TSD File Inventory Index

US EPA RECORDS CENTER REGION 5

1004612

Date November 13, 2012

Initial SDP

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1 Correspondence		2 All Other Permitting Documents (Not Part of the ARA) B.1.6	1
2 Notification and Acknowledgment	1	**C.1 Compliance - (Inspection Reports)** See C.2	
3 Part A Application and Amendments	1	**C.2 Compliance/Enforcement** C.2(3)	3
4 Financial Insurance (Sudden, Non Sudden)	1	1 Land Disposal Restriction Notifications C.2.1	1
5 Change Under Interim Status Requests		2 Import/Export Notifications	
6 Annual and Biennial Reports	1	**C.3 FOIA Exemptions - Non-Releasable Documents** C.3	1
A.3 Groundwater Monitoring		**D.1 Corrective Action/Facility Assessment**	
1 Correspondence A.3.1 - A.3.2	1	1 RFA Correspondence	
2 Reports		2 Background Reports, Supporting Docs and Studies D.1.3-D.1.4	1
A.4 Closure/Post Closure		3 State Prelim Investigation Memos	
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7 Lab Data Soil-Sampling/Groundwater D.2.7 (4)	4	D.5 Corrective Action/Enforcement	
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D.3 Corrective Action/Remediation Study		1 Forms/Checklists D.6.1	1
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.2 Interim Measures		1 Correspondence	
.3 CMS Workplan See D.3.1		.2 Reports	
4 CMS Draft/Final Report		F Imagery/Special Studies (Videos, photos, disks, maps, blueprints, drawings, and other special materials.)	1
.5 Stabilization		G.1 Risk Assessment	
.6 CMS Progress Reports D.3.6 (2)	2	.1 Human/Ecological Assessment	
7 Lab Data, Soil-Sampling/Groundwater D.3.7 (8)	8	.2 Compliance and Enforcement	
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1 CMI Correspondence		4 Ecological - Administrative Record	
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3 CMI Program Reports and Oversight		6 Corrective Action Remediation Study	
4 CMI Draft/Final Reports		7 Corrective Action/Remediation Implementation	
5 CMI QAPP		8 Endangered Species Act G.1.8	1
6 CMI Correspondence		9 Environmental Justice	

Note Transmittal Letter to Be Included with Reports

Comments _____

MID 064 197 742

BASF Corp (Wyandotte)

Draft Phase I RCRA Facility Investigation Report

12/4/97

For

BASF Wyandotte Facility

Appendix B to H with all attachment

Has been sent to FRC on 6/12/12 in 4 boxes (16 folders)

On the shelf it was listed as volume 2 to 23.

Original Report & Appendix A (Vol. 1 of 23) is on the shelf

In the Records Center

F

File Inventory Sheet		Box 1 of 4
File Series: BASF Corp (Wyandotte)		RCRA 206a
ID # MID 064 197 742		
Folder #	**Date**	**Folder Description**
1	12/4/97	D.2.4 Draft Phase 1 RCRA Facility Investigation Report Appendix B – Soil Boring & Monitoring Well Logs
2	12/4/97	D.2.4 Draft Phase 1 RCRA Facility Investigation Report Appendix C – Aquifer Testing Data & Analyses Appendix D – Data Validation Reports & Analytical Lab Data (Report 1a of 36, 1b of 36, 2 of 36)
3	12/4/97	D.2.4 Draft Phase 1 RCRA Facility Investigation Report Appendix D – Data Validation Reports & Analytical Lab Data (Report 3 of 36, 4 of 36, 5 of 36)
4	12/4/97	D.2.4 Draft Phase 1 RCRA Facility Investigation Report Appendix D – Data Validation Reports & Analytical Lab Data (Report 6 of 36, 7 of 36, 8 of 36)

File Inventory Sheet		Box 2 of 4
File Series: BASF Corp (Wyandotte)		RCRA 206a
ID # MID 064 197 742		
Folder #	**Date**	**Folder Description**
5	12/4/97	D.2.4 Draft Phase 1 RCRA Facility Investigation Report Appendix D – Data Validation Reports & Analytical Lab Data (Report 9 of 36, 10a of 36, 10b of 36)
6	12/4/97	D.2.4 Draft Phase 1 RCRA Facility Investigation Report Appendix C – Aquifer Testing Data & Analyses Appendix D – Data Validation Reports & Analytical Lab Data (Report 11, 12, 13, 14, 15 of 36)
7	12/4/97	D.2.4 Draft Phase 1 RCRA Facility Investigation Report Appendix D – Data Validation Reports & Analytical Lab Data (Report 16, 17, 18 of 36)
8	12/4/97	D.2.4 Draft Phase 1 RCRA Facility Investigation Report Appendix D – Data Validation Reports & Analytical Lab Data (Report 19, 20, 21 of 36)

File Inventory Sheet		Box 3 of 4
File Series: BASF Corp (Wyandotte)		RCRA 206a
ID # MID 064 197 742		
Folder #	**Date**	**Folder Description**
9	12/4/97	D.2.4 Draft Phase 1 RCRA Facility Investigation Report Appendix D – Data Validation Reports & Analytical Lab Data (Report 22, 23, 24 of 36)
10	12/4/97	D.2.4 Draft Phase 1 RCRA Facility Investigation Report Appendix C – Aquifer Testing Data & Analyses Appendix D – Data Validation Reports & Analytical Lab Data (Report 25, 26, 27, 28 of 36)
11	12/4/97	D.2.4 Draft Phase 1 RCRA Facility Investigation Report Appendix D – Data Validation Reports & Analytical Lab Data (Report 29, 30 of 36)
12	12/4/97	D.2.4 Draft Phase 1 RCRA Facility Investigation Report Appendix D – Data Validation Reports & Analytical Lab Data (Report 31, 32 of 36)

File Inventory Sheet		Box 4 of 4
File Series: BASF Corp (Wyandotte)		RCRA 206a
ID # MID 064 197 742		
Folder #	**Date**	**Folder Description**
13	12/4/97	D.2.4 Draft Phase 1 RCRA Facility Investigation Report Appendix D – Data Validation Reports & Analytical Lab Data (Report 33a, 33b, 33c of 36)
14	12/4/97	D.2.4 Draft Phase 1 RCRA Facility Investigation Report Appendix C – Aquifer Testing Data & Analyses Appendix D – Data Validation Reports & Analytical Lab Data (Report 34a, 34b, 34c of 36)
15	12/4/97	D.2.4 Draft Phase 1 RCRA Facility Investigation Report Appendix D – Data Validation Reports & Analytical Lab Data (Report 35a, 35b, 35c, 36 of 36)
16	12/4/97	D.2.4 Draft Phase 1 RCRA Facility Investigation Report App. E – Field Parameter & GW Elevation Summary Tables App. F – Exposure Assumptions for Chemical Intake Estimates App. G – Exposure & Risk Calculations App. H – GTI Toluene Remediation Investigation Report (TRIP)

F

File Inventory Sheet		Box 1 of 2
File Series: BASF Corp (North Works)		RCRA 206a
ID # MID 064 197 742		
Folder #	Date	Folder Description
1	2/96-10/5/96	Inchcape Testing Services – Metals Data – RCRA Data
2	8/96-10/96	Inchcape Testing Services – for A. T. Kearney, SDG Narrative RCRA Data
3	3/13/96-11/18/96	Inchcape Testing Services – NDRC Laboratories Inorganic Analysis Data Sheet

File Inventory Sheet		Box 2 of 2
File Series: BASF Corp (North Works)		RCRA 206a
ID # MID 064 197 742		
Folder #	Date	Folder Description
4	8/2/96 -11/6/96	Inchcape Testing Services – Environmental Laboratories, for A.T. Kearney, SDG Narrative, RCRA Data
5	9/27/96 -11/26/96	Inchcape Testing Services – RCRA Data

BASF

The Chemical Company

CERTIFIED MAIL – RETURN RECEIPT REQUESTED
1. 7012 2920 0001 0585 1739
2. 7012 2920 0001 0585 1777
3. 7012 2920 0001 0585 1753
4. 7012 2920 0001 0585 1746

August 11, 2014

1. U.S. BANK
GOVERNMENT LOCK BOX 979077
U.S. EPA FINES AND PENALTIES
1005 CONVENTION PLAZA
MAIL STATION SL-MO-C2-GL
ST. LOUIS, MO 63101

2. Regional Hearing Clerk (E-19J)
U.S. EPA, Region 5
77 West Jackson Blvd.
Chicago, IL 60604

3. Bryan Gangwisch
RCRA Branch (LR-8J)
U.S. EPA, Region 5
77 West Jackson Blvd.
Chicago, IL 60604

4. Reginald Pallesen
Office of Regional Counsel (C-14J)
U.S. EPA, Region 5
77 West Jackson Blvd.
Chicago, IL 60604

RE: In the Matter of:
BASF Corporation
Wyandotte, Michigan 48192
CAFO Docket # RCRA-05-2014-0010

To Whom It May Concern:

Enclosed please find the check from BASF Corporation 1609 Biddle Avenue, Wyandotte, MI 48192. For CAFO #RCRA-05-2014-0010 in the amount of $55,940.00. BASF Check #02027572.

Should you have any questions, please contact Bryan Hughes at 734-324-6523.

Sincerely,

Bryan J. Hughes
OH-MI-CAN Hub Team Leader

Enclosure: Check

i:\ecology\hughes\rcra-05-2014-0010-2.doc

BASF Corporation
1609 Biddle Avenue
Wyandotte, MI 48192
Tel: (734) 324-6100
www.basf.com/usa

BASF Corporation
100 Park Ave
Florham Park, NJ 07932-0685

RCRA-05-2014-0010

62-38
311

No. 02027572

DATE
08 06 2014

*** FIFTY-FIVE THOUSAND NINE HUNDRED FORTY USD***

USD
*********55,940.00*

TREASURER UNITED STATES OF AMERICA
US EPA
PO Box 979077
ST LOUIS MO 63197-9000

Robert E. Weal

Deutsche Bank Trust Company Delaware
WILMINGTON

VOID AFTER 90 DAYS

In the Matter of
BASF Corporation
Wyandotte, Michigan 48192

⑈02027572⑈ ⑆031100380⑆ 00558709⑈

BASF Corporation
100 Park Ave
Florham Park, NJ 07932-0685

TREASURER UNITED STATES OF AMERICA
US EPA
PO Box 979077
ST LOUIS MO 63197-9000

02027572

DOCUMENT NO	INV DATE	INVOICE NO	GROSS AMOUNT	DISCOUNT AMOUNT	NET AMOUNT
1700082874	08/04/2014	08/04/2014	55,940.00	0.00	55,940.00
			55,940.00	0.00	55,940.00

Date 08/06/2014

Direct Payment
Inquiries to
(973) 245-5530

Your Account with us 2005062
Payment Document 1081156912
AP_INQUIRY_MAIL_BOX@BASF.COM
Hold Code 05 Nancy Diem

Payment Amount
********55,940.00*

USD

BASF Corporation
100 Park Ave
Florham Park, NJ 07932-0685

REMOVE DOCUMENT ALONG THIS PERFORATION

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

JUL 15 2014

REPLY TO THE ATTENTION OF:

CERTIFIED MAIL 7009 1680 0000 7677 8930
RETURN RECEIPT REQUESTED

Mr. Gregory E. Pflum
Vice President and General Manager
BASF Corporation
1609 Biddle Avenue
Wyandotte, MI 48192

Re: Consent Agreement and Final Order
BASF Corporation
1609 Biddle Avenue
Wyandotte, MI 48192
EPA I.D. No.: MID064197742
Docket No: **RCRA-05-2014-0010**

Dear Mr. Pflum:

Enclosed, please find an original signed fully-executed Consent Agreement and Final Order (CAFO) in resolution of the above case. The original was filed on July 15, 2014, with the Regional Hearing Clerk.

Please pay the civil penalty in the amount of $55,940 in the manner prescribed in paragraphs 68 and 69 of the CAFO, and reference all checks with the Docket No.: **RCRA-05-2014-0010**. Also, enclosed is a *Notice of Securities and Exchange Commission Registrant's Duty to Disclose Environmental Legal Proceedings*. Your payment is due within 30 calendar days of the effective date of the CAFO. Thank you for your cooperation in resolving this matter.

Sincerely,

Gary J. Victorine
Chief,
RCRA Branch

Enclosures

cc: Tracy Kecskemeti, MDEQ-SEMI District Office
kecskemetit@michigan.gov

John Craig, MDEQ-Lansing Office
craigj@michigan.gov

Lonnie Lee, MDEQ-Lansing Office
leel@michigan.gov

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

JUL 15 2014

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Sincerely,

Gary J. Victorine
Chief,
RCRA Branch

Enclosures

Recycled/Recyclable • Printed with Vegetable Oil Based Inks on 100% Recycled Paper (100% Post-Consumer)

cc: Tracy Kecskemeti, MDEQ-SEMI District Office
kecskemetit@michigan.gov

John Craig, MDEQ-Lansing Office
craigj@michigan.gov

Lonnie Lee, MDEQ-Lansing Office
leel@michigan.gov

Bcc: Reginald Pallesen, ORC (C-14J)(w/CAFO)
Bryan Gangwisch, LR-8J (w/CAFO)
Official File (w/CAFO)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

In the Matter of:	)	**Docket No. RCRA-05-2014-0010**
	)	
BASF Corporation Wyandotte, Michigan 48192	)	**Proceeding to Commence and Conclude an Action to Assess a Civil Penalty Under Section 3008(a) of the Resource Conservation and Recovery Act, 42 U.S.C. § 6928(a)**
Respondent.	)	

REGIONAL HEARING CLERK
RECEIVED
JUL 15 2014
U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 5

Consent Agreement and Final Order

Preliminary Statement

1. This is an administrative action commenced and concluded under Section 3008(a) of the Solid Waste Disposal Act, as amended, also known as the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 6928(a), and Sections 22.13(b) and 22.18(b)(2) and (3) of the Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation/Termination or Suspension of Permits (Consolidated Rules) as codified at 40 C.F.R. Part 22.

2. The Complainant is the Director of the Land and Chemicals Division, United States Environmental Protection Agency, Region 5.

3. Respondent is BASF Corporation, a corporation doing business in the State of Michigan.

4. EPA provided notice of commencement of this action to the State of Michigan pursuant to Section 3008(a)(2) of RCRA, 42 U.S.C. § 6928(a)(2).

5. Where the parties agree to settle one or more causes of action before the filing of a complaint, the administrative action may be commenced and concluded simultaneously by the issuance of a consent agreement and final order (CAFO). 40 C.F.R. § 22.13(b).

6. The parties agree that settling this action without the filing of a complaint or the adjudication of any issue of fact or law is in their interest and in the public interest.

7. Respondent consents to the assessment of the civil penalty specified in this CAFO, and to the terms of this CAFO.

Jurisdiction and Waiver of Right to Hearing

8. Jurisdiction for this action is conferred upon EPA by Sections 3006 and 3008 of RCRA, 42 U.S.C. §§ 6926 and 6928.

9. Respondent admits the jurisdictional allegations in this CAFO and neither admits nor denies the factual allegations in this CAFO.

10. Respondent waives its right to request a hearing as provided at 40 C.F.R. § 22.15(c), any right to contest the allegations in this CAFO, and its right to appeal this CAFO.

11. Respondent certifies that, to the best of its information and belief, it is complying fully with RCRA, 42 U.S.C. §§ 6901 – 6992k, and the regulations at 40 C.F.R. Parts 260 - 279.

Statutory and Regulatory Background

12. EPA has promulgated regulations, codified at 40 C.F.R. Parts 260 through 279, governing generators and transporters of hazardous waste and facilities that treat, store and dispose of hazardous waste, pursuant to Sections 3002, 3003 and 3004 of RCRA, 42 U.S.C. §§ 6922, 6923 and 6924.

13. Pursuant to Section 3006 of RCRA, 42 U.S.C. § 6926, the Administrator of EPA may authorize a state to administer the RCRA hazardous waste program in lieu of the federal program when the Administrator finds that the state program meets certain conditions. Any violation of regulations promulgated pursuant to Subtitle C (Sections 3001-3023 of RCRA, 42 U.S.C. §§ 6921-6939e) or any state provision authorized pursuant to Section 3006 of RCRA,

constitutes a violation of RCRA, subject to the assessment of civil penalties and issuance of compliance orders as provided in Section 3008 of RCRA, 42 U.S.C. § 6928.

14. Pursuant to Section 3006(b) of RCRA, 42 U.S.C. § 6926(b), the Administrator of EPA granted the State of Michigan final authorization to administer a state hazardous waste program in lieu of the federal government's base RCRA program effective October 30, 1986. 51 Fed. Reg. 36804 (October 16, 1986). The EPA-authorized Michigan regulations are codified at Michigan Administrative Code (MAC) Rules 299.9101 *et seq.* *See also* 40 C.F.R. §§ 272.1151 *et seq.*

15. EPA has promulgated regulations, codified at 40 C.F.R. Parts 260 through 279, governing generators and transporters of hazardous waste and facilities that treat, store, and dispose of hazardous waste, pursuant to Sections 3002, 3003 and 3004 of RCRA, 42 U.S.C. §§ 6922, 6923, and 6924.

16. Under Section 3008(a) of RCRA, 42 U.S.C. § 6928(a), EPA may issue an order assessing a civil penalty for any past or current violation, requiring compliance immediately or within a specified period of time, or both.

17. The Administrator of EPA may assess a civil penalty of up to $25,000 per day for each violation of Subtitle C of RCRA according to Section 3008 of RCRA, 42 U.S.C. § 6928. The Federal Civil Penalties Inflation Adjustment Act of 1990, as amended by the Debt Collection Improvement Act of 1996, 31 U.S.C. § 3701 note (1996), required EPA to adjust its penalties for inflation on a periodic basis. Pursuant to the Civil Monetary Penalty Inflation Adjustment Rule, published at 40 C.F.R. Part 19, EPA may assess a civil penalty of up to $32,500 per day for each violation of Subtitle C of RCRA that occurred after March 15, 2004,

through January 12, 2009, and may assess a civil penalty of up to $37,500 per day for each violation of Subtitle C of RCRA that occurred after January 12, 2009.

Factual Allegations and Alleged Violations

18. Respondent was and is a "person" as defined by MAC R 299.9106(i), 40 C.F.R. § 260.10, and Section 1004(15) of RCRA, 42 U.S.C. § 6903(15).

19. Respondent is an "owner" or "operator," as those terms are defined under MAC R 299.9106(f) and (g) and 40 C.F.R. § 260.10, of a facility located at 1609 Biddle Avenue, Wyandotte, Michigan 48192 (Facility).

20. Respondent's Facility is comprised of several buildings, situated on some 235 acres, where Respondent manufactures organic and specialty chemicals and conducts research and development (R&D) activities.

21. Respondent's Facility is a "facility," as that term is defined under MAC R 299.9103(r) and 40 C.F.R. § 260.10.

22. On June 13-14, 2012, EPA conducted an inspection ("Inspection") of Respondent's Facility to evaluate Respondent's compliance with the applicable requirements of RCRA.

23. At the time of the Inspection, Respondent was operating as a large quantity generator of hazardous wastes, according to Respondent's hazardous waste generation rate, a Michigan Department of Environmental Quality (MDEQ) annual hazardous waste report, and an EPA database.

24. At all times relevant to this Complaint, Respondent held various wastes in "containers and/or "tanks"" as those terms are identified under MAC R 299.9102(r) and 40 C.F.R. R 260.10, for temporary periods before the material was shipped from the Facility for treatment, storage, disposal, burning or incineration elsewhere.

25. At all times relevant to this Complaint, Respondent's waste in question was a "solid waste" as that term is defined at MAC R 299.9202 and 40 C.F.R. § 261.2.

26. At all times relevant to this Complaint, Respondent's waste in question was a "hazardous waste" as that term is defined at MAC R 299.9203 and 40 C.F.R. § 261.3.

27. At all times relevant to this Complaint, Respondent's holding of hazardous waste in containers constituted "storage," as that term is defined under MAC R 299.9107(dd) and 40 C.F.R. § 260.10.

28. Because Respondent owns and operates a Facility that stores hazardous waste awaiting treatment, disposal or storage elsewhere, Respondent is subject to the requirements for treatment, storage and disposal facilities (TSDFs) found at MAC R 299.9601 – 299.9640 and 40 C.F.R. Parts 264 and 265.

29. Pursuant to MAC R 299.9502, 299.9508 and 299.9510; and 40 C.F.R. §§ 270.1(c) and 270.10(a) and (d), the treatment, storage or disposal of hazardous waste by any person who has not applied for or received a license is prohibited.

30. Pursuant to MAC R 299.9306(a) and 40 C.F.R. § 262.34(a), however, and subject to certain exceptions, a generator of hazardous waste may store hazardous waste on-site for 90 days or less without having a license or interim status, provided that the generator complies with all applicable conditions set forth in MAC R 299.9306 and 40 C.F.R.§ 262.34(a).

31. Failure to comply with any of the conditions of MAC R 299.9306 subjects a generator of hazardous waste to the license requirements of MAC R 299.9502, 299.9508 and 299.9510 and 40 C.F.R. §§ 270.1(c) and 270.10(a) and (d).

32. At all times relevant to this Complaint, the State of Michigan had not issued a license to Respondent to treat, store or dispose of hazardous waste at its Facility.

33. At all times relevant to this Complaint, Respondent did not have interim status for the treatment, storage or disposal of hazardous waste at its Facility.

34. Respondent generated and managed hazardous waste at the Facility on or before November 19, 1980.

35. On or about August 8, 1980, Respondent submitted a Hazardous Waste Notification to EPA for the Facility.

36. In its Hazardous Waste Notification dated August 8, 1980, Respondent identified itself as a generator.

37. At all times relevant to this Complaint, Respondent generated during each calendar month more than 1000 kg of hazardous waste (large quantity generator) at its Facility.

38. On January 22, 2013, EPA issued a Notice of Violation to Respondent alleging certain violations of RCRA discovered during the Inspection.

Count I: Storage of Hazardous Waste Without a Permit or Interim Status

39. Pursuant to MAC R. 299.9306(3) and 40 C.F.R. § 262.34(b), a large quantity generator who accumulates hazardous waste for more than 90 days is an operator of a hazardous waste storage facility. This is also a requirement of owners and operators of hazardous waste storage facilities under MAC R. 299.9502(1), 299.9508 and 299.9510, and 40 C.F.R. §§ 270.1(c), 270.10(a) and (d), and 270.13.

40. During the Inspection of the Central Hazardous Waste Container Storage Area, the inspector observed four 5-gallon hazardous waste containers that were marked with accumulation start dates that had already exceeded 90 days at the time of the inspection, including: a container labeled as "Hazardous Waste" and "D001, D018"; a container labeled as "Hazardous Waste" and "D002 Spent Sulfuric Acid"; a container labeled as "Hazardous Waste"

and "F002, F003 Acetone, o-dichlorobenzene phenol"; and a container labeled as "Hazardous Waste" and "D001 Methyl Amyl Ketone, Petroleum Distillate, Styrene".

41. During the Inspection of the Central Hazardous Waste Container Storage Area, the inspector observed one 55-gallon hazardous waste drum that was marked with an accumulation start date that had already exceeded 90 days at the time of the inspection. The drum was labeled as "Hazardous Waste" and "D001, D009, D011, D018, D019, D022, F002, F003". The drum was stored on-site for more than 90 days.

42. Pursuant to MAC R. 299.9306(1)(b) and 40 C.F.R. § 262.34(a)(2), in order to retain the exemption from the requirement to obtain a hazardous waste storage license, a large quantity generator must ensure that the date upon which each period of accumulation begins and the hazardous waste number of the waste are clearly marked and visible for inspection on each hazardous waste container.

43. During the Inspection of the Central Hazardous Waste Container Storage Area, the inspector observed two 5-gallon hazardous waste containers labeled as "Hazardous Waste" and "D001, F003, F005, D028, D022" that did not have accumulation start dates marked on them. One 5-gallon container labeled as "Hazardous Waste" and "F005 Waste Pyridine" did not have an accumulation start date marked on it.

44. During the Inspection of the Central Hazardous Waste Container Storage Area, the inspector observed two 55-gallon hazardous waste drums labeled as "Hazardous Waste" that did not have the applicable hazardous waste codes marked on them. Three 55-gallon hazardous waste drums labeled as "Hazardous Waste" and "D001" did not have accumulation start dates marked on them. One 55-gallon hazardous waste drum labeled as "Hazardous Waste" and "D001" did not have an accumulation start date marked on it.

45. During the Inspection of the non-hazardous waste storage side of the Central Hazardous Waste Container Storage Area, the inspector observed one 55-gallon hazardous waste drum labeled as "Hazardous Waste" that did not have the applicable hazardous waste codes or an accumulation start date marked on it. A lab pack box being prepared for shipment contained one 1-gallon hazardous waste container labeled as "Hazardous Waste" that did not have the applicable hazardous waste codes or an accumulation start date marked on it.

46. During the Inspection of the Chemical Engineering Building, at the 3rd Floor Pilot Plant, the inspector observed one 55-gallon drum labeled as "Hazardous Waste" and "Methyl Amyl Ketone, Petroleum Distillate, Styrene" that did not have the applicable hazardous waste codes marked on it.

47. Respondent's failure to comply with the conditions of MAC R 299.9306 and 40 C.F.R. § 262.34 regarding storage of hazardous wastes for no more that 90 days and marking accumulation dates and hazardous waste numbers subjects Respondent to the license requirements of MAC R 299.9502, 299.9508 and 299.9510 and 40 C.F.R. §§ 270.1(c) and 270.10(a), (d).

48. As a result of Respondent's failure to meet all of the applicable conditions for the generator exemption provided by MAC R. 299.9306 and 40 C.F.R. § 262.34, Respondent became an operator of a hazardous waste treatment, storage and disposal facility (TSDF).

49. Respondent's storage of hazardous waste without a permit or interim status violated Section 3005 of RCRA, 42 U.S.C. § 6925(a) and the requirements of MAC R. 299.9502, 299.9508, and 299.9510, and 40 C.F.R. §§ 270.1(c) and 270.10(a) and (d), and 270.13.

Count II: Secondary Containment Systems

50. In order to retain the exemption from the requirement to obtain a hazardous waste storage license, a large quantity generator must ensure that secondary containment systems are capable of detecting and collecting releases and accumulated liquids until the collected material is removed. Also, secondary containment systems must, at a minimum, be provided with a leak detection system that is designed and operated so that it will detect the failure of either the primary and secondary containment structure or the presence of any release of hazardous waste or accumulated liquid in the secondary containment system within twenty-four hours, or at the earliest practicable time if the existing detection technology or site conditions will not allow detection of a release within twenty-four hours. See MAC R. 299.9306(1)(a)(ii) and 40 C.F.R. §§ 262.34(a)(1)(ii) and 265.193(b)(2) and (c)(3). This is also a requirement of owners and operators of hazardous waste storage facilities under MAC R. 299.9615(1) and 299.9601(1), (2)(h) and (3)(b) and 40 C.F.R. § 264.193(b)(2) and (c)(3).

51. During the Inspection of Respondent's records, the inspector observed that there was no leak detection system in place for the secondary containment system associated with the Resin Plant hazardous waste storage tanks since no daily tank inspections were conducted at the Resin Plant during various periods from September 2010 through April 2012. Also, the Resin Plant daily hazardous waste tank inspection logs, from June 13, 2009 through 2010, were not retained on-site.

52. Respondent failed to comply with hazardous waste secondary containment and tank leak detection requirements, in violation of MAC R. 299.9306(1)(a)(ii) and 299.9615(1), and 40 C.F.R. §§ 262.34(a)(1)(ii); 265.193(b)(2) and (c)(3); and 264.193(b)(2) and (c)(3), and thereby failed to retain the exemption from the requirement to obtain a hazardous waste storage license.

Count III: Failure to Make Hazardous Waste Determination

53. Pursuant to MAC R. 299.9302(1) and 40 C.F.R. § 262.11. a person who generates solid waste, as defined in MAC R. 299.9202, must determine if that waste is a hazardous waste.

54. During the inspection of the Resins Plant, the inspector observed a solution resin waste on the floor adjacent to the hazardous waste tank area. Respondent did not know whether the waste on the floor was hazardous or non-hazardous, and did not have a waste profile.

55. During the inspection of the Central Hazardous Waste Container Storage Area, the inspector observed one 250-gallon tote that contained an expired wastewater treatment chemical waste. The tote was not labeled, and Respondent did not know whether the waste in the tote was hazardous waste or non-hazardous waste.

56. Respondent failed to make required hazardous waste determinations, in violation of MAC R. 299.9302(1) and 40 C.F.R. § 262.11.

Count IV: Hazardous Waste Manifest

57. Pursuant to MAC R. 299.9307(3) and 40 C.F.R. § 262.40(a), hazardous waste generator shall keep a copy of each manifest signed in accordance with MAC R. 299.9304(4) for three years or until he or she receives a signed copy from the designated facility which received the waste. This signed copy shall be retained as a record for not less than three years from the date the waste was accepted by the initial transporter.

58. During the inspection of records, the four specific manifests TSDF copies were not available for the inspector to review.

59. Respondent failed to keep copies of four TSDF signed manifest as a record for at least three years from the date the waste was accepted by the initial transporter, in violation of MAC R. 299.9307(3) and 40 C.F.R. § 262.40(a).

Count V: Waste Container Inspections

60. In order to retain the exemption from the requirement to obtain a hazardous waste storage license, a large quantity generator must inspect areas where containers are stored, at least weekly, looking for leaks and for deterioration caused by corrosion or other factors. The inspections must be documented, and the inspection records shall be maintained on-site for a period of not less than three years from the date of the inspection. See MAC R. 299.9306(1)(a)(i) and 40 C.F.R. §§ 265.174 and 262.34(a)(1)(i). These are also requirements for owners and operators of hazardous waste storage facilities, under MAC R. 299.9614(1)(a) and 299.9601(1), (2)(g), and (3)(b) and 40 C.F.R. § 264.174.

61. Records reviewed by the inspector during the Inspection indicated that weekly inspections of the hazardous waste container storage areas for the Central Hazardous Waste Container Storage Area had not occurred for three weeks in May and June 2011.

62. Records reviewed by the inspector during the Inspection indicated that hazardous waste container inspections records for the Central Hazardous Waste Container Storage Area for three weeks in May and June 2011were missing. Also, the Polyol Plant weekly hazardous waste container inspection logs, from June 13, 2009 through 2010, were not retained on-site.

63. Respondent failed to conduct, document and retain on-site records of the inspections required pursuant to the provisions of 40 C.F.R. § 265.174, in violation of MAC R. 299.9306(1)(a)(i), 299.9614(1)(a) and 299.9601(1), (2)(g), and (3)(b); and 40 C.F.R. §§ 264.174, 265.174 and 262.34(a)(1)(i); and thereby failed to retain the exemption from the requirement to obtain a hazardous waste storage license .

Count VI: Facility Maintenance and Operation

64. Pursuant to MAC R. 299.9306(1)(d) and 40 C.F.R. §§ 262.34(a)(4) and 265.31,

Respondent must ensure that its facility is maintained and operated to minimize the possibility of a fire, explosion or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water, which could threaten human health or the environment. This is also a requirement for owners and operators of hazardous waste storage facilities under MAC R. 299.9601(3) and 299.9606(1); 40 C.F.R. § 264.31.

65. During the inspection of the Resins Plant, the inspector observed a solution resin waste on the floor adjacent to the hazardous waste tank area. Respondent did not know whether the waste on the floor was hazardous or non-hazardous, and did not have a waste profile.

66. Respondent failed to ensure that its facility is maintained and operated to minimize the possibility of a fire, explosion or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water, which could threaten human health or the environment, in violation of MAC R. 299.9306(1)(d) and 40 C.F.R. §§ 262.34(a)(4) and 265.31.

PENALTY

67. Pursuant to Section 3008(a)(3) of RCRA, 42 U.S.C. § 6928(a)(3), Complainant determined that an appropriate civil penalty to settle this action is $55,940. In determining the penalty amount, Complainant took into account the seriousness of the violations and Respondent's good faith efforts to comply with the applicable requirements. Complainant also considered EPA's RCRA Civil Penalty Policy, dated June 23, 2003.

68. Within 30 days after the effective date of this CAFO, Respondent must pay a $55,940 civil penalty for the RCRA violations by sending a cashier's or certified check, payable to the "Treasurer, United States of America," to:

U.S. EPA
Fines and Penalties
Cincinnati Finance Center
P.O. Box 979077
St. Louis, MO 63197-9000

or for checks sent by express mail:

U.S. Bank
Government Lockbox 979077
U.S. EPA Fines and Penalties
1005 Convention Plaza
Mail Station SL-MO-C2-GL
St. Louis, MO 63101

The check must state the case title and the docket number of this CAFO.

For electronic funds transfer, payable to "Treasurer, United States of America," and sent to:

Federal Reserve Bank of New York
ABA No. 021030004
Account No. 68010727
SWIFT address FRNYUS33
33 Liberty Street
New York, NY 10045
Field Tag 4200 of the Fedwire message is
"D68010727 Environmental Protection Agency"

In the comment or description field of the electronic funds transfer, state the case title and the docket number of this CAFO.

For ACH payment, also known as REX or remittance express, by ACH electronic funds transfer, payable to "Treasurer, United States of America," and sent to:

US Treasury REX / Cashlink ACH Receiver
ABA: 051036706
Account Number: 310006, Environmental Protection Agency
CTX Format Transaction Code 22 – checking

For on-line payment, go to:

WWW.PAY.GOV
Use the Search Public Forms option and enter 'sfo 1.1' in the search field.
Open form and complete required fields.

69. A transmittal letter stating Respondent's name, the case title, Respondent's complete address, the case docket number, and the billing document number must accompany each payment. Respondent must send a copy of the checks and transmittal letters to:

Regional Hearing Clerk (E-19J)
U.S. EPA, Region 5
77 West Jackson Blvd.
Chicago, IL 60604

Bryan Gangwisch
RCRA Branch (LR-8J)
U.S. EPA, Region 5
77 West Jackson Blvd.
Chicago, IL 60604

Reginald Pallesen
Office of Regional Counsel (C-14J)
U.S. EPA, Region 5
77 West Jackson Blvd.
Chicago, IL 60604

70. This civil penalty is not deductible for federal tax purposes.

71. EPA may bring an action to collect any unpaid portion of the penalty with interest, handling charges, nonpayment penalties, and the United States enforcement expenses for the collection action. The validity, amount, and appropriateness of the civil penalty are not reviewable in a collection action.

72. Pursuant to 31 C.F.R. § 901.9, Respondent must pay the following on any amount overdue under this CAFO. Interest will accrue on any amount overdue from the date payment was due at a rate established by the Secretary of the Treasury pursuant to 31 U.S.C. § 3717(a)(1). Respondent must pay a $15 handling charge each month that any portion of the penalty is more than 30 days past due. In addition, Respondent must pay a 6 percent per year penalty on any principal amount 90 days past due.

General Provisions

73. This CAFO resolves only Respondent's liability for federal civil penalties for the violations and facts alleged in the CAFO.

74. This CAFO does not affect the right of EPA or the United States to pursue appropriate injunctive or other equitable relief or criminal sanctions for any violations of law.

75. This CAFO does not affect Respondent's responsibility to comply with RCRA and other applicable federal, state, and local laws or permits.

76. This CAFO is a "final order" under 40 C.F.R. § 22.31, EPA's RCRA Civil Penalty Policy, and EPA's Hazardous Waste Civil Enforcement Response Policy (December 2003).

77. The terms of this CAFO bind Respondent, its successors, and assigns.

78. Each person signing this agreement certifies that he or she has the authority to sign for the party whom he or she represents and to bind that party to its terms.

79. Each party agrees to bear its own costs and attorney's fees in this action.

80. This CAFO constitutes the entire agreement between the parties.

BASF Corporation, Respondent

June 12, 2014
Date

Greg Pflum
Vice President and General Manager
BASF Wyandotte

United States Environmental Protection Agency, Complainant

7/7/2014
Date

Margaret M. Guerriero
Director
Land and Chemicals Division

In the Matter of:
BASF Corporation
Docket No. RCRA-05-2014-0010

Final Order

This Consent Agreement and Final Order, as agreed to by the parties, shall become effective immediately upon filing with the Regional Hearing Clerk. This Final Order concludes this proceeding pursuant to 40 C.F.R. §§ 22.18 and 22.31. IT IS SO ORDERED.

7-11-2014
Date

Susan Hedman
Regional Administrator
United States Environmental Protection Agency
Region 5

Consent and Final Order
In the Matter of: BASF Corporation

DOCKET NO: RCRA-05-2014-0010

CERTIFICATE OF SERVICE

I hereby certify that today I filed the original of this Consent Agreement and Final Order ((CAFO) docket number **RCRA-05-2014-0010** the Regional Hearing Clerk (E-19J), United States Environmental Protection Agency, Region 5, 77 W. Jackson Boulevard, Chicago, Illinois 60604, and that I mailed the second original copy to Respondent by first-class, postage prepaid, certified mail, return receipt requested, by placing it in the custody of the United States Postal Service addressed as follows :

Mr. Gregory Pflum
Vice President & General Manager
BASF Corporation
1609 Biddle Avenue
Wyandotte, Michigan 48192
Certified Mail # 7009 1680 0000 7677 8916

I certify that I delivered a correct copy of the CAFO by intra-office mail, addressed as follows:

Regional Judicial Officer (C-14J)
U.S. Environmental Protection Agency
77 W. Jackson Boulevard
Chicago, Illinois 60604

On the **15th** day of **July 2014**

Ruben B. Aridge

Ruben B. Aridge
Office Administrative Assistant
United States Environmental Protection Agency
Region V
Land and Chemicals Division LM-8J
77 W. Jackson Blvd, Chicago, IL 60604-3590

Certified Mail Receipt Number: **7009 1680 0000 7677 8930**

LAND AND CHEMICALS DIVISION

Type of Document: Pre - Filing Letter

Name of Document: BASF Corporation

1609 Biddle Avenue, Wyandotte, MI (MID064197742)

	NAMES	DATE
AUTHOR:	[signature]	2/3/14
SECTION APA:	MC	2/4
SECTION CHIEF:	Jue manor Jr	2/3/14
BRANCH APA:		
BRANCH CHIEF:	[signature]	2/11/14
DIVISION APA:	[signature]	2/13/14
DIVISION DIRECTOR:		
OTHERS: ORC	[signature]	2-3-14
DRA:		
RA:		

RETURN TO:

PHONE:

COMMENTS:

State 300f(a)(2) notification 1/23/14

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

FEB 13 2014

REPLY TO THE ATTENTION OF:

CERTIFIED MAIL 7009 1680 0000 7679 6491
RETURN RECEIPT REQUESTED

David W. Sheaves
Environmental Team Leader
BASF Corporation
1609 Biddle Avenue
Wyandotte, Michigan 48192

Re: Notice of Intent to File a Civil Administrative Complaint
EPA I.D. No.: MID064197742

Dear Mr. Sheaves:

The U.S. Environmental Protection Agency plans to file an administrative complaint for civil penalties against BASF Corporation. In the complaint, EPA will allege that BASF violated the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §§ 6901 – 6992k, as amended, as described in the enclosed Notice of Violation previously issued to BASF. In addition, this letter informs you that EPA deems BASF to be a Significant Non-Complier under RCRA.

Based on information currently available to us, EPA plans to propose a penalty of $62,156 in the complaint. This letter is not a demand to pay a penalty. EPA will not ask BASF to pay a penalty until EPA files the complaint or a final order. Before filing the complaint, EPA is giving BASF the opportunity to present any information that it believes EPA should consider. Relevant information might include evidence that BASF did not violate the law; evidence that BASF relied on compliance assistance from EPA or a state agency; evidence that EPA identified the wrong party; or financial data bearing on BASF's ability to pay a penalty.

Please inform EPA if BASF believes that it will be unable to pay an $62,156 penalty because of financial reasons. To support any inability to pay claim, EPA will require from BASF certified, complete financial statements including balance sheets; income statements and all notes to the financial statements; and the company's signed income tax returns with all schedules and amendments for the past three years.

Also, as part of a settlement, BASF may voluntarily propose to undertake an environmentally beneficial project related to the violations in exchange for penalty consideration. A Supplemental Environmental Project (SEP) furthers EPA's goal of protecting and enhancing public health and the environment. See this EPA web link for information on SEPs:

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http://www.epa.gov/enforcement/sep.html

BASF may assert a claim of business confidentiality under 40 C.F.R. Part 2, Subpart B, for any portion of the information it submits to EPA. Information subject to a business confidentiality claim is available to the public only to the extent allowed by 40 C.F.R. Part 2, Subpart B. If BASF fails to assert a business confidentiality claim, EPA may make all submitted information available, without further notice, to any member of the public who requests it.

Within 10 calendar days after you receive this letter, please send any written response to:

Bryan Gangwisch
Environmental Scientist (LR-8J)
U.S. Environmental Protection Agency
Region 5
77 West Jackson Boulevard
Chicago, Illinois, 60604

If BASF wants to confer with EPA, you should contact Mr. Gangwisch, in writing, within 10 calendar days after you receive this letter. Please be advised that this conference is not a settlement negotiation covered by Federal Rule of Evidence 408; EPA may use any information BASF submits in support of an administrative, civil or criminal action. After the conference (or after you have submitted a written reply if EPA does not have a conference), EPA may give BASF the opportunity to engage in settlement negotiations before EPA files a complaint. If pre-filing settlement negotiations commence and are successful, a settlement agreement can be filed, as provided by federal regulations at 40 C.F.R. § 22.13(b).

If you do not respond to this letter, EPA may file a complaint against BASF without further notice, as authorized under Section 3008(a) of RCRA, 42 U.S.C. § 6928(a).

If you have any questions, please telephone Reginald Pallesen, Associate Regional Counsel, at (312) 886-0555.

Thank you for your prompt attention to this matter.

Sincerely,

Gary J. Victorine

Gary J. Victorine, Chief
RCRA Branch

Enclosures

BASF
The Chemical Company

Helping Make
Products Better™

CERTIFIED MAIL - RETURN RECEIPT REQUESTED:
7011 1150 0002 3033 5145

June 14, 2013

Mr. Bryan Gangwisch
Land and Chemicals Division (LR-8J)
USEPA Region V
77 West Jackson Boulevard
Chicago, IL 60604-3590

Re: BASF Corporation, Wyandotte, MI EPAID MID 064 197 742

Dear Mr. Gangwisch:

This letter is provided to you in response to your request for additional information received by BASF Corporation on June 13, 2013, with respect to Finding #2 referenced in the January 24, 2013 Letter of Violation.

BASF Corporation is providing the copy of the requested manifest 007745052 JJK for your review.

Should you have any questions regarding the actions taken to prevent re-occurrence please do not hesitate to contact me at 734-324-6836 or by e-mail: david.sheaves@basf.com.

Sincerely,

David W. Sheaves
Environmental Team Leader
Enclosure

BASF Corporation
1609 Biddle Avenue
Wyandotte, MI 48192-3729
Tel: (734) 324-6000
www.basf.com/usa

BASF

The Chemical Company

Attachment 1

BASF Corporation
1609 Biddle Avenue
Wyandotte, MI 48192-3729
Tel: (734) 324-6000
www.basf.com/usa

398724

1262208

Form Approved. OMB No. 2050-0039

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	MID064197742	3	(800) 567-7455	007745052 JJK

5. Generator's Name and Mailing Address
BASF CORP
1609 BIDDLE AVE
WYANDOTTE MI 48192 (734)473-7608
Generator's Phone:

Generator's Site Address (if different than mailing address)
BASF CORP
1609 BIDDLE AVE
WYANDOTTE MI 48192 (734)473-7608

6. Transporter 1 Company Name
NORTRU, LLC
U.S. EPA ID Number
MID021087275

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
PETRO-CHEM PROCESSING GROUP
421 Lycaste
Facility's Phone: Detroit, MI 48214 (313) 824-5840
U.S. EPA ID Number
MID980615298

9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
RQ	1. UN1993 WASTE FLAMMABLE LIQUIDS, N.O.S. (METHANOL, N-BUTYL ACETATE, METHYL AMYL KETONE) 3 PGII RQ(D001)	01	DM	0055	~~G~~ X G	D001	F005	
RQ	2. UN1992 WASTE FLAMMABLE LIQUIDS, TOXIC, N.O.S. (ACRYLONITRILE, STYRENE) 3 (6.100) PGII RQ(D001)	46	DM	2530	G	D001	D018	
RQ	3. UN1993 WASTE FLAMMABLE LIQUIDS, N.O.S. (SOLVENTS) 3 PGII RQ(D001)	03	~~DM~~ DM	0015	G	D001		
RQ	4. UN1993 WASTE FLAMMABLE LIQUIDS, N.O.S. (URETHANE RESIN, POLYOL) 3 PGII RQ(D001)	03	DM	0165	G	D001		

14. Special Handling Instructions and Additional Information
(1) 394695-00 - ERG(128) SMALL CONTAINERS OF (2) 4044843-00 - ACRYLONITRILE,STYREN (3) 4044849-00 - ONF WASTE SOLVENTS
(4) 4044876-00 - ERG(128) WASTE URETHANE RESIN
761-195

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true. 59333

Generator's/Offeror's Printed/Typed Name: JEFFREY D. Garner | Signature: Jeffrey D. Garner | Month 01 Day 24 Year 11

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Jimmy Simms | Signature: Jimmy Simms | Month 01 Day 24 Year 11
Transporter 2 Printed/Typed Name: | Signature: | Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator) U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H141	H061	H061	H061

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: B. TARWER | Signature: B. Tarwer | Month 1 Day 24 Year 11

GENERATOR — INTL — TRANSPORTER — DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY'S COPY

998724

1262208

Form Approved. OMB No. 2050-0039

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)	21. Generator ID Number	22. Page 2 of 3	23. Manifest Tracking Number
	MID064197742		00774505211K

24. Generator's Name

BASF CORP
1609 BIBBLE AVE , WYANDOTTE MI 48192 (734)473-7608

25. Transporter _____ Company Name — U.S. EPA ID Number

26. Transporter _____ Company Name — U.S. EPA ID Number

27a. HM	27b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	28. Containers No.	Type	29. Total Quantity	30. Unit Wt./Vol.	31. Waste Codes		
X	5 UN2929 WASTE TOXIC LIQUIDS, FLAMMABLE, ORGANIC, N.O.S. 6.100000000000001 (3) PGII	02	DM ~~DF~~ JG	0010	G	F003	F002	
X	6 UN1992 WASTE FLAMMABLE LIQUIDS, TOXIC, N.O.S. 3 (6.100) PGII	01	DM	0055	G	D001	F003	
RQ	7 UN2924 WASTE FLAMMABLE LIQUIDS, CORROSIVE, N.O.S. (ACETONE, ACRYLIC ACID) 3 (8) PGII RQ(D001)	01	DM ~~DF~~ JG	0005	G JG	D001	F003	
X	8 UN1993 WASTE FLAMMABLE LIQUIDS, N.O.S. (STYRENE METHYL AMYL KETONE) 3 PGIII	10	DM	0550	G JG	D001 U162	U008	U113
RQ	9 UN1993 WASTE FLAMMABLE LIQUIDS, N.O.S. (STYRENE, METHYL AMYL KETONE) 3 PGIII RQ(D001)	02	DM	0110	G JG	D001		
X	10 UN1993 WASTE FLAMMABLE LIQUIDS, N.O.S. (ACETONE STYRENE,TOLUENE,METHYL METHACRYLATE) 3 PGII	07	DM ~~DF~~ JG	0035	G JG	D001 U140	U008 U131	U113 U031
RQ	11 NA1993 WASTE FUEL OIL 3 PGIII RQ(D001)	01	DM	0005	G	D001		
X	12 UN2924 WASTE FLAMMABLE LIQUIDS, CORROSIVE, N.O.S. 3 (8) PGII	01	DM	0055	G	F002	F003	F005
	13 NON-DOT, NON-RCRA REGULATED MATERIAL	01	DM	0055	G	029L		
X	14 UN1992 WASTE FLAMMABLE LIQUIDS, TOXIC, N.O.S. (ACETONE, ISOPROPYL ALCOHOL, TOLUENE) 3 (6.1) PGII "TOXIC"	01	DM	0055	G	D001 D018	D009 D019	D011 D022

32. Special Handling Instructions and Additional Information (5) 4D44867-00 - 1,2 DICHLOROBENZENE- (6) 4D47082-00 - W-760 POLYMERS QA LA (7) 384603-00 - ERG(132) PROCESS & PROTECTOR (8) 423179-00 - ERG(128) MIXED MONOMER WASTE (9) 412727-00 - ERG(128) MONOMER & SOLVENT (J (10) 428323-00 - ERG(128) SPENT GC STANDARDS J (11) 393069-00 - ERG(128) WASTE DIESEL FUEL #2 (12) 4D47889-00 - W123 - LAB SOLVENT (13) 4D44890-00 - ELASTOCELL B COMPONE (14) 4D44857-00 - ERG(131) CYCLOHEX-MEOH-POLYOL

33. Transporter _____ Acknowledgment of Receipt of Materials

Printed/Typed Name — Signature — Month Day Year

34. Transporter _____ Acknowledgment of Receipt of Materials

Printed/Typed Name — Signature — Month Day Year

35. Discrepancy

36. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

(5) H061 (6) H061 (7) H061 (8) H141 (9) H141

(10) H141 B. TARVER (11) H061 (12) B. Tarver (13) H141 (14) H061 24 11

GENERATOR — TRANSPORTER — DESIGNATED FACILITY

EPA Form 8700-22A (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY'S COPY

998724

1262208

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)	21. Generator ID Number MID064197242	22. Page 3 of 3	23. Manifest Tracking Number 002245052 JK

24. Generator's Name
BASF CORP
1609 BIBBLE AVE, WYANDOTTE MI 48192 (734)671-7688

25. Transporter _____ Company Name — U.S. EPA ID Number

26. Transporter _____ Company Name — U.S. EPA ID Number

27a. HM	27b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	28. Containers No.	28. Containers Type	29. Total Quantity	30. Unit Wt./Vol.	31. Waste Codes		
	15 NON DOT/NON RCRA REGULATED MATERIAL	01	DM	0055	G	D29L		
X	16 UN1993 WASTE FLAMMABLE LIQUIDS, N.O.S. (2-HEPTANONE, ACETONE, N-BUTYL ACETATE) 3 PGII	02	DM	0110	G	D001		
X	17 UN 1993 WASTE Flammable LIQUIDS, N.O.S. (methyl Amyl Ketone), 3 PG III, Erg 128	06	DM	0330	G	D001		
RQ	18 RQ Waste Flammable LIQUIDS, N.O.S. (Acetone, Xylene, Styrene, Ethyl Acrylate), 3, PG II, ERG 40 UN1993	02	DM	0110	G	D001	U002	U113
						U220	U239	
RQ	19 UN 1993 WASTE FLAMMABLE LIQUIDS, N.O.S., (Acetone, Xylene, Styrene, Ethyl Acrylate), 3, PG II, ERG 40	11	DM	0605	G	D001	U002	U113
						U220	U239	
	20							
	21							
	22							
	23							
	24							

32. Special Handling Instructions and Additional Information (15) 4B69511-00 - BDE RESIN (16) 449832-00 - ERG(128) LIQUID RESIN SAMPLES
(17) JP-001 / 428070 (18) JP 033 / 435772 (19) JP 034 / 435723

GENERATOR

33. Transporter _____ Acknowledgment of Receipt of Materials
Printed/Typed Name — Signature — Month — Day — Year

34. Transporter _____ Acknowledgment of Receipt of Materials
Printed/Typed Name — Signature — Month — Day — Year

TRANSPORTER

35. Discrepancy

DESIGNATED FACILITY

36. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
(15) H061 | (16) H141 | H141 | H141 | H141
B. TARDEK | B. Tarnes | 24 11

EPA Form 8700-22A (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY'S COPY

BASF
The Chemical Company

Helping Make Products Better™

CERTIFIED MAIL - RETURN RECEIPT REQUESTED:
7011 1150 0002 3033 5664

May 30, 2013

Mr. Bryan Gangwisch
Land and Chemicals Division (LR-8J)
USEPA Region V
77 West Jackson Boulevard
Chicago, IL 60604-3590

Re: BASF Corporation, Wyandotte, MI EPAID MID 064 197 742

Dear Mr. Gangwisch:

This letter is provided to you in response to your request for additional information received by BASF Corporation on May 28, 2013, with respect to Finding #9 referenced in the January 24, 2013 Letter of Violation.

BASF Corporation is providing the manifest copies for the waste streams listed in the table below. Each manifest copy has a call out bullet indicating on the manifest the specific line item the request references. The manifest copies are provided for your review in Attachment 1.

BASF Waste Stream Identifier	Manifest Number	Manifest Line Number	Accumulation Start Date
W-105	007290353 JJK	4	3/7/2012
W-454	007290353 JJK	5	3/9/2012
W-184	007290353 JJK	15	2/19/2012
JPP-004	002849383 JJK	19	2/8/2012
W-452	004827111 FLE	4	12/11/2011

Should you have any questions regarding the actions taken to prevent re-occurrence please do not hesitate to contact me at 734-324-6836 or by e-mail: david.sheaves@basf.com.

Sincerely,

David W. Sheaves
Environmental Team Leader
Enclosure

BASF Corporation
1609 Biddle Avenue
Wyandotte, MI 48192-3729
Tel: (734) 324-6000
www.basf.com/usa

BASF
The Chemical Company

Attachment 1

BASF Corporation
1609 Biddle Avenue
Wyandotte, MI 48192-3729
Tel: (734) 324-6000
www.basf.com/usa

655076 1494793

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: MID064197742
2. Page 1 of 3 1/2
3. Emergency Response Phone: (800) 832-HELP
4. Manifest Tracking Number: 007290353 JJK

5. Generator's Name and Mailing Address
BASF CORP
1609 BIDDLE AVE
WYANDOTTE MI 48192 (734)473-7608
Generator's Phone:

Generator's Site Address (if different than mailing address)
BASF CORP
1609 BIDDLE AVE
WYANDOTTE MI 48192 (734)473-7608

6. Transporter 1 Company Name: NORTRU, LLC
U.S. EPA ID Number: MID021087275

7. Transporter 2 Company Name:
U.S. EPA ID Number:

RECEIVED
JUL 01 2012
ENVIRONMENTAL HEALTH & SAFETY DEPT.

8. Designated Facility Name and Site Address
PETRO-CHEM PROCESSING GROUP
421 Lycaste
Facility's Phone: Detroit, MI 48214 (313) 824-5840
U.S. EPA ID Number: MID980615298

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
RQ	1. NA1993 WASTE FLAMMABLE LIQUIDS, N.O.S. (METHANOL, N-BUTYL ACETATE, METHYL AMYL KETONE) 3 PGII RQ(D001) EVRED05	04	DM	0220	G	D001 F005
RQ	2. NA2924 WASTE FLAMMABLE LIQUIDS, CORROSIVE, N.O.S. (ACETONE, ACRYLIC AC(D) 3 (8) PGII RQ(D001) HTPG001	03	DM	0165	G	D001 F003
X	3. NA1992 WASTE FLAMMABLE LIQUIDS, TOXIC, N.O.S. (ACTRYLONITRILE, STYRENE) 3 (6.100) PGII RQ(D001) W010	13	DM	0715	G	D001 D018
X	4. NA1992 WASTE FLAMMABLE LIQUIDS, TOXIC, N.O.S. (ACETONE, ISOPROPYL ALCOHOL, TOLUENE) 3 (6.1) PGII "TOXIC" W105	03	DM	0165	G	D001 D009 D011 D018 D019 D022

14. Special Handling Instructions and Additional Information
(1) 384605-00 - ERG(128) SMALL CONTAINERS OF (2) 384605-00 - ERG(132) PROCESS & PROTECTOR (3) 4044843-01 - ACRYLONITRILE,STYREN (4) 4044857-01 - ERG(131) CYCLOHEX-MEDH-POLYOL
tel # 761-213 94361

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: X Jeffrey D Garner
Signature: Jeffrey D Garner
Month 06 Day 14 Year 12

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: RONALD LARESE
Signature: Ronald Larese
Month 06 Day 14 Year 12
Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

18. Discrepancy
18a. Discrepancy Indication Spac ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or General U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility Month Day Year

W-105 / START DATE 3/7/2012

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H141	H141	H061 ~~H141~~	H061 ~~H141~~

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: S. Jabalee
Signature: S Jabalee
Month 06 Day 20 Year 12

GENERATOR / INT'L / TRANSPORTER / DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)

21. Generator ID Number: [illegible]

22. Page 2 of 3

23. Manifest Tracking Number: [illegible]

24. Generator's Name: [illegible] CORP, 1609 MIDDLE AVE, [illegible] OH 44101, (216)[illegible]-7600

25. Transporter _____ Company Name — U.S. EPA ID Number

26. Transporter _____ Company Name — U.S. EPA ID Number

27a. HM	27b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	28. Containers No.	28. Containers Type	29. Total Quantity	30. Unit Wt./Vol.	31. Waste Codes
X	5 UN2920 WASTE TOXIC LIQUIDS, FLAMMABLE, ORGANIC, N.O.S. 6.1(8)(3)(UN1993)(1) PG I (W454)	02	DM	0010	G	F003, F005
X	6 UN2924 WASTE FLAMMABLE LIQUIDS, N.O.S. (METHYL ETHYL KETONE) 3 PGII (TP-001)	04	DM	0330	G	D001
X	7 UN1993 WASTE FLAMMABLE LIQUIDS, N.O.S. (STYRENE MONOMER,XYLENE) 3 PGII (TP-002)	16	DM	0880	G	F003, F005, D001
X	8 UN1993 WASTE FLAMMABLE LIQUIDS N.O.S. (STYRENE MONOMER, METHYL ETHYL KETONE) 3 PGII (TP-020)	04	DM	0220	G	D001, D035, D043, D182
X	9 UN1993 WASTE FLAMMABLE LIQUIDS, N.O.S. (ACETONE,XYLENE,STYRENE ETHYL ACRYLATE) 3 PGII (TP033)	01	DM	0055	G	D001, D002, D043, D229, D035
X	10 UN1993 WASTE FLAMMABLE LIQUIDS, N.O.S. (ACETONE,XYLENE,STYRENE ETHYL ACRYLATE) 3 PGII (TP-034)	03	DM	0165	G	D001, D002, D043, D226, D035
X	11 UN1993 WASTE FLAMMABLE LIQUIDS, N.O.S. (METHYL ETHYL KETONE) 3 PGII (W785)	01	DM	0005	G	D001, D035, D001
X	12 UN1993 WASTE FLAMMABLE LIQUIDS, N.O.S. (STYRENE, METHYL ETHYL KETONE) 3 PGII, PG100-1 (TP002)		DM		G	D001
X	13 UN3262 WASTE CORROSIVE SOLID BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE) 8 PGII (TP-011)	02	DM	0110	G	D002
X	14 UN1993 WASTE FLAMMABLE LIQUIDS, N.O.S. (TOLUENE,ISOPROPYL ALCOHOL) 3 PGII (W128)		DM		G	D001

32. Special Handling Instructions and Additional Information (5) 404487-01 - 1,2 DICHLOROBENZENE (6) 123173-01 - EPA(128) POLYON FILTERS (7) 425188-01 - EPA(128) SPENT SOLVENT & SYRU (8) 123173-01 - EPA(128) DRYER POWDER WASTE (9) 425772-01 - EPA(128) PURGES, JP-01, (10) 425723-01 - EPA(128) MONOMER CONTAINING RESIN (11) 386173-01 - EPA(128) SOG PPE WASTE (12) 412727-00 - EPA(128) NONGNIER 3 SOLVENT (13) 425791-01 - EPA(128) SPENT CONTAIN JP-01 (14) 404051-01 - EPA(128)

GENERATOR

TRANSPORTER

33. Transporter _____ Acknowledgment of Receipt of Materials

Printed/Typed Name — Signature — Month Day Year

W-454

34. Transporter _____ Acknowledgment of Receipt of Materials

Printed/Typed Name — Signature — Month Day Year

3-9-12

DESIGNATED FACILITY

35. Discrepancy

36. Hazardous Waste Report Management Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

(5) H141	(6) H141	(7) H061	(8) H141	(9) H141
(10) H141	(11) H061	(12) [illegible]	(13) H141	(14) [illegible]

EPA Form 8700-22A (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)	21. Generator ID Number	22. Page	23. Manifest Tracking Number
	[illegible]	3	00729 [illegible]

24. Generator's Name
BASF CORP
[illegible] Siddle Ave Wyandotte, MI 48172

25. Transporter _____ Company Name | U.S. EPA ID Number

26. Transporter _____ Company Name | U.S. EPA ID Number

27a. HM	27b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	28. Containers No.	28. Containers Type	29. Total Quantity	30. Unit Wt./Vol.	31. Waste Codes		
	[illegible]	001	Drn	0005	G	D001	[illegible]	[illegible]

W-184
2-19-12

32. Special Handling Instructions and Additional Information

GENERATOR

33. Transporter _____ Acknowledgment of Receipt of Materials
Printed/Typed Name | Signature | Month | Day | Year

34. Transporter _____ Acknowledgment of Receipt of Materials
Printed/Typed Name | Signature | Month | Day | Year

TRANSPORTER

35. Discrepancy

DESIGNATED FACILITY

36. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

EPA Form 8700-22A (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: MID 064 197 742
2. Page 1 of: 3
3. Emergency Response Phone: (800) 832-4357
4. Manifest Tracking Number: 002849383 JJK

5. Generator's Name and Mailing Address: BASF CORPORATION - WYANDOTTE
1609 BIDDLE AVENUE
WYANDOTTE, MI 48192
Generator's Phone: (734) 324-3524
Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: EQ INDUSTRIAL SERVICES
U.S. EPA ID Number: MID 000 263 871

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address: EQ DETROIT, INC.
1923 FREDERICK
DETROIT, MI 48211
Facility's Phone: (313) 347-1300
U.S. EPA ID Number: MID 980 991 566

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. OTHER WASTE LIQUID - NON-HAZARDOUS/NON-REGULATED MATERIAL A-035	10	DM	550	G	U29L
X	2. RQ, NA2212, Asbestos, 9, PGIII, ERG #171 A-621	4	DM	2,000	P	
	3. OTHER WASTE LIQUID - NON-HAZARDOUS/NON-REGULATED MATERIAL A-711	12	DM	660	G	U29L
	4. OTHER WASTE SOLIDS - NON-HAZARDOUS/NON-REGULATED MATERIAL EPC-001	3	DM	1,500	P	

14. Special Handling Instructions and Additional Information
1. GF041506 / W. Baghouse Filter Waste A035 2. HM041906 / W. Asbestos - A621 3. GF041506 / W. Calcium Stearate (Liquid) A711 4. JF042389 EPC 001 Caprol Aclam Beads

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: DANIEL G HANNEWALD
Signature: ON BEHALF OF BASF
Month / Day / Year: 06 / 15 / 12

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Darlin Ambrose
Signature:
Month / Day / Year: 06 / 15 / 12
Transporter 2 Printed/Typed Name:
Signature:
Month / Day / Year:

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator)
Month / Day / Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
LIW	H141	LIW	LIW

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name:
Signature:
Month / Day / Year:

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)

21. Generator ID Number: MID 084 197 742

22. Page: 2

23. Manifest Tracking Number: 002846383 JJK

24. Generator's Name: BASF CORPORATION - WYANDOTTE

25. Transporter _____ Company Name — U.S. EPA ID Number

26. Transporter _____ Company Name — U.S. EPA ID Number

27a. HM	27b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	28. Containers No.	28. Containers Type	29. Total Quantity	30. Unit Wt./Vol.	31. Waste Codes
	05 OTHER WASTE - NON-HAZARDOUS/NON-RCRA EVR&D-04	1	DF	55	G	029L
	06 NON-REGULATED SOLID MATERIAL EVR&D-06	1	DF	200	P	029L
	07 NON-REGULATED LIQUID MATERIAL JP-028	2	DF	110	G	029L
	08 NON-REGULATED LIQUID MATERIAL JPP-002	1	DF	55	G	029L
	09 NON-REGULATED LIQUID MATERIAL JPA1-002	9	DM	495	G	029L
	10 OTHER WASTE (POLYOL) - NON-HAZARDOUS/NON-REGULATED MATERIAL W-015	1	DM	200	P	
	11 OTHER WASTE - NON-HAZARDOUS/NON-RCRA W-061	4	DM	220	G	029L
	12 OTHER WASTE SOLIDS - NON-HAZARDOUS/NON-REGULATED MATERIAL W-126	11	DM	4,400	P	029L
	13 OTHER WASTE - NON-HAZARDOUS/NON-REGULATED MATERIAL W-127	15	DM	825	G	029L
	14 OTHER WASTE - NON-HAZARDOUS/NON-REGULATED MATERIAL W-403	1	DM	150	G	029L

32. Special Handling Instructions and Additional Information

5. J078016DET / W. EVR & D - 04 6. I098104DET / NON-HAZARDOUS SOLID AND PIGMENTED WASTE (EV R&D-06 7. L097128DET / WASTE SURFACTANT JP-028 (drums) 8. H098042DET / EMULSION WASTE JPP-002 9. J098003DET / EMULSIONS,RESIN CUTS AND SOLID GRADE OIGOMERS JPQA 10. GF041507 / W. Polyol W. Solids - W015 11. A088165DET / W. MDI (Methylene Bisphenyl DiIsocyanate) 12. GF041505 / W. Prepolymer Liquids - W126 13. GF041538 / W. N-Methyl Pyrolidone - W127 14. GF041513 / W. Polysterdiols (Liquids)

33. Transporter _____ Acknowledgment of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

34. Transporter _____ Acknowledgment of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

35. Discrepancy

Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

05 LIW	06 LIW	07 LIW	08 LIW	09 LIW
10 LIW	11 LIW	12 LIW	13 LIW	14 LIW

GENERATOR

TRANSPORTER

DESIGNATED FACILITY

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)	21. Generator ID Number	22. Page	23. Manifest Tracking Number
	MID 064 197 742	3	002849383JJK

24. Generator's Name

BASE CORPORATION - WYANDOTTE

25. Transporter _____ Company Name — U.S. EPA ID Number

26. Transporter _____ Company Name — U.S. EPA ID Number

27a. HM	27b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	28. Containers No.	Type	29. Total Quantity	30. Unit Wt./Vol.	31. Waste Codes
	15 OTHER WASTE - NON-HAZARDOUS/NON-REGULATED MATERIAL W-702	13	DM	715	G	029L
	16 Non Hazardous / Non Regulated Solid EPC-020	1	DM	200	P	
	17 Non Hazardous / Non Regulated Solid A-616	4	DM	800	P	
	18 NON Hazardous / NON Regulated Liquid ACCE-006	1	DM	55	G	029L
X	19 UN 1993, Waste Flammable Liquids, n.o.s, (Methyl Amyl Ketone, Petroleum distillates, Styrene) JPP-004	1	DM	5	G	D001
	20 Non Hazardous / Non Regulated Liquid W-013	1	DM	55	G	029L

JPP-004

2-8-2012

32. Special Handling Instructions and Additional Information

15. GF041499 / W. Resin & Polyol - W702 16 ~~F041~~ F041481 18.) WF05910 19) F118204DET

20. GF041517

33. Transporter _____ Acknowledgment of Receipt of Materials

Printed/Typed Name — Signature — Month Day Year

34. Transporter _____ Acknowledgment of Receipt of Materials

Printed/Typed Name — Signature — Month Day Year

35. Discrepancy

36. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

15 LIW

GENERATOR

TRANSPORTER

DESIGNATED FACILITY

EPA Form 8700-22A (Rev. 3-05) Previous editions are obsolete. DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

V1308570

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) D54495826 SC PPW 3/3/2011 Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	MID064197742	2/20	(800) 483-3718	004827111 FLE

5. Generator's Name and Mailing Address
BASF
1609 Biddle Avenue
Wyandotte, MI 48192
Generator's Phone: (734) 324-6524

Generator's Site Address (if different than mailing address)
SAME

6. Transporter 1 Company Name: Clean Harbors Environmental Services Inc — U.S. EPA ID Number: MAD039322250

7. Transporter 2 Company Name: Clean Harbors Environmental Services Inc — U.S. EPA ID Number: MAD039322250

8. Designated Facility Name and Site Address
Clean Harbors Env Services Inc
2247 South Highway 71
Kimball, NE 69145
Facility's Phone: (308) 235-4012
U.S. EPA ID Number: NED981723513

RECEIVED
AUG 27 2012
ENVIRONMENTAL HEALTH & SAFETY DEPT.

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. RQ, UN1203, WASTE GASOLINE, 3, PG II (D018)	1	DM	40	P	D001	D018	
X	2. RQ, UN2811, WASTE TOXIC SOLIDS, ORGANIC, N.O.S., (TOLUENE DIISOCYANATE, METHYLENE BIPHENYL ISOCYANATE), 6.1, PG II	4	DM	80	P	U223		
X	3. UN2206, ISOCYANATE SOLUTIONS, TOXIC, N.O.S., (DIMETHYL-M-ISOPROPENYL BENZYL ISOCYANATE), 6.1, PG III	4	DM	100	P			
X	4. RQ, UN1830, WASTE SULFURIC ACID, 8, PG II	2	DF	120	P	D002		

14. Special Handling Instructions and Additional Information
1. 706959W ERG#128 1X5
2. 707093W ERG#154 4X5
3. 728837W ERG#155 4X5
4. 706975W ERG#137 2X5

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: DANIEL G HANNEWALD — Signature: ON BEHALF OF BASF — Month 07 Day 27 Year 12

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Stephen Garlick — Month 07 Day 27 Year 12
Transporter 2 Printed/Typed Name: [illegible] — Month 7 Day 27 Year 12

W-452
12-11-2011

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator) U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H040 2. H040 3. H040 4. H040

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: ED AVILA — Signature: [signature] — Month 8 Day 18 Year 12

GENERATOR / INT'L / TRANSPORTER / DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

LAND AND CHEMICALS DIVISION

Type of Document: Notice of Violation

Name of Document: BASF Corp.
1609 Biddle Ave., Wyandotte, MI (MID064197742)

	NAMES	DATE
AUTHOR:	[signature]	1/8/13
SECTION APA:		BG on 1/15/13
SECTION CHIEF:	Mike Beadle w/ corrections	1/11/13 MB
BRANCH APA:	MG	1/17/13
BRANCH CHIEF:	[signature]	1/18/13
DIVISION APA:		
DIVISION DIRECTOR:		
OTHERS:	ORC: Reginald Pallesen [signature]	1/9/13
DRA:		
RA:		

RETURN TO:

PHONE:

COMMENTS:

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

JAN 22 2013

REPLY TO THE ATTENTION OF:

LR-8J

CERTIFIED MAIL 7009 1680 0000 7679 6033
RETURN RECEIPT REQUESTED

David W. Sheaves
Environmental Team Leader
BASF Corporation
1609 Biddle Avenue
Wyandotte, Michigan 48192

Re: Notice of Violation
RCRA Compliance Evaluation Inspection
BASF Corporation
EPA I.D. No.: MID064197742

Dear Mr. Sheaves:

On June 13 and 14, 2012, a representative of the U.S. Environmental Protection Agency inspected the BASF Corporation (BASF) facility located in Wyandotte, Michigan. The purpose of the inspection was to evaluate BASF's compliance with certain requirements of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 6901 *et seq.*, and the implementing regulations related to the generation, treatment and storage of hazardous waste for a large quantity generator. We have enclosed a copy of the EPA inspection report and checklists for your reference.

Based on information provided by BASF's personnel, a review of records and personal observations by the inspector, EPA finds that BASF is engaged in the management of hazardous waste without a hazardous waste storage license, and is in violation of certain requirements of the United States Code of Federal Regulations (C.F.R.) and the Michigan Administrative Code (MAC). To be eligible for the exemption from the requirement to apply for and obtain a hazardous waste storage license, BASF must be in compliance with the conditions of MAC R. 299.9306 [40 C.F.R. § 262.34]. Specifically, EPA finds that BASF is not in compliance with the following conditions for a storage license exemption, and in violation of the following hazardous waste management requirements:

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1. A generator of a solid waste as defined in MAC R. 299.9202 shall determine if that waste is a hazardous waste. See MAC R. 299.9302(1) [40 C.F.R. § 262.11].

During the inspection of the Resins Plant, the inspector observed a solution resin waste on the floor adjacent to the hazardous waste tank area. Mr. Sheaves stated that he was not sure if the waste on the floor was hazardous or non-hazardous, but would find out and provide a waste profile. BASF, therefore, violated a waste determination requirement. However, since the inspection, BASF submitted correspondence dated June 28, 2012, which included a documented hazardous waste determination for the above-referenced spilled waste. Thus, no further actions are necessary to comply with this requirement.

Also, during the inspection of the Central Hazardous Waste Storage Area, the inspector observed one 250-gallon tote that contained an expired wastewater treatment chemical waste, as stated by Mr. Sheaves. The tote was not labeled, and Mr. Sheaves stated that he was not sure if the waste in the tote was hazardous waste or non-hazardous waste. BASF, therefore, violated a waste determination requirement. However, since the inspection, BASF submitted correspondence dated June 25, 2012, which included a documented non-hazardous waste determination for the waste in the above-referenced tote. Thus, no further actions are necessary to comply with this requirement.

2. A generator shall keep a copy of each manifest signed in accordance with MAC R. 299.9304(4) for three years or until he or she receives a signed copy from the designated facility which received the waste. This signed copy shall be retained as a record for not less than three years from the date the waste was accepted by the initial transporter. See MAC R. 299.9307(3) [40 C.F.R. § 262.40(a)].

During the inspection of records, the following six manifests TSDF copies were not available for review: 000530083 VES (shipment date 5/22/12); 009231839 JJK (shipment date 5/14/12); 009606637 JJK (shipment date 3/29/12); 009607286 JJK (shipment date 3/12/12); 008498461 JJK (shipment date 5/25/11); and 007745052 JJK (shipment date 1/24/11). BASF, therefore, violated the manifest retention requirement.

3. In order to retain the exemption from the requirement to obtain a hazardous waste storage license, a large quantity generator must ensure that the date upon which each period of accumulation begins and the hazardous waste number of the waste are clearly marked and visible for inspection on each container. See MAC R. 299.9306(1)(b) [40 C.F.R. § 262.34(a)(2)].

During the inspection of the Central Hazardous Waste Container Storage Area, the inspector observed two 5-gallon hazardous waste containers labeled as "Hazardous Waste" and "D001, F003, F005, D028, D022" that did not have accumulation start dates marked on them. One 5-gallon container labeled as "Hazardous Waste" and "F005 Waste Pyridine" did not have an accumulation start date marked on it. BASF, therefore, failed to comply with the above-referenced condition for a license exemption and violated the above-referenced storage facility license application and obtainment requirement.

Also, during the inspection of the Central Hazardous Waste Container Storage Area, the inspector observed one 55-gallon hazardous waste drum labeled as "Hazardous Waste" that did not have the applicable hazardous waste codes marked on it and was dated 5/24/12. Another 55-gallon hazardous waste drum labeled as "Hazardous Waste" did not have the applicable hazardous waste codes marked on it and was dated 5/24/12. Three 55-gallon hazardous waste drums labeled as "Hazardous Waste" and "D001" did not have accumulation start dates marked on them. One 55-gallon hazardous waste drum labeled as "Hazardous Waste" and "D001" did not have an accumulation start date marked on it. BASF, therefore, failed to comply with the above-referenced condition for a license exemption and violated the above-referenced storage facility license application and obtainment requirement.

In addition, during the inspection of the Central Hazardous Waste Container Storage Area, on the non-hazardous waste storage side of the area, the inspector observed one 55-gallon hazardous waste drum labeled as "Hazardous Waste" that did not have the applicable hazardous waste codes or an accumulation start date marked on it. A lab pack box being prepared for shipment contained one 1-gallon hazardous waste container labeled as "Hazardous Waste" that did not have the applicable hazardous waste codes or an accumulation start date marked on it. BASF, therefore, failed to comply with the above-referenced condition for a license exemption and violated the above-referenced storage facility license application and obtainment requirement.

