECTED BY F. Belchatidka J. Janiczek TRANSFERED TO RECEIVED AT LAB EXAMINER [illegible]

Allen Park Clay Mine; Allen Park, Mich. SAMPLE REMARKS SEND RESULTS TO (NAME & SECTION) J. Janiczek Resource Recovery

"DO NOT PUNCH" DESCRIPTION OF SAMPLING SITE OR SAMPLE	REF NO. P	STORET NUMBER	START DATE YYMMDD	TIME MIL TTTT	DEPTH FEET	LAB NO. 2 00008	CA TOTAL MG/L 00916	MG TOTAL MG/L 00927	NA TOTAL MG/L 00929	K TOTAL MG/L 00937	CD TOTAL UG/L 01027	CR TOTAL UG/L 01034	CU TOTAL UG/L 01042	NI TOTAL UG/L 01067
Space Water	I01		801117	1545		19106	40	7	55	5.0	K20	K50	K20	K [illegible]
	I02		801117	1620		19107	160	70	480	95	↓	↓	↓	↓
Observation Well	I03		801118	1130		19108	160	45	190	3.9	↓	85	3,000	36 [illegible]
"	~~I04~~		~~801118~~	~~1300~~		—	~~dissolved~~ Ca	~~dissolved~~ Mg	~~dissolved~~ Na	~~dissolved~~ K	~~dissolved~~ CD	~~dissolved~~ Cr	~~dissolved~~ Cu	~~dissolved~~ Ni
	I05		801118	1345		19110	150	50	130	3.0	K20	50	1200	75
	I06						Dissolved	Dis	Dis	Dis	Dis	Dis	Dis	Dis
Observation Well	I07		801118	1300		19109	250	80	100	3.6	K20	K50	20	K50
	I08													
	I09													
	I10													

	ZN TOTAL UG/L 01092	FE TOTAL UG/L 01045
K50	75	1600
1	120	2100
1300	80,000	15,000
	Zn	Fe
180	16,000	3600
PB	ZN	Fe
Dis	Dis	Dis
K50	450	K100

Observation Well [illegible] Dissolved [illegible]

ESD-00902 REV. 05/80

DEPT. OF NATURAL RESOURCES, ENVIRONMENTAL LABORATORY ANALYSIS -- PHYSICAL & BIOLOGICAL - WATER - GENERAL USAGE

PROJ CODE 6B COST CENTER 96007 PR 4 COLLECTED BY F. Bellapalach J. Janiczek TRANSFERED TO RECEIVED AT LAB JF EXAMINER [illegible]

Allen Park Clay Mine; Allen Park, Mich. SAMPLE REMARKS SEND RESULTS TO (NAME & SECTION) J Janiczek Resource Recovery

"DO NOT PUNCH"

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	COND. 25 C US/CM 00095	RES-NF SS-105 MG/L 00530	RES-TF TDS180 MG/L 70300
[illegible]	I01		801117	1545		19106				8.1	550	26	380
	I02		801117	1620		19107				7.9	3300	18	2300
[illegible] Well	I03		801118	1120		19108				7.5	2000	120	1200
" "	I04		801118	1300		19109				8.1	2150	760	1900
" "	I05		801118	1345		—							
	I06												
	I07								105	8.4	1940	36	1600
	I08												
	I09												
	I10												

ESD-03301 REV. 05/80

DEPT. OF NATURAL RESOURCES, ENVIRONMENTAL LABORATORY ANALYSIS -- C[illegible]ICS - WATER - GENERAL USAGE

PROJ CODE 68 COST CENTER 96007 PR 4 COLLECTED BY F. Feldbrandt J. Janiczek TRANSF[illegible] TO [illegible] RECEIVED AT LAB [illegible] EXAMINER [illegible]

Allen Park Clay Mine; Allen Park, Mich. SAMPLE REMARKS SEND RESULTS TO (NAME & SECTION) J. Janiczek

"DO NOT PUNCH" DESCRIPTION OF SAMPLING SITE OR SAMPLE	REF NO. P	STORET NUMBER	START DATE YYMMDD	TIME MIL TTTT	DEPTH FEET	LAB NO. 2 00008	[illegible]-OIL [illegible]G/L [illegible]560	A-1242 PCB UG/L 39496	A-1254 PCB UG/L 39504	A-1260 PCB UG/L 39508	VOL H.C.			
[illegible] Water	I01		801117	1545		19106		K0.1	K0.1	K0.1	U			
" "	I02		801117	1620		1910[illegible]					U			
[illegible] Well	I03		801118	1130		19108					[illegible] J160 methylene chloride			
" "	I04		801118	1300		19109					U			
	I05		801118	1345		19110					Trace unknown			
	I06						[illegible]OS	K0.3	K0.1	K0.1				
	I07													
	I08													
	I09													
	I10													

ESD-01004 REV. 04/80

LAB LOG# 6552 PROJ CODE 63 COST CENTER 9600 F 4 COLLECTED BY E. Quackenbush TRANSFERED TO _____ AT LAB _____

LOCATION SAMPLED Allied Chem Clay Mine, Allied Chem (F.M.C.) SAMPLE REMARKS Samples analyzed for CN and S= SEND RESULTS TO (NAME & SECTION) J. Jankes, Research

"DO NOT PUNCH"

FIELD ID.	DESCRIPTION OF SAMPLING SITE OR SAMPLE	REF NO.	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	PHENOL T. REC UG/L 32730	CN TOTAL MG/L 00720	S= TOTAL MG/L 00745
W-2	Observation Well	I01		801210			10931			15	2.2	K5	K0.005	2.6
W-2s	" "	I02		801210			[illegible]			15	5.8	29	K0.005	K0.02
W-5	" "	I03		801210			10933			10	1.2	21	K0.005	3.28
W-5s	" "	I04		801210			10934			84	24.	K5	K0.005	K0.02
W-7	" "	I05		801210			10935			82 PS	13.	23	0.017	2.12 NA
W-10	" "	I06		801209			[illegible]			18	2.9	7	K0.005	2.71
W-10s	" "	I07		801210			[illegible]			20	6.1	51	K0.005	K0.02
		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	ALK. TOTAL MG/L 00410	BICARB HCO3- MG/L 00440	CARB. CO3= MG/L 00445
01		C0.03	0.01	0.50	C0.60							180		920	164	C200	C0.[illegible]
02		C0.02	K0.01	0.48	C0.50							91		1000	157	C192	C0
03		C0.09	K0.01	0.42	C0.29							150		180	640	C675	C0.3
04		C0.04	K0.01	0.12	C0.42							1200		200	255	C315	C0
05		C0.11	0.01	1.1	C0.42							160		610	92	C0	C22
06		C0.01	K0.01	0.72	C0.26							160		1700	184	C225	C0
07		C0.15	0.01	0.42	C0.54							180		830	122	C155	C0
08		C			C											C	C
09		C			C											C	C
10		C			C											C	C

ESD-03201 REV., 05/80

cc: L.A. Bohn
FMC Operator
WayneCo. HD.
File

MICHIGAN DEPT. OF NATURAL RESOURCES ENVIRONMENTAL LABORATORY ANALYSIS -- INORGANICS - WATER - GENERAL USAGE DEC

LAB LOG# 6832 PROJ CODE 6B COST CENTER 96007 PR COLLECTED BY J. Javiczek F. Belcbraidich TRANSFERED TO RECEIVED AT LAB EXAMINER

LOCATION SAMPLED Allen Park Clay Mine, Allen Park, Mich. (Fe Mg Co) SAMPLE REMARKS SEND RESULTS TO (NAME & SECTION) J. Javiczek, Resource

<---"DO NOT PUNCH"---> REF NO. P | TORET NUMBER | START DATE YYMMDD | TIME MIL TTTT | DEPTH FEET | LAB NO. 2 00008 | CA TOTAL MG/L 00916 | MG TOTAL MG/L 00927 | NA TOTAL MG/L 00929 | K TOTAL MG/L 00937 | CD TOTAL UG/L 01027 | CR TOTAL UG/L 01034 | CU TOTAL UG/L 01042

FIELD ID.	DESCRIPTION OF SAMPLING SITE OR SAMPLE	REF NO. P	TORET NUMBER	START DATE YYMMDD	TIME MIL TTTT	DEPTH FEET	LAB NO. 2 00008	CA TOTAL MG/L 00916	MG TOTAL MG/L 00927	NA TOTAL MG/L 00929	K TOTAL MG/L 00937	CD TOTAL UG/L 01027	CR TOTAL UG/L 01034	CU TOTAL UG/L 01042
W-2	OBSERVATION WELL	I01					19931	230	160	120	5.3	K20	50	K20
W-2S	" "	I02					19932	300	100	100	3.3		K50	190
W-5	" "	I03					19933	300	190	95	4.2			200
W-5S	" "	I04					19934	340	100	380	1.5			40
W-10	" "	I05					19936	360	240	100	4.9			120
W-10S	" "	I06					19937	280	90	95	2.5			130
	METALS BLANK	I07					19938	K1	K1	K1	K.1			K20
		I08												
W-7	OBSERVATION WELL	I09		801210			19935 DISSOLVED METALS (SEDIMENT)	X	X	X	X	X	X	X
		I10												