During the inspection of the Chemical Engineering Building, at the 3rd Floor Pilot Plant, the inspector observed one 55-gallon drum labeled as "Hazardous Waste" and "Methyl Amyl Ketone, Petroleum Distillate, Styrene" that did not have the applicable hazardous waste codes marked on it, was dated 5/24/12, and was stored closed. BASF, therefore, failed to comply with the above-referenced condition for a license exemption and violated the above-referenced storage facility license application and obtainment requirement. However, during the inspection, a BASF employee then placed a new label with the waste codes D001 and F003 on the drum. Thus, no further actions are necessary to comply with the condition/requirement set out in this paragraph.

4. In order to retain the exemption from the requirement to obtain a hazardous waste storage license, a large quantity generator must document the inspections required pursuant to the provisions of 40 C.F.R. § 265.174. The generator shall maintain inspection records on-site for a period of not less than three years from the date of the inspection. See MAC R. 299.9306(1)(a)(i).

Records reviewed by the inspector during the inspection indicated that hazardous waste container inspections were being conducted and documented at least weekly. However, the records indicated the following periods when weekly container inspections at the Central Hazardous Waste Container Storage Area were missed: 5/23/11-6/13/11; 8/23/10-10/11/10; 10/11/10-11/1/10. Also, the Polyol Plant weekly hazardous waste container inspection logs, from June 13, 2009 through 2010, were not retained on-site, as stated by Mr. Sheaves and Mr. Hannewald. Those inspection logs were retained at Iron Mountain located at 7277 North Haggerty Road, Canton, Michigan. BASF, therefore,

failed to comply with the above-referenced condition for a hazardous waste storage license exemption, and violated an inspection documentation requirement. However, since the inspection, BASF submitted correspondence dated June 27, 2012, which included documented weekly inspection logs from several months during the June 13, 2009, through 2010 period. Thus, no further actions are necessary to comply with the condition/requirement set out in this paragraph.

5. In order to retain the exemption from the requirement to obtain a hazardous waste storage license, a large quantity generator must inspect areas where containers are stored, at least weekly, looking for leaks and for deterioration caused by corrosion or other factors. See MAC R. 299.9306(1)(a)(i) and 40 C.F.R. § 265.174 [40 C.F.R. § 262.34(a)(1)(i)]. This is also a requirement for owners and operators of hazardous waste storage facilities, under MAC R. 299.9614(1)(a) and 299.9601(1), (2)(g), and (3)(b) and 40 C.F.R. § 264.174.

   Records reviewed by the inspector during the inspection indicated that weekly inspections of the hazardous waste container storage areas were occurring. However, the records indicated the following periods when no weekly inspections occurred for the Central Hazardous Waste Container Storage Area: 5/23/11-6/13/11; 8/23/10-10/11/10; 10/11/10-11/1/10. BASF, therefore, failed to comply with the above-referenced condition for a hazardous waste storage license exemption, and violated an inspection requirement.

6. In order to retain the exemption from the requirement to obtain a hazardous waste storage license, a large quantity generator must ensure that secondary containment systems are capable of detecting and collecting releases and accumulated liquids until the collected material is removed. Also, to meet the requirements of this rule, secondary containment systems must, at a minimum, be provided with a leak detection system that is designed and operated so that it will detect the failure of either the primary and secondary containment structure or the presence of any release of hazardous waste or accumulated liquid in the secondary containment system within twenty-four hours, or at the earliest practicable time if the existing detection technology or site conditions will not allow detection of a release within twenty-four hours. See MAC R. 299.9306(1)(a)(ii) [40 C.F.R. § 262.34(a)(1)(ii)]; 40 C.F.R. § 265.193(b)(2), and (c)(3). This is also a requirement of owners and operators of hazardous waste storage facilities under MAC R. 299.9615(1) and 299.9601(1), (2)(h) and (3)(b) and 40 C.F.R. § 264.193(b)(2) and (c)(3).

   During the inspection of records (including records dated 6/27/12 submitted by BASF after the inspection), the inspector observed that there was no leak detection system in place for the secondary containment system associated with the Resin Plant and Chemical Engineering Building hazardous waste storage tanks since no daily tank inspections were conducted at the Resin Plant during the following periods: 6/10/12; 6/4/12; 5/17/12; 5/11/12; 5/8/12; 4/20/12; 4/18/12; 4/16/12; 3/23-3/24/12; 3/20/12; 3/14/12; 1/21/12; 1/6-1/7/12; 11/23-11/24/11; 11/16-11/17/11; 10/30/11; 10/29/11; 7/6/11; 7/1/11; 3/16/11; 3/8/11; 1/19/11; 1/4/11; 12/17/10; 12/2-12/4/10; and 9/17-9/19/10. In addition, no daily tank inspections were conducted at the Chemical Engineering Building during the following periods: 1/28/11-2/14/11; and 11/21/10-1/17/11. BASF, therefore, failed to comply with the above-referenced conditions for a hazardous waste storage license

exemption and violated the storage facility hazardous waste tank leak detection requirements.

7. In order to retain the exemption from the requirement to obtain a hazardous waste storage license, a large quantity generator must inspect and document in the operating record, where present, at least once each operating day: data gathered from monitoring and leak-detection equipment (e.g., pressure or temperature gauges, monitoring wells) to ensure that the tank system is being operated according to its design. The generator must also inspect and document in the operating record at least once each operating day: (1) overfill/spill control equipment (e.g., waste-feed cut-off systems, bypass systems, and drainage systems) to ensure that it is in good working order; (2) the aboveground portions of the tank system, if any, to detect corrosion or releases of waste; and (3) the construction materials and the area immediately surrounding the externally accessible portion of the tank system including secondary containment structures (e.g., dikes) to detect erosion or signs of releases of hazardous waste (e.g., wet spots, dead vegetation). See MAC R. 299.9306(1)(a)(ii) [40 C.F.R. § 262.34(a)(1)(ii)]; 40 C.F.R. § 265.195(a), (b)(1)-(3), and (g). This is also a requirement of owners and operators of hazardous waste storage facilities under MAC R. 299.9615(1) and 299.9601(1), (2)(h) and (3)(b) and 40 C.F.R. § 264.195(a), (b), (c)(1) and (2), and (h).

   During the inspection of records (including records dated 6/27/12 submitted by BASF after the inspection), the inspector observed that no daily hazardous waste tank inspections were conducted or recorded at the Resin Plant during the following periods: 6/10/12; 6/4/12; 5/17/12; 5/11/12; 5/8/12; 4/20/12; 4/18/12; 4/16/12; 3/23-3/24/12; 3/20/12; 3/14/12; 1/21/12; 1/6-1/7/12; 11/23-11/24/11; 11/16-11/17/11; 10/30/11; 10/29/11; 7/6/11; 7/1/11; 3/16/11; 3/8/11; 1/19/11; 1/4/11; 12/17/10; 12/2-12/4/10; and 9/17-9/19/10. In addition, no daily tank inspections were conducted at the Chemical Engineering Building during the following periods: 1/28/11-2/14/11; and 11/21/10-1/17/11. Also, the daily hazardous waste tank (associated with the Resin Plant and Chemical Engineering Building) inspection logs from June 13, 2009, through 2010 were not retained on-site as stated by Mr. Sheaves and Mr. Hannewald. Those inspection logs were retained at Iron Mountain located at 7277 North Haggerty Road, Canton, Michigan. BASF, therefore, failed to comply with the above-referenced conditions for a hazardous waste storage license exemption, and violated the storage facility hazardous waste tank inspection and documentation requirements.

8. In order to retain the exemption from the requirement to obtain a hazardous waste storage license, a large quantity generator must ensure that its facility is maintained and operated to minimize the possibility of a fire, explosion or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water, which could threaten human health or the environment. See MAC R. 299.9306(1)(d) [40 C.F.R. § 262.34(a)(4)]; 40 C.F.R. § 265.31. This is also a requirement for owners and operators of hazardous waste storage facilities, under MAC R. 299.9601(3) and 299.9606(1); 40 C.F.R. § 264.31.

   During the inspection of the Resins Plant, the inspector observed a solution resin waste on the floor adjacent to the hazardous waste tank area. Mr. Sheaves stated that he was not

sure if the waste on the floor was hazardous or non-hazardous, but would find out and provide a waste profile. BASF, therefore, failed to comply with the above-referenced condition for a storage license exemption, and violated the storage facility maintenance and operation requirement. However, since the inspection, BASF submitted correspondence dated June 27-28, 2012, which included documentation that the spill had been determined to be a hazardous waste and was cleaned up and managed properly. Thus, no further actions are necessary to comply with this condition/requirement.

9. A large quantity generator who accumulates hazardous waste for more than 90 days is an operator of a hazardous waste storage facility. See MAC R. 299.9306(3) [40 C.F.R. § 262.34(b)]. This is also a requirement of owners and operators of hazardous waste storage facilities under MAC R. 299.9502(1), 299.9508 and 299.9510 [40 C.F.R. §§ ~~270.1(c), 270.10(a) and (d), and 270.13~~].

During the inspection of the Central Hazardous Waste Container Storage Area, the inspector observed four 5-gallon hazardous waste containers that were marked with accumulation start dates that had already exceeded 90 days at the time of the inspection. The first 5-gallon hazardous waste container was labeled as "Hazardous Waste" and "D001, D018," and was dated 2/19/12 (115 total days in accumulation = 25 days over the allowable limit). The second 5-gallon hazardous waste container was labeled as "Hazardous Waste" and "D002 Spent Sulfuric Acid," and was dated 12/1/11 (195 total days in accumulation = 105 days over the allowable limit). The third 5-gallon hazardous waste container was labeled as "Hazardous Waste" and "F002, F003 Acetone, o-dichlorobenzene phenol," and was dated 3/9/12 (96 total days in accumulation = 6 days over the allowable limit). The fourth 5-gallon hazardous waste container was labeled as "Hazardous Waste" and "D001 Methyl Amyl Ketone, Petroleum Distillate, Styrene," and was dated 2/8/12 (126 total days in accumulation = 36 days over the allowable limit). BASF, therefore, violated the above-referenced storage facility license application and obtainment requirement.

In addition, during the inspection of the Central Hazardous Waste Container Storage Area, the inspector observed one 55-gallon hazardous waste drum that had been rejected and returned by Clean Harbors, as stated by Chris Gilbert (full-time on-site Waste Management Contractor to BASF). The drum was labeled as "Hazardous Waste" and "Ignitable, Reactive, Aerosols D001, D003," and was dated 1/26/12 (139 total days in accumulation = 49 days over the allowable limit). The label placed on the drum by Clean Harbors was dated 4/3/12. BASF, therefore, violated the above-referenced storage facility license application and obtainment requirement.

Furthermore, during the inspection of the Central Hazardous Waste Container Storage Area, the inspector observed one 55-gallon hazardous waste drum that was labeled as "Hazardous Waste" and "D001, D009, D011, D018, D019, D022, F002, F003," and was dated 3/7/12 12 (98 total days in accumulation = 8 days over the allowable limit). BASF, therefore, violated the above-referenced storage facility license application and obtainment requirement.

10. A large quantity generator who accumulates hazardous waste on-site for more than 90 days, and who does not meet the conditions for a license exemption of MAC R. 299.9306(1) and (3) [40 C.F.R. § 262.34(a) and (b)], is an operator of a hazardous waste storage facility, and is required to obtain a hazardous waste storage license. See MAC R. 299.9502(1), 299.9508 and 299.9510 [40 C.F.R. §§ 270.1, 270.10 and 270.13].

    BASF became an operator of a hazardous waste storage facility when it failed to comply with the conditions for a license exemption referenced in items 3 through 9 above. Therefore, BASF was required to apply for and to obtain a hazardous waste storage license, which it did not do. BASF's failure to apply for and to obtain a hazardous waste storage license violated the licensing requirements of MAC R. 299.9502(1), 299.9508 and 299.9510 [40 C.F.R. §§ 270.1, 270.10 and 270.13].

At this time, EPA is not requiring BASF to apply for a hazardous waste storage license, so long as it immediately establishes compliance with the conditions for an exemption as outlined above. Under Section 3008(a) of RCRA, 42 U.S.C. § 6928(a), EPA may issue an order assessing a civil penalty for any past or current violation and requiring compliance immediately or within a specified time period. Although this letter is not such an order, we request that you submit a response in writing to this office documenting the actions, if any, which have been taken since the inspection to establish compliance with the above conditions and requirements.

You should submit your response no later than thirty (30) days after receipt of this letter to Bryan Gangwisch, Land and Chemicals Division (LR-8J), U.S. EPA, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604-3590.

If you have any questions or concerns regarding this letter, please contact Mr. Gangwisch at 312-886-0989.

Sincerely,

Gary Victorine

Gary Victorine, Chief
RCRA Branch

Enclosures

cc: Tracy Kecskemeti, MDEQ-SEMI District Office
kecskemetit@michigan.gov

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5, LCD, RCRA BRANCH, LR-8J
77 WEST JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604

RCRA COMPLIANCE EVALUATION INSPECTION REPORT

SITE NAME: BASF Corporation

EPA ID No.: MID064197742

ADDRESS: 1609 Biddle Avenue
Wyandotte, MI 48192

DATES OF INSPECTION: June 13-14, 2012

EPA INSPECTOR: Bryan Gangwisch

PREPARED BY: 7/3/12
Bryan Gangwisch
Environmental Scientist
Compliance Section #2
Date Completed

ACCEPTED BY: 7-6-12
Paul Little, Chief
Compliance Section #2
Date

Purpose of Inspection
This inspection was an evaluation of BASF Corporation (BASF), and its compliance with hazardous waste regulations found at Michigan Administrative Code (MAC) and the Code of Federal Regulations (CFR). The inspection was an EPA lead RCRA Compliance Evaluation Inspection (CEI).

Participants

David W. Sheaves, Environmental Team Leader	BASF
Daniel G. Hannewald, Sr. EHS Specialist	BASF
Kara G. Sparks, EHS Hub Manager	BASF
Bryan Gangwisch, Environmental Scientist	U.S. EPA

Introduction
I arrived at the site on June 13, 2012 at approximately 8:57 a.m. The weather consisted of sunny conditions with a light wind, and an ambient air temperature of approximately 60 degrees Fahrenheit. I introduced myself, presented my inspector credentials and identification, and described the purpose of the inspection and the process by which I intended to conduct the inspection. Mr. Sheaves provided me with a verbal description of the site, led the tour throughout the facility, and then attempted to provide me with the records I requested for review.

Site Description
BASF was operating as a large quantity generator at the time of the inspection according to BASF's hazardous waste generation rate, a Michigan Department of Environmental Quality (MDEQ) annual hazardous waste report, and a U.S. EPA database.

The following facility description and waste generation information was stated by Mr. Sheaves, unless otherwise noted, and stated in BASF's document section titled "Process Descriptions and Effluent Description Outfalls 001, 002 and 003", attachment 1. The facility is comprised of several buildings that are situated on two hundred thirty five acres. The original facility was constructed in the late 1800s and was originally owned by Michigan Alkali. Around 1940, the facility was sold to Wyandotte Chemical Company. In the late 1960s the facility was purchased by BASF.

BASF originally manufactured bulk inorganic chemicals such as soda ash and calcium chlorides. However, since the 1950s, this facility has manufactured organic and specialty chemicals, and has conducted research and development (R&D) applications. This facility is comprised of 1/3 manufacturing operations, 1/3 R&D, and 1/3 business and administration operations. This facility is the fifth largest BASF facility in the United States.

The following processes are conducted at the facility: Regional Distribution Center – handles finished product resins (liquids and solids).

Engineering Plastics Compounding – takes in raw nylon 6 and various additives and colorants to produce, through high pressure and temperature extrusion, a refined nylon resin finished product (all solids) to be used in various commercial products including the auto industry. The plant generates both non-contact cooling water and process wastewater. The non-contact cooling water is discharged through Outfall 003. The process wastewater is discharged to the Wayne County publicly owned treatment works (POTW). This operation also utilizes a recirculating cooling tower for the extruder lines. The blow down from the cooling is discharged to the Wayne County POTW. There are two satellite accumulation areas (SAA) in this area.

Cellasto Plant – produces, through a reaction/injection molding process, a urethane rubber shock absorber pad primarily for the auto industry. The plant generates non-contact cooling water, storm water from surrounding area and storm water from secondary containment units, which is discharged to Outfall 003. There are minor amounts of process wastewater generated from equipment cleaning and floor washing in this area. The wastewater is discharged to the Wayne County POTW. There are two SAA in this area.

Chemical Engineering Building – the unit manufactures small batch campaigns of surfactants and heat transfer liquids (various glycol mixtures) and various specialty chemicals such as polyether polyol. The non-contact cooling water from the plant is discharged both to the Wayne County POTW and Outfall 003. There are three hazardous waste storage areas (2 hazardous waste tanks and 1 hazardous waste container area) at this plant.

R&D Applications – activities focus on urethane technologies, specialty chemicals and coatings technologies and there is also a product applications laboratory. There is one hazardous waste storage area at this area.

Former Amino Resins – this plant is idle but still utilizes a loading dock area that has a SAA.

Resins Plant – manufactures various acrylic resins, emulsion polymers and aqueous resin cuts. The plant discharges regulated storm water through Outfalls 002 and 003. All process wastewaters are discharged to the Wayne County POTW. The plant utilizes a recirculating cooling tower for non-cooling water resource and all cooling tower blow down is discharged to the Wayne County POTW. There are four hazardous waste tanks and a hazardous waste container storage area at this plant. There are also SAA locations. There is one regenerative thermal oxidizer (RTO) that is regulated via a Title V air permit.

Abbott Laboratories – is a third party manufacturer of pharmaceutically active ingredients located at the Wyandotte site. This facility has their own EPA ID number (MIR000103051) and manages their waste separately. The facility utilizes the Detroit River water for non-contact cooling purposes. Storm water from secondary containment and loading and unloading areas is discharged to Outfall 002 after being evaluated for characteristic pollutants. Process wastewaters from this operation are regulated and discharged to the Wayne County POTW. This facility was originally constructed and owned by BASF in 1988 and housed the windshield adhesives plant.

The plant was then shut down in 1993. BASF constructed the synthroid plant in 1996 and then sold it to Abbott Laboratories in 2001 approximately.

Thermal Plastic Polyurethane Plant – utilizes methylene bisphenyl diisocyanate and various polyols to manufacture a thermoplastic polyurethane slab. The slab is cut and extruded to form a crystalline bead finished product. The plant generates two sources of wastewater, non-contact cooling water that is discharged to the Detroit River through Outfall 002 and process wastewater generated by a scrubber system. The scrubber water is discharged to the Wayne County POTW. There is a SAA location in this plant.

Polyol Plant – currently has four reactor train systems operating. Conventional polyols are produced in reactor train systems 7, 8, and 9. Graft polyols are produced in the number 10 reactor train system. The reactor systems are comprised of raw material storage tanks, blending vessels, reaction vessels, and finished product storage tanks. In addition to the reactor trains, this plant also includes several product storage tanks and the following various emission control equipment: the water scrubber system, the glycol reactor system, and the thermal oxidizer. Approximately 80 different polyol products are manufactured and they are primarily used by customers to make urethane-type foams in the automotive and housing industries. There are three hazardous waste container storage areas at this plant. The plant also generates a scrubber system process wastewater that is batch discharged to the Wayne County POTW. There is thermal oxidizer that is regulated via a Title V air permit.

The Polyol Plant is situated over several Corrective Action Areas of Concern stemming from historical operating practices at the site.

The Polyol Plant utilizes a two stage (West Pond and East Pond separated by a bulk head wall) surface impoundment for the purposes of solids settling and pH adjustment. The impoundment was constructed in the 1960s approximately. The last cleanout/dredge of the pond sludge/sediments occurred in 2000 approximately and the sludge/sediments was managed as non-hazardous waste and was sent to Michigan Disposal. The West Pond receives the effluent from the Dirty Water Lift Station. Any incoming process wastewater below a pH of 6.5 will lock the system out and no lift transfer occurs. The East Pond receives storm water. The impoundment has an approximate capacity of 600,000 gallons. Residence time for the pond is approximately ten to sixteen hours. The pond is fed through the Dirty Water Lift system. This system employs an in plant lift station for process wastewaters (these waters get pH adjusted and are pumped to weir box bypassing East Pond) and a second lift station (Clean Water System) for wastewater from the storm water sewers. The Clean Water Lift transfers treated groundwater and non-contact cooling waters to the impoundment weir box (and bypasses the East Pond). The wastewaters are then co-mingled and discharged to the Detroit River.

Effluent Outfall 001 – the discharge is comprised of two systems which combine for discharge to the Detroit River. The Dirty Water system receives process wastewater from the Polyol Plant and Concepp Technologies. The effluent from the Polyol Plant consists of reactor washes and loading pad cleaning from the truck and rail car loading and unloading racks for polyether

polyols. The Dirty Water system also receives wastewater from the facility trench system which is designed to contain pavement washing, storm water and steam condensate. The effluent from the trench system is gravity fed to the Plant Lift Station. This lift station conveys the effluent to the Dirty Water Lift Station where the effluent is lifted to the Polyol Plant pond.

Effluent Outfalls 002 and 003 – the discharge is comprised of regulated storm water, non-contact cooling water, groundwater seepage and storm water from secondary containment structures. Outfall 002 also receives back flush from the Kinney Strainer system for the river water intake. Both outfalls also receive water from the testing of Fire Suppression systems located in the manufacturing units. These systems consist of hydrants and monitors. The water generated from the testing of the systems is limited to outdoor activities. All indoor system testing is discharged to the Wayne County POTW.

The Outfall discharge to the Detroit River is regulated under an NPDES permit that has limits for biochemical oxygen demand (BOD), total suspended solids (TSS), pH, low level mercury and toluene.

Central Waste Accumulation Storage Area – is the facility's largest hazardous waste container storage area.

Concepp Technologies - – is a third party manufacturer of expanded polypropylene beads located at the Wyandotte site. This facility has their own EPA ID number (MIK365473362) and manages their waste separately. The primary raw materials are butane, polypropylene bead, nitric acid and various surfactants. The plant wastewater streams are comprised of non-contact cooling; process wastewater and bead wash water. The plant generates process wastewater that is neutralized, subjected to a flocking agent, allowed time to settle out the solids formed and then discharged to the Wayne County POTW. The final bead wash removes any residual tricalcium phosphate that may remain after primary bead washes that are sent to the POTW. The final wash water is transferred to the Dirty Water Lift Station in the Polyol Plant. This lift station transfers wastewater to the plant surface impoundment for settling and pH adjustment.

The main waste streams generated at BASF consist of: hazardous waste groundwater remediation waste from corrective action activities; corrosives; ignitables; spent solvents; and excess/obsolete/off-specification commercial chemical products. Waste codes associated with the hazardous waste streams are (D001, D002, D018, D028, F003, F005, U200 and U220). There were several hazardous waste container and tank storage areas observed during the inspection. There was several SAA observed during the inspection. There is used oil generated from maintenance activities and a process in the Cellasto Plant. The used oil is picked up for recycling. The facility's universal waste that is generated (spent fluorescent bulbs and batteries) is picked up for recycling by Clean Harbors. The facility's electronic waste is sent to Redem Tech for recycling. There is no wastewater treatment operation at the facility.

The Wyandotte Fire Department conducts regular tours of the facility. There are spill containment kits, decontamination equipment, fire extinguisher and alarms in place at the

facility. There are also two fully equipped mobile spill/emergency facility vehicles that service the site at all times. The fire extinguishers are inspected by Vanguard annually. The emergency equipment is tested and inspected monthly.

There are approximately 1,100 total employees that work at the facility. The facility operates on a twenty-four hour schedule with three shifts every day for certain facility operations and Monday through Friday schedules for other facility operations. There are on-site security guards on a twenty-four hour schedule and the entire facility is fenced and equipped with remote access cameras.

Site Tour

The physical walkthrough of the site began on June 13, 2012 at approximately 10:20 a.m. We started outside at the R&D Waste Crib which was a hazardous waste container storage area. There were six 55-gallon hazardous waste drums (on pallets) and two 55-gallon non-hazardous waste drums. The first drum was labeled as "Non-Hazardous Waste" and "Waste Polyol", and was closed. The second drum was labeled as "Non-Hazardous Waste" and "Waste Solid Polyol", and was closed. The third drum was labeled as "Hazardous Waste" and "Acetone, Xylenes, D001 and F003", was dated 6/11/12, and was closed. The fourth drum was labeled as "Hazardous Waste" and "Acetone, Xylenes, D001 and F003", was dated 3/30/12, and was closed. The fifth drum was labeled as "Hazardous Waste" and "Acetone, Isopropanol, Methanol, Toluene, D001, F003 and F005", was dated 3/30/12, and was closed. The sixth drum was labeled as "Hazardous Waste" and "Acetone, Isopropanol, D001 and F003", was dated 3/30/12, and was closed. The seventh drum was labeled as "Hazardous Waste" and "D001, D009, D011, D018, D019, F002 and F003", was dated 6/11/12, and was closed. The eighth drum was labeled as "Hazardous Waste" and "D001 and F003", was dated 3/30/12, and was closed. There were seven 55-gallon drums that contained product acetone as stated by Mr. Sheaves. The entire crib was fenced with a roof and was sloped and equipped with a berm to provide secondary containment. There was a spill control kit, decontamination equipment, fire extinguisher and two way radio usage and phone in the vicinity. Aisle space was sufficient in this area.

At the south end of the site, I observed the fire water pond which retains only storm water to be used in an emergency. In this area was the inbound and outbound truck traffic area and product storage for Distribution Center.

I observed the Engineering Plastics Compounding Building as we drove by it.

Next, I inspected the Cellasto Plant. At the Mold Line Area, there was one 55-gallon drum that was labeled as "Non-Hazardous Waste" and "B-Component", and was closed. On a spill containment pallet, there were four 55-gallon drums that were labeled as "Used Oil." There was an eye wash station and safety shower in the vicinity. At the Quality and Analytical (Q&A) Laboratory's physical testing side, there was no waste observed at the time of the inspection. At the Q&A Laboratory's analytical side, there was one SAA that consisted of one 55-gallon drum that was labeled as "Hazardous Waste" and "D001, F002, F003, F005", and was stored closed. There were two 55-gallon drums that were labeled as "Non-Hazardous Waste" and "Pre Polymer Waste", and were closed.

At the Resins Plant, there were two 5,000-gallon hazardous waste storage tanks. The first tank was labeled as "Hazardous Waste" and "Hydroxyl Waste Tank D-1053", and was last emptied on 6/10/12 as documented on the log sheet next to the tank. The other tank was labeled as "Hazardous Waste" and "Acid Functional Waste Tank D-1054", and was last emptied on 5/30/12 as documented on the log sheet next to the tank. Both tanks were installed in 2008 and both were situated inside of a liner that was bermed (containment walls) to provide secondary containment. There was a fire extinguisher, fire suppression system, spill containment kit, decontamination equipment, two-way radio usage in the area, and a phone in the vicinity. Aisle space was sufficient in this area. There were four 55-gallon drums that were labeled as "Non-Hazardous Waste" and "Solid Grade Oligomer", and were closed. At the Resins hazardous waste container storage area, there were four 55-gallon cardboard fiber drums, on a pallet, that were labeled as "Non-Hazardous Waste" and "Solid Grade Oligomer", and were closed. On a pallet, there were four 55-gallon hazardous waste drums. All four of the drums were labeled as "Hazardous Waste" and "D001", were dated 6/11/12, and were closed. The building provided secondary containment for the hazardous waste drums as stated by Mr. Sheaves. There was a fire extinguisher, fire suppression system, spill containment kit, decontamination equipment, two-way radio usage in the area, and a phone in the vicinity. Aisle space was sufficient in this area.

Still at the Resins Plant, I observed the Inbound Staging Area Warehouse which was utilized for product storage as stated by Mr. Sheaves. There was no waste was generated or stored in this area as stated by Mr. Sheaves. Adjacent to the hazardous waste tank area, I observed a solution resin waste on the floor. Mr. Sheaves stated that he was not sure if the waste on the floor was hazardous or non-hazardous, but would find out and provide a waste profile. There were two hazardous waste storage tanks. The first tank was labeled as "Hazardous Waste" and "D-1081", and was last emptied on 6/11/12 as documented on the log sheet next to the tank. The other tank was labeled as "Hazardous Waste" and "D-1082", and was last emptied on 6/11/12 as documented on the log sheet next to the tank. Both tanks were situated inside of a liner that was bermed (containment walls) to provide secondary containment. There was a fire extinguisher, fire suppression system, spill containment kit, decontamination equipment, two-way radio usage in the area, and a phone in the vicinity. Aisle space was sufficient in this area.

Still at the Resins Plant, at the Polyol Filtration area, there were three separate SAA locations. The first SAA consisted of one 55-gallon drum that was labeled as "Hazardous Waste" and "D001, F003, F005", and was stored closed. There was a spill containment kit and an over pack drum in the vicinity. The second SAA consisted of one 55-gallon drum that was labeled as "Hazardous Waste" and "U002, U113, U220, U239, 131U, D001 Rags/Wipes", and was stored closed. The third SAA consisted of one 55-gallon drum that was labeled as "Hazardous Waste" and "U002, U113, U220, U239, 131U, D001 Liquid Waste", and was stored closed. At the Third Floor Emulsions area, there were two separate SAA locations. The first SAA consisted of one 55-gallon drum that was labeled as "Hazardous Waste" and "U002, U113, U220, U239, 131U, D001 Liquid Waste", and was stored closed. The other SAA consisted of one 55-gallon drum that was labeled as "Hazardous Waste" and "U002, U113, U220, U239, 131U, D001" Rags/Wipes", and was stored closed. There was one 55-gallon drum that was labeled as "Purge

From Manual Additions" and "Pending Characterization", and was stored closed. There was one 55-gallon drum that was labeled as "Non-Hazardous Waste" and "Waste Emulsion and Resin Cutting Filter and Absorbent", and was stored closed.

I left the site to take a lunch break.

I arrived back on-site at approximately 12:45 p.m.

The site tour continued at approximately 12:50 p.m., and I inspected the Thermal Plastic Polyurethane Plant. At the Q&A Laboratory, there was one SAA that consisted of one 5-gallon container, inside of a fume hood, that was labeled as "Hazardous Waste" and "D001", and was stored closed. At the Raw Material Tank Farm, there was one 55-gallon drum that was labeled as "Used Oil."

Next, I inspected the Polyol Plant. I started outside at the Polyol Pond area. I observed the clean water lift. A picture was taken. There was one sulfuric acid product tank (Tank 156) in the area that is utilized to adjust pH if necessary as stated by Mr. Sheaves. I then observed the East Side of the Pond. Pictures were taken. I observed the weir box, which is where the clean and dirty water meet. A picture was taken. I observed the dirty water lift and associated piping run. Pictures were taken.

Still outside at the Polyol Plant, I inspected the Raw Materials Storage area. This area was comprised of all product tank storage. There were two 250-gallon totes that were labeled as "Non-Hazardous Waste Polyol", and were stored closed. There was one 55-gallon drum that was labeled as "Non-Hazardous Waste methylene bisphenyl diisocyanate (MDI)", and was stored closed. I inspected the W010 hazardous waste container storage area. There were seven 55-gallon hazardous waste drums situated on spill containment pallets. The first and second drums were labeled as "Hazardous Waste" and "D001, D018", were dated 6/10/12, and were stored closed. The third and fourth drums were labeled as "Hazardous Waste" and "D001, D018", were dated 5/13/12 and 6/10/12, and were stored closed. The fifth and sixth drums were labeled as "Hazardous Waste" and "D001, D018", were dated 6/10/12 and 6/3/12, and were stored closed. The seventh drum was labeled as "Hazardous Waste" and "D001, D018", was dated 4/22/12, and was stored closed. There was one SAA that consisted of one 55-gallon drum that was labeled as "Hazardous Waste" and "D001, D018", and was stored closed. There was one 55-gallon drum that was labeled as "Used Oil." The areas where the containers were stored were sloped and equipped with a berm to provide secondary containment. There was a spill control kit, decontamination equipment, fire extinguisher and two way radio usage and phone in the vicinity. Aisle space was sufficient in this area. There were two 20 cubic-yard roll-off boxes that contained non-hazardous waste polyol filter cake as stated by Mr. Sheaves. There was one SAA that consisted of one 55-gallon drum that was labeled as "Hazardous Waste" and "U223", and was stored closed.

At the Polyol Plant Q&A Laboratory, there were several separate SAA locations. The first SAA consisted of one 5-gallon pail, stored in a fume hood, which was labeled as "Hazardous Waste"

and "Styrene Methyl Methacrylate", and was stored closed. The second SAA consisted of one 1-gallon container that was labeled as "Hazardous Waste" and "D002 Waste Sodium Hydroxide", and was stored closed. The third SAA consisted of one 1-gallon container that was labeled as "Hazardous Waste" and "D002 Waste Hydrochloric Acid", and was stored closed. The fourth SAA consisted of one 5-gallon pail that was labeled as "Hazardous Waste" and "Styrene Methyl Methacrylate", and was stored closed. The fifth SAA consisted of one 55-gallon drum that was labeled as "Hazardous Waste" and "U008, F003, F005, D001", and was stored closed. The sixth SAA consisted of one 5-gallon container that was labeled as "Hazardous Waste" and "D002", and was stored closed. The seventh SAA consisted of one 55-gallon drum that was labeled as "Hazardous Waste" and "D001", and was stored closed. There were two 55-gallon non-hazardous waste drums in this area. The first drum was labeled as "Non-Hazardous Waste" and "Spent Isoton Solution", and was stored closed. The other drum was labeled as "Non-Hazardous Waste" and "Emulsions & Resin Cuts", and was stored closed. The eighth SAA consisted of one 5-gallon container, stored in a fume hood, which was labeled as "Hazardous Waste" and "Diesel Fuel D001", and was stored closed. The ninth SAA consisted of one 5-gallon container, stored in a fume hood, which was labeled as "Hazardous Waste" and "D001, U009, 131U", and was stored closed.

Next, I inspected the Central Hazardous Waste Container Storage Area. There was approximately thirty-five 5-gallon hazardous waste containers, stored on pallets, which were labeled as "Hazardous Waste", had the applicable hazardous waste codes marked on them, and were stored closed. The majority of the thirty-five 5-gallon hazardous waste containers were dated within ninety days from the date of the inspection. However, there were four 5-gallon hazardous waste containers that were marked with accumulation start dates that had already exceeded ninety days at the time of the inspection. The first 5-gallon hazardous waste container was labeled as "Hazardous Waste" and "D001, D018", and was dated 2/19/12 (115 total days in accumulation = 25 days over the allowable limit). A picture was taken. The second 5-gallon hazardous waste container was labeled as "Hazardous Waste" and "D002 Spent Sulfuric Acid", and was dated 12/1/11 (195 total days in accumulation = 105 days over the allowable limit). Pictures were taken. The third 5-gallon hazardous waste container was labeled as "Hazardous Waste" and "F002, F003 Acetone, o-dichlorobenzene phenol", and was dated 3/9/12 (96 total days in accumulation = 6 days over the allowable limit). A picture was taken. The fourth 5-gallon hazardous waste container was labeled as "Hazardous Waste" and "D001 Methyl Amyl Ketone, Petroleum Distillate, Styrene", and was dated 2/8/12 (126 total days in accumulation = 36 days over the allowable limit). A picture was taken. There were two 5-gallon hazardous waste containers that were labeled as "Hazardous Waste" and "D001, F003, F005, D028, D022", but did not have accumulation start dates marked on them. Pictures were taken. There was one 5-gallon container that was labeled as "Hazardous Waste" and "F005 Waste Pyridine", but did not have an accumulation start date marked on it. A picture was taken. There was one 55-gallon hazardous waste drum that had been rejected and returned by Clean Harbors as stated by Chris Gilbert (full-time on-site Waste Management Contractor to BASF). The drum was labeled as "Hazardous Waste" and "Ignitable, Reactive, Aerosols D001, D003", was dated 1/26/12 (139 total days in accumulation = 49 days over the allowable limit). Pictures were taken. The label placed on the drum by Clean Harbors was dated 4/3/12.

There were approximately eighty 55-gallon hazardous waste drums in the Central Hazardous Waste Storage Area. There were five rows of drums (stacked two-high) on each side of the storage area with one side being almost exclusively (one hazardous waste drum) non-hazardous waste drums in storage. The other side of the storage area was mixed with hazardous waste (approximately 79) and non-hazardous waste drums (approximately 35). There were also two 250-gallon hazardous waste totes in the storage area. The totes were labeled as "Hazardous Waste" and "F002", dated within ninety days from the date of the inspection, and were stored closed. All of the hazardous waste drums were labeled as "Hazardous Waste" and were stored closed. There was one 55-gallon hazardous waste drum that was labeled as "Hazardous Waste", but did not have the applicable hazardous waste codes marked on it, and was dated 5/24/12. Pictures were taken. There was one 250-gallon tote that contained an expired wastewater treatment chemical waste as stated by Mr. Sheaves. The tote was not labeled and Mr. Sheaves stated that he was not sure if the waste in the tote was hazardous waste or non-hazardous waste. A picture was taken. There was one 55-gallon hazardous waste drum that was labeled as "Hazardous Waste", but did not have the applicable hazardous waste codes marked on it, and was dated 5/24/12. A picture was taken. There were three 55-gallon hazardous waste drums that were labeled as "Hazardous Waste" and "D001", but did not have accumulation start dates marked on them. Pictures were taken. There was one 55-gallon hazardous waste drum that was labeled as "Hazardous Waste" and "D001, D009, D011, D018, D019, D022, F002, F003, and was dated 3/7/12 (98 total days in accumulation = 8 days over the allowable limit). Pictures were taken. There was one 55-gallon hazardous waste drum that was labeled as "Hazardous Waste" and "D001", but did not have an accumulation start date marked on it. Pictures were taken.

On the almost exclusively non-hazardous waste storage side of the waste storage area, there was one 55-gallon hazardous waste drum that was labeled as "Hazardous Waste", but did not have the applicable hazardous waste codes marked on it, and did not have an accumulation start date marked on it. A picture was taken. There was a lab pack box being prepared for shipment, and there was one 1-gallon hazardous waste container that was labeled as "Hazardous Waste", but did not have the applicable hazardous waste codes marked on it, and did not have an accumulation start date marked on it. Pictures were taken. A universal waste shipment had recently occurred on 6/12/12 as stated by Mr. Gilbert. There were LEL monitors, a fire suppression system, a fire extinguisher, spill containment and decontamination equipment, a phone and two way radio usage in this area. The elevated (from ground level) floor of this hazardous waste storage area was a monolithic poured floor and the building provided secondary containment as stated by Mr. Sheaves. Aisle space was sufficient in this area. Pictures were taken.

The tour concluded at approximately 3:50 p.m. I left the site at approximately 4:20 p.m. on June 13, 2012.

On June 14, 2012 I arrived back at the site at approximately 8:22 a.m.

Record Review

The review of records began. I reviewed BASF's Significant Industrial Users of Wayne County (POTW) Permit No. D-11311. The permit was effective as of 9/1/10 and expires on 8/31/15.

The facility's NPDES Permit No. MI0000540 for authorized discharge to the Trenton Channel of the Detroit River was reviewed. The permit was effective as of 11/1/08 and has an expiration date of 10/1/12. BASF conducts the sampling and Shrader Analytical (Detroit, MI) does the analysis for the primary pollutant characterization for each renewal of the permit as stated by Mr. Sheaves.

Waste determinations were documented for the hazardous and non-hazardous waste streams and were documented through generator knowledge/profiles/TCLP analysis/MSDS. The waste determinations that were reviewed on-site included the following: waste profile for the JP-026 waste resin (non-hazardous); waste profile for the P-019 spent busch pump cleaning fluids and TCLP (performed by Shrader on 4/27/11) (non-hazardous); waste profile for the JPQA-006 spent isoton solution (non-hazardous); waste profile for the W-067 neutralized MDI (non-hazardous); waste profile for the lupranate isocyanate (non-hazardous); waste profile for the W-403 polyesterdiols (non-hazardous); waste profiles for the W-013 liquid polyols (Pluracol 1200 and Polyol 1570) (non-hazardous); and waste profile for the W-007 polyol filter cake (non-hazardous).

Site Tour Continued

I inspected the Chemical Engineering Building at approximately 10:15 a.m. There was a 70-gallon hazardous waste storage tank near the Pilot Scale Reactors. This tank was labeled as "Hazardous Waste" and "D-731", and was last emptied on 5/24/12 as documented on the log sheet next to the tank. The floor (coated) was sloped around the tank to provide containment as well as the building did, and the drains were plugged as stated by a BASF employee. At the 3rd Floor Pilot Plant, there was a hazardous waste container storage area. There was one 55-gallon drum that was labeled as "Hazardous Waste" and "Methyl Amyl Ketone, Petroleum Distillate, Styrene", did not have the applicable hazardous waste codes marked on it, was dated 5/24/12, and was stored closed. A BASF employee then placed a new label with the waste codes D001, F003 on the drum. The drum was situated on a portable secondary containment unit. There was a fire extinguisher, fire suppression system, spill containment kit, decontamination equipment, two-way radio usage in the area, and a phone in the vicinity. Aisle space was sufficient in this area. At the Solid Grade Oligomer Pilot Plant, there was one SAA location. The SAA consisted of one 55-gallon drum that was labeled as "Hazardous Waste" and "D001", and was stored closed. There was one other hazardous waste storage tank that was labeled as "Hazardous Waste" and "D-631", and was last emptied on 6/7/12 as documented on the log sheet next to the tank. The tank was situated inside of a sloped liner (coated) to provide secondary containment as well as the building. There was a fire extinguisher, fire suppression system, spill containment kit, decontamination equipment, two-way radio usage in the area, and a phone in the vicinity. Aisle space was sufficient in this area.

Back at the Polyol Plant, I observed and took pictures of the West Side of the Pond.

Record Review Continued

I reviewed the hazardous waste storage tank assessments and certifications for the following hazardous waste tanks: D-631 and D-731 (assessment performed on 5/12/09 by Process Results, Inc., - D. Kevin Bingel, P.E., No. 29650, Michigan); D-1053, D-1054, D-1081, and D-1082 (assessment performed on 9/8/09 by Lockwood Greene Engineers, Inc., - Gerald A. Knazek, P.E., No. NY062631-1, New York). All six of the hazardous waste tanks are completely contained within buildings. The tanks are equipped with high level alarms and overfill controls. The secondary containment for the tanks consists of concrete liners with berms or sloped areas, and can contain the entire capacity of any one of the hazardous waste tanks.

I reviewed the weekly hazardous waste container inspection logs. The weekly hazardous waste container inspections were being conducted at least weekly and were being documented. However, the following periods indicated when weekly container inspections (at the Central Hazardous Waste Storage Area) were missed: 5/23/11-6/13/11; 8/23/10-10/11/10; 10/11/10-11/1/10. Also, the weekly hazardous waste container inspection logs were retained on file from only 1/1/11 to the date of the inspection. The inspection logs from June 13, 2009 through 2010 were not retained on-site as stated by Mr. Sheaves and Mr. Hannewald. Those inspection logs were retained at Iron Mountain located at 7277 North Haggerty Road, Canton, Michigan.

I reviewed the manifests. The most recent manifests show that all hazardous waste is sent to the following TSDFs: Clean Harbors El Dorado, LLC (ARD069748192); Petro-Chem Processing Group of Nortru, LLC (MID980615298); EQ Detroit, Inc., (MID980991566); Calgon Carbon Corp., (KYD005009923); Clean Harbors Environmental (NED981723513); Veolia ES Technical Solutions (TXD000838896); Veolia ES Technical Solutions (OHD093945293); Michigan Disposal WTP (MID000724831); Systech Environmental Services (OHD005048947); Greencastle WDF (IND006419212); and Heritage WTI, Inc., (OHD980613541). The following transporters were also used: EQ Industrial Services, Inc., (MI0000263871); Clean Harbors Environmental (MAD039322250); Valley City Environmental (MID981956063); Nortru Transportation Group, LLC (MID021087275); Hazmat Environmental (NYD980769947); and Dart Trucking Company, Inc., (OHD009865825). The manifests were retained on file for at least the last three years. However, the following six manifests' TSDF copies were not available for review at the time of inspection: 000530083 VES (shipment date 5/22/12); 009231839 JJK (shipment date 5/14/12); 009606637 JJK (shipment date 3/29/12); 009607286 JJK (shipment date 3/12/12); 008498461 JJK (shipment date 5/25/11); and 007745052 JJK (shipment date 1/24/11). There were LDRs available for each waste stream on each manifest. However, there was no LDR notification documented or available for review at the time of inspection, for the hazardous waste stream going to Michigan Disposal WTP.

I left the site to take a lunch break.

I arrived back on-site at approximately 1:47 p.m.

I reviewed the daily hazardous waste tank inspection logs. The daily hazardous waste tank inspections were being conducted daily and were being documented. However, the following

periods indicated when daily tank inspections (at the Resin Plant) were missed: 6/10/12; 6/4/12; 5/17/12; 5/11/12; 5/8/12; 4/20/12; 4/18/12; 4/16/12; 3/23-3/24/12; 3/20/12; 3/14/12; 1/21/12; 1/6-1/7/12; 11/23-11/24/11; 11/16-11/17/11; 10/30/11; 10/29/11; 7/6/11; 7/1/11; 3/16/11; 3/8/11; 1/19/11; and 1/4/11. The following periods indicated when daily tank inspections (at the Chemical Engineering Building) were missed: 1/28/11-2/14/11; and 11/21/10-1/17/11. Also, the daily hazardous waste tank inspection logs were retained on file from only 1/1/11 to the date of the inspection. The inspection logs from June 13, 2009 through 2010 were not retained on-site as stated by Mr. Sheaves and Mr. Hannewald. Those inspection logs were retained at Iron Mountain located at 7277 North Haggerty Road, Canton, Michigan.

The RCRA training (including contingency plan implementation) and annual refreshers are administered and documented for the facility employees who have hazardous waste management positions. The annual RCRA refresher logs for employees who received the training were reviewed for the last four years.

There was a contingency plan in place for the facility. The plan was most recently updated on 4/4/12 due to the list of plant managers. The updated version of the plan had been sent to the required authorities. Mr. Sheaves was listed as the primary emergency coordinator and the listed alternates were Gary Price, Mark Gill, and Tom Ozimek.

The facility's Subpart BB (LDAR) program was being conducted and documented. The contractor that was being utilized to conduct the program was Environmental Monitoring Service (EMS) (Houston, Texas).

The facility's Subpart CC program was documented. The following hazardous waste tanks are operated as pressure tanks, considered to be in light liquid service, and are subject to Level 2 controls: D-1053; D-1054; D-1081; and D-1082. Those tanks are all vented to the RTO located at the Resins Plant. The following hazardous waste tanks are operated as closed tanks, have vapor pressure calculations documented, and are subject to Level 1 controls: D-631 and D-731.

Closing Conference

I summarized the RCRA requirements for the following: accumulation of hazardous waste for more than ninety days without a storage license, accumulation start dates, hazardous waste code labeling, copies of manifests, weekly hazardous waste container and daily hazardous waste tank inspections, hazardous waste container and tank inspection records retention periods identified during the inspection. The inspection concluded at approximately 5:42 p.m. on June 14, 2012.

Documents received during this inspection are as follows:

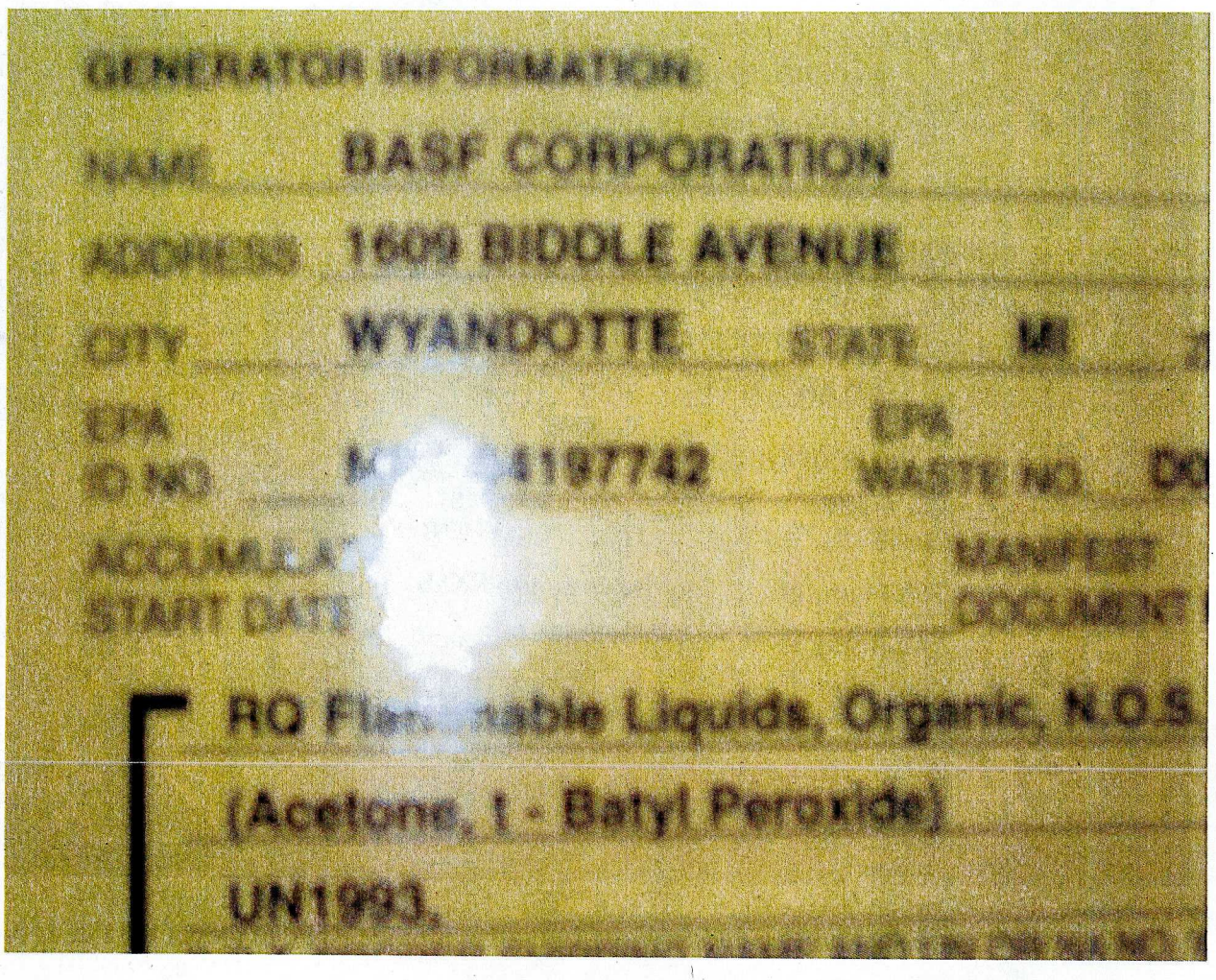
- Copies of the facility's LDAR program documentation of the master tag list for some of the applicable equipment (10 pages)
- Copy of the Monthly Discharge Monitoring Report for Outfall 001
- Copy of discharge sample data for Outfall 003
- Copy of low-level mercury sample data for sampling events for Outfalls 001 and 002

- Copies of NPDES discharge sample data for the following: north intake water; Outfall 001; Outfall 002; and Outfall 003
- Copy of facility document "Process Descriptions and Effluent Description Outfalls 001, 002 and 003" (Attachment 1)
- Copy of MSDS for Pluracol 1570 Polyol
- Copy of MSDS for Pluracol 1200 Polyol
- Copy of facility document "Requirements for Tanks Managing Hazardous Waste in VOC Service"

Documents given to BASF during this inspection are as follows:

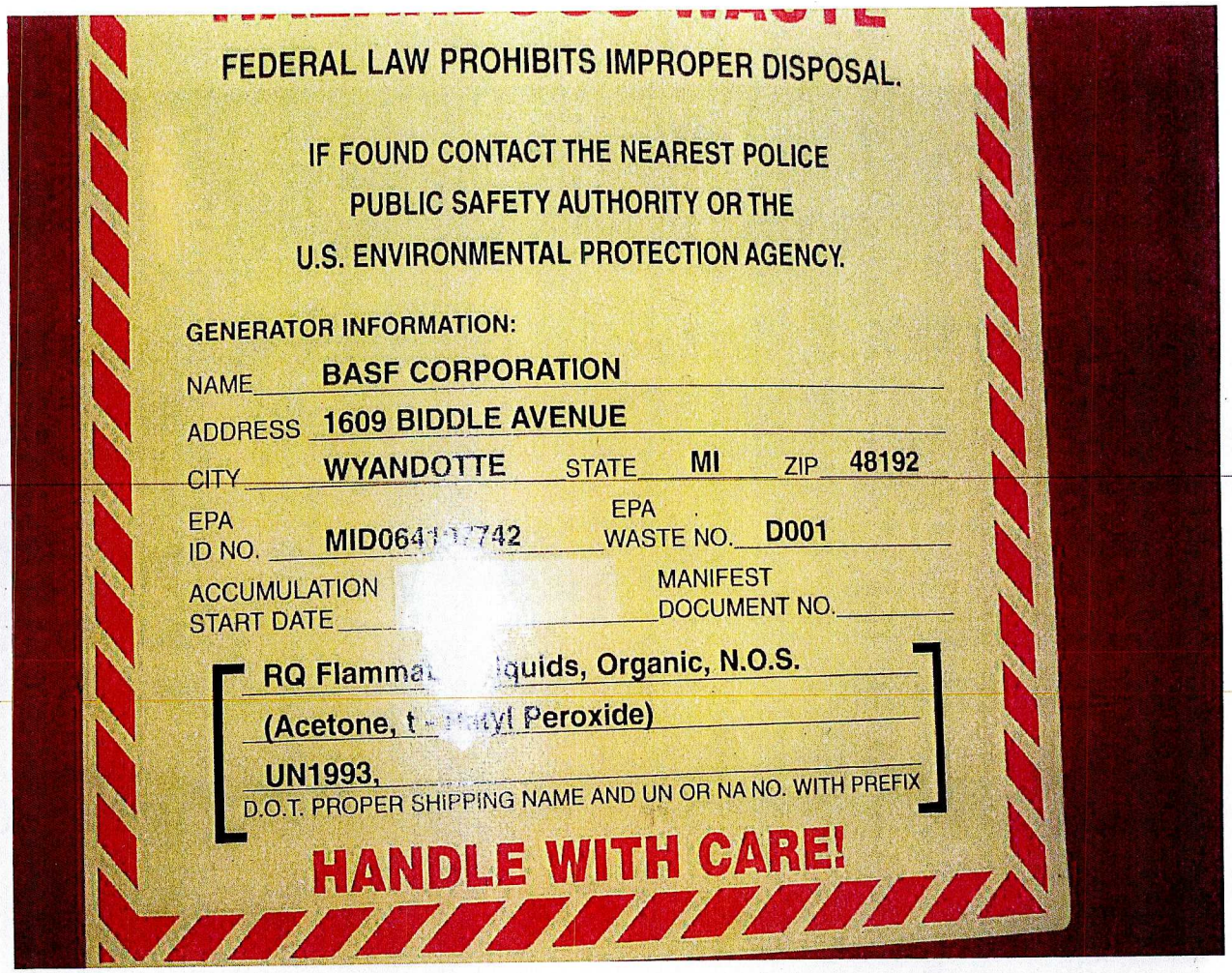
- U.S. EPA Small Business Resources handout (compliance assistance)
- Region 5 and State Pollution Prevention contact handout
- Michigan RETAP Pollution Prevention handout was declined by facility (too large of company)

A photo log is attached consisting of fifty-four (54) photos taken by U.S. EPA during the inspection.



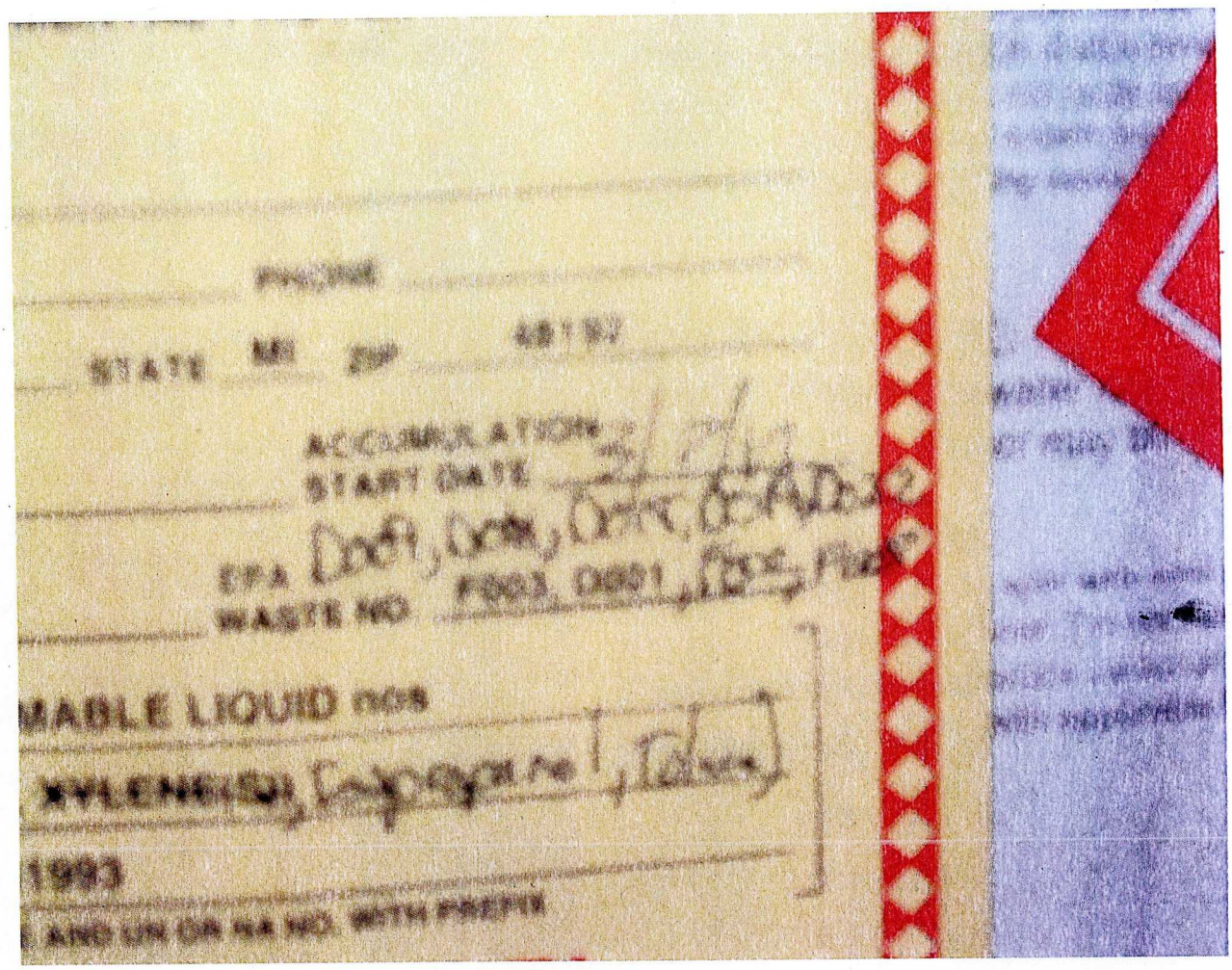
18. Another view, at the Central Hazardous Waste Container Storage Area, of the same drum (as above in photo # 17) that was labeled as "Hazardous Waste" and "D001", but did not have an accumulation start date marked on it.

BASF Corporation, Wyandotte, MI
Bryan Gangwisch, U.S. EPA 6/13-6/14/12



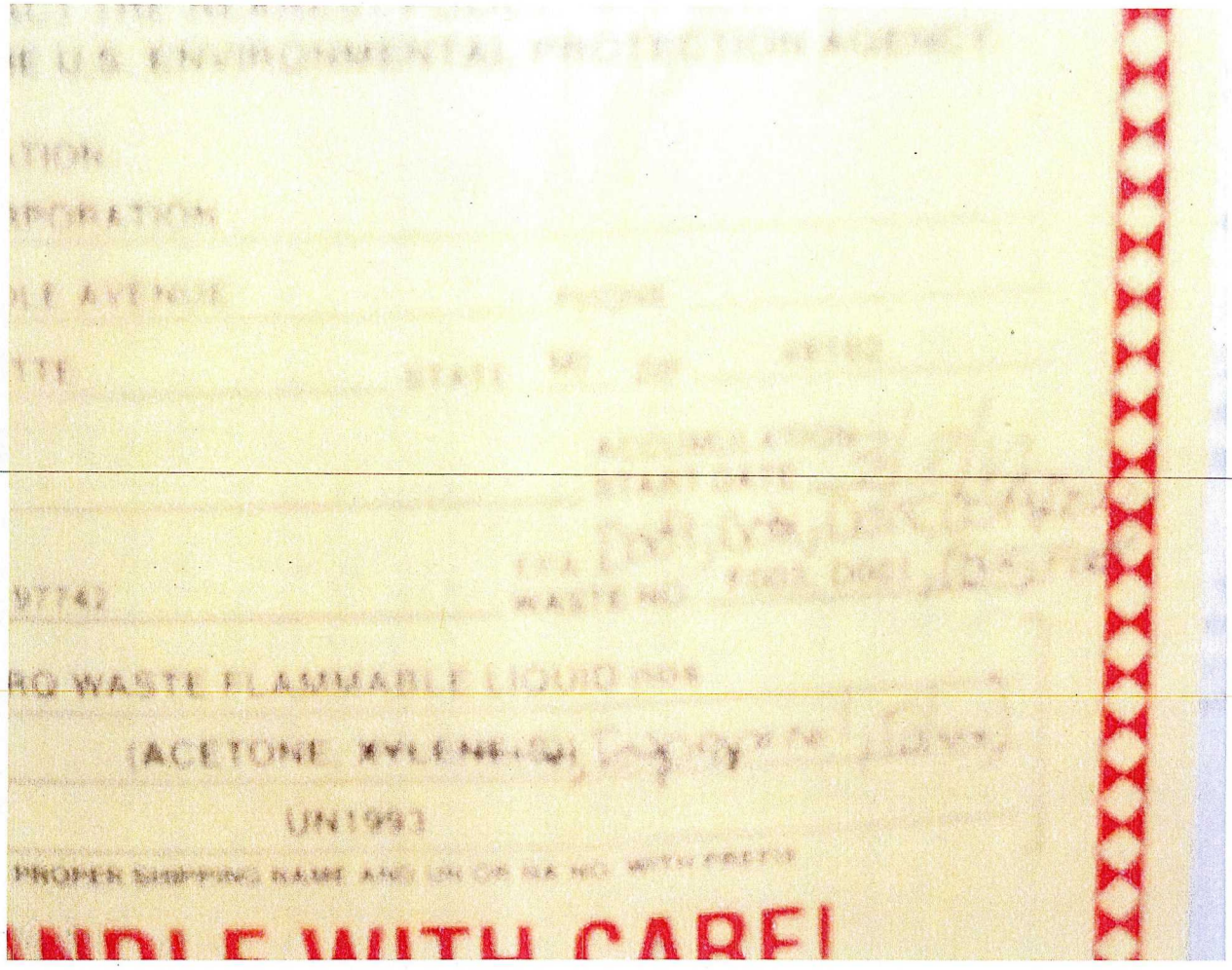
17. A view, at the Central Hazardous Waste Container Storage Area, of one of the three 55-gallon hazardous waste drums that were labeled as "Hazardous Waste" and "D001", but did not have accumulation start dates marked on them.

BASF Corporation, Wyandotte, MI
Bryan Gangwisch, U.S. EPA 6/13-6/14/12



16. Another view, at the Central Hazardous Waste Container Storage Area, of the same (as above in photos # 12, # 13 and # 14) 55-gallon hazardous waste drum that was labeled as "Hazardous Waste" and "D001, D009, D011, D018, D019, D022, F002, F003, and was dated 3/7/12 (98 total days in accumulation = 8 days over the allowable limit).

BASF Corporation, Wyandotte, MI
Bryan Gangwisch, U.S. EPA 6/13-6/14/12



15. Another view, at the Central Hazardous Waste Container Storage Area, of the same (as above in photos # 12, # 13 and # 14) 55-gallon hazardous waste drum that was labeled as "Hazardous Waste" and "D001, D009, D011, D018, D019, D022, F002, F003, and was dated 3/7/12 (98 total days in accumulation = 8 days over the allowable limit).

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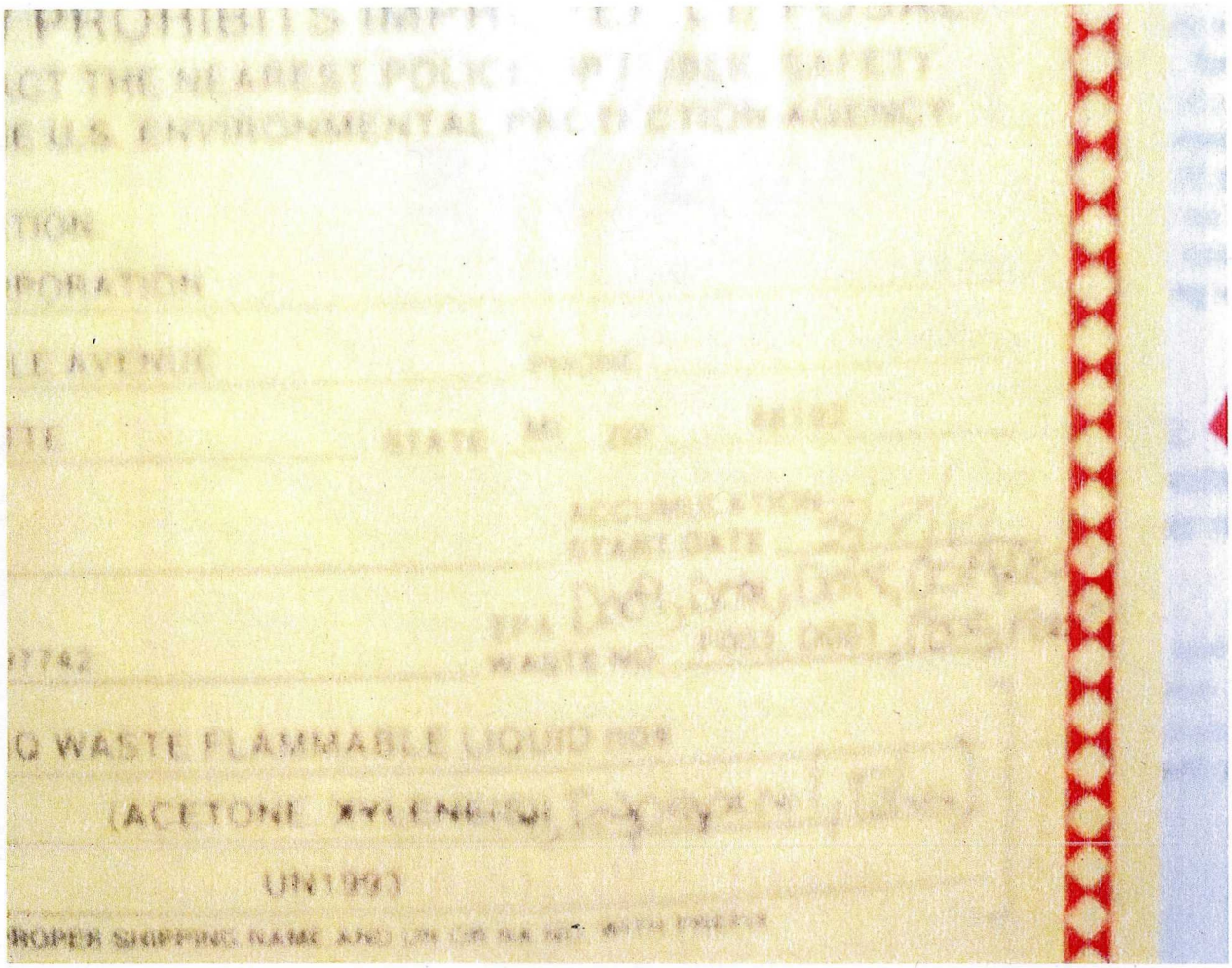

14. Another view, at the Central Hazardous Waste Container Storage Area, of the same (as above in photos # 12 and # 13) 55-gallon hazardous waste drum that was labeled as "Hazardous Waste" and "D001, D009, D011, D018, D019, D022, F002, F003, and was dated 3/7/12 (98 total days in accumulation = 8 days over the allowable limit).

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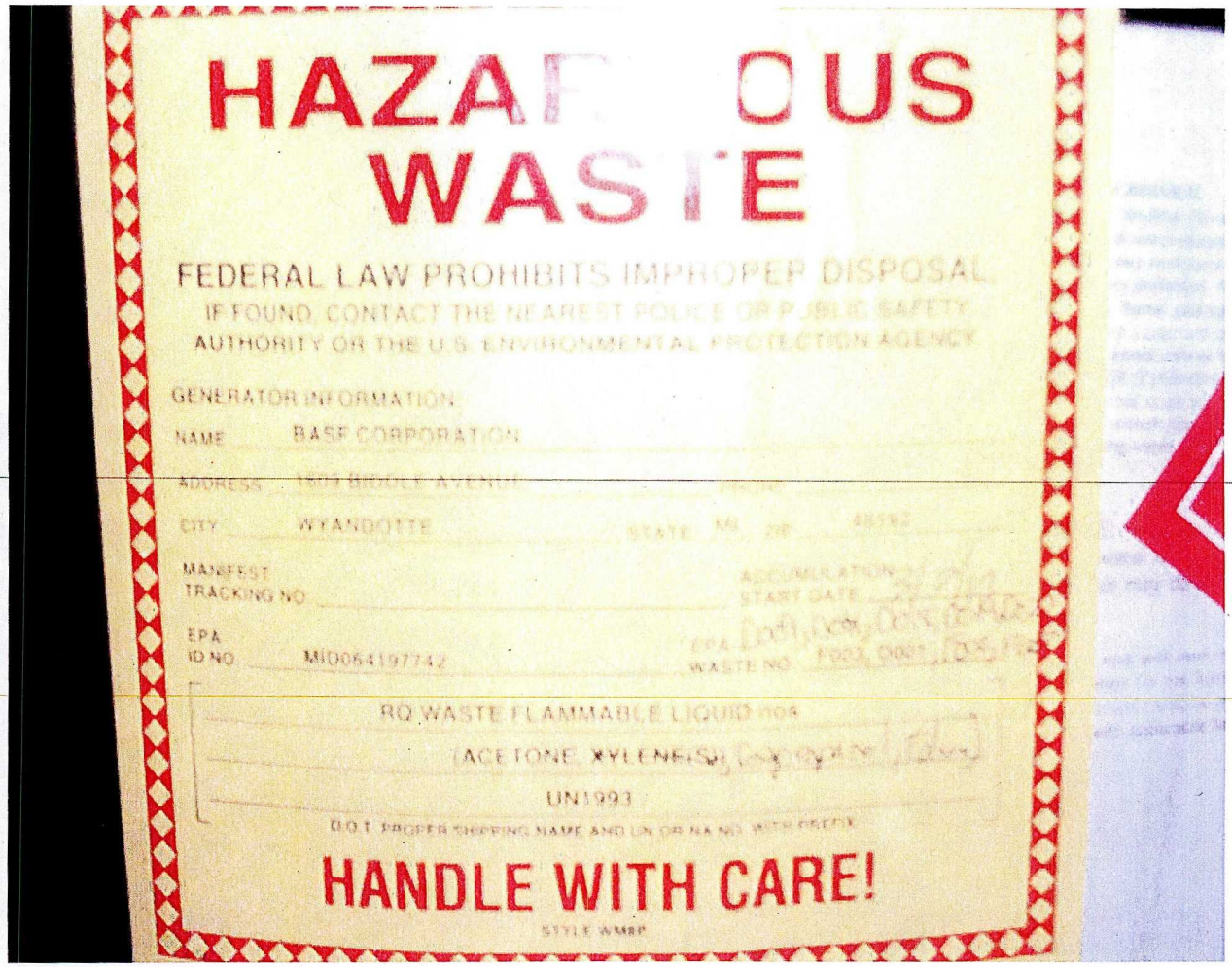

13. Another view, at the Central Hazardous Waste Container Storage Area, of the same (as above in photo # 12) 55-gallon hazardous waste drum that was labeled as "Hazardous Waste" and "D001, D009, D011, D018, D019, D022, F002, F003, and was dated 3/7/12 (98 total days in accumulation = 8 days over the allowable limit).

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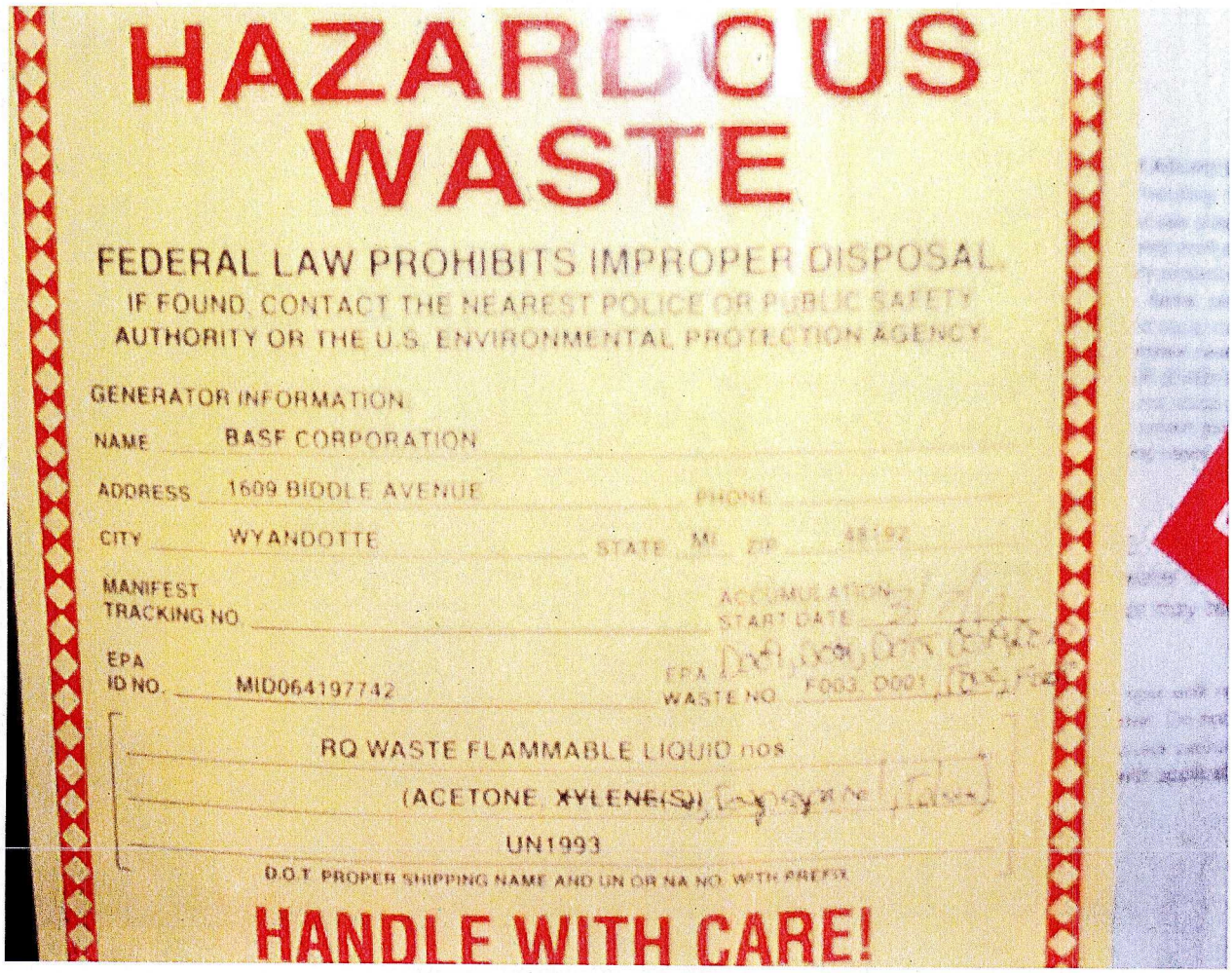

12. A view, at the Central Hazardous Waste Container Storage Area, of one 55-gallon hazardous waste drum that was labeled as "Hazardous Waste" and "D001, D009, D011, D018, D019, D022, F002, F003, and was dated 3/7/12 (98 total days in accumulation = 8 days over the allowable limit).