REF NO.	PB TOTAL UG/L 01051	ZN TOTAL UG/L 01092	FE TOTAL UG/L 01045	Ca diss	Mg diss	Na diss	K diss	Cd diss	Cr diss	Cu diss	Ni diss	Pb diss	Zn diss	Fe diss			
01	K50	26000	2700	X	X	X	X	X	X	X	X	X	X	X			
02	95	9500	3700	X	X	X	X	X	X	X	X	X	X	X			
03	50	15000	5600	X	X	X	X	X	X	X	X	X	X	X			
04	220	14000	4600	X	X	X	X	X	X	X	X	X	X	X			
05	K50	37000	5600	X	X	X	X	X	X	X	X	X	X	X			
06	65	10000	8000	X	X	X	X	X	X	X	X	X	X	X			
07	K50	K50	K100	X	X	X	X	X	X	X	X	X	X	X			
08																	
09	X	X	X	280	K1	150	19	K20	65	K20	K50	K50	65	K100			
10																	

ESD-00902 REV. 05/80

MICHIGAN DEPT. OF NATURAL RESOURCES, ENVIRONMENTAL LABORATORY ANALYSIS -- PHYSICAL & BIOLOGICAL - WATER - GENERAL USAGE

LAB LOG# 6832 PROJ CODE 6B COST CENTER 96007 PR 4 COLLECTED BY J. Janiczek, E. Belcobaidich TRANSFERED TO _____ RECEIVED AT LAB [illegible] EXAMINER [illegible]

LOCATION SAMPLED Allen Park Clay Mine, Allen Park, Mich. (Fo Mo Co) SAMPLE REMARKS _____ SEND RESULTS TO (NAME & SECTION) J. Janiczek, Resource

<---"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	COND. 25 C US/CM 00095	NES-MF SS-105 MG/L 00530	RES-TDS1 MG/ 7030
W-2	Observation Well	I01		801210			15931				8.3	2250		1800
W-2S	" "	I02		801210			15932				7.8	2200		1900
W-5	" "	I03		801210			15933				8.9	1630		[illegible]
W-5S	" "	I04		801210			15934				7.2	4100		[illegible]
W-7	" "	I05		801210			15935				11.3	2300		[illegible]
W-10	" "	I06		801209			15936				7.8	3000		[illegible]
W-10S	" "	I07		801210			15937				7.6	2150		[illegible]
		I08												
		I09												
		I10												

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

MICHIGAN DEPT. OF NATURAL RESOURCES, ENVI[illegible]NMENTAL LABORATORY ANALYSIS -- ORGANICS -- SEDIMENTS -DRY WT. BASIS

LAB LOG# 6832 PROJ CODE 68 COST CENTER 96007 PR COLLECTED BY J. JANICZEK, E. BELOGRAIDICH TRANSFERED TO RECEIVED AT LAB [illegible] EXAMINER

LOCATION SAMPLED Allen Park Clay Mine, Allen Park, Mich. (Mo Co) SAMPLE REMARKS SEND RESULTS TO (NAME & SECTION) J. Janiczek, [illegible]

FIELD ID.	DESCRIPTION OF SAMPLING SITE OR SAMPLE ("DO NOT PUNCH")	REF NO. P	STORET NUMBER	START DATE YYMMDD	TIME MIL TTTT	S,T OR B	NUM SAMPLES	END DATE YYMMDD	TIME MIL TTTT	DEPTH FEET	LAB NO. 2 00008	TOTAL SOLIDS PERCNT 70318	VOLITL SOLIDS % T.S. 70322	FE-OIL MG/KG 00561	A-12[illegible] PCB UG/KG 39499
W-2	OBSERVATION WELL	C01		801210							10031				K0.1
W-2s	" "	C02		801210							10032				
W-5	" "	C03		801210							10033				
W-5s	" "	C04		801210							10034				
W-7	" "	C05		801210							10035				
W-10	" "	C06		801209							10036				
W-10s	" "	C07		801210							10037				
		C08													
		C09													
		C10													

REF NO.	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	VOL HC GC SCAN
01	K0.1								U
02									
03									
04									unknown non halogenated HC
05									U
06									
07									
08									
07									
10									

ESD-01303 REV. 12/79

CENTRAL LABORATORY SERVICES
GENERAL SERVICES
LABORATORY INVESTIGATION REPORT

NUMBER 003457

To: D. L. Bartley July 30, 1980

SUBJECT: Clay Mine Well Water

SUPPLIER: Steel Division

OBJECT: Analyze samples for Phenol, Nitrate, Nitrite, Ammonia, Sulfate Bicarbonate, Chloride, Total Carbon, total dissolved solids, COD, Iron, Calcium, Sodium, Magnesium, Lead and Chromium. Determine the pH and Specific Conductance.

TEST DATA:

TEST	#2	#5	#7	#10	Analyst	Method
pH	7.85	8.21	10.16	7.54	D. P. L.	EPA 1979, 150.1
Specific Conductance (umhos/cm)	2250	1500	2800	1375	D. P. L.	EPA 1979, 120.1
T.D.S. (mg/L)	1971	1106	1063	2725	D. P. L.	EPA 1979, 160.1
Bicarbonate as $CaCO_3$ (mg/L)	284	588	209	204	D. P. L.	Std. Methods, 14th Ed. 4
Ammonia as N (mg/L)	0.50	0.41	1.36	0.83	D. K. M.	EPA 1979, 350.2
Nitrate (mg/L)	<10	<10	11.10	<10	M. S. D.	Ion Chromatography
Nitrite (mg/L)	<10	<10	<10	<10	M. S. D.	" "
Chloride (mg/L)	183.88	108.50	170.20	125.67	M. S. D.	" "
Sulfate (mg/L)	1115.14	153.00	495.24	1766.62	M. S. D.	" "
Phenolics (mg/L)	<0.005	<0.005	Typo 0.010	0.006	M. S. D.	EPA 1979, 420.1
COD (mg/L)	16	<10	47	40	D. P. L.	EPA 1979, 410.1
Total Carbon (% per Total Volume)	0.023	0.036	0.012	0.009	K. L.	Leco WR-12 Book 789 Page 85

(Continued on page 2)

CENTRAL LABORATORY SERVICES
GENERAL SERVICES
LABORATORY INVESTIGATION REPORT

NUMBER 003457

TEST DATA: (Continued)

TEST	#2	#5	#7	#10	Analyst	Method
Calcium (mg/L)	240.30	26.04	194.50	366.88	R. F.	*ICP - OES
Chromium (mg/L)	0.12	0.13	<0.10	0.15	R. F.	"
Iron (mg/L)	2.56	2.47	13.46	6.78	R. F.	"
Lead (mg/L)	<0.40	<0.40	<0.40	0.45	R. F.	"
Magnesium (mg/L)	191.1	182.6	0.92	237.3	R. F.	"
Sodium (mg/L)	105.50	89.33	106.25	92.33	R. F.	"

*Inductive Couple Plasma - Optical Emission Spectroscopy

By M. S. Drouillard
M. S. Drouillard

Concur: J. A. Galloway
J. A. Galloway, Section Supervisor
Environmental Section
Chemistry Department

MSD/em

CLAY MINE - MONITORING WELLS

ANALYSES--3/8/78 VS. 7/27/79

Test Parameter	Boring #2		Boring #5		Boring #7		Boring #10		Current Excavation
	3/08/78	7/27/79	3/08/78	7/27/79	3/08/78	7/27/79	3/08/78	7/27/79	7/27/79
C.O.D. mg/l	241.0	53.0	188.0	21.0	150.0	28.0	346.0	11.0	52.0
Chlorides mg/l	183.0	NA	165.0	NA	312.0	NA	146.0	NA	NA
Iron mg/l	0.01	NA	<0.01	NA	0.06	NA	0.05	NA	NA
Sulphates mg/l	1,250.0	351.0	300.0	154.0	575.0	345.0	2,150.0	1,410.0	600.0
T.K. Nitrogen mg/l	2.7	0.90	2.5	0.67	2.2	1.77	3.0	0.83	1.83
pH	7.96	7.83	8.06	8.82	12.03	10.71	7.65	7.35	8.12
Phenolics μg/l	22.0	32.0	<2.0	14.0	<2.0	19.0	<2.0	4.0	6.0
T.D.S. mg/l	2,389.0	2,081.0	1,161.0	1,126.0	2,142.0	1,138.0	2,812.0	2,789.0	2,288.0
Carbonate Hardness mg/l	1,300.0	1,360.0	880.0	805.0	1,050.0	525.0	1,820.0	1,890.0	1,135.0

NA not available; tests not completed on these parameters

Note: (1) Samples taken on March 8, 1978 analyzed by Hydro Research Services of Pontiac, Michigan

(2) Samples taken on July 27, 1979 analyzed by Ford Motor Company Central Laboratories

August 7, 1979

T.T.

CHEMICAL ANALYSIS - WASTE WATERS
MICHIGAN WATER RESOURCES COMMISSION

SOURCE: FoMoCo. - OAKWOOD (NAME OF INDUSTRY OR MUNICIPALITY) — Allen Park (CITY OR TWP) — Wayne (COUNTY)

SEND RESULTS TO: Fred Feitel (NAME)

RECEIVING WATER: Rouge River (NAME OF STREAM OR LAKE)

Resource Recovery Divisio (DISTRICT OR SECTION)

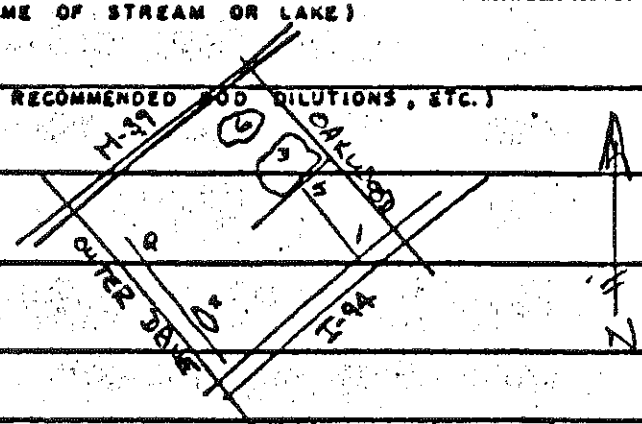
REMARKS (APPEARANCE, RECOMMENDED BOD DILUTIONS, ETC.)