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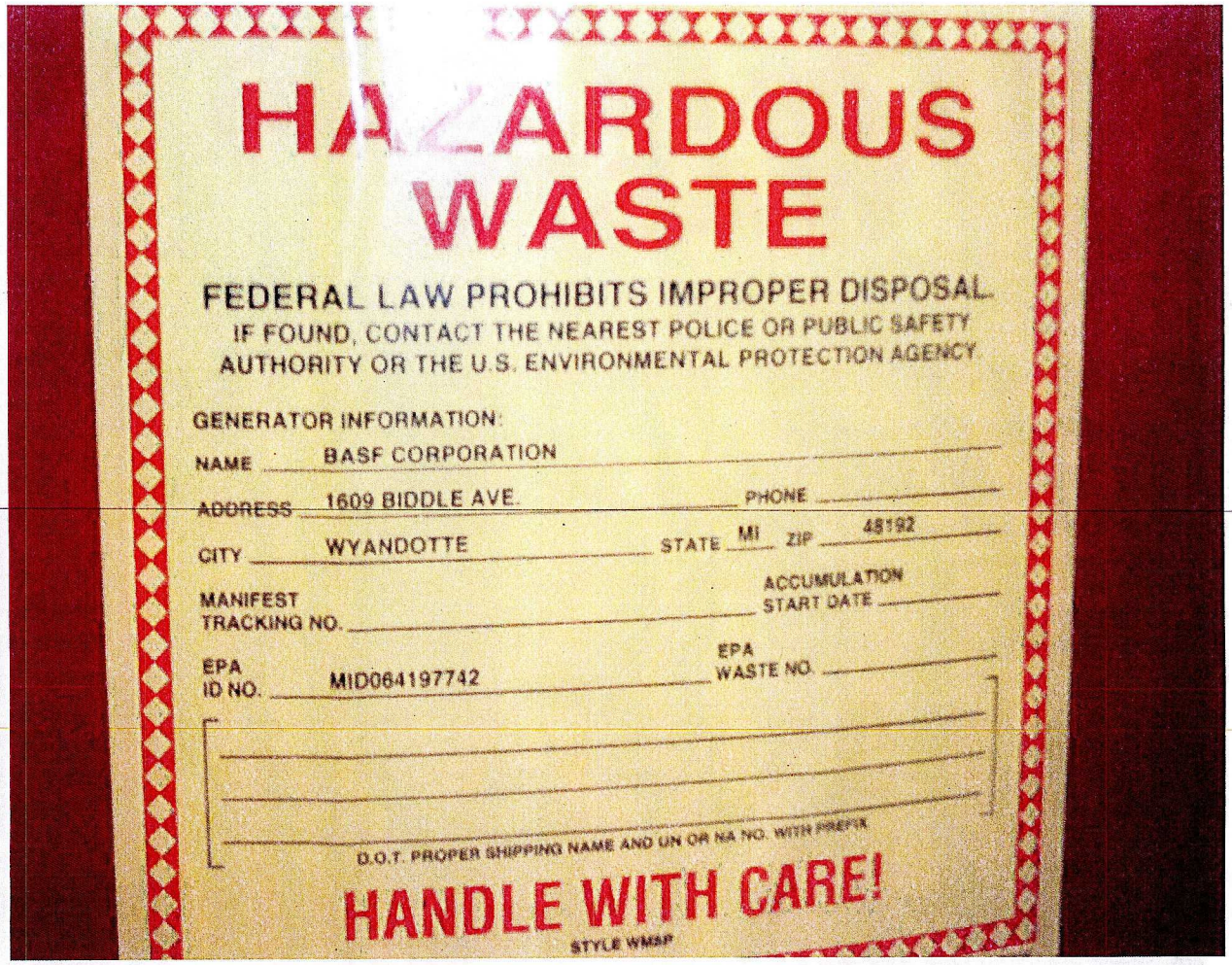

11. A view, at the Central Hazardous Waste Container Storage Area, on the almost exclusively non-hazardous waste storage side of the waste storage area, of one 55-gallon hazardous waste drum that was labeled as "Hazardous Waste", but did not have the applicable hazardous waste codes marked on it, and did not have an accumulation start date marked on it.

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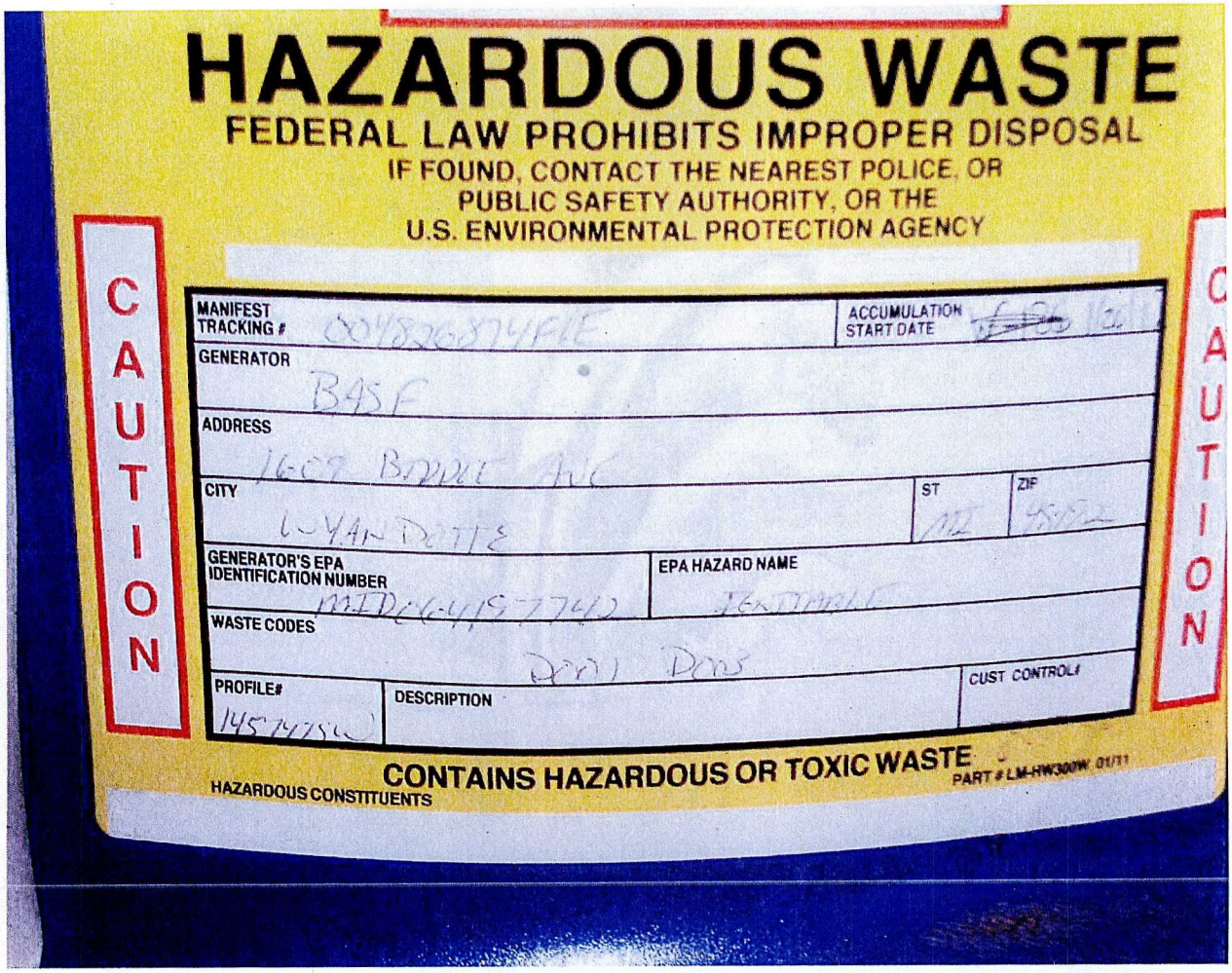

10. Another view, at the Central Hazardous Waste Container Storage Area, of the same (as above in photos # 7, # 8 and # 9) 55-gallon hazardous waste drum that had been rejected and returned by Clean Harbors as stated by Chris Gilbert (full-time on-site Waste Management Contractor to BASF).

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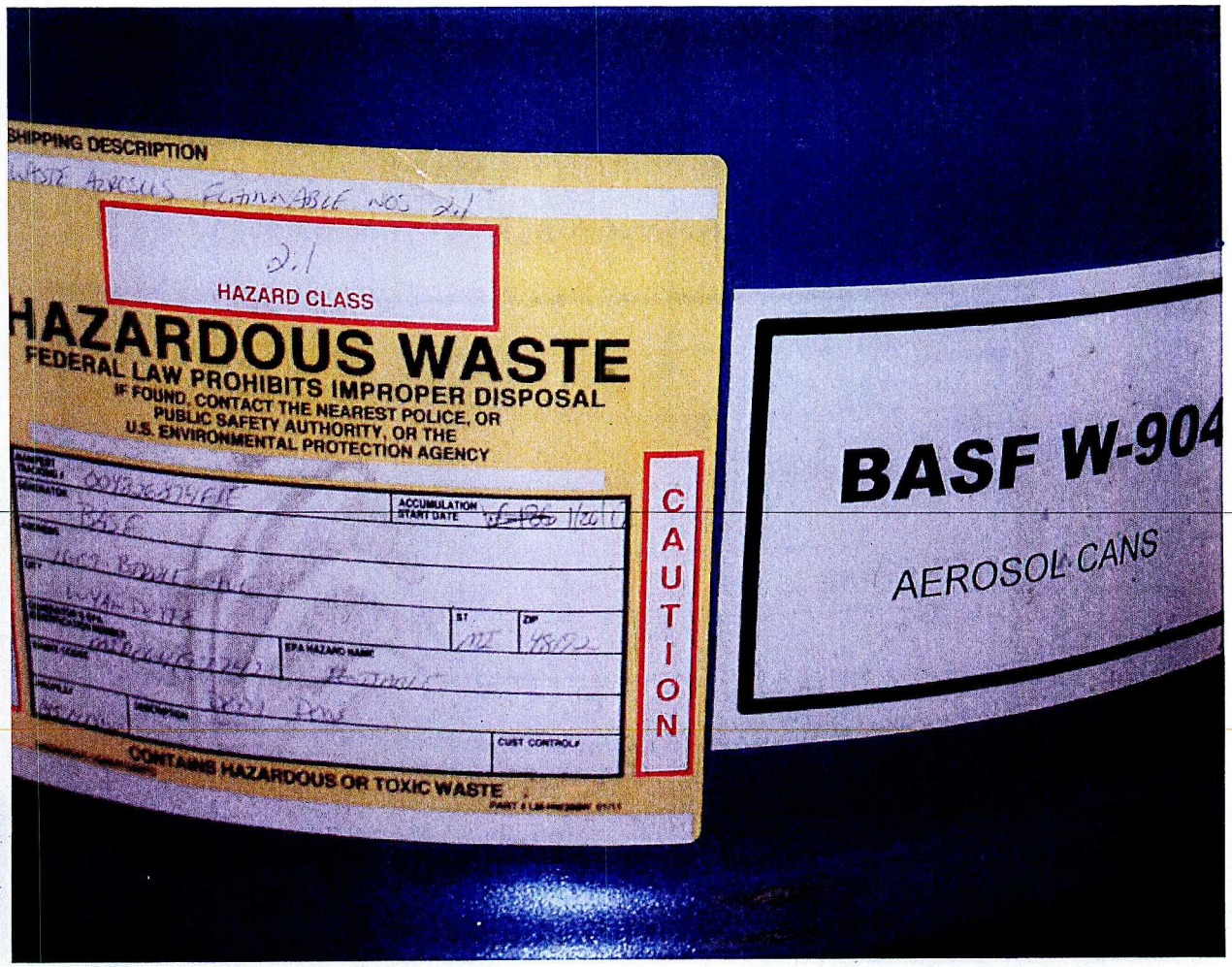

9. Another view, at the Central Hazardous Waste Container Storage Area, of the same (as above in photos # 7 and # 8) 55-gallon hazardous waste drum that had been rejected and returned by Clean Harbors as stated by Chris Gilbert (full-time on-site Waste Management Contractor to BASF).

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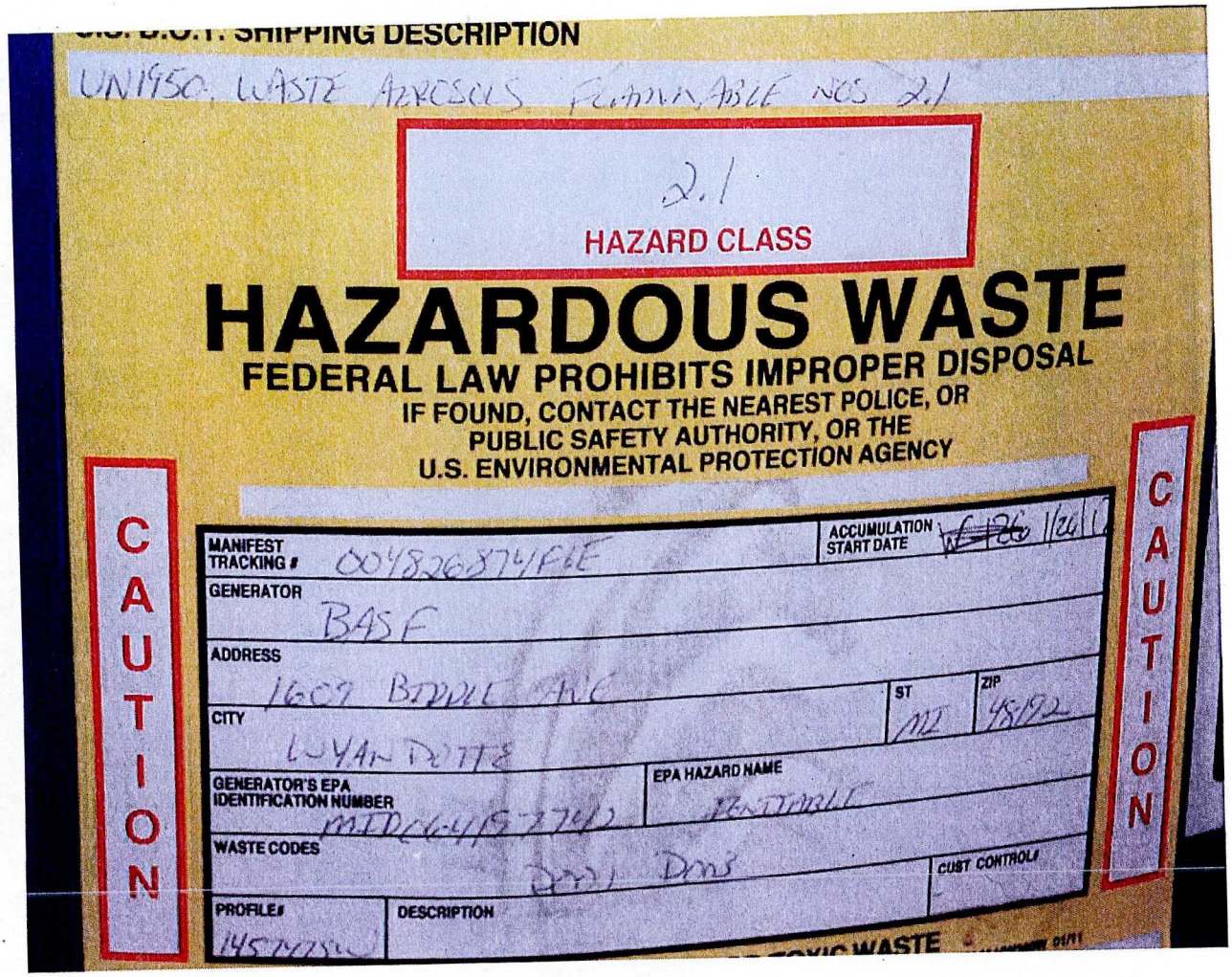

8. Another view, at the Central Hazardous Waste Container Storage Area, of the same (as above in photo # 7) 55-gallon hazardous waste drum that had been rejected and returned by Clean Harbors as stated by Chris Gilbert (full-time on-site Waste Management Contractor to BASF). The drum was labeled as "Hazardous Waste" and "Ignitable, Reactive, Aerosols D001, D003", was dated 1/26/12 (139 total days in accumulation = 49 days over the allowable limit). The label placed on the drum by Clean Harbors was dated 4/3/12.

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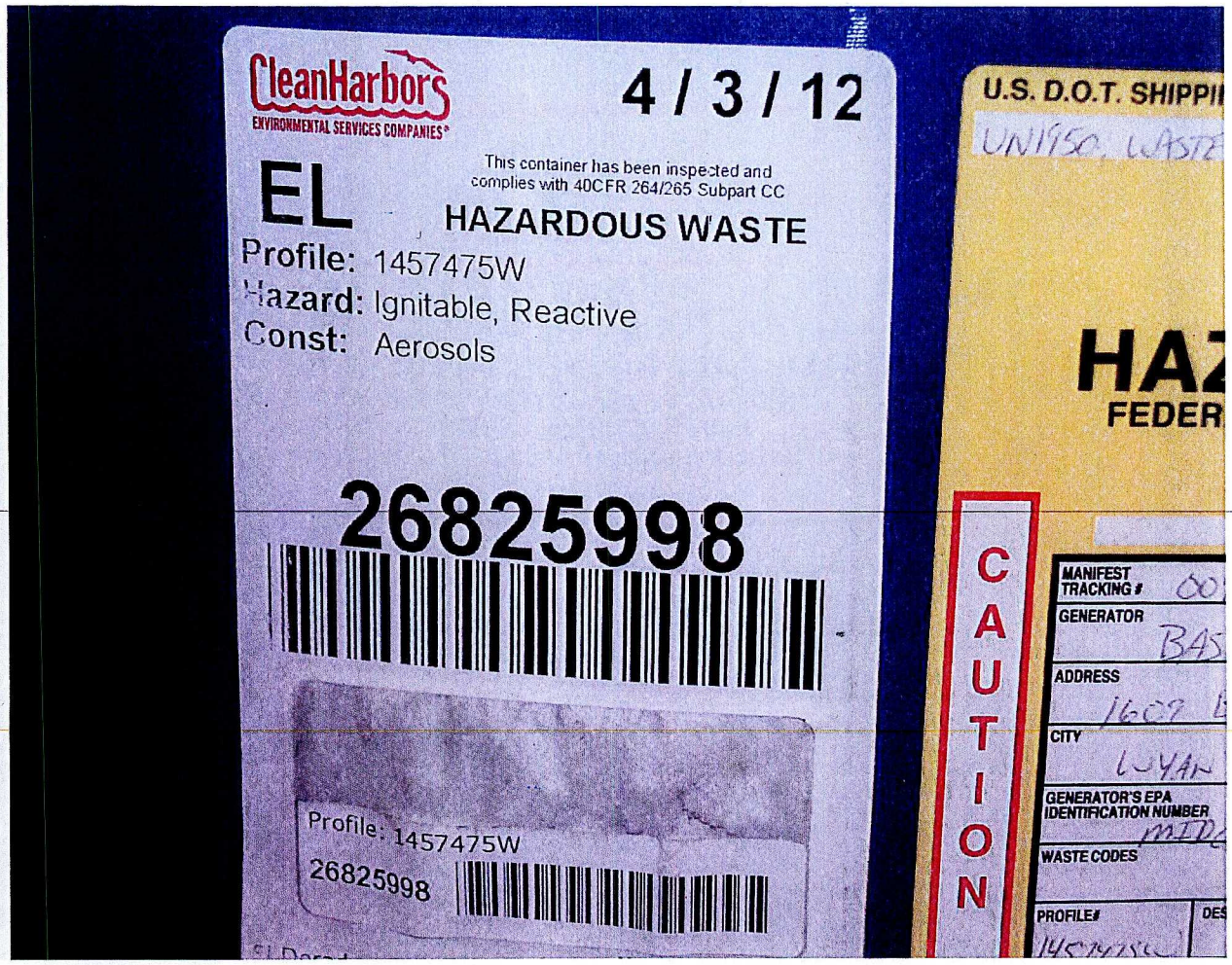

7. A view, at the Central Hazardous Waste Container Storage Area, of one 55-gallon hazardous waste drum that had been rejected and returned by Clean Harbors as stated by Chris Gilbert (full-time on-site Waste Management Contractor to BASF). The drum was labeled as "Hazardous Waste" and "Ignitable, Reactive, Aerosols D001, D003", was dated 1/26/12 (139 total days in accumulation = 49 days over the allowable limit). The label placed on the drum by Clean Harbors was dated 4/3/12.

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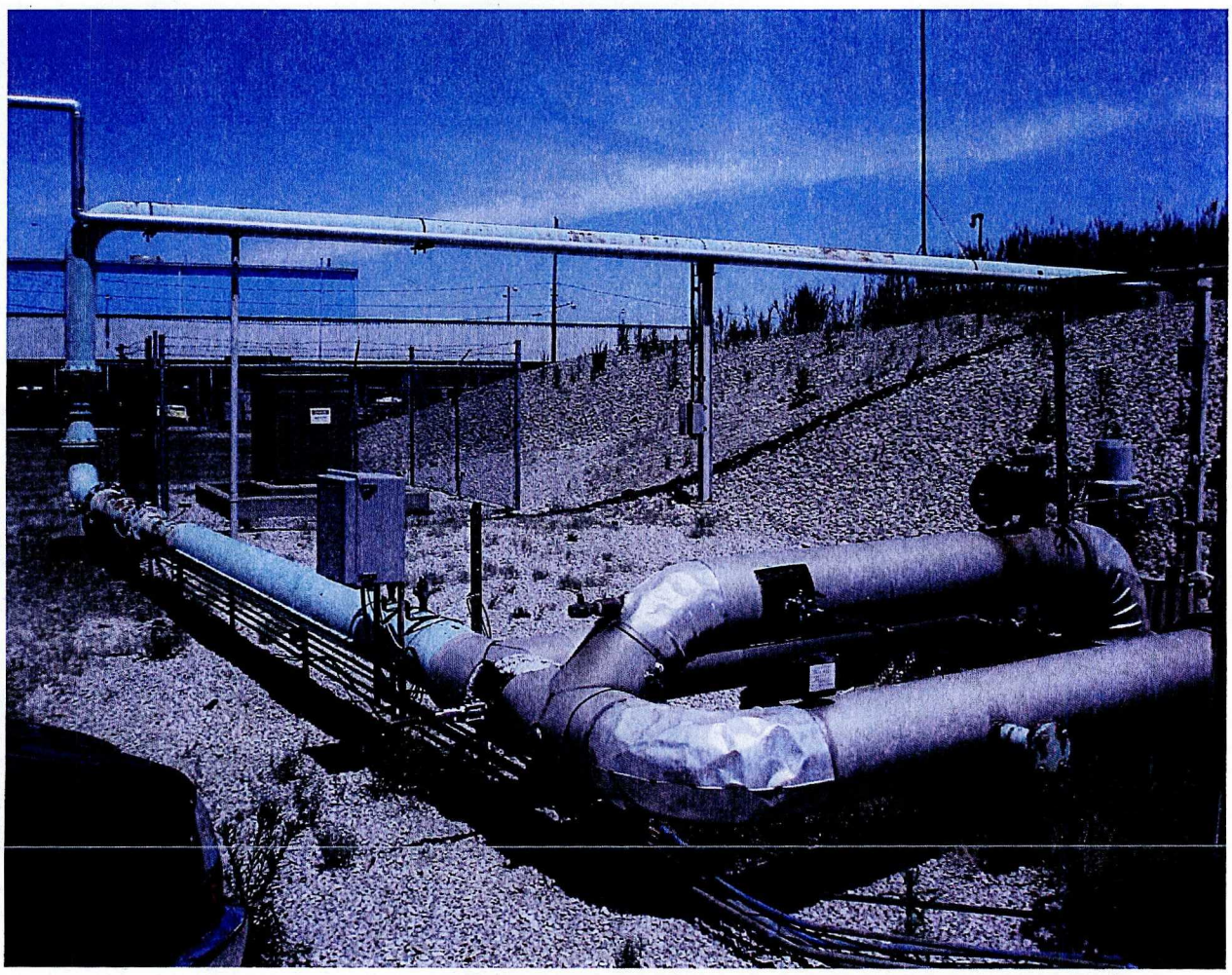

6. A view, at the Polyol Plant Pond area, of the dirty water piping run.

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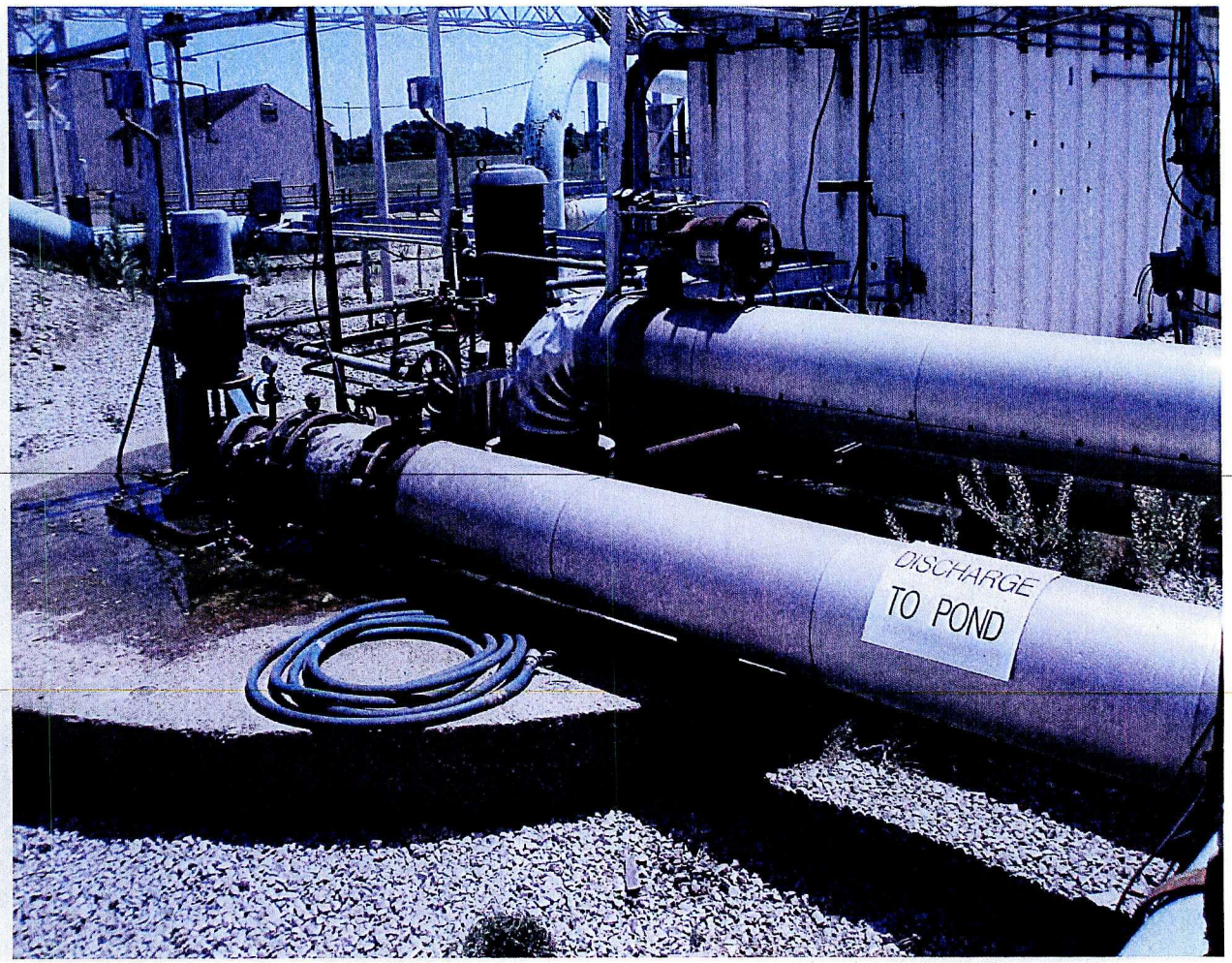
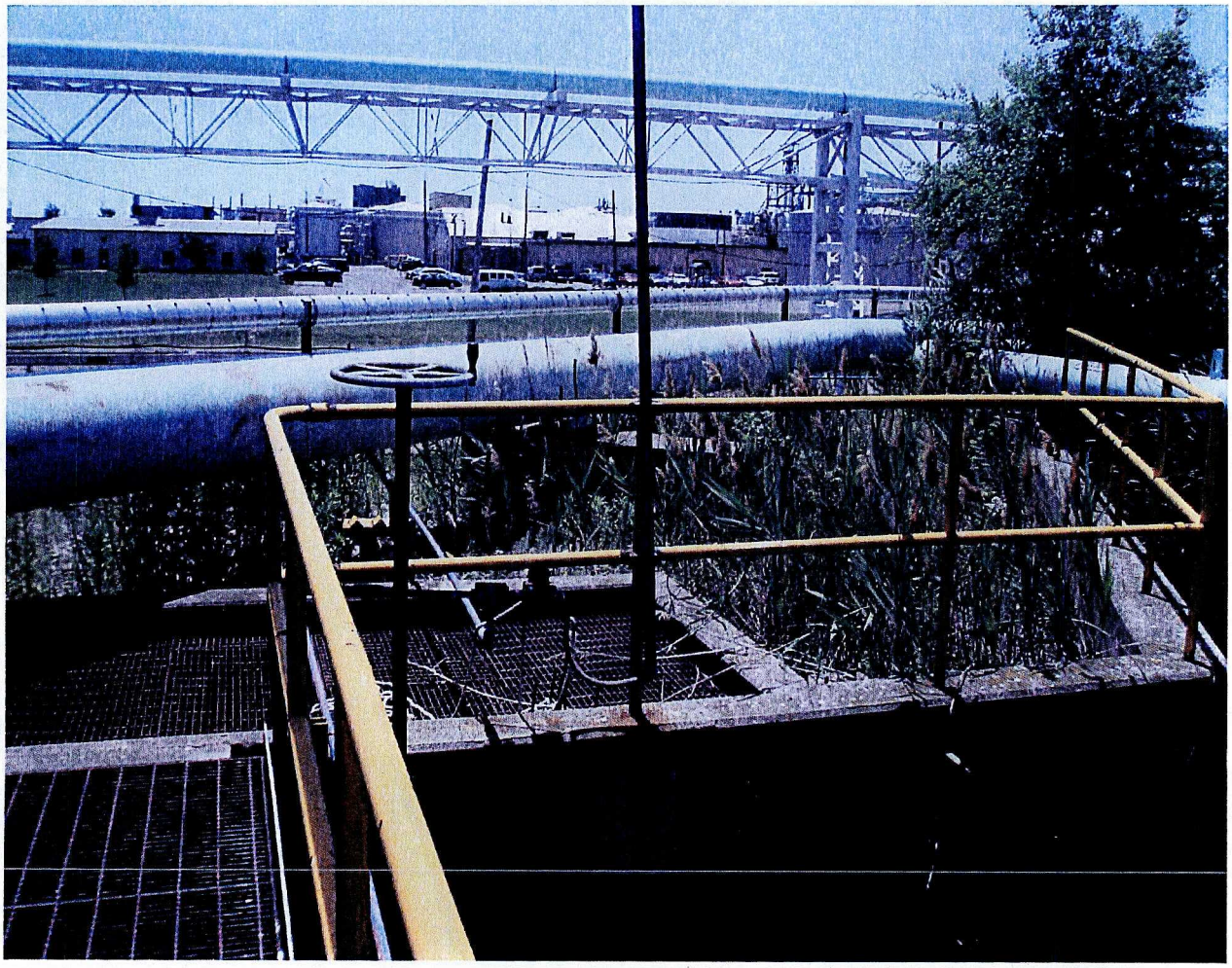
Bryan Gangwisch, U.S. EPA 6/13-6/14/12



5. A view, at the Polyol Plant Pond area, of the dirty water lift and associated piping run.

BASF Corporation, Wyandotte, MI
Bryan Gangwisch, U.S. EPA 6/13-6/14/12



4. A view, at the Polyol Plant Pond area, of the intake water piping run from the Detroit River.

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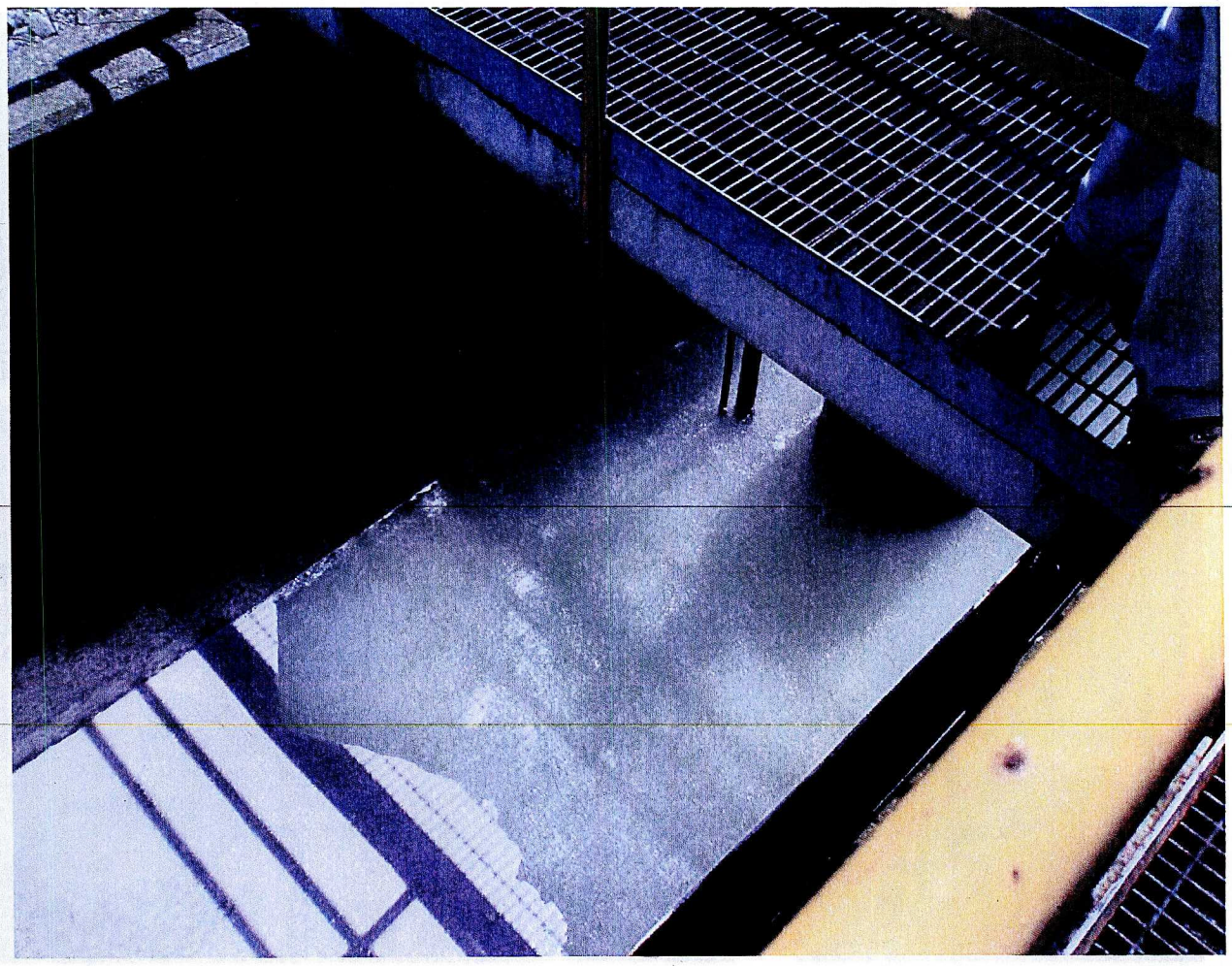

3. A view, at the Polyol Plant Pond area, of the weir box, which is where the clean and dirty water meet.

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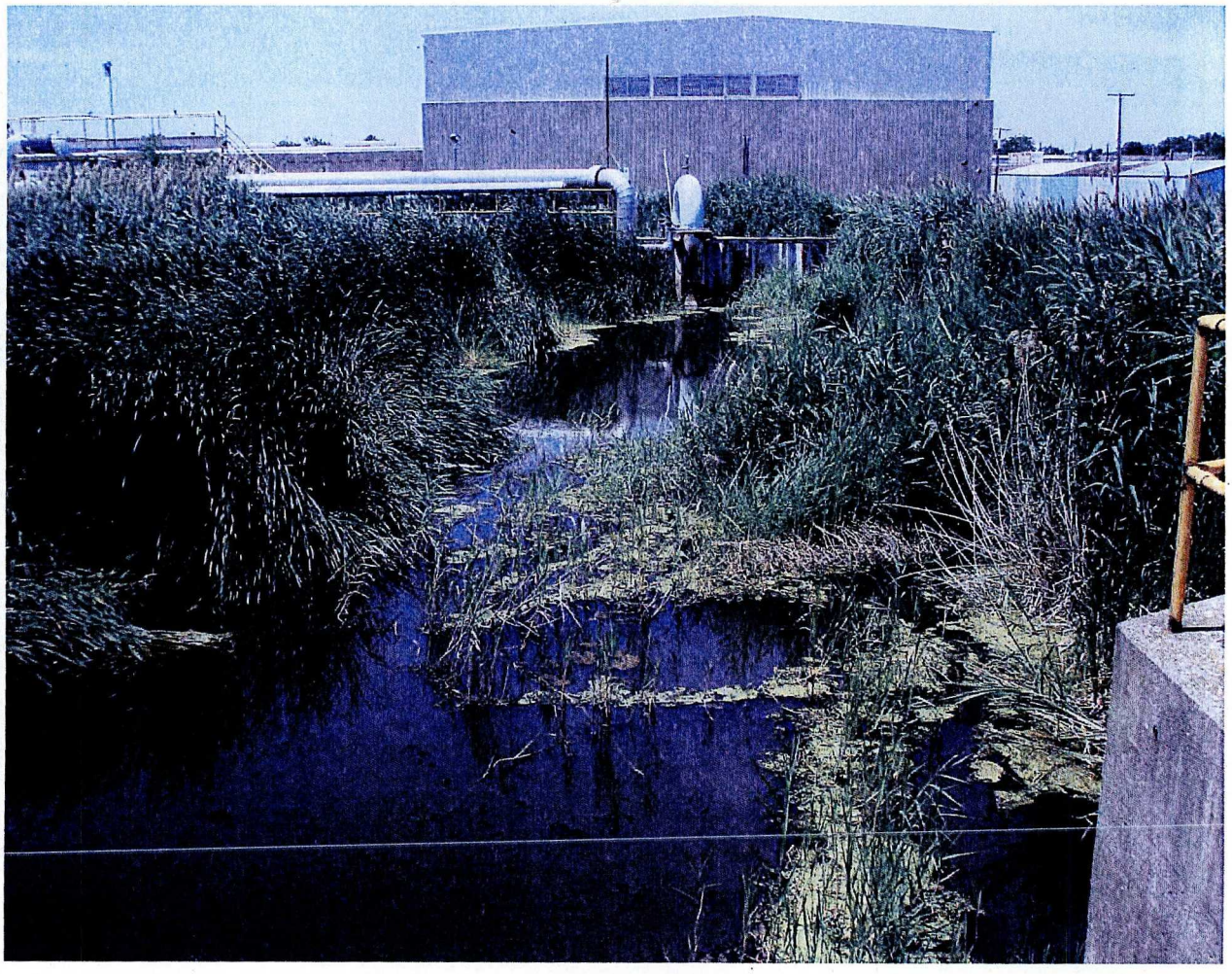
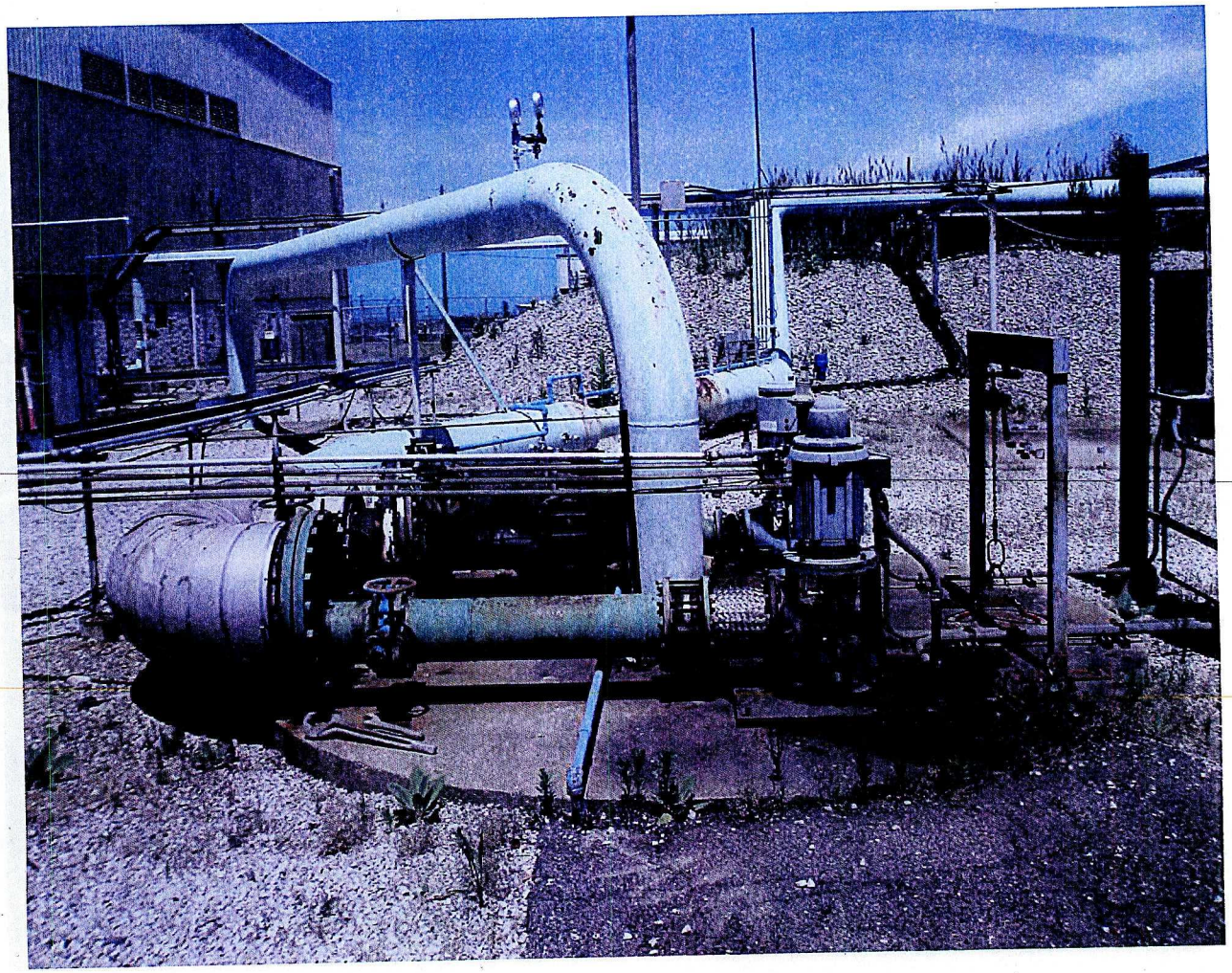
Bryan Gangwisch, U.S. EPA 6/13-6/14/12



2. A view, at the Polyol Plant Pond area, of the East Side of the Pond.

BASF Corporation, Wyandotte, MI
Bryan Gangwisch, U.S. EPA 6/13-6/14/12



1. A view, at the Polyol Plant Pond area, of the clean water lift.

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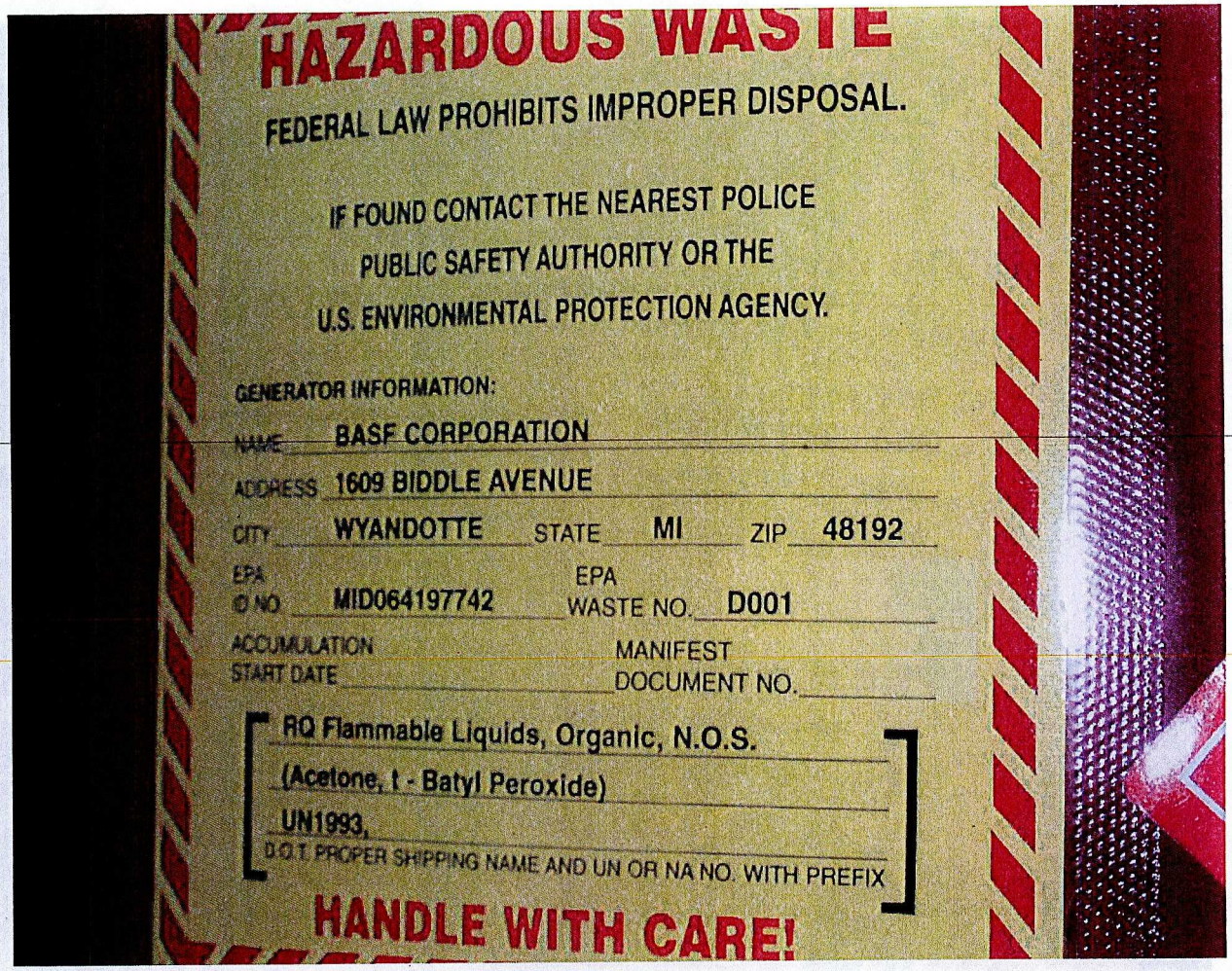

19. A view, at the Central Hazardous Waste Container Storage Area, of one of the three 55-gallon hazardous waste drums that were labeled as "Hazardous Waste" and "D001", but did not have accumulation start dates marked on them.

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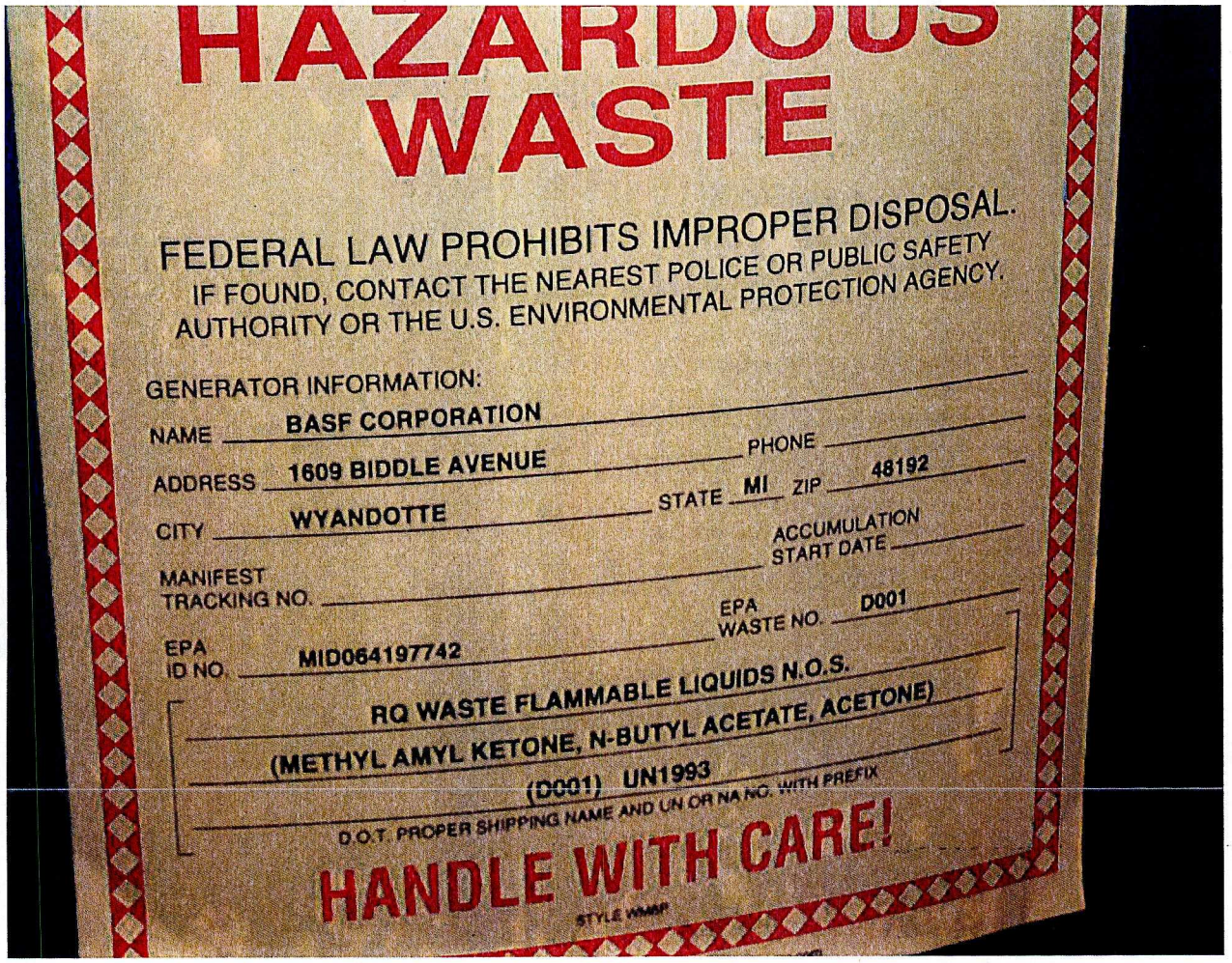

20. A view, at the Central Hazardous Waste Container Storage Area, of one of the three 55-gallon hazardous waste drums that were labeled as "Hazardous Waste" and "D001", but did not have accumulation start dates marked on them.

BASF Corporation, Wyandotte, MI
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21. Another view (bottom right drum), at the Central Hazardous Waste Container Storage Area, of the same drum (as above in photo # 20) that was labeled as "Hazardous Waste" and "D001", but did not have an accumulation start date marked on it.

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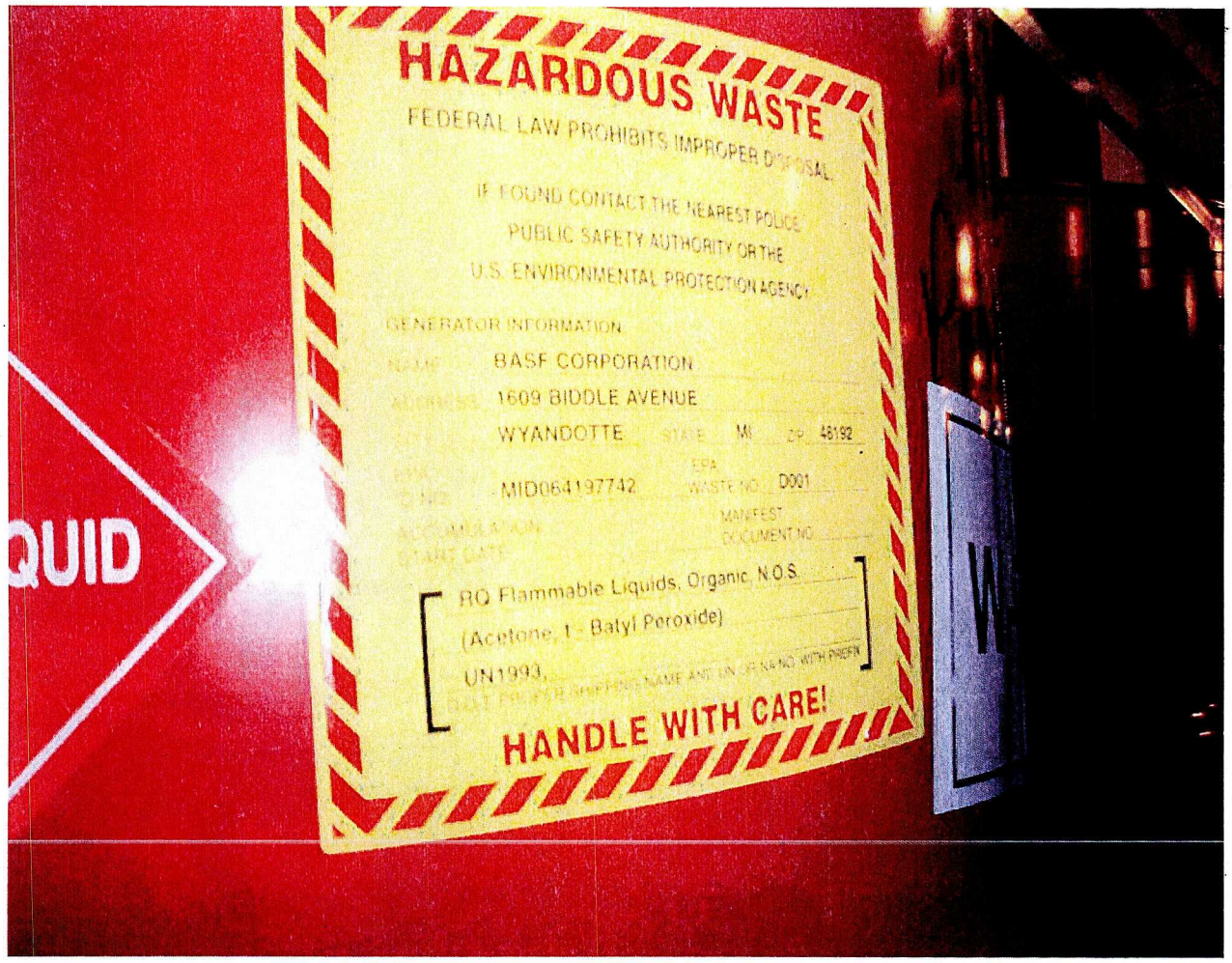

22. A view, at the Central Hazardous Waste Container Storage Area, of one of the three 55-gallon hazardous waste drums that were labeled as "Hazardous Waste" and "D001", but did not have accumulation start dates marked on them.

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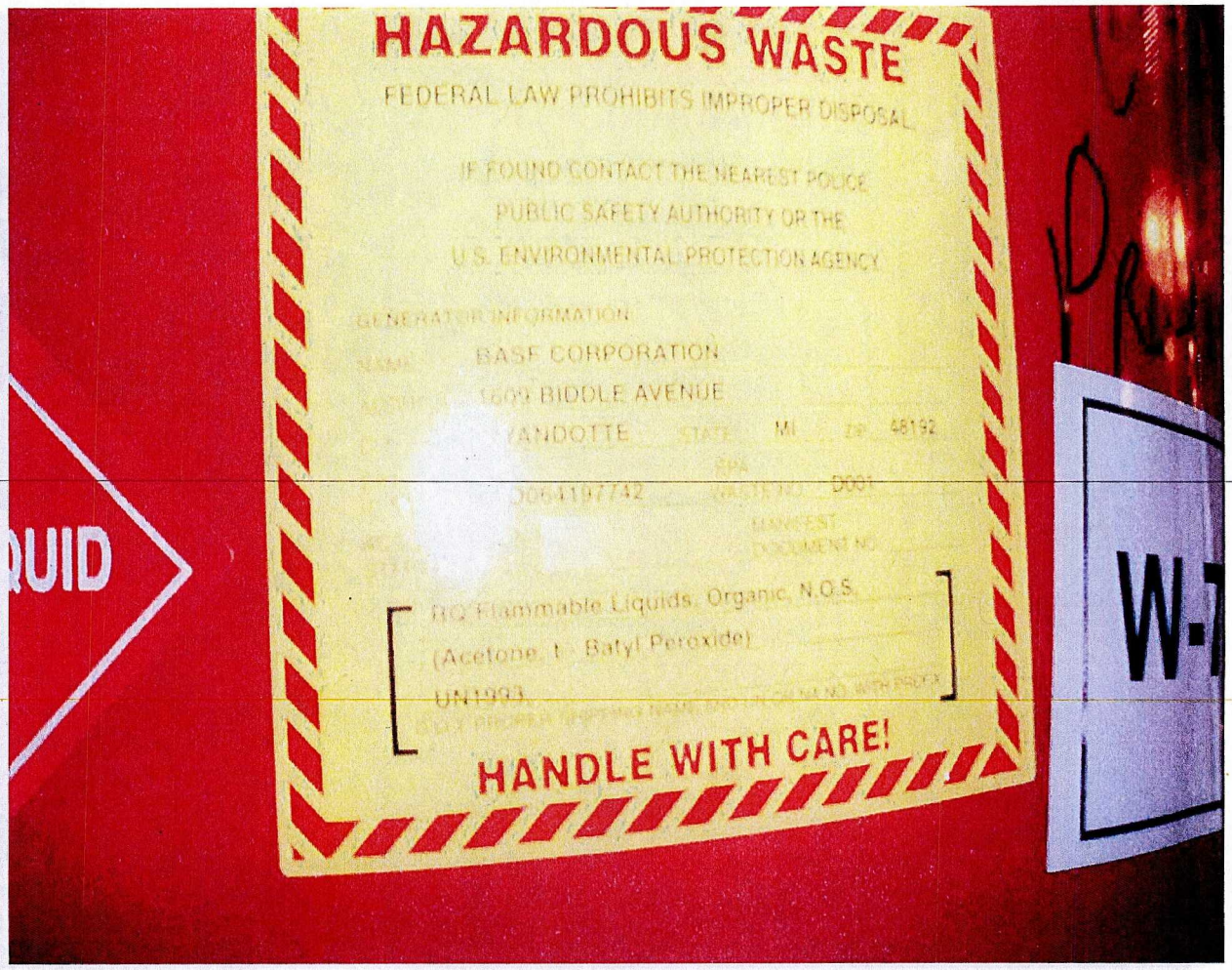

23. Another view, at the Central Hazardous Waste Container Storage Area, of the same drum (as above in photo # 22) that was labeled as "Hazardous Waste" and "D001", but did not have an accumulation start date marked on it.

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24. Another view, at the Central Hazardous Waste Container Storage Area, of the same drum (as above in photos # 22 and # 23) that was labeled as "Hazardous Waste" and "D001", but did not have an accumulation start date marked on it.

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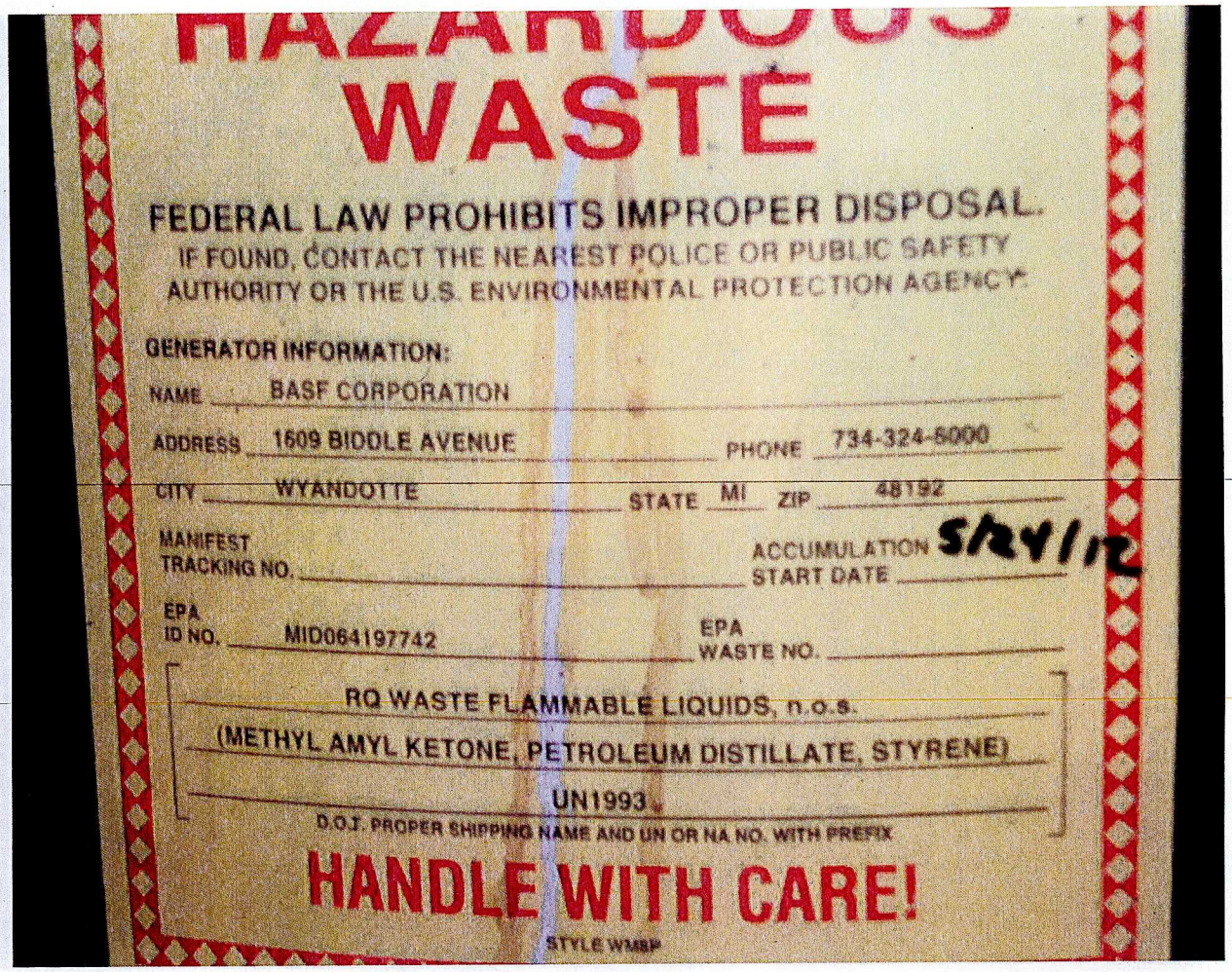

25. A view, at the Central Hazardous Waste Container Storage Area, of one 55-gallon hazardous waste drum that was labeled as "Hazardous Waste", but did not have the applicable hazardous waste codes marked on it, and was dated 5/24/12.

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26. Another view (black drum), at the Central Hazardous Waste Container Storage Area, of the same (as above in photo # 25) 55-gallon hazardous waste drum that was labeled as "Hazardous Waste", but did not have the applicable hazardous waste codes marked on it, and was dated 5/24/12.

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27. A view, at the Central Hazardous Waste Container Storage Area, of one 250-gallon tote that contained an expired wastewater treatment chemical waste as stated by Mr. Sheaves. The tote was not labeled and Mr. Sheaves stated that he was not sure if the waste in the tote was hazardous waste or non-hazardous waste.

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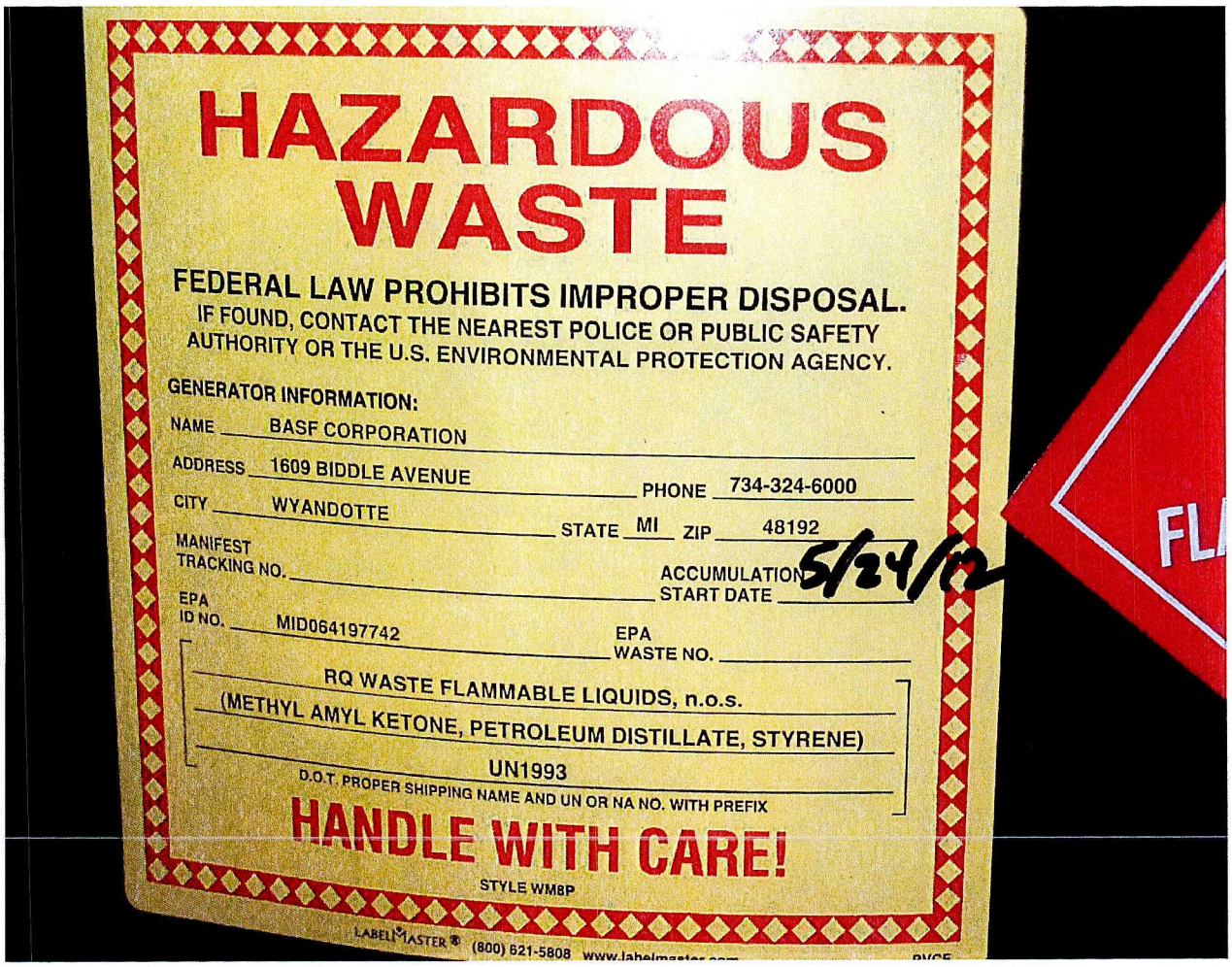

28. A view, at the Central Hazardous Waste Container Storage Area, of one 55-gallon hazardous waste drum that was labeled as "Hazardous Waste", but did not have the applicable hazardous waste codes marked on it, and was dated 5/24/12.

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29. Another view, at the Central Hazardous Waste Container Storage Area, of the same (as above in photo # 28) 55-gallon hazardous waste drum that was labeled as "Hazardous Waste", but did not have the applicable hazardous waste codes marked on it, and was dated 5/24/12.

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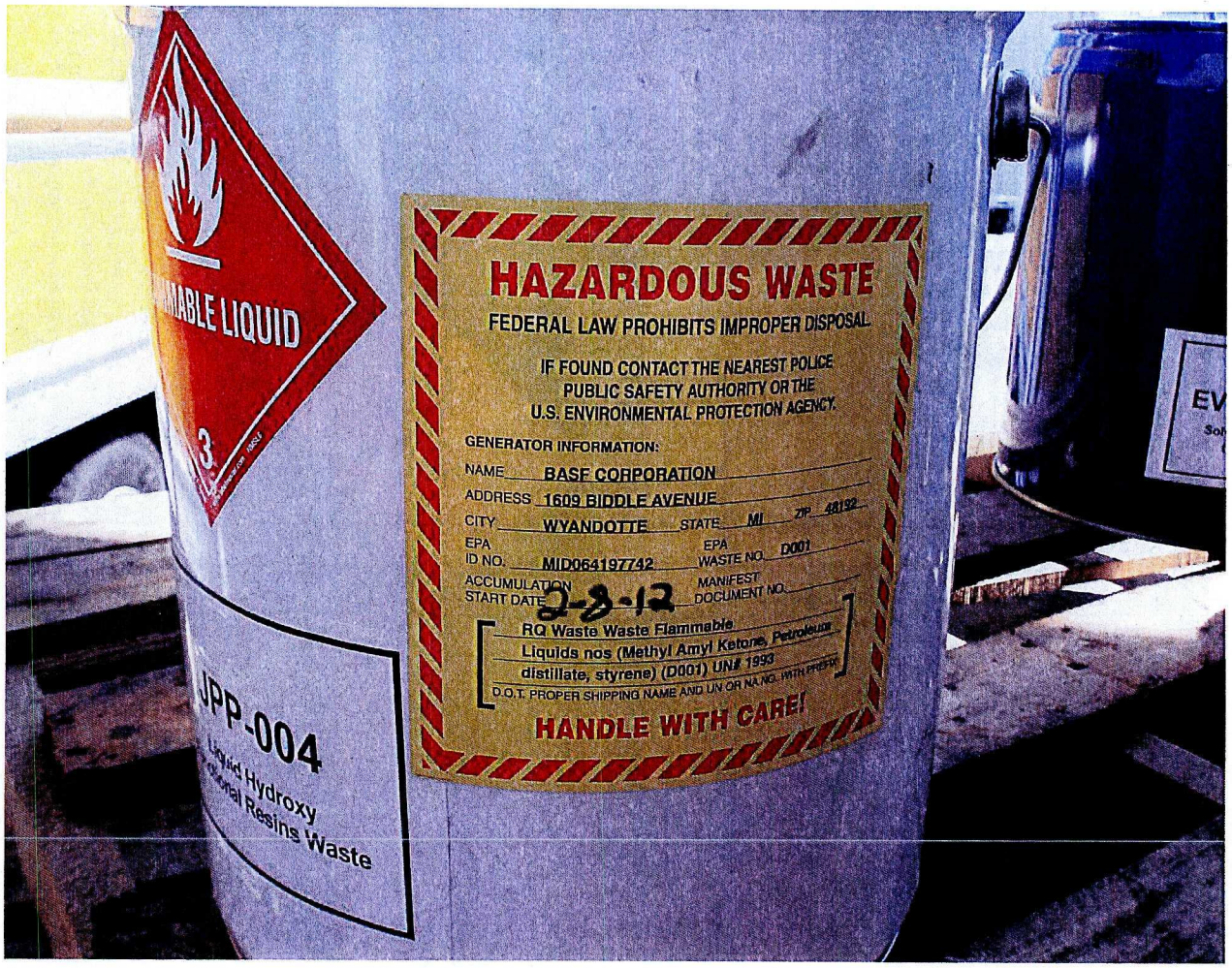

30. A view, outside of the Central Hazardous Waste Container Storage Area (after containers moved outside by BASF personnel), of one 5-gallon hazardous waste container that was labeled as "Hazardous Waste" and "D001 Methyl Amyl Ketone, Petroleum Distillate, Styrene", and was dated 2/8/12 (126 total days in accumulation = 36 days over the allowable limit).

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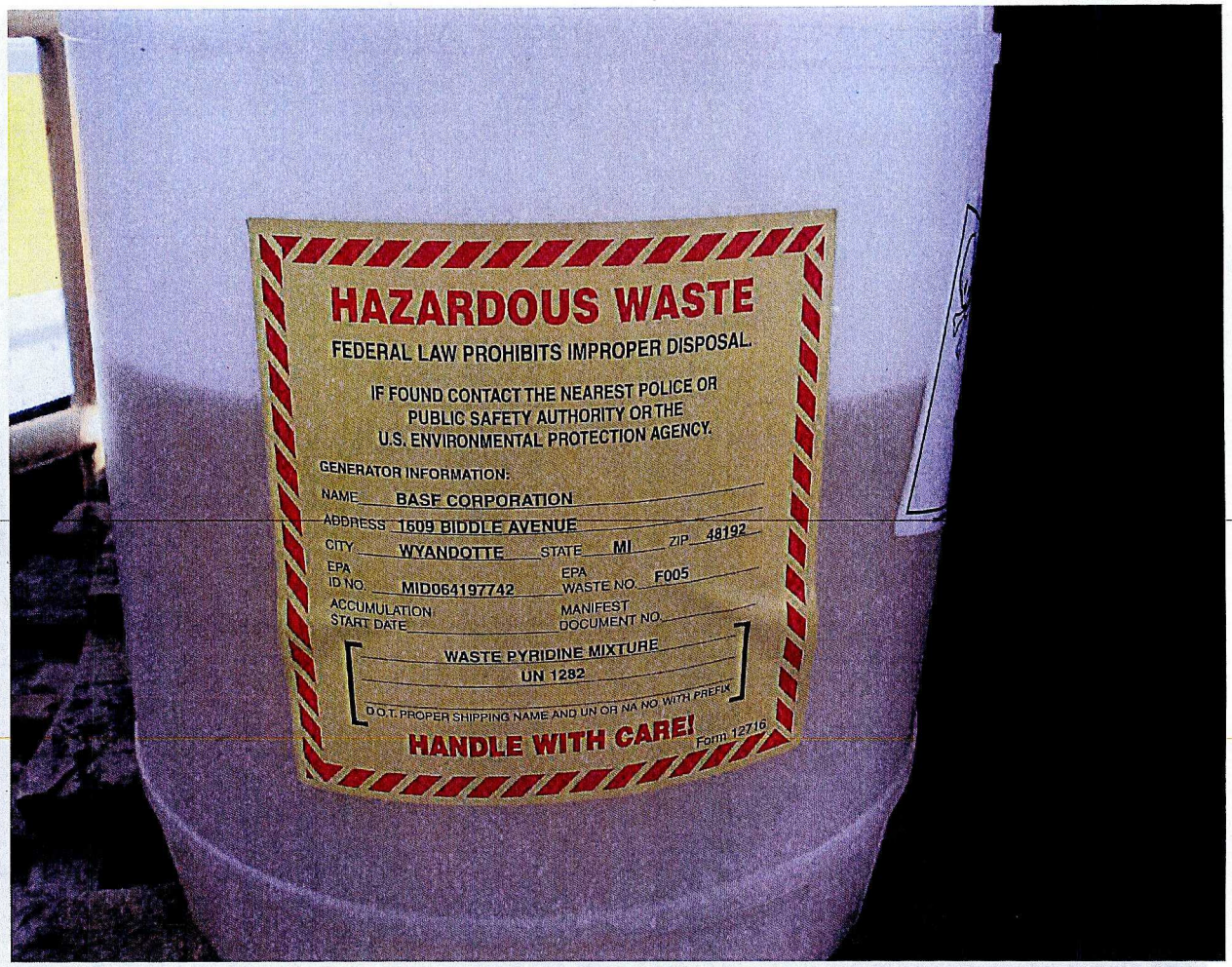

31. A view, outside of the Central Hazardous Waste Container Storage Area (after containers moved outside by BASF personnel), of one 5-gallon container that was labeled as "Hazardous Waste" and "F005 Waste Pyridine", but did not have an accumulation start date marked on it.