COLLECTED BY: F. Feitel

RECEIVED BY: RW — X-32197 -36593

DATE RECEIVED: 11-30-76

EXAMINER: RW



	CARD TYPE	STORET NUMBER	DATE & TIME YYMMDDTTTT	DEPTH FEET	LAB NUMBER	CONDUIT FLOW MGD	TEMP °C	pH SU	BOD5 mg/l	T.S.S. mg/l	TOT-P mg/l (.001)	NH3-N mg/l	OIL mg/l	TOT-CL mg/l (250)
	P			D	00008	50050	00010	00400	00310	00530	00665	00610	00560	00940
1	D	S. Ditch at I-94			5947			7.8			2.2			1200
2	D	at Hospital			5948			10.1			5.7			840
3	D	Borrow Pit			5948 49			7.9			1.3			710
4	D	Pond - SW. Corner			5949 50			8.0			3.2			710
5	D	S. Ditch at Entrance			5949 51			7.6			.30			600

"DO NOT PUNCH" SOURCE DESCRIPTION OF SAMPLE		D.O. mg/l	TOT-Zn µg/l	TOT-Cr µg/l	Cr+6 µg/l (50)		TOT-Ni µg/l	TOT-Cd µg/l (10)	Fe µg/l (300)	TDS mg/l	SO4 mg/l (250)	H2	
		00300	01092	01034	01032		01067	01027					
1				120	<100	80	210	10	16,000	4280	380	NS	
2				110	I		300	20	2,600	8120	160	NS	
3				40	I		180	10	6,900	3440	310	NS	
4				110	<10		200	10	13,000	3380	240	NS	
5				50	<10		80	10	3,200	[illegible]	140	NS	

I = interference

WRC - 025 0 11/75

CHEMICAL ANALYSIS - WASTE WATERS
MICHIGAN WATER RESOURCES COMMISSION

SOURCE: FoMoCo-OAKWOOD (NAME OF INDUSTRY OR MUNICIPALITY) Allen Park (CITY OR TWP) Wayne (COUNTY)

SEND RESULTS TO: Fred Feitel (NAME)

RECEIVING WATER: Rouge River (NAME OF STREAM OR LAKE)

Resource Recovery Divisi (DISTRICT OR SECTION)

REMARKS: (APPEARANCE, RECOMMENDED BOD DILUTIONS, ETC.)

COLLECTED BY:

RECEIVED BY: RW

DATE RECEIVED: 1-30-76

EXAMINER: RW

	CARD TYPE	STORET NUMBER	DATE & TIME YYMMDDTTTT	DEPTH FEET	LAB NUMBER	CONDUIT FLOW MGD	TEMP °C	pH SU	BOD5 mg/l	T.S.S. mg/l	TOT-P mg/l	NH3-N mg/l	OIL mg/l	TOT-CL mg/l
	P			D	00008	50050	00010	00400	00310	00530	00665	00610	00560	00940
1	D	DUMP AREA		5952				9.1			1.5			540
2	D													
3	D													
4	D													
5	D													

"DO NOT PUNCH" SOURCE DESCRIPTION OF SAMPLE	D.O. mg/l 00300	TOT-Zn µg/l 01092	TOT-Cr µg/l 01034	Cr+6 µg/l 01032	
1			80	<10	
2					
3					
4					
5					

TOT-Ni µg/l 01067	TOT-Cd µg/l 01027	Fe µg/l	TDS mg/l	SO4 mg/l	H2S	
100	<10	4,500	2940	270	VS	

Attachment C

Enforcement Status

Type of Action	Date	State / Federal	Result or Status
LOW	9/2/82	State	9/17/82 CR-IC
LOW	6/14/83	State	6/24/83 CR - RTC 6/30/83
LOW	6/22/83	State	7/6/83 CR - RTC 7/18/83
LOW	9/27/83	State	10/5/83 CR - RTC 10/11/83
LOW	11/23/83	State	12/6/83 CR
2nd LOW	1/31/84	State	2/15/84 CR - RTC 3/28/84
LOW	4/11/84	State	Pumped leachate into fenced area S of Cell I CR 4/25/84
LOW	6/21/84	State	CR 6/27/84 RTC 7/24/84
NOTICE OF DEFICIENCY	10/3/84	Federal	Application Incomplete
LOW	11/21/84	State	CR 11/26/84 RTC 12/17/84
LOW	3/18/85	State	CR 4/1/85 RTC 4/23/86
LOW	10/10/85	State	CR 9/23/85 RTC 10/10/85
LOW	12/18/85	State	CR 1/7/85 RTC 1/15/86
LOW	4/28/86	State	CR 4/16/86 RTC 4/28/86

CR - Company Response
IC - Incompliance
RTC - Return To Compliance

Attachment D

16 Public Complaints

Anonymous	6/11/81	PEAS	Company discharging water to ditch. WCHD inspection - uncontaminated water from pit
Local Citizen	4/18/83	Representative HWD	Hazardous wastes received - expressing concerns re: potential for contamination Dept. responded with precautions taken at site 6/7/83
Local Citizen	9/27/84	Wayne Co. Air	Fugitive Dust Problem - Related to SW facility - referred to GWQD (copy attached) - Staff spoke directly with Mr. Bemberg - Ltr 10/16/84 from Air Quality

82-01

STATE OF MICHIGAN

NATURAL RESOURCES COMMISSION
COS A. HOEFER
ROBERT HOLMES
E. M. LAITALA
HILARY F. SNELL
PAUL H. WENDLER
HARRY H. WHITELEY

JAMES J. BLANCHARD, Governor

DEPARTMENT OF NATURAL RESOURCES

STEVENS T. MASON BUILDING
BOX 30028
LANSING, MI 48909
HOWARD A. TANNER, Director

Hakim Shakir

June 7, 1983

RECEIVED
JUN 23 1983
GQD DETROIT DIST

Honorable John D. Dingell
U.S. House of Representatives
2221 Rayburn House Office Building
Washington, D.C. 20515

Dear Representative Dingell:

Thank you for your letter of April 25, 1983 concerning an inquiry from the constituent, Mrs. Victoria Hild, 1903 Snow Street, Dearborn, Michigan, 48124. In Mrs. Hild's letter to you, she indicated concern over the location of the Ford Motor Company - Allen Park Clay Mine Landfill which is part of what is used to dispose of hazardous wastes from the Ford Motor Company. This landfill is regulated closely by the U.S. Environmental Protection Agency and the State of Michigan in compliance with the provisions of the Michigan Hazardous Waste Management Act (1979 Public Act 64, as amended).

Ford Motor Company has been issued a hazardous waste disposal facility operating license by the Michigan Department of Natural Resources after careful review of the soils and groundwater (hydrogeology) of the area, proposed waste to be disposed, and public input. After several public hearings and input from a local site review board, the license was issued. The license will expire on October 22, 1986 and will be thoroughly reviewed to determine if modifications are required before it will be reissued.

The area of the landfill that is proposed for disposal of hazardous wastes was carefully evaluated by the company and the Department of Natural Resources to assure that the waste can be safely contained in the landfill without any adverse impact on the environment. Any proposed modification of the operation or management of hazardous wastes at the facility must be approved by the Department of Natural Resources prior to making that change.

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JUN 8 1983
GQD-COMPLIANCE 2

R1025

The operating license requires Ford Motor Company to continuously monitor all activities at the landfill including sampling and testing of the surface water, groundwater and air quality in and around the site to assure protection of the environment. Sampling and testing results are reviewed and confirmed by additional sampling by the Environmental Protection Agency and the Michigan Department of Natural Resources. The operating license limits the kind and quantity of waste that can be disposed of in the landfill to assure compatability with the site.

The company must maintain financial assurance for closing the landfill and to maintain sampling and monitoring systems for a minimum of 15 years after the landfill is closed to assure that any possible malfunction is recognized before damage to the environment can occur.

Any deficiencies found that are in violation of the company's operating license are required to be corrected immediately. Representatives of the Hazardous Waste Division of the Michigan Department of Natural Resources conduct inspections of the facilities at least four times per year. The Environmental Protection Agency may make additional inspections. We believe the facilities are very well regulated and should not create adverse impact on the surrounding environment.

If you would like further information regarding any aspect of the Department of Natural Resources' regulation of the Allen Park Clay Mine Landfill, I would be happy to provide it.

Sincerely,

James F. Cleary
Acting Director

cc: Ken Burda

October 16, 1984

Mr. Robert J. Bemben
1151 Linden
Dearborn, MI. 48124

Dear Mr. Bemben:

Your letter of September 27, 1984 was received, and your concern and insight involving the Ford Motor Company landfill is to be commended.

First of all, be assured that this site is being inspected on a regular basis. This year has seen an increase in truck traffic using the facility, mainly due to the excavations at the Ford Rouge complex, and also because of additional clay trucks coming onto the facility to expedite clay capping in some areas. This increase in traffic has at times caused problems with tracking of material onto Oakwood Street, as you observed.

The facility is utilizing a full time flushing truck, and any material accumulating along the curbs is to be shoveled daily. We will enforce these procedures. There has been a delay in implementing a wheel wash. This has primarily occurred because of conflicting opinions on requirements for handling the spent water. Hopefully these differences will be worked out soon.

Fugitive and windborne dust has also been addressed. Unpaved roads are watered and treated with dust inhibitors, as are the open off-road areas. Rapid clay capping is also being enforced.

We certainly share in your concerns and will inspect the site with increased regularity. Your interest is appreciated, and if you should have any further questions, feel free to phone me at 224-4677.

Sincerely,

Michael D. Maillard
Enforcement/Engineering Director

MDM:RZ:saw

cc: Mr. T. Shoens

Groundwater Monitoring Data
Water Quality Parameters

Plant Olive Park Clay Mine Sampling Date 4-26-83

	Well # 2S	Well # 5S	Well # 10S	Well #
Static Water Elevation (Ft)	589.60	593.69	591.01	
Up- or Downgradient (U,D)	N/A	N/A	N/A	
Chloride	100	650	94	
Iron	.84	3.7	1.8	
COD	370	200	220	
TOC	81	68	64	
Specific Conductance	2066	1714	1858	
pH	7.5	8.4	7.4	
Temperature	13.5°C	18.3°C	10.2	
Sulfate	280	150	950	
Sodium				
Ammonia Nitrogen				
Nitrogen, Nitrate				
Nitrogen Nitrite				
Magnesium				
Lead				
Bicarbonate				
Total Chromium				
Calcium				

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GQD-DETROIT DIST.

Groundwater Monitoring Data
Water Quality Parameters

Plant Allen Park Clay Mine Sampling Date 4-26-83

	Allen Drain Well #	Tyre Drain Well #	Well #	Well #
Static Water Elevation (Ft)	NA	NA		
Up- or Downgradient (U,D)	NA	NA		
Chloride	590	210		
Iron	.65	.56		
COD	80	36		
TOC	24	33		
Specific Conductance	1800	1518		
pH	7.2	6.9		
Temperature	11.2	10.3		
Sulfate	560	210		
Sodium				
Ammonia Nitrogen				
Nitrogen, Nitrate				
Nitrogen Nitrite				
Magnesium				
Lead				
Bicarbonate				
Total Chromium				
Calcium				

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GQD-DETROIT DIST.

CLOW
HYDRO RESEARCH SERVICES
Water Management Division
Clow Corporation
408 Auburn Avenue
Pontiac, MI 48058
313 334-1630
313 334-4747

3-15-83

Ford Motor Company
SSECO
Parkland Towers, Suite 628W
One Parklane Blvd.
Dearborn, MI 48126
Attn: Kathy Burge

Sample received: 2-23-83

Hydro Number: 61804

Client I.D. Allen Park Clay Mine
Sediment Pond

Phenol by GC, ug/l	<10
Napthalene, ug/l	<10
Cadmium, Cd, mg/l	< 0.01
Total Chromium, Cr, mg/l	< 0.02
Lead, Pb, mg/l	< 0.05

Linda Deans
Linda Deans
General Laboratory Manager

Gr idwater Monitoring Data
Drinking Water Parameters

Plant Allen Park Clay Mine Sampling Date 10-26-82

4th Quarter Sampling

	Well # 2-D	Well # 5-D	Well # 102-D	Well # 103-D
Static Water Elevation (Ft)	600.68	604.84	599.15	601.26
Up- or Downgradient (U,D)	U	U	D	D
Arsenic	ND .001	ND .001	ND .001	ND .001
Barium	ND 0.1	ND .05	ND 0.1	ND 0.2
Cadmium	ND .003	ND .003	ND .003	ND .003
Chromium	.016	.019	.008	ND .005
Fluoride	0.9	1.0	1.0	1.0
Lead	.007	.091 **	<.007	<.007
Mercury	ND .0002	ND .0002	ND .0002	ND .0002
Nitrate	ND 0.01	ND 0.01	ND 0.01	ND .01
Selenium	ND .01	ND .01	ND .01	ND .01
Silver	.008	ND .005	.005	.007
Endrin ug/l	ND 0.10	ND 0.10	ND 0.10	ND .10
Lindane ug/l	ND 0.10	ND 0.10	ND 0.10	ND .10
Methoxychlor ug/l	ND 0.50	ND 0.50	ND 0.50	ND .50
Toxaphene ug/l	ND (1)	ND (1)	ND (1)	ND (1)
2, 4-D ug/l	ND 0.10	ND 0.10	ND 0.10	ND .10
2, 4, -5-TP Silvex ug/l	ND .050	ND .050	ND .050	ND .050
Radium (pCi/l)	<5	<5	<5	<5
Gross Alpha (pCi/l)	<5	<5	<5	<5
Gross Beta (pCi/l)	<8	<8	<8	<8
Coliform Bacteria (Colonies/100 ml)	<2.2	4 *	<2.2	5.1 *

Units are mg/l unless otherwise noted.

* VALUE EXCEEDS LEVEL IN APPENDIX III
** LEAD VALUE EXCEEDS LEVEL IN APPENDIX III

Groundwater Monitoring Data
Water Quality Parameters

Plant Allen Park Clay Mine Sampling Date 10-26-82

4th Quarter Sampling

	2-D Well #	5-D Well #	102-D Well #	103-D Well #
Static Water Elevation (Ft)	600.68	604.84	599.15	601.26
Up- or Downgradient (U,D)	U	U	D	D
Chloride	170	140	140	130
Iron	0.45	.88	1.2	6.0
Manganese	.024	.008	.016	.037
Phenols	ND .004	ND .004	ND .004	ND .004
Sodium	240	120	200	160
Sulfate	880	70	810	840

Units are mg/l unless otherwise noted.

GROUNDWATER MONITORING DATA
POLLUTION INDICATIVE PARAMETERS

Plant Allen Park Clay Mine Sampling Date 10-26-82

4th Quarter Sampling

	2-D Well #	5-D Well #	102-D Well #	103-D Well #
Static Water Elevation (Ft)	600.68	604.84	599.15	601.26
Up- or Downgradient (U,D)	U	U	D	D
pH (Units)	8.7	10.2	8.7	8.7
	8.7	10.2	8.7	8.7
	8.7	10.2	8.7	8.7
	8.7	10.2	8.7	8.7
Specific Conductance (μmhos/cm)	2256	1785	2392	2352
	2244	1800	2398	2308
	2252	1791	2358	2294
	2250	1860	2378	2288
TOC (mg/l)	15	21	16	26
	20	20	24	21
	17	9	23	22
	16	33	16	21
TOX (μgm/l)	.01	.021	.015	.01
	.017	.041	ND .01	.01
	.026	.025	.016	.014
	.038	.032	.013	ND .01

Gro Jwater Monitoring Data
Drinking Water Parameters

Plant Allen Park Clay Mine Sampling Date 10-26-82

4th Quarter Sampling

	Well # 104-D	Well #	Well #	Well #
Static Water Elevation (Ft)	604.12			
Up- or Downgradient (U,D)	D			
Arsenic	ND .001			
Barium	ND 0.1			
Cadmium	ND .003			
Chromium	.013			
Fluoride	1.0			
Lead	.019			
Mercury	ND .0002			
Nitrate	.25			
Selenium	ND .01			
Silver	.012			
Endrin ug/l	ND .10			
Lindane ug/l	ND .10			
Methoxychlor ug/l	ND .50			
Toxaphene ug/l	ND (1)			
2, 4-D ug/l	ND .10			
2, 4, -5-TP Silvex ug/l	ND .050			
Radium (pCi/l)	<5			
Gross Alpha (pCi/l)	<5			
Gross Beta (pCi/l)	11			
Coliform Bacteria (Colonies/100 ml)	9.2 *			

Units are mg/l unless otherwise noted.

* VALUE EXCEEDS LEVEL IN APPENDIX III

Groundwater Monitoring Data
Water Quality Parameters

Plant Allen Park Clay Mine Sampling Date 10-26-82

4th Quarter Sampling

	104-D Well #	Well #	Well #	Well #
Static Water Elevation (Ft)	604.12			
Up- or Downgradient (U,D)	D			
Chloride	140			
Iron	52			
Manganese	10			
Phenols	ND .004			
Sodium	210			
Sulfate	1200			

Units are mg/l unless otherwise noted.

GROUNDWATER MONITORING DATA
POLLUTION INDICATIVE PARAMETERS

Plant Allen Park Clay Mine Sampling Date 10-26-82

4th Quarter Sampling

	104-D Well #	Well #	Well #	Well #
Static Water Elevation (Ft)	604.12			
Up- or Downgradient (U,D)	D			
pH (Units)	8.3			
	8.2			
	8.2			
	8.2			
Specific Conductance (μmhos/cm)	2898			
	2862			
	2838			
	2871			
TOC (mg/l)	11			
	15			
	10			
	12			
TOX (μgm/l)	.024			
	.018			
	.010			
	.020			

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1983
S.E. MICHIGAN REGION
DIVISION OFFICE

Groundwater Monitoring Data
Water Quality Parameters

Plant Allen Park Clay Mine Sampling Date 10-26-82

4th Quarter Sampling

	Well #7-D	Well #10-D	101-D Well #	105-D Well #
Static Water Elevation (Ft)	586.35	596.63	599.77	603.5
Up- or Downgradient (U,D)	D	D		
Chloride	140	140	140	140
Iron	3.4	5.9	3.8	4.3
Manganese				
Phenols				
Sodium	260	210	240	200
Sulfate	880	1600	980	1100

Units are mg/l unless otherwise noted.