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32. Another view, outside of the Central Hazardous Waste Container Storage Area (after containers moved outside by BASF personnel), of the same (as above in photos # 30 and # 31) two hazardous waste 5-gallon containers.

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33. Another view, outside of the Central Hazardous Waste Container Storage Area (after containers moved outside by BASF personnel), of the same (as above in photos # 30 and # 32) 5-gallon hazardous waste container that was labeled as "Hazardous Waste" and "D001 Methyl Amyl Ketone, Petroleum Distillate, Styrene", and was dated 2/8/12 (126 total days in accumulation = 36 days over the allowable limit).

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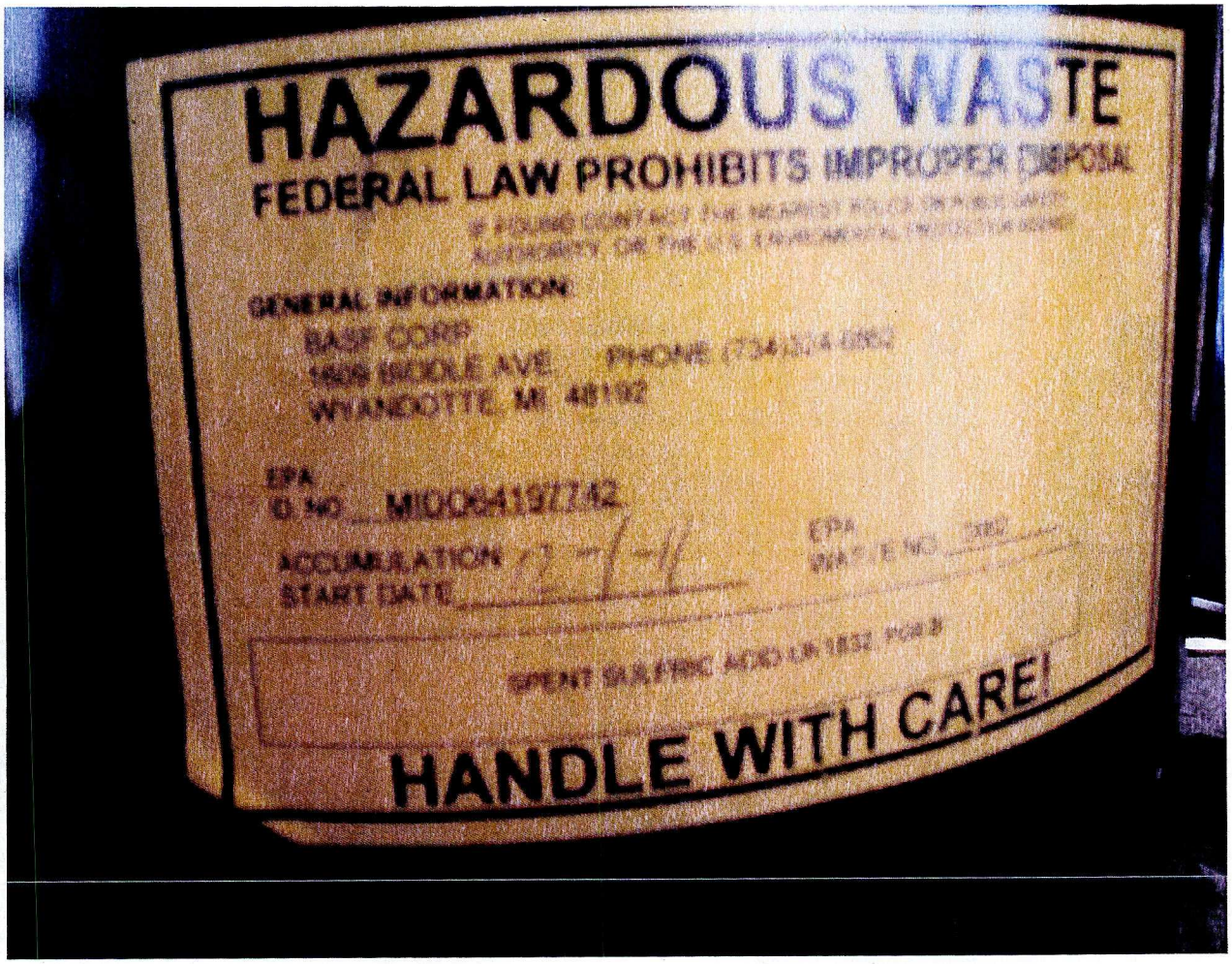
Bryan Gangwisch, U.S. EPA 6/13-6/14/12



34. A view, outside of the Central Hazardous Waste Container Storage Area (after containers moved outside by BASF personnel), of one 5-gallon hazardous waste container that was labeled as "Hazardous Waste" and "D002 Spent Sulfuric Acid", and was dated 12/1/11 (195 total days in accumulation = 105 days over the allowable limit).

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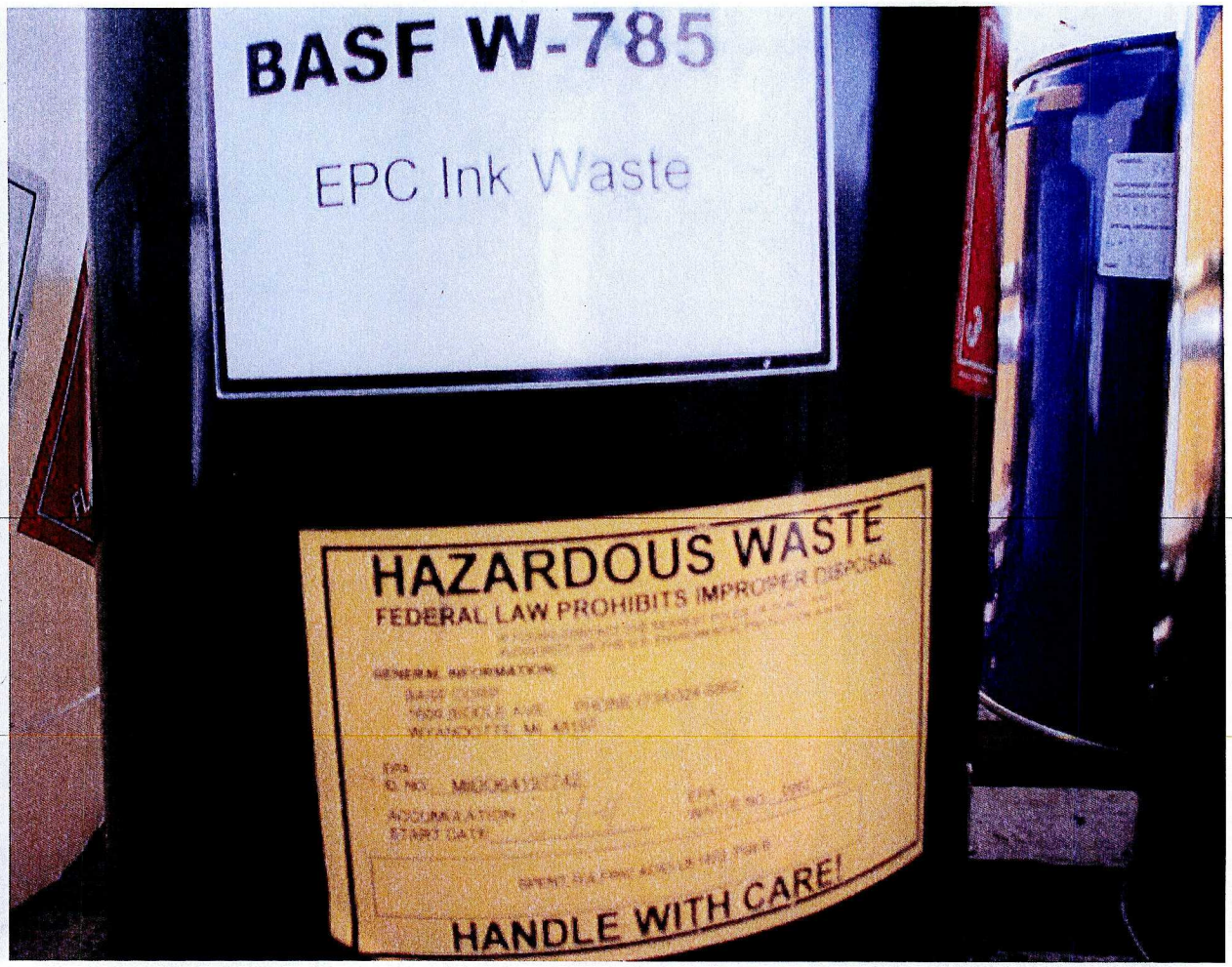

35. Another view, outside of the Central Hazardous Waste Container Storage Area (after containers moved outside by BASF personnel), of the same (as above in photo # 34) 5-gallon hazardous waste container that was labeled as "Hazardous Waste" and "D002 Spent Sulfuric Acid", and was dated 12/1/11 (195 total days in accumulation = 105 days over the allowable limit).

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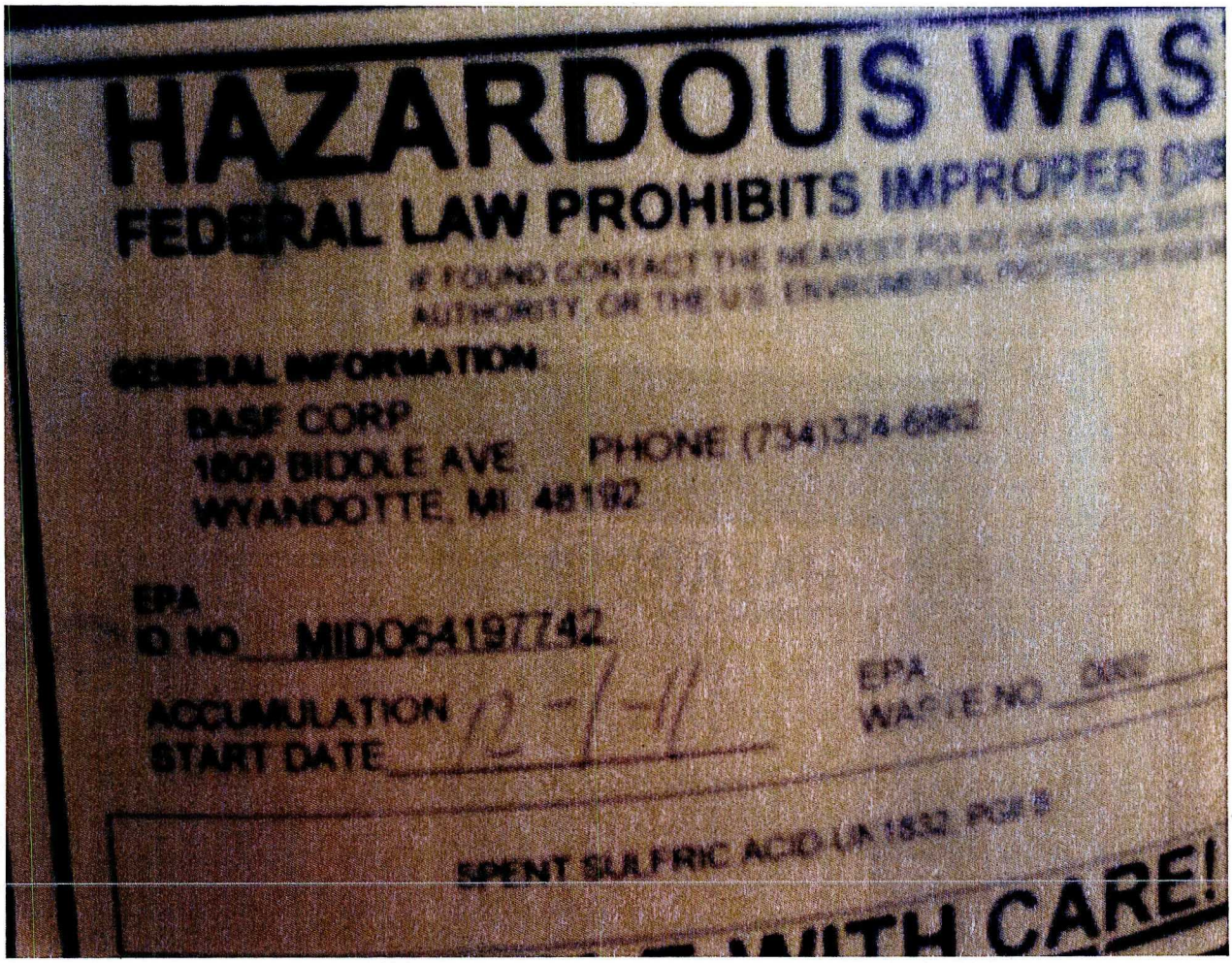
Bryan Gangwisch, U.S. EPA 6/13-6/14/12



36. Another view, outside of the Central Hazardous Waste Container Storage Area (after containers moved outside by BASF personnel), of the same (as above in photos # 34 and # 35) 5-gallon hazardous waste container that was labeled as "Hazardous Waste" and "D002 Spent Sulfuric Acid", and was dated 12/1/11 (195 total days in accumulation = 105 days over the allowable limit).

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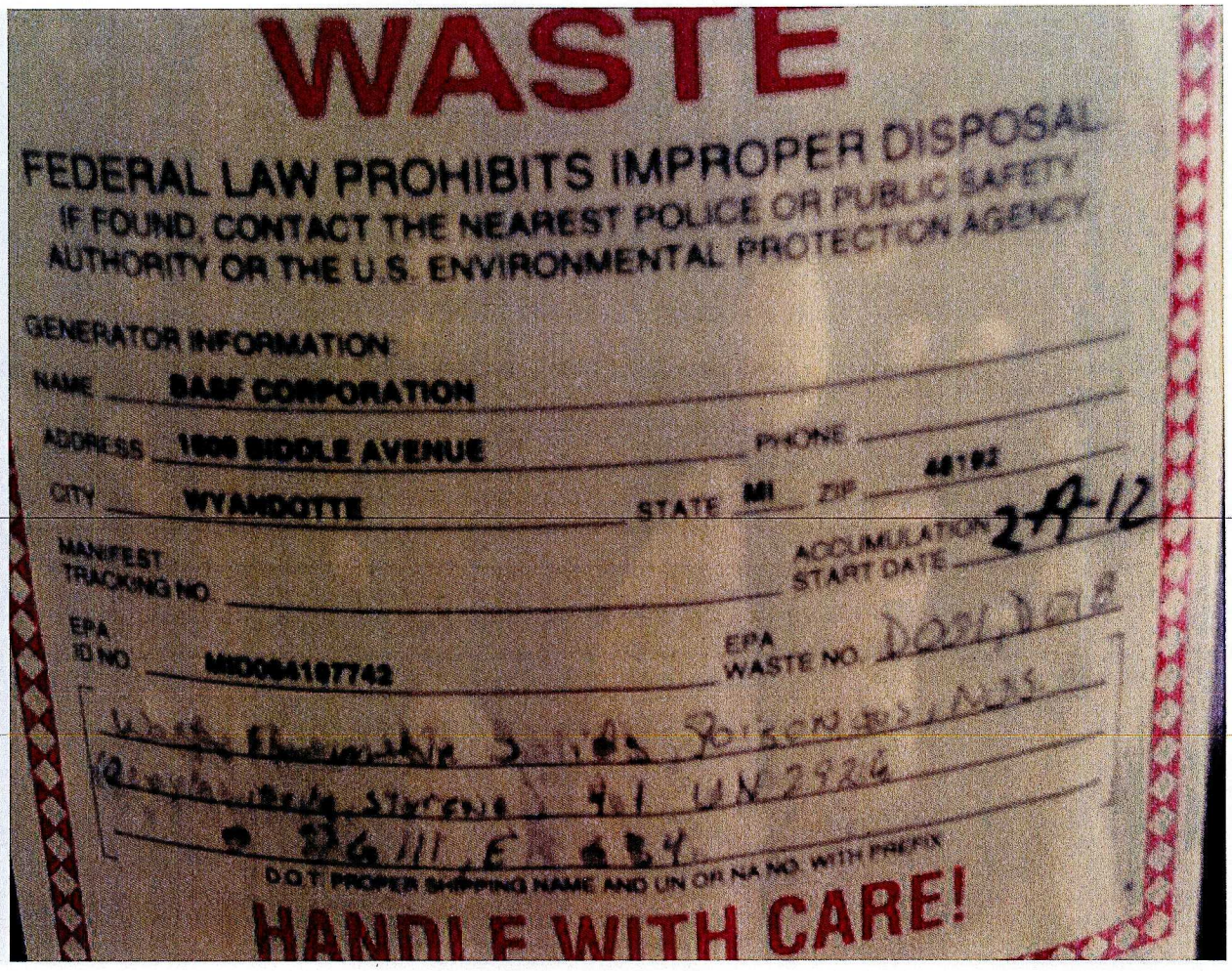
Bryan Gangwisch, U.S. EPA 6/13-6/14/12



37. A view, outside of the Central Hazardous Waste Container Storage Area (after containers moved outside by BASF personnel), of one 5-gallon hazardous waste container that was labeled as "Hazardous Waste" and "D001, D018", and was dated 2/19/12 (115 total days in accumulation = 25 days over the allowable limit).

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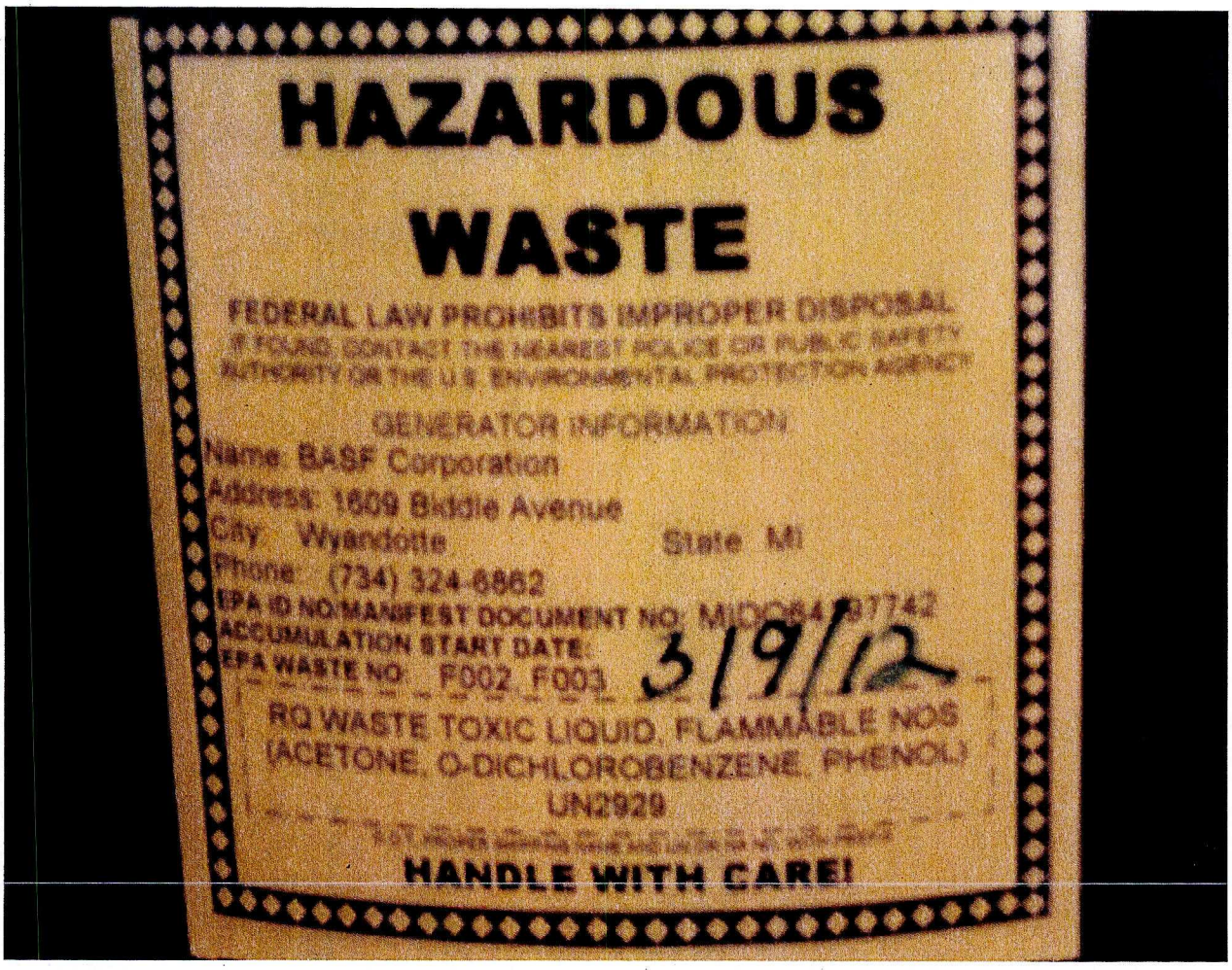
Bryan Gangwisch, U.S. EPA 6/13-6/14/12



38. A view, outside of the Central Hazardous Waste Container Storage Area (after containers moved outside by BASF personnel), of one 5-gallon hazardous waste container that was labeled as "Hazardous Waste" and "F002, F003 Acetone, o-dichlorobenzene phenol", and was dated 3/9/12 (96 total days in accumulation = 6 days over the allowable limit).

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Bryan Gangwisch, U.S. EPA 6/13-6/14/12

39. Another view, outside of the Central Hazardous Waste Container Storage Area (after containers moved outside by BASF personnel), of the same (as above in photos # 34, # 35, # 36, # 37, and # 38) three hazardous waste 5-gallon containers.

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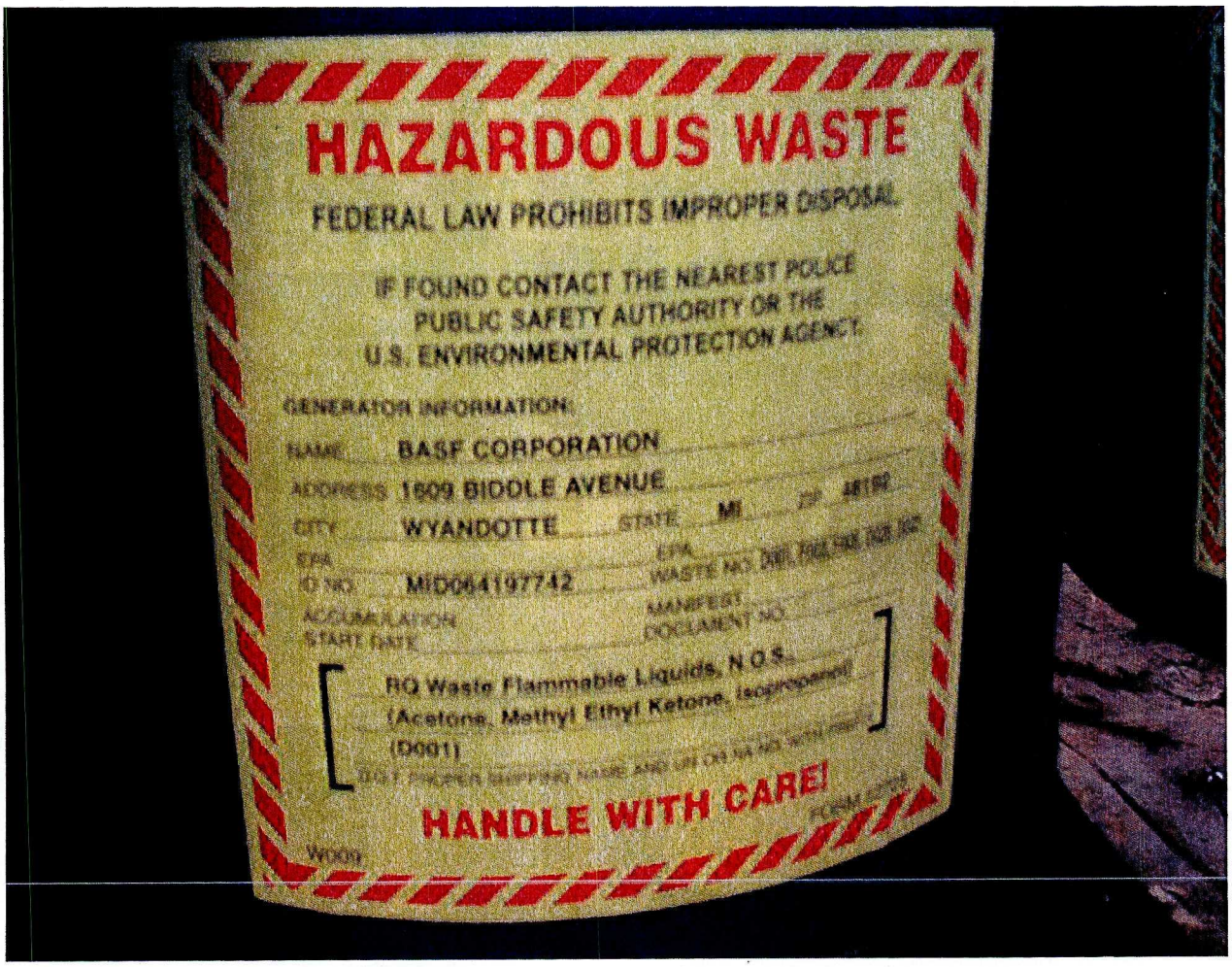
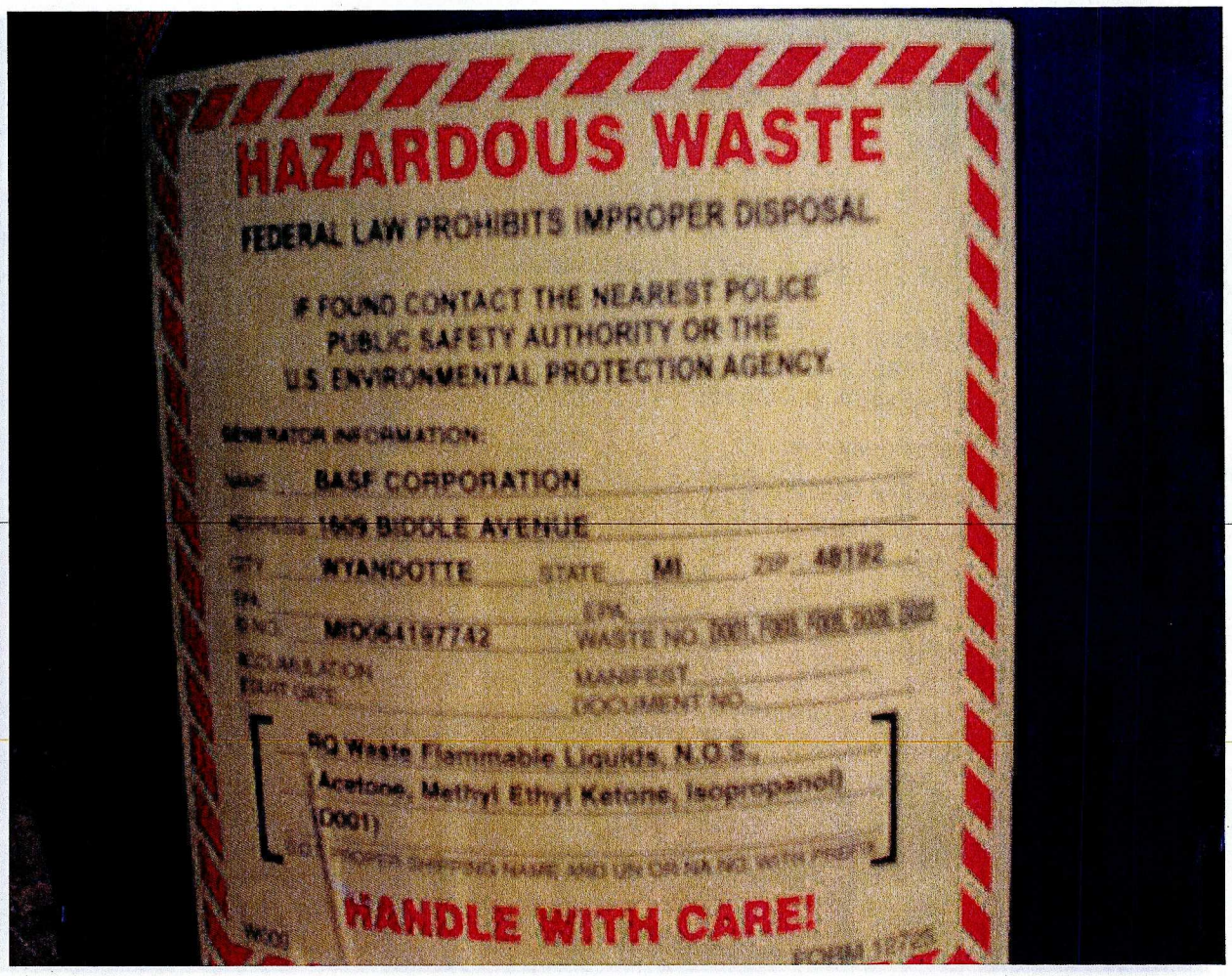


40. A view, outside of the Central Hazardous Waste Container Storage Area (after containers moved outside by BASF personnel), of one of two 5-gallon hazardous waste containers that were labeled as "Hazardous Waste" and "D001, F003, F005, D028, D022", but did not have accumulation start dates marked on them.

BASF Corporation, Wyandotte, MI
Bryan Gangwisch, U.S. EPA 6/13-6/14/12



41. A view, outside of the Central Hazardous Waste Container Storage Area (after containers moved outside by BASF personnel), of the other of two 5-gallon hazardous waste containers that were labeled as "Hazardous Waste" and "D001, F003, F005, D028, D022", but did not have accumulation start dates marked on them.

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42. Another view, outside of the Central Hazardous Waste Container Storage Area (after containers moved outside by BASF personnel), of the same (as above in photos # 40 and # 41) two hazardous waste 5-gallon containers.

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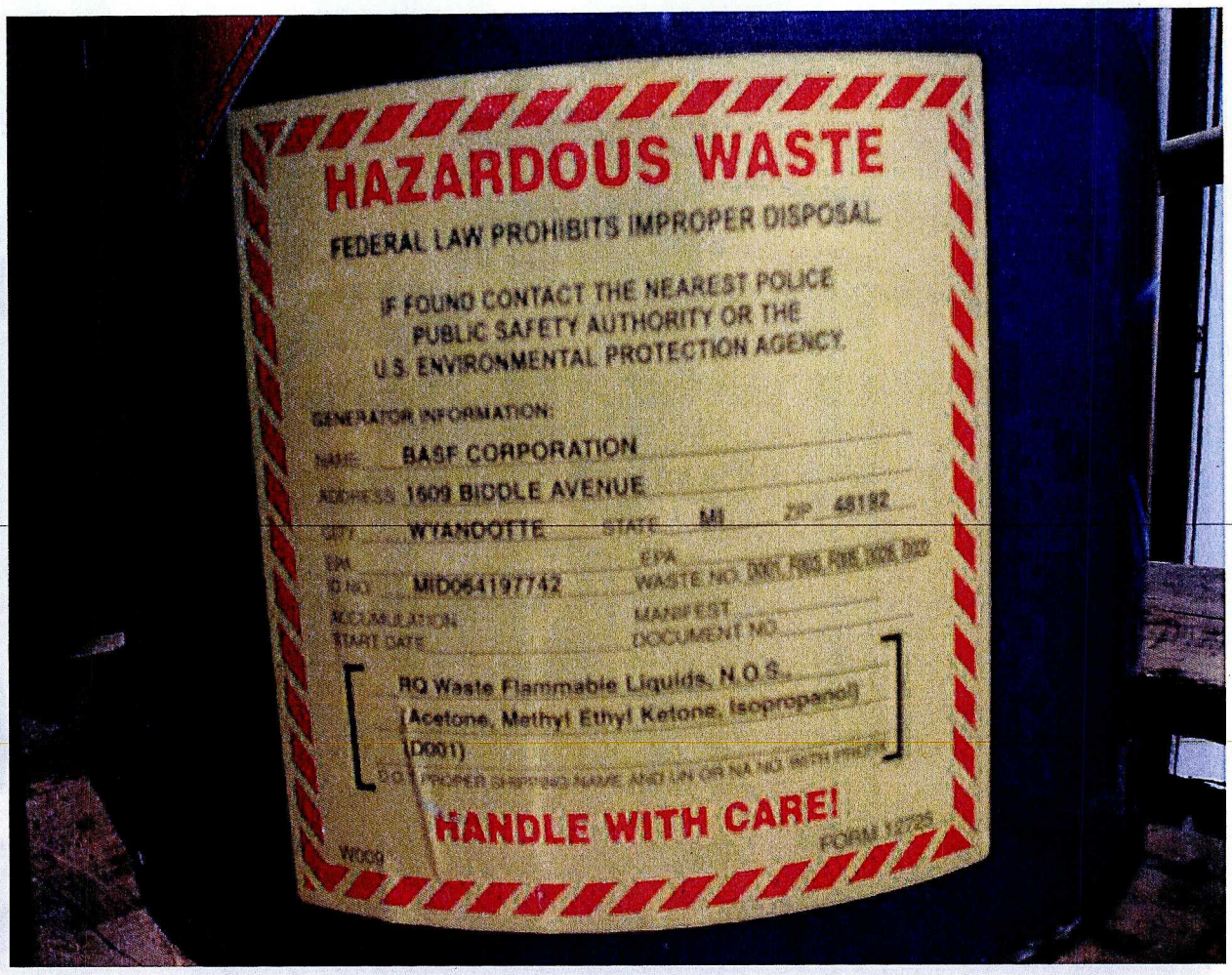

43. Another view, outside of the Central Hazardous Waste Container Storage Area (after containers moved outside by BASF personnel), of the same (as above in photo # 41) 5-gallon hazardous waste container that was labeled as "Hazardous Waste" and "D001, F003, F005, D028, D022", but did not have an accumulation start date marked on it.

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Bryan Gangwisch, U.S. EPA 6/13-6/14/12

44. Another view, outside of the Central Hazardous Waste Container Storage Area (after containers moved outside by BASF personnel), of the same (as above in photos # 30 - # 43) seven 5-gallon hazardous waste containers.

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45. A view, at the Central Hazardous Waste Container Storage Area, of the aisle space in this area.

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46. Another view, at the Central Hazardous Waste Container Storage Area, of the aisle space in this area.

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47. Another view, at the Central Hazardous Waste Container Storage Area, of the aisle space in this area.

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48. Another view, at the Central Hazardous Waste Container Storage Area, of the aisle space in this area.

BASF Corporation, Wyandotte, MI
Bryan Gangwisch, U.S. EPA 6/13-6/14/12

Department of Environmental Quality
FULLY REGULATED GENERATOR (FRG) INSPECTION FORM

Facility's Name BASF Corporation Part 3 Rules

Date 6/13 - 6/14/12 ID# MID 064197742 1994 PA 451

HAZARDOUS WASTE AND WASTE #	SOURCE	HOW MUCH
Haz-Waste groundwater remediation D028	GW remediation C.A. activities	varies (tons)
Waste solvents D001, F003, F005	Process Waste	varies (tons)
Corrosives D002	Process Waste	varies (tons)
Off-spec/obsolete comm. chemical products D018 U200 U220	← →	varies (tons)

___ abbreviated

FACILITY COMPLIANCE REQUIRED IN ALL AREAS

WASTE DETERMINATION (Rule 302: 40 CFR 262.11

(NI = Not inspected; N/A = Not applicable)

		YES	NO	
1. Determined if waste streams are hazardous waste? (Rule 302: 40 CFR 262.11))	262A	[ ]	X	NI N/A
a) copy of waste evaluation on-site 3 years? (Rule 307(1): 40 CFR 262.40(c))	262D	[X]	___	NI N/A
b) re-evaluated waste when changes in materials or process? (Rule 302(3))	262A	[X]	___	NI N/A
2. Did generator have written waste analysis plan if treating wastes on-site? (Rule 306)(1)(d):40 CFR 268.7(a)(5))	262C	[ ]	___	NI (N/A)

IDENTIFICATION NUMBER (Rule 303: 40 CFR 262.12)

3. Has the generator obtained an identification number? (Rule 303: 40 CFR 262.12)	262A	[X]	___	NI N/A

MANIFEST REQUIREMENTS (Rule 304: 40 CFR 262.20)

4. Copies of the manifest readily available for review & inspection? (Section 11138(1)(f))	FSS	[ ]	X	NI N/A
5. Manifests kept for the past 3 years? (Rule 307(3): 40 CFR 262.20(a)) 6 TSDF copies	262D	[ ]	X	NI N/A
6. Manifests, prepared by the generator according to instructions in appendix of Part 262 contain the following:				
a) manifest document number (Rule 304(1)(b): 40 CFR 262.20(a)(i)),	262B	[X]	___	NI N/A
b) generator's name, address, phone & ID # (Rule 304(1)(b): 40 CFR 262.20(a)(i)),	262B	[X]	___	NI N/A
c) name & ID # of the transporter. (Rule 304(1)(b): 40 CFR 262.20(a)(i)),	262B	[X]	___	NI N/A
d) name, address & ID # of TSDF. (Rule 304(1)(b): 40 CFR 262.20(a)(i)),	262B	[X]	___	NI N/A
e) DOT description of waste(s). (Rule 304(1)(b): 40 CFR 262.20(a)(i)),	262B	[X]	___	NI N/A
f) quantity of waste, type & # of containers. (Rule 304(1)(b): 40 CFR 262.20(a)(i)),	262B	[X]	___	NI N/A
g) hazardous waste number of the wastes. (Rule 304(1)(b): 40 CFR 262.20(a)(i)),	262B	[X]	___	NI N/A
h) generator signature, initial transporter & date of acceptance. (Rule 304(1)(b): 40 CFR 262.20(a)(i)),	262B	[X]	___	NI N/A
7. Submitted copy of manifests to Director no later than 10 days after month shipment was made? (Rule 304(2)(b))	262B	[X]	___	NI N/A
8. For out-of-state manifests, if not submitted by designated facility, generator submitted copy of 3rd signature manifest as requested by Director? (Rule 304(2)(c))	262B	[X]	___	NI N/A
9. Is the transporter used properly registered &/or permitted under Act 138, Sec. 2 (3)? (Rule 304(1)(c))	262B	[X]	___	NI N/A

NOTE: *For shipments of hazardous waste solely by water or rail shipments, within United States see Rule 304(4)(g or h).*

10. Using manifest that has expired? (Rule 304(1)(a) : 40 CFR 262.20)	262B	___	[X]	NI N/A
11. Reportable exceptions (Rule 308(3): 40 CFR 262.42)(a)(b))				
a) number of manifests generator HASN'T receive signed copy from TSD w/in 35 days:				(N/A)
b) number of manifests generator HASN'T submitted exception reports to RA & DEQ after 45 days:				(N/A)
12. Facility has written program to reduce volume/toxicity/recycle wastes? (Rule 304(1)(b):40 CFR 262.27(a))	262B	[ ]	___	NI (N/A)

13. Facility discusses program in place to reduce volume/toxicity/recycle of waste (Rule 304(1)(b): 40 CFR 262.27(a))	262B	[X]	___	NI N/A

LAND DISPOSAL RESTRICTION REQUIREMENTS
WASTE ANALYSIS AND RECORDKEEPING (Rule 311(1): 40 CFR 268.7))

		YES	NO
14. Did the generator determine if the waste is restricted from land disposal? (Rule 311(1): 40 CFR 268.7(a)(1))			
a) all listed waste	268A	[X]	___ NI N/A
b) all characteristic wastes?	268A	[X]	___ NI N/A

NOTE: If waste has both listed & characteristic waste codes, the treatment standard for the listed waste is sufficient if the treatment standards for the listed waste includes a standard for the constituent that caused the waste to exhibit the characteristic, except for D001 and D002. (40 CFR 268.9(b))

15. If restricted waste exceeds treatment standards or prohibitions did notice go w/ initial shipment? (Rule 311(1):40 CFR 268.7(a)(2))	268A	[X]	___ NI N/A
OR			
16. If restricted waste does not exceed treatment standards or prohibitions did a notice and certification statement go with initial shipment? (Rule 311(1): (40 CFR 268.7(a)(3))	268A	[ ]	___ NI N/A
OR			
17. If waste has exemption from prohibition on the type of land disposal method utilized for the waste, did a notice go with initial shipment? (Rule 311(1): 40 CFR 268.7(a)(4))	268A	[ ]	___ NI N/A
OR			
18. If facility choose alternative treatment standard for lab pack that contains none of the waste in appendix IV, did a notice & certification go with initial shipment? (Rule 311(1): 40 CFR 268.7(a)(9))	268A	[ ]	___ NI N/A
19. Did the notice include: (Rule 311(1): 40 CFR 268.7(a)(1) or 268.7(a)(2) or 268.7(a)(3)			
a) EPA hazardous waste #?	268A	[X]	___ NI N/A
b) if wastewater or non-wastewater as defined in 268.2(d&f)?	268A	[X]	___ NI N/A
c) subcategory of the waste (such as D003 reactive cyanide) if applicable?	268A	[X]	___ NI N/A
d) manifest number associated with the shipment?	268A	[X]	___ NI N/A
e) waste analysis data, where available?	268A	[X]	___ NI N/A
f) waste constituents that the treater will monitor, if monitoring will not include all regulated constituents, for F001- F005, F039, D001, D002, D012-D043? (treatment standards for hazardous waste in table in 268.40 for the waste code under regulated constituents)	268A	[X]	___ NI N/A
UNLESS			
g) did generator/treater claim they are going to monitor for ALL regulated constituents in the waste in lieu of the generator indicating same in the notice? (Rule 311(1): 40 CFR 268.7(a)(1) & 268.9)	268A	[ ]	___ NI N/A
h) did generator/treater claim they are going to monitor for underlying hazardous waste constituents (except vanadium and zinc), reasonably expected to be present at the generation point, above UTS standards for D001, D002 & TCLP organics? Rule 311(1): 40 CFR 268 Subpart D & 268.48)	268A	[ ]	___ NI N/A
20. Other than notices for waste exceeding treatment standards, did notices include: (Rule 311(1): 40 CFR 268.7(2)(3)			
a) if the notice is for shipments that meet the standards does the notice include the certification?	268A	[ ]	___ NI N/A
b) if the notice is for shipments under prohibitions does the notice include a statement that the waste isn't prohibited from land disposal & date the waste is subject to prohibition?	268A	[ ]	___ NI N/A

NOTE: An alternate treatment standard may be used after approval from the Administrator. (40 CFR 268.44)
NOTE: Hazardous waste debris see 40 CFR 268.7(a)(1)(iv) for the notice requirements which must be followed by the statement "This hazardous debris is subject to alternative treatment standards of 40 CFR 268.45."

21. Generator retain on-site records to support determination from knowledge or results from tests? (40 CFR 268.7(a)(6)	268A	[X]	___ NI N/A
22. If the restricted waste is excluded from being a hazardous waste or solid waste did the generator place a one- time notice stating same in the facility file? (40 CFR268.7(a)(7))	268A	[ ]	___ NI N/A
23. All notices/certifications/demonstrations/other documents retained for 3 years on-site? (40 CFR 268.7(a)(8)	268A	[X]	___ NI N/A

NOTE: This requirement (268.7(a)(8)) applies to solid waste even when the hazardous waste characteristic is removed prior to disposal or when the waste is excluded from the definition of hazardous waste or solid waste.

DILUTION PROHIBITED AS SUBSTITUTE FOR TREATMENT (RULE 311(1):40 CFR 268.3)

24. Generator dilute hazardous waste or treatment residue of a hazardous waste to avoid prohibition? (40 CFR: 268.3(a))	268A	___	[X] NI N/A

TREATMENT STANDARDS (RULE 311(1):40 CFR 268.40)

25. If wastes exceeding treatment standards are mixed, was the most stringent standards selected? (40 CFR268.40(c))	268A	[X]	___ NI N/A

BIENNIAL REPORT (Rule 308: 40 CFR 262.41)

26. Generator submitted biennial report by 3/1 (even years)? (Rule 308(1): 40 CFR 262.41)	262D	[X]	___ NI N/A
27. Were copies of the report retained at least 3 years? (Rule 307(4): 40 CFR 262.40(b))	262D	[X]	___ NI N/A

PRE-TRANSPORTER REQUIREMENTS (Rule 305: 40 CFR 262.30)

		YES	NO		
28. Waste packaged according to DOT regulations (required before shipping waste off-site)? (Rule 305(1)(a):40 CFR262.30))	262C	co.said__obsrvd__ [X]	___	NI	N/A
29. Are waste packages marked & labeled per DOT 49 CFR172 concerning hazardous materials (required before shipping waste off- site)?(Rule 305(1)(b)(c): 40 CFR 262.32(a))	262C	co.said__obsrvd__ [X]	___	NI	N/A
30. On containers of 119 gallons or less, is there a warning, generator's name, address, site identification number, manifest tracking number & waste code per DOT 49 CFR172.304? (Rule 305(1)(d): 40 CFR 262.32(b))	262C	co.said__obsrvd__ [X]	___	NI	N/A
31. If required (>1000 #'s), are placards available to the transporter? (Rule 305(1)(e): 40 CFR 262.33)	262C	[X]	___	NI	N/A

ACCUMULATION TIME (Rule 306: 40 CFR 262.34)

32. If hazardous waste accumulated in containers: (If no, skip to #35)					
a) containers have accumulation date which is clearly visible? (Rule 306(1)(b): 40 CFR 262.34(a)(2))	262C	[ ]	X	NI	N/A
b) container have words "Hazardous Waste"? (Rule 306(1)(c): 40 CFR 262.34(a)(3))	262C	[X]	___	NI	N/A
c) is each container clearly marked with the hazardous waste number? (Rule 306(1)(b))	262C	[ ]	X	NI	N/A
d) has more than 90 days elapsed since date marked? (Rule 306(1)	262C	X	[ ]	NI	N/A

OR

e) one of the following apply:					
i) the generator applied for & received an extension to accumulate longer? (Rule 306(3): 40 CFR 262.34(b))	262C	[ ]	___	NI	(N/A)
ii) it is F006 waste recycled for metals recovery in compliance with Rule 306 (7) (180 days maximum). Rule 306(7):40 CFR 262.34(g))	262C	[ ]	___	NI	(N/A)
iii) it is F006 waste recycled for metals recovery in compliance with Rule 306(7) which must be transported more than 200 miles (270 days max.)? (Rule 306(8):40 CFR 262.34(h)	262C	[ ]	___	NI	(N/A)
iv) generator applied for & received extension or exception to accumulate F006 haz waste longer than ii or iii above? (Rule 306(9-10):40 CFR 262.34(i))	262C	[ ]	___	NI	(N/A)

The following Subpart I, 265.170 to 265.177 requirements are referred to by Rule 306(1)(a) and 40 CFR 262.34(a)(1).

f) are containers in good condition? (265.171)	262C	[X]	___	NI	N/A
g) are containers compatible with waste in them (265.172)	262C	[X]	___	NI	N/A
h) are containers stored closed? (265.173(a))	262C	[X]	___	NI	N/A
i) containers handled/stored in a way which may rupture it or cause leaks? (265.173(b)	262C	___	[X]	NI	N/A
j) ignitable & reactive wastes stored 15 meters (50 feet) from property line or written approval obtained from local fire prevention code authority for less than 15 meter? (265.176)	262C	[X]	___	NI	N/A
k) are containers inspected weekly for leaks and defects? (265.174)	262C	[ ]	X	NI	N/A
l) did the generator document the inspections in 32(k)? (Rule 306(1)(a)(i))	262C	[ ]	X	NI	N/A
m) inspection documents maintained on-site 3 years? (Rule 306(1)(a)(i))	262C	[ ]	X	NI	N/A
n) are incompatible wastes stored in separate containers? (265.177(a))	262C	[ ]	___	NI	(N/A)
o) hazardous wastes put in unwashed containers that previously held incompatible waste. (265.177(b))	262C	___	[ ]	NI	(N/A)
p) incompatible waste separated/protected from each other by physical barriers or sufficient distance? (265.177(c))	262C	[ ]	___	NI	(N/A)

Rule 306(2) & 40 CFR 262.34(c)(1)(i) both refer to 40 CFR 265.171, 265.172 & 265.173(a).

33. If hazardous waste is being accumulated at the point of generation:					
a) container(s) <55 gal or 1 qt acutely/severely toxic? (Rule 306(2):40 CFR 262.34(c)(1))	262C	[X]	___	NI	N/A
b) container(s) under operator control & near the point of generation? (Rule 306(2): 40 CFR 262.34(c)(1))	262C	[X]	___	NI	N/A
c) container(s) have words "Hazardous Waste"? (Rule 306(2): 40 CFR 262.34(c)(1)(ii))	262C	[X]	___	NI	N/A
d) are the container(s) marked with the hazardous waste number or chemical name? (Rule 306(2))	262C	[X]	___	NI	N/A
e) are container(s) in good condition? (265.171)	262C	[X]	___	NI	N/A
f) are container(s) compatible with waste in them? (265.172)	262C	[X]	___	NI	N/A
g) container(s) closed when not in use & managed to prevent leaks? (265.173(a))	262C	[X]	___	NI	N/A
34. If generator exceeds 55 gallons or 1 quart, w/in 3 days does generator, w/respect to that amount of excess waste:					
a) mark the container with the date the excess amount began accumulating? (Rule 306(2): 40 CFR 262.34(c)(2))	262C	[ ]	___	NI	(N/A)
b) move to an area with secondary containment, if required? (Rule 306(1): 40 CFR 264.175))	262C	[ ]	___	NI	(N/A)

Rule 306(1)(a) refers to containment requirements in 40 CFR 264.175.

35. If accumulating free liquids or any F020, F021, F022, F023, F026, F027, does the hazardous waste storage area include

a) impervious base free of cracks? (264.175(b)(1)) :	262C	[X] ___ NI N/A
b) sloped or otherwise designed to elevate/protect containers from contact with liquids? (264.175(b)(2))	262C	[X] ___ NI N/A
c) hold 10% of volume of containers or volume of the largest container, whichever is greater? (264.175(b)(3))	262C	[X] ___ NI N/A
d) run-on prevented unless sufficient capacity? (264.175(b)(4))	262C	[X] ___ NI N/A
e) accumulated liquids removed in a timely manner to prevent overflow? (264.175(b)5))	262C	[ ] ___ NI (N/A)

NOTE: Closure of Accumulation Area covered under # 53.

36. If accumulating solids, (other than F020,F021,F022, F023, F026, F027), is haz waste accumulation area sloped or otherwise designed, or containers elevated or otherwise protected from contact with liquids? (264.175(c)(1 & 2))	262C	[ ] ___ NI (N/A)
37. Is hazardous waste accumulated in other than tanks or containers? Or, is hazardous waste generated but not accumulated, i.e.: process tank? No *Explain any yes answer.*		___ X NI N/A
38. Waste area protected from weather, fire, physical damage & vandals? (Rule 306(1)(e))	262C	[X] ___ NI N/A
39. Hazardous waste accumulated so no hazardous waste or hazardous waste constituent can escape by gravity into soil, directly or indirectly, into surface, ground-waters, drains or sewers, and such that fugitive emissions do not violate Act 451, Part 55? (Rule 306(1)(f))	262C	[X] ___ NI N/A
40. Is hazardous waste accumulated in tanks? Yes *If so, complete Tank System inspection form.*		X ___ NI N/A
41. Is hazardous waste placed on drip pads? No *If so, complete Wood Preserving inspection form*		___ X NI N/A

Rule 306(1)(d) & 40 CFR 262.34(a)(4) refers to 265.16
PERSONNEL TRAINING (265.16)

42. Did personnel receive training? (265.16)	262C	[X] ___ NI N/A
43. Do personnel training records contain the following:		
a) job title? (265.16(d)(1))	262C	[X] ___ NI N/A
b) job descriptions? (265.16(d)(2))	262C	[X] ___ NI N/A
c) name of employee filling each job? (265.16(d)(1))	262C	[X] ___ NI N/A
d) description of type & amount of both introductory & continued training? 265.16(d)(3))	262C	[X] ___ NI N/A
e) training designed so facility personnel can respond to emergencies? (265.16(a)(3)	262C	[X] ___ NI N/A
f) records of training? (265.16(d)(4))	262C	[X] ___ NI N/A
g) do new personnel receive required training within 6 months? (265.16(b)	262C	[X] ___ NI N/A
h) do training records show personnel have taken part in annual training? (265.16(c))	262C	[X] ___ NI N/A
i) training by person trained in hazardous waste management procedures? (265.16(a))	262C	[X] ___ NI N/A

Rule 306(1)(d) & 40 CFR 262.34(a)(4) refer to 265, Subpart C, 265.30-265.37.
PREPAREDNESS AND PREVENTION (265.30-265.37)

44. Facility maintained/operated to minimize possibility of fire, explosion, release of hazardous waste or hazardous waste constituent which could threaten human health/environment? (265.31)	262C	co said__obsrvd_ [ ] X NI N/A
45. If required, does this facility have the following:		
a) internal communications or alarm systems? (265.32(a))	262C	[X] ___ NI N/A
b) telephone or 2-way radios at the scene of operations? (265.32(b))	262C	[X] ___ NI N/A
c) portable fire extinguishers, fire control, spill control equipment and decontamination equipment? (265.32(c))	262C	[X] ___ NI N/A
d) adequate volume of water and/or foam available for fire control? (265.32(d))	262C	[X] ___ NI N/A
46. Testing and Maintenance of Emergency Equipment		
a) owner/operator test & maintain emergency equipment to assure operation? (265.33)	262C	[X] ___ NI N/A
b) has owner/operator provided immediate access to internal alarms? Access to alarm system is applicable only if required (40 CFR 265. 32)		
i) when hazardous waste is being poured, mixed, etc. (265.34(a))	262C	[X] ___ NI N/A
ii) if only one employee on the premises while facility is operating. (265.34(b))	262C	[ ] ___ NI (N/A)
c) aisle space for unobstructed movement of personnel/emergency equipment? (265.35)	262C	[X] ___ NI N/A
47. Has the facility made arrangements with local authorities? (265.37(a)&(b))	262C	[X] ___ NI N/A

Rule 306(1)(d) & 40 CFR 262.34(a)(4) refer to Subpart D, 265.50-265.56.
CONTINGENCY PLAN AND EMERGENCY PROCEDURES (265.50-265.56)

48. Plan implemented whenever fire/explosion/release could threaten human health or the environment? (265.51(b))	262C	[X] ___ NI N/A
49. Does the contingency plan contain the following:		
a) actions personnel must take responding to fires/explosions/unplanned release of hazardous waste? (265.52(a & b))	262C	[X] ___ NI N/A

b) describe arrangements w/ local police, fire, hospitals, contractors, state & local emergency responders for emergency services; (265.52(c)) & (265.37(a)&(b))?	262C	[X] ___ NI N/A
c) name, addresses & phone (office & home) of emergency coordinator? (265.52)(d))	262C	[X] ___ NI N/A
d) list emergency equipment at the facility, including location, physical description & capabilities? (265.52(e))	262C	[X] ___ NI N/A
e) evacuation plan for personnel w/ signal(s), evacuation routes & alternate evacuation routes. (265.52(f))	262C	[X] ___ NI N/A
50. Does the facility have an Emergency Coordinator? (265.55)	262C	[X] ___ NI N/A
Emergency Coordinator and Emergency Procedures:		
a) emergency coordinator familiar with site operation & emergency procedures? (265.55)	262C	[X] ___ NI N/A
b) emergency coordinator has the authority to carry out the contingency plan? (265.55)	262C	[X] ___ NI N/A
c) if emergency occurred, did the emergency coordinator follow emergency procedures? (265.56)	262C	[ ] ___ NI N/A
d) fire/explosion/other release of hazardous waste/haz. waste constituents, could threaten human health or environment or generator has knowledge spill reached surface or ground water, did generator notify MDEQ? (Rule 306(1)(d))	262C	[ ] ___ NI N/A
51. Contingency plan Amendments and Copies — changes in plant managers		
a) amended: fails in emergency; changes in regulations/emergency coordinators/emergency equipment? (265.54)	262C	[X] ___ NI N/A
b) copies of plan on site and sent to local emergency organizations? (265.53)	262C	[X] ___ NI N/A

Rule 309 refers to 262, Subpart E except 262.54 & 262.55

INTERNATIONAL SHIPMENTS (Rule 309 & 310: 40 CFR 262.50-262.60)

52. Has the facility imported or exported hazardous waste?		___ X NI N/A
a) exporting, has the generator:		
i) notified the Administrator in writing <12 months prior to shipment? (Rule 309(1): 40 CFR 262.53(a))	262E	[ ] ___ NI N/A
ii) receiving country consented to accept waste. (Rule 309(1): 40 CFR 262.52(b))	262E	[ ] ___ NI N/A
iii) has copy of EPA Acknowledgment of Consent. (Rule 309(1): 40 CFR 262.52(c))	262E	[ ] ___ NI N/A
iv) complied with manifest requirements in Rule 309(2)(a-i).	262E	[ ] ___ NI N/A
v) if required, was an exception report filled. (309(3)(a-c))	262E	[ ] ___ NI N/A
b) importing, has the generator met manifest requirements? (Rule 310: 40 CFR 262.60)	262F	[ ] ___ NI N/A

Rule 306(1)(g) and 40 CFR 262.34(a)(1) refers to 40 CFR 265.111 & 265.114

ACCUMULATION AREA CLOSURE (265.111 & 265.114)

53. The accumulation area must be closed in a manner that:		
a) minimizes need for further maintenance (Rule 306(1)(g): 40 CFR 265.111(a))	262C	[ ] ___ NI N/A
b) controls/minimizes/eliminates, to protect human health & environment, the escape of haz. waste or hazardous waste constituents, leachate, run-off to ground/surface waters and air. (Rule 306(1)(g): 40 CFR 265.111(b))	262C	[ ] ___ NI N/A
c) all contaminated equipment, structures, and soil properly disposed of. (Rule 306(1)(g): 40 CFR 265.114)	262C	[ ] ___ NI N/A

COMMENTS:

Department of Environmental Quality
GENERATOR TANK INSPECTION FORM

Facility's Name BASF Corporation Part 3 Rules

Date 6/13-6/14/12 ID# MID064197742 1994 PA 451

___ abbreviated

FACILITY COMPLIANCE REQUIRED IN ALL AREAS

ALL TANK SYSTEMS ACCUMULATION TIME (Rule 306: 40 CFR 252.34)

(NI - Not Inspected N/A - Not Applicable)

		YES	NO
1. Has more than 90 days elapsed since tank was emptied? (If yes, operating license required per Part 5 of Rules. (Rule 306(1): 40 CFR 262.34(a))	GPT		[X] NI N/A
2. Is each tank labeled or marked with the words "Hazardous Waste" (Rule 306 (1)(c): 40 CFR 252.34(a)(3))	GPT	[X]	NI N/A

NOTE: Rule 306(1)(a)(ii) & 40 CFR 252.34(a)(1)(ii) refer to 265 Subpart J, except 265.197(c) and 265.200 & Rule 615, except Subrule (1).

GENERAL OPERATING REQUIREMENTS (Rule 306: 40 CFR 265.194)

3. Could wastes placed in tank system cause ruptures, leaks, corrosion or other failure? (265.194 (a))	GPT		[X] NI N/A
4. Controls & practices to prevent spills & overflows must include: (265.194(b))			
a) spill prevention controls. (265.194(b)(1))	GPT	[X]	NI N/A
b) overfill prevention controls. (265.194(b)(2)).	GPT	[X]	NI N/A
c) freeboard in uncovered tanks to stop overtopping by wave or wind action or precipitation. (265.194 (b)(3)).	GPT	[ ]	NI (N/A)

NOTE: Response to leaks, spills and disposition of leaking or unfit-for-use tank systems is in 40 CFR 265.196.

5. A tank system or secondary containment system from which there has been a leak, spill or which is unfit for use, is it:			NI (N/A)
a) removed from service immediately? (265.196)	GPT	[ ]	NI (N/A)
b) completed requirements in 265.196(a-f)	GPT	[ ]	NI (N/A)

INSPECTIONS (Rule 306(1):40 CFR 265.195)

6. Where present, has the facility inspected at least once each operating day: (265.195(a)) several missed periods			
a) discharge, overflow/spill control equipment (daily). (265.195(a)(1))	GPT	[ ] X	NI N/A
b) monitoring equipment data (daily). (265.195(a)(3))	GPT	[ ] X	NI N/A
c) above ground portion of tank system (daily). (265.195(a)(2))	GPT	[ ] X	NI N/A
d) materials and area around tank (daily). (265.195(a)(4))	GPT	[ ] X	NI N/A
e) are the inspections documented? (265.195 (c))	GPT	[ ] X	NI N/A
7. Must inspect cathodic protection system, if present, for in-ground tanks:			
a) cathodic protection within six months after initial installation (annually thereafter). (265.195 (b) (1))	GPT	[ ]	NI (N/A)
b) impressed current inspected and/or tested at least bimonthly. (265.195 (b) (2))	GPT	[ ]	NI (N/A)
c) are the inspections documented? (265.195(c))	GPT	[ ]	NI (N/A)

SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTE (Rule 306(1):40 CFR 265.198)

8. Ignitable or reactive waste must not be placed in tanks unless:			
a) treated/mixed before or immediately after placed in the tank system, so: (265.198(a)(1))			
i) resulting mixture is no longer ignitable/reactive. (265.198(a)(1)(i))	GPT	[ ]	NI (N/A)
ii) does not cause environmental or structural damage to tank systems. (265.198(a)(1)(ii))	GPT	[X]	NI N/A

OR

b) waste stored/treated so protected from igniting or reacting. (265.198(a)(2))	GPT	[X]	NI N/A

OR

c) tank system is used solely for emergency. (265.198(1)(3))	GPT	[ ]	NI (N/A)
9. Observes National Fire Protection Association's buffer zone for tanks w/ ignitable or reactive wastes? (265.198(b)) *(See tables 2-1 through 2-6 of NFPA's Flammable & Combustible Liquids Code - 1977" to determine compliance)*	GPT	[X]	NI N/A

		YES NO
10. Is the tank system designed, constructed, operated and maintained in conformance with requirements of Act 207, Michigan flammable liquid regulations. (Rule 615(4)	GPT	Company said___ [X] __ NI N/A
11. Is the tank labeled in accordance with NFPA standard # 704? (Rule 615(5))	GPT	[X] __ NI N/A

INCOMPATIBLE WASTE (Rule 306(1):40 CFR 265.199)

12. Are incompatible wastes stored in separate tanks? (265.199(a)) (If not, the provisions of 265.17(b) apply).	GPT	[ ] __ NI N/A
13. Tank decontaminated before hazardous waste placed in it that held incompatible waste, unless 265.17(b). (265.199(b)).	GPT	[ ] __ NI N/A

CLOSURE AND POST-CLOSURE (265.197)

NOTE: At tank system closure refer to 265.197 for closure/post closure care, except 265.197(c).

14. If the tank system is closed, did the facility follow the requirements in 265.197? (265.197).	GPT	[ ] __ NI N/A

EXISTING TANK SYSTEMS
REQUIREMENTS FOR EXISTING TANK(S) CONTAINING LIQUID WASTE THAT DO NOT MEET THE REQUIREMENTS OF 265.193 (Rule 615)

15. Are above ground tanks:		
a) paved, diked or cubed or otherwise enclosed to contain not less than 100% of the largest tank? (Rule 615(2)(a))	GPT	[ ] __ NI N/A
b) incompatible waste or interconnected tanks must have 100% containment for each tank. (Rule 615(2)(a))	GPT	[ ] __ NI N/A
16. Do underground tanks:		
a) have secondary containment and a leachate withdrawal system? (Rule 615(2)(b)(i))	GPT	[ ] __ NI N/A
b) complete an inventory of wastes not less than twice a month? (Rule 615 (2)(b)(ii))	GPT	[ ] __ NI N/A
c) leachate sampling analysis at least once per year (if b shows loss, sample within 24 hours). (Rule 615(2)(b)(iii)	GPT	[ ] __ NI N/A

Note: *If existing tanks do not have secondary containment meeting RCRA, the facility must assess the existing tank system's integrity, 265.191.*
Note: *The determination that secondary containment does or does not meet the standards in 265.193 can be made by the company. It does not require a certification by an independent engineer.*
Note: *Tanks w/out free liquids in a building w/ impermeable floor & tanks part of secondary containment system are exempt (265.190(a)&(b).*

ASSESSMENT OF EXISTING TANK SYSTEM'S INTEGRITY (Rule 306(1) :40 CFR 265.191)

17. If existing tank system (before 7/14/86) does not meet the secondary containment requirements in 265.193, was an assessment made and certified by an independent engineer? (265.191)	GPT	[ ] __ NI N/A

CONTAINMENT AND DETECTION OF RELEASES (Rule 306(1):40 CFR 265.193)

18. Until an existing tank is upgraded to meet the secondary containment requirements in 265.193 has the facility: (265.193(i))		
a) for non-enterable underground tank, performed leak test meeting rqrmnt of 265.191(b)(5) annually: (R 265.193(i)(1))	GPT	[ ] __ NI N/A
b) for other than non-enterable underground tanks and ancillary equipment, the facility must:		
i) conduct an annual leak test that meets the requirements of 265.191(b)(5). (265.193(i)(2))	GPT	[ ] __ NI N/A
OR		
ii) an internal inspection or other tank integrity exam by an independent, qualified, reg. prof. engineer. (265.193(i)(2))	GPT	[ ] __ NI N/A
19. Secondary containment & detection that meets the requirements, must be provided for: (265.193)a))		
a) new tank systems prior to being put into service (any tank installed after 7-14-86). (265.193(a)(1)	GPT	X __ NI N/A
b) existing tanks used for F020, F021, F022, F023, F026, F027 prior to 1/12/90. (265.193(a)(1))	GPT	__ __ NI N/A
c) existing tanks w/ documented age before 1/12/90 or tanks 15 years of age, which is later. (265.293(a)(3).	GPT	__ __ NI N/A
d) existing tank system, w/out documented age, upgrades done by 1/12/96 unless facility is greater than 7 years in 1988, then containment provided before facility reaches 15 years or by 1/12/90 which is later. (265.193(a)(4))	GPT	__ __ NI N/A
e) wastes which became hazardous waste after 1/12/87. (265.193(a)(5))	GPT	__ __ NI N/A

NEW TANK SYSTEMS AND UPGRADED EXISTING TANK SYSTEMS
(Rule 306(1):40 CFR 265.193(c))

20. Secondary containment and detection systems must have the following: (265.193(c))		
a) tank system constructed of compatible material with sufficient strength. (265.193(c)(1))	GPT	[X] __ NI N/A
b) adequate foundation/base. (265.193(c)(2))	GPT	[X] __ NI N/A
c) leak detection system designed/operated to detect leaks w/in 24 hours of earliest practical time. (265.193(c)(3)). Internal inspection	GPT	[ ] X NI N/A
d) sloped/drained & all liquid (leaks, precipitation) removed w/in 24 hours or in a timely mariner. (265.193 (c)(4)).	GPT	[X] __ NI N/A
e) must include one or more of the following:		
i) a liner (external to tanks) & must satisfy the following requirements. (265.193(d)(1))		
A) 100% capacity of largest tank within its boundary. (265.193(1)(i))	GPT	[X] __ NI N/A

		YES	NO
B) prevent run-on or infiltration of precipitation unless excess of capacity. (265.193(e)(1)(ii))	GPT	[X]	NI N/A
C) free of cracks or gaps. (265.193(e)(1)(iii))	GPT	[X]	NI N/A
D) cover any area waste may come in contact with if released. (265.193(e)(1)(iv))	GPT	[X]	NI N/A

CEMENT LINERS ONLY

Note: If liner is cement then, must have, in addition, 265.193(e)(2)(iii & iv)

E) constructed with chemical resistant water stops in place at all joints. (25.193(e)(2)(iii))	GPT	[X]	NI N/A
F) impermeable, compatible interior lining or coating. (265.193(e)(2)(iv))	GPT	[X]	NI N/A
ii) vault system & must satisfy the following requirements. (265.193(e)(2)(i-iv))(264.175(b)(3))			
A) 100% capacity of the largest tank within its boundary. (265.193(e)(2)(i))	GPT	[ ]	NI N/A
B) prevent run-on or infiltration of precipitation unless excess of capacity. (265.193(e)(2)(ii))	GPT	[ ]	NI N/A
C) constructed with chemical resistant water stops in place at all joints. (265.193(e)(2)(iii))	GPT	[ ]	NI N/A
D) impermeable, compatible interior lining or coating. (265.193(e)(2)(iv))	GPT	[ ]	NI N/A
E) if ignitable or reactive, then provide against vapor formation and ignition. (265.193(e)(2)(v))	GPT	[ ]	NI N/A
F) provide with exterior moisture barrier. (265.193(e)(2)(vi))	GPT	[ ]	NI N/A
iii) double wall tanks & must satisfy the following requirements: (265.193(d)(3))			
A) designed as integral structure (inner tank with outer shell). (265.193(d)(3)(i))	GPT	[ ]	NI N/A
B) protect metal surface for corrosion (interior and exterior). (265.193(e)(3)(ii))	GPT	[ ]	NI N/A
C) capable of detecting releases within 24 hours. (265.193(e)(3)(iii))	GPT	[ ]	NI N/A
f) ancillary equipment (note certain exclusions) must be provided with full secondary containment. (265.193)(f))	GPT	[X]	NI N/A

NEW TANK SYSTEMS
DESIGN AND INSTALLATION OF NEW TANK SYSTEMS OR COMPONENTS (265.192)

21. Facility obtained written assessment that was reviewed & certified (270.11(d)) by independent qualified registered professional engineer to include:			
a) design standards and considerations? (265.192(a)(1)&(5))	GPT	[X]	NI N/A
b) hazard characteristics of the waste(s) to be handled? (265.192(a)(2))	GPT	[X]	NI N/A
c) determination by a corrosion expert, (if external shell of metal tank or metal part in contact with soil or water)? (265.192(a)(3))	GPT	[ ]	NI N/A
d) if needed, design considerations for UST systems affected by vehicular traffic? (265.192(a)(4))	GPT	[ ]	NI N/A
22. New tank/component & piping underground was backfilled w/non-corrosive, porous, homogeneous material & carefully compacted? (265.192(c))	GPT	[ ]	NI N/A
23. All new tanks/ancillary equipment tested for tightness before covered, enclosed, put in use? (265.192(d))	GPT	[X]	NI N/A
24. New tank system not tight, were repairs made before covered, enclosed, put in use? (265.192(d))	GPT	[ ]	NI N/A
25. Is ancillary equipment supported/protected against damage & stress? (265.192(e)).	GPT	[X]	NI N/A
26. Corrosion protection provided? (265.192(f))	GPT	[ ]	NI N/A
27. Field fabricated corrosion protection supervised by independent expert? (265.192(f))	GPT	[ ]	NI N/A
28. Is written statement kept on file at the facility and certified? (265.192(g))	GPT	[X]	NI N/A

COMMENTS:

BASF Corporation 6/13 - 6/14/12

Inspection Checklist for Subpart CC: Air Emission Standards (Containers)

Item # 40 CFR:

CC-1	265.1080	Do any of the following exclusions apply? If yes, please circle.	YES	NO

Applicability: The air emission requirements apply to units subject to subpart I * unless the following apply (circle if applicable):

1. Waste was placed in unit prior to Oct. 6, 1996, and none has been added since.
2. The container capacity is less than .1 cubic meter (26 gallons)
3. A unit (e.g. tank) has stopped adding waste and is undergoing closure
4. The unit is used solely for onsite treatment or storage as a result of remedial activities required under corrective action, Superfund, or other similar state program
5. The unit is used solely to manage radioactive mixed waste
6. The unit is regulated by and operates in accordance with Clean Air Act regulations

***Note: 1. Satellite containers are exempt 2. CESQG's and SQG's are exempt**

CC-2	265.1083	Do any of the following exemptions apply? If yes, please circle	YES	NO

~~**General Standards**: The owner/operator must control air emissions from waste management units except the unit is exempt if~~ (please circle if applicable):

1. All hazardous waste entering the unit has an average VO concentration at the point of origination less than 500 parts per million by weight (waste determination required)
2. The organic content of all waste entering the unit has been reduced by one of the 8 acceptable destruction or removal processes.
3. The unit is a tank used for certain biological treatment
4. The hazardous waste placed in the unit meets the LDR numerical concentration limits or has been treated using the specified LDR treatment technology (for organics)
5. The unit is a tank used for bulk feed to an incinerator and meets certain requirements

CC-3	265.1084	Waste Determination:	Determination Not Needed	Determination Needed

Was the VO concentration properly determined for each waste which the facility manages ~~in a unit which~~ does not meet Subpart CC requirements? The concentration must be determined by either direct measurement or knowledge. Please see 265.1084 for specific requirements for measurement and knowledge. Determination is not needed for waste managed in containers which meet standards. It may be necessary to evaluate container management prior to requiring VO concentration determination.

#	NA=Not Applicable, NI=Not Inspected, OK= In Compliance, DF= Deficiency	NA	NI	OK	DF

CONTAINER MANAGEMENT 265.1087

Level 1	Level 2	Level 3
Larger than 26.4 gallons and less than or equal to 122 gallons, or larger than 122 gallons and do not manage H.W. in light material service	Larger than 122 gallons and manage H.W. "in light material service" (definition at 265.1081)	Larger than 26.4 gallons and treat H.W. by a stabilization process

CC-4	265.1087	Controls	NA	NI	OK	DF

One of the following: -Use containers that meet DOT requirements -Use a cover and control with no visible gaps, holes or other open spaces into the interior of the container -Use organic vapor suppression on or above the container 265.1087(c)	One of the following: -Use containers that meet DOT requirements -Use containers that operate with no detectable emissions (method 21) -Use containers that are demonstrated to be vapor-tight within the last 12 months (method 27) 265.1087(d)	-Containers used to stabilize H.W. with volatile organics greater than 500 ppm -For waste stabilized in a container either: 1.container must be vented directly to a control device; or 2.container is vented inside an enclosure which is exhausted through a closed vent to a control device -Conservation vents are not allowed 265.1087(b)(2)

Level 1			Level 2	Level 3			
#	NA=Not Applicable, NI=Not Inspected, OK= In Compliance, DF= Deficiency			NA	NI	OK	DF
CC -5	**265.1087**	**Waste transfer requirements**					
No waste transfer requirements apply			-Waste transfer requirements apply regardless of container alternative used in level 2 -Transfer waste into or out of a container in such a manner as to minimize exposure of the waste to the atmosphere. Acceptable methods include a submerged fill pipe, vapor recovery system, or fitted opening with a line purge 265.1087(b)(3)	Not applicable			
CC-6	**265.1087**	**Operating requirements**		**NA**	**NI**	**OK**	**DF**
The covers, openings, and closure devices should be closed except: 1. When transferring H.W. in and out of the containers 2. between batch transfer not exceeding 15 minutes between transfer (note: if the person performing the transfer leaves the area, or the process shuts down, the container must be closed) 3. While performing sampling and equipment access 4. Conservation and safety vents are allowed -Containers may be open while performing sampling or equipment access -Safety valves and conservation vents may be used if normally left in close position -A cover need not to be on a RCRA empty container, as defined in 40 CFR 261.7 265.1087(c)(3), (d)(3)				-If the vapors are directly vented to a control device, there are specific design and operating criteria that must be met same as tanks that have closed vent and control device systems -If an enclosure is used, the enclosure must meet the design and operating criteria specified in "Procedure T-Criteria for and Verification of a Permanent or Temporary Total Enclosure" under 40 CFR 52.741 The container, enclosure, control device or closed vent system may have safety relief devices.			
CC-7	**265.1089**	**Inspection requirements**		**NA**	**NI**	**OK**	**DF**
Minimal inspection required: - when facility accepts container and it is not emptied within 24 hours -if wastes are stored greater than a year, then visually inspect once a year If inspections are required, facility must develop written plan and schedule to perform inspection 265.1087(c)(4), (d)(4)				Inspection requirements are the same as for tanks			
CC- 8	**265.1087**	**Repair requirements**		**NA**	**NI**	**OK**	**DF**
When a defect is detected; attempt to repair within 24 hours must be made and: 1. Repair within 5 calendar days or empty and remove the container from service 2. Do not use until defect is repaired 265.1087(c)(4), (d)(4)				Necessary corrective measures shall be immediately implemented to ensure that the control device is operated in compliance			
CC- 9	**265.1090**	**Recordkeeping requirements**		**NA**	**NI**	**OK**	**DF**
-If container exceeds 122 gallons and does not meet DOT standards, records indicating that the container is not managing H.W. in light material service			Since Level 2 waste is "in light material service", no records need to be kept	Depends upon how the organic emissions are vented: -If an enclosure is used, records must be maintained for the most recent set of calculations and measurements performed to verify that the enclosure meets the criteria of a permanent total enclosure (Procedure T) -Records for the closed vent and control device system are the same for those used on tanks(265.1090)(e)			

BASF Corporation 6/13 - 6/14/12

Inspection Checklist for Subpart CC: Air Emission Standards (Tanks)

Applicability: The air emission requirements apply to units subject to Subpart J * unless any of the following apply:

Item # 40 CFR: *Note: CESQG's and SQG's are exempt

CC-T1	265. 1	Do any of the following general exclusions apply? If yes, please circle.	YES	NO

1. Wastewater treatment units -265.1(c)(10)
2. Emergency spill management units. -265.1(c)(11)
3. Hazardous waste recycling units. -265.1(c)(6)
4. Elementary neutralization units -265.1(c)(10)
5. Totally enclosed treatment units. -265.1(c)(9)
6. Satellite accumulation areas. -265.1(c)(7) - 262.34(c)(1)

CC-T2	265.1080	Do any of the following exceptions apply? If yes, please circle.	YES	NO

1. Waste was placed in the unit prior to Oct. 6, 1996 and none has been added since. -265.1080(b)(1)
2. The unit has stopped adding waste and is undergoing closure pursuant to an approved closure plan. -265.1080(b)(3)
3. The unit is used solely for onsite treatment or storage as a result of remedial activities required under corrective action, Superfund, or other similar state program. -265.1080(b)(5)
4. The unit is used solely to manage radioactive mixed waste. -265.1080(b)(6)
5. The unit operates with an emission control device regulated by and in accordance with Clean Air Act regulations. -(b)(7)
6. The unit operates with a process vent as defined in 264.1031, regulated under Subpart AA. -265.1080(b)(8)

CC-T3	265.1080(d)	Administrative Stay for Organic Peroxide Waste:	YES	NO

If the unit recieves hazardous waste generated by organic peroxide manufacture, and the owner/operator has met the conditions as set forth in 265.1080(d), the requirements under Subpart CC are administratively stayed, *except for the record keeping requirements* which additionally include the notification requirement as given in 265.1080(d)(3).

CC-T4	265.1083	Do any of the following exemptions apply? If yes, please circle.	YES	NO

General Standards: The owner/operator must control air emissions from waste management units except the unit is exempt if:

1. All hazardous waste entering the unit has an average VO concentration at the point of origination less than 500 parts per million by weight (waste determination required by 265.1084; see **CC-T5**). -265.1083(c)(1)
2. The organic content of all waste entering the unit has been reduced by one of the 8 acceptable processes. -265.1083(c)(2)
3. The unit is a tank used for certain biological treatment consistent with 265.1087(c)(2)(iv). -265.1083(c)(3)
4. The hazardous waste placed in the unit meets the LDR numerical concentration limits given in 268.40 or has been treated using the LDR treatment technology specific for the waste (specified in 268.42). -265.1083(c)(4)
5. The unit is a tank within an enclosure used for bulk feed to an incinerator and meets certain requirements. -265.1083(c)(5)

CC-T5	265.1084	Waste Determination	Determination Not Needed	Determination Needed

Was the VO concentration properly determined for each waste which the facility manages in a unit which does not meet Subpart CC requirements? The concentration must be determined by either direct measurement or knowledge. Please see 265.1084 for specific requirements for measurement and knowledge. Determination is **not** needed for waste managed in tanks which meet Subpart CC standards. It may be necessary to evaluate tank management prior to requiring VO concentration determination.

TANK MANAGEMENT

Level 1 tank controls apply only to a fixed-roof tank in which the maximum vapor pressure of organic waste is less than that listed below for each tank design capacity, contents are not heated above the temperature of vapor pressure determination, and no waste stabilization is conducted in the tank. -265.1085(b)(1)
Tanks that exceed Level 1 criteria must use Level 2 controls; tanks that do not exceed Level 1 criteria may use Level 2 controls. The five design options for Level 2 controls are given below; vented fixed-roof tanks are the most common. -265.1085(b)(2)

Tank Design Capacity	Level 1 pressure limits	Level 1	Level 2	
≥151 m^3 / 40,000 gal	< 5.2 kPa / 0.75 psi	Fixed-roof tanks	Fixed-roof tanks vented to control device	-265.1085(g)
< 151 m^3 and ≥ 75 m^3	< 27.6 kPa / 4.0 psi	-265.1085(c)(1) through (c)(4)	External floating roof tanks	-265.1085(f)
			Fixed-roof with internal floating roof	-265.1085(e)
< 75 m^3 / 20,000 gal	< 76.6 kPa / 11.1 psi	-265.1085(d)	Enclosure vented to combustion device	-265.1085(i)
			Pressure tank	-265.1085(h)

265.1085(c)

Level 1 Controls for Fixed-Roof Tanks

NA=Not Applicable NI=Not Inspected OK= In Compliance DF= Deficiency

CC-T6	265.1085(c)(1)	Vapor Pressure Determination	NA	NI	OK	DF

Has the owner/operator determined the maximum organic vapor pressure of the waste in the tank: by direct measurement or by knowledge?	-265.1085(c)(1) -265.1084(c)(3,4)	YES	NO
Is the determination acceptable?		YES	NO
Does waste in tank exceed vapor pressure threshold for tank size? (If yes must use Level 2 Controls)		YES	NO

CC-T7	265.1085(c)(2)	Tank Design Specifications	NA	NI	OK	DF

The fixed roof and its closure devices shall be designed to form a continuous barrier over the entire surface area of the hazardous waste in the tank; shall be installed such that ther are no visible cracks, holes, gaps or other open spaces between roof and tank wall / closure device and roof. Inspect the fixed roof and closure devices of each tank or a representative percentage of multiple tanks; list and photograph defects at each.

Tank #	Defect(s)	Photo #	Notes
D-631	N/A	N/A	CC Level 1 tank
D-731	N/A	N/A	CC Level 1 tank

Is each opening in the fixed roof (sampling port, conservation vent, level indicator, safety valve, etc.): **265.1085(c)(2)(i)(A)** equipped with a closure device such that when closed there are no visible cracks, holes, gaps or other open spaces? or; **265.1085(c)(2)(i)(B)** connected via a closed vent system to a control device? (If YES see Level 2 Controls checklist below)	YES	NO
	YES	NO

CC-T8	265.1085(j)	Waste transfer requirements	NA	NI	OK	DF

Transfer of hazardous waste to the tank from another tank subject to 265.1085 or suface impoundment subject to 265.1086 shall be conducted using continuous hard piping or other closed system,to prevent exposure of waste to atmosphere; except under conditions given in 265.1085(j)(2).

CC-T9	265.1085(c)(3)	Operating requirements	NA	NI	OK	DF

Cover and closure devices shall be closed at all times except when performing routine inspections, sampling, maintenance and cleaning. Opening of a pressure/vacuum relief valve, conservation vent or similar device is allowed during normal operations to maintain tank pressure within design specificatons. Opening of a safety device is allowed at any time.

Are pressure/vacuum relief valves and conservation vents designed to operate with NDE when secured in closed position?	YES	NO
Are the opening settings of these devices consistent with the manufacturer's recommended operating ranges?	YES	NO
What are the pressure settings of these devices and how do they compare with Level 1 vapor pressure limits?	OK	DF

CC-T10	265.1085(c)(4)	**Inspection requirements**	NA	NI	OK	DF

The fixed roof and closure devices shall be visually inspected for defects initially, on or before December 12, 1996, or when first in service and thereafter at least annually,according to written plan; except when unsafe, and delay conditions are met. Buried parts of tank need not be inspected TSDs: The inspection plans must be incorporated into the overall facility inspection plan as per 265.15.

CC-T11	265.1085(k)	**Repair requirements**	NA	NI	OK	DF

Owner/operator shall make first efforts at repair of each defect detected during an inspection no later than 5 calendar days after detection; repairs shall be completed as soon as possible but no later than 45 calendar days after detection, except as provided in 265.1085(k)(2).

CC- T12	265.1090(b)	**Recordkeeping requirements**	NA	NI	OK	DF

For each unit in service records must be maintained on-site including: unique unit ID number, dimensions and capacity, organic vapor pressure of waste (if tested, records include time and date of samples, analytical method, and results), and inspection and repair records for three years.
Please list in detail below deficiencies noted regarding items CC-T6 through CC-T12:

CC- T13	265.1085(c)(2)	**Level 2 Controls for Fixed-Roof Tanks Vented to Control Device**	**NA=Not Applicable OK= In Compliance**	**NI=Not Inspected DF= Deficiency**

All requirements of CC-T7 and: Each roof opening not equipped with a closure device shall be connected to a closed system that is vented to a control device which removes or destroys organics in the vent stream, and which shall be operating whenever hazardous waste is in the tank.

CC- T14	265.1085(j)	**Waste transfer requirements**	NA	NI	OK	DF

All requirements of **CC-T8**.

CC- T15	265.1085(g)	**Operating requirements**	NA	NI	OK	DF

All requirements of **CC-T9** and: Closed vent system and control device shall be installed and operated in accordance with **265.1088.**

CC- T16	265.1085(g)(3)	**Inspection requirements**	NA	NI	OK	DF

All requirements of **CC-T10** and: perform initial leak detection testing of closed vent system on or before date tank is subject to the rule, as per 265.1088(b)(4); annually inspect closed vent system components per 265.1033(k) and 265.1034(b); negative pressure systems per 265.1033(j)(2).

CC- T17	265.1085(k)	**Repair requirements**	NA	NI	OK	DF

All requirements of **CC-T11**.

CC- T18	265.1090(e)	**Recordkeeping requirements**	NA	NI	OK	DF

All requirements of **CC-T12** and: maintain records of unexpected malfunctions and semiannual updates of planned maintenance operations for 3 years; also: If control device is <u>not</u> a carbon absorber, condenser, flare, process heater, boiler or thermal vapor incinerator, maintain records of proper operation and use (e.g., manufacturer's documentation). Please list in detail below deficiencies regarding items CC-T13 through CC-T18:

D-1053	
D-1054	
D-1081	vented to RTO in Resins Plant
D-1082	

INTERIM STATUS FACILITIES AND FULLY REGULATED GENERATOR

ORGANIC AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS

BB

Facility's Name BASF Corporation

Date 6/13-6/14/12 ID# MID064197742

Note: Use of the words "process vents" means process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction or air or steam stripping operations managing hazardous waste with organic concentrations of at least 10 ppmw (time weight annual average basis).

Note: Total Organic Emissions shall be abbreviated to TOE

Note: Equipment with closed-vent systems and control devices shall comply with the provisions of section 265.1033.

(rev. 4/25/97 [z/bb.new] - EA&MDEQ)

NI - not inspected N/A - not applicable

		YES	NO	NI	N/A

APPLICABILITY (40 CFR 265.1050)

1. If the equipment contains or contacts hazardous waste w/ organic concentrations of at least 10 percent by weight:		Yes
a) Are the units subject to the permitting requirements of part 270? (265.1050(b)(1))	DAE	*

OR

b) Are there hazardous waste recycling units located at the facility that are otherwise subject to the permitting requirements? (265.1050(b)(2))	DAE	*

* If the answers to the above questions are no the following regulations do not apply.

STANDARDS: PUMPS IN LIGHT LIQUID (40 CFR 265.1052)

Note: Delays in repair are allowed see 265.1059 (#37)

Note: Did the owner/operator subject to the provisions of this subpart comply with the required test methods and procedures: (265.1063(b-l)) (#41)

2. Pump equipped w/ duel mechanical seal system that includes a barrier fluid system? If yes, its exempt from monthly monitoring (#5) and visual inspections (#6) if: (265.1052(d))		Yes X	NI	N/A
a) Each duel mechanical seal system is:				
I) Operated with a barrier fluid with pressure greater than the pump stuffing box pressure. (265.1052(d)(1)(I))	DAE	[ ]	NI	N/A

OR

ii) Has a barrier fluid degassing reservoir connected by closed-loop to a control device. (265.1052(d)(1)(ii))	DAE	[ ]	NI	N/A

OR

iii) System that purges the barrier fluid into a hazardous waste stream w/no detectable emissions? (265.1052(d)(1)(iii)		[ ]	NI	N/A
b) Barrier fluid is not a hazardous waste w/ organic concentrations 10% or greater by weight. (265.1052(d)(2))	DAE	[ ]	NI	N/A
c) Each barrier fluid system equipped w/ a sensor to detect failure of the seal/barrier fluid system. (265.1052(d)(3))	DAE	[ ]	NI	N/A
d) Each calendar week pump has visual inspection for signs of liquids dripping from pump seals. (265.1052(d)(4))	DAE	[ ]	NI	N/A
e) Each sensor is checked: (265.1052(d)(5)(I))				
I) Daily.	DAE	[ ]	NI	N/A

OR

ii) Equipped with audible alarm that is checked monthly to see if working.	DAE	[ ]	NI	N/A
f) Owner/operator has determined a criteria indicating failure of the seal/barrier fluid system. (265.1052(d)(5)(ii))	DAE	[ ]	NI	N/A
g) Indications of liquids dripping from pump seal/sensor means failure of seal/barrier fluid system & a leak has been detected: (265.1052(d)(6)(I))				
I) Was it repaired as soon as practicable but no later than 15 calendar days after detected? (265.1052(d)(6)(ii))	DAE	[ ]	NI	N/A
ii) A first attempt at repair was made no later than 5 calendar days after leak is detected? (265.1052(d)(6)(iii))	DAE	[ ]	NI	N/A
3. The pump designed as in 264.1064(g)(2) for no detectable emissions as indicated by an instrument reading of < 500 ppm above background? Yes, pump exempt from monthly monitoring (#5), visual monitoring (#6), repairs (#7a & #7b) and barrier fluid system (#2) if: (265.1052(e))			NI	N/A
a) It does not have an externally actuated shaft penetrating the pump housing. (265.1052(e)(1))	DAE	[ ]	NI	N/A

		YES	NO	NI	N/A
b) It operates with no detectable emissions as indicated w/ emission reading of < 500 ppm. (265.1052(e)(2))	DAE	X		NI	N/A
c) Is tested for compliance initially, annually and when requested by Regional Administrator. (265.1052(e)(3))	DAE	X		NI	N/A
4. Is the pump equipped with a closed-vent system capable of capturing and transporting any leakage from seal(s) to the control device? If yes, the pump is exempt from monthly monitoring (#5), visual monitoring (#6), repairs (#7a & #7b), barrier fluid system (#2) and no detectible emission (#3). (265.1052(f))	DAE			NI	N/A
5. Is each pump in light liquid service monitored monthly to detect leaks? (265.1052(a)(1))	DAE	X		NI	N/A
6. Does each pump in light liquid service have a visual inspection each calendar week for indications of liquid dripping? (265.1052(a)(2))	DAE	X		NI	N/A
7. Was an instrument reading of 10,000 ppm or greater measured or were there are any indications of liquids dripping from the pump seal? If yes, a leak is detected and:	DAE			NI	N/A
a) Was it repaired as soon as practicable but no later than 15 calendar days after detected? (265.1052(c)(1))	DAE	[ ]		NI	N/A
b) Was a first attempt at repair made no later than 5 calendar days after leak is detected? (265.1052(c)(2))	DAE	[ ]		NI	N/A

STANDARDS: COMPRESSORS (40 CFR 265.1053)

NOTE: Delays in repair are allowed see 265.1059 (#37)

8. Is the compressor designed as described in 265.1064(g)(2), for no detectable emissions indicated by instrument reading of < 500 ppm above background? If yes the compressor is exempt from seal system and operation (#10-11), barrier fluid concentration (#12), barrier system sensor(#13-14), criteria for failure (#15), leak detection/repair (#16) and closed-vent (#9). (265.1053(I))	DAE			NI	N/A
9. Is the compressor equipped with a closed-vent system capable of capturing and transporting leakage from the seal(s) to a control device in compliance w/ 265.1060? If yes, the compressor is exempt from seal system (#10) and seal system operation (#11). (265.1053(h))	DAE			NI	N/A
10. Each compressor equipped w/ seal system that has barrier fluid system that prevents leakage of TOE? (265.1053(a))	DAE	[ ]		NI	N/A
11. Is each compressor seal system: (265.1053(b))					
a) Operated with the barriers fluid at a greater pressure than the stuffing box pressure? (265.1053(b)(1))	DAE	[ ]		NI	N/A

OR

b) Equipped with a barrier fluid system connected by a closed-vent system to a control device? (265.1053(b)(2))	DAE	[ ]		NI	N/A

OR

c) Equipped with a system that purges the barrier fluid system with no detectable emissions? (265.1053(b)(3))	DAE	[ ]		NI	N/A
12. Is the barrier fluid system a hazardous waste w/ an organic concentration of 10% or greater by weight? (265.1053(c))	DAE		[ ]	NI	N/A
13. Each barrier system equipped w/ a sensor to detect failure of the seal/barrier fluid system? (265.1053(d))	DAE	[ ]		NI	N/A
14. Is each barrier system sensor checked: (265.1053(e)(1))					
a) Daily?	DAE	[ ]		NI	N/A

OR

b) Equipped with audible alarm that is checked monthly to see if working?	DAE	[ ]		NI	N/A

UNLESS

c) The compressor is located at an unmanned plant then is the sensor checked daily?	DAE	[ ]		NI	N/A
15. Has the owner/operator determined a criterion to indicate failure of the seal/barrier fluid system? (265.1053(e)(2))	DAE	[ ]		NI	N/A
16. Did the sensor indicates failure of the seal/barrier fluid system? If yes, a leak is detected and: (265.1053(f))	DAE			NI	N/A

		YES	NO	NI	N/A
a) Was it repaired as soon as practicable but no later than 15 calendar days after detected? (265.1052(g)(1))	DAE	[ ]		NI	N/A
b) Was a first attempt at repair was made no later than 5 calendar days after leak is detected? (265.1052(g)(2))	DAE	[ ]		NI	N/A

STANDARDS: PRESSURE RELIEF DEVICES IN GAS/VAPOR SERVICE (40 CFR 265.1054)

NOTE: Delays in repair are allowed see 265.1059 (#37)

17. Is the pressure relief device equipped with a closed-vent system capable of capturing and transporting leakage to a control devices specified in 265.1060? If yes, the device is exempt from relief device monitored for no detectable emissions (#18), specifications to reset device and time frame (#19 & #20). (265.1054(c))	DAE	X		NI	N/A
18. Pressure relief devices in gas/vapor service operated w/ no detectable emissions indicated by an instrument reading of <500 ppm above background, except during pressure releases? (265.1054(a))	DAE	X		NI	N/A
19. After a pressure release, was the device returned to a condition of no detectable emissions indicated by an instrument reading of <500 ppm above background, as soon as practical but no later than 5 calendar days? (265.1054(b)(1))	DAE	[ ]		NI	N/A
20. No later than 5 calendar days after a pressure release, is the pressure relief device monitored to confirm no detectable emissions indicated by an instrument reading of <500 ppm above background,? (265.1054(b)(2))	DAE	[ ]		NI	N/A

STANDARDS: SAMPLING CONNECTING SYSTEMS (40 CFR 265.1055)

21. Is the sampling system *in situ*? If yes, the system isn't required to have closed-vent or closed-purge system (#22 & #23). (265.1055(c))				NI	N/A
22. Is each sampling connection system equipped with a closed-purge system or closed-vent system? (265.1055(a))	DAE	[ ]		NI	N/A
23. Does each closed-purge or closed-vent system: (265.1055(b))					
a) Return purged hazardous waste stream directly to hazardous waste management process line w/ no detectable emissions? (265.1055(b)(1))	DAE	[ ]		NI	N/A

OR

b) Collect and recycle the purged hazardous waste stream with no detectable emissions? (265.1055(b)(2))	DAE	[ ]		NI	N/A

OR

c) Designed/operated to capture/transport all purged hazardous waste stream to a control device? (265.1055(b)(3))	DAE	[ ]		NI	N/A

STANDARDS: OPEN-ENDED VALVES OR LINES (40 CFR 265.1056)

Note: Delays in repair are allowed see 265.1059 (#37)

Note: Did the owner/operator subject to the provisions of this subpart comply with the required test methods and procedures: (265.1063(b-l)) (#41)

24. Is each open-ended valve or line equipped with a cap, blind flange, plug or second valve? (265.1056(a)(1))	DAE	X		NI	N/A
25. Cap/blind flange/plug/second valve always seal open end except when waste must flow through? (265.1056(a)(2))	DAE	X		NI	N/A
26. If using a second valve, is the first valve closed before the second? (265.1056(b))	DAE	X		NI	N/A
27. If a double block and bleed system is used and the bleed line/valve stays open during venting, is the line between the block valves have cap/blind flange/plug/second value and sealed at all other times? (265.1056(c))	DAE	[ ]		NI	N/A

STANDARDS: VALVES IN GAS/VAPOR SERVICE OR IN LIGHT LIQUID SERVICE (40 CFR 265.1057)

Note: There are alternate standards for valves in gas/vapor or light liquid service where owners/operators may elect to have all valves within a hazardous waste management unit comply with alternative standards which: (1) allows no greater than 2% of the valves to leak. (265.1061(a-d) and (2) allows for skip period leak detection and repair. (265.1062(a-b))

Note: Delays in repair are allowed see 265.1059 (#37)

28. Valve designated as an unsafe-to-monitor valve as described in 265.1064(h)(1). If yes, the valve is exempt from monthly monitoring (#31) if: (265.1057(g))	DAE	X		NI	N/A

	YES	NO	NI	N/A
a) The owner/operator of the valve determines that the valve would be unsafe to monitor because monitoring personnel would be exposed to an immediate danger. (265.1057(g)(1)) DAE	X		NI	N/A
b) The owner/operator of the valve adheres to a written plan that requires monitoring of the valve as often as possible during safe-to-monitor times. (265.1057(g)(2)) DAE	X		NI	N/A
29. Valve designated as a difficult to-monitor valve in 265.1064(h)(2). If yes, the valve is exempt from monthly monitoring (#31) if: (265.1057(h))			NI	N/A
a) The owner/operator of the valve determines the valve cannot be monitored without elevating personnel more than 2 meters above a support surface. (265.1057(h)(1))	[ ]		NI	N/A
b) Hazardous waste management unit where valve is located was in operation before 6/21/90. (265.1057(h)(2))	[ ]		NI	N/A
c) Follow written plan that requires monitoring of valve at least once per calendar year. (265.1057(h)(3))	[ ]		NI	N/A
30. Valve designated for no detectable emissions, as indicated bt instrument reading of <500 ppm above background, and described in 265.1064(g)(2) . If yes, the valve is exempt from monthly monitoring (#31) if: (265.1057(f))			NI	N/A
a) It has no external actuating mechanism in contact with the hazardous waste streams. (265.1057(f)(1))	[ ]		NI	N/A
b) It is operated with emissions <500 ppm above background. (265.1057(f)(2))	[ ]		NI	N/A
c) It is tested for emissions initially and then annually. (265.1057(f)(3))	[ ]		NI	N/A
31. Is each valve, other than unsafe or difficult-to-monitor or no detectible emissions (#28-30), in gas/vapor or light liquid service monitored monthly for leaks? (265.1057(a)) (exemptions 33 & 34)	[ ]		NI	N/A

OR

32. Any valve for which a leak has not been detected for two successive months may be monitored the first month of every succeeding quarter, until a leak is detected? (265.1057(c)(1))	X		NI	N/A

AND

33. If the monitoring was every quarter and a leak is detected was the monthly monitoring resumed until a leak was not detected for 2 consecutive months? (265.1057(c)(2))	X		NI	N/A
34. When a leak is detected, by an instrument reading of 10,000 ppm or greater: (265.1057(b)): (265.1057(d)(1))				
a) Was it repaired as soon as practicable but not later than 15 calendar days after detected? (265.1052(d)(1))	[ ]		NI	N/A
b) Was a first attempt at repair made no later than 5 calendar days after leak is detected? (265.1052(d)(2))	[ ]		NI	N/A
c) Was the first repair attempt include, but not limited to: (265.1057(e))				
i) Tightening of bonnet bolts?	[ ]		NI	N/A
ii) Replacement of bonnet bolts?	[ ]		NI	N/A
iii) Tightening of packing gland nuts?	[ ]		NI	N/A
iv) Injection of lubricant into lubricating packing?	[ ]		NI	N/A

STANDARDS: PUMPS AND VALVES IN HEAVY LIQUID SERVICE, PRESSURE RELIEF DEVICES IN LIGHT LIQUID OR HEAVY LIQUID SERVICE AND FLANGES AND OTHER CONNECTORS (40 CFR 265.1058)

NOTE: Delays in repair are allowed see 265.1059 (#37)

35. Are pumps and valves in heavy liquid service, pressure relief devices in light or heavy liquid service and flanges and other connectors monitored within 5 days if evidence of a potential leak is found by visual, audible, olfactory or other detection method? (265.1058)(a))	X		NI	N/A
36. If a leak was detected, by an instrument reading of 10,000 ppm or greater: (265.1058(b))			NI	N/A
a) Was it repaired as soon as practicable but no later than 15 calendar days after detected? (265.1058(c)(1))	[ ]		NI	N/A
b) Was a first attempt at repair was made no later than 5 calendar days after leak is detected? (265.1058(c)(2))	[ ]		NI	N/A

		YES	NO	NI	N/A
c) Was the first repair attempt include, but not limited to: (265.1058(d))					
i) Tightening of bonnet bolts?	DAE	[ ]		NI	N/A
ii) Replacement of bonnet bolts?	DAE	[ ]		NI	N/A
iii) Tightening of packing gland nuts?	DAE	[ ]		NI	N/A
iv) Injection of lubricant into lubricating packing?	DAE	[ ]		NI	N/A

STANDARDS: DELAY OF REPAIR (40 CFR 265.1059)

37. Was there a delay in repair of equipment for which leaks have been detected? If yes, the delay is allowed if:	DAE			NI	N/A
a) Was the repair technically infeasible without a shutdown of the hazardous waste management unit and did the repair occur before the end of the next shutdown? (265.1059(a))	DAE	[ ]		NI	N/A
b) Was the equipment isolated from the hazardous waste management unit and the unit does not contain or contact hazardous waste with organic concentrations at least 10% by weight. (265.1059(b))	DAE	[ ]		NI	N/A
38. Was there a delay in repair of a valve? If yes, the delay is allowed if:	DAE			NI	N/A
a) Determine emissions from purged material from immediate repair are greater than emissions resulting from a delay of the repair. (265.1059(c)(1))		[ ]		NI	N/A
b) When repaired, the purged material is collected and destroyed or recovered in a control device. (265.1059(c)(2))	DAE	[ ]		NI	N/A
39. Was there a delay in repair of a pump? If yes, the delay will be allowed if:	DAE			NI	N/A
a) Repair requires the use of a duel mechanical seal system that includes a barrier fluid system. (265.1059(d)(1))	DAE	[ ]		NI	N/A
b) Repair is completed as soon as practicable but within 6 months. (265.1059(d)(2))	DAE	[ ]		NI	N/A
40. Was there a delay in repair of a valve beyond a hazardous waste management unit shutdown? If yes, the delay will be allowed until the next shutdown or longer if the shutdown is within 6 months if: (265.1059(e))	DAE			NI	N/A
a) The valve assembly replacement is necessary during shutdown.	DAE	[ ]		NI	N/A
b) Valve assembly supplies have been depleted & supplies were sufficiently stocked before supplies were depleted.	DAE	[ ]		NI	N/A

TEST METHODS AND PROCEDURES (40 CFR 265.1063)

41. Did the owner/operator subject to the provisions of this subpart comply with the required test methods and procedures: (265.1063(b-l))					
a) For leak detection monitoring? (265.1063(b))	DAE	☒	___	NI	N/A
b) For 'no detectible' emissions determination? (265.1063(c))	DAE	☒	___	NI	N/A
c) To determine if each piece of equipment contains or contacts a hazardous waste w/ organic concentrations ≥ 10% by weight? (265.1063(d))	DAE	☒	___	NI	N/A
d) To determine if pumps or valves are in light liquid service? (265.1063(h))	DAE	☒	___	NI	N/A
e) To determine if the control device achieved 95 weight percent organic emissions? (265.1063(l))	DAE	☒	___	NI	N/A
42. Were samples used in determine the percent organic content representative of the highest TOC hazardous waste that is expected to be contained in or contact the equipment? (265.1063(g))	DAE	☒	___	NI	N/A

RECORDKEEPING REQUIREMENTS (40 CFR 265.1064)

Note: Owners/operators with more than one hazardous waste management unit, subject to these regulations, may use one recordkeeping system if each unit is identified.

42. Did the owners/operators record the following information in the operating record for each piece of equipment subject to Subpart BB? (265.1064(b))

		YES	NO	NI	N/A
a) Equipment identification number and hazardous waste management unit identification? (265.1064(b)(1)(I))	DAE	X		NI	N/A
b) Approx. location(s) of the equipment (e.g., identify unit on facility plot plan)? (265.1064(b)(1)(ii))	DAE	X		NI	N/A
c) Type of equipment (eg: pump or pipeline valve)? (265.1064(b)(1)(iii))	DAE	X		NI	N/A
d) Percent-by-weight total organics in the hazardous waste stream at the equipment? (265.1064(b)(1)(iv))	DAE	X		NI	N/A
e) State of the hazardous waste at the equipment (eg: liquid or gas/vapor)? (265.1064(b)(1)(v))	DAE	X		NI	N/A
f) Method of compliance w/ the standard (monthly leak detection/repair or equipped w/ dual mechanical seals?	DAE	X		NI	N/A
g) Implementation schedule, if facility can't install a closed-vent system & control device in time?(265.1064(b)(2))	DAE	[ ]		NI	(N/A)
h) A performance test plan if the owner/operator chose to use test data to demonstrate the organic removal efficiency or total organic compound concentration by the control device? (265.1064(b)(3))	DAE	[ ]		NI	(N/A)
I) Include documentation of compliance with the closed-vent and control device standards? (265.1064(b)(4))	DAE	X		NI	N/A
j) If a leak is detected?					
I) A weatherproof & readily visible identification attached to the leaking equipment and marked with: (265.1064(c)(1))					
a) The equipment i.d. number?	DAE	[ ]		NI	(N/A)
b) Date evidence of a potential leak was found?	DAE	[ ]		NI	(N/A)
c) Date leak was detected?	DAE	[ ]		NI	(N/A)

Note: The identification on equipment, except a valve, may be removed after repair. (265.1064(c)(2))
Note: The identification on a valve may be removed after being monitored for two successive months without leaks. (265.1064(c)(3))

ii) In an inspection log the following information? (265.1064(d))					
a) Instrument, operator and equipment id number? (265.1064(d)(1))	DAE	X		NI	N/A
b) Date evidence of a potential leak was found? (265.1064(d)(2))	DAE	X		NI	N/A
c) Date leak was detected? (265.1064(d)(3))	DAE	X		NI	N/A
d) Date of each attempt to repair the leak? (265.1064(d)(3))	DAE	X		NI	N/A
e) Repair methods applied in each attempt to repair the leak? (265.1064(d)(4))	DAE	X		NI	N/A
f) "Above 10,000" instrument readings? (265.1064(d)(5))	DAE	X		NI	N/A
g) "Repair delayed" and the reason? (265.1064(d)(6))	DAE	X		NI	N/A
h) Documentation supporting delay in valve repair? (265.1064(d)(7))	DAE	X		NI	N/A
I) Signature of owner/operator whose decision it was not to repair until shutdown? (265.1064(d)(8))	DAE	X		NI	N/A
j) If the repair is not done in 15 days the expected date of a successful repair? (265.1064(d)(9))	DAE	X		NI	N/A
k) The date of successful repair of the leak? (265.1064(d)(10)	DAE	X		NI	N/A
iii) Up-to-date design documentation, monitoring, operating, inspection information for closed-vent & control devices? (265.1064(e))	DAE	X		NI	N/A
iv) Control device (other than thermal or catalytic vapor incinerator/flare/boiler/process heater/condenser/carbon adsorption system) have monitoring/inspection information indicating proper operation/maintenance of control device? (265.1064(f))	DAE	[ ]		NI	(N/A)
v) The following information regarding the equipment recorded in a log: (265.1064(g))					
a) List of identification numbers for the equipment subject to the requirements and equipment designated for no detectable emissions? (265.164(g)(1)&(2)(I))	DAE	X		NI	N/A
b) The designation of the equipment signed by the owner/operator? (265.1064(g)(2)(ii))	DAE	X		NI	N/A
c) List of identification numbers for pressure relief devices? (265.1064(g)(3))	DAE	X		NI	N/A
d) For each compliance test:					

		YES	NO	NI	N/A
1) Dates of each test? (265.1064(g)(4)(I))	DAE	X		NI	N/A
2) Background level measured during each test? (265.1064(g)(4)(ii))	DAE	X		NI	N/A
3) The maximum instrument reading measured at the equipment during each test? (265.1064(g)(4)(iii))	DAE	X		NI	N/A
e) List of all identification numbers for equipment in vacuum service? (265.1064(g)(5))	DAE	[ ]		NI	N/A
vi) A log with a list of identification numbers for the valves that are designated unsafe or difficult to monitor, an explanation stating why they are unsafe or difficult and the plan for monitoring? (265.1064(h)(1-2))	DAE	X		NI	N/A
vii) For valves in gas/vapor or light liquid service with alternative standards the operating record will record: (265.1064(I))					
a) A schedule of monitoring? (265.1064(I)(1))	DAE	X		NI	N/A
b) The percent of valves found leaking during each monitoring period? (265.1064(I)(2))	DAE	X		NI	N/A
viii) Is the following information shall be recorded in a log and kept in the operating record: (265.1064(j))					
a) Criteria for failure of seal system indicated by sensor used w/ light liquid service pumps? (265.1064(j)(1))	DAE	[ ]		NI	N/A
b) Criteria for failure of seal system indicated by sensor used w/ compressors? (265.1064(j)(1))	DAE	[ ]		NI	N/A
c) Any changes to these criteria and the reason for change? (265.1064(j)(2))	DAE	[ ]		NI	N/A
ix) The following information kept in a log and used to determine exemptions for the hazardous waste management unit: (265.1064(k))					
a) An analysis determining the design capacity of the management unit? (265.1064(k))	DAE	X		NI	N/A
b) A statement listing the hazardous waste influent to and effluent from each unit and analysis determining whether the waste is a heavy liquid? (265.1064(k)(2))	DAE	X		NI	N/A
c) Up-to-date analysis/supporting data used to determine if equipment is subject to standards? (265.1064(k)(3))	DAE	X		NI	N/A
d) Documentation when knowledge of the hazardous waste stream or process is used? (265.1064(k)(3))	DAE	X		NI	N/A
e) Any new determinations if the owner/operator takes any action that could result in an increase of the organic content of the waste? (265.1064(k)(3))	DAE	[ ]		NI	N/A
43. Are records of equipment leak information in 265.1064(d) and closed-vent and control device information in 265.1064(e) kept 3 years? (265.1064(1))	DAE	X		NI	N/A

Comments: _____

DEQ

Department of Environmental Quality, Waste and Hazardous Materials Division

USED OIL INSPECTION FORM – GENERATORS

Facility's Name BASF Corporation Part 8 Rules

Date 6/13 - 6/14/12 ID# MID064197742 1994 PA 451

***Note**: Used oil is defined as "any oil which has been refined from crude oil, or any synthetic oil which has been used and as a result of use, is contaminated with physical or chemical impurities." R 299.9109*

APPLICABILITY (Rule 809)

NI – Not Inspected, N/A – Not Applicable		YES	NO	N/A
1. Does the facility generate used oil and any of the following materials which are subject to regulation as used oil:		X		
a) mixture of used oil and hazardous waste generated by a CESQG regulated pursuant to Rule 205? (Rule 809(1)(a))	UOA			X
b) material that contains or is otherwise contaminated w/ used oil & is burned for energy recovery? (Rule 809(1)(b))	UOA			X
c) used oil that is drained/removed from materials that contain or contaminated w/ used oil? (Rule 809(1)(c))	UOA	X		
d) mixture of used oil and fuel? (Rule809(1)(d))	UOA			X
e) material which is produced from used oil & is burned for energy recovery? (Rule 80991)(e))	UOA			
f) used oil that is burned for energy recovery & any fuel produced from used oil by processing, blending or other treatment & exceeds the following: (Rule 809(1(f))				
i) maximum arsenic concentration of 5ppm	UOA			
ii) maximum cadmium concentration of 2ppm	UOA			
iii) maximum chromium concentration of 10ppm	UOA			
iv) maximum lead concentration of 100ppm	UOA			
v) minimum flash point of 100 degrees Fahrenheit	UOA			
vi) maximum total halogen concentration of 4,000ppm	UOA			
g) recycled and a hazardous waste solely because it exhibits a hazardous characteristic? (Rule 809(1)(g))	UOA			
h) used oil contains PCB's at any concentration of 50ppm or less? (May also be subject to 40 CFR Part 761) (Rule 809(2)(l))	UOA			
2. Does the facility generate any of the following which exempts it from regulation as used oil: (may be subject to regulation as a hazardous waste)				
a) mixture of used oil and hazardous waste except as specified in Rule 809(1)(a)? (See question 1.a.) (Rule 809(2)(a))	UOA			
b) used oil including metalworking oils/fluids containing chlorinated paraffin w/ > 1000 ppm total halogens which hasn't been successfully rebutted by demonstrating that it does not contain significant concentrations of halogenated hazardous constituents in 40 CFR Part 261, Appendix VIII? (Rule 809(2)(b))	UOA			
c) metalworking oils/fluids w/ chlorinated paraffin reclaimed through a tolling agreement? (Rule 809(2)(b)(i))	UOA			
d) used oil w/ chlorofluorocarbons from refrigeration units going for reclaim? (Rule809(2)(b)(ii))	UOA			
e) material that contains or is otherwise contaminated w/ used oil from which the oil has been removed?(Rule 809 (2)(c))	UOA			
f) mixture of used oil/diesel fuel that is mixed on used oil generator's site & used in their own vehicles? (Rule 809(2)(d))	UOA			
g) used oil & material derived from used oil that are disposed of or used in a manner constituting disposal? (Rule 809(2)(e))	UOA			
h) used oil re-refining distillation bottoms used as feed stock to manufacture asphalt products? (Rule 809(2)(f))	UOA			
i) wastewater, the discharge of which is subject to §402 or §307(b) of the CWA & is contained w/ de minimis quantities of used oil? (Rule 809((2)(g))	UOA			
j) mixture of used oil/crude or natural gas liquid for insertion into a crude oil pipeline? (Rule 809(2)(h))	UOA			
k) mixture of oil/crude or nature gas liquid w/ less than 1% used oil if being stored/transported to crude oil pipeline or petroleum refinery for insertion into process before crude distillation or catalytic cracking? (Rule 809(2)(i))	UOA			
l) used oil for insertion into petroleum refining process before crude distillation or catalytic cracking w/out prior mixing if used oil constitutes less than 1% of crude oil feed? (Rule 809 (2)(j))	UOA			
m) used oil, unintentionally introduced, is captured by a hydrocarbon recovery system or wastewater treatment system at a petroleum refinery & inserted into the refining process? (Rule 809(2)(l))	UOA			
n) tank bottoms from stock tanks w/mixture of used/crude oil or nature gas liquids? (Rule 809(2)(m)	UOA			
o) used oil produced on vessels from normal shipboard operations while on-ship? (Rule 809(2)(n))	UOA			
p) specification used oil fuel once the facility demonstrates compliance w/ R 299.9815(3)(b),(c)&(f)? (Rule809(2)(o))	UOA			
q) used oil containing polychlorinated biphenyls at 50 ppm or greater? (Rule 809(2)(p))	UOA			

GENERATOR REQUIREMENTS (Rule 810)

NOTE: *Used oil generator requirements do not apply to: (1) farmers who generate, in a calendar year, an average of 25gallons per month or less from vehicles or machinery used on the farm, or (2) household do-it-yourselfer*

		YES	NO	
3. Is the used oil stored in units other than containers or tanks? (Rule 810(4)	UOA		[X]	NI N/A
a) in good condition? (40 CFR 279.22(b)(1))	UOA	[ ]		NI N/A
b) not leaking (no visible leaks)? (40 CFR 279.22(b)(2))	UOA	[ ]		NI N/A
4. Are all containers & above ground tanks storing used oil labeled/marked "Used Oil"? (40 CFR 279.22(c)(1))	UOA	[X]		NI N/A
5. Are fill pipes used to transfer used oil into underground tanks labeled/marked "Used Oil"? (40 CFR 279.22(c)(2))	UOA	[ ]		NI N/A
6. Upon detection of a release does the facility:				
a) stop the release? (40 CFR 279.22(d)(1))	UOA	[ ]		NI N/A
b) contain the released used oil? (40 CFR 279.22(d)(2))	UOA	[ ]		NI N/A
c) clean-up and manage the released used oil & other material? (40 CFR 279.22(d)(3))	UOA	[ ]		NI N/A
d) if necessary to prevent future release, repair/replace any leaking oil containers or tanks? (40 CFR 279.22(d)(4))	UOA	[ ]		NI N/A

GENERATOR REQUIREMENTS FOR ON-SITE BURNING IN SPACE HEATER

(Rule 810 refers to 40 CFR 279.23)

7. Does facility that burns used oil in oil-fired space heater(s):				
a) burn only used oil generated by the owner/operator or from household do-it-yourselfers? (40 CFR 279.23(a))	UOA	[ ]		NI N/A
b) burn in heaters designed to have a maximum capacity of not more than 0.5 million BTU per hour?(40 CFR 279.23(b))	UOA	[ ]		NI N/A
c) have combustion gases vented to the ambient air? (40 CFR 279.23(c))	UOA	[ ]		NI N/A

GENERATOR REQUIREMENTS FOR OFF-SITE SHIPMENTS OF USED OIL

(Rule 810 refers to 40 CFR 279.24)

8. Does the facility use a transporter with an EPA identification number? (Rule 810 refers to 40 CFR 279.24)	UOA	[X]		NI N/A

OR

9. If the facility does not use a transporter w/ an EPA identification number, does it meet one of the following exemptions?				
a) self transportation of small amounts to approved collection centers provided that the generator transports:				
i) the used oil in a vehicle owned by the generator or an employee of the generator? (40 CFR 279.24(a)(1))	UOA	[ ]		NI N/A
ii) no more than 55 gallons of used oil at one time? (40 CFR 279.24(a)(2))	UOA	[ ]		NI N/A
iii) to a used oil collection center that is registered, licensed, permitted or recognized by government? (40 CFR 279.24(a)(3))	UOA	[ ]		NI N/A
b) self transportation of small amounts to aggregation point owned by the generator provided that the generator transports: (40 CFR 279.24(b))				
i) the used oil in a vehicle owned by the generator or an employee of the generator? (40 CFR 279.24(b)(1))	UOA	[ ]		NI N/A
ii) no more than 55 gallons of used oil at one time? (40 CFR 279.24(b)(2))	UOA	[ ]		NI N/A
iii) the used oil to a used oil aggregation point that is owned/operated by the same generator? (40 CFR 279.24(b)(3))	UOA	[ ]		NI N/A
c) used oil is reclaimed and the processor returns the oil to the generator under tolling for use as lubricant, cutting oil, or coolant? (40 CFR 279.24(c))	UOA	[ ]		NI N/A
i) the contract indicates the type and amount of used oil and frequency? (40 CFR 279.24(c)(10))	UOA	[ ]		NI N/A
ii) the contract indicates the vehicle used to transport both ways is owned by the processor? (40 CFR 279.24(c)(2))	UOA	[ ]		NI N/A
iii) the contract indicates the oil will be returned to the generator? (40 CFR 279.24(c)(3))	UOA	[ ]		NI N/A

USED OIL DISPOSAL (Rule 816)

10. Is used oil that cannot be recycled & is being disposed of & is not a hazardous waste managed in accordance w/ applicable federal & state regulations? (Rule 816(2))	UOA	[X]		NI N/A
11. Is the used oil used as a dust suppressant? (Rule 816(3))	UOA		[X]	NI N/A

COMMENTS:-

Re: Follow-up Request from 6/13-6/14/12 EPA RCRA Inspection at BASF Wyandotte, MI

David W Sheaves to: Bryan Gangwisch 10/04/2012 07:34 AM

From: David W Sheaves <david.sheaves@basf.com>
To: Bryan Gangwisch/R5/USEPA/US@EPA,

History: This message has been replied to.

1 attachment

LDR Groundwater system carbon transfer water.pdf

Mr. Gangwisch,

Attached is the original first notification under the Land Disposal Restrictions for the referenced waste stream. The load in question did not have an accompanying Land Disposal Restriction Notification as the rule does not require the notice as long as the waste stream has not changed it's LDR status. This notice was in our on-site files, I apologize for not being able to produce the document during the initial inspection.

If you have any further questions please don't hesitate to contact me.

David Sheaves
Environmental Team Leader

Phone: 734-324-6836, Mobile: 734-476-7608, E-Mail: david.sheaves@basf.com
Postal Address: 1609 Biddle Avenue, Wyandotte, MI 48192

Be First to Strive! Then Strive to be First!

From: Bryan Gangwisch <Gangwisch.Bryan@epamail.epa.gov>
To: David W Sheaves <david.sheaves@basf.com>
Date: 10/03/2012 04:32 PM
Subject: Follow-up Request from 6/13-6/14/12 EPA RCRA Inspection at BASF Wyandotte, MI

Mr. Sheaves--
In looking over any other potential forthcoming (from BASF) items from the inspection, I had noticed that to date, no Land Disposal Restriction (LDR) form/notice to Michigan Disposal WTP for the hazardous waste shipment on 5/10/12 (North Works Feed Water -TT - D028) on manifest 009045965 JJK, had been

provided. This form/notice was not produced during the inspection. If you are able to locate the form/notice, express whether this form/notice was located on-site or if this form/notice had to be obtained from off-site? Also, provide a copy of the form/notice.

Sincerely,

Bryan Gangwisch
U.S. EPA, Region 5
77 W. Jackson Blvd. (LR-8J)
Chicago, IL 60604-3511
RCRA Branch
Land and Chemicals Division
Voice # (312) 886-0989
Fax # (312) 692-2033
gangwisch.bryan@epa.gov

Protecting the environment is everyone's responsibility. Help EPA fight pollution by reporting possible harmful environmental activity. To do so, visit EPA's website at
http://www.epa.gov/compliance/complaints/index.html

LAND DISPOSAL RESTRICTION & CERTIFICATION FORM 6/98

Please check the facility you are shipping to:

☑ Michigan Disposal Waste Treatment Plant
(Stabilization and Treatment)
49350 N. I-94 Service Drive
Belleville, MI 48111
EPA ID # MID 000 724 831

☐ Wayne Disposal, Inc.
Subtitle C Landfill
(Secure Hazardous Waste Landfill)
49350 N. I-94 Service Drive
Belleville, MI 48111
EPA ID # MID 048 090 633

☐ Michigan Recovery Systems, Inc.
(Solvent Recycling, Fuel Blending & Wastewater Treatment)
36345 Van Born Road
Romulus, MI 48174
EPA ID # MID 060 975 844

Generator Name BASF Corporation Generator USEPA ID No. MID 064 197 742

Generator Address 1609 Biddle Avenue Wyandotte, MI 48192

State Manifest No. MI 7577954 Manifest Doc. No. 14059

INSTRUCTIONS

- In Column 1 identify all USEPA hazardous waste codes that apply to this waste shipment.
- In Column 2, choose the appropriate treatability group: Non-Wastewater (NWW) or Wastewater (WW).
- In Column 3, enter the appropriate Subcategory, if applicable, and also enter "Contaminated Soil" or "Debris" if the waste will be treated using one of the alternative treatment technologies provided by 268.49(c) (soil) or 268.45 (debris).
- In Column 4, circle the letter of the appropriate paragraph from Pages 1-2 of this form.
- In Column 5, for F001-F005, F039, D001-D043, Debris & Contaminated Soil wastes, enter the Reference Number(s) from the EQ Resource Guide–LDR/UHC Constituent Table for any constituents subject to treatment in your waste stream.

Manifest Line Item #	1. USEPA HAZARDOUS WASTE CODE(S)	2. NWW or WW	3. SUBCATEGORY	4. HOW MUST THE WASTE BE MANAGED? (Circle one)	5. REFERENCE NUMBER(S) of Hazardous Constituents contained in the waste. Complete for F001-F005, F039, D001-D043, Soil & Debris wastes.
11.A	D028	☐ NWW ☑ WW		A B C D E F G H I J K L M S	27, 28, 79
11.B		☐ NWW ☐ WW		A B C D E F G H I J K L M S	
11.C		☐ NWW ☐ WW		A B C D E F G H I J K L M S	
11.D		☐ NWW ☐ WW		A B C D E F G H I J K L M S	

I hereby certify that all information submitted on this and all associated documents is complete and accurate to the best of my knowledge and information.

Generator Signature [signature] Title Environmental Specialist

Printed Name David W. Sheaves Date 7/28/00

HOW MUST THE WASTE BE MANAGED?

For S, circle the appropriate response for the 3 *italicized* options:

S. THIS CONTAMINATED SOIL *DOES / DOES NOT* (CIRCLE ONE) CONTAIN LISTED HAZARDOUS WASTE AND *DOES / DOES NOT* (CIRCLE ONE) EXHIBIT A CHARACTERISTIC OF HAZARDOUS WASTE AND *IS SUBJECT TO / COMPLIES WITH* (CIRCLE ONE) THE SOIL TREATMENT STANDARDS AS PROVIDED BY 268.49(c) OR THE UNIVERSAL TREATMENT STANDARDS. I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and believe that it has been maintained and operated properly so as to comply with treatment standards specified in 40 CFR 268.49 without impermissible dilution of the prohibited wastes. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

BASF Corporation June 13 and 14 Inspection Third Set of Attachments

David W Sheaves to: Bryan Gangwisch 06/27/2012 07:03 AM

From: David W Sheaves <david.sheaves@basf.com>
To: Bryan Gangwisch/R5/USEPA/US@EPA,

History: This message has been replied to.

4 attachments

Joncryl 500.pdf Joncryl 910.pdf Joncryl ADP 1200.pdf RCRAJob Descriptions Resins and Polyols.PDF

Bryan,

Provided is the third set of attachments for the information you requested at the closing. This set includes examples of RCRA job descriptions and representative MSDSs for the solution resins drumming area.

David Sheaves
Environmental Team Leader

Phone: 734-324-6836, Mobile: 734-476-7608, E-Mail: david.sheaves@basf.com
Postal Address: 1609 Biddle Avenue, Wyandotte, MI 48192

Be First to Strive! Then Strive to be First!

BASF

The Chemical Company

Safety data sheet
Joncryl® 500

1. Substance/preparation and company identification

Company
BASF CORPORATION
100 Campus Drive
Florham Park, NJ 07932

24 Hour Emergency Response Information
CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP

2. Composition/information on ingredients

CAS Number	Content (W/W)	Chemical name
	80.0 - 95.0 %	Modified acrylic copolymer
110-43-0	15.0 - 20.0 %	2-heptanone

3. Hazard identification

Emergency overview

DANGER: FLAMMABLE.
Avoid all sources of ignition: heat, sparks, open flame.
Avoid contact with the skin, eyes and clothing.
Avoid prolonged and/or repeated contact with the skin.

Potential health effects

Primary routes of exposure
Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

Potential environmental effects

Aquatic toxicity:
At the present state of knowledge, no negative ecological effects are expected.

4. First-aid measures

General advice:
Remove contaminated clothing.

If inhaled:
If difficulties occur after vapour/aerosol has been inhaled, remove to fresh air and seek medical attention.

If on skin:
Wash thoroughly with soap and water.

If irritation develops, seek medical attention.

If in eyes:
Wash affected eyes for at least 15 minutes under running water with eyelids held open.

Seek medical attention.

If swallowed:
Rinse mouth and then drink plenty of water. Do not induce vomiting. Immediate medical attention required.

Note to physician

Treatment:	Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-fighting measures

Flash point:	approx. 36.5 °C approx. 97.70 °F	(ASTM D93)
Autoignition:		No data available.
Flammability:	Highly flammable.	

Suitable extinguishing media:
dry extinguishing media, foam

Hazards during fire-fighting:
harmful vapours
Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

Protective equipment for fire-fighting:
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:
The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

6. Accidental release measures

Personal precautions:
Can release flammable vapours. Wind direction should be noted. Avoid all sources of ignition: heat, sparks, open flame. Use antistatic tools.

Environmental precautions:
Do not discharge into drains/surface waters/groundwater.

Cleanup:

For large amounts: Pump off product.
For residues: Pick up with suitable absorbent material. Dispose of absorbed material in accordance with regulations.

7. Handling and storage

Handling

General advice:
Ensure thorough ventilation of stores and work areas.

Protection against fire and explosion:
Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

Storage

General advice:
Keep container tightly closed and in a cool place.

8. Exposure controls and personal protection

Components with workplace control parameters

2-heptanone	OSHA	PEL 100 ppm 465 mg/m3 ;
	ACGIH	TWA value 50 ppm ;

Personal protective equipment

Respiratory protection:
Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator.

Hand protection:
Chemical resistant protective gloves

Eye protection:
Safety glasses with side-shields.

General safety and hygiene measures:
Wear protective clothing as necessary to minimize contact. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Form:	viscous	
Odour:	acrylic-like	
Colour:	yellowish	
pH value:		Not applicable
Freezing point:		No data available.
Boiling point:	152 °C	Information applies to the solvent.
Vapour pressure:		No data available.
Density:	1.03 g/cm3	(20 °C)
Solubility in water:		slightly soluble
Other information:	No data available.	

10. Stability and reactivity

Conditions to avoid:
Avoid extreme heat.

Substances to avoid:
oxidizing agents

Hazardous reactions:
No hazardous reactions when stored and handled according to instructions.
The product is chemically stable.

Decomposition products:
Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

11. Toxicological information

Acute toxicity

Oral:
LD50/rat: > 5,000 mg/kg

Skin irritation:
rabbit: non-irritant (BASF-Test)

Eye irritation :
rabbit: non-irritant (BASF-Test)

Chronic toxicity

Other information:
The product has not been tested. The statements on toxicology have been derived from products of a similar structure and composition.

12. Ecological information

Environmental fate and transport

Biodegradation:
Evaluation: The polymer component of the product is poorly biodegradable.

Environmental toxicity

Other ecotoxicological advice:
The product has not been tested. The statements on ecotoxicology have been derived from products of a similar structure and composition.

13. Disposal considerations

Waste disposal of substance:
Must be dumped or incinerated in accordance with local regulations.

Container disposal:
Dispose of in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

RCRA: D001

14. Transport information

Land transport
USDOT

Hazard class:	3
Packing group:	III
ID number:	UN 1866
Hazard label:	3
Proper shipping name:	RESIN SOLUTION (contains HEPTAN-2-ONE)

Sea transport
IMDG

Hazard class:	3
Packing group:	III
ID number:	UN 1866
Hazard label:	3
Marine pollutant:	NO
Proper shipping name:	RESIN SOLUTION (contains HEPTAN-2-ONE)

Air transport
IATA/ICAO

Hazard class:	3
Packing group:	III
ID number:	UN 1866
Hazard label:	3
Proper shipping name:	RESIN SOLUTION (contains HEPTAN-2-ONE)

15. Regulatory information

Federal Regulations

Registration status:
TSCA, US released / listed

OSHA hazard category: ACGIH TLV established

SARA hazard categories (EPCRA 311/312): Not hazardous

State regulations

State RTK

CAS Number	Chemical name	State RTK
	Modified acrylic copolymer	MA, NJ, PA
110-43-0	2-heptanone	MA, NJ, PA

16. Other information

HMIS III rating

Health: 1 Flammability: 3 Physical hazard: 0

HMIS uses a numbering scale ranging from 0 to 4 to indicate the degree of hazard. A value of zero means that the substance possesses essentially no hazard; a rating of four indicates high hazard.

Local contact information
Prod_Reg@basf.com
(800) 231-7868

Joncryl® 500 is a registered trademark of BASF Corporation or BASF SE
IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE , IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY BASF HEREUNDER ARE GIVEN GRATIS AND BASF ASSUMES NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK.

END OF DATA SHEET

BASF

The Chemical Company

Safety Data Sheet

Joncryl® 910

1. Product and Company Identification

Company
BASF CORPORATION
100 Campus Drive
Florham Park, NJ 07932, USA

24 Hour Emergency Response Information
CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP

2. Hazards Identification

Emergency overview

DANGER:
FLAMMABLE.
MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.
Avoid contact with the skin, eyes and clothing.
Avoid all sources of ignition: heat, sparks, open flame.

State of matter: liquid
Colour: colourless
Odour: acrylic-like

Potential health effects

Primary routes of exposure:
Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

Chronic toxicity:

Carcinogenicity: Not expected to be carcinogenic (based on composition).

Repeated dose toxicity: Repeated oral uptake of the substance did not cause substance-related effects.
Repeated inhalative uptake of the substance did not cause substance-related effects.
Repeated dermal uptake of the substance did not cause substance-related effects.
The product has not been tested. The statement has been derived from products of a similar structure or composition.

Reproductive toxicity: No data available concerning reproduction toxicity.

Teratogenicity: No data available concerning teratogenic effects.

Genotoxicity: No data was available concerning mutagenic activity.

Signs and symptoms of overexposure:
The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further important symptoms and effects are so far not known.

Potential environmental effects

Degradation / environmental fate:
The polymer component of the product is poorly biodegradable.

3. Composition / Information on Ingredients

CAS Number	Content (W/W)	Chemical name
	70.0 - 80.0 %	Modified acrylic copolymer
110-43-0	20.0 - 30.0 %	2-heptanone

4. First-Aid Measures

General advice:
Remove contaminated clothing.

If inhaled:
Remove the affected individual into fresh air and keep the person calm. Seek medical attention.

If on skin:
Wash thoroughly with soap and water.

If irritation develops, seek medical attention.

If in eyes:
Wash affected eyes for at least 15 minutes under running water with eyelids held open.

Seek medical attention.

If swallowed:
Immediately rinse mouth and then drink plenty of water, do not induce vomiting, seek medical attention. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions.

Note to physician
Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Flash point:	41 °C	(ASTM D93)
Autoignition:		not determined
Lower explosion limit:		not determined
Upper explosion limit:		not determined
Flammability:	Flammable.	
Self-ignition temperature:		not self-igniting

Suitable extinguishing media:
dry powder, foam

Hazards during fire-fighting:
harmful vapours
Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

Substance/product is a flammable liquid.

Protective equipment for fire-fighting:
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:
The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

6. Accidental release measures

Personal precautions:
Can release flammable vapours. Wind direction should be noted. Avoid all sources of ignition: heat, sparks, open flame. Use antistatic tools.

Environmental precautions:
Do not discharge into drains/surface waters/groundwater.

Cleanup:
For large amounts: Pump off product.
For residues: Pick up with suitable absorbent material. Dispose of absorbed material in accordance with regulations.

7. Handling and Storage

Handling

General advice:
Ensure thorough ventilation of stores and work areas.

Avoid all sources of ignition: heat, sparks, open flame.

Protection against fire and explosion:
Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

Storage

General advice:
Keep container tightly closed and in a cool place.

8. Exposure Controls and Personal Protection

Components with workplace control parameters

2-heptanone	OSHA	PEL	100 ppm	465 mg/m3 ;
	ACGIH	TWA value	50 ppm	;

Personal protective equipment

Respiratory protection:
Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator.

Hand protection:
Chemical resistant protective gloves

Eye protection:
Safety glasses with side-shields. Wear face shield if splashing hazard exists.

General safety and hygiene measures:
Wear protective clothing as necessary to minimize contact. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

Form:	liquid	
Odour:	acrylic-like	
Colour:	colourless	
pH value:		of low solubility
Melting point:	-35 °C	The product has not been tested., Information applies to the solvent.
Boiling point:	approx. 152 °C	
Vapour pressure:	3.86 mmHg	(25 °C) Information applies to the solvent.
Density:	1.043 g/cm3	(20 °C)
Relative density:	1.043	(20 °C)
Vapour density:		not determined
Partitioning coefficient n-octanol/water (log Pow):		Study scientifically not justified.
Particle size:		The substance / product is marketed or used in a non solid or granular form.
Solubility in water:		slightly soluble
Other Information:	No data available.	

10. Stability and Reactivity

Conditions to avoid:
Avoid extreme heat.

Substances to avoid:
oxidizing agents

Hazardous reactions:
No hazardous reactions when stored and handled according to instructions.
The product is chemically stable.

Decomposition products:
Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:
Stable up to boiling point.

Oxidizing properties:
not fire-propagating

11. Toxicological information

Acute toxicity

Oral:
Type of value: LD50
Species: rat
Value: 1,500 - 2,000 mg/kg

Inhalation:

Type of value: LC50
Species: rat
Value: 10 - 20 mg/l
Exposure time: 4 h
The product has not been tested. The statement has been derived from the properties of the individual components.

Dermal:
Type of value: LD50
Species: rat
Value: > 5,000 mg/kg
The product has not been tested. The statement has been derived from the properties of the individual components.

Irritation / corrosion

Skin:
Species: rabbit
Result: non-irritant
Method: BASF-Test
The product has not been tested. The statement has been derived from the properties of the individual components.

Eye:
Species: rabbit
Result: non-irritant
Method: BASF-Test
The product has not been tested. The statement has been derived from the properties of the individual components.

Sensitization:

Species: guinea pig
Result: Non-sensitizing.
Method: OECD Guideline 406
The product has not been tested. The statement has been derived from the properties of the individual components.

Aspiration Hazard:

No aspiration hazard expected.

12. Ecological Information

Fish

Acute:
Leuciscus idus/LC50 (96 h): > 100 mg/l
The product has not been tested. The statement has been derived from products of a similar structure or composition.

Chronic:

No data available regarding toxicity to fish.

Aquatic invertebrates

Acute:
daphnia/EC50 (48 h):
No data available concerning toxicity for daphnia.

Chronic:
No data available regarding toxicity to daphnids.

Aquatic plants

Toxicity to aquatic plants:
algae/EC50 (72 h):
No data available concerning toxicity for algae.

Microorganisms

Toxicity to microorganisms:

The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Bioaccumulation

At the present state of knowledge, no negative ecological effects are expected.
Treatment in biological waste water treatment plants has to be performed according to local and administrative regulations.

Other adverse effects:

According to experience, the material has no harmful effect on the environment.

13. Disposal considerations

Waste disposal of substance:
Must be disposed of or incinerated in accordance with local regulations.

Container disposal:
Dispose of in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers. Flammable vapors may exist in containers in which residues of this product remain.

14. Transport Information

Land transport
USDOT

Hazard class:	3
Packing group:	II
ID number:	UN 1866
Hazard label:	3
Proper shipping name:	RESIN SOLUTION (contains HEPTAN-2-ONE)

Sea transport
IMDG

Hazard class:	3
Packing group:	II
ID number:	UN 1866
Hazard label:	3
Marine pollutant:	NO
Proper shipping name:	RESIN SOLUTION (contains HEPTAN-2-ONE)

Air transport

IATA/ICAO

Hazard class:	3
Packing group:	II
ID number:	UN 1866
Hazard label:	3
Proper shipping name:	RESIN SOLUTION (contains HEPTAN-2-ONE)

15. Regulatory Information

Federal Regulations

Registration status:
Chemical TSCA, US released / listed

OSHA hazard category: Chronic target organ effects reported; ACGIH TLV established; Flammable Liquid

EPCRA 311/312 (Hazard categories): Acute; Chronic; Fire

CERCLA RQ	CAS Number	Chemical name
1000 LBS		Proprietary

State regulations

State RTK	CAS Number	Chemical name
MA, NJ, PA		Modified acrylic copolymer
MA, NJ, PA	110-43-0	2-heptanone

16. Other Information

NFPA Hazard codes:
Health : 2 Fire: 3 Reactivity: 0 Special:

HMIS III rating
Health: 2 Flammability: 3 Physical hazard: 0

NFPA and HMIS use a numbering scale ranging from 0 to 4 to indicate the degree of hazard. A value of zero means that the substance possesses essentially no hazard; a rating of four indicates extreme danger. Although similar, the two rating systems are intended for different purposes, and use different criteria. The NFPA system was developed to provide an on-the-spot alert to the hazards of a material, and their severity, to emergency responders. The HMIS system was designed to communicate workplace hazard information to employees who handle hazardous chemicals.

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

MSDS Prepared by:
BASF NA Product Regulations
msds@basf.com

MSDS Prepared on: 2012/01/31

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IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE , IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY OUR COMPANY HEREUNDER ARE GIVEN GRATIS AND WE ASSUME NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK.
END OF DATA SHEET

BASF
The Chemical Company

Safety data sheet
Joncryl® ADP 1200

1. Substance/preparation and company identification

Company
BASF CORPORATION
100 Campus Drive
Florham Park, NJ 07932

24 Hour Emergency Response Information
CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP

2. Composition/information on ingredients

CAS Number	Content (W/W)	Chemical name
	>= 95.0 %	Polybutylacrylate polymers

3. Hazard identification

Emergency overview

Avoid contact with the skin, eyes and clothing.
Avoid prolonged and/or repeated contact with the skin.
Use with local exhaust ventilation.
Wear full face shield if splashing hazard exists.
Wear protective clothing.

Potential health effects

Primary routes of exposure
Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

Potential environmental effects

Aquatic toxicity:
At the present state of knowledge, no negative ecological effects are expected.

4. First-aid measures

General advice:
Remove contaminated clothing.

If inhaled:
Remove the affected individual into fresh air and keep the person calm. Seek medical attention.

If on skin:
Wash thoroughly with soap and water.

If irritation develops, seek medical attention.

If in eyes:
Wash affected eyes for at least 15 minutes under running water with eyelids held open.

Seek medical attention.

If swallowed:
Rinse mouth and then drink plenty of water. Do not induce vomiting. Immediate medical attention required.

Note to physician

Treatment:	Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-fighting measures

Flash point:	> 100 °C	
Autoignition:		No data available.
Flammability:	does not ignite	

Suitable extinguishing media:
water, dry extinguishing media, foam

Hazards during fire-fighting:
harmful vapours
Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

Protective equipment for fire-fighting:
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:
The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

6. Accidental release measures

Personal precautions:
Use personal protective clothing.

Environmental precautions:
Do not discharge into drains/surface waters/groundwater.

Cleanup:
Place absorbed material in the same container as the spilled substance/product for disposal.

For small amounts: Pick up with absorbent material (e.g. sand, sawdust, general-purpose binder). Dispose of absorbed material in accordance with regulations.
For large amounts: Pump off product.

Further information:
High risk of slipping due to leakage/spillage of product.

7. Handling and storage

Handling

General advice:
No special measures necessary provided product is used correctly.

Protection against fire and explosion:
Take precautionary measures against static discharges.

Storage

General advice:
Keep container tightly closed and dry; store in a cool place.

8. Exposure controls and personal protection

Personal protective equipment

Respiratory protection:
Wear respiratory protection if ventilation is inadequate. Breathing protection if breathable aerosols/dust are formed.

Hand protection:
Chemical resistant protective gloves

Eye protection:
Safety glasses with side-shields.

General safety and hygiene measures:
Wear protective clothing as necessary to minimize contact. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Form:	viscous	
Odour:	acrylic-like	
Colour:	colourless	
Boiling point:		not applicable
Density:	1.03 g/cm3	(20 °C)
Viscosity, dynamic:	550 mPa.s	(25 °C)
Solubility in water:		slightly soluble
Other information:	No data available.	

10. Stability and reactivity

Conditions to avoid:
No conditions known that should be avoided.

Substances to avoid:
No substances known that should be avoided.

Hazardous reactions:
No hazardous reactions when stored and handled according to instructions.
The product is chemically stable.

Decomposition products:

Hazardous decomposition products: No hazardous decomposition products known.

11. Toxicological information

Acute toxicity

Oral:
LD50/rat: > 5,000 mg/kg

Skin irritation:
rabbit: non-irritant (BASF-Test)

eye irritation :
rabbit: non-irritant (BASF-Test)

Chronic toxicity

Other information:
The product has not been tested. The statements on toxicology have been derived from products of a similar structure and composition.

12. Ecological information

Environmental fate and transport

Biodegradation:
Evaluation: The polymer component of the product is poorly biodegradable.

Environmental toxicity

Other ecotoxicological advice:
The product has not been tested. The statements on ecotoxicology have been derived from products of a similar structure and composition.

13. Disposal considerations

Waste disposal of substance:
Dispose of in accordance with national, state and local regulations.
It is the waste generator's responsibility to determine if a particular waste is hazardous under RCRA.

Container disposal:
Dispose of in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

14. Transport information

Land transport
USDOT

Not classified as a dangerous good under transport regulations

Sea transport
IMDG

Not classified as a dangerous good under transport regulations

Air transport
IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory information

Federal Regulations

Registration status:
TSCA, US released / listed

OSHA hazard category: No data available.

CERCLA RQ	CAS Number	Chemical name
5000 LBS	71-36-3	n-butanol
100 LBS	67-63-0	2-Propanol

SARA hazard categories (EPCRA 311/312): Not hazardous

State regulations

State RTK

CAS Number	Chemical name	State RTK
	Polybutylacrylate polymers	MA, NJ, PA

16. Other information

HMIS III rating
Health: 1 Flammability: 1 Physical hazard: 0

HMIS uses a numbering scale ranging from 0 to 4 to indicate the degree of hazard. A value of zero means that the substance possesses essentially no hazard; a rating of four indicates high hazard.

Local contact information
Prod_Reg@basf.com
(800) 231-7868

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IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE , IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE

DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY BASF HEREUNDER ARE GIVEN GRATIS AND BASF ASSUMES NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK.
END OF DATA SHEET

Hazardous Waste Job Descriptions Wyandotte Resins Plant

Plant Support Staff and Engineers

Description: This group consists of all support personnel for the operation of the plant such as managers, operations engineers, logistics personnel, and administrative staff.

These personnel do not normally manage hazardous wastes as a part of their routine day to day duties. The training required is the Corporate and Site Models within Mockingbird.

Plant Operators

Description: This group includes all operators within the Wyandotte Resins Manufacturing unit. This includes Solid Grade Oligomers, Emulsions, Resin Cutting, finished product truck loading and Shift Supervisors.

These personnel routinely manage hazardous waste by loading drums, totes or tanks of waste. Their responsibilities include ensuring drums and totes are labeled properly, ensuring the tanks Tk1053, 54, Tk-1081, 82 and TK4105 are properly inspected and ensuring containers in the < 90 day areas are properly inspected. Additionally, these personnel may be required to transport waste to the Central Waste Accumulation Storage Area, Building 55M.

These operators must complete the Mockingbird training modules for hazardous waste management at both the Corporate Level and Site Level on an annual basis.

Tank Farm Operators

Description: This group consists of the operators and supervision assigned the management and operation of the Wyandotte Resins Monomer Tank Farm, Liquid Polyol Storage Tanks and Hazardous Waste Storage Tanks.

These personnel manage hazardous waste generated in the tank farm areas in either, containers, totes and load out waste from the bulk hazardous storage tanks TK-1081 and TK-1082.

This group is required to complete on an annual basis both the Corporate and Site Specific hazardous waste training. In addition these operators are required to complete specific uniform hazardous waste manifest training.

Maintenance Technicians

Description: This group consists of the maintenance personnel assigned to the Wyandotte Resins Plant.

These personnel manage the episodic generation of hazardous waste as a result of maintenance activities. In addition these personnel are tasked with repairing leaking components identified during routine and non-routine Leak Detection and Repair Monitoring.

This group is required to complete on an annual basis both the Corporate and Site Specific hazardous waste training.

QA Lab Personnel

Description: This group consists of the personnel and supervision associated with the operation of the Wyandotte Resins Polymer Quality Assurance lab.

These personnel generate pail and drum quantities of hazardous waste and manage them in local satellite accumulation areas.

This group is required to complete on an annual basis both the Corporate and Site Specific hazardous waste training.