COD	260	230	250	110
Ammonia Nitrogen	.63	.55	.50	.41
Nitrogen, Nitrate	.08	.04	.07	ND .01
Nitrogen Nitrite	.02	.01	ND .01	ND .01
TOC	49	21	43	9
Lead	.437	.05	.02	.02

Groundwater Monitoring Data
Water Quality Parameters

Plant Allen Park Clay Mine Sampling Date 10-26-82

4th Quarter Sampling

	2-S Well #	5-S Well #	10-S Well #	Well #
Static Water Elevation (Ft)	588.2	591.02	589.71	
Up- or Downgradient (U,D)	NA	NA	NA	
Chloride	99	400	88	
Iron	1.2	5.6	.21	
Manganese				
Phenols				
Sodium	110	340	200	
Sulfate	970	130	1000	

Units are mg/l unless otherwise noted.

COD	34	220	210	
Ammonia Nitrogen	.65	.29	.39	
Nitrogen, Nitrate	.01	.01	ND .01	
Nitrogen Nitrite	.01	ND .01	ND .01	
TOC	4	38	32	
Lead	.024	< .007	< .01	

Sediment Pond

Phenol	ND .004	
Chromium	< .007	
Cadmium	ND .003	
Lead	.010	
Naphthalene	ND 5.0 ug/l	

Groundwater Monitoring Data
Drinking Water Parameters

Plant Allen Park Clay Mine Sampling Date 7-14-82

3rd Quarterly Sampling.	RCRA Well # 2-D	RCRA Well # 5-D	RCRA Well # 102-D	RCRA Well # 103-D
Static Water Elevation (Ft)	600.68	605.45	601.68	601.23
Up- or Downgradient (U,D)	U	U	D	D
Arsenic	ND 0.001	ND 0.001	ND 0.001	ND .001
Barium	< .02	ND .02	ND 0.02	ND 0.02
Cadmium	.003	ND 0.003	< .003	.003
Chromium	[illegible]	.016	.006	ND .002
Fluoride	0.5	1.0	1.0	1.0
Lead	[illegible]	0.01	ND 0.01	[illegible]
Mercury	ND [illegible]	0.005	ND 0.002	[illegible]
Nitrate	0.01	0.25	0.27	0.05
Selenium	ND [illegible]	0.01	ND .01	ND [illegible]
Silver	[illegible]	0.003	.004	[illegible]
Endrin	ND [illegible]	ND 0.10	ND [illegible]	[illegible]
Lindane	ND [illegible]	ND 0.10	ND [illegible]	[illegible]
Methoxychlor	ND [illegible]	ND 0.50	ND 0.50	[illegible]
Toxaphene	ND [illegible]	ND 1.0	ND [illegible]	ND [illegible]
2, 4-D	ND [illegible]	ND 0.10	ND [illegible]	ND 0.10
2, 4, -5-TP Silvex	ND [illegible]	ND .050	ND .050	ND [illegible]
Radium (pCi/l)	<5	<5	<5	<5
Gross Alpha (pCi/l)	<5	<5	<5	<5
Gross Beta (pCi/l)	<5	ND (4)	ND (4)	ND (4)
Coliform Bacteria (Colonies/100 ml)	<4 *	<4 *	<4 *	<4 *

Units are mg/l unless otherwise noted.

* Numerous non-specific bacteria (NSB) were observed to be present. Due to the number of (NSB) the aliquot used for analysis was reduced to 25 ml.

Groundwater Monitoring Data
Water Quality Parameters

Plant Allen Park Clay Mines Sampling Date 7-14-82

	RCRA 2-D Well #	RCRA 5-D Well #	RCRA 102-D Well #	103-D Well #
Static Water Elevation (Ft)	600.68	605.45	601.68	601.23
Up- or Downgradient (U,D)	U	U	D	D
Chloride	170	150	140	140
Iron	3.84	1.2	5.1	.90
Manganese	[illegible]	0.016	0.041	[illegible]
Phenols	[illegible].024	ND [illegible]	[illegible]	[illegible]
Sodium	[illegible]	88	[illegible]	[illegible]
Sulfate	[illegible]	200	960	790

Units are mg/l unless otherwise noted.

Sediment Pond

Phenol	.007 mg/l
Cadmium	(ND) .003 mg/l
Lead	.01 mg/l
Naphthalene	(ND) 5 ug/l
Chromium	.006 mg/l

GROUNDWATER MONITORING DATA
POLLUTION INDICATIVE PARAMETERS

Plant Allen Park Clay Mine Sampling Date 7-14-82

	RCRA 2-D Well #	RCRA 5-D Well #	RCRA 102-D Well #	RCRA 103-D Well #
Static Water Elevation (Ft)	600.68	605.45	601.68	601.23
Up- or Downgradient (U,D)	U	U	D	D
pH (Units)	7.75	7.44	7.20	7.70
	7.76	7.50	7.20	7.70
	7.73	7.67	7.20	7.70
	7.76	7.60	7.20	7.70
Specific Conductance (μmhos/cm)	3054	1990	2524	2441
	2983	1912	2664	2468
	2980	1939	2651	2450
	2875	1954	2630	2438
TOC (mg/l)	3	21	2	12
	5	18	15	14
	5	18	17	14
	5	20	19	3
TOX (mg/l)	.029	.064	.035	.010
	.033	.032	.010	.054
	.046	.024	.010	.010
	.027	.026	.010	.010
Temperture	55°F	56°F	57°F	59°F

Groundwater Monitoring Data
Drinking Water Parameters

Plant Allen Park Clay Mines Sampling Date 7-14-82

RCRA

	Well # 104-D	Well # 7-D	Well # 10-D	Well # 101-D
Static Water Elevation (Ft)	604.32	582.06	588.03	597.81
Up- or Downgradient (U,D)	D	N/A	N/A	N/A
Arsenic	ND 0.01			
Barium	ND 0.05			
Cadmium	ND 0.005			
Chromium	.012			
Fluoride	0.9			
Lead	ND 0.01			
Mercury	ND .0002			
Nitrate	0.23			
Selenium	ND 0.01			
Silver	[illegible]			
Endrin	ND 0.10			
Lindane	ND 0.10			
Methoxychlor	ND 0.50			
Toxaphene	ND 1.0			
2, 4-D	ND 0.10			
2, 4, -5-TP Silvex	ND .050			
Radium (pCi/l)	<5			
Gross Alpha (pCi/l)	ND (3)			
Gross Beta (pCi/l)	ND (4)			
Coliform Bacteria (Colonies/100 ml)	8 *			

Units are mg/l unless otherwise noted.

* Numerous NON-specific bacteria were observed to be preser
Due to the number of (NSB), the aliquot used for analysi
was reduced to 25 ml's

Groundwater Monitoring Data
Water Quality Parameters

Plant Allen Park Clay Mines Sampling Date 7-14-82

	RCRA 104-D Well #	7-D Well #	10-D Well #	101-D Well #
Static Water Elevation (Ft)	604.32	582.06	588.03	597.81
Up- or Downgradient (U,D)	D	N/A	N/A	N/A
Chloride	160	160	160	150
Iron	9.9	20	.52	.94
Manganese	.045			
Phenols	.004			
Sodium	88			
Sulfate	1300	1000	1900	1000

Units are mg/l unless otherwise noted.

GROUNDWATER MONITORING DATA
POLLUTION INDICATIVE PARAMETERS

Plant Allen Park Clay Mine Sampling Date 7-14-82

	RCRA 1040 Well #	7-D Well #	10-D Well #	101-D Well #
Static Water Elevation (Ft)	604.32	582.06	588.03	597.81
Up- or Downgradient (U,D)	D	N/A	N/A	N/A
pH (Units)	7.70	10.00	7.94	7.62
	7.68			
	7.68			
	7.67			
Specific Conductance (µmhos/cm)	2817	2664	1238	2207
	2885			
	2852			
	2885			
TOC (mg/l)	6	31	68	44
	12			
	14			
	12			
TOX (mg/l)	.010			
	.024			
	.010			
	.048			
Temperture	57°F	54°F	55°F	69°F
COD		160	300	210

Groundwater Monitoring Data
Water Quality Parameters

Plant Allen Park Clay Mine Sampling Date 7-14-82

	105-D Well #	2-S Well #	5-S Well #	10-S Well #
Static Water Elevation (Ft)	604.00	588.50	591.19	589.80
Up- or Downgradient (U,D)	N/A	N/A	N/A	N/A
Chlorice	160	100	580	[illegible]
Iron	3.4	0.29	2.5	[illegible]
Manganese				
Phenols				
Sodium				
Sulfate	1300	1100	160	1100

Units are mg/l unless otherwise noted.

GROUNDWATER MONITORING DATA
POLLUTION INDICATIVE PARAMETERS

Plant Allen Park Clay Mine Sampling Date 7-14-82

	105-D Well #	2-S Well #	5-S Well #	10-S Well #
Static Water Elevation (Ft)	604.00	588.50	591.19	589.80
Up- or Downgradient (U,D)	N/A	N/A	N/A	N/A
pH (Units)	7.0	7.73	7.60	8.40
Specific Conductance (µmhos/cm)	3084	2399	2345	2522
TOC (mg/l)	12	22	18	9
TOX (mg/l)				
Temperture	53°F	59°F	56°F	55°F
COD	4.1	260	88	420

Attachment E
Inspections

Date	Inspector	Conclusions
4/6/76	WCHD/MDNR	Ponded contaminated water (sandy bank), wastes not leveled, poor drainage
8/19/76	WCHD/MDNR	"playground filled water"
11/22/76	" "	cover eroded, lack of cover, water samples taken, numerous leachate springs, northern pit with leachate
5/26/77	MDNR	Contaminated water in ditches, lack of cover
12/2/77	First SW (Act 87) license issued	
8/23/78	MDNR	Leachate near I-94
7/31/80	WCHD	filling into water
8/28/80	"	Potential dust problem, filling near ditch
10/1/80	WCHD	no problem noted
11/18/80	"	filling into water
12/16/80	"	no problem
2/5/81	"	" "
3/10/81	"	Dike construction starting
3/30/81	"	leaching on west & north slopes, exposed refuse
4/16/81	"	water from RCRA area transferred via tankers & brought to Range
5/22/81	"	Water in RCRA pit removed, no problem noted
10/11/81	"	[illegible]

6/19/81	WCHD (Local)	Dike installed from sediment basin along east edge and 3/4's of the south edge.
7/22/81	WCHD "	Cracks & fissures in dike, dike installation proceeding
8/13/81	WCHD "	leachate spring SE corner of facility. Gullies in cover
9/25/81	WCHD "	Eroded cover, fuel oil spill near sedimentation basin
11/4/81	WCHD "	leaching on west side, contaminated water ponded on-site
3/30/82	WCHD "	leaching in the northwest area Eroded areas in cover
4/29/82	WCHD "	leaching near Southfield Freeway
6/11/82	WCHD "	Lack of cover, leaching on west side
9/2/82	C. Riley (State)	RCRA violations (ie waste analysis plan, inspection log, post-closure plan incomplete, etc)
3/7/83	WCHD (Local)	SW area dust problem
4/12/83	L. A. Buchan (State)	Act 64 violations (warning signs missing, run-on not diverted, GW monitoring & surface water monitoring not IAW permit.
3/8/83 - 10/23/83	WCHD (Local)	Variety of inspections - no problems
6/1/83	L. A. Buchan (State)	RCRA violations (warning signs missing, run-on run-off not managed properly, inspection form to be revised) Act 64 violations (GW monitoring, leachate [illegible]

9/22/83 L. AuBuchon (State) Act 64 lack of daily cover

10/24/83 WCHD Truck out of mud onto Oakwood Blvd.

11/17/83 L. AuBuchon (State) Act 64 lack of daily cover, hole in fence, inspection rpt not properly completed.

3/28/84 L. AuBuchon (State) Act 64 - In compliance

10/25/83 - 4/16/84 " (State) Various inspections, no problems

4/17/84 WCHD Minor leaching noted

6/21/84 L. AuBuchon (State) Act 64 - Lack of warning signs, insufficient cover, inadequate grading

6/21/84 " (State) RCRA - Lack of warning signs

7/26/84 WCHD (Local) Leachate springs along Outer Drive repaired, minor leaks along dike base.

8/22/84 " (Local) Repairing leachate outbreaks along Outer Drive.

9/25/84 L. AuBuchon (State) Act-64 - In compliance

11/20/84 " " Act-64 - Lack of daily cover, contingency plan not updated, training deficiency

3/13/85 " " Act 64 - Lacking required info for contested case settlement, keep leachate level down, monitoring (Sec 7 & 8) not performed

8/23/84 - 7/17/85 WCHD (Local) Minor problems only noted during inspections

7/18/85 " " Leachate entered drainage ditch

5/21/85	L. A. Bucho	(State)	Act 64. In Compliance
5/21/85	L. A. Bucho	"	RCRA - "
9/4/85	L. A. Bucho	"	Act 64 - Leachate levels high, Berms/dikes inadequately maintained.
12/16/85	L. A. Bucho	"	RCRA - Warning sign missing, need fence repair, diversion berms inadequate.
3/25/86	L. A. Bucho	"	Act 64 - warning signs, training, regular pumping of leachate from Cell I

5/86 WCHD indicates concerns on the large amount of water trapped in fill area and the large number of leachate seeps which are continuing.

Wayne County Health Department - Division of Environmental Health

SOLID WASTE MANAGEMENT EVALUATION REPORT

Name & Type of Facility FORD MOTOR CO. ALLEN PARK CLAY MINE

Location ALLEN PARK, MI @ OAKWOOD & I-94

Operator/Property Owner ED KEBLISH / FOMOCO Phone #

ITEMS REQUIRED IN ALL FACILITIES

Plan on File ___ On-Site Roads ___
Restricted Access ___ Traffic Flow ___
Conformity to Plan ___ Attendant ___
Burning Restricted ___ Salvaging ___

ITEMS REQUIRED IN (TR, PP)

Container/Bldg. Const. ___ Daily Log ___
Container Removal ___ Overnite Storage ___
Preprocessing Storage ___ Storage Area ___
Dumping Area ___ Bldg. Enclosed ___
Emergency Plan ___ Noise/Vibration ___

ITEMS REQUIRED IN (TR, PP, CC)

Fence & Screening ___
Signs-Hrs. of Operations ___

ITEMS REQUIRED IN (SL, TR, PP)

Hazardous Mat'l. & Liquids ___ Equipment ___
Vermin Control ___ Equipment Maintenance ___
Paper Confined ___ General Maintenance ___
Fire Protection ___ Dust & Odor Control ___

ITEMS REQUIRED IN (SL)

Daily/Final Cover ___ Cover Maintenance ___
Completion of Area ___ Spreading Refuse ___
Surface Water Drainage ___ Compaction ___
Protection of Ground & Surface Water ___
Cell Volumes ___

REMARKS

(1) LACK OF COVER MATERIAL OVER MUCH OF "OLD FILL SECTION"

(2) GULLY EROSION ALONG NORTH & WEST-NORTHWEST SIDE SLOPES, ALSO ALONG I-94 X-WAY.

(3) NUMEROUS LEACHATE SPRINGS ALONG WEST-NORTHWEST SLOPE

(4) NO DITCHES IN THE N-NE section, E-NE section. Its questionable WHETHER SURFACE water RUN-OFF ALONG WEST-NORTH WEST PERIMETER reaches ditches

(5) The NORTHERN fill PIT CONTAINED at least 3-4' of LEACHATE/RUN-OFF

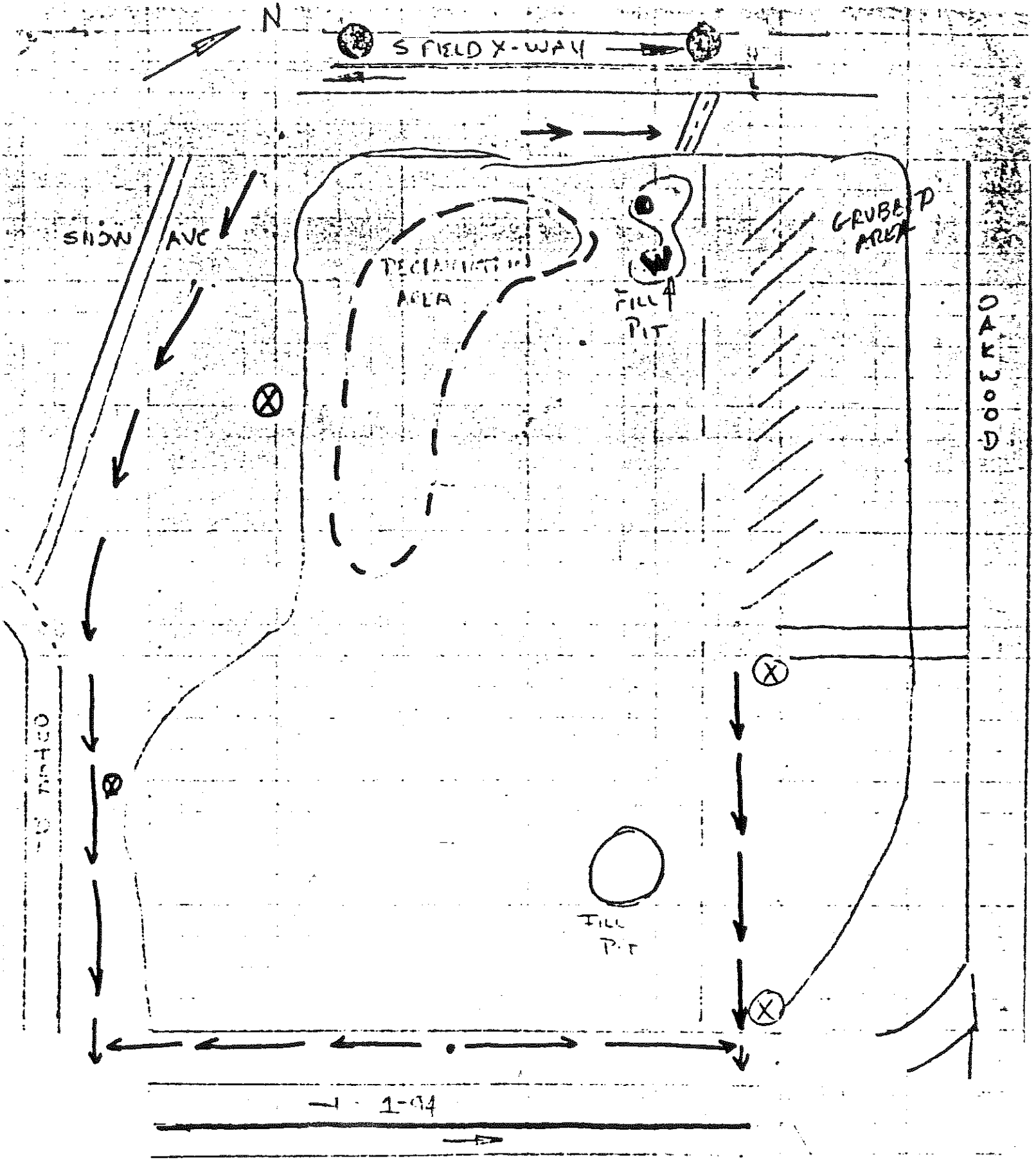
SKETCH

(6) A SWATH NORTH OF ENTRANCE RD HAS BEEN PARTIALLY cleared OF vegetation prior to development