Ronald Geer
Staff Members

- Ronald Geer - N-EDN/OW (Operations Director)
  - Darren Leblanc - N-EDN/OW (CONTRACTOR)
  - Eldridge Hall - N-EDN/OW (CONTRACTOR)
  - Gary Krynock - N-EDN/OW (CONTRACTOR)
  - Gregory Dye - N-EDN/OW (CONTRACTOR)
  - Jeffrey Bryan - N-EDN/OW (Production Scheduler)
  - Kurt Radke - N-EDN/OW (Plant Logistics Ldr)
  - Lavorn Denson - N-EDN/OW (CONTRACTOR)
  - Lori Hass - N-EDN/OW (Admin Assoc)
  - Mark Smith - N-EDN/OW (CONTRACTOR)
  - Marvin Bannow - N-EDN/OW (CONTRACTOR)
  - Marvin Black - N-EDN/OW (CONTRACTOR)
  - Michael Carr - N-EDN/OW (CONTRACTOR)
  - Michael Lewen - N-EDN/OW (CONTRACTOR)
  - Peter Cilia - N-EDN/OW (CONTRACTOR)
  - Randy Jacob - N-EDN/OW (Supply Chain Planner III)
  - Steve Maccani - N-EDN/OW (Tech & Eng Manager)
    - Holly Johnson - N-EDN/OW (Operations Technologist)
    - Joshua Chism - N-EDN/OW (CONTRACTOR)
    - Kenneth Moll - N-EDN/OW (Ops Engineer III)
    - Mark Gill - N-EDN/OW (Opns/Maint Coord)
      - Gerald Mead - N-EDN/OW (Chemical Plant Operator II)
      - Rodney Moore - N-EDN/OW (Chemical Plant Operator I)
      - Todd Mitchell - N-EDN/OW (Chemical Plant Operator III)
    - Richard Hoagland - N-EDN/OW (Operations Engineer Spclst Sr)
    - Robert Bennis - N-EDN/OW (Ops Engineer II)
    - Steven Danley - N-EDN/OW (Engineering Associate)
  - Steve Starks-Glispie - N-EDN/OW (CONTRACTOR)
  - Terry Tkachuk - N-EDN/OW (CONTRACTOR)
  - Thomas Johnson - N-EDN/OW (Materials Planner Sr)
  - Thomas Turnbull - N-EDN/OW (Production Manager)
    - John Benjamin - N-EDN/OW (Shift Supv)
      - David Greggo - N-EDN/OW (Chemical Plant Operator II)
      - Douglas Sanborn - N-EDN/OW (Chemical Plant Operator)
      - James Plohg - N-EDN/OW (Chemical Plant Operator I)
      - Lane Zurawski - N-EDN/OW (Chemical Plant Operator V)
      - Mark Kaminske - N-EDN/OW (Chemical Plant Operator I)
      - Michael Cudnik - N-EDN/OW (Chemical Plant Operator I)
      - Michael Garner - N-EDN/OW (Chemical Plant Operator V)
      - Phillip Page - N-EDN/OW (Chemical Plant Operator II)
      - Reuben Hernandez - N-EDN/OW (Chem Process Operator II)
      - Robert Crandall - N-EDN/OW (Chemical Plant Operator I)
      - William Griggs - N-EDN/OW (Chemical Plant Operator II)
    - John Boehme - N-EDN/OW (Operations Technologist)
    - Marvin Beier - N-EDN/OW (Shift Supv)
      - Brian Gray - N-EDN/OW (Chemical Plant Operator I)
      - Daniel Schuebel - N-EDN/OW (Chemical Plant Operator V)
      - David Livingston - N-EDN/OW (Chemical Plant Operator I)
      - Douglas Maloney - N-EDN/OW (Chemical Plant Operator II)
      - Frank Mannino - N-EDN/OW (Chemical Plant Operator II)
      - Jeffrey Degg - N-EDN/OW (Chemical Plant Operator II)
      - Jeremy Beaubien - N-EDN/OW (Chemical Plant Operator III)

- John Yoscovits - N-EDN/OW (Chemical Plant Operator III)
- Markglece Reynolds - N-EDN/OW (Chemical Plant Operator III)
- Richard Lothian - N-EDN/OW (Chemical Plant Operator 1)
- Shawn Rossow - N-EDN/OW (Chemical Plant Operator I)
- Paul Gonzales - N-EDN/OW (Shift Supv)
  - Amanda Chaudoir - N-EDN/OW (Chemical Plant Operator V)
  - David Woods - N-EDN/OW (Chemical Plant Operator IV)
  - Gabe McDonald - N-EDN/OW (Chemical Plant Operator I)
  - James Simpson - N-EDN/OW (Chemical Plant Operator I)
  - Joseph Blevins - N-EDN/OW (Chemical Plant Operator II)
  - Raymond Follbaum - N-EDN/OW (Chemical Plant Operator I)
  - Ronald Draheim - N-EDN/OW (Chemical Plant Operator IV)
  - Scott Kassab - N-EDN/OW (Chemical Plant Operator II)
  - Scott Murdoch - N-EDN/OW (Chemical Plant Operator I)
  - Thomas Blizman - N-EDN/OW (Chemical Plant Operator I)
  - Todd Gauthier - N-EDN/OW (Chemical Plant Operator II)
- Terri Willman - N-EDN/OW (Shift Supv)
- Timothy Kearney - N-EDN/OW (Shift Supv)
  - David Krudwig - N-EDN/OW (Chemical Plant Operator III)
  - George King - N-EDN/OW (Chemical Plant Operator I)
  - James Beaubien - N-EDN/OW (Chemical Plant Operator IV)
  - Jason Rothe - N-EDN/OW (Chemical Plant Operator IV)
  - Keith Rudzik - N-EDN/OW (Chemical Plant Operator I)
  - Matt Snyder - N-EDN/OW (Chemical Plant Operator I)
  - Ontario Sullivan - N-EDN/OW (Chemical Plant Operator III)
  - Patrick Sekmistrz - N-EDN/OW (Chemical Plant Operator II)
  - Richard Farley - N-EDN/OW (Chemical Plant Operator I)
  - Richard Gow - N-EDN/OW (Chemical Plant Operator I)
  - Robert Friesema - N-EDN/OW (Chemical Plant Operator V)
- Tom Schirz - N-EDN/OW (CONTRACTOR)

RCRA Job Descriptions and Assignments
Wyandotte Polyol

Job Title: RCRA Unit Coordinator

Employee Filling Position:
Donald Swanson Operations Coordinator

Qualifications/Training:

- Hazard Communication
- Annual site train the trainer in RCRA requirements
- Knowledge of PPE and emergency response procedures
  Incident Commander Trained
  Emergency Response Trained

Job Description:

- Conduct RCRA training for employees
- Inspect Accumulation Storage Areas
- Inspection Satellite Storage Areas
- Monitor waste container labeling
- Monitor amount of waste generated
- Communicate new Polyol RCRA issues with Site EHS Team leader

Job Title: Operations Coordinators

Employees Filling Position:
Gail Fensom, Jerry Mikolajewski

Qualifications/Training:

- Hazard Communication Trained
- Annual Training In RCRA Requirements
- Knowledge Of PPE and Emergency Response Procedures
  Incident Commander Trained
  Emergency Response Trained

Job Description:

- Inspect Satellite Storage Areas
- Inspect Accumulation Storage Areas
- Monitor/ Label Waste Containers

Job Title: Production Supervisor

Employees Filling Position:
Larry Ouellette, Johnny Gonzales, Raymond Cade, Joe Fazekas

Qualifications/Training:

- Hazard Communication Trained
- Annual Training In RCRA Requirements
- Knowledge Of PPE and Emergency Response Procedures
  Incident Commander Trained
  Emergency Response Trained

Job Description:

- Inspect Satellite Storage Areas
- Inspect Accumulation Storage Areas
- Monitor/ Label Waste Containers

Job Title: Polyol Chemical Handlers and Operators

Employees Filling Position:

Juan Aguirre	Thomas Sleep	David Preston
Todd Duperron	Doug Nowaczewski	Steve Thiesmeyer
Dave Elliott	Mike Gessner	Jason Wilson
Kevin Keith	Jim Fields	Scott Springstead

Qualifications/Training:

- Hazard Communication Trained
- Annual training in RCRA requirements
- DOT training – General Awareness
- Knowledge of PPE and emergency response procedures
  Emergency Response Trained

Job Description:

- Load & Unload Trailers
- Verify quantities are accurate on shipping documentation.

Job Title: Maintenance, QA Lab

Employee Filling Position:

Robert Dincau	Pat Keck
Mary Ramirez	Jeff Gauthier
Richard Matthews	Jack Wisser
David Jones	
Bob Delisle	

Qualifications/Training

- Hazard Communication Trained
- Annual training in RCRA requirements
- Knowledge of PPE and emergency response procedures

Job Description:

- Inspect/maintain satellite storage areas
- Monitor/Label waste containers

Regarding the Compliance Inspection June 13 and 14

David W Sheaves to: Bryan Gangwisch 06/15/2012 06:18 AM

From: David W Sheaves <david.sheaves@basf.com>
To: Bryan Gangwisch/R5/USEPA/US@EPA,

History: This message has been replied to.

Bryan,

I would like to get copies of the photos you had taken during the inspection, I meant to ask you yesterday before you left but it slipped my mind. Can you e-mail the photos so that I can complete my incident reports?

Thanks in advance,

David Sheaves
Environmental Team Leader

Phone: 734-324-6836, Mobile: 734-476-7608, E-Mail: david.sheaves@basf.com
Postal Address: 1609 Biddle Avenue, Wyandotte, MI 48192

Be First to Strive! Then Strive to be First!

Re: Regarding the Compliance Inspection June 13 and 14

David W Sheaves to: Bryan Gangwisch 06/18/2012 09:16 AM

From: David W Sheaves <david.sheaves@basf.com>
To: Bryan Gangwisch/R5/USEPA/US@EPA,

Bryan,

Thank you!

Dave
David Sheaves
ENV Team Leader

From: Bryan Gangwisch [Gangwisch.Bryan@epamail.epa.gov]
Sent: 06/18/2012 09:04 AM EST
To: David Sheaves
Subject: Re: Regarding the Compliance Inspection June 13 and 14

Mr. Sheaves--
I will email scan copies of the photos to you tomorrow when I'm back in the office.

Sincerely,

Bryan Gangwisch
U.S. EPA, Region 5
77 W. Jackson Blvd. (LR-8J)
Chicago, IL 60604-3511
RCRA Branch
Land and Chemicals Division
Voice # (312) 886-0989
Fax # (312) 692-2033
gangwisch.bryan@epa.gov

Protecting the environment is everyone's responsibility. Help EPA fight pollution by reporting possible harmful environmental activity. To do so, visit EPA's website at
http://www.epa.gov/compliance/complaints/index.html

"" David W Sheaves ---06/15/2012 06:18:03 AM---Bryan, I would like to get copies of the photos you had taken during the

From: David W Sheaves <david.sheaves@basf.com>
To: Bryan Gangwisch/R5/USEPA/US@EPA
Date: 06/15/2012 06:18 AM
Subject: Regarding the Compliance Inspection June 13 and 14

Bryan,

I would like to get copies of the photos you had taken during the inspection, I meant to ask you yesterday before you left but it slipped my mind. Can you e-mail the photos so that I can complete my incident reports?

Thanks in advance,

David Sheaves
Environmental Team Leader

Phone: 734-324-6836, Mobile: 734-476-7608, E-Mail: david.sheaves@basf.com
Postal Address: 1609 Biddle Avenue, Wyandotte, MI 48192

Be First to Strive! Then Strive to be First!

Fw: Iron Mountain
David W Sheaves to: Bryan Gangwisch 06/18/2012 05:00 PM

From: David W Sheaves <david.sheaves@basf.com>
To: Bryan Gangwisch/R5/USEPA/US@EPA,
History: This message has been replied to.

Bryan,

Provided below is the address for Iron Mountain where our documents are archived off-site. I am currently working on the other deliverables you have requested. I will package them into one e-mail as opposed to the piece mealing them to you.

Thanks

David Sheaves
Environmental Team Leader

Phone: 734-324-6836, Mobile: 734-476-7608, E-Mail: david.sheaves@basf.com
Postal Address: 1609 Biddle Avenue, Wyandotte, MI 48192

Be First to Strive! Then Strive to be First!

----- Forwarded by David W Sheaves/NP/WYANDOTT/BASF-CORP/BASF on 06/18/2012 05:55 PM -----

From: Shane Ratliff/PARTNERS/NA/BASF
To: David W Sheaves/NP/WYANDOTT/BASF-CORP/BASF@BASF
Cc: Donald J Swanson/NPU/WYANDOTT/BASF-CORP/BASF@BASF
Date: 06/18/2012 04:22 PM
Subject: Iron Mountain

Here is the address for Iron Mountain:

Iron Mountain
7277 N. Haggerty Road
Canton, MI 48187
800-899-IRON
Www.ironmountain.com

If you need more information, please let me know.

Shane Ratliff
Polyol & TPU Plant Administrative Assistant

Phone: 734-324-6996 Mobile: 734-307-9358 Fax: 734-324-6379 E-Mail: shane.ratliff@partners.basf.com

Re: Follow-up Request from 6/13-6/14/12 EPA RCRA Inspection at BASF Wyandotte, MI

David W Sheaves to: Bryan Gangwisch 06/25/2012 01:49 PM

From: David W Sheaves <david.sheaves@basf.com>
To: Bryan Gangwisch/R5/USEPA/US@EPA,

History: This message has been replied to.

2 attachments

SCALETROL PDC9323 Waste Determination.pdf W-015 Waste Solid Polyol.pdf

Bryan,

As requested here is the scanner W-015 waste determination and from your inspection on site a scanned version of the Scaletrol waste determination.

David Sheaves
Environmental Team Leader

Phone: 734-324-6836, Mobile: 734-476-7608, E-Mail: david.sheaves@basf.com
Postal Address: 1609 Biddle Avenue, Wyandotte, MI 48192

Be First to Strive! Then Strive to be First!

From: Bryan Gangwisch <Gangwisch.Bryan@epamail.epa.gov>
To: david.sheaves@basf.com
Date: 06/25/2012 01:01 PM
Subject: Follow-up Request from 6/13-6/14/12 EPA RCRA Inspection at BASF Wyandotte, MI

Mr. Sheaves--
Please provide a scanned copy of waste profile W-015 waste solid polyol when you can.
Thanks.

Bryan Gangwisch
U.S. EPA, Region 5
77 W. Jackson Blvd. (LR-8J)
Chicago, IL 60604-3511
RCRA Branch
Land and Chemicals Division

Voice # (312) 886-0989
Fax # (312) 692-2033
gangwisch.bryan@epa.gov

Protecting the environment is everyone's responsibility. Help EPA fight pollution by reporting possible harmful environmental activity. To do so, visit EPA's website at
http://www.epa.gov/compliance/complaints/index.html

----- Forwarded by Bryan Gangwisch/R5/USEPA/US on 06/25/2012 11:58 AM -----

From: Bryan Gangwisch/R5/USEPA/US
To: david.sheaves@basf.com
Date: 06/21/2012 04:14 PM
Subject: EPA Photos from 6/13-6/14/12 RCRA Inspection at BASF Wyandotte, MI

Mr. Sheaves--
Here are the photos you requested that were taken during the RCRA inspection on 6/13-14/2012. Let me know if they do not go through (too large file).

[attachment "EPA_6_13_14_2012_RCRA_CEI_BASF_Wyandotte_MI_Photos.pdf" deleted by Bryan Gangwisch/R5/USEPA/US]

Bryan Gangwisch
U.S. EPA, Region 5
77 W. Jackson Blvd. (LR-8J)
Chicago, IL 60604-3511
RCRA Branch
Land and Chemicals Division
Voice # (312) 886-0989
Fax # (312) 692-2033
gangwisch.bryan@epa.gov

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http://www.epa.gov/compliance/complaints/index.html

Re: Follow-up Request from 6/13-6/14/12 EPA RCRA Inspection at BASF Wyandotte, MI

David W Sheaves to: Bryan Gangwisch 06/25/2012 02:47 PM

From: David W Sheaves <david.sheaves@basf.com>
To: Bryan Gangwisch/R5/USEPA/US@EPA,
History: This message has been replied to.

Bryan,

The photos made it through fine, thanks.

The Scaletrol was the large green tote of material in the waste warehouse.

Sincerely,

David Sheaves
Environmental Team Leader

Phone: 734-324-6836, Mobile: 734-476-7608, E-Mail: david.sheaves@basf.com
Postal Address: 1609 Biddle Avenue, Wyandotte, MI 48192

Be First to Strive! Then Strive to be First!

From: Bryan Gangwisch <Gangwisch.Bryan@epamail.epa.gov>
To: David W Sheaves <david.sheaves@basf.com>
Date: 06/25/2012 03:32 PM
Subject: Re: Follow-up Request from 6/13-6/14/12 EPA RCRA Inspection at BASF Wyandotte, MI

Mr. Sheaves--
Thanks for the submitted information. Was the Scaletrol the material on the floor near the hazardous waste tanks in Resin Plant? Also, did the inspection photos pass through email?

Sincerely,

Bryan Gangwisch
U.S. EPA, Region 5
77 W. Jackson Blvd. (LR-8J)
Chicago, IL 60604-3511
RCRA Branch
Land and Chemicals Division
Voice # (312) 886-0989

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http://www.epa.gov/compliance/complaints/index.html

David W Sheaves ---06/25/2012 01:49:35 PM---Bryan, As requested here is the scanner W-015 waste determination and from your

From: David W Sheaves <david.sheaves@basf.com>
To: Bryan Gangwisch/R5/USEPA/US@EPA
Date: 06/25/2012 01:49 PM
Subject: Re: Follow-up Request from 6/13-6/14/12 EPA RCRA Inspection at BASF Wyandotte, MI

Bryan,

As requested here is the scanner W-015 waste determination and from your inspection on site a scanned version of the Scaletrol waste determination.

David Sheaves
Environmental Team Leader

Phone: 734-324-6836, Mobile: 734-476-7608, E-Mail: david.sheaves@basf.com
Postal Address: 1609 Biddle Avenue, Wyandotte, MI 48192

Be First to Strive! Then Strive to be First!

From: Bryan Gangwisch <Gangwisch.Bryan@epamail.epa.gov>
To: david.sheaves@basf.com
Date: 06/25/2012 01:01 PM
Subject: Follow-up Request from 6/13-6/14/12 EPA RCRA Inspection at BASF Wyandotte, MI

Mr. Sheaves--
Please provide a scanned copy of waste profile W-015 waste solid polyol when you can.
Thanks.

Bryan Gangwisch
U.S. EPA, Region 5
77 W. Jackson Blvd. (LR-8J)
Chicago, IL 60604-3511
RCRA Branch
Land and Chemicals Division

Voice # (312) 886-0989
Fax # (312) 692-2033
gangwisch.bryan@epa.gov

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Date: 06/21/2012 04:14 PM
Subject: EPA Photos from 6/13-6/14/12 RCRA Inspection at BASF Wyandotte, MI

Mr. Sheaves--
Here are the photos you requested that were taken during the RCRA inspection on 6/13-14/2012. Let me know if they do not go through (too large file).

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Bryan Gangwisch
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Protecting the environment is everyone's responsibility. Help EPA fight pollution by reporting possible harmful environmental activity. To do so, visit EPA's website at
http://www.epa.gov/compliance/complaints/index.html [attachment "SCALETROL PDC9323 Waste Determination.pdf" deleted by Bryan Gangwisch/R5/USEPA/US] [attachment "W-015 Waste Solid Polyol.pdf" deleted by Bryan Gangwisch/R5/USEPA/US]

Waste Profile Sheet

Waste Name: Waste Solid Polyol **Waste Code: W-015**

Section A General Information

Generator Information:

Site/Unit: Polyol Plant
Contact: Don Swanson

Date: 12/29/10
Last Revision:

Waste Information

Generator's Common Name and Description: Waste Solid Polyol
Location (Point(s) of Generation) : Various points in the plant
Process Description: (How was the waste generated?) off-spec solidified polyols and residues, clean up of small spills of polyether and graft polyether polyols
Waste Generation Rate: 220 gall Quantity (lbs., gals, drums, etc.) Per: month Rate (shift, week, one-time, etc.)

Storage Information:

Storage Location: Polyol Plant and va
Container Type: 55 gallon steel drum

Received
Post inspection

Section B Physical Propertie:

Physical Properties:

Color:	varies	y organic
Number of Phases:	1	
Physical State (stp):	solid	@
Viscosity (cps):		
Melting Point:	NA	
Density		
Aqueous – pH	Exact: N/	
Aqueous – pH	Range:	

Composition:

Ensure All EPCRA 313 compo

Chemical Name	CASRN	RQ (lbs.)	Min %	Max %
Polyether polyol			40	99
Graft Polyether polyol			40	99
Clay absorbent			1	20

Section C Regulatory Determination

Solid Waste Determination:

- ☐ Material is not a Solid Waste. Stop here and go to Conclusions
- ☒ The waste is a Solid waste specify regulation 261.2

Exclusions:

- ☒ Material is not excluded
- ☐ The waste is exempted from regulation by 40 CFR 261.4(a) – Recycle Chart
- ☐ The waste is exempted from regulation by other clause – specify regulation:

Process Waste:

- ☒ This waste is not a process waste:
- ☐ This waste is a process waste:
  - ☐ Non-specific sources (including solvent use). List applicable F codes:
  - ☐ Specific sources as defined in 40 CFR 262. List applicable K codes:
- ☐ The waste is a process waste, but is not listed as an F or K code.

Product Waste:

- ☒ The waste is **not** a listed discarded commercial chemical product with a sole active ingredient
- ☐ The waste is a discarded commercial chemical product with a sole active ingredient
  List applicable U code:
  List applicable P code:

Characteristically Hazardous Wastes

- ☒ The waste does **not** exhibits any of characteristics of a Hazardous Waste:
- ☐ The waste exhibits one of the following characteristics:
  - ☐ D001 – Ignitability (High TOC)
  - ☐ D002 – Corrosivity
  - ☐ D003 – Reactivity
  - ☐ D004 - D0043 – Toxicity

(List all Toxicity D codes and concentrations):

Code: Concentration:	Code: Concentration:	Code: Concentration:	Code: Concentration:
Code: Concentration:	Code: Concentration:	Code: Concentration:	Code: Concentration:
Code: Concentration:	Code: Concentration:	Code: Concentration:	Code: Concentration:

Characteristic determination by:

- ☐ TCLP
- ☐ Total Metals
- ☒ By Knowledge

Conclusion & Determination

- ☒ The material is **NOT** a RCRA Hazardous Waste.
- ☐ The material is a RCRA Hazardous Waste.

Rationale (if needed):

Embed Analytical Reports and or MSDS

PLURACOL 5155.pdf

PLURACOL SG-360.pdf

- ☐ By analysis: attach copy of the lab summary.
- ☒ By knowledge. Provide brief description: Polyether and graft polyether polyols do not exhibit the characteristic of a hazardous waste nor do they contain substances referenced in 40CFR261.24
- ☐ The material is a State Hazardous Waste. List Codes:

Section D Land Disposal Restrictions (LDR)

- ☒ The material was NOT a RCRA hazardous Waste at the point of generation. LDR does not apply.
- ☐ The material is/was a RCRA hazardous Waste at the point of generation. List ALL applicable waste codes:

Waste Code	Constituent	Waste Water Std	Non Waste Water Std	Treatment Technology / Standard	Significa nt (Y/N)

LDR One Time Notification

☐ This material was, at point of generation, a hazardous waste and has been managed under one of the exclusions outlined in 40 CFR 268(a)(7). This document is to serve as a one time notification to file.

Universal Treatment Standards

☒ The waste is not a characteristic waste, UTS does not apply
☐ The waste is a high TOC D001, UTS does not apply
☐ The waste is characteristically hazardous and is subject to UTS for the underlying hazardous constituents listed here:

Chemical Name	Concentration	Wastewater Standard	Non-Wastewater Standard

☐ By analysis: attach copy of the lab summary.
☒ By knowledge: provide brief description of knowledge:

Section E Reportable Quantity Determination

Calculate the mixture RQ for each constituent to determine the RQ requirements.
Constituent RQ / Constituent % = Mixture RQ

Constituent	Constituent RQ	Constituent %	Mixture RQ
NA			

Section F RCRA Air Emissions Applicability

☐ Subpart CC Applicable.
VOC Concentration:
Storage Type
- ☐ DOT container Level 1
- ☐ DOT container Level 2
- ☐ Storage Tank provide tank number

☐ Subpart BB Applicability
Describe applicability:

☐ Subpart AA Applicable.
VOC Concentration:
Type of Recycle Unit Operation (i.e. still, distillation column etc.)

☒ RCRA Air Emissions not applicable

Waste Profile Sheet

Section G Shipping Information:

- ☐ EPA Hazardous Waste (If it is a hazardous waste it is a DOT hazardous material)
- ☐ State Hazardous Waste (List codes):
- ☐ State Non-Hazardous Waste (List codes):
- ☐ DOT hazardous material

For DOT Hazardous materials:

DOT Shipping Name: Non-regulated Solid Waste
DOT Hazard Class:
DOT Identification Number (UN/NA):
DOT Package Group:
Reportable Quantity (lbs.):
☒ DOT Approved Package
DOT Hazard Marking or Label:

DOT Notes:

Section H Miscellaneous Information

Transporter 1

Name: EQ Industrial Services
Contact: Racheal Lucarelli — Phone: 1-313-347-1342

Transporter 2

Name:
Contact: — Phone:

TSD 1 Information:

TSD Facility Name: EQ Detroit — Approval Number: GF041507
Location: 1923 Frederick St. Detroit, MI. 48122
Contact: Marla Hudson — Number: 1-313-347-1300

TSD 2 Information:

TSD Facility Name: — Approval Number:
Location:
Contact: — Number:

TSD 3 Information:

TSD Facility Name: — Approval Number:
Location:
Contact: — Number:

TSD 4 Information:

TSD Facility Name: — Approval Number:
Location:
Contact: — Number:

TSD 5 Information:

TSD Facility Name: — Approval Number:
Location:
Contact: — Number:

Section I Additional Analytical Data

Metals mg/Kg

Arsenic (As)	0.00	Mercury (Hg)	0.00		0.00
Barium (Ba)	0.00	Nickel (Ni)	0.00		0.00
Cadmium (Cr)	0.00	Selenium (Se)	0.00		0.00
Chromium (Cr)	0.00	Silver (Ag)	0.00		0.00
Copper (Cu)	0.00	Zinc (Zn)	0.00		0.00
Lead (Pb)	0.00	Thalium (Tl)	0.00		0.00

Waste Profile Sheet

Other Properties various units

Chlorine	0.00	BTUs	0		0.00
Bromine	0.00		0.00		0.00
Halides	0.00 .		0.00		0.00

Organics & Other Constituents mg/Kg

	0.00		0.00
	0.00		0.00
	0.00		0.00
	0.00		0.00
	0.00		0.00
	0.00		0.00
	0.00		0.00
	0.00		0.00
	0.00		0.00
	0.00		0.00
	0.00		0.00
	0.00		0.00

TSD Notes

☐ This material is a hazardous waste. Sate and Federal law requires properly handling. Make certain that you have:

1. Packaged the material in the proper container:
2. Closed and secured all container openings
3. Placed the hazardous label on the container
4. Dated the container
5. Moved the container to the proper location
6. Notified Site EHS Hub Personnel

☒ This material is not a hazardous waste. Make certain that you:

1. Packaged the material in the proper container
2. Closed and secured all container openings
3. Placed the non-hazardous label on the container
4. Placed appropriate OSHA HAZCOM Label on container
5. Moved the container to the proper location
6. Notified Site EHS Hub Personnel

NON-HAZARDOUS WASTE

Proper D.O.T. Shipping Name: Non-regulated Solid Polyol	UN OR NA #

GENERATOR INFORMATION:

NAME	BASF Corporation		
ADDRESS	1609 Biddle Avenue		
CITY	Wyandotte	STATE: MI	ZIP 48192
EPA ID NO	MID 064 197 742	MANIFEST DOCUMENT NO:	

ACCUMULATION START DATE:

NON-HAZARDOUS WASTE

BASF
The Chemical Company

Safety Data Sheet
PLURACOL® 5155 POLYOL

1. Product and Company Identification

Company
BASF CORPORATION
100 Campus Drive
Florham Park, NJ 07932, USA

24 Hour Emergency Response Information
CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP

Chemical family:	polyetherpolyol
Synonyms:	Graft Polyol

2. Hazards Identification

Emergency overview

CAUTION:
MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.
This material is found at low residual levels and meets performance exemption (a)(2)(i.i.) of the OSHA Acrylonitrile standard.
No special handling, labeling or surveillance are required.

State of matter: liquid

Potential health effects

Primary routes of exposure:
Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

Acute toxicity:
Ingestion may cause gastrointestinal disturbances.

Irritation / corrosion:
Irritating to respiratory system. Irritating to eyes and skin.

Assessment other acute effects:
Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Sensitization:
The chemical structure does not suggest a sensitizing effect.

Chronic toxicity:

Carcinogenicity: The chemical structure does not suggest a specific alert for such an effect.

Repeated dose toxicity: No known chronic effects.

Reproductive toxicity: The chemical structure does not suggest a mutagenic effect.

Teratogenicity: The chemical structure does not suggest a mutagenic effect.

Genotoxicity: The chemical structure does not suggest a mutagenic effect.

Medical conditions aggravated by overexposure:
Data available do not indicate that there are medical conditions that are generally recognized as being aggravated by exposure to this substance/product.

Potential environmental effects

Aquatic toxicity:
There is a high probability that the product is not acutely harmful to aquatic organisms.

Degradation / environmental fate:
Poorly biodegradable. The product has not been tested. The statement has been derived from the properties of the individual components.

3. Composition / Information on Ingredients

CAS Number	Content (W/W)	Chemical name
	100.0 %	Polyol
100-42-5	<= 500.0 PPM	Styrene
107-13-1	<= 100.0 PPM	acrylonitrile

4. First-Aid Measures

General advice:
Remove contaminated clothing.

If inhaled:
Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. Immediate medical attention required.

If on skin:
Wash affected areas thoroughly with soap and water. If irritation develops, seek medical attention.

If in eyes:
In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Immediate medical attention required.

If swallowed:
Rinse mouth and then drink plenty of water. Do not induce vomiting. Immediate medical attention required.

5. Fire-Fighting Measures

Autoignition: Unspecified
Self-ignition temperature: not self-igniting

Suitable extinguishing media:
water, dry extinguishing media, carbon dioxide, foam

Hazards during fire-fighting:

No particular hazards known.

Protective equipment for fire-fighting:
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

6. Accidental release measures

Cleanup:
Spills should be contained, solidified, and placed in suitable containers for disposal.

7. Handling and Storage

Handling

Protection against fire and explosion:
No explosion proofing necessary.

Storage

General advice:
No special precautions necessary. Avoid extreme heat. Store protected against freezing.

Storage stability:
Storage temperature: 70 - 80 °F
Protect against moisture.

8. Exposure Controls and Personal Protection

Advice on system design:
Provide local exhaust ventilation to control vapours/mists.

Personal protective equipment

Respiratory protection:
Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator as needed.

Hand protection:
Chemical resistant protective gloves

Eye protection:
Wear face shield or tightly fitting safety goggles (chemical goggles) if splashing hazard exists.

General safety and hygiene measures:
Avoid contact with skin. Handle in accordance with good industrial hygiene and safety practice. Wear protective clothing as necessary to prevent contact. Avoid inhalation of vapours/mists.

9. Physical and Chemical Properties

Form:	liquid	
pH value:		Unspecified
Freezing point:		Unspecified
Boiling point:		Unspecified
Vapour pressure:		Unspecified
Density:	8.799 lb/USg	(25 °C)
Partitioning coefficient n-octanol/water (log Pow):		Unspecified
Viscosity, dynamic:	19,260 mPa.s	(25 °C)

Solubility in water:	sparingly soluble

10. Stability and Reactivity

Conditions to avoid:
> 80 degrees Fahrenheit
Avoid moisture.

Decomposition products:
Hazardous decomposition products: carbon monoxide, carbon dioxide

Thermal decomposition:
No data available.

Corrosion to metals:
No corrosive effect on metal.

Oxidizing properties:
Not an oxidizer.

11. Toxicological information

Irritation / corrosion

Information on: Polyol
Assessment of irritating effects:
Contact may result in skin irritation. Contact may result in eye irritation.

Aspiration Hazard:

No aspiration hazard expected.

12. Ecological Information

13. Disposal considerations

Waste disposal of substance:
Incinerate in a licensed facility. Do not discharge substance/product into sewer system. Dispose of in a licensed facility.

Container disposal:
DRUMS:
Steel drums must be emptied and can be sent to a licensed drum reconditioner for reuse, a scrap metal dealer or an approved landfill. Do not attempt to refill or clean containers since residue is difficult to remove. Under no circumstances should empty drums be burned or cut open with gas or electric torch as toxic decomposition products may be liberated. Do not reuse empty containers.

14. Transport Information

Land transport
USDOT

Not classified as a dangerous good under transport regulations

Sea transport
IMDG

Not classified as a dangerous good under transport regulations

Air transport
IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory Information

Federal Regulations

Registration status:
Chemical TSCA, US released / listed

OSHA hazard category: Chronic target organ effects reported;

EPCRA 311/312 (Hazard categories): Chronic;

CERCLA RQ	CAS Number	Chemical name
1000 LBS	100-42-5	Styrene
100 LBS	107-13-1	acrylonitrile

State regulations

State RTK	CAS Number	Chemical name
MA, NJ, PA	100-42-5	Styrene
MA, NJ, PA	107-13-1	acrylonitrile

CA Prop. 65:
THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

16. Other Information

HMIS III rating
Health: 1 Flammability: 0 Physical hazard: 0

NFPA and HMIS use a numbering scale ranging from 0 to 4 to indicate the degree of hazard. A value of zero means that the substance possesses essentially no hazard; a rating of four indicates extreme danger. Although similar, the two rating systems are intended for different purposes, and use different criteria. The NFPA system was developed to provide an on-the-spot alert to the hazards of a material, and their severity, to emergency responders. The HMIS system was designed to communicate workplace hazard information to employees who handle hazardous chemicals.

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

MSDS Prepared by:
BASF NA Product Regulations
msds@basf.com

MSDS Prepared on: 2010/04/22

PLURACOL is a registered trademark of BASF Corporation or BASF SE

IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE , IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY BASF HEREUNDER ARE GIVEN GRATIS AND BASF ASSUMES NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK.
BASF CORPORATION WILL NOT MAKE ITS PRODUCTS AVAILABLE TO CUSTOMERS FOR USE IN THE MANUFACTURE OF MEDICAL DEVICES WHICH ARE INTENDED FOR PERMANENT IMPLANTATION IN THE HUMAN BODY OR IN PERMANENT CONTACT WITH INTERNAL BODILY TISSUES OR FLUIDS.

END OF DATA SHEET

BASF

The Chemical Company

Safety Data Sheet
PLURACOL® SG360 POLYOL

1. Product and Company Identification

Company
BASF CORPORATION
100 Campus Drive
Florham Park, NJ 07932, USA

24 Hour Emergency Response Information
CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP

Synonyms: Conventional Polyol

2. Hazards Identification

Emergency overview

CAUTION:
MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.

State of matter: liquid
Colour: yellow
Odour: faint odour

Potential health effects

Primary routes of exposure:
Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

Acute toxicity:
Ingestion may cause gastrointestinal disturbances.

Irritation / corrosion:
Irritating to respiratory system. Irritating to eyes and skin.

Sensitization:
The chemical structure does not suggest a sensitizing effect.

Chronic toxicity:

Carcinogenicity: The chemical structure does not suggest a specific alert for such an effect.

Repeated dose toxicity: No known chronic effects.

Genotoxicity: The chemical structure does not suggest a mutagenic effect.

Medical conditions aggravated by overexposure:

Data available do not indicate that there are medical conditions that are generally recognized as being aggravated by exposure to this substance/product.

Potential environmental effects

Aquatic toxicity:
There is a high probability that the product is not acutely harmful to aquatic organisms.

Degradation / environmental fate:
The product has not been tested. The statement has been derived from the properties of the individual components.

3. Composition / Information on Ingredients

CAS Number	Content (W/W)	Chemical name
	100.0 %	Polyol

4. First-Aid Measures

General advice:
Remove contaminated clothing.

If inhaled:
Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. Immediate medical attention required.

If on skin:
Wash affected areas thoroughly with soap and water. Immediate medical attention required.

If in eyes:
In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Immediate medical attention required.

If swallowed:
Rinse mouth and then drink plenty of water. Induce vomiting. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Immediate medical attention required.

5. Fire-Fighting Measures

Flash point:	> 250 °F	(open cup)
	> 121 °C	(open cup)
Autoignition:		No data available.
Self-ignition temperature:		not self-igniting

Suitable extinguishing media:
water, dry extinguishing media, carbon dioxide, foam

Hazards during fire-fighting:

No particular hazards known.

Protective equipment for fire-fighting:
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:
Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental release measures

Cleanup:
Spills should be contained, solidified, and placed in suitable containers for disposal.

7. Handling and Storage

Handling

Protection against fire and explosion:
No explosion proofing necessary.

Storage

General advice:
No special precautions necessary. Avoid extreme heat. Store protected against freezing.

Storage stability:
Storage temperature: 70 - 140 °F
Protect against moisture.

8. Exposure Controls and Personal Protection

Advice on system design:
Provide local exhaust ventilation to control vapours/mists.

Personal protective equipment

Respiratory protection:
Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator as needed.

Hand protection:
Chemical resistant protective gloves

Eye protection:
Wear face shield or tightly fitting safety goggles (chemical goggles) if splashing hazard exists.

General safety and hygiene measures:
Avoid contact with skin. Wear protective clothing as necessary to prevent contact. Handle in accordance with good industrial hygiene and safety practice. Avoid inhalation of vapours/mists.

9. Physical and Chemical Properties

Form:	liquid	
Odour:	faint odour, of polyol	
Colour:	yellow	
pH value:	8 - 10	No data available.
Freezing point:	0 °C	
Boiling point:		Unspecified
Vapour pressure:		Unspecified
Density:	1.0 lb/USg	(25 °C)
Partitioning coefficient n-octanol/water (log Pow):		Unspecified
Viscosity, dynamic:	3,500 mPa.s	(25 °C)
Solubility in water:		slightly soluble

10. Stability and Reactivity

Conditions to avoid:
Avoid moisture.

Hazardous reactions:
The product is chemically stable.

Decomposition products:
Hazardous decomposition products: carbon monoxide, carbon dioxide

Thermal decomposition:
No data available.

Corrosion to metals:
No corrosive effect on metal.

Oxidizing properties:
not fire-propagating

11. Toxicological information

Acute toxicity

Oral:
Type of value: LD50
Species: rat
Value: > 2,000 mg/kg

Dermal:
Type of value: LD50
Species: rabbit
Value: > 2,000 mg/kg

Irritation / corrosion

Skin:
Species: rabbit
Result: non-irritant

Eye:
Species: rabbit
Result: non-irritant

Sensitization:

Result: Non-sensitizing.

Genetic toxicity

Experimental/calculated data:
Bacterial gene mutation assay negative

Ames-test negative

12. Ecological Information

Fish

Acute:
Brachydanio rerio/LC50 (48 h): > 100 mg/l

Aquatic invertebrates

Acute:
Daphnia magna/EL50 (48 h): > 100 mg/l

Chronic:
Daphnia magna (NOEC) 21 d > 1 mg/l
Microorganisms

Toxicity to microorganisms:
activated sludge/EC20 (0.5 h): > 1,000 mg/l

Degradability / Persistence
Biological / Abiological Degradation

Evaluation: Not readily biodegradable (by OECD criteria).
The product is biodegradable.

13. Disposal considerations

Waste disposal of substance:
Incinerate in a licensed facility. Do not discharge substance/product into sewer system. Dispose of in a licensed facility.

Container disposal:
Steel drums must be emptied and can be sent to a licensed drum reconditioner for reuse, a scrap metal dealer or an approved landfill. Refer to 40 CFR § 261.7 (residues of hazardous waste in empty containers). Decontaminate containers prior to disposal. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

14. Transport Information

Land transport
USDOT

Not classified as a dangerous good under transport regulations

Sea transport
IMDG

Not classified as a dangerous good under transport regulations

Air transport
IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory Information

<u>Federal Regulations</u>

Registration status:
Chemical TSCA, US released / listed

16. Other Information

Recommended use: polyurethane component industrial chemicals
Suitable for use in industrial sector: Polymers industry; chemical industry

HMIS III rating
Health: 1 Flammability: 0 Physical hazard: 0

NFPA and HMIS use a numbering scale ranging from 0 to 4 to indicate the degree of hazard. A value of zero means that the substance possesses essentially no hazard; a rating of four indicates extreme danger. Although similar, the two rating systems are intended for different purposes, and use different criteria. The NFPA system was developed to provide an on-the-spot alert to the hazards of a material, and their severity, to emergency responders. The HMIS system was designed to communicate workplace hazard information to employees who handle hazardous chemicals.

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K_ProdRegs@basf.com

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END OF DATA SHEET

Waste Profile Sheet

Waste Name: Waste Scaletrol PDC9323 **Waste Code:** SS-001

Section A General Information

Generator Information:

Site/Unit: Site Services
Contact: Craig Cook

Date: 06/18/2012
Last Revision:

Waste Information

Generator's Common Name and Description: Location (Point(s) of Generation) Waste Scaletrol PDC9323
Process Description: (How was the waste generated?) Material is an obsolete waste treatment additive
Waste Generation Rate: 275 gallons Quantity (lbs., gals, drums, etc.) Per Once Rate (shift, week, one-time, etc.)

Storage Information:

Storage Location: CWASA
Container Type: Tote

Section B Physical Properties and Composition

Physical Properties:

Color:	Amber to brown	Odor:	Slight
Number of Phases:	1	Odor Threshold	None
Physical State (stp):	liquid	Vapor Press	18 MmHg @ 20 C
Viscosity (cps):	140	Boiling Point	> 100 C
Melting Point:	-4 C	Flash Point	> 93 C
Density	1.096	NACE Rate	< 0.25 inches per year
Aqueous – pH	Exact9.8	Nonaqueous	
Aqueous – pH	Range:		

Composition:

Ensure All EPCRA 313 compounds are listed

Chemical Name	CASRN	RQ (lbs.)	Min %	Max %
SCALETROL PDC9323				100

Section C Regulatory Determination

Solid Waste Determination:

- ☐ Material is not a Solid Waste. Stop here and go to Conclusions
- ☒ The waste is a Solid waste specify regulation 261.2

Exclusions:

- ☒ Material is not excluded
- ☐ The waste is exempted from regulation by 40 CFR 261.4(a) – Recycle Chart
- ☐ The waste is exempted from regulation by other clause – specify regulation:

Process Waste:

- ☒ This waste is not a process waste:
- ☐ This waste is a process waste:
  - ☐ Non-specific sources (including solvent use). List applicable F codes:
  - ☐ Specific sources as defined in 40 CFR 262. List applicable K codes:
- ☐ The waste is a process waste, but is not listed as an F or K code.

Product Waste:

- ☒ The waste is **not** a listed discarded commercial chemical product with a sole active ingredient
- ☐ The waste is a discarded commercial chemical product with a sole active ingredient

List applicable U code:
List applicable P code:

Characteristically Hazardous Wastes

- ☒ The waste does **not** exhibits any of characteristics of a Hazardous Waste:
- ☐ The waste exhibits one of the following characteristics:
  - ☐ D001 – Ignitability (High TOC)
  - ☐ D002 – Corrosivity
  - ☐ D003 – Reactivity
  - ☐ D004 - D0043 – Toxicity

(List all Toxicity D codes and concentrations):

Code: Concentration:	Code: Concentration:	Code: Concentration:	Code: Concentration:
Code: Concentration:	Code: Concentration:	Code: Concentration:	Code: Concentration:
Code: Concentration:	Code: Concentration:	Code: Concentration:	Code: Concentration:

Characteristic determination by:

- ☐ TCLP
- ☐ Total Metals
- ☒ By Knowledge

Conclusion & Determination

- ☐ The material is **NOT** a RCRA Hazardous Waste.
- ☐ The material is a RCRA Hazardous Waste.

Rationale (if needed): See attached analytical report

Embed Analytical Reports and or MSDS

Scaletrol.pdf

- ☐ By analysis: attach copy of the lab summary.
- ☐ By knowledge. Provide brief description: stable polymer used for ion exchange in water softners
- ☐ The material is a State Hazardous Waste. List Codes:

Section D Land Disposal Restrictions (LDR)

- ☒ The material was NOT a RCRA hazardous Waste at the point of generation. LDR does not apply.
- ☐ The material is/was a RCRA hazardous Waste at the point of generation. List ALL applicable waste codes:

Waste Code	Constituent	Waste Water Std	Non Waste Water Std	Treatment Technology / Standard	Significa nt (Y/N)

Waste Profile Sheet

LDR One Time Notification

☐ This material was, at point of generation, a hazardous waste and has been managed under one of the exclusions outlined in 40 CFR 268(a)(7). This document is to serve as a one time notification to file.

Universal Treatment Standards

☒ The waste is not a characteristic waste, UTS does not apply
☐ The waste is a high TOC D001, UTS does not apply
☐ The waste is characteristically hazardous and is subject to UTS for the underlying hazardous constituents listed here:

Chemical Name	Concentration	Wastewater Standard	Non-Wastewater Standard

☐ By analysis: attach copy of the lab summary.
☐ By knowledge: provide brief description of knowledge:

Section E Reportable Quantity Determination

Calculate the mixture RQ for each constituent to determine the RQ requirements.
Constituent RQ / Constituent % = Mixture RQ

Constituent	Constituent RQ	Constituent %	Mixture RQ
NA			

Section F RCRA Air Emissions Applicability

☐ Subpart CC Applicable.
VOC Concentration:
Storage Type
- ☐ DOT container Level 1
- ☐ DOT container Level 2
- ☐ Storage Tank provide tank number

☐ Subpart BB Applicability
Describe applicability:
☐ Subpart AA Applicable.
VOC Concentration:
Type of Recycle Unit Operation (i.e. still, distillation column etc.)
☒ RCRA Air Emissions not applicable

Waste Profile Sheet

Section G Shipping Information:

- ☐ EPA Hazardous Waste (If it is a hazardous waste it is a DOT hazardous material)
- ☐ State Hazardous Waste (List codes):
- ☒ State Non-Hazardous Waste (List codes): 029L
- ☐ DOT hazardous material

For DOT Hazardous materials:

DOT Shipping Name: Non-regulated material
DOT Hazard Class:
DOT Identification Number (UN/NA):
DOT Package Group:
Reportable Quantity (lbs.):
☐ DOT Approved Package
DOT Hazard Marking or Label:

DOT Notes:

Section H Miscellaneous Information

Transporter 1

Name:
Contact: Phone:

Transporter 2

Name:
Contact: Phone:

TSD 1 Information:

TSD Facility Name: Approval Number:
Location:
Contact: Number:

TSD 2 Information:

TSD Facility Name: Approval Number:
Location:
Contact: Number:

TSD 3 Information:

TSD Facility Name: Approval Number:
Location:
Contact: Number:

TSD 4 Information:

TSD Facility Name: Approval Number:
Location:
Contact: Number:

TSD 5 Information:

TSD Facility Name: Approval Number:
Location:
Contact: Number:

Section I Additional Analytical Data

Metals mg/Kg

Arsenic (As)	0.00	Mercury (Hg)	0.00		0.00
Barium (Ba)	0.00	Nickel (Ni)	0.00		0.00
Cadmium (Cr)	0.00	Selenium (Se)	0.00		0.00
Chromium (Cr)	0.00	Silver (Ag)	0.00		0.00
Copper (Cu)	0.00	Zinc (Zn)	0.00		0.00
Lead (Pb)	0.00	Thalium (Tl)	0.00		0.00

Waste Profile Sheet

Other Properties various units

Chlorine	0.00	BTUs	0		0.00
Bromine	0.00		0.00		0.00
Halides	0.00 .		0.00		0.00

Organics & Other Constituents mg/Kg

	0.00		0.00
	0.00		0.00
	0.00		0.00
	0.00		0.00
	0.00		0.00
	0.00		0.00
	0.00		0.00
	0.00		0.00
	0.00		0.00
	0.00		0.00
	0.00		0.00
	0.00		0.00

TSD Notes

☐ This material is a hazardous waste. Sate and Federal law requires properly handling. Make certain that you have:

1. Packaged the material in the proper container:
2. Closed and secured all container openings
3. Placed the hazardous label on the container
4. Dated the container
5. Moved the container to the proper location
6. Notified Site EHS Hub Personnel

☐ This material is not a hazardous waste. Make certain that you:

1. Packaged the material in the proper container
2. Closed and secured all container openings
3. Placed the non-hazardous label on the container
4. Placed appropriate OSHA HAZCOM Label on container
5. Moved the container to the proper location
6. Notified Site EHS Hub Personnel

Example Label Text

NON-HAZARDOUS WASTE

Proper D.O.T. Shipping Name Non regulated Liquid	UN OR NA #

GENERATOR INFORMATION:

NAME	BASF CORPORATION		
ADDRESS	1609 Biddle Avenue		
CITY	ndotte	STATE: MIC	ZIP 48192
EPA ID NO	MID 064 197 742	MANIFEST DOCUMENT NO:	

ACCUMULATION START DATE:

NON-HAZARDOUS WASTE

Craig Cook
1-734-320-7426

C-C-US620013
Cost Center

GE Betz

GE Betz, Inc.
4636 Somerton Road
Trevose, PA 19053
Business telephone: (215) 355-3300

Material Safety Data Sheet

Issue Date: 03-MAY-2000

EMERGENCY TELEPHONE (Health/Accident): (800) 877-1940

1 PRODUCT IDENTIFICATION

PRODUCT NAME:

SCALETROL PDC9323

PRODUCT APPLICATION AREA:

DEPOSIT CONTROL PRODUCT.

2 COMPOSITION / INFORMATION ON INGREDIENTS

Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this MSDS for our assessment of the potential hazards of this formulation.

HAZARDOUS INGREDIENTS:

This product is not hazardous as defined by OSHA regulations.

No component is considered to be a carcinogen by the National Toxicology Program, the International Agency for Research on Cancer, or the Occupational Safety and Health Administration at OSHA thresholds for carcinogens.

3 HAZARDS IDENTIFICATION

****

EMERGENCY OVERVIEW

CAUTION

May cause slight irritation to the skin. May cause moderate irritation to the eyes. Vapors, gases, mists or aerosols may cause irritation to the upper respiratory tract. Prolonged exposure may cause dizziness and headache.

DOT hazard is not applicable
Emergency Response Guide is not applicable
Odor: Mild; Appearance: Amber, Liquid

Fire fighters should wear positive pressure self-contained breathing apparatus(full face-piece type). Proper fire-extinguishing media:

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dry chemical, carbon dioxide, foam or water

****

POTENTIAL HEALTH EFFECTS

ACUTE SKIN EFFECTS:
Primary route of exposure; May cause slight irritation to the skin.

ACUTE EYE EFFECTS:
May cause moderate irritation to the eyes.

ACUTE RESPIRATORY EFFECTS:
Vapors, gases, mists or aerosols may cause irritation to the upper respiratory tract. Prolonged exposure may cause dizziness and headache.

INGESTION EFFECTS:
No adverse effects expected. If more than several mouthfuls are swallowed, abdominal discomfort, nausea, diarrhea and weakness may occur.

TARGET ORGANS:
No evidence of potential chronic effects.

MEDICAL CONDITIONS AGGRAVATED:
Not known.

SYMPTOMS OF EXPOSURE:
May cause redness or itching of skin.

4 FIRST AID MEASURES

SKIN CONTACT:
Remove contaminated clothing. Wash exposed area with a large quantity of soap solution or water for 15 minutes.

EYE CONTACT:
Immediately flush eyes with water for 15 minutes. Immediately contact a physician for additional treatment.

INHALATION:
Remove victim from contaminated area to fresh air. Apply appropriate first aid treatment as necessary.

INGESTION:
Do not feed anything by mouth to an unconscious or convulsive victim. Do not induce vomiting. Immediately contact physician. Dilute contents of stomach using 3-4 glasses milk or water.

NOTES TO PHYSICIANS:
No special instructions

5 FIRE FIGHTING MEASURES

FIRE FIGHTING INSTRUCTIONS:
Fire fighters should wear positive pressure self-contained breathing apparatus (full face-piece type).

EXTINGUISHING MEDIA:
dry chemical, carbon dioxide, foam or water

HAZARDOUS DECOMPOSITION PRODUCTS:
Thermal decomposition (destructive fires) yields elemental oxides.

FLASH POINT:
> 200F > 93C P-M(CC)

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6 ACCIDENTAL RELEASE MEASURES

PROTECTION AND SPILL CONTAINMENT:

Ventilate area. Use specified protective equipment. Contain and absorb on absorbent material. Place in waste disposal container. Flush area with water. Wet area may be slippery. Spread sand/grit.

DISPOSAL INSTRUCTIONS:

Water contaminated with this product may be sent to a sanitary sewer treatment facility,in accordance with any local agreement,a permitted waste treatment facility or discharged under a permit. Product as is - Incinerate or land dispose in an approved landfill.

7 HANDLING & STORAGE

HANDLING:

Normal chemical handling.

STORAGE:

Keep containers closed when not in use. Protect from freezing. Preferably stored between 40-100F (5-40C).

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS

This product is not hazardous as defined by OSHA regulations.

ENGINEERING CONTROLS:

adequate ventilation

PERSONAL PROTECTIVE EQUIPMENT:

Use protective equipment in accordance with 29CFR 1910 Subpart I

RESPIRATORY PROTECTION:

A RESPIRATORY PROTECTION PROGRAM THAT MEETS OSHA'S 29 CFR 1910.134 AND ANSI Z88.2 REQUIREMENTS MUST BE FOLLOWED WHENEVER WORKPLACE CONDITIONS WARRANT A RESPIRATOR'S USE.
USE AIR PURIFYING RESPIRATORS WITHIN USE LIMITATIONS ASSOCIATED WITH THE EQUIPMENT OR ELSE USE SUPPLIED AIR-RESPIRATORS.
If air-purifying respirator use is appropriate, use a respirator with organic vapor cartridges.

SKIN PROTECTION:

rubber gloves-- Wash off after each use. Replace as necessary.

EYE PROTECTION:

splash proof chemical goggles

9 PHYSICAL & CHEMICAL PROPERTIES

Specific Grav.(70F,21C)	1.096	Vapor Pressure (mmHG)	~ 18.0
Freeze Point (F)	25	Vapor Density (air=1)	< 1.00
Freeze Point (C)	-4		
Viscosity(cps 70F,21C)	140	% Solubility (water)	100.0

Odor		Mild
Appearance		Amber
Physical State		Liquid
Flash Point	P-M(CC)	> 200F > 93C
pH As Is (approx.)		9.8

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Evaporation Rate (Ether=1) < 1.00

NA = not applicable ND = not determined

10 STABILITY & REACTIVITY

STABILITY:
Stable under normal storage conditions.
HAZARDOUS POLYMERIZATION:
Will not occur.
INCOMPATIBILITIES:
May react with strong oxidizers.
DECOMPOSITION PRODUCTS:
Thermal decomposition (destructive fires) yields elemental oxides.
INTERNAL PUMPOUT/CLEANOUT CATEGORIES:
"A"

11 TOXICOLOGICAL INFORMATION

Oral LD50 RAT:	>5,000 mg/kg
Dermal LD50 RABBIT:	>2,000 mg/kg
Inhalation LC50 RAT:	>17.16 mg/L/hr
Skin Irritation Score RABBIT:	Slight
Eye Irritation Score RABBIT:	Slight

12 ECOLOGICAL INFORMATION

AQUATIC TOXICOLOGY

Ceriodaphnia 48 Hour Static Renewal Bioassay
LC50= 1710; 0% Mortality= 500 mg/L
Daphnia magna 48 Hour Static Renewal Bioassay
LC50= 3830; No Effect Level= 156 mg/L
Fathead Minnow 96 Hour Static Acute Bioassay
LC50= 2400; No Effect Level= 1120 mg/L
Menidia beryllina (Silversides) 96 Hour Flow-Thru Bioassay
LC50= 353; No Effect Level= 89.7 mg/L
Mysid Shrimp 96 Hour Static Renewal Bioassay
LC50= 908; No Effect Level= 125 mg/L
Rainbow Trout 96 Hour Static Acute Bioassay (pH adjusted)
LC50= 1068; No Effect Level= 540 mg/L
Sheepshead Minnow 96 Hour Static Renewal Bioassay
LC50= 2730; No Effect Level= 1000 mg/L

BIODEGRADATION

BOD-28 (mg/g): 7
BOD-5 (mg/g): 2
COD (mg/g): 430
TOC (mg/g): 130

13 DISPOSAL CONSIDERATIONS

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If this undiluted product is discarded as a waste, the US RCRA hazardous waste identification number is :
Not applicable.

Please be advised; however, that state and local requirements for waste disposal may be more restrictive or otherwise different from federal regulations. Consult state and local regulations regarding the proper disposal of this material.

14 TRANSPORT INFORMATION

DOT HAZARD:	Not Applicable
UN / NA NUMBER:	Not applicable
DOT EMERGENCY RESPONSE GUIDE #:	Not applicable

15 REGULATORY INFORMATION

TSCA:
All components of this product are listed in the TSCA inventory.
CERCLA AND/OR SARA REPORTABLE QUANTITY (RQ):
No regulated constituent present at OSHA thresholds
SARA SECTION 312 HAZARD CLASS:
Product is non-hazardous under Section 311/312
SARA SECTION 302 CHEMICALS:
No regulated constituent present at OSHA thresholds
SARA SECTION 313 CHEMICALS:
No regulated constituent present at OSHA thresholds

CALIFORNIA REGULATORY INFORMATION

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65) CHEMICALS PRESENT:

No regulated constituent present at OSHA thresholds

MICHIGAN REGULATORY INFORMATION

No regulated constituent present at OSHA thresholds

16 OTHER INFORMATION

NFPA/HMIS		CODE TRANSLATION
Health	1	Slight Hazard
Fire	1	Slight Hazard
Reactivity	0	Minimal Hazard
Special	ALK	pH above 12.0
(1) Protective Equipment	B	Goggles,Gloves

(1) refer to section 8 of MSDS for additional protective equipment recommendations.

CHANGE LOG

	EFFECTIVE DATE	REVISIONS TO SECTION:	SUPERCEDES
MSDS status:	28-JAN-1997		** NEW **
	20-JUL-1999	12	28-JAN-1997
	03-SEP-1999	12	20-JUL-1999
	03-MAY-2000	12	03-SEP-1999

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Waste Determination Sheet

Waste Name: Monomer/Solvent Manual Addition Rags/Wipes Waste Code: JP-034

Generator Information:

Site/Unit: **JONCRYL® Polymer Plant** Date: **09-29-2009**
Contact: **Dan Hannewald** Last Revision:

Waste Information

Generator's Common Name and Description: Rags/Wipes from monomer/solvent manual addition stations
Location (Point(s) of Generation): Manual Addition Stations
Process Description: (How was the waste generated?): Wiping up drums/totes and incidental releases
Waste Generation Rate: **55 Gallons** (lbs., gals, drums, etc.) Per: Month Rate (shift, week, one-time, etc.)

Storage Information:

Storage Location: Satellite Containers at Manual Addition Stations, CWASA
Container Type: 55 gallon drums

Physical Properties:

Color:	Varies	Odor:	Acrylic and solvent
Number of Phases:	2 – liquid and solid	Odor Threshold	Low
Physical State (stp):	Liquid and solid	Vapor Press	<30 MmHg @ 20 C
Viscosity (cps):	NA	Boiling Point	NA
Melting Point:	Varies	Flash Point	< 140 F (est.)
Density	400 lbs per drum	NACE Rate	< 0.25 inches per year
Aqueous – pH	Exact: NA	Nonaqueous	
Aqueous – pH			

Composition:

Chemical Name	CASRN	RQ (lbs.)	Min %	Max %
Rags, wipes, sorbent materials			0	100
Acrylic/Methacrylic Monomers (e.g. Ethyl acrylate, isobornyl methacrylate, hydroxy ethyl acrylate, glycidyl methacrylate, ethyl methacrylate, 2-ethyl hexyl acrylate, styrene, methacrylic acid, hydroxyethyl methacrylate)			0	20
Diacetone acrylamide			0	10
Solvents (e.g. n-methyl 2-pyrrolidone, Oxsol 100, t-butyl acetate, aromatic 100, xylene, n-butyl acetate, acetone, toluene, propylene glycol methyl ether acetate)			0	20
Water			0	20

Exclusions:

- ☒ Material is not excluded
- ☐ The waste is exempted from regulation by 40 CFR 261.4(a) – Recycle Chart
- ☐ The waste is exempted from regulation by other clause – specify regulation:

Process Waste

- ☒ This waste is not a process waste:
- ☐ This waste is a process waste:
  - ☐ Non-specific sources (including solvent use). List applicable F codes:
  - ☐ Specific sources as defined in 40 CFR 262. List applicable K codes:
- ☐ The waste is a process waste, but is not listed as an F or K code.

Or

Product Waste:

- ☐ The waste is **not** a listed discarded commercial chemical product with a sole active ingredient
- ☒ The waste is a discarded commercial chemical product with a sole active ingredient
  List applicable U code: U002, U113, U220, U239, 131U
  List applicable P code:

Waste Determination Sheet

Characteristic

☐ The waste does not exhibits any of characteristics of a Hazardous Waste:
☒ The waste exhibits one of the following characteristics:
☒ D001 – Ignitability (High TOC)
☐ D003 – Reactivity
☐ D002 – Corrosivity
☐ D004 - D0043 – Toxicity
(List all Toxicity D codes and concentrations):

Code: Concentration:	Code: Concentration:	Code: Concentration:	Code: Concentration:

Characteristic determination by:

☐ TCLP
☐ Total Metals
☒ By Knowledge

Conclusion & Determination

☐ The material is **NOT** a RCRA Hazardous Waste.
☒ The material is a RCRA Hazardous Waste.
Rationale (if needed):

ethyl acrylate.pdf
Isobornyl methacrylate.pdf
HEA.pdf
glycidyl methacrylate.pdf
ethyl methacrylate.pdf
2-ethyl hexyl acrylate.PDF
styrene.pdf
methacrylic acid.pdf
HEMA.pdf
DAAM and water.pdf
NMP.pdf
Oxsol 100.pdf
t-butyl acetate.pdf
Aromatic 100.pdf
xylenes.pdf
n-butyl acetate.pdf
acetone.pdf
toluene.pdf
PMA.pdf

☐ By analysis: attach copy of the lab summary.
☒ By knowledge. Provide brief description: Review of MSDS for characteristics and several compounds are classified as discarded commercial chemical product.
☒ The material is a State Hazardous Waste. List Codes: 131 U

Land Disposal Restrictions (LDR)

☐ The material was NOT a RCRA hazardous Waste at the point of generation. LDR does not apply.
☒ The material is/was a RCRA hazardous Waste at the point of generation. List ALL applicable waste codes:

Waste Code	Constituent	Waste Water Std	Non Waste Water Std	Treatment Technology / Standard	Significant (Y/N)
D001	Various flammable liquids		Y	CMBST	Y
U002	Acetone		160 mg/L		Y
U113	Ethyl acrylate		X	CMBST	Y
U220	Toluene		10 mg/L		Y
U239	Xylenes		30 mg/L		Y

Waste Determination Sheet

LDR One Time Notification

☐ This material was, at point of generation, a hazardous waste and has been managed under one of the exclusions outlined in 40 CFR 268(a)(7). This document is to serve as a one time notification to file.

Universal Treatment Standards

☐ The waste is not a characteristic waste, UTS does not apply

☒ The waste is a high TOC D001, UTS does not apply

The waste is characteristically hazardous and is subject to UTS for the underlying hazardous constituents listed here:

Chemical Name	Concentration	Wastewater Standard	Non-Wastewater Standard

☐ By analysis: attach copy of the lab summary.

☒ By knowledge: provide brief description of knowledge:

RCRA Management Codes:

Source Code	Source Codes can be found in Attachment 2 of this document
Form Code	Form Codes can be found in Attachment 2 of the document.
Management Code	Management Codes can found in Attachment 2 of the document

RQ

Calculate the mixture RQ for each constituent to determine the RQ requirements.

Constituent RQ / Constituent % = Mixture RQ

Constituent	Constituent RQ	Constituent %	Mixture RQ
D001	100	100	100

RCRA Air Emissions Applicability

☒ Subpart CC Applicable.

VOC Concentration: > 500 ppmv

Storage Type

- ☒ DOT container Level 1
- ☐ DOT container Level 2
- ☐ Storage Tank provide tank number

☒ Subpart BB Applicability

Describe applicability: When containers are actively managed in < 90 day areas

☐ Subpart AA Applicable.

VOC Concentration:

Type of Recycle Unit Operation (i.e. still, distillation column etc.)

☐ RCRA Air Emissions not applicable

Waste Determination Sheet

Shipping Information:

- ☒ EPA Hazardous Waste (If it is a hazardous waste it is a DOT hazardous material)
- ☐ State Hazardous Waste (List codes):
- ☐ State Liquid Industrial Waste (List codes):
- ☒ DOT hazardous material

For DOT Hazardous materials:

DOT Shipping Name: RQ Waste Flammable Liquids nos (Acetone, xylene, styrene, ethyl acrylate)
DOT Hazard Class: 3
DOT Identification Number (UN/NA): UN 1993
DOT Package Group: PG II
Reportable Quantity (lbs.): 100 lbs
☒ DOT Approved Package
DOT Hazard Marking or Label: Flammable Liquids

DOT Notes:

Transporter 1

Name:
Contact: Phone:

Transporter 2

Name:
Contact: Phone:

TSD 1 Information:

TSD Facility Name: Approval Number:
Location:
Contact: Number:

TSD 2 Information:

TSD Facility Name: Approval Number:
Location:
Contact: Number:

TSD 3 Information:

TSD Facility Name: Approval Number:
Location:
Contact: Number:

TSD 4 Information:

TSD Facility Name: Approval Number:
Location:
Contact: Number:

TSD 5 Information:

TSD Facility Name: Approval Number:
Location:
Contact: Number:

Metals mg/Kg

Arsenic (As)	0.00	Mercury (Hg)	0.00		0.00
Barium (Ba)	0.00	Nickel (Ni)	0.00		0.00
Cadmium (Cr)	0.00	Selenium (Se)	0.00		0.00
Chromium (Cr)	0.00	Silver (Ag)	0.00		0.00
Copper (Cu)	0.00	Zinc (Zn)	0.00		0.00
Lead (Pb)	0.00	Thalium (Tl)	0.00		0.00

Waste Determination Sheet

Other Properties various units

Chlorine	0.00	BTUs	> 5000		0.00
Bromine	0.00		0.00		0.00
Halides	0.00 .		0.00		0.00

Organics & Other Constituents mg/Kg

	0.00		0.00
	0.00		0.00
	0.00		0.00
	0.00		0.00
	0.00		0.00
	0.00		0.00
	0.00		0.00
	0.00		0.00
	0.00		0.00
	0.00		0.00
	0.00		0.00
	0.00		0.00

TSD Notes

☒ This material is a hazardous waste. State and Federal law requires properly handling. Make certain that you have:

1. Packaged the material in the proper container: Managed in five gallon pails as a labpack
2. Closed and secured all container openings
3. Placed the hazardous label on the container
4. Dated the container
5. Moved the container to the proper location
6. Notified Site EHS Hub Personnel

☐ This material is not a hazardous waste. Make certain that you:

1. Packaged the material in the proper container
2. Closed and secured all container openings
3. Placed the non-hazardous label on the container
4. Placed appropriate OSHA HAZCOM Label on container
5. Moved the container to the proper location
6. Notified Site EHS Hub Personnel

HAZARDOUS WASTE

FEDERAL LAW PROHIBITS IMPROPER DISPOSAL
IF FOUND, CONTACT THE NEAREST POLICE, OR
PUBLIC SAFETY AUTHORITY, OR THE
U.S. ENVIRONMENTAL PROTECTION AGENCY

Proper D.O.T. Shipping Name;	**RQ Waste Flammable Liquids nos (Acetone, xylene, styrene, ethyl acrylate) (D001)**	UN OR NA #	**UN 1993**

GENERATOR INFORMATION:

NAME:	**BASF CORPORATION**		
ADDRESS:	**1609 Biddle Avenue**		
CITY:	**Wyandotte**	**STATE: MI**	**ZIP 48192**
EPA ID NO	**MID 064 197 742**	EPA WASTE NO:	**U002, U113, U220, U239, 131U, D001**
ACCUMULATION START DATE:		**MANIFEST DOCUMENT #**	

HANDLE WITH CARE!

CONTAINS HAZARDOUS OR TOXIC WASTES

Re: BASF Corporation June 13 and 14 Inspection Third Set of Attachments

David W Sheaves to: Bryan Gangwisch 06/27/2012 09:03 AM

From: David W Sheaves <david.sheaves@basf.com>
To: Bryan Gangwisch/R5/USEPA/US@EPA,
History: This message has been replied to.

Bryan,

We looked back over the preceding several weeks to determine what was being drummed. These three materials represent that review, so it could be any one of the three.

Thanks

David Sheaves
Environmental Team Leader

Phone: 734-324-6836, Mobile: 734-476-7608, E-Mail: david.sheaves@basf.com
Postal Address: 1609 Biddle Avenue, Wyandotte, MI 48192

Be First to Strive! Then Strive to be First!

From: Bryan Gangwisch <Gangwisch.Bryan@epamail.epa.gov>
To: David W Sheaves <david.sheaves@basf.com>
Date: 06/27/2012 09:56 AM
Subject: Re: BASF Corporation June 13 and 14 Inspection Third Set of Attachments

Mr. Sheaves--
Thanks for the submitted information. Which of the three materials in which you sent three MSDS for, was present at the time of inspection and observed on the floor in the solution resin drumming area near the hazardous waste tanks?

Sincerely,

Bryan Gangwisch
U.S. EPA, Region 5
77 W. Jackson Blvd. (LR-8J)
Chicago, IL 60604-3511
RCRA Branch
Land and Chemicals Division
Voice # (312) 886-0989

Fax # (312) 692-2033
gangwisch.bryan@epa.gov

Protecting the environment is everyone's responsibility. Help EPA fight pollution by reporting possible harmful environmental activity. To do so, visit EPA's website at
http://www.epa.gov/compliance/complaints/index.html

David W Sheaves ---06/27/2012 07:03:54 AM---Bryan, Provided is the third set of attachments for the information you requested

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Date: 06/27/2012 07:03 AM
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David Sheaves
Environmental Team Leader

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Be First to Strive! Then Strive to be First![attachment "Joncryl 500.pdf" deleted by Bryan Gangwisch/R5/USEPA/US] [attachment "Joncryl 910.pdf" deleted by Bryan Gangwisch/R5/USEPA/US] [attachment "Joncryl ADP 1200.pdf" deleted by Bryan Gangwisch/R5/USEPA/US] [attachment "RCRAJob Descriptions Resins and Polyols.PDF" deleted by Bryan Gangwisch/R5/USEPA/US]

Re: BASF Corporation June 13 and 14 Inspection Third Set of Attachments

David W Sheaves to: Bryan Gangwisch 06/28/2012 08:13 AM

From: David W Sheaves <david.sheaves@basf.com>
To: Bryan Gangwisch/R5/USEPA/US@EPA,

History: This message has been replied to.

1 attachment

JP-034 Waste Determination.PDF

Bryan,

The spilled material has been cleaned up and placed in an established waste stream. The waste determination is provided as an attachment to the e-mail. This waste determination was developed with the intention to facilitate the clean up of small spills of this product family. If you have any questions as always please don't hesitate to contact me.

Thanks

David Sheaves
Environmental Team Leader

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From: Bryan Gangwisch <Gangwisch.Bryan@epamail.epa.gov>
To: David W Sheaves <david.sheaves@basf.com>
Date: 06/27/2012 10:29 AM
Subject: Re: BASF Corporation June 13 and 14 Inspection Third Set of Attachments

Mr. Sheaves--
If the spilled material has been cleaned up, how was it managed/waste determined?

Bryan Gangwisch
U.S. EPA, Region 5
77 W. Jackson Blvd. (LR-8J)
Chicago, IL 60604-3511

RCRA Branch
Land and Chemicals Division
Voice # (312) 886-0989
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6/13/12 on-site security
entire fenced facility
remote access cameras
guards on-site 24/7

Weather: Sunny light wind 60°F Approx.

BASF Corp.

same plants
24 365
24 hrs J
8-5 R&D - presented

Arrived @ 8:57 am Approx.

Dave Sheaves - Env. & Process safety team leader

Approx 1,100 employees credentials

BG

Michigan ~~to~~ Alkali late 1800s

plant

Wyandotte chemical Co

5th largest in U.S.