(7) NUMEROUS water samples were TAKEN

Approved ___ Not Approved X Pending ___
Date NOV 22, 1970 Time 1130 AM Interviewee ___
Inspector ~~D. VIRNIUS WCHD~~ F. FEITEL DNR-RRD

Key: (✓) Compliance, (X) Non-Compliance,
(-) Does not apply,
(SL) Sanitary Landfill, (TR) Transfer Facility, (PP) Processing Plant
(CC) Collector Center



LEGEND : → DITCHES
⊗ SAMPLE LOCATIONS

Wayne County Health Department - Division of Environmental Health

SOLID WASTE MANAGEMENT EVALUATION REPORT

Name & Type of Facility Allen Park Clay Mine LF

Location Oakwood Blvd., Allen Park

Operator/Property Owner Ford Motor Co. Phone #

ITEMS REQUIRED IN ALL FACILITIES

Plan on File ✓ On-Site Roads ✓
Restricted Access ✓ Traffic Flow ✓
Conformity to Plan ✓ Attendant ✓
Burning Restricted ___ Salvaging ___

ITEMS REQUIRED IN (TR, PP)

Container/Bldg. Const. ___ Daily Log ___
Container Removal ___ Overnite Storage ___
Preprocessing Storage ___ Storage Area ___
Dumping Area ___ Bldg. Enclosed ___
Emergency Plan ___ Noise/Vibration ___

ITEMS REQUIRED IN (TR, PP, CC)

Fence & Screening ___
Signs-Hrs. of Operations ___

ITEMS REQUIRED IN (SL, TR, PP)

Hazardous Mat'l. & Liquids (e) Equipment ___
Vermin Control ___ Equipment Maintenance ___
Paper Confined ___ General Maintenance (f) (g)
Fire Protection ___ Dust & Odor Control ___

ITEMS REQUIRED IN (SL)

Daily/Final Cover ___ Cover Maintenance ___
Completion of Area ___ Spreading Refuse (k)
Surface Water Drainage (b) (d) Compaction ___
Protection of Ground & Surface Water ___
Cell Volumes ___

REMARKS	SKETCH
(A) The perimeter drainage ditch has been diverted to the sediment basin.	
(B) A sediment delta has formed N of the Sediment Basin (where interior drainage was pumped out) and effectively blocked the perimeter ditch. Clean it out.	
(C) The seed in the ditches and on the slopes of the fill doing good.	
(d) Gullies forming along the slope of the drainage ditch (perimeter) must be repaired, seeded and the associated sediment deltas cleaned out.	
(e) "Fuel oil" has been spilled near the sediment basin. Residue from it can get into surface drainage; therefore, clean up the contaminated soil.	

Approved ___ Not Approved X Pending ___
Date 9-25-81 Time 10:55 Interviewee ___
Inspector Elson C. Thomas

Key: (✓) Compliance, (X) Non-Compliance,
(-) Does not apply,
(SL) Sanitary Landfill, (TR) Transfer Facility, (PP) Processing Plant
(CC) Collector Center

DEPARTMENT OF NATURAL RESOURCES
GROUND WATER QUALITY DIVISION

RECEIVED
AUG 14 1985
GOB-DETROIT DIST.

EVALUATION REPORT

SANITARY LANDFILL: [X] TYPE II [ ] TYPE III [ ] OTHER _____

NAME FACILITY: Allen Park Clay Mine Landfill

FACILITY NO.: 82-00001

LOCATION: Main Roads — Section No. — Township — City — County
I-94 & Oakwood, Allen Park, City of, Wayne County

NAME OF OPERATOR: Ford Motor Co.

NAME OF LICENSEE: Ford Motor Co.

STATUS: [X] Open & Licensed [ ] Closed & Inspecting [ ] Unlicensed

RESTRICTIONS/STIPULATIONS TO CONSIDER DURING INSPECTION

(C) = Compliance (N) = Noncompliance (—) = Does Not Apply

C	A. Protection of Surface Waters
C	B. Hazardous Material/Liquids/Sewage Materials Prohibited for Disposal
C	C. Surface Water Drainage
C	D. Period and Adequacy of Cover
C	E. Completion of Area/Final Coverage
C	F. Compaction
C	G. Leachate Control/Management
C	H. Engineering Plans, Hydrogeologic Evaluation & Construction Certification
C	I. Operations Conform to Plan & License Stipulations
C	J. Vermin Control/Bird Control
C	K. Blowing Debris, Dust & Odor Control
C	L. Gas Migration
C	M. Fire Protection and Restriction of Burning
C	N. Equipment Adequacy
C	O. Restricted Access/Attendant
C	P. Traffic Flow
C	Q. Salvaging/Scavenging
	R. Noise Level
C	S. Fence/Screening Maintenance

REMARKS:

- A wet spot was found at the base of the slope south end. Rusty colored trails of water were found on the north side of the perimeter drainage ditch (south side).
- Significant gullies are begining to form on the western slope north end.
- The northern edge of Cell #4, sunk about 7', it is a cresent shape 250'x50'.
- They are installing a temporary leachate pipeline along out side of Cell #3 from the sump (Cell #3) to the discharge along I-94.
- They are still filling on top of the site.
- They plan to start dumping into Cell #3 by 7-24-85.
- A contractor should be onsite within 2 wks to correct erosion problems and seed selected areas.

Inspection item definitions are on back of this form.

PERSON INTERVIEWED: Jim Brennan w/ Victor Abrahamson (WCDH)

DATE: 85 07 18

TIME OF INSPECTION: 1:35 p.m.

INSPECTED BY: Nora Turner

REPRESENTING: Wayne County Dept of Health

DISTRIBUTION: Original to Dept. of Natural Resources; 1 copy — Licensee; 1 copy — Certified Health Dept.

R5509
Rev. 3/83

Facility Management Plan
Attachment 20 Summary
Ford Allen Park Clay Mine
Allen Park
MID980568711

RECEIVED
APR 14 1986
SOLID WASTE BRANCH
U.S. EPA, REGION V

Background

Notification and Part A submitted on November 17, 1980.

Ford Allen Park Clay Mine is a captive landfill facility for Ford Motor Co. located in the City of Allen Park, Wayne County, Michigan. The total site is approximately 260 acres consisting of 183 acres of solid waste landfill, 17 acres of hazardous waste landfill, with the remainder being greenbelt and easements. The original Part A filed with EPA included landfilling of K061 (electric furnace emission control dust) and K087 (decanter tank tar sludge from coking operations). On October 22, 1982, MDNR issued a Act 64 operating license to Ford Allen Park Clay Mine. Ford contested many provisions of the operating license. Ford and MDNR are currently working towards resolution of the contested portions of the Act 64 resolution of the contested portions of the Act 64 operating license.

On January 16, 1984, their Part B was called in by EPA. Ford submitted the Part B to EPA on July 10, 1984. The Part B included the addition of waste types F006, D006, D007, D008 for disposal in the landfill.

EPA sent corrective action letter to Ford Allen Park on April 23, 1985. Ford submitted their response to corrective action letter on May 30, 1985. The response indicated that they have solid waste management units in the form of closed landfill cells and that releases had occurred by leachate seeping through the cover systems to surface waters. The submittal also indicates that measures to prevent further releases by constructing a perimeter clay dike around the landfill and tying into the clay cover and improving site drainage were completed in 1982. Ford has requested groundwater monitoring waivers for both RCRA and Act 64. EPA issued a partial waiver of interim status groundwater monitoring in December, 1985. At this point it appears that EPA and MDNR will not require monitoring of the artesian aquifer. However, some monitoring of the upper clay layer for lateral migration from the landfill may be required.

Environmental Significance

The facility is within the limits of the City of Allen Park and is bordered on the east by I-94, on the west by M-39, and a hospital to the southwest. The facility is located in an area which is highly populated and includes industrial and residential zoning.

There have been complaints from local residents regarding fugitive dust emissions and trackout from the facility.

COPY 2

Ford's response to the EPA corrective action letter indicates that leachate from closed landfill cells was released to surface waters on the site prior to 1982. The company stated that action was taken to prevent further releases of leachate, however, they did not indicate that any remedial actions to determine the extent of any contamination and to clean it up were taken.

There is quite a bit hydrogeological information on this site. Much of the work has been done by Ford to support their request for a groundwater monitoring waiver. This work has confirmed the extensive clay overlying the artesian aquifer. It appears that groundwater monitoring of the artesian aquifer will be waived.

Recommendations

A preliminary assessment and site investigation (PA/SI) should be carried out for this facility. During the PA, a thorough file search needs to be completed to document past problems from solid waste management units at the facility and what measures were taken to correct them. The site investigation should include inspection and sampling program to determine the location and extent of contamination, if any, from releases of hazardous wastes or hazardous constituents at the facility. MDNR plans to perform the PA/SI work for this facility by May 1986. At that time, the attachment 20 checklist will be completed, recommendations for further investigation work will be provided, if necessary, and recommendations for permitting or enforcement action will be outlined.

RECEIVED

AUG 22 1985

SWB - AIS
U.S. EPA REGION V

Ford Motor Company
3001 Miller Road
Dearborn, Michigan 48121

August 20, 1985

RCRA Activities
Part B Permit Application
U.S. EPA Region
P.O. Box 3587
Chicago, Illinois 60690-3587

ATTENTION: 5HS-13

Subject: Ford Allen Park Clay Mine
Part B Permit Application
MID 980568711

The May 30, 1985 submittal concerning Corrective Action Requirements inadvertently omitted the appropriate signature on page 370. Enclosed please find four copies of the amended signature page which has been paginated 370A.