Approx 1940

1/3 manufacturing
1/3 R&D
1/3 business & admin

BASF purchased site in late 60's

By 1980 -

235 acres site

Basic chemicals - soda ash calcium chlorides bulk
mainly organics urethane started in 50's
special chem R&D & applications

Regional Dist. Center

All per Dave:

handles resins liquid & solid
finished product drums bulk bags

EPC

Engineering Plastics Compounding

Take in raw nylon 6 & 66
extruded into finished product
all solids

(~) SAA

BG
~~no haz waste~~ per David

(2)

All per Dave

plant

Cellast - reaction / injection
mold facility
Create polyurethane

~ (SAA)

shock absorber pad
production

pails of spent solvent from Q&A Lab

Chemical Eng. Building

small scale products

- 2 tanks
- 1 container

(3) ~~(2)~~ BG 90 day areas

polyether polyol
campaign small batch
production

(2) haz-waste tanks
Less than 100 gallons

pails to drums
spent solvents haz waste
generation

R & D & Applications

pails & drums
spent solvents

(90 day area)

Former Amino Resins

idle but has
SAA loading dock area - waste from Resins Plant loading rack

(3)

raw in by rail, tank wagon drums bags
& product out same

All per Dave

Resins Plant

product out drums, totes sacks, no barge

3 types of product

solid grade ~~A~~ BG oligomer
used in acrylic emulsions
aqueous resin cuts

SAAs

90 day - drums

90 day tank area

(4 ~~2~~ BG sub 5 tanks

~ - 5,000 - gal
~ - 8,000 - gal)

Bulk tanker haz-waste shipments

Abbott Laboratories

have their own EPA
ID number
manage all their
waste separately

original building in ~~199~~ BG
constructed 1988

housed windshield adhesives plant
shut down in 1993

All per Dave

(4)

constructed synthroid plant in 1996

sold to Abbott approx. 2001

Thermal Plastic Polyurethane Plant

products methyl bisphenyl diisocyanate
polyol

— tigon tubing
bead resin
extruded
into
finished product

SAA Q&A Lab
containers

Polyol Plant

All product tanks
make non-haz
product

All per Dave

process waste

(5)

BG

~~(2)~~ 90 day areas

(3) containers — oil styrene
& acryonitrile

~~largest container 90-day~~
BG

waste
~~waste~~ Accumulation Storage Area
BG
Central ~~9~~ BG

(90-day largest) pickup

~~Tank~~ BG

Cacepp Technologies

make expanded
polypropylene

separate entity
handles waste
Cacepp separately

non-contact cooling water
Abbott discharge to NPDES outfall # 001 to pond
outfall # 002
(no pond) direct to river

(6)

All per Dave

Pond

trench system - lift station
drain water lift
lifted into pond

- reactor washes - pond cleaning

just from Polyol Plant

2 - sections

bulk head wall separate
E from W

W - normal operating

waste
process water
contact
ww

dirty water entrance
settling & pH
control

pumped
to weir

above 7 adjust
back down

bypasses
E Pond

under 6.5
system
locks out

cooling water intake
from Detroit
River

(7)

All per Dave

East Pond

Clean water
- non-contact cooling
& storm
sewer
water

pumped to weir
bypasses
E Pond

fragmite growth

rain water
~~upsets~~
~~would~~ BG

NPDES

BOD, TSS, Toluene, pH - continuous
1/week
1/week

low level mercury - 1/month

frequencies - TSS free day/week

built in 1960s Approx.
- Clay
600,000 gallons

- last cleanout/dredge
Approx 2000 ~~solids~~ BG
sludge Michigan
managed as non-haz to ~~EG Depth~~ Disposal
BG

may have
data

(8)

Subpond BB

tanks in resins

located pipe run

Chemical Engineer

(2) tanks

limited pipe run

~~CA~~ BG LDAR

contract – EMS
Env. Monitoring Service
Houston, TX

Subpond CC

MOVPs

Used oil – maintenance
process in cellarto

(9)

Universal waste – bulbs, batteries

central area

Clean Harbor

no oil skimming of oil
from any pond

E-waste – sent
to Redem
Tech
for recycling

No WWT

Tour

At 10:20 am Appr

outside
90 day

R & D waste Cnt

6 – hazwaste 55-gal

2 – non-haz 55-gal

check profile MSDS

* 1 – W-013 waste polyol labeled non-haz, closed

(10)

1 - W-015
waste solid polyol
labeled non-haz
BG ~~905~~ closed

haz - waste

1 - drum labeled haz
closed
F003, D001
acetone, xylenes
5/11/12

1 - drum labeled haz
closed
F003, D001
" "
3/30/12

1 - drum labeled haz
closed
F003, D001, F005
acetone, isopropanol, methanol
Johnson
3/30/12

(11)

1 - labeled haz waste closed
F003, D001 acetone isopropan
3/30/12

1 - labeled haz closed
F003, D001, D018, F002, D019
5/11/12 D009, D011

1 - labeled haz closed
F003, D001
3/30/12

spill kit
drums on pallets
bermed crib, sloped
fenced in crib w/ roof
fire extinguisher
Vanguard inspects annual
emergency shower
eye wash, radio usage
& phone
aisle space ok

7 drums of
acetone
product
per Dave

mobile spill truck (12)

S end of site

Re waste pad

Quarantine Area
inbound outbound trucks
products for Dist center

drone by EPC plant

Cellasto

Mold Line Area

1 55 gal dr
labeled non-haz closed
B-components

4 55-gal drs of used oil
labeled used oil on
spill pallet

eye wash
safety shower (13)

Q & A Lab

physical testing side

analytical side

SAA
1 55-gal drum
labeled haz waste
Closed

D001, F002, F003, F005

BG
2 ~~1~~ 55-gal drum closed
labeled non-haz
prepolymer waste

waste tank
Hydroxyl
Resins Plant
6/10/12 (per log)

labeled
Haz
waste
D - 1003 - 5,000
D - 1054 - 5,000

(per log) 5/30/12 acid functional waste tank
containment, 2008 installed
containment, berned liner

(14)

aisle space ok
fire extinguisher

fire suppression system
spill kit
safety shower
eye wash, phone
on
radio
usage

Also

* check profit

.4 haz-haz drum
labeled haz-haz closed
waste solid
grade oligomer

Resins 90-day free container

SGO Pantron

solid grade
oligomer

on a pallet
4 - 55 drum cardboard file
labeled haz-haz solid grade oligomer

on a pallet
4 - 55 haz
building secondary containment
prod per Dave

(15)

on a pallet 6/11/12
1 - labeled haz closed
D001

1 - labeled haz closed
D001
6/11/12
BG

1 - " "
"
6/11/12

1 - " "
6/11/12

in hand staging area
warehouse
product per Dave

no waste
per Dave

* check MSDS
outside of tank are
solution resin on floor

Haz Waste Tank
D - 1081
labeled haz
containment

D - 1082
labeled haz 6/11/12 - last emptied
per log

Dave not sure if haz or not
~~of contents~~
BG
Check back later

6/11/12
per log - last emptied

fire ext.
spill kit
safety shower
eye wash
phone

Polyol Filtration

SAA
1 - 55 gallon drum

D001, F003, F005
labeled bar
Closed

Spill kit, overpack

Separate SAA
1 - 55 - gallon drum
labeled bar closed
U002, U113, U220
U239, 1310, D001
rags/wipes

Separate SAA labeled bar closed
1 - 55 gallon drum
liquid waste

3rd Floor
Emulsions

SAA - 1 - 55 gallon drum
labeled bar closed
U002, U113, U220
U239, 1310, D001
liquid waste

separate SAA - 1 " " "
" "
D001
rags/wipes

1 - 55 gallon drum

non-monomer purge from manual addition
pending characterization
Closed

(18)

1 - 55 gallon
labeled raw haz
waste emulsion
& resin cutting
filters
& absorbent, closed

Lunch

Arrived back from
lunch @ 12:45 pm

12:50 Tan cutting

Thermal Plastic
Polyurethane

(19)

Q & A Lab

SAA

1 5 - gall pail
labeled haz-waste
Closed
Dool
in fume hood

Raw Material Tank Farm

1 55 - gal drum
of used oil
labeled used oil

Polyol Plant

outside by Pond

(PIC) clean water lift
non - contact

(20)

w/ containment

Tank 156
sulfuric acid tank
product tank
used to adjust
pH
if necessary
per Dave

PVCS pond -
E-side

PSC - weir box
clean & dirty water
meet

- PICS

dirty water lift
& piping

(21)

Outside
Raw Materials storage

all product
tank storage

check
* profile
2 250-gallon
totes - non-haz polyol
W013, closed

* check
1 55-gallon
drum non-haz MDI
methylene bisphenol
labeled non-haz, closed
BG - W007

W010 90 day area

7 ~~4~~ BG haz-waste 55-gallon
1 - labeled haz
closed
D001, D018
on a pallet 6/10/12
1 - " "
6/10/12

(22)

fire ext.
spill kit
decon equip.
und. con't.
on spill pallets
radio usage
aisle space sufficient

1 - " "
5/13/12

on a pallet

1 - " "
6/10/12

sloped berm containment area

1 - " "
6/10/12

on pallet

1 - " "
~~6/1~~ 6/3/12
BG

1 - " "
4/22/12

1 - used oil
labeled used oil

SAA 1 - " "

(23)

process water 250,000 gallon ho WWTP
gas NPDES
* P019
check hon-haz

800,000 - 1 mill
going to Wayne County Potw

contact water
reactor wash

check 2 20 yd
hon-haz
* W007
polyol filter cake per Dave

—

~~monthly~~ BG

Toluene diisocyanate
Load rack

SAA

1 - 55 gall dr
labeled
haz
U 223
closed

* check
W403 - hon-haz

Polyol Q&A Lab

in fume hood 1 - 5 gallon pail closed
labeled haz
SAA
styrene methyl mesh acrylate

SAA 1 - gallon
labeled hor
Door
waste sodium hydroxide
closed

SAA 1 - gallon
labeled hor
waste hydrochloric acid
Door
closed

SAA 15 - gallon pail
labeled hor
styrene methyl
methacrylate
closed

separate SAA

1 55 gallon drum D001
labeled hor
closed
U008, F003, F005, D001

1 - 5 gallon carbone
labeled hor
closed
Door

SAA
(2) - 55 gallon non-hor
1 - labeled non-hor closed
spent isotan
solution

check
*
JPQA-008

1 - labeled non-hor
emulsion & resin cuts
closed

55-gallon
1 - labeled hor
closed
D001

(26)

fume hood

1 - 5 gallon
labeled haz closed
diesel fuel D001

1 - 5 gallon container
labeled haz
D001, U009, 131C
Closed

Central Haz Waste Area

All closed

All on pallets
Approx 35
5-gallon pails
majority dated from 3/15/12 labeled haz waste
within 90 days from inspection date
BG ~~majority~~ BG

All labeled haz waste
with waste codes
haz

4 dated over 90 days
5-gallon ~~F00~~ BG
containers

(27)

* 2 ~~1~~ BG 5-gallon pail
not dated
labeled haz
D001, F003, F005
D028, D022

pics

* pic 1-5 gall dated ~~3/9/12~~ BG 2/19/12
labeled haz
D001, D018

* pic 1 - 5 gallon haz waste
labeled haz waste
D002
dated 12/1/11
closed
spent sulfuric acid

~~1 - 5 gallon labeled haz waste~~ BG

* pic - 3/9/12 labeled haz waste
1-5 gallon F002, F003
acetone, o-dichlorobenzene
phenol

pic 1 - 5 gallon labeled haz
dated 2/8/12 D001
methyl Amyl ketone, petroleum distillate
styrene

* pic 1-5-gallon
waste pyridine
F005
not dated
labeled haz-waste

(28)

1 - 55 gallon drum
rejected haz waste
labeled haz waste load
ignitable/reactive
returned D001, D003
4/3/12
Clean Harbors
per Chris Gilbert
(W.M. contractor)

pics

* original manifest
forthcoming
to know
original date

original date on label
(generator)
was 1/26/12

(29)

35 total non-haz drums on haz-side
2 totes
labeled haz dated w/in 90
F002

* 1 55 gallon labeled haz dated 5/24/12 closed
pics no code
4 haz drums labeled haz closed
closed dated within 90 days

* pic - old WWT chemical
check in 250 tote
MSDS no label
Dave not sure if haz or not

(last 3 rows 64 haz drums)
2 other rows - Approx 80 total haz drums
(Approx. 5 rows of non-haz drums)
BG
BG
haz
labeled haz dated 5/24/12
pic
* 1 drum did not have code

BG
* 1 drum labeled haz not dated
BG (4) ~~total~~ BG
pics (3)
haz-waste D001
W-737
(last pallet last now)

~~* 1 drum labeled haz not dated D001~~ BG

pics
1 drum labeled haz
dated 3/7/12 over 90
D009, D011, D018, D019, D022, F003, D001, F002 ~~F003~~ BG

last row

* 1 drum labeled haz D001
pics
no date
W-737

~~* 1 haz~~ BG
~~no date JP-041~~

other side of room

* pic
*
1 haz waste drum labeled haz
no date
no code

lab pack
pics
* 1 - 1gallon labeled haz waste not dated or coded
container

All 90-day areas operators have two way radios

Universal waste waste
just shipped
5/12/12
per
Chris
Gilbert
Wm
contractor

pics of aisle space

pic
rel monitors
fire suppression system water
spill kit, over packs
fire extinguisher

safety shoe eyewash

monolithic poured floor
elevated building secondary
can't per Dave
~~tel~~ BG phone

6/13/12 Tour concluded at 3:50

Left site @ 4:20 pm Approx

6/14/12

arrived @

8:22 am

Records

POTW

Significant Industrial Users of Wayne County

Permit No.

D-11311

effective 9/1/10

expiration date 8/31/15

~~D~~ BG

NPDES

Permit No. MI0000540 to the Trenton Channel of the Detroit River

effective 11/1/08

expiration 10/1/12

authorized maximum 12 million gallons per day of process ww, non contact cooling water, regulated storm water, hydrostatic pressure test water

Final effluent limitations

001 - flow from river

Biochemical Oxygen Demand

Total suspended solids

Toluene

Temperature

Total mercury

pH 6.5-9.0

002 - flow

carbonaceous BOD, 5-day

Temp

outfall observation

Total mercury

pH 6.5-9.0

authorized 8.5 MGD

no process ww

same otherwise as 001

003

Flow

CBOD5

Temp

outfall observation

Total mercury

Total mercury

pH 6.5-9.0

no process ww

9.1 MGD

C.A.

historical practices & processes at the site have resulted in the contamination of the groundwater within the drainage area of outfall 002 & 003. Historical practices also account for the presence of 1,2 dichloropropane, bis 2-(chloroisopropyl) ether & mercury in Outfall 003. Outfall 001 is also an AOC per Dave

BASF does sampling

Shrader Analytical does analysis

Detroit for NPDES

primary pollutants per Dave

rail car cleaning water, fire suppression system test water, secondary containment storm water, groundwater seepage & water from groundwater remediation from Maritime Point 001A through Outfall 001

(34)

Waste Characterizations / Profiles / MSDS

JP - 026 - Waste Resin Non-Haz
P - 019 - Spent Busch Pump Cleaning Fluids - Non-haz
TCLP through Shrader
4/27/11 Non-Haz
JPQA - 006 - spent isotan solution - Non-haz
W - 067 - waste neutralized MDI - Non Haz
lupranate m20s isocyanate - Non Haz

W - 403 - Polyesterdiols - Non haz

W - 013 - Liquid Polyol
Pluracol 1200 polyol & 1570 - Non haz
W - 007 polyol filtercake - Non haz

Site Tour @ : 10:15 am

Chemical Engineering Building Approx

Pilot scale Reactors
last emptied 5/24/12 per log
Haz waste Tank labeled haz
D - 731
Solid Grade Oligomer Cleanout
BG ~~100~~ 70 gallon
Building containment

(35)

Floor sloped
drains plugged per employee

3rd Fl. ~~JPP~~ BG
~~J~~ BG Pilot Plant
90 day area

1 55-gallon drum
~~open funnel lid~~ BG closed
labeled haz waste
dated 5/24/12
no haz waste code
methyl Amyl ketone, petroleum distillate, styrene

BG ~~pic~~

employee - placed new label w/waste
F003, D001

~~D~~ ~~d~~ abated BG

on a portable secondary containment unit

SGO Pilot Plant
SAA

D001 1 55-gallon drum labeled haz-waste closed

[radio usage phone spill kit decon equip fire ext. aisle space ok]

labeled haz
haz-waste tank
Research pilot Plant
Clean out Tank
70-gallon
D-631 , sloped liner
6/7/12
per log — emptied weekly per Dave
radio usage
Phone
safety shower
eye wash
spill kit
fire extinguisher
sprinkler system
aisle space of
Polyol Plant
aside Pond

pics of west side
pond
~~to~~ BG influent
effluent

- 4 haz waste tanks vented to RTO
Resins Plant

RTO
Thermal oxidizer
polyol
title

Tank Assessments / Certification

D-631 — high level alarm, over-fill controls
performed by Process Results, Inc.
Chemical Engineering Bulletin
5/12/09 D-731 — high level alarm, over-fill controls
" " "

- floor coated

by D. Kevin Bingel, P.E.
Registered Professional Engineer No. 29050
State of MI

Tank Assessments / Certification
Resins Building
haz-waste Tanks (4)
D-1053 Hydroxyl Waste Tank
9/8/09 D-1054 Acid Functional Waste Tank
D-1081 Haz-Waste Storage Tank #1
D-1082 Haz-Waste Storage Tank #2

(38)

performed by Lockwood Greene Engineers, Inc.

Gerald A. Knazek, P.E.
No. NY 062631-1
State of NY

All four tanks have high level alarms / overfill controls

Container Inspections ~~o~~ BG
(3) 90 day areas
90-day - Polyol Plant
Juan Aguirre Tom Sleep
Jason Wilson Johanny Gonzales
ok after 5/14/12 BG - 6/6/12 BG Mark Gill
missing weeks BG
ok 1/30/12 - 2/15/12 ~~1/16/12~~ 10/31

* BG ok 10/31/11 - 1/16/12
ok 10/5/11 - 10/26/11
ok 8/5/11 - 8/23/11
daily inspection log backups were observed for these dates
2010 - thru 6/09
* not on-site
per Dave
+ Dan

(39)

* 000530083 VES 5/22/12 no TSD copy yet?
009231839 JJK 5/14/12; 009607286 JJK 3/12/12
009606637 JJK 3/29/12 007745052 JJK 1/24/11
Todd Mitchell
Derek Hetes 008498461 JJK

Manifests

2012 Jeffrey Garner David Hogden 5/25/11
Jerry Mead Rodney Moore

Clean Harbors Env., ~~AK~~ BG Ark - LDR
Veolia ES Technical Solutions TX, - LDR
Petro-Chem Processing - LDR
Veolia ES Technical Solutions OH - LDR
EQ Detroit - LDR
* ok BG Calgon Carbon Corp. - ~~No~~ BG LDR
Clean Harbors Env services NEB - LDR
* ok BG Heritage - WTI - 12/1/11 ~~No~~ BG LDR
* Michigan Disposal WTP - No LDR

2011 009045965 JJK 5/10/12 North Works
2010 Lunch Had at least 3 years Feed Water worth + LDR's except 1 TT D028

Arrived back from Lunch ~~on~~ BG @ 1:47 pm Approx
Tank & Container Inspections
Resin Plant

Jim Simpson Daniel Schuebel
Ronald Draheim Bob Crandel
David Krudwig (containers - ok)
Jeff Degg

* Tank missing dates
6/4/12 5/17/12 3/20/12
6/10/12 5/8/12 3/23 & 3/24/12
5/11/12 1/6 & 1/7/12
3/8/11 ~~3/9/11~~ BG 4/16/12 1/21/12
4/18/12
3/16/11 4/20/12
1/4/11 1/19/11 3/14/12

7/1/11
7/6/11

10/29/11
10/30/11
11/16 & 11/17/11
11/23 11/24/11

Tanks Resh ~~& Chemical Engineering~~ & Chemical Engineering BG

per Dan Hannewald & EHS Specialist
2010 thru ~~&~~ BG 6/09 not on site
per Dave been shipped ~~off site~~ to Iron Mountain located at

*

Container Inspections

Central

Chris Gilbert (W.M. contractor)
Jeff Garner (BASF employee)

missing week
* 5/23/11 - 6/13/11

~~* BG 2010 thru 6/09 records (not on-site 3 years)~~ ~~off-site per Dave & Dan~~

missing weeks
* 10/11/10 - 11/1/10
8/23/10 - 10/11/10

R&D

containers - ok
had 3 years

Chemical Engineering Building

Daily Tanks

* ~~1/31/11~~ BG - 2/14/11
1/28/11

* ~~11/5/10~~ BG - 1/17/11
11/11/10 -

RCRA Training

Annual Refresher documented
from at least last 4 years

* Names, titles, job descriptions
forthcoming per Dave
had per Dave, send later

curriculum
included cont. plan
implementation

Contingency Plan

Primary E.C. Dave

Gary Price
Mark Gill
Tom Orimek

Wyandotte Fire Department
regular tours

em. equipment tested monthly

4/4/12
last revision
due to list of plant
managers changed

Subpart BB CDAR
ok

Subpart CC
ok

List of documents forthcoming potentially

- inspection logs
- RCRA training
  - names, titles, job descriptions
  - amount, type of training
- Michigan Disposal UDR Summary conference

Left site @ 5:42 pm

Approx. on 6/14/12

EPA Meeting with BASF Corporation

July 24, 2008

Attendance Sheet

Name	Affiliation	Phone	Email
[illegible]	EPA	(312)886-6010	thomas.juan@epa.go
JENNIFER DODDS	EPA	(312)886-1484	DODDS.JENNIFER@EPA.go
DAVE PETROVSKI	EPA	312-886-0997	petrovski.david@epa.go
MIKE ERICKSON	ARCADIS	810.225.1924	michael.erickson@arcadis-us.com
Mike Gerdenich	BASF	734 324-6298	Michael.Gerdenich@BASF.com
THEO VON WALLMENICH		810-225-1906	tvonwallmenich@arcadis-us.com

ARCADIS

Subject	Project No.	By	Date	Sheet

Calculations By _____ Date _____ Checked By _____ Date _____

NAME	AFFILIATION	PHONE
M. Erickson	Arcadis	510 225 1924
M. Gordenich	BASF	734-324-6298
T. DEKKER	LimnoTech	734-332-1200
Brian Diepeveen	BASF	215-672-4119
DAVE PETROVSKI	US EPA/RCRA	312-886-0997
KEN JENKINS	ARCADIS	707 888 3565
Phil Goodrum	ARCADIS	315-396-6655
Amy Muchka	EPA-GLNPO	312 886-6785
[illegible]	EPA-LCD	312-886-6010
Diana Mally	EPA-GLNPO	312-886-7275

Juan Thomas /R5/USEPA/US
06/17/2008 12:29 PM

To Michael J Gerdenich <michael.gerdenich@basf.com>
cc "Brian W Diepeveen" <brian.diepeveen@basf.com>, ConfortiR@michigan.gov, David Petrovski/R5/USEPA/US@EPA, "Lisa Tomlinson"
bcc
Subject BASF North Works - Proposed Meeting

Mike,

As we discussed last week, it looks like Thursday, July 24 is the best day to schedule our meeting after submission of BASF Corporation's Work Plan. This should give us adequate time to review the work plan once received by July 14, as proposed. Again, based on previous as well as ongoing dialogue between the parties, we anticipate only minor modifications requiring reconciliation. Also, as discussed during our phone conversation last week, EPA is agreeing to grant a thirty day extension of time for submission of a revised SERA Document after BASF receives additional comments from the EPA relative to its review of the SERA and/or Tier II Risk Evaluation Summary Report and incorporation of comments from the MDEQ.

Thanks.

Juan Thomas
Environmental Scientist, CA Project Manager
U.S. EPA Region 5, Land and Chemicals Division
Remediation and Reuse Branch
Corrective Action Section II
312-886-6010
(312) 353-4342 (fax)

Michael J Gerdenich
<michael.gerdenich@basf.com>
08/28/2007 11:10 AM

To Juan Thomas/R5/USEPA/US@EPA, confortr@michigan.gov, michael.erickson@arcadis-us.com
cc Brian W Diepeveen <brian.diepeveen@basf.com>, Frederick C Delisle <frederick.delisle@basf.com>
bcc

Subject North Works 8/29 Itinerary

Here is the itinerary for tomorrow's boat tour @ North Works:

9:15am Meet in BASF Main Administration Building (park in visitors lot - turn left prior to reaching the main gate building; we will meet in the lobby)
9:30am Depart BASF Alkali Dock on North Works boat tour (North Works north to Zug Island)
11:00am Fighting Island environmental tour (Fred Delisle - BASF)
12:00pm Lunch and Discussion
1:00pm Depart Fighting Island
1:15pm Return to BASF Alkali Dock

Juan, the probing crew will be on the river ~8:00 so you can observe from shore if you wish prior to the tour and then again on return @ 1:15. I will be available from 7:30 on if you want to get an early start on the day so give me a call with your preference.

Thanks all.

Mike

Michael Gerdenich
EHS Remediation Team Member

Phone: (734) 324-6298
Mobile: (734) 365-9573
Fax: (734) 324-6401
BASF Corporation
1609 Biddle Avenue
Wyandotte, MI 48192

BASF - The Chemical Company

BASF
The Chemical Company

Helping Make
Products Better™

April 26, 2007

Mr. Arthur Ostaszewski
Michigan Department of Environmental Quality
Waste and Hazardous Materials Division
P.O. Box 30241
Lansing, MI 48909-7741

Subject: Slides from 02/27/2007 BASF North Works Presentation at US EPA Region V – Chicago, IL

Dear Mr. Ostaszewski:

The enclosed CD contains our Power Point presentation from the February 27th meeting with US EPA Region V personnel in Chicago. Please call or e-mail if you have any questions; my telephone number is (734) 324-6298.

I am looking forward to meeting you and De when you are in Wyandotte.

Sincerely,
BASF Corporation

Michael Gerdenich
Remediation Team Member

Enclosure

c: Juan Thomas – US EPA (w/o enclosure)

BASF Corporation
1609 Biddle Avenue
Wyandotte, MI 48192-3729
Tel: (734) 324-6000
www.basf.com/usa

Juan Thomas /R5/USEPA/US
02/26/2007 10:51 AM

To Katelyn Stroshein <stroshek@michigan.gov>
cc HAZELTOJ.DEQPO1.DEQ@michigan.gov, Steven Hoin <HOINS@michigan.gov>, Barry Selden <SELDENB@michigan.gov>,
bcc
Subject Re: Fwd: Follow-up on the December 21 teleconference

Good Morning,

The call-in number for tomorrow's meeting with BASF Corporation Northworks Facility Representatives is 866-299-3188, once connected you will be given a voice prompt to dial in a passcode which is 3532153. Looking forward to a productive meeting. The meeting is scheduled to start at 10:00 am CST. Thanks.

Juan Thomas
Katelyn Stroshein <stroshek@michigan.gov>

Katelyn Stroshein
<stroshek@michigan.gov>
02/16/2007 08:32 AM

To Juan Thomas/R5/USEPA/US@EPA
cc HAZELTOJ.DEQPO1.DEQ@michigan.gov, Steven Hoin <HOINS@michigan.gov>, Barry Selden <SELDENB@michigan.gov>, YOONH.DEQPO1.DEQ@michigan.gov

Subject Re: Fwd: Follow-up on the December 21 teleconference

Juan,

We would greatly appreciate calling in. Since the DEQ folks involved with this are located across the state, we'd like to call in to a conferencing number from our respective offices. Please let me know what that number is, and I will set up the meeting with the DEQ folks with the phone number to call in.

Thanks again Juan,
Katelyn

>>> <Thomas.Juan@epamail.epa.gov> 2/7/2007 4:37:47 PM >>>
Katelyn,

The meeting here in the Chicago Regional Office has been scheduled for Tuesday February 27, at 10:00 am. I can make arrangements to make sure that you are able to participate via teleconference. What would you suggest, that I call you from the meeting room or that you call in. Let
me know your thoughts. Thanks.

Juan Thomas

Katelyn

Stroshein
<stroshek@michig
an.gov>

To
Juan Thomas/R5/USEPA/US@EPA

02/05/2007 08:51
AM

cc
Jennifer Hazelton
<HAZELTOJ.DEQPO1.DEQ@michigan.gov
>, Steven Hoin
<HOINS@michigan.gov>, Barry
Selden <SELDENB@michigan.gov>,
Hae-Jin Yoon
<YOONH.DEQPO1.DEQ@michigan.gov>

Subject
Re: Fwd: Follow-up on the
December 21 teleconference

Juan,

Thank you for the update, and the invitation. Michigan DEQ would like to attend this conference if it is in Michigan. Unfortunately, we are under Order from the governor banning out-of-state travel. If the conference is scheduled to be in Chicago, we would still like to participate by teleconference. Please let us know if we can call in to
participate.

email: STROSHEK@michigan.gov

----- Message from "Katelyn Stroshein" <stroshek@michigan.gov> on Thu, 21 Dec 2006 16:33:49 -0500 -----

To:<Thomas.Juan@epamail.epa.gov>,"Judith Gapp" <GAPPJ@michigan.gov>, "Jennifer Hazelton" <HAZELTOJ@michigan.gov>, "Steven Hoin" <HOINS@michigan.gov>, "Barry Selden" <SELDENB@michigan.gov>, "Beth Vens" <VENSB@michigan.gov>, "Hae-Jin Yoon" <YOONH@michigan.gov>Subject:Follow-up on the December 21 teleconferenceGood Afternoon,

Thank you for taking time out of your busy schedules to meet today. I believe that our meeting was very productive; and greatly appreciate everyone's willingness to provide their expertise in resolving this difficult matter.

As a quick follow-up to our meeting, I'd like to re-cap what was discussed. Steven Hoin from the DEQ agreed to provide assistance to Juan and his technical staff with the GSI issues. Juan agreed to send a
copy of the January 2007 status report that BASF is providing to the EPA; and the draft CMS report that BASF should be sending in the Spring.
Juan, please find both addresses that those documents can be sent to below:

Katelyn Stroshein
Department of Environmental Quality
Constitution Hall
2nd Floor, South Tower
525 W. Allegan St.
Lansing, Michigan 48933

Hae-Jin Yoon
Department of Environmental Quality
SE Michigan District Office
27700 Donald Court
Warren, Michigan 48092

Again, the DEQ thanks the EPA for their willingness to work with us towards an effective resolution.

Enjoy your holidays!

Katelyn M. Stroshein
Enforcement Unit
Field Operations Division
Water Bureau
Michigan Department of Environmental Quality
phone: 517-373-3473
fax: 517-373-2040
email: STROSHEK@michigan.gov

Thanks again Juan,
Katelyn

Katelyn M. Stroshein
Enforcement Unit
Field Operations Division
Water Bureau
Michigan Department of Environmental Quality
phone: 517-373-3473
fax: 517-373-2040
email: STROSHEK@michigan.gov

>>> <Thomas.Juan@epamail.epa.gov> 1/31/2007 1:46:03 PM >>>
Katelyn,

No report has been received to date. However, BASF has proposed a meeting here in our regional office for either February 27, or 28th to present the status of the ongoing corrective action work at the Northworks Plant. The tentative agenda items are noted below:

Presentation of the BASF Wyandotte - North Works facilities expansion projects and a discussion of their impacts to the RCRA CMS. Update of activities completed since the April 2006 meeting between USEPA and BASF
or currently underway. Presentation of preliminary tier II human health
and screening level ecological risk assessment findings. Discussion of remaining RCRA CMS elements and schedule for completion.
Since this might be an opportunity to address both EPA and MDEQ concerns, I was wondering if someone from the MDEQ would also be interested in attending. No date has been confirmed yet but I will let you know.

Juan Thomas

-----Katelyn Stroshein <stroshek@michigan.gov> wrote: -----

To: Juan Thomas/R5/USEPA/US@EPA
From: Katelyn Stroshein <stroshek@michigan.gov>
Date: 01/31/2007 10:18AM
cc: Jennifer Hazelton <HAZELTOJ@michigan.gov>, Hae-Jin Yoon <YOONH@michigan.gov>
Subject: Fwd: Follow-up on the December 21 teleconference

Good Afternoon,

I was hoping to catch up with you regarding the status of the BASF Wyandotte January status report. Has one been submitted to you yet?

Thanks Juan,
Katelyn

Katelyn M. Stroshein
Enforcement Unit
Field Operations Division
Water Bureau
Michigan Department of Environmental Quality
phone: 517-373-3473
fax: 517-373-2040

Beth Vens
<VENSB@michigan.gov>
10/17/2006 09:37 AM

To

Subject BASF-Northworks

History: This message has been replied to and forwarded.

Hi Juan,

It took awhile, but we have completed our review of the GSI work plan BASF submitted for the BASF-Northworks site. In order to adequately review the GSI issue it was necessary to look at the site as a whole, therefore, the review if a little lengthy. Attached is the review of the GSI work plan, conducted by our Senior Geologist, Mr. Steven Hoin. Hope it is helpful.

basfnorthworksgsi.pdf

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING

JENNIFER M. GRANHOLM
GOVERNOR

STEVEN E. CHESTER
DIRECTOR

August 21, 2006

CERTIFIED MAIL **7002 0860 0007 7046 7004**

Mr. K. Edward Nuernberg
General Manager
1609 Biddle Avenue
Wyandotte, Michigan 48192

Dear Mr. Nuernberg:

On July 27, 2006, The BASF Corporation (BASF) met with the Department of Environmental Quality (DEQ), Water Bureau (WB), Enforcement Unit (EU), to discuss the draft Administrative Consent Order (ACO) proposed by the DEQ to settle BASF's violations of Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), MCL 324.3101 *et seq.*

During the meeting, the draft ACO sent to BASF on June 13, 2006, and BASF's comments on the draft ACO, contained in the July 14, 2006, letter to the EU, were discussed. Additionally, BASF requested that the DEQ provide a response to BASF's written request for a Site Specific "Level Currently Achievable" for mercury; BASF's written request for an intake credit for mercury; and BASF's August 2005 Work Plan to target portions of the Outfall 003 system to improve the quality of the discharge effluent. The DEQ has granted the request to provide a response to those three items. Please be advised that after BASF receives the responses to those three items, BASF will have sixty days to enter into an ACO with the DEQ as settlement of these matters. Should settlement not occur within sixty days, the DEQ will pursue other escalated enforcement options, including, but not limited to, referring these matters to the Attorney General's Office.

The DEQ appreciates BASF's stated commitment to achieve compliance with its National Pollutant Discharge Elimination System permit; and looks forward to resolving these matters through settlement with an ACO.

Sincerely,

Katelyn Stroshein

Katelyn Stroshein, Enforcement Specialist
Enforcement Unit
Field Operations Division
Water Bureau
517-373-3473

cc: Mr. Juan Thomas, United States Environmental Protection Agency
Mr. Barry H. Selden, DEQ
Ms. Hae-Jin Yoon, DEQ
Ms. Jennifer Hazelton, DEQ

ENSR INTERNATIONAL

ENSR International
2 Technology Park Drive
Westford, MA 01886-3140

(978) 589-3000
FAX (978) 589-3100
www.ensr.com

December 17, 2004

Juan Thomas, Environmental Scientist
USEPA Region V
77 W. Jackson
Chicago, IL 60604

RE: BASF - Wyandotte Project Database

Dear Mr. Thomas:

Per your request, enclosed is a copy of the EQuIS project database for the BASF Wyandotte site. Please contact me at (978) 589-3000 if you have any questions regarding this database.

Sincerely,

Heather Wayne

Heather Wayne
Database Specialist

enclosures: BASF – Wyandotte Database via CD

cc: Bruce Roberts, BASF
Tim Adams, ENSR
Betsy Ruffle, ENSR

V. FINDINGS OF FACT

A. Respondent BASF Corporation, is a company doing business in the State of Michigan, incorporated under the laws of the State of Delaware, and is a person as defined in Section 1004(15) of RCRA, 42 U.S.C. §6903(15) and 40 CFR 260.10.

B.(1) On or about May 1, 1996, Flint Ink Corporation acquired 471 Howard Avenue from Respondent BASF Corporation (BASF).

(2) BASF owned and operated the Facility as a hazardous waste management facility on and after November 19, 1980, the applicable date which renders owners and operators of hazardous waste treatment, storage and disposal facilities subject to the interim status requirements and the requirement to have a permit under Sections 3004 and 3005 of RCRA, 42 U.S.C. §§6924 and 6925.

C. On and after November 19, 1980, BASF engaged in treatment, storage and/or disposal of hazardous waste at the Facility, subject to RCRA interim status requirements.

D.(1) Pursuant to Section 3010 of RCRA, 42 U.S.C. §6930, BASF notified U.S. EPA of its hazardous waste activities. Respondent's Notification of Hazardous Waste Activity (EPA Form 8700-12 or Notification) was received by U.S. EPA on or about August 8, 1980. The Notification was signed on August 8, 1980, by R. Bowen, Assistant General Manager. The Facility was assigned U.S. EPA Identification Number, MID 048 223 986.

(2) On the Notification, BASF identified itself as a generator, a transporter, owner/operator of a treatment, storage and/or disposal facility for hazardous waste and an underground injection well, and indicated that the following hazardous waste activities were occurring at the Facility: "Generation", "Treat/Store/Dispose", "Transportation", and "Underground Injection". BASF identified hazardous wastes handled at the Facility using the following U.S. EPA hazardous waste numbers set forth at 40 CFR 261.31 Subpart D[2]:

F001, F002, F003, F004, F005, U012, U014, U073, U122, U147, U159, U190, U220, and U239, listed hazardous wastes; as well as D001 (ignitable), D002 (corrosive), and D000 (toxic), non-listed characteristic hazardous wastes.

(3) On November 14, 1983, the U.S. EPA acknowledged receipt of the original Facility Notification.

(4) On a subsequent notification submitted by BASF on January 20, 1986, and signed by Keith Fry, Director of Environmental Affairs, Chemical Division, BASF identified itself

---

[2] Hazardous wastes exhibiting the characteristics of ignitability, corrosivity, reactivity, or EP or TC toxicity identified at 40 CFR 261.20-261.24, (*D001-D043*); Hazardous wastes from non-specific sources identified at 40 CFR 261.31, (*F001-F028*); Hazardous wastes from specific sources identified at 40 CFR 261.32, (*K001-K136*); and Commercial chemical products, manufacturing chemical intermediates, off-specification commercial chemical products, or manufacturing chemical intermediates identified at 40 CFR 261.33(e), (*P001-P123*), or at 40 CFR 261.33(f),(*U001-U249*).

as a generator and underground injection facility, as well as a generator marketing hazardous waste fuel, off-specification used oil, and specification used oil to be burned as fuel. BASF described hazardous wastes handled at the Facility using the following U.S. EPA hazardous waste numbers set forth at 40 CFR 261.31 Subpart D:

F001, F002, F003, F004, F005, U012, U014, U073, U122, U147, U159, U190, U220, and U239, listed hazardous wastes; as well as D001 (ignitable), D002 (corrosive), and D000 (toxic), non-listed characteristic hazardous wastes.

E.(1) On or about November 17, 1980, BASF submitted to U.S. EPA, pursuant to Section 3005 of RCRA, 42 U.S.C. §6925, Part A of its RCRA permit application (Part A), dated November 18, 1980, and signed by R.E. Dunn, Secretary.

(2) According to the Part A, the Facility would conduct the following hazardous waste management activities each year: storage in containers with a capacity of 200,000 gallons, storage in a waste pile with a volume of 100 cubic yards, treatment in a surface impoundment with a capacity of 1.5 million gallons per day, other treatment (treatment unit) consisting of settling, pH adjustment, and biological treatment with a capacity of 1.5 million gallons per day capacity, tank storage with a capacity of 120,000 gallons, and disposal in an injection well with a capacity of 10.9 billion gallons.

(3) BASF amended its Part A on November 18, 1981, November 15, 1982, January 26, 1983, and February 13, 1984, stating that storage and treatment of hazardous waste in a waste pile and surface impoundment, tank and treatment unit had not occurred.

(4) BASF indicated on the Part A that the Facility had been in operation since 1916,[3] and produced (development and manufacture) organic pigments, in powder and flushed forms.

(5) The Facility buildings were destroyed in a 1946 fire and rebuilt.

(6) Past activities at the Facility have included the manufacture of phthallocyanine (PCN) and intermediate pigments, and the conducting of varnishing vehicle manufacturing.

(7) BASF operations at the Facility have included the production of organic pigments, resulting in the mother liquid being sent to the Wastewater Treatment Plant or the Preinjection System. BASF also produced various vehicles added to the production of oil based pigments, and produced a solvent-based vehicle by mixing xylene, toluene, polyethylene and other compounds.

F. In a letter dated May 7, 1984, to BASF, U.S. EPA requested submittal of the Facility's RCRA Part B permit application.

---

[3] Predecessor companies known as Holland Aniline Dye, Chematron Corporation-Holland Color and Chemical Company/Allegany Ludlum Industries, BASF Wyandotte Corporation (Inmont).

G. On September 24, 1984, BASF submitted a closure plan for a container storage area and a hazardous waste aboveground storage tank.

H. On November 8, 1984, RCRA was amended by the HSWA of 1984, 42 U.S.C. §6928, which includes Section 3008(h), interim status corrective action.

I. In a December 13, 1984, letter to BASF, U.S. EPA approved the closure plan for the two regulated hazardous waste management units at the Facility. U.S. EPA stated in the letter that closure did not release the Facility from HSWA corrective action requirements. Closure was certified by BASF On May 7, 1985 and May 14, 1985.

J. In an undated letter to BASF sent in the latter part of 1985 or early 1986, U.S. EPA requested a Facility certification regarding releases from any Facility SWMU.

K. On February 28, 1986, BASF submitted to U.S. EPA a certification regarding potential releases from Facility SWMUs that was signed by K.A. Kiesling, Works Manager. The Certification stated there had been a release from the hazardous waste unit designated in the Part A permit application as D79.

L.(1) Pursuant to Section 3010 of RCRA, 42 U.S.C. §6930, Flint Ink notified MDEQ of its hazardous waste activities, following a change of ownership at the Facility. Flint Ink's Notification of Regulated Waste Activity (MDEQ Form EQP5150 or

Notification) was received by MDEQ on or about April 13, 1996, and included information for the Facility known as 471 Howard Avenue. The Notification was signed on April 13, 1996, by Lee Burgess, Vice President Manufacturing. The Facility was assigned U.S. EPA Identification Number, MIR 000 014 779.

(2) On the Notification, Flint Ink identified itself as a generator of hazardous waste greater than 1,000 kilograms per month, or a large quantity generator (LQG). Flint Ink described hazardous wastes handled at the Facility using the following U.S. EPA hazardous waste numbers set forth at 40 CFR 261.31 Subpart D: Non-listed characteristic hazardous waste; D001 (ignitable), and D009 (TCLP or Toxic Characteristic Leaching Procedure); and listed hazardous wastes F003, and F005.

(3) On a subsequent notification submitted by Flint Ink on October 3, 1996, and signed by Lee Burgess, Vice President Manufacturing, Flint Ink identified itself as a generator of hazardous waste of 100 to 1,000 kilograms per month or a small quantity generator. Flint Ink described hazardous wastes handled at the Facility using the following U.S. EPA hazardous waste numbers set forth at 40 CFR 261.31 Subpart D: characteristic non-listed hazardous wastes D001 (ignitable), and D005 and D009 (TCLP); and listed hazardous wastes F002, F003, and F005.

(4) On May 2, 1996, MDEQ acknowledged receipt of the Flint Ink Notification.

M. The Facility occupies approximately 28 acres, in the City of Holland, Ottawa County, State of Michigan, latitude 42°47'32"N and longitude 86°08'30"W according to BASF notifications, and latitude 42°47'48" and longitude 86°7'53" according to Flint Ink notifications (see Figure 1). The Facility is bordered on the north by Douglas Avenue, on the west by residences, on the south by Lake Macatawa, and on the east by other industrial property.

N. The Facility is located in Holland, a municipality with a population of approximately 31,000 people, located in southwest Michigan, in the Lake Michigan drainage basin (see Figure 2). The city of Holland uses Lake Michigan as a primary drinking water source. However, groundwater wells are located in the area. The nearest residential drinking well known to U.S. EPA is located approximately 150 feet down gradient of the Facility.

O. Lake Macatawa is located approximately 50 feet south of the Facility property boundary, is down gradient from the Facility, and discharges to Lake Michigan approximately 4.75 miles from the Facility. Several parks and recreation areas are located on Lake Macatawa, or near the confluence of Lake Macatawa with Lake Michigan.

P. Lake Macatawa is utilized for human recreation such as swimming, fishing and boating. Lake Macatawa supports benthic organisms that represent a fundamental trophic level for local

ecosystems, and is also used by non-human receptors, such as fish and waterfowl.

Q. Information on Facility geology, soils, groundwater and hydro geology was generated by BASF in 1990, 1991 and 1992. BASF's information was derived from soil borings, water well logs and injection well construction information. Most geological information generated by BASF focused on the upper 50 feet. In summary, geology at the Facility is thought to be limited to unconsolidated glacial deposits. Groundwater flow followed land topography towards Lake Macatawa. Facility hydro geology appeared to be influenced by production wells, and was manifest in a groundwater divide in the vicinity of the OCM Building. Shallow groundwater flow from the surficial aquifer appeared to be toward Lake Macatawa.

R. National Wetland Inventory Maps indicate that a palustrine, aquatic bed, intermittently exposed wetland once existed at the Facility. However, the wetland has been incorporated into a solid waste management unit (SWMU), and no longer exists. A lacustrine, littoral, unconsolidated bottom, permanently flooded wetland exists along the shore of Lake Macatawa, approximately 50 feet south of the Facility.

S. The Facility is located in Ottawa County, where there is one (1) Federal endangered and threatened species, as well as

TABLE 1

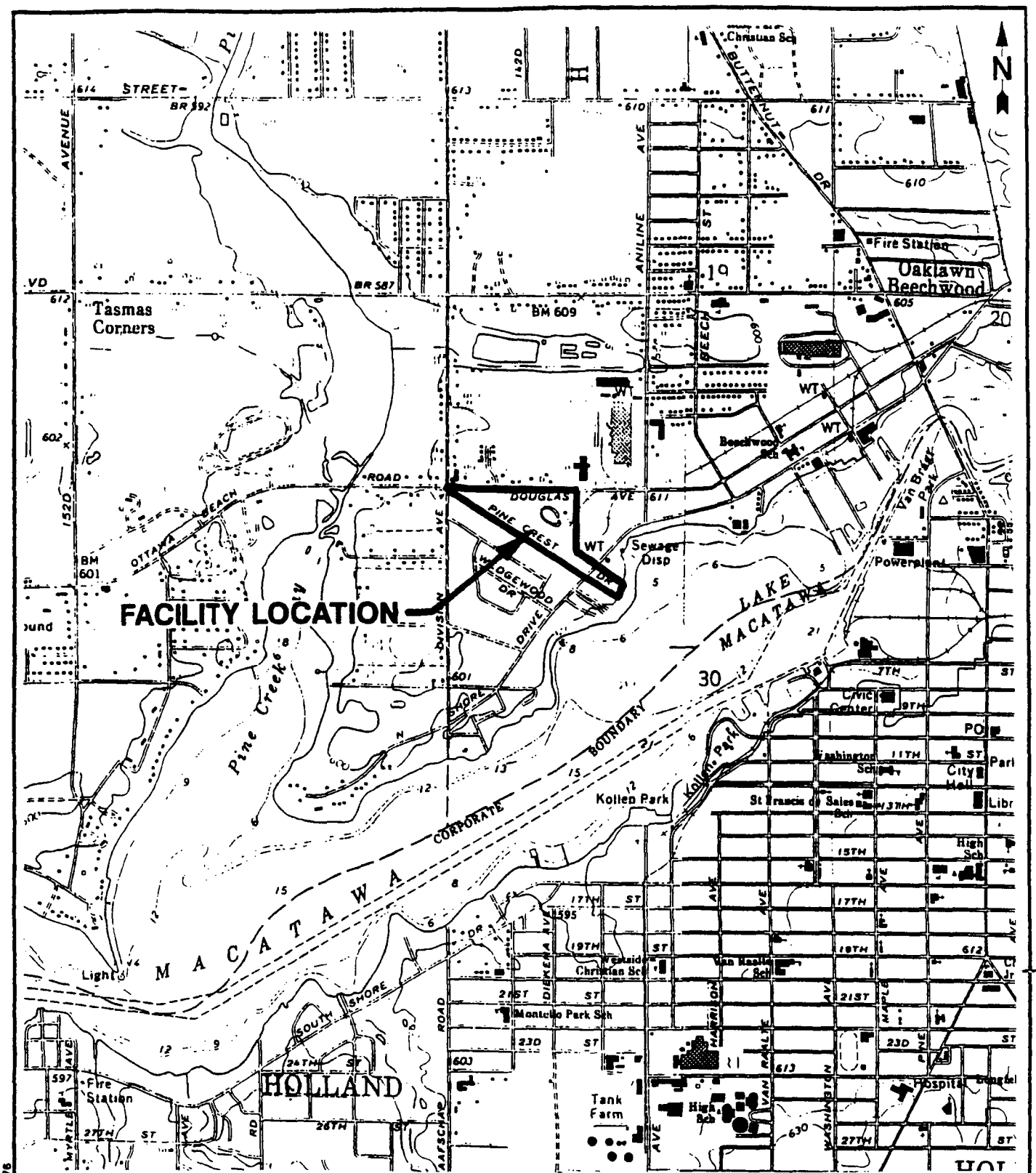
SOLID WASTE MANAGEMENT UNITS

SWMU Number	SWMU Name	RCRA Hazardous Waste Management Unit[a]	Status
1	Container Storage Area	Yes	RCRA closure in 1985; active for less than 90-day storage
2	Former Hazardous Waste Aboveground Storage Tank	Yes	RCRA closure in 1985; active for product oil storage
3	Satellite Accumulation Areas	No	Active; accumulate hazardous waste
4	Preinjection System	No	Active; stores and filters nonhazardous wastewater prior to deep well injection
5	Wastewater Treatment Plant	No	Active; treats nonhazardous wastewater
6	Used Oil Collection Areas	No	Active; collects used oil
7	Former OCM Building Area	No	Inactive; building operations ceased in 1965 and building was demolished in 1990
8	Former Sludge Drying Area	No	Inactive; operations ceased in 1983
9	Injection Wells and Well Storage Tanks	Yes	Active; dispose of nonhazardous wastewater
10	Aeration Basin	No	Active; aerate primary wastewater
11	Trash Compactor	No	Active; compacts general nonhazardous waste
12	Storage Pad	No	Active; storage of nonhazardous waste, intermediates, and product
13	Scrap Metal Collection Area	No	Active; collects scrap metal

Note:

[a] A RCRA hazardous waste management unit is one that currently requires or formerly required submittal of a RCRA Part A or Part B permit application.

FIGURE 1

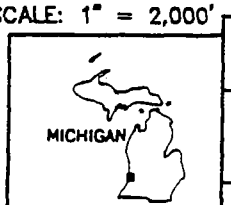


SCALE 1:24000

1 1/2 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

SCALE: 1" = 2,000'



QUADRANGLE LOCATION

BASF CORPORATION HOLLAND WORKS
HOLLAND, MICHIGAN

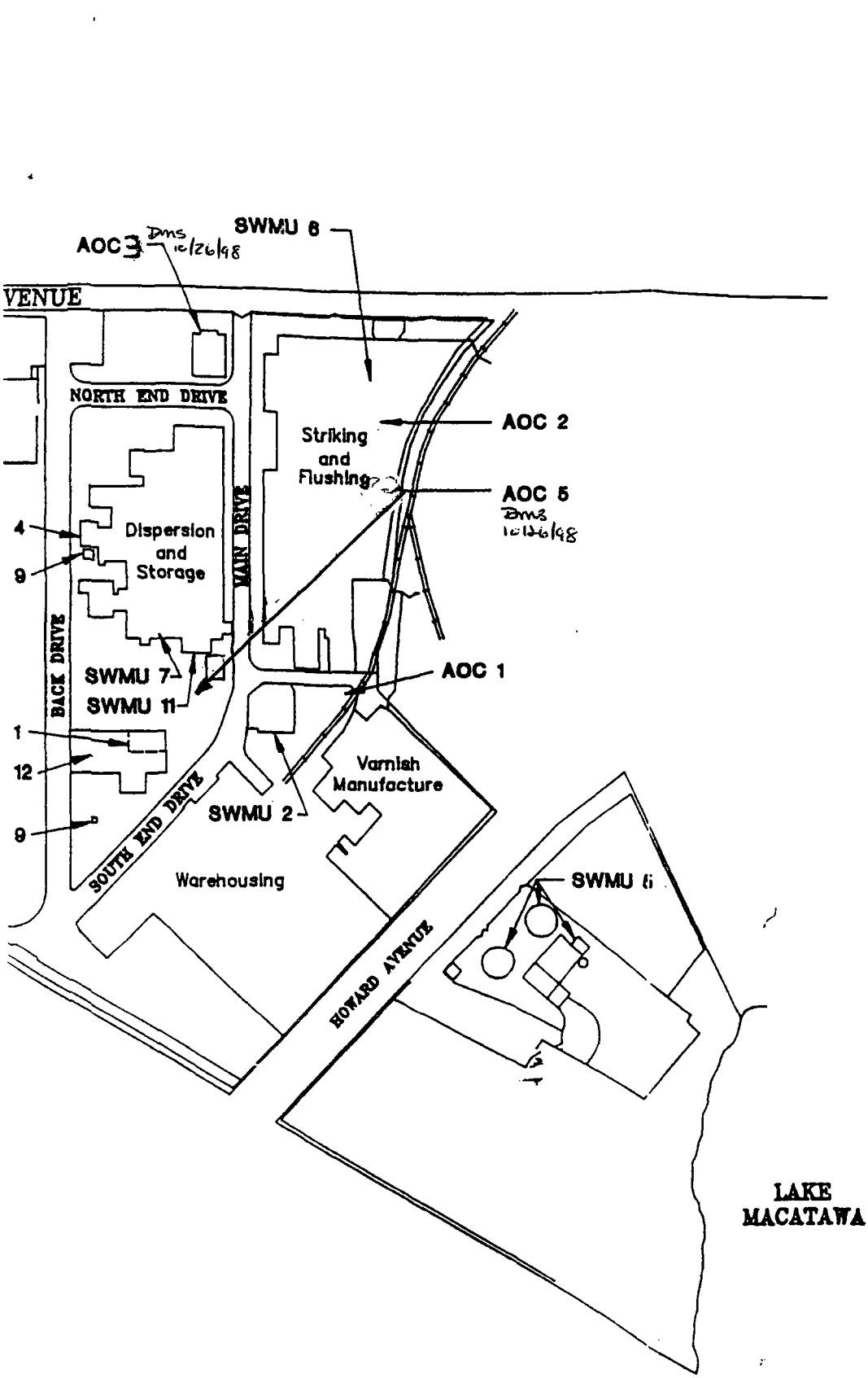
FIGURE 1

FACILITY LOCATION

PRC ENVIRONMENTAL MANAGEMENT, INC.

SOURCE: MODIFIED FROM USGS,
HOLLAND WEST, MICHIGAN, QUADRANGLE 1972
HOLLAND EAST, MICHIGAN, QUADRANGLE 1972

BASF-HOLDWG - 11/16/93 - MLB 309-R05032W176



471 Howard Ave.
formerly
492 Douglas A
Dms
7/17/96

50' 0 50' 100'
APPROXIMATE SCALE: 1" = 100'

BASF CORPORATION HOLLAND WORKS
HOLLAND, MICHIGAN

FIGURE 2

FACILITY LAYOUT

PRC ENVIRONMENTAL MANAGEMENT, INC.

State endangered and threatened species, that are possible biological receptors.[4]

T. From information obtained by U.S. EPA during a PA/VSI conducted on September 27, 1993, thirteen (13) SWMUs and five (5) AOCs were identified at the Facility. These SWMUs and AOCs (see Table 1, May 1994 PA/VSI) are described briefly below:

a) SWMU 1 - Container Storage Area. A RCRA hazardous waste management unit in use since 1980 that required a Part A/Part B permit application, that was certified closed on May 7, 1985, but utilized after closure for less than 90 day storage.

b) SWMU 2 - A former Hazardous Waste Aboveground Storage Tank that was a RCRA hazardous waste management unit in use since at least 1966 that required a Part A/Part B permit application, that was certified closed on May 15, 1985, but utilized after closure for product oil storage.

c) SWMU 3 - Satellite Accumulation Areas. An area utilized to accumulate hazardous waste since the 1960s.

d) SWMU 4 - Preinjection System. A system utilized since 1965 to store and filter both hazardous and nonhazardous wastewater prior to deep well injection, such as characteristic waste waters from the blue pigment (thiocyanine) production process which were corrosive and were routinely generated and

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[4] 50 CFR 17, Subpart B and Michigan Natural Features Inventory, March 1994.

disposed via the deep well system. In the early to mid-1980s, BASF changed the thiocyanine blue process; a change that resulted in the waste water becoming non-hazardous. Prior to the change in the process, the deep well system treatment system was viewed by MDNR as a totally enclosed treatment system under RCRA, and was not regulated as a hazardous waste management unit.

e) SWMU 5 - Wastewater Treatment Plant (WWTP). The WWTP discharged to Lake Macatawa under a National Pollutant Discharge Elimination System (NPDES) permit (Number MI 0000761). The WWTP was utilized for the treatment of nonhazardous waste since 1961.

f) SWMU 6 - Used Oil Collection Areas. These areas were utilized to collect used oil since the 1960s.

g) SWMU 7 - Former OCM Building Area. The Building operations began in the late 1930s, operations ceased in 1965, and the building was demolished in 1990. A variety of product intermediates were produced at this building including IC-2 (2-amino-5-chloro-para-toluene sulfonic acid), IC-6 (various isomers of IC-2), IC-30 (2-chloro-5-amino-para-ethyl benzene sulfonic acid), and 4B acid (6-amino-meta-toluene sulfonic acid). Chemicals involved in the production of the intermediates included toluene, ethyl benzene, sulfuric acid, chlorine gas, nitric acid, hydrochloric acid, and trichlorobenzene.

were utilized since 1965 for the disposal of nonhazardous waste. Releases of hazardous waste to soil from the unit(s) occurred throughout the 1980s. In November of 1981, BASF reported the plugging and abandonment of its D-1 disposal well. On September 27, 1995, U.S. EPA, Region 5, Water Division's Underground Injection Control (UIC) Program, approved the plugging and abandonment of Disposal Wells D-2 and D-3, but BASF is still liable for endangerment to underground sources of drinking water, should defects be found in the plugging and abandonment. (See description under SWMU 4.) Facility Management Plans prepared by MDNR on December 26, 1985, and June 30, 1986, indicated pumping losses from the deep well system prior to upgrading of the injection well included volumes as high as 11,000,000 gallons.

j) SWMU 10 - Aeration Basin. The basin was utilized since 1984 to aerate primary wastewater.

k) SWMU 11 - Trash Compactor. The compactor was utilized from the early 1980s to compact general nonhazardous waste.

l) SWMU 12 - Storage Pad. The pad was utilized for an unknown period of time for the storage of nonhazardous waste, intermediates and products.

m) SWMU 13 - Scrap Metal Collection Area. The area was utilized from an unknown date for the collection of scrap metal.

In 1963, production of PCN pigment involving the use of phthalic anhydride, urea, cuprous and cupric chloride, molybdic trioxide, trichlorobenzene, sodium chloride, ethylene, diethylene, and propylene glycol began, with wastewater entering the OCM building in a trench that discharged to a sump which, in turn, discharged to the Wastewater Treatment Plant. In 1965, SWMU 4 and SWMU 9 were constructed to receive these waste streams which were no longer diverted to the OCM building.

Upon demolition of SWMU 7 in 1990, BASF concluded that soil beneath the Facility was contaminated with various site-specific compounds, including 1,2,4-trichlorobenzene, IC-2, IC-30, fuchsine, methyl violet, benzenes, toluene, and xylene. Groundwater sampling at the Facility by BASF showed that groundwater beneath the Facility was contaminated with the following compounds: benzene, chlorobenzene, chloroform, 1,2-dichloroethene, ethyl benzene, tetrachloroethane, trichloroethene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, and 1,2,4-trichlorobenzene.

h) SWMU 8 - Former Sludge Drying Area. Area operations began in 1983 and ceased in 1984. Releases to soil in the area have been documented.

i) SWMU 9 - Injection Wells and Well Storage Tanks. The wells and tanks were a RCRA hazardous waste management unit(s) that required a Part A/Part B permit application. They

n) AOC 1 - Former Product Oil Underground Storage Tanks (USTs) Locations. The USTs operated since 1982, with soil contamination possible.

o) AOC 2 - Former Partitioned UST Area. The area operated since 1965, with soil contamination possible.

p) AOC 3 - Former Fuel Oil UST Area. The area operated since 1965, with soil contamination possible.

q) AOC 4 - Former Alum UST Area. The area operated since 1970, with soil contamination possible.

r) AOC 5 - Former Toluene and Ethyl benzene UST Area. The area operated since 1970, with soil contamination possible.

U. Waste generation at the Facility included hazardous and nonhazardous waste streams (Table 2). BASF has reported that generation of hazardous waste streams included only D001, D002, D005, and U073. Current and past solid waste streams include used oil, scrap metal, pigment wastewater, wastewater treatment plant sludge, aqueous dispersion filter bags, waste baghouse bags, drain sludges and spill cleanup materials.

V. The hazardous waste constituents contained in the solid and hazardous waste pose a potential threat to human health, as well as to the physical and biotic environment. These constituents may migrate or may have migrated via numerous pathways, including groundwater, soils, sediments, Lake Macatawa, surface water, and through physical contact with receptors.

W. Several of the hazardous waste constituents found in the solid and hazardous wastes managed and released at the Facility, are known or probable human carcinogens, or systemic toxicants and endocrine system disrupters for humans and other species, as summarized below:

CONSTITUENT	IRIS[5]	PED/BCC[6]	EDQL[7]
benzene	X	X	X
chlorine	X		X
chlorobenzene	X		X
chloroform	X	X	X
1,3-dichlorobenzene	X		X
1,4-dichlorobenzene	X		X
1,2-dichloroethane	X		X
ethyl benzene	X		X
phthalic anhydride	X		
tetrachloroethane	X	X	X
1,2,4-trichlorobenzene	X		X
trichloroethane	X	X	X
toluene	X	X	X
xylene	X	X	X

[5] U.S. EPA Integrated Risk Information System (IRIS), September 21, 1988.

[6] U.S. EPA Office of Water, Office of Science and Technology, Possible Endocrine Disrupters (PED), and Great Lakes Initiative Guidance Final Rule, *Federal Register*, Vol. 60, No. 56, March 23, 1995, Bioaccumulative Chemicals of Concern (BCC).

[7] U.S. EPA Region 5 Ecological Data Quality Levels (EDQLs), June 3, 1988.

B. Respondent BASF Corporation was the owner or operator of a Facility that has operated, or should have been operating under interim status subject to §3005(e) of RCRA, 42 U.S.C. §6925(e);

C. Certain wastes found at the Facility are hazardous wastes pursuant to §§1004(5) and 3001 of RCRA; 42 U.S.C. §§6903(5) and 6921; 40 CFR Part 261; and Subpart S, 264.501, 55 Federal Register 30874, July 27, 1990;

D. There is or has been a release of hazardous waste(s) into the environment from the Facility; and

E. The actions required by this Order are necessary to protect human health and/or the environment.

VII. PROJECT COORDINATOR

A. Within fifteen (15) days of the effective date of this Order, U.S. EPA and Respondent shall each designate a Project Coordinator. Respondent shall notify U.S. EPA in writing of the Project Coordinator it has selected. Each Project Coordinator shall be responsible for overseeing the implementation of this Order and for designating a person to act in their absence. The U.S. EPA Project Coordinator will be U.S. EPA's designated representative for the Facility. To the maximum extent practicable, all communications

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

DEC 15 1999

REPLY TO THE ATTENTION OF:

DE - 9J

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Thomas McGourty
BASF Corporation
1609 Biddle Avenue
Wyandotte, MI 48192

RE: Change in EPA Project Coordinator
BASF Corporation - Wyandotte, MI
MID 064-197-742

Dear Mr. McGourty:

Pursuant to the Administrative Order on Consent (Consent Order), Docket No. V-W-011-94, the United Stated Environmental Protection Agency (U.S. EPA) is submitting this letter to notify you of a change in EPA project management. Jacqueline Nichele will now be responsible for overseeing the implementation of the Consent Order for the BASF Facility in Wyandotte, Michigan. Ms. Nichele can be reached at 312-353-1481.

Sincerely yours,

George Hamper, Chief
Corrective Action Section
Enforcement and Compliance Assurance Section

cc: Jon Russell, MDEQ
Reginald Pallesen, USEPA - ORC
Jack Lanigan, BASF
John Byrnes, BASF

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Author's copy

MID 064 197 742

17 Copies — 1 to Each File

STATE OF MICHIGAN

JOHN ENGLER, Governor

DEPARTMENT OF ENVIRONMENTAL QUALITY

HOLLISTER BUILDING, PO BOX 30473, LANSING MI 48909-7973

RUSSELL J. HARDING, Director

REPLY TO:

WASTE MANAGEMENT DIVISION
PO BOX 30241
LANSING MI 48909-7741

August 5, 1996

RECEIVED
AUG 08 1996
OFFICE OF RCRA
WASTE MANAGEMENT DIVISION
EPA, REGION V

Mr. Paul Little
Enforcement Program Section - HRE-8J
Region 5
U.S. Environmental Protection Agency
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Dear Mr. Little:

In response to a recent request from your office for information on several Michigan hazardous waste facilities, I offer the following:

None of the identified facilities have any Resource Conservation and Recovery Act (RCRA) enforcement action recently taken or about to be initiated. Any inspection to be completed at these facilities would be a result of them not being inspected previously or part of our Treatment, Storage, and Disposal Facility (TSDF) commitments. We have not identified any specific issues which would cause us to consider these facilities for special inspections. Specific comments on the facilities:

1. BASF - MID064197742 - 1609 Biddle Avenue, Wyandotte is a TSDF which has a very old Order in place (not a Waste Management Division Order) directing cleanup activities. This is part of an Environmental Response Division (ERD) Remedial Action Plan on which ERD has the lead. ← EPA has § 3008(h) AOC at NW, DEQ did RA at su

2. BASF - MID001868538 - 5935 Milford Avenue, Detroit is a TSDF proceeding with closure of their RCRA unit.

3. BASF - MID007138746 - 3301 Bourke Avenue, Detroit is a TSDF which has been clean closed and is awaiting corrective action.

4. BASF - MID057007478 - 1200 Blaney Drive, Troy is a TSDF which has been clean closed and is awaiting corrective action.

5. BASF - Holland - BASF formerly owned two facilities in Holland. One facility was a research and development laboratory at 491 Columbia Avenue. The other facility, at 492 Douglas Avenue, was a full production plant. Both plants were involved in the development and manufacture of pigments, both in powder and in flushed forms. Effective July 1, 1996, BASF sold both of its Holland plants to Flint Ink Corporation. Approximately 50 percent of the former BASF employees were terminated as a result of the sale. Prior to the sale, there have been no state RCRA enforcement actions against either of these plants. We have no plans for an immediate inspection at the Douglas Avenue facility, although one will be conducted at some point in the future since it retains a generator status.

6. BASF - 836 Chicago Drive, Grand Rapids - This facility has not been involved in a RCRA enforcement action and no enforcement actions are planned. The last routine inspection was conducted on May 3, 1996, which was followed by a letter of warning. The company has indicated that most of the violations have been corrected and they are actively working toward correcting the rest. Once BASF indicates that all of the violations have been corrected, a follow-up inspection will be conducted.

7. Reichhold Chemicals Inc., Ferndale - MID020087128 - This facility is a TSDF which is subject to corrective action. They are in the process of remediation. The facility is closed with the buildings demolished.

We have no record of inspections for the following facilities:

1. BASF Widger Chemical, Warren
2. BASF Wyandotte Terminal, Wyandotte
3. ARMCO, Inc., Plymouth
4. ARMCO, Inc. Taylor
5. Automotive Refinish or BASF, 19855 Outer Drive, Dearborn
6. BASF, 2855 Coolidge, Troy
7. BASF, 1419 Biddle Street, Wyandotte
8. BASF, 1725 Biddle Street
9. Reichhold Chemicals, 4134 Yorba Linda Boulevard, Royal Oak

For the facilities we have either not inspected or have not conducted recent inspections, there may be some incentive to consider as part of an initiative. Overall, our thought would be that the national initiative would not be that beneficial to the RCRA program for BASF Corporation based upon our contacts with the facilities through our inspections.

Please let me know if I can be of further assistance on this matter.

Sincerely,

Frank Ruswick (ekp)

Frank Ruswick, Jr.
Program Manager
Waste Management Division
517-373-6093

From: MICHAEL DEROSA
To: sharrow-diane
Date: Monday, March 11, 1996 1:48 pm
Subject: BASF letter

If you wish to add this, the letter should have another condition stating:

In order to characterize the PDC spill area sufficiently, a limited TIC search protocol should be developed to focus on the metabolites in this spill area. See comment h on page 13 of the lab audit report.

Dave said to me that if they kick and scream about this one, we could let it go.

BASF Corporation

BASF

CERTIFIED MAIL-RETURN RECEIPT REQUESTED
Z 355 728 999

David W. Sheaves
BASF Corporation
1609 Biddle Avenue
Wyandotte, MI 48192

Re: MI0 000 938 704
BASF (Point Hennepin)

June 1, 1995

Ms. Connie Pennel
Michigan Department of Natural Resources
Waste Management Division
608 W. Allegan
Lansing, MI 48933

Dear Ms. Pennel:

A recent correspondence with USEPA Region V alerted our office to a possible error in the use of BASF's Point Hennepin site EPA ID number (MIO 000 938 704). A review of our records and subsequent telephone conversation with yourself indicated that the EPA ID number being used by BASF was incorrect MID 000 938 704 and the correct is MIO 000 938 704. I am providing you with a list of Michigan Uniform Hazardous Waste Manifest numbers for which the incorrect number was employed (attached). Please make the necessary corrections to the data entered into your data base.

Please also review any data that may have inadvertently been entered under the BASF North Works EPA ID number (MID 064 197 742). Point Hennepin site data is appearing under this ID number in the RCRA Reporting and Information System (RCRIS) data base and the Corrective Action Reporting System (CARS) data base. The listed materials did not originate from the North Works site and BASF is clearly interested in ensuring the integrity of the waste management data.

BASF has contacted the disposal facilities who have received waste shipments from the Point Hennepin site (Envotech Management Services, Belleville, MI; Rollins Environmental Services, Livonia, MI and Clean Harbors Inc., Natick, MA) and notified them of the error.

1609 Biddle Avenue, Wyandotte, Michigan 48192 (313) 246-6100

BASF Corporation

BASF C.2.1

Ed MID 064 197742

October 11, 1994

RECEIVED
OCT 21 1994
OFFICE OF RCRA
WASTE MANAGEMENT DIVISION
EPA, REGION V

United States Environmental Protection Agency
Office of RCRA Enforcement
Region V
77 W. Jackson Blvd.
HR8J
Chicago, IL 60604

Re: MID 064197742

To whom it may concern,

This letter is a notification of Exception for the following Michigan Uniform Hazardous Waste Manifest(s) 2680382, and 2680384. An initial attempt at contacting Petrochem Processing was made on August 29, 1994. Two subsequent calls were made to the first transporter Detrex Corp. and finally on October 11, 1994 Petrochem Processing telefaxed the copies to our offices in Wyandotte, MI. Enclosed are copies of the manifests and the faxed copies of the TSDF copy.

Thank you,

David W. Sheaves
Environmental Specialist

cc: CDLascola
dws

1609 Biddle Avenue, Wyandotte, Michigan 48192 (313) 246-6100

DNR
MICHIGAN DEPARTMENT OF NATURAL RESOURCES
AUG - 3 1994

DO NOT WRITE IN THIS SPACE
ATT. ☐ DIS. ☐ REJ. ☐ PR. ☐

Failure to file is punishable under section 299.548 MCL or Section 10 of Act 136, PA. 1969.

Form Approved. OMB No. 2050-0039 Expires 8-30-92

Please print or type

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. MID064197742 Manifest Document No. 12537
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
BASF CORPORATION
1609 BIDDLE AVENUE
WYANDOTTE, MI 48192
4. Generator's Phone ( ) 313-246-6836

A. State Manifest Document Number MI 2680382
B. State Generator's ID

5. Transporter 1 Company Name: DETREX CORPORATION
6. US EPA ID Number: MID091605972
C. State Transporter's ID
D. Transporter's Phone 313-491-4[illegible]

7. Transporter 2 Company Name: Solvent Distillers
8. US EPA ID Number: [illegible]
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
PETROCHEM PROCESSING
515 LYCASTE
DETROIT, MI 48214
10. US EPA ID Number: MID980615298
G. State Facility's ID
H. Facility's Phone [illegible]

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID NUMBER).	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	1. Waste No.	2. N/H
a.	X	RQ WASTE N, N-DIMETHYLFORMAMIDE MIXTURE, 3, UN2265, PGIII, ERG26	004	DM	00220	G	0001	[illegible]
b.	X	RQ WASTE NAPTHA MIXTURE, 3, UN2553, PGIII, ERG27	002	DM	00085	G	[illegible]	[illegible]
c.	X	RQ WASTE ISOPROPANOL MIXTURE, 3, UN1219, PGII, ERG26	011	DM	00605	G	[illegible]	[illegible]
d.		NONREGULATED SPENT DIMETHYL SULFOXIDE MIXTURE	003	DF	00165	G	[illegible]	[illegible]

J. Additional Descriptions for Materials Listed Above
A. [illegible] B. D027, D039, D018, [illegible]
C. [illegible] D. [illegible]
D07-832-94 1-[illegible]
NOTIFY GENERATOR IF UNDELIVERABLE

K. Handling Codes for Wastes Listed Above
a/ [illegible]
b/ [illegible]
c/ [illegible]
d/ [illegible]

15. Special Handling Instructions and Additional Information
IN CASE OF SPILL, DAY OR NIGHT, NOTIFY CHEMTREC 24 HRS. AT 1-800-424-9300.

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: KENNETH M. SLOWIK
Signature: Kenneth M Slowik
Date: Month Day Year 072794

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Pat Walter
Signature: Pat Walter
Date: Month Day Year 072794

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: F Gouhenoux
Signature: [signature]
Date: Month Day Year 072794

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: F Gouhenoux
Signature: [signature]
Date: Month Day Year 072794

GENERATOR

TRANSPORTER

FACILITY

HAZARDOUS MUST BE REPORTED TO THE MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM, IN MICHIGAN AT 1-800-292-4706 OR OUT OF STATE AT 517-373-7660 AND THE NATIONAL RESPONSE 1-800-424-8802 24 HOURS PER DAY.

Generator Land Disposal Restriction Notification for Hazardous Wastes Subject to an Effective Prohibition Date

Generator Name: BASF Corporation EPA ID NO. MID064197742

Address: 1609 Biddle Avenue Contact (Print) David W. Sheaves

Wyandotte, MI 48192

Signature: [illegible] Date: 7-27-94

The hazardous wastes identified on the accompanying manifest number 2680382 and bearing EPA Hazardous Waste Codes listed below are restricted wastes which are prohibited from land disposal under the Land Disposal Restriction, 40 CFR Part 268. In accordance with 40 CFR 268.7(a)(1), the EPA waste codes, waste subcategories, treatability groups, treatment standards, technology codes, and appropriate references, as applicable are provided below:

I. Characteristic Waste D001 through D017

Waste Code/Subcategory	Numerical Treatment Standard, Technology Code and/or Reference: Wastewater	Nonwastewater
[✓] D001		
[ ] All descriptions based on 40 CFR 261.21, except for the 261.21(a)(1) High TOC subcategory, managed in non-CWA/non-CWA-equivalent/non-Class I SDWA systems.	[ ] DEACT, and meet F039; or [ ] FSUBS, RORGS, or INCIN	[ ] DEACT, and meet F039; or [ ] FSUBS, RORGS, or INCIN
[ ] All descriptions based on 40 CFR 261.21, except for the 261.21(a)(1) High TOC subcategory, managed in CWA, CWA-equivalent or Class I SDWA systems.	[ ] DEACT	[ ] DEACT
[✓] All descriptions based on 40 CFR 261.21(a)(1) High TOC Ignitable Liquids Subcategory - greater than or equal to 10% TOC	NA	[✓] FSUBS, RORGS, or INCIN
[ ] D002		
[ ] All wastes (acids, alkalines, others) that are managed in non-CWA/non-CWA-equivalent/non-Class I SDWA systems.	[ ] DEACT, and meet F039	[ ] DEACT, and meet F039
[ ] All wastes (acids, alkalines, others) that are managed in managed in CWA, CWA-equivalent or Class I SDWA systems.	[ ] DEACT	[ ] DEACT
[ ] D003		
[ ] Reactive Sulfides	[ ] Ref 2 -- DEACT	[ ] Ref 2 -- DEACT
[ ] Reactive Cyanides	[ ] Ref 3	[ ] Ref 3
[ ] Explosives	[ ] Ref 2 -- DEACT	[ ] Ref 2 -- DEACT
[ ] Water Reactives	NA	[ ] Ref 2 -- DEACT
[ ] Other (per '261.23(a)(1))	[ ] Ref 2 -- DEACT	[ ] Ref 2 -- DEACT
[ ] D004 - Arsenic	[ ] Ref 3	[ ] Ref 1
[ ] D005 - Barium	[ ] Ref 3	[ ] Ref 1
[ ] D006		
[ ] Cadmium	[ ] Ref 3	[ ] Ref 1
[ ] Cadmium Containing Batteries	NA	[ ] Ref 2 -- RTHRM
[ ] D007 - Chromium	[ ] Ref 3	[ ] Ref 1
[ ] D008		
[ ] Lead	[ ] Ref 3	[ ] Ref 1
[ ] Lead Acid Batteries	NA	[ ] Ref 2 -- RLEAD
[ ] D009 - Mercury		
[ ] Low Hg, < 260 mg/kg Hg	[ ] Ref 3	[ ] Ref 1
[ ] High Hg, > or = 260 mg/kg Hg, mercury and organics and are not incinerator residues	NA	[ ] Ref 2 -- IMERC, or RMERC
[ ] High Hg, > or = 260 mg/kg Hg, inorganics including incinerator and RMERC residues	NA	[ ] Ref 2 -- RMERC
[ ] D010 - Selenium	[ ] Ref 3	[ ] Ref 1
[ ] D011 - Silver	[ ] Ref 3	[ ] Ref 1
[ ] D012 - Endrin	[ ] Ref 2 -- BIODG; or INCIN	[ ] Ref 3
[ ] D013 - Lindane	[ ] Ref 2 -- CARBN; or INCIN	[ ] Ref 3
[ ] D014 - Methoxychlor	[ ] Ref 2 -- WETOX; or INCIN	[ ] Ref 3
[ ] D015 - Toxaphene	[ ] Ref 2 -- BIODG; or INCIN	[ ] Ref 3
[ ] D016 - 2,4-D	[ ] Ref 2 -- CHOXD; BIODG; or INCIN	[ ] Ref 3
[ ] D017 - 2,4,5-TP (Silvex)	[ ] Ref 2 -- CHOXD or INCIN	[ ] Ref 3

II. D001/D002 Hazardous Wastes Requiring DEACT and meet F039 Treatment Standard

Are there any F039 constituents reasonably expected to be present in the waste? [ ] No [ ] Yes

If yes, please list all constituents: _____

[ ] CHECK HERE IS SPENT SOLVENT, CALIFORNIA LIST, OR F-, K- P-, OR U-CODE WASTE. IF CHECKED, COMPLETE PAGE 2.

III. Spent Solvent Wastes F001 through F005

Spent Solvent Waste Code(s) - Check all which apply: [ ] F001 [ ] F002 [ ] F003 [ ] F004 [ ] F005

Constituent	Wastewater (mg/l)	Nonwastewater (mg/kg) (by TCLP method (mg/l) where indicated by asterisk**)
[ ] Acetone	[ ] 0.28	[ ] 160
[ ] Benzene	[ ] 0.070	[ ] 3.7
[ ] n-Butyl alcohol	[ ] 5.6	[ ] 2.6
[ ] Carbon disulfide	[ ] 0.014	[ ] 4.8**
[ ] Carbon Tetrachloride	[ ] 0.057	[ ] 5.6
[ ] Chlorobenzene	[ ] 0.057	[ ] 5.7
[ ] Cresol (m- and p- isomers)	[ ] 0.77	[ ] 3.2
[ ] o-Cresol	[ ] 0.11	[ ] 5.6
[ ] Cyclohexanone	[ ] 0.36	[ ] 0.75**
[ ] 1,2-Dichlorobenzene	[ ] 0.088	[ ] 6.2
[ ] 2-Ethoxyethanol (F005)	[ ] Ref 2 -- BIODG; or INCIN	[ ] Ref 2 -- INCIN
[ ] Ethyl acetate	[ ] 0.34	[ ] 33
[ ] Ethyl benzene	[ ] 0.057	[ ] 6.0
[ ] Ethyl ether	[ ] 0.012	[ ] 160
[ ] Isobutyl alcohol	[ ] 5.6	[ ] 170
[ ] Methanol	[ ] 5.6	[ ] 0.75**
[ ] Methylene chloride	[ ] 0.089	[ ] 33
[ ] Methylene chloride -- Pharmaceutical Industry Waste Only	[ ] 0.44	NA
[ ] Methyl ethyl ketone	[ ] 0.28	[ ] 36
[ ] Methyl isobutyl ketone	[ ] 0.14	[ ] 33
[ ] Nitrobenzene	[ ] 0.068	[ ] 14
[ ] 2-Nitropropane (F005)	[ ] Ref 2 -- (WETOX or CHOXD) fb CARBN; or INCIN	[ ] Ref 2 -- INCIN
[ ] Pyridine	[ ] 0.014	[ ] 16
[ ] Tetrachloroethylene	[ ] 0.056	[ ] 5.6
[ ] Toluene	[ ] 0.08	[ ] 28
[ ] 1,1,1-Trichloroethane	[ ] 0.054	[ ] 5.6
[ ] 1,1,2-Trichloroethane	[ ] 0.030	[ ] 7.6
[ ] Trichloroethylene	[ ] 0.054	[ ] 5.6
[ ] 1,1,2-Trichloro - 1,2,2-trifluoroethane	[ ] 0.057	[ ] 28
[ ] Trichlorofluoromethane	[ ] 0.02	[ ] 33
[ ] Xylenes (total)	[ ] 0.32	[ ] 28

IV. California List Wastes -- Hazardous waste containing one or more of the following constituents:

[ ] Nickel > or = 134 mg/l
[ ] Liquids with PCB's > or = 50 ppm
[ ] Thallium > or = 130 mg/l
[ ] Waste containing HOC's > or = 1,000 mg/kg

V. Other Listed Hazardous Wastes (F-, K-, P-, and U-codes)

EPA Hazardous Waste Code	Wastewater or Nonwastewater	Applicable Treatment Standard or Technology Code	Reference(s) (Ref 1, Ref 2, and/or Ref 3)

References

Ref 1: See numerical treatment standard(s) in 40 CFR 268.41, Table CCWE - Constituent Concentrations in Waste Extract
Ref 2: See technology-based standard(s) in 40 CFR 268.42, Table 2 - Technology-Based Standard by RCRA Waste Codes
Ref 3: See numerical treatment standard(s), 40 CFR 268.43, Table CCW - Constituent Concentrations in Waste

DNR
MICHIGAN DEPARTMENT OF NATURAL RESOURCES
AUG 3 1994

DO NOT WRITE IN THIS SPACE
ATT. ☐ DIS. ☐ REJ. ☐ PR. ☐

Form as amended and Act 136, PA 1969.
Failure to file is punishable under section 299.548 MCL or Section 10 of Act 136, PA 1969.