Yours very truly,

David S. Miller

David S. Miller
Mining Properties Department

DSM:pf

Enclosures

16

COPY 2

3. For the units noted in Number 1 above and also those hazardous wasteunits in your Part B application, please describe for each unit any data available on any prior or current releases of hazardous wastes or constituents to the environment that may have occurred in the part or still be occurring.

Please provide the following information

a. Date of release
b. Type of waste released .
c. Quantity or volume of waste released
d. Describe nature of release (i.e., spill, overflow, ruptured pipe or tank, etc.)

A) Prior to 1982, leachate runoff intermittantly seeped into surface drains. Refer to Exhibit V.

B) Annual maintenance of cap to eliminate wet spots and potential seepage.

4. In regard to the prior releases described in Number 3 above, please provide (for each unit) any analytical data that may be available which would describe the nature and extent of environmental contamination that exists as a result of such releases, Please focus on concentrations of hazardous wastes or constituents present in contaminated soil or groundwater.

A) Refer to Exhibit VI

1 certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the submittal is, to the best of my knowledge and belief, true, accurate, and complete. 1 am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. (42 U.S.C. 6902 et seq. and 40 CFR 270.11(d))

Ben C. Trethewey, Manager, Mining Properties Dept.
Typed Name and Title

Signature

8-20-85
Date

Ford Motor Company

3001 Miller Road
Dearborn, Michigan 48121

RECEIVED
MAY 16 1985
SOLID WASTE BRANCH
U.S. EPA, REGION V

May 14, 1985

5HS - 13
U. S. EPA
Region 5
230 South Dearborn Street
Chicago, IL 60604

Re: Corrective Action Requirements
Ford Motor Company Allen Park Clay Mine
MID 980568711

Gentlemen:

Enclosed please find the unsigned certification regarding potential release from solid waste management units. Information required to complete the certification is presently being collected and will be submitted to your office on May 31, 1985.

Yours very truly,

Ben C. Trethewey

Ben C. Trethewey, Manager
Mining Properties Department

DSM:dp

Enclosure

15

CERTIFICATION REGARDING POTENTIAL RELEASES FROM
SOLID WASTE MANAGEMENT UNITS

FACILITY NAME: FORD MOTOR COMPANY ALLEN PARK Clay MINE

EPA I.D. NUMBER: MID 980 568 711

LOCATION CITY: ALLEN PARK

STATE: MI CH

1. Are there any of the following solid waste management units (existing or closed) at your facility? NOTE - DO NOT INCLUDE HAZARDOUS WASTES UNITS CURRENTLY SHOWN IN YOUR PART B APPLICATION

	YES	NO
° Landfill	____	____
° Surface Impoundment	____	____
° Land Farm	____	____
° Waste Pile	____	____
° Incinerator	____	____
° Storage Tank (Above Ground)	____	____
° Storage Tank (Underground)	____	____
° Container Storage Area	____	____
° Injection Wells	____	____
° Wastewater Treatment Units	____	____
° Transfer Stations	____	____
° Waste Recycling Operations	____	____
° Waste Treatment, Detoxification	____	____
° Other _____		

2. If there are "Yes" answers to any of the items in Number 1 above, please provide a description of the wastes that were stored, treated or disposed of in each unit. In particular, please focus on whether or not the wastes would be considered as hazardous wastes or hazardous constituents under RCRA. Also include any available data on quantities or volume of wastes disposed on and the dates of disposal. Please also provide a description of each unit and include capacity, dimensions, location at facility, provide a site plan if avaliable.

_____

_____

_____

_____

_____

NOTE: Hazardous waste are those identified in 40 CFR 261. Hazardous constituents are those listed in Appendix VIII Of 40 CFR Part 261.

P557099049

APR 23 1985

5HS-13

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

B. C. Trethewey, Manager
Ford Motor Company Allen Park Clay Mine
3001 Miller Rd., Room 2042
Dearborn, MI 48121

RE: Corrective Action Requirements,
Hazardous and Solid Waste
Amendments of 1984
Ford Motor Company Allen Park Clay Mine
MID 980 568 711

Dear Mr. Trethewey:

As you know, we are currently reviewing Part B of the Resource Conservation and Recovery Act (RCRA) permit application for the above-referenced facility.

On November 8, 1984, the Hazardous and Solid Waste Amendments of 1984 (the Amendments) were enacted to modify RCRA. Under Section 206 (copy enclosed) of the Amendments, all RCRA permits issued after the date of enactment must provide for corrective action for all releases of hazardous waste or constituents from any solid waste management unit, regardless of the time at which waste was placed in the unit. Please note that both hazardous and non-hazardous waste can meet the definition of solid waste under 40 CFR 261.2.

Consequently, we must determine whether such releases have ever occurred at the facility site. If they have, we must ensure that corrective actions either have been taken or will be taken, pursuant to a RCRA permit. An important part of our determination includes your willingess (or unwillingness) to sign the enclosed certification statement. Please read it carefully and either sign it and return it, or return it to us unsigned with a cover letter of explanation, within three weeks of the date of this letter. Any information regarding releases of hazardous waste or hazardous constituents to the environment will be evaluated during the permit review process. Any tentative decision we make concerning your permit application will be public noticed in a newspaper of general circulation in the area of the facility.

Please contact the previously identified permit writer with our Agency for additional information.

Sincerely yours,

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

228-20

Enclosures

	TYPIST	AUTHOR	STU #1 CHIEF	STU #2 CHIEF	~~STU #3~~ CHIEF	TPS CHIEF	WMB CHIEF	WMD DIRECTOR
INITIALS	G.W.							
~~DATE~~	4-1-85	4/23/85			4-23-85	4/23/85		

PS Form 3811, July 1983 447-845

DOMESTIC RETURN RECEIPT

SENDER: Complete items 1, 2, 3 a

Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

1. ☐ Show to whom, date and address of delivery.
2. ☐ Restricted Delivery.

3. Article Addressed to:

B.C. TRETHEWEY, MANAGER
FORD MOTOR COMAPNY ALLEN PK. CLAY MINE
3001 MILLER RD. - Room 2042
DEARBORN, MI 48121

4. Type of Service:

☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail

Article Number: P 557 099 049

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature – Addressee
X

6. Signature – Agent
X

7. Date of Delivery
MAY 2 1985

FORD MOTOR CO

8. Addressee's Address *(ONLY if requested and fee paid)*

5HS-13 R. TRAUB
P 557 0[illegible] 049

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to B.C. TRETHEWAYM MANAGER	
Street and No. 3001 MILLER RD.-RM 2042	
P.O., State and ZIP Code DEARBPRM. MI 48121	
Postage	$ .22
Certified Fee	.75
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	.70
Return receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$1.67
Postmark or Date	

CHICAGO, IL LOOP STA. APR 29 1985 USPO

PS Form 3800, Feb. 1982

★ U.S.G.P.O. 1983-403-517

5HS-13 R. TRAUB

UNITED STATES POSTAL SERVICE

OFFICIAL BUSINESS

SENDER INSTRUCTIONS

Print your name, address, and ZIP Code in the space below.

- **Complete items 1, 2, 3, and 4 on the reverse.**
- **Attach to front of article if space permits, otherwise affix to back of article.**
- **Endorse article "Return Receipt Requested" adjacent to number.**

U.S.MAIL

PENALTY FOR PRIVATE USE, $300

RECEIVED

MAR 06 1985

SOLID WASTE BRANCH
U.S. EPA, REGION V

RETURN TO

ENVIRONMENTAL PROTECTION AGENCY
REGION V
230 SOUTH DEARBORN STREET
CHICAGO IL 60604

3. For the units noted in Number 1 above and also those hazardous wasteunits in your Part B application, please describe for each unit any data available on any prior or current releases of hazardous wastes or constituents to the environment that may have occurred in the part or still be occurring.

   Please provide the following information

   a. Date of release
   b. Type of waste released .
   c. Quantity or volume of waste released
   d. Describe nature of release (i.e., spill, overflow, ruptured pipe or tank, etc.)

   _____

   _____

   _____

   _____

4. In regard to the prior releases described in Number 3 above, please provide (for each unit) any analytical data that may be available which would describe the nature and extent of environmental contamination that exists as a result of such releases, Please focus on concentrations of hazardous wastes or constituents present in contaminated soil or groundwater.

   _____

   _____

   _____

   _____

   1 certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the submittal is, to the best of my knowledge and belief, true, accurate, and complete. 1 am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. (42 U.S.C. 6902 et seq. and 40 CFR 270.11(d))

   _____
   Typed Name and Title

   _____ _____
   Signature Date

CONTINUING RELEASES AT PERMITTED FACILITIES

SEC. 206. Section 3004 of the Solid Waste Disposal Act is amended by adding the following new subsection after subsection (t) thereof:

"(u) CONTINUING RELEASES AT PERMITTED FACILITIES.—Standards promulgated under this section shall require, and a permit issued after the date of enactment of the Hazardous and Solid Waste Amendments of 1984 by the Administrator or a State shall require, corrective action for all releases of hazardous waste or constituents from any solid waste management unit at a treatment, storage, or disposal facility seeking a permit under this subtitle, regardless of the time at which waste was placed in such unit. Permits issued under section 3005 shall contain schedules of compliance for such corrective action (where such corrective action cannot be completed prior to issuance of the permit) and assurances of financial responsibility for completing such corrective action.".