Please print or type.

Form Approved. OMB No. 2050-0039 Expires 9-30-92

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. MI 0 0 6 4 1 9 7 7 4 2 — Manifest Document No. 1 2 6 3 9 — 2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
BASF CORPORATION
1609 BIDDLE AVENUE
WYANDOTTE, MI 48192
4. Generator's Phone ( ) 313-246-6836

A. State Manifest Document Number: MI [illegible]
B. State Generator's ID:
C. State Transporter's ID:
D. Transporter's Phone: [illegible]
E. State Transporter's ID:
F. Transporter's Phone:
G. State Facility's ID:
H. Facility's Phone: [illegible]

5. Transporter 1 Company Name: DETREX CORPORATION — 6. US EPA ID Number: MI 0 0 9 1 6 0 5 9 7 2
7. Transporter 2 Company Name: Solvent Distillers — 8. US EPA ID Number: MI 0 9 8 0 6 8 4 0 8 8
9. Designated Facility Name and Site Address: PETROCHEM PROCESSING, 515 LYCASTE, DETROIT, MI 48214 — 10. US EPA ID Number: MI 0 9 8 0 6 1 5 2 9 8

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER). HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	15. Waste No.	N/H
a. NONREGULATED WASTE EV-113 HIGH BOILERS	004	DM	00220	G	[illegible]	[illegible]
b. [redacted]						
c.						
d.						

J. Additional Descriptions for Materials Listed Above
A. W304, W34057 D07-831-94
B. W133, W[redacted] 57600
NOTIFY GENERATOR IF UNDELIVERABLE

K. Handling Codes for Materials Listed Above

15. Special Handling Instructions and Additional Information
IN CASE OF SPILL, DAY OR NIGHT, NOTIFY CHEMTREC 24HRS. AT 1-800-424-9300.

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: KENNETH M. SLOWIK — Signature: Kenneth M. Slowik — Date: Month Day 07 27 [illegible]

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Pat Walter — Signature: Pat Walter — Date: Month Day 07 27 [illegible]

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: E. Goubeneuk — Signature: [signature] — Date: Month Day 07 27 [illegible]

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: E. Goubeneuk — Signature: [signature] — Date: Month Day 07 27 [illegible]

GENERATOR — TRANSPORTER — FAC

MUST BE REPORTED TO THE MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM, IN MICHIGAN AT 1-800-292-4706 OR OUT OF STATE AT 517-373-7660 AND THE NATIONAL RESPONSE 1-800-424-8802 24 HOURS PER DAY.

EPA Form 8700-22 (Rev. 9/88)

TSDF COPY

RCRA CONSENT AGREEMENT AND FINAL ORDER SIGN-OFF

PART I BACKGROUND

Facility Name BASF Corporation, Incorporated

Facility RCRA ID Number MID 064 197 742

Docket Number

REB Assignee Diane Sharrow ORC Assignee Reg Pallesen

Summary of Agreement AOC per § 3008(h) - terms include RFI, CMS and CMI. Includes "new" model third party dispute resolution language.

~~PART II CONCURRENCES ON DRAFT CAFO~~

	Initials	Date	Agree	Disagree
REB Assignee				
Chief, RCRA Enf. Section				
Chief, RCRA Enf. Branch				
Asst. Regional Counsel				
Chief, S.W.E.R. Section				

See yellow

PART III RETURN TO ORC ASSIGNEE FOR TRANSMITTAL OF DRAFT TO THE FACILITY

PART II FINAL CAFO APPROVAL

REB Assignee Diane Sharrow	DMS	2/14/94	X	
Chief, RCRA Enf. Section Laura Lodisio	[signature]	2/15/94	✓	
Chief, RCRA Enf. Branch Joe Boyle	[signature]	2/15/94	✓	
Asst. Regional Counsel Reg Pallesen	[signature]	2/16/94	✓	
Chief, ~~S.W.E.R.~~ Multi-media Section Rob Klassner	[signature]	2/20/94	✓	
	[signature]	2/20/94	✓	
Assoc. Dir., Office of RCRA Niedergang	[signature]	2/24/94	✓	
Director, WMD Muno	WEM	2/24/94	✓	

PART III RETURN TO REB HRE-8J, FOR MAILING

BASF WYANDOTTE CORPORATION
MID064197742

DATE	TITLE
08/01/80	NOTIFICATION FORM 8700-12
08/05/80	AMENDED N.F. 8700-12
11/17/80	RCRA PERMIT PART A FORM 3510-3 W/ATTACHMENTS
12/04/80	BASF LETTER RE: REVISED PART A FORM 3510-3
12/04/80	REVISED PART A FORM 3510-3/dated 11/19/80 - recd. 12/4/80
12/12/80	AMENDED N.F. 8700-12
04/08/81	BASF-WISNIEWSKI LETTER RE: REVISED PART A FORM 3510-3
04/09/81	BASF-DUNN LETTER RE: REVISED PART A FORM 3510-3
04/09/81	REVISED PART A FORM 3510-3
04/09/81	REVISED PART A FORM 3510-3
06/25/81	BASF LETTER RE: REVISED PART A FORM 3510-3
06/25/81	REVISED PART A FORM 3510-3
10/02/81	1981 TSD INTERIM STATUS INSPECTON REPORT
06/10/82	BASF LETTER RE: INTERIM STATUS AS TSD FACILITY
07/13/82	BASF LETTER RE: COMPLIANCE W/40 CFR 265.147
09/16/82	1982 TSD I.S. INSPECTON REPORT
09/28/82	NOTICE OF DEFICIENCY
01/10/83	USEPA CONVERSATION RECORD RE: WITHDRAWAL OF PART A
01/12/83	PRELIMINARY ASSESSMENT VISUAL SITE INSPECTION OR RFA
01/13/83	BASF LETTER RE: COMPLIANCE W/40 CFR 265.147
04/28/83	BASF LETTER RE: COMPLIANCE W/40 CFR 265.147
06/22/83	1983 TSD I.S. INSPECTION REPORT
08/26/83	MDNR LETTERS RE: NOTIFICATION OF CLAIM AGAINST BASF TO BASF AND USEPA
02/27/84	1983 BIENNIAL REPORT FORM 8700-13A GENERATOR AND 8700-13B TSD
02/28/84	BASF LETTER RE: 1983 BIENNIAL REPORT
07/31/84	1984 TSD I.S. INSPECTION REPORT
08/20/84	USEPA LETTER RE: INCINERATOR
08/27/84	USEPA CONVERSATION RECORD RE: USEPA LETTER OF 08-20-84
09/05/84	BASF LETTER RE: INCINERATOR
12/11/84	BASF MANIFEST EXCEPTION REPORT
01/23/85	MDNR REQUEST FOR CLOSURE PLAN
03/29/85	LETTER OF WARNING RE: NON-RECEIPT OF CLOSURE PLAN
04/23/85	BASF CLOSURE/POST CLOSURE PLAN DATED 11/80 REVISED 03/83 AND 04/85
06/17/85	NOTICE OF DEFICIENCY
07/09/85	BASF VARIANCE REQUEST UNDER 40 CFR 260.30(B) RE: VITAMIN COMPLEX
07/23/85	EPA LETTER TO MDNR RE: VARIANCE REQUEST

BASF WYANDOTTE CORPORATION
MID064197742

DATE	TITLE
07/24/85	CORRECTIONS OF DEFIENCIES
08/28/85	MDNR LETTER TO EPA RE: VARIANCE REQUEST
11/07/85	CONSENT DECREE-CIVIL ACTION NO. 83CV-4712-DT
11/27/85	BASF LETTER RE: MERGER & NAME CHANGE
12/10/85	BASF LETTER RE: COMPLIANCE W/40 CFR 265 SUBPART H
12/16/85	AMENDED N.F. 8700-12
12/18/85	MDNR LETTER TO EPA RE: VARIANCE REQUEST
12/23/85	BASF LETTER RE: MERGER & NAME CHANGE
12/30/85	1985 TSD I.S. INSPECTION REPORT AND NOTICE OF VIOLATION
12/31/85	USEPA MEMO TO FILE RE: APPROVAL OF VARIANCE REQUEST
01/10/86	EPA LETTER RE: CORRECTIVE ACTION REQUIREMENTS
01/13/86	EPA CONVERSATION RECORD RE: VARIANCE REQUEST
01/20/86	AMENDED N.F. 8700-12
01/20/86	BASF LETTER RE: VARIANCE REQUEST
01/24/86	BASF LETTER RE: AMENDED N.F. 8700-12
02/18/86	CORRECTION OF MOST DEFICIENCEIES
02/19/86	PUBLIC NOTICE OF VARIANCE REQUEST
02/19/86	PUBLIC NOTICE MATERIAL
04/08/86	USEPA LETTER RE: GRANTING OF VARIANCE REQUEST
08/25/86	STIPULATION TO AMEND CONSENT DECREE-CIVIL ACTION NO. 83-CV-4712-DT
09/04/86	ORDER AMENDING CONSENT DECREE-CIVIL ACTION NO. 83-CV-4712-DT
06/08/88	USEPA CONVERSATION RECORD RE: ACKNOWLEDGEMENT OF PART A WITHDRAWAL OF INCINERATOR
10/25/88	BASF EXCEPTION REPORT
11/07/88	BASF LETTER RE: CLOSURE PLAN FOR WITHDRAWAL OF INTERIM STATUS
11/08/88	BASF DOCUMENTATION OF CLOSURE CONTAINER STORAGE AREA
11/16/88	MDNR LETTER RE: PUBLIC NOTICE OF CLOSURE
12/20/89	BASF EXECPTION REPORT
12/29/89	AMMENDED N.F. 8700-12
12/29/89	BASF LETTER RE: AMENDED N.F.8700-12
03/27/90	AMENDED N.F. 8700-12
03/27/90	BASF LETTER RE: AMENDED N.F.8700-12
05/14/90	(DO NOT RELEASE) ENFORCEMENT SENSITIVE RCRA PRIORITIZATION SYSTEM SCORING SUMMARY
06/18/90	AMENDED N.F. 8700-12
06/18/90	BASF LETTER RE: AMENDED N.F. 8700-12
12/20/90	AMENDED N.F. 8700-12
12/20/90	BASF LETTER RE: AMENDED N.F. 8700-12

BASF WYANDOTTE CORPORATION
MID064197742

DATE	TITLE
06/27/91	MDNR LETTER RE: DENIAL OF CLEAN CLOSURE
11/12/92	SECT. 3007 OF RCRA INFORMATION REQUEST
11/16/92	USEPA CONVERSATION RECORD RE: SECT. 3007 I.R.
12/14/92	USEPA LETTER RE: SECT. 3007 I.R. EXTENSION
01/08/93	BASF RESPONSE W/ATTACHMENTS TO SECT. 3007 I.R.
09/17/93	DRAFT ADMINISTRATIVE ORDER ON CONSENT SEC. 3008(H) OF RCRA W/ATTACHMENTS
10/20/93	BASF - USEPA MEETING NOTES
10/21/93	FAX TO BASF OF 10/20/93 ATTENDEE LIST AND 01/12/83 PA/VSI
10/29/93	MULTI MEDIA SCREENING INSPECTION
11/05/93	FAX OF BASF LETTER OF COMMENTS ON DRAFT SEC. 3008(H) ORDER W/0 ATTACHMENT
11/05/93	(DO NOT RELEASE - CBI) BASF LETTER W/ATTACHMENTS
11/12/93	BASF - USEPA MEETING NOTES
11/15/93	BASF LETTER RE: APPLICATILITY OF SEC. 3008(H) TO BASF
12/07/93	USEPA LETTER OF RESPONSE TO BASF 11/05/93 LETTER
12/07/93	FAX OF USEPA LETTER
12/08/93	FAX OF BASF LETTER OF CONCERNS RE: DRAFT SEC. 3008(H) ORDER
12/08/93	BASF LETTER OF CONCERNS ON DRAFT SEC. 3008(H) ORDER
12/10/93	BASF - USEPA MEETING NOTES
12/27/93	BASF LETTER REQUESTING 90 DAY EXTENSION TO ORDER SETTLEMENT DEADLINE
/ /	INTEGRATED RISK INFORMATION SYSTEM CARCINOGENITY, INHALATION RFC & ORAL RFD SUMMARIES
/ /	1985,1987,1989,1991 AND 1993 B.R. FORMS 8700-13A AND B (MICHROFICHE)
/ /	(DO NOT RELEASE) ENFORCEMENT SENSITIVE - ENVIRONMENTAL BENEFITS ANALYSIS

BASF Corporation

BASF

CERTIFIED MAIL-RETURN RECEIPT REQUESTED
P 121 664 290

January 8, 1993

Mr. Eric Glatstein
U.S. EPA, Region 5
RCRA Enforcement Branch (HRE-8J)
77 West Jackson Blvd.
Chicago, Illinois 60604

RECEIVED
JAN 1 1 1993
OFFICE OF RCRA
Waste Management Division
U.S. EPA, REGION

Re: Section 3007 Information Request
BASF Corporation
EPA ID. No.: MID 064 197 742

Dear Mr. Glatstein:

Per your request, enclosed is information relating to the BASF Corporation, Wyandotte Site, North Works groundwater remedial program. Following is a listing of the information enclosed as it relates to items 1 through 7 from your request letter. The numbered items correspond to the numbered locations on the enclosed site plan (see Item 7). Please note that analytical reports which show results for both groundwater and soil are included under Item 1.

Monitoring data and/or data summaries for NPDES Outfall 003 discharges are included in this submittal because this discharge contains surface water runoff from the southern portion of the site. Data for Outfall 001 has not been included because this discharge is comprised primarily of process wastewater from the Polyols Plant. Outfall 002 is not included because this discharge consists only of surface water runoff from parking lots and non-contact cooling water from the TPU and Windshield Adhesives Plants and is only monitored for flow volumes.

The three primary constituents of concern in Outfall 003 are 1,2 dichloropropane (PDC), bis (2-chloroisopropyl) ether (BCE) and 1,2 dichloroethane (EDC). As discussed with you, additional unsubmitted data on Outfall 003 exists within BASF's files, in particular for EDC. Results were not summarized for EDC because levels have been very low as compared to PDC. PDC is the primary contaminant of concern in the groundwater and has been used by the site as an indicator to track the performance of the groundwater remedial program.

Also, as discussed with you, Michigan DNR NPDES compliance inspection reports are not included in this submittal because it is felt that they contain little information relevant to this request. These reports are available upon request.

With this submittal, BASF also wishes to clarify the identifying number of the consent decree which addresses the North Works property. It is 83-CV-4712-DT.

1609 Biddle Avenue, Wyandotte, Michigan 48192 (313) 246-6100

Please address any questions you may have regarding this information submittal to Carlene LaScola (313-246-6834) or Doug Thiel (313-246-6209).

Item 1. **Chemical analyses of untreated groundwater samples taken from monitoring and extraction wells.**

1.1 Results of chemical analyses conducted on samples of monitoring well groundwater and soil taken in June 1981 in conjunction with the Michigan DNR investigation. Sample locations are shown on the last page of the first section which is a summary.

1.2 Results of chemical analyses conducted from 1987 to December 1992 on the feeds to and discharge from the Carbon Treatment System (labeled "North Works Groundwater Extraction Wells").

1.3 Analytical results of organic phase extracted from Well #10 to better understand subsurface concentrations of pollutants. Collected and analyzed during September, 1992.

1.4 Results of groundwater and soil analytical work conducted in conjunction with a current project to investigate and design a remedial system for toluene contamination in the area of the Polyols Plant (Toluene Remediation Project). Samples were collected from borings and temporary monitoring wells from May to September 1992. A detailed description prefaces this section.

1.5 Results of chemical analyses conducted on extraction well samples in April, 1988.

Item 2. **Chemical analyses of soil, sediment or surface water.**

2.1 PDC (1,2 dichloropropane) Soil Contamination Report. This report was generated internally in April 1985. — [illegible] NW quadrant
1985 Nestimate ~35,000 gals of PDC in local soil. Geology

2.2 A report of a soil investigation conducted in the northern portion of the North Works in April 1990 by Environmental Resources Management, Inc.

2.3 Results of waste characterizations conducted on soils during 1991 and 1992. A more detailed description prefaces this section.

2.4 Analytical data collected from Outfall 003 discharge from January 1987 to December 1992 for 1,2 dichloropropane (PDC) and bis (2-chloroisopropyl) ether (BCE). Figure 1 shows monthly maximum trends for 1,2 dichloropropane from January 1987 through January 1991. Figures 2 through 4 show actual results of samples taken from February 91 through December 92. Figures 5 through 8 show the same information for BCE. Please note that an incorrect method was used for BCE until July 31, 1992. Therefore, results recorded prior to this date are questionable.

Item 2. **Chemical analyses of soil, sediment or surface water.** **(Cont.)**

2.5 Analytical results from an internal surface water investigation conducted near the Polyols Plant during October and November, 1992.

2.6 Results of analyses conducted on surface/groundwater samples collected in conjunction with miscellaneous projects from 1987 to 1990.

2.7 Results of PDC analyses conducted on the Outfall 003 discharge from January 1982 to December 1986.

2.8 Results of toluene analyses conducted from October 1988 to November 1990 on samples taken from Polyols Plant locations within the collection system serviced by Outfall 001 (i.e., trenches, drains, lift stations, 001 discharge) and surface water. This study was conducted in an attempt to determine the source of toluene contamination in Outfall 001 discharge. Toluene is present in the groundwater and soils of the Polyols Plant area as a result of historical operations unrelated to the existing Polyols Plant operations (see Item 1.4).

2.9 Results of toluene analyses conducted from March 1990 to December 1992 on the feeds and discharges to and from the Polyols Plant carbon absorbers. These carbon adsorption beds were installed to reduce toluene concentrations in collected surface water prior to discharge through Outfall 001.

Item 3. **Pumping logs and summaries of pumping logs.**

3.1 Pumping logs for the North Works Groundwater Collection System from 1987 to December 1992.

3.2 Summaries of pumping logs indicating volumes of groundwater which have been extracted from the wells on a monthly basis. Monthly and year-to-date gallon per day (GPD) averages are shown. Note that the reports also address the BASF South Works property. Only Part A on each page is applicable to this information request.

Item 4. **Reports demonstrating whether the flow of groundwater to the Detroit River has been halted by the groundwater remedial program.**

4.1 Report of an investigation conducted by S. S. Papadopulos & Associates, Inc. in 1984 to determine rate and direction of groundwater flow at the North Works. This report is submitted pursuant to your verbal request on Dec. 14.

Item 4. **Reports demonstrating whether the flow of groundwater to the Detroit River has been halted by the groundwater remedial program.**

4.2 Reports showing groundwater cones of depression using well measurement data. A more detailed description prefaces this item.

4.3 Well measurement data from 1987 to present.

Item 5. **Description of the treatment, storage and disposal of the extracted groundwater.**

5.1 Description of the groundwater collection and treatment system.

Item 6. **Reports which demonstrate the efficacy of the North Works groundwater remedial program.**

6.1 See attached description of reports.

Item 7. **Copy of North Works Site plan identifying wells and sampling locations.**

Item 8. **Notarized Certification**

I certify under penalty of law that I have personally examined and am familiar with the information submitted in responding to this information request for production of documents. Based on my review of all relevant documents and inquiry of those individuals immediately responsible for providing all relevant information and documents, I believe that the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Issued this 8th day of January, 1993.

Gary T. Durst
Site General Manager

LYNN D. HANNA
Notary Public, Wayne County, MI
My Commission Expires Mar. 3, 1996

Enclosures
C:\WP51\DATA\EPARFI.SUM.CDL

STICK POSTAGE STAMPS TO ARTICLE TO COVER FIRST CLASS POSTAGE, CERTIFIED MAIL FEE, AND CHARGES FOR ANY SELECTED OPTIONAL SERVICES. (see front)

1. If you want this receipt postmarked, stick the gummed stub to the right of the return address leaving the receipt attached and present the article at a post office service window or hand it to your rural carrier. (no extra charge)

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6. Save this receipt and present it if you make inquiry.

U.S. [illegible] 1988-217-132

DEC 14 1992

HRE-8J

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Ms. Carlene Lascola, Manager
Ecology Services
BASF Corporation
1609 Biddle Avenue
Wyandotte, Michigan 48192

Re: Section 3007 Information Request
BASF Corporation
EPA ID. No.: MID 064 197 742

Dear Ms. Lascola:

As we discussed in our December 14, 1992, telephone conversation, because of the difficulties BASF has had in assembling pre-1985 information relating to the Wyandotte North Works, and because many people may have vacation in the coming weeks, the response date for the Resource Conservation and Recovery Act (RCRA) Section 3007 Information Request submitted to BASF Corporation on November 12, 1992, is hereby extended until January 8, 1993.

Sincerely yours,

EG

Eric Glatstein
RCRA Enforcement Branch

bcc: Laura Lodisio
Branch file

f:\user\eglatste\basf\3007ext.let

NOV 12 1992

HRE-8J

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Adam Bickel
BASF Corporation
1609 Biddle Avenue
Wyandotte, Michigan 48192

Re: Section 3007 Information Request
BASF Corporation
EPA ID. No.: MID 064 197 742

Dear Mr. Bickel:

This is a request for information by the United States Environmental Protection Agency (U.S. EPA) pursuant to its authority under Section 3007 of the Resource Conservation and Recovery Act (RCRA), as amended, 42 U.S.C. §6927. The information requested relates to the possible release of hazardous wastes or hazardous constituents from the above referenced facility, and to the effectiveness of the facility's continuing groundwater remedial program.

The information requested herein must be provided to this office within thirty (30) days of receipt of this letter notwithstanding its possible characterization as confidential information. You may, pursuant to 40 CFR 2.203(a), assert a business confidentiality claim covering all or part of the information in the manner described in 40 CFR 2.203(b). Information covered by such a claim will be disclosed by U.S. EPA only to the extent and by means of the procedures set forth in 40 CFR Part 2, Subpart B. Any request for confidentiality must be made when the information is submitted, since any information not so identified may be made available to the public without further notice.

The written statements submitted pursuant to this request must be notarized and submitted under an authorized signature certifying that all statements contained therein are true and accurate to the best of the signatory's knowledge and belief. Any documents submitted to U.S. EPA Region 5 pursuant to this information request should be certified as true and authentic to the best of the signatory's knowledge or belief.

UNITED STATES POSTAL SERVICE

OFFICIAL BUSINESS

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- Attach to front of article if space permits, otherwise affix to back of article.
- Endorse article "Return Receipt Requested" adjacent to number.

RETURN TO

Print Sender's name, address, and ZIP Code in the space below.

Eric Glatstein (HRE-85)
U.S. EPA, 77 W. Jackson
Chicago, IL 60604

U.S.MAIL

PENALTY FOR PRIVATE USE, $300

Should the signatory find, at any time after the submittal of the requested information, that any portion of the submitted information is false, misleading or incomplete, the signatory should so notify Region 5. If any answer certified as true should be found to be untrue or misleading, the signatory can and may be prosecuted pursuant to 18 U.S.C. §1001. U.S. EPA has the authority to use the information requested herein in an administrative, civil, or criminal action.

If you have any questions regarding this matter, please contact Mr. Eric Glatstein of my staff at (312) 886-3901. Your response should be sent to Mr. Glatstein at the U.S. EPA, Region 5, RCRA Enforcement Branch (HRE-8J), 77 West Jackson Blvd., Chicago, Illinois 60604.

Sincerely yours,

Joseph M. Boyle, Chief
RCRA Enforcement Branch

Enclosure

cc: Ken Burda, MDNR (w/encl)

f:\user\eglatste\basf\3007 11/6/92

CONCURRENCE REQUESTED FROM REB			
OTHER STAFF	REB STAFF	REB SECTION CHIEF	REB BRANCH CHIEF
11-5-92	11/5/92	RDS for LLL 11/5/92	11/6 for JMB

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

BASF CORPORATION 1609 BIDDLE AVENUE WYANDOTTE, MICHIGAN 48192 EPA ID NO.: MID 064 197 742	)))))))	Information Request Pursuant to Section 3007 of the Resource Conservation and Recovery Act, as amended, 42 U.S.C. §6927

This is a request by the United States Environmental Protection Agency (U.S. EPA) issued pursuant to Section 3007 of the Resource Conservation and Recovery Act, as amended, 42 U.S.C. §6927. The issuance of this request serves to require BASF Corporation, to submit information relating to its treatment, storage, and disposal of hazardous wastes.

I. INSTRUCTIONS

This request for information pertains to any and all information you may have regarding the generation, transportation, treatment, storage, or disposal of hazardous waste at or from the former BASF Wyandotte Corporation North Works ("North Works"), the facility located in the City of Wyandotte, Wayne County, Michigan, and generally described as being bounded on the north by Perry Place, on the east by the U.S. Harbor Line of the Detroit River, on the south by Mulberry Street, and on the west by Biddle Avenue.

If any information called for herein is not available or accessible in the full detail requested, the request shall be deemed to call for the best information available. The request also requires the production of all information called for in as detailed a manner as possible based upon such information as is available or accessible.

The information must be provided notwithstanding its possible characterization as confidential information or trade secrets. You are entitled to assert a claim of confidentiality pursuant to 40 CFR 2.203(b) for any information produced that, if disclosed to persons other than officers, employees, or duly authorized representatives of the United States, would divulge information entitled to protection as trade secrets. Any information which the Administrator of this Agency determines to constitute methods, processes or other business information entitled to protection as trade secrets will be maintained as confidential pursuant to the procedures set forth in 40 CFR Part 2. A request for confidential treatment must be made when information is provided since any information not so identified will not be accorded this protection by the Agency.

The written statements submitted pursuant to this request must be notarized and returned under an authorized signature certifying that all statements contained therein are true and accurate to the best of the signatory's knowledge and belief. Should the signatory find at any time after submittal of the requested information that any portion of this submittal certified as true is false or misleading, the signatory should so notify U.S. EPA. If any information submitted under this information request is found to be untrue or misleading, the signatory can be prosecuted under Section 1001 of Title 18 of the United States Code. U.S. EPA has the authority to use the information requested herein in an administrative, civil, or criminal action.

The information requested herein must be provided, within thirty (30) days following receipt of this request, to the United States Environmental

Protection Agency, Region 5, RCRA Enforcement Branch (HRE-8J), 77 West Jackson Blvd., Chicago, Illinois 60604, Attention: Eric Glatstein.

II. DEFINITIONS

1. "Facility" means all contiguous land and structures, other appurtenances and improvements on the land used for treating, storing or disposing of hazardous waste. A facility may consist of several treatment, storage, or disposal operational units (e.g., one or more landfills, surface impoundments or combinations of them) (40 CFR 260.10).

2. "Hazardous waste" means a hazardous waste as defined in 40 CFR 261.3.

3. "Hazardous constituent" means a chemical compound which is listed in 40 CFR Part 261 Appendix VIII.

4. "Treatment" means any method, technique or process, including neutralization, designed to change the physical, chemical or biological character or composition of any hazardous waste so as to neutralize such waste, or so as to recover energy or material resources from the waste or so as to render such waste nonhazardous or less hazardous; safer to transport, store or dispose of; or amenable for recovery, amenable for storage or reduced in volume (40 CFR 260.10).

5. "Storage" means the holding of hazardous waste for a temporary period, at the end of which the hazardous waste is treated, disposed of or stored elsewhere (40 CFR 260.10).

6. "Disposal" means the discharge, deposit, injection, dumping, spilling, leaking or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including groundwater (40 CFR 260.10).

III. REQUEST FOR ANSWERS TO QUESTIONS AND THE PRODUCTION OF DOCUMENTS

1. Provide copies of all chemical analyses of untreated groundwater samples taken since 1980 from any on or off-site North Works monitoring wells, or from any on-site extraction wells, with an indication of which well the sample was taken from, and when.

2. Provide copies of all chemical analyses of soil, sediment, or surface water samples taken since 1980 from the North Works, with an indication of where each sample was taken from, and when.

3. Provide copies of pumping logs for those groundwater extraction wells required by the North Works groundwater remedial program delineated in the January 6, 1986, Consent Decree, Civil Action No. 83-CV-4712-DT; and, in the event that they are available, provide summaries of pumping logs indicating volumes of groundwater which have been extracted from the wells on a monthly basis.

4. Provide copies of any already prepared summaries, reports, or hydraulic data which demonstrate whether the flow of groundwater to the Detroit River and the City of Wyandotte sewerage system has been halted by the North Works groundwater remedial program.

5. Provide a description of the interim and ultimate treatment, storage, and disposal of the extracted groundwater.

6. Provide copies of any already prepared summaries, reports, or additional chemical analyses which may assist in evaluating the efficacy of the North Works groundwater remedial program in reducing the concentration of hazardous constituents in the groundwater.

7. Provide a copy of a North Works site plan which identifies each well and other sampling location for which analytical or hydraulic data are submitted.

8. Provide the following notarized certification by a responsible company officer:

   I certify under penalty of law that I have personally examined and am familiar with the information submitted in responding to this information request for production of documents. Based on my review of all relevant documents and inquiry of those individuals immediately responsible for providing all relevant information and documents, I believe that the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Issued this 12th day of November, 1992.

Joseph M. Boyle, Chief
RCRA Enforcement Branch
Waste Management Division
United States Environmental Protection Agency
Region 5

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION V
EASTERN DISTRICT OFFICE
25089 CENTER RIDGE ROAD
WESTLAKE, OHIO 44145

[redacted]

MEMORANDUM

SUBJECT: Multi-Media Screening Inspection Checklist, BASF-Wyandotte, Wyandotte, MI (AFE102:A9)

FROM: David R. Barna, Environmental Engineer

THRU: A. R. Winklhofer, Chief
Eastern District Office (SE-W)

TO: Addressees

[redacted]3, multimedia screening was conducted at BASF in conjunction with an NPDES Compliance Evaluation Inspection (CEI). A screening checklist has been completed. Please distribute to your staff for appropriate program review. The CEI report will be forwarded separately to the water division.

If you have any questions concerning this checklist, contact me at (216) 522-7260.

Attachment

Addressees:

Michael Mikulka,	WC-15J
Michael G. Smith,	CM-3T
Mardi Klevs,	WC-15J
Gary Gulezian,	AT-18J
Douglas Ehorn,	WQ-16J
Robert Bowden,	HSE-5J
Mark Horwitz,	HSC-9J
Joseph Boyle,	HRE-8J
Phyllis Reed,	SP-14J
Gerald Phillips,	HRU-8J
Richard Zdanowicz,	WD-17J
James Mayka,	HSRW-6J

GENERAL INFORMATION

1. Inspector(s) Name DAVID R. BARNA

2. Date OF INSPECTION 9/22-23/93

3. Facility Name/Address
BASF CORPORATION (NORTH WORKS)
1609 BIDDLE
WYANDOTTE, MI 48192-3799

4. Facility Contact(s)/Title(s)
Carlene D. LaScola, CIH, CHMM, Ecology Services Manager
Charles E. Anderson, Ecology Services Engineer
Karen A. LeMieux, Ecology Services Engineer II
Adam C. Bickel, Environmental Specialist
Doug P. Thiel, Quality and Ecology Services Manager

5. Description of Facility Operations

SIC Code 2869; 2821; 8731; 3082

Number of Employees ~ 800

Operating Schedule MOST PROCESSES 24 hrs/day; OTHER ON VARIABLE SCHEDULES

Major Products/Production Capacity PLASTIC INTERMEDIATES (POLYOL'S), VITAMINS, THERMOPLASTIC POLYURETHANS; other products

RCRA

Observations

1. Does the facility generate or otherwise handle hazardous wastes? YES

2. Do you see any containers of hazardous waste, land disposal units, lagoons, treatment units? Approximately how many?
YES (1)

3. Were any of the units that contain or handle hazardous wastes (containers, beams, dikes, tanks, piping, impoundments, etc. in poor condition, unmarked, open, leaking, cracked, corroded, or in a condition that would allow the release or potential release of hazardous wastes? If yes, describe unit(s). Any actual or evidence of past releases observed? If so, describe waste (i.e., liquid, sludge, etc.), unit(s), and location.
None observed (current releases)

BASF has a toluene remediation project - treating toluene contaminated water prior to discharge thru NPDES outfall. BASF is also pump/treating historical propylene dichloride contamination - discharge to Wayne Co-Wyandotte WWTP. (3) (PDC)

4. Does the facility operate a boiler or industrial furnace which burns hazardous wastes? Was there any incineration of hazardous waste on site?
Not according to BASF

5. Was there any evidence of spills, leaks, or discharges of hazardous wastes? If so, provide location and description.
None observed

Interview Questions/Records Reviews

1. If the facility is a generator of hazardous waste was there a notification (EPA Form 8100-12) of hazardous waste activity? What is the quantity (kilograms/month) of hazardous wastes produced? How are they produced?
Yes, operates as LQG and <90 accumulation

Generates ~ 1.4 x10^5 kg/mo (2)

2. What is the EPA Identification Number? MID 0641 97742

3. What was the basis (i.e., test, knowledge of process and waste) for determining if the facility did not did not produce or handle hazardous wastes? Who mae the determination?

ANALYSES / KNOWLEDGE OF WASTE BY BASF AND CONTRACT LABS

4. Does the facility have copies of shipping manifests? Obtain copies of a month's (or other specific time frame) set of manifests.

YES (4)

NOTES

(1) • 5 HAZARDOUS WASTE ACCUMULATION AREAS INCLUDING TWO BULK AREAS

• OVER 50 SATELITE ACCUMULATION AREAS

(2) Refer to Attachment 1 for SUMMARY OF 1993 DISPOSITION OF HAZAROUS WASTES

(3) IN SEPT, 1993 USEPA ISSUED A DRAFT 3008 (h) corrective action. BASF HAD 90 DAYS to negotiate an Administrative Order or unilateral action would be taken by USEPA. A meeting with the company and USEPA representatives was held in October.

The Order seeks to have BASF address the effectiveness of its groundwater remediation activities under an existing 1986 State Consent Decree. Activities to be assessed include the effectiveness of the Toluene Remediation Project, and remediation efforts to prevent further discharges to the Detroit River. The order also seeks the investigation of 9 SWMU's and 3 areas of concern that may be contributing to groundwater and river contamination.

(4) Refer to Attachment 2 for copies of selected Manifests.

(5) Refer to Attachment 3 for an overview of Toluene Remediation Project

(6) Refer to Attachment 4 for a Discussion of RCRA regulatory status of Polyol Pond (part of NPDES treatment)

BASF CORPORATION, WYANDOTTE SITE
1993 YTD DISPOSITION OF HAZARDOUS AND NONHAZARDOUS WASTE

Disposal Sites	Average lbs/gal	HazWaste (lbs)	NHWaste (lbs)	Total Waste (lbs)
BFI (via Manumit)				0
Calgon Carbon - Catlettsburgh		5600		5,600
Calgon Carbon - Pittsburgh	6	6500	60000	66,500
City Environmental (Harper)	8		158315	158,315
Clean Harbors - Baltimore	9	15385	10855	26,240
Clean Harbors - Braintree	9	25365	12270	37,635
Clean Harbors - Chicago	9	28215		28,215
Clean Harbors - Cleveland	9		9450	9,450
Clean Harbors - Natick				0
Columbus Steel Drum			478920	478,920
Michigan Disposal	8	2043105		2,043,105
Michigan Recovery	9		381922	381,922
Motors Oil Refinery	9			0
Petro-Chem Processing	8	223200	134760	357,960
Rollins - Baton Rouge	8	1823	2288	4,111
Rollins - Bridgeport	8	35780	9450	45,230
Rollins - Deer Park	8			0
Ross	10	26350		26,350
Safety-Kleen (Romulus & Toledo)	8	816		816
Wayne Disposal	9		68000	68,000

24/2139 1326230

Note: Activity with Clean Harbors was high due to Adhesive/Phosphates Plant closure.

7.5×10^4 Kg/mo.

$$\frac{(24/2139\ \text{lbs})(0.4536\ \text{Kg/lbs})}{8\ \text{mo.}} = 1.37 \times 10^5\ \text{Kg/mo.}$$

acb/wp51/rev.9/93

DNR
MICHIGAN DEPARTMENT OF NATURAL RESOURCES

FILTER CAKE

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1969.
Failure to file is punishable under section 299.548 MCL or Section 10 of Act 136, P.A. 1969.

Please print or type

Form Approved. OMB No. 2050-0039 Expires 9-30-91

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: MID064197742 — Manifest Document No.: 11336
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: BASF CORPORATION, 1609 BIDDLE AVE., WYANDOTTE, MI 48192
4. Generator's Phone (313) 246-6399

A. State Manifest Document Number: MI 2144949
B. State Generator's ID:

5. Transporter 1 Company Name: K & D INDUSTRIAL SERVICES
6. US EPA ID Number: MID072790710
C. State Transporter's ID:
D. Transporter's Phone: (313) 729-3350

7. Transporter 2 Company Name:
8. US EPA ID Number:
E. State Transporter's ID:
F. Transporter's Phone:

9. Designated Facility Name and Site Address: ENVOTECH MANAGEMENT SERVICES, 49350 N SERVICE DRIVE, BELLEVILLE, MI 48111
10. US EPA ID Number: MID000724831
G. State Facility's ID:
H. Facility's Phone: (313) 697-7830

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER). HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.	N/H
a.	NON - REGULATED ZINC HYDROXIDE FILTER CAKE	001	CM	16	Y	003D	H
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
40%-60% ZINC HYDROXIDE — BASF W300
40%-60% WATER — APPROVAL #000050M
2%-25% PAPER — Y90936TB Y61330R
NOTIFY GENERATOR IF UNDELIVERABLE

K. Handling Codes for Wastes Listed Above
a/ /
b/ /
c/ /
d/ /

15. Special Handling Instructions and Additional Information
FOR CHEMICAL EMERGENCY, CALL CHEMTREC, DAY OR NIGHT 1-800-424-9300 1273

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR; if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: LAWRENCE SALESKI — Signature: [signature] — Date: Month Day Year 08 11 93

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: [illegible] — Signature: [signature] — Date: Month Day Year

18. Transporter 2 Acknowledgement or Receipt of Materials
Printed/Typed Name: — Signature: — Date: Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: DARRYL V. JARBROUGH — Signature: [signature] — Date: Month Day Year 08 11 93

GENERATOR

TRANSPORTER

FACILITY

ALL SPILLS MUST BE REPORTED TO THE MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM OF MICHIGAN AT 1-800-292-4706 OR OUT OF STATE AT 517-373-7660 AND THE NATIONAL RESPONSE CENTER AT 1-800-424-8802 24 HOURS PER DAY.

EPA Form 8700-22 (Rev. 9/88) PR 5110 Rev. 4/90

GENERATOR 2nd COPY

DNR
MICHIGAN DEPARTMENT OF NATURAL RESOURCES

CAKE

DO NOT WRITE IN THIS SPACE
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1969.
Failure to file is punishable under section 299.548 MCL or Section 10 of Act 136, P.A. 1969.

Please print or type

Form Approved. OMB No. 2050-0039 Expires 9-30-92

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. MID 0 6 4 1 9 7 7 4 2 | Manifest Document No. 0 9 5 8 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
BASF CORPORATION - 1609 BIDDLE AVE.
WYANDOTTE, MICHIGAN 48192

4. Generator's Phone (313) 246-6836

A. State Manifest Document Number: MI 2680245

B. State Generator's ID

5. Transporter 1 Company Name: K & D INDUSTRIAL
6. US EPA ID Number: MID 0 7 2 7 9 0 7 1 0

C. State Transporter's ID

D. Transporter's Phone

7. Transporter 2 Company Name
8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone 313-729-3350

9. Designated Facility Name and Site Address
ENVOTECH
49350 N. SERVICE DRIVE
BELLEVILLE, MI 48111

10. US EPA ID Number: MID 0 0 0 7 2 4 8 2 1

G. State Facility's ID

H. Facility's Phone 313-697-7830

	11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER). HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.	N/H
a.	X	RQ WASTE FLAMMABLE SOLID, NOS (MAGNESIUM SILICATE, POLYOL), UN1325, DOT E-8943, ERG 32	0 0 1	CM	00000	10	Y D001	H
b.								
c.								
d.								

J. Additional Descriptions for Materials Listed Above
APPROVAL #: 13035/BASF W007 HAZARDOUS WASTE NUMBER D-002. THE WASTE SOLIDS CONTAIN 40% MAGNESIUM SILICATE, 45% POLYOL & 15% CAUSTIC. NOTIFY GENERATOR IF UNDELIVERABLE. MATERIAL MUST BE PROCESSED IMMEDIATELY. IT CAN IGNITE. CALL CHEMTREC AT 1-800-424-9300 FOR EMERGENCY ASSISTANCE

K. Handling Codes for Wastes Listed Above
a/ /
b/ /
c/ /
d/ /

15. Special Handling Instructions and Additional Information
12 8214

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR; if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: J. SCHWEICKHART/D. EASLEY/T. LYNCH | Signature | Date Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Date Month Day Year

18. Transporter 2 Acknowledgement or Receipt of Materials
Printed/Typed Name | Signature | Date Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name | Signature | Date Month Day Year

GENERATOR / TRANSPORTER / FACILITY

ALL SPILLS MUST BE REPORTED TO THE MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM, IN MICHIGAN AT 1-800-292-4706 OR OUT OF STATE AT 517-373-7980 AND THE NATIONAL RESPONSE CENTER AT 1-800-424-8802 24 HOURS PER DAY.

EPA Form 8700-22 (Rev. 9/88)

GENERATOR 2nd COPY

PR 5110 Rev. 10/91

Wastes which *DO NOT MEET* treatment standards
Notice from generator to disposal facility (40 CFR 268.7(a)(1)(i))

The wastes identified on manifest number MI 2680245 and bearing the EPA Hazardous Waste Number(s) D001 D002 are subject to the land disposal restrictions of 40 CFR Part 268. This waste *DOES NOT MEET* the applicable treatment standards specified in Part 268 Subpart D or exceeds the prohibitions specified in 268.32 or RCRA section 3004(d). Analytical data, where available, has been previously applied or is attached. All treatment standards or prohibition levels exceeded by the waste are checked below.

I. Applicable treatment standards from 40 CFR 268.41(Table CCWE) or 268.42 (Tables 1 and 2) or 268.43 (Table CCW)

Check One	Waste Code	See also	Waste descriptions and/or treatment subcategory	Technology Code Circle One: Wastewaters	Nonwastewaters
X	D002	Table CCWE in 268.41 and Table CCW in 268.43	Acid, alkaline, and other subcategory based on 261.22 managed in non-CWA/non-CWA-equivalent/non-Class I SDWA systems.	DEACT and meet F039	DEACT and meet F039
___	D002	NA	Acid, alkaline, and other subcategory based on 261.22 managed in CWA, CWA-equivalent, or Class I SDWA systems.	DEACT	DEACT

II. Are there any F039 Constituents (40 CFR 268.43 CCW, 268.41 CCWE)? ___ Yes X No
If so, please list all; or circle constituents on a Table 2 attachment. _____

III. California List Prohibition Levels (40 CFR 268.32)

Does this waste contain any of the following constituents at levels greater than the California List Prohibition levels given below?

YES	NO	Constituents (MUST Check either Yes or No)
___	X	1,000 mg/kg Halogenated Organic Compounds (HOC's listed in 168.32 App. III)
___	X	50 ppm PCB's (liquid wastes)
___	X	134 mg/L Nickel (liquid wastes)
___	X	130 mg/L Thallium (liquid wastes)

IV. Additional Hazardous Characteristics (check one)

X No additional characteristics are exhibited by this waste which would require treatment beyond the standards described above.
___ Treatment standards for the additional Hazardous Characteristics requiring treatment are indicated on the attached page.

V. Certification
All treatment standards and prohibition levels applicable to this waste are indicated above.

Company Name: _____
Authorized Signature: _____ Date: 8/27/93

D001 - IGNITABLE CHARACTERISTIC HAZARDOUS WASTE

Wastes which *DO NOT MEET* treatment standards
Notice from generator to disposal facility (40 CFR 268.7(a)(1)(i))

The wastes identified on manifest number MI 2680245 and bearing the EPA Hazardous Waste Number(s) D001 D002 are subject to the land disposal restrictions of 40 CFR Part 268. This waste *DOES NOT MEET* the applicable treatment standards specified in Part 268 Subpart D or exceeds the prohibitions specified in 268.32 or RCRA section 3004(d). Analytical data, where available, has been previously supplied or is attached. All treatment standards or prohibition levels exceeded by the waste are checked below.

I. Applicable treatment standards from 40 CFR 268.41(Table CCWE) or 268.42 (Tables 1 and 2) or 268.43 (Table CCW)

Check One	Waste Code	See also	Waste descriptions and/or treatment subcategory	Technology Code Circle One: Wastewaters	Nonwastewaters
X	D001	Table CCWE in 268.41 and Table CCW 268.43	All descriptions based on 40 CFR 261.21, except for the 261.21 (a)(1) High TOC Subcategory, managed in non-CWA/non-CWA-equivalent/ non-Class I SDWA systems.	DEACT, and meet F039; or FSUBS; RORGS or INCIN	DEACT, and meet F039 or FSUBS; RORGS; or INCIN
___	D001	NA	All descriptions based on 40 CFR 261.21, except for the 261.21 (a)(1) High TOC subcategory, managed in CWA, CWA-equivalent, or Class I SDWA systems.	DEACT	DEACT
___	D001	NA	All descriptions on 40 CFR 261.21 (a) (1) - High TOC Ignitable Liquids Subcategory- Greater than or equal to 10% total organic carbon.	NA	FSUBS; RORGS; or INCIN

II. Are there any F039 Constituents(40 CFR 268.43 CCW, 268.41 CCWE)?
___ Yes X No

If yes, please list all; or circle constituents on Table 2 attachment _____

III. California List Prohibition Levels (40 CFR 268.32)

Does this waste contain any of the following constituents at levels greater than the California List Prohibition levels given below?

YES	NO	Constituents (MUST Check either Yes or No)
___	X	1,000 mg/kg Halogenated Organic Compounds (HOC's listed in 168.32 App. III)
___	X	50 ppm PCB's (liquid wastes)
___	X	134 mg/L Nickel (liquid wastes)
___	X	130 mg/L Thallium (liquid wastes)

IV. Additional Hazardous Characteristics (check one)

X No additional characteristics are exhibited by this waste which would require treatment beyond the standards described above.

___ Treatment standards for the additional Hazardous Characteristics requiring treatment are indicated on the attached page.

V. Certification

All treatment standards and prohibition levels applicable to this waste are indicated above.

Company Name: BASF Wyandotte

Authorized Signature: [signature] Date: 8/27/93

U.S. Department
of Transportation

Research and
Special Programs
Administration

400 Seventh Street, S.W.
Washington, D.C. 20590

DOT-E 8943
(CORRECTED COPY)

1. BASF Wyandotte Corporation, Parsippany, New Jersey, is hereby granted an exemption from those provisions of this Department's Hazardous Materials Regulations specified in paragraph 5 below to offer packages prescribed herein of a flammable solid for transportation in commerce subject to the limitations and special requirements specified herein. This exemption authorizes shipment of a polyol filter cake classed as a flammable solid in a non-DOT specification container and provides no relief from any regulation other than as specifically stated.

2. BASIS. This exemption is based on BASF Wyandotte Corporation's application dated October 21, 1982 submitted in accordance with 49 CFR 107.103 and the public proceeding thereon.

3. HAZARDOUS MATERIALS (Descriptor and class). Polyol filter cake, classed as a flammable solid.

4. PROPER SHIPPING NAME (49 CFR 172.101). Flammable solid, n.o.s.

5. REGULATION AFFECTED. 49 CFR 173.154.

6. MODES OF TRANSPORTATION AUTHORIZED. Motor vehicle.

7. SAFETY CONTROL MEASURES. Packaging prescribed is an open top, metal cargo carrying box of approximately 35,000 pounds loading capacity and lined with 8 mil polyethylene which after completion of loading is folded over the filter cake. The metal box is covered with a tarpaulin. The covered metal box is winched aboard a trailer frame and becomes the truck body. The polyol filter cake must be wetted down with water to cool the temperature below 200°F before shipment.

8. SPECIAL PROVISIONS.

a. The cargo carrying body of the motor vehicle must be plainly marked on the right side, near the front, in letters at least two inches high on a contrasting background, "DOT-E 8943".

b. A copy of this exemption must be carried aboard each motor vehicle used to transport packages covered by this exemption.

9. REPORTING REQUIREMENTS. Any incident involving loss of contents of the package must be reported to the Office of Hazardous Materials Regulation as soon as practicable.

10. EXPIRATION DATE. December 1, 1984.

U.S. Department
of Transportation

Research and
Special Programs
Administration

400 Seventh Street, S.W.
Washington, D.C. 20590

Notice to Exemption Holders

The enclosed exemption has been issued to you (or your company). It is very important that you read and understand all of the terms and conditions of this exemption. Do not assume the exemption authorizes everything that was requested in your exemption application. The exemption provides relief only from the requirements of the Department's Hazardous Materials Regulations (HMR) specifically cited in the exemption. All other applicable requirements of the HMR must be met.

One of the most important provisions in an exemption is its expiration date. Often holders review the expiration date of an exemption upon receipt to determine its duration and fail to check the expiration date thereafter. Consequently, many exemption holders have failed to submit timely renewal applications in conformance with 49 CFR 107.105. Such applications must be submitted at least 60 days prior to their expiration date.

Many holders continue to operate under the terms of exemptions that have expired. This is the same as having no exemption. The responsibility for filing a timely renewal application lies not only with the holder, but with each person who holds the status of a party to an exemption. Therefore, it is important that each holder and each person holding party-to status develop a method to remind themselves to submit a renewal application at least 60 days prior to the expiration date.

Should you have any questions about an exemption, please contact the Exemptions Branch at (202) 366-4535. Be aware that it is your responsibility to understand and comply with the terms and conditions of an exemption. Any person who knowlingly violates the requirements of an exemption shall be liable for a civil penalty of not more than $10,000 for each violation. For 1988, there were 38 enforcement actions against exemption holders, resulting in the payment of penalties in excess of $67,000.

The following is a section dealing with exemptions which has been extracted from the Hazardous Materials Transportation Act (49 App. U.S.C. Section 1801, et seq.)

EXEMPTIONS

Sec. 107.(a) General.-The Secretary, in accordance with procedures prescribed by regulation, is authorized to issue or renew, to any person subject to the requirements of this title, an exemption from the provisions of this title, if such person transports or causes to be transported or shipped hazardous materials in a manner so as to achieve a level of safety (1) which is equal to or exceeds that level of safety which would be required in the absence of such exemption, or (2) which would be consistent with the public interest and the policy of this title in the event there is no existing level of safety established. The maximum period of an exemption issued or renewed under this section shall not exceed 2 years, but any such exemption may be renewed upon application to the Secretary. Each person applying for such an exemption or renewal shall, upon application, provide a safety analysis as prescribed by the Secretary to justify the grant of such exemption. A notice of an application for issuance or renewal of such exemption shall be published in the Federal Register. The Secretary shall afford access to any such safety analysis and an opportunity for public comment on any such application, except that nothing in this sentence shall be deemed to require the release of any information described by subsection (b) of section 552 of title 5, United States Code, or which is otherwise protected by law from disclosure to the public. (emphasis added).

Exemptions and Approvals Division
Office of Hazardous Materials
Transportation

93 JUL 27 P3:00

DNR

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

WAREHOUSE

DO NOT WRITE IN THIS SPACE

ATT. ☐ DIS. ☐ REJ. ☐ PR. ☐

1969.

Failure to file is punishable under section 299.548 MCL or Section 10 of Act 136, P.A. 1969.

Please print or type.

Form Approved. OMB No. 2050-0039 Expires 9-30-92

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. MID064197742 Manifest Document No. 12481

2. Page 1 of

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
BASF CORPORATION
1609 BIDDLE AVENUE
WYANDOTTE, MI 48192

4. Generator's Phone (313) 246-6836

A. State Manifest Document Number MI 2680331

B. State Generator's ID

5. Transporter 1 Company Name: DETREX CORPORATION

6. US EPA ID Number: MID091605972

C. State Transporter's ID

D. Transporter's Phone 313/491-4550

7. Transporter 2 Company Name: [illegible]

8. US EPA ID Number: [illegible]

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
PETRO-CHEM PROCESSING
515 LYCASTE
DETROIT, MI 48214

10. US EPA ID Number: MID980615298

G. State Facility's ID

H. Facility's Phone 313/824-5835

	11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER).	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.	N/H
a.	HAZARDOUS WASTE LIQUID, NOS ORNE, NA9189 (CONTAINS METHYLENE CHLORIDE)	X	006	DM	00230	G	F002	H
b.	RQ WASTE FLAMMABLE LIQUID, NOS, UN1993 (ACRYLONITRILE, OIL, STYRENE) (D001, D018)	X	007	DM	00105	G	D001	H
c.	RQ HAZARDOUS WASTE LIQUID, NOS, ORNE, NA9189 (D001)	X	006	DM	00330	G	D001	H
d.	RQ WASTE FLAMMABLE LIQUID, NOS, UN1993 (CONTAINS ACETONE, METHANOL, TOLUENE) (D001, D009, F003, F005)	X	002	DM	00010	G	D001	H

J. Additional Descriptions for Materials Listed Above
A. ERG31, W001, W28918 B. D018, ERG27, W010, W34049
C. ERG31, W035, U34863 D. D009,F003,F005, ERG27,W063,W28913

NOTIFY GENERATOR IF UNDELIVERABLE.

K. Handling Codes for Wastes Listed Above
a/ /
b/ /
c/ /
d/ /

15. Special Handling Instructions and Additional Information
IN CASE OF SPILL, DAY OR NIGHT, NOTIFY CHEMTREC, 24 HOURS AT 1-800-424-9300.

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR; if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

GENERATOR

Printed/Typed Name: ADAM C. BICKEL — Signature: [signature] — Date (Month Day Year): 07 27 93

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: [illegible] — Signature: [signature] — Date (Month Day Year): [illegible]

18. Transporter 2 Acknowledgement or Receipt of Materials
Printed/Typed Name: [illegible] — Signature: [signature] — Date (Month Day Year): [illegible]

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: [illegible] — Signature: [signature] — Date (Month Day Year): [illegible]

L SPILLS MUST BE REPORTED TO THE MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM MICHIGAN AT 1-800-292-4706 OR OUT OF STATE AT 517-373-7660 AND THE NATIONAL RESPONSE CENTER AT 1-800-424-8802 24 HOURS PER DAY.

EPA Form 8700-22 (Rev. 9/88)

GENERATOR 2nd COPY

PR 5110 Rev. 10/91

Generator Land Disposal Restriction Notification for
Hazardous Wastes Subject to an Effective Prohibition Date

Generator Name: BASF Corporation
EPA ID No. MID064197742
Address: 1609 Biddle
Wyandotte MI 48192
Contact (Print) Adam Bickel
Signature: [signature]
Date: 7/27/93

The hazardous wastes identified on the accompanying manifest number 12481 and bearing the EPA Hazardous Waste Codes listed below are restricted wastes which are prohibited from land disposal under the Land Disposal Restrictions, 40 CFR Part 268. In accordance with 40 CFR 268.7(a)(1), the EPA waste code, waste subcategory, treatability groups, treatment standards, technology codes, and appropriate references, as applicable, are provided below:

I. Characteristic Wastes D001 through D017

Waste Code/Subcategory	Numerical Treatment Standard, Technology Code and/or Reference: Wastewater	Nonwastewater
[X] D001		
[ ] Ignitable Liquid Wastewaters	[ ] Ref 2 -- DEACT	NA
[ ] Ignitable Liquids < 10% TOC	NA	[ ] Ref 2 -- DEACT
[X] Ignitable Liquids > or = 10% TOC	NA	[X] Ref 2 -- FSUBS; RORGS; or INCIN
[ ] Ignitable Compressed Gas	NA	[ ] Ref 2 -- DEACT
[ ] Ignitable Reactives	NA	[ ] Ref 2 -- DEACT
[ ] Oxidizers	[ ] Ref 2 -- DEACT	[ ] Ref 2 -- DEACT
[ ] D002		
[ ] Acid, pH < or = 2.0	[ ] Ref 2 -- DEACT	[ ] Ref 2 -- DEACT
[ ] Alkaline, pH > or = 12.5	[ ] Ref 2 -- DEACT	[ ] Ref 2 -- DEACT
[ ] Other (per '261.22(a)(2))	[ ] Ref 2 -- DEACT	[ ] Ref 2 -- DEACT
[ ] D003		
[ ] Reactive Sulfides	[ ] Ref 2 -- DEACT	[ ] Ref 2 -- DEACT
[ ] Reactive Cyanides	[ ] Ref 3	[ ] Ref 3
[ ] Explosives	[ ] Ref 2 -- DEACT	[ ] Ref 2 -- DEACT
[ ] Water Reactives	NA	[ ] Ref 2 -- DEACT
[ ] Other (per '261.23(a)(1))	[ ] Ref 2 -- DEACT	[ ] Ref 2 -- DEACT
[ ] D004 - Arsenic	[ ] Ref 3	[ ] Ref 1
[ ] D005 - Barium	[ ] Ref 3	[ ] Ref 1
[ ] D006		
[ ] Cadmium	[ ] Ref 3	[ ] Ref 1
[ ] Cadmium Containing Batteries	NA	[ ] Ref 2 -- RTHRM
[ ] D007 - Chromium	[ ] Ref 3	[ ] Ref 1
[ ] D008		
[ ] Lead	[ ] Ref 3	[ ] Ref 1
[ ] Lead Acid Batteries	NA	[ ] Ref 2 -- RLEAD
[X] D009 - Mercury		
[X] Low Hg, < 260 mg/kg Hg	[ ] Ref 3	[X] Ref 1
[ ] High Hg, > or = 260 mg/kg Hg, mercury and organics and are not incinerator residues	NA	[ ] Ref 2 -- IMERC; or RMERC
[ ] High Hg, > or = 260 mg/kg Hg, inorganics including incinerator & RMERC residues	NA	[ ] Ref 2 -- RMERC
[ ] D010 - Selenium	[ ] Ref 3	[ ] Ref 1
[ ] D011 - Silver	[ ] Ref 3	[ ] Ref 1
[ ] D012 - Endrin	[ ] Ref 2 -- BIODG; or INCIN	[ ] Ref 3
[ ] D013 - Lindane	[ ] Ref 2 -- CARBN; or INCIN	[ ] Ref 3
[ ] D014 - Methoxychlor	[ ] Ref 2 -- WETOX; or INCIN	[ ] Ref 3
[ ] D015 - Toxaphene	[ ] Ref 2 -- BIODG; or INCIN	[ ] Ref 3
[ ] D016 - 2,4-D	[ ] Ref 2 -- CHOXD; BIODG; or INCIN	[ ] Ref 3
[ ] D017 - 2,4,5-TP (Silvex)	[ ] Ref 2 -- CHOXD; or INCIN	[ ] Ref 3

References
Ref 1: See numerical treatment standard(s) in 40 CFR 268.41, Table CCWE - Constituent Concentrations in Waste Extract
Ref 2: See technology-based standard(s) in 40 CFR 268.42, Table 2 - Technology-Based Standard By RCRA Waste Codes
Ref 3: See numerical treatment standard(s), 40 CFR 268.43, Table CCW - Constituent Concentrations in Waste

[X] CHECK HERE IF SPENT SOLVENT, CALIFORNIA LIST, OR F-, K-, P-, OR U-CODE WASTE. IF CHECKED, COMPLETE PAGE 2.

Toluene Remediation Project

Overview

Project Description

Conduct studies and gather information necessary to define the scope of and provide a design basis for in-situ remediation of toluene migration into the stormwater run-off and entering NPDES Outfall 001.

Project Background

In early 1990, three toluene limit exceedances at Outfall 001 were caused by contaminated stormwater run-off. Investigation identified the source of the toluene in the shallow soils around the Polymers Plant. To temporarily alleviate this problem, the wastewater system was modified to segregate and treat by carbon adsorption the contaminated stormwater. The MDNR has expressed concern regarding the adequacy of the current system in two recent letters.

Project Elements

Investigation

Determine the nature, extent, direction, rate, movement and concentration of toluene and styrene in the subsurface area around the Polymers Plant and conduct necessary tests or studies to determine the feasibility of remedial technologies.

The subsurface investigation includes the following tasks: 1) soil borings, soil sampling, water sampling; 2) engineering samples; 3) well installation; 4) monitoring well sampling and groundwater analysis; 5) hydrogeologic study; and 6) data compilation and investigative report.

Remedial Design

The design basis will include the following: 1) assessment of the effectiveness of potential remedies; 2) evaluation of performance, reliability, ease of implementation and potential impacts of the recommended remedy; 3) assessment of the time and cost; and 4) assessment of regulatory requirements.

The conceptual remedial system designs will evaluate three technologies: 1) biremediation; 2) soil vapor extraction; and 3) air sparging.

Consultant

Groundwater Technology, Inc. was selected as the contractor. A Purchase Order was issued on March 30, 1992 for $125,859. A project kickoff meeting was conducted on March 31, 1992.

Costs

The appropriated total project cost is $200,000. The cost includes contractor services, analytical work, and a 20% contingency.

To date $76K has been invoiced from Groundwater Technology, Inc. (which is 60% of the $126K P.O.) and $42K has been invoiced for the water line repair (which is 105% of the contingency).

Interoffice

BASF

Date	November 25, 1991
To	J. Schweickart
From	A. Bickel X6836
Subject	Polyol Pond Regulatory Status
Copies	DFigg, KGranata, PGreer, CHanson, CLaScola, TLynch, DThiel

A meeting was held at the Polyol Plant on September 10, 1991 to discuss the regulatory status of the wastewater ponds. In response to this meeting, the following information was compiled to outline the regulatory status of the Polyol Ponds.

SUMMARY

After review of the Polyol Plant processes and applicable regulations it has been determined the Polyol Ponds do not receive hazardous wastewaters and are therefore not subject to the RCRA and Act 64 waste management regulations. But if the Ponds were to receive hazardous wastewaters they would be subject to the RCRA and Act 64 standards for surface impoundments requiring a Part B permit.

REGULATORY BACKGROUND

The RCRA and Act 64 waste management regulations provide for specific exemptions for wastewater which contain hazardous waste. These exemptions include industrial wastewater discharges subject to the National Pollution Discharge Elimination System (NPDES) requirements under the Clean Water Act per 40 CFR 261.4(a)(2) and wastewater treatment units per 40 CFR 264.1(g)(6).

NPDES

The first exemption applies to NPDES industrial wastewater discharges. The definition of discharge under the CWA per 40 CFR 122.2 as "any addition of any 'pollutant' or combination of pollutants to 'waters of the United States' from any 'point source'". Waters of the United States are defined as "including all waters which are subject to the ebb and flow of the tide, interstate waters, wetlands, lakes, rivers, streams...". The definition specifically excludes ponds or lagoons used for treatment and manmade bodies of water. Therefore, a surface impoundment would not be covered under the NPDES system and, if receiving hazardous wastewaters, would be subject to the requirements for a surface impoundment.

WASTEWATER TREATMENT UNIT

The second exemption is based on a wastewater treatment unit meeting all of the following conditions: 1) is subject to regulation under either section 402 (NPDES) or 307(b) (POTW) of the CWA; 2) meets the definition of a tank per 40 CFR 260.10; 3) receives and treats or stores influent hazardous waste as defined in 40 CFR 261.3. This exemption would not

apply because the Polyol Ponds do not meet the definition of a tank. A tank is defined per 260.10 as meaning a stationary device, designed to contain an accumulation of hazardous waste which is constructed primarily of non-earthen materials (e.g. wood, concrete, steel, plastic) which provide structural support. In the Koppers Company, Inc. decision the EPA requires the unit to pass the so-called "foundation test:"

> In the foundation test, the unit is theoretically placed on a solid foundation and filled to capacity. All lateral support from surrounding soil is removed. If the unit can maintain structural integrity under those conditions, it passes the test.

REVIEW OF POTENTIAL SOURCES

Based on the Polyol Ponds failing to meet the two exemptions, stated in the previous section, it was necessary to review all existing operations that contribute wastewater to the Ponds to ensure that hazardous wastewaters were not being discharged. If the Ponds were to receive hazardous wastewaters they would be subject to the RCRA and Act 64 standards for surface impoundments.

POLYOL PLANT

A review of the process and maintenance areas did not indicate any hazardous waste or hazardous wastewater sources entering the Polyol Ponds. However, the potential for de minimis losses from commercial chemical products in the process and maintenance areas does exist. These de minimis losses are exempt provided they are discharged with wastewater subject to an NPDES or POTW permit and meet the conditions of 40 CFR 261.3(a)(2)(iv)(D), which states:

> A discarded commercial chemical product, or chemical intermediate listed in 40 CFR 261.33, arising from de minimis losses of these materials from manufacturing operations in which these materials are used as raw materials or are produced in the manufacturing process. For purposes of this subparagraph, " de minimis " losses include those from normal material handling operations (e.g. spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves or other devices used to transfer materials); minor leaks of process equipment, storage tanks or containers; leaks from well-maintained pump packings and seals; sample purgings; relief device discharges; discharges from safety showers and rinsing and cleaning of personal safety equipment; and rinsate from empty containers or from containers that are rendered empty by that rinsing.

The definition of commercial chemical product (i.e. P and U listed hazardous waste) would include acrylonitrile, ethylene oxide, styrene (Act 64), toulenediamine, and toluene diisocyanate.

The only other potential source of hazardous wastewaters would be the decanted water from the Polyol Filter Cake which has the ability to exceed a pH of 12.5. However, the pH of the water is adjusted in the lift station which meets the definition of a tank and is therefore exempt.

POLYOL QA

The waste management and wastewater practices of the Polyol QA Laboratory have been reviewed. The piping for the Lab is thought to be connected to the Polyol Ponds. An RES is currently being completed to verify the sewer routing for the Lab.

Various waste streams are generated and containerized for off-site treatment and disposal. Small quantities of acetone, methanol, and isopropanol are discharged as wastewater from secondary cleaning of glassware and instrumentation. Although these small quantities of solvents are not considered hazardous wastewaters based on the discussion below.

An exemption is provided under 40 CFR 261.3 (a)(2)(iv)(E) for wastewaters resulting from laboratory operations which states:

> Wastewater resulting from laboratory operations containing toxic (T) wastes listed in Subpart D, Provided, That the annualized average flow of laboratory wastewater does not exceed one percent of total wastewater flow into the headworks of the facility's wastewater treatment or pre-treatment system, or provided the wastes, combined annualized average concentration does not exceed one part per million in the headworks of the facility's wastewater treatment or pre-treatment facility. Toxic (T) wastes used in laboratories that are demonstrated not to be discharged to wastewater are not to be included in this calculation.

The Polyol QA Labs wastewater discharge meets this exemption based on the fact that the small volume of solvents discharged are toxic wastes listed in Subpart D of 40 CFR 261 and the average flow of laboratory wastewater is less than one percent of the dirty water flow into the Ponds.

STEAM FACILITY

The Steam Facility wastewater is discharged to the Polyol Pond and Outfall 001. The pH of the Steam Facility wastewater may be acidic or basic due to the addition of sulfuric acid and sodium hydroxide, which are used for demineralization. The Steam Facility performs pH adjustment of their wastewater with final pH adjustments made at the Polyol Pond dirty lift station. This activity is exempt because the lift station meets the definition of a tank.

OTHER

A Cyclezorb carbon unit is currently being used to remove the toluene from the surface water along the south west side of the Polyol Plant. The toluene was used until mid-1979 as a solvent for liquid/liquid extraction of catalyst in the Polyol manufacturing process. Because the toluene was used for its solvent properties, it is considered a listed (F005) hazardous waste; therefore, the toluene and water are considered a listed hazardous waste based on the EPA's "contained-in" policy.

The carbon unit is being used for compliance with a NPDES permit and meets the exemption criteria per 40 CFR 264.1(g)(6). The NPDES permit for the Polyol Plant is non-specific in nature with regards to identifying wastewater equipment. Although the carbon unit is not specifically addressed in the NPDES permit it has been inspected by the MDNR, Surface Water Division and acknowledged as part of the Polyol Plant NPDES system.

An additional point to clarify is when the toluene contaminated water, entering or exiting the carbon unit, is considered a hazardous waste. The EPA addressed the question, when does environmental media contaminated by listed hazardous waste cease to be a listed hazardous waste, as follows:

- only as long as it "contains" a listed hazardous waste (until decontaminated); or
- when the listed waste is completely removed by treatment; or
- when present at de minimis levels.

With regards to the third item, the Federal EPA has not defined the de minimis criteria. Until such time, an EPA Region or an authorized State (i.e. Michigan) may make this determination. Kim Paksi of the MDNR, Waste Management Division, Waste Characterization Unit, indicated that the MDNR recognizes the Act 307 clean up standards as the de minimis level for environmental media contaminated with listed hazardous waste. The clean up standard for toluene is 100 ppb for surface water.

This means that surface water entering or existing the carbon bed with a toluene concentration less than 100 ppb is nonhazardous. It is my understanding that a bimonthly monitoring program has been initiated to prevent break through of the carbon bed. This monitoring program will also be necessary to ensure that carbon bed effluent concentrations are maintained below the 100 ppb limit. If carbon bed effluent were discharged to the Polyol Ponds, with toluene concentrations exceeding 100 ppb, the Ponds would be subject to the waste management standards for surface impoundments.

CONCLUSION

After review of the Polyol Plant processes and applicable regulations it has been determined the Polyol Ponds do not receive hazardous wastewaters and are therefore not subject to the RCRA and Act 64 waste management regulations. But if the Ponds were to receive hazardous wastewaters they would be subject to the RCRA and Act 64 standards for surface impoundments requiring a Part B permit. Therefore, it is imperative that we prevent the entry of potential hazardous wastewater sources into the Polyol Pond system.

This can only be accomplished by:

- establishing a monitoring program for the carbon bed,
- continually reviewing existing processes, and
- reviewing new projects or process modifications that may adversely affect wastewater streams to the ponds.

If you have any questions or if I can be of further assistance, please call me.

A. C. Bickel

acb

UST

Observations

1. Are there any underground storage tanks? No- according to BASF

2. Approximately how many? What are the contents? (Wastes, virgin petroleum, or chemicals)

3. What type of leak detection is used? When was it last used?

4. Is there any evidence of leaks, spills, broken piping, broken fill/vent lines, or leaking pumps joints or valves? Provide location and description.

Interview Questions/Records Review

1. If the tanks are virgin petroleum or chemicals (not wastes) are they registered with the state? Date of registration? Date of tank(s) installation?

SPCC

Observations

1. Does the facility have the capacity to store oil either in above or below ground tanks? How many gallons? Does any tank have a capacity of more than 660 gallons in a single tank or does the facility have a capacity f more than 1320 gallons in a number of tanks or a capacity of more than 42,000 gallons below the ground?

YES
- 150,000 gal #6 fuel oil back-up to steam boiler
- 3000 gal fuel oil
- 350 gal lube oil
- MISC DRUMS gasoline tanks

2. What type of secondary containment is used at the facility? Were there any deficiencies in the secondary containment (cracks, broken, dikes left open)? Is it adequate to contain the entire contents of the largest tank?

DIKES

3. Is the Worst Case Contingency Requirement of the Oil Pollution Act of 1990 applicable for this facility? If so, has the facility developed and submitted a plan?

NO

Interview Questions/Records Reviews

1. Does the facility have a certified (signed by a P.E. plan? When was it last updated?

SPCC PLAN WAS NOT CERTIFIED BY P.E. LAST REVISED TO March, 1991

2. Has there been any major changes to oil storage at the facility since the last modification of the plan?

SPCC PLAN SHOULD BE REVISED TO REFLECT CURRENT TANKAGE VOLUMES.

WETLANDS

Observations

1. Are there any wet areas near the facility with wetland-type vegetation (cattails, rushes, sedges) that have been disturbed by waste disposal, ditching, or filling?
Not observed in areas visited during walk-thru

Interview Questions/Record Reviews

1. Does the facility have a federal section 404 permit or any state or local permit authorizing the fill?
N/A

FIFRA

Observations

1. Does the facility produce pesticides? (1)

2. Is the facility applying pesticides? NO- has contract exterminator [Terminix]

3. Where are the pesticides stores?

Interview Questions/Records Review

1. If the facility produces pesticides, what is the establishment's registration number? _____

2. If the facility is applying pesticides, what is the registration number of the pesticide? _____

(1) According to BASF, they manufacture 'PIX' (trade name), whose active ingredient is 1,1-dimethyl piperidium chloride, at a 60% concentration for usage as an intermediate in other BASF plants where it is formulated into lesser concentrations for marketing.

AIR

Observations

1. Is there any asbestos on site? YES

2. Is the facility undergoing or has the facility undergone any renovations or demolitions during the last 18 months, which involve the removal or disturbance of asbestos-containing materials? Approximately how much asbestos (square feet or linear feet) was removed?
BASF has had two removals in 1993 (2)

3. Does the facility have any coating or printing operations? Does the facility use any paints or organic solvents? What, if any, type of air pollution control is used? Was it operating?
Small scale painting done in Research & Development spray booth. Spray booth equipped with filters

4. Were there any odors? What process was the source of the odors? Describe the odors.
None encountered during site walk thru. (1)

5. Were there any visible (opaque smoke) emissions? What process was the source? Were there any fugitive (not from a stack) emissions? Was the air pollution control equipment, if any, operating? Describe source.
No

6. Were all continuous emission monitors operating? Itemize all monitors at the site, including the type(s) (e.g., opacity, SO_2).

7. Were there any out-of-ordinary operating practices or procedures, or occurrences during the inspection? (This information should be supplied separately to the specific program office).
No.

Interview Questions/Records Reviews

1. If asbestos was removed, was notification provided to the State and EPA? YES - by Contractors (2)

2. If the facility has coating or printing operations, are they water based or organic solvent based?
Both; solvent primarily (90% solvent 10% water based) 95% of coating is paints, 5% is powder coatings

3. Does the facility handle/emit any of the National Emission Standards for Hazardous Air Pollutants (NESHAP) chemicals other than asbestos (mercury, beryllium, vinyl chloride, benzene, arsenic, radionuclides)? Describe process.
BENZENE (3)

4. Has the facility added new or expanded existing processes in the last two years? Was it permitted by EPA or the State?
YES / YES

NOTES

(1) HAVE INSTALLED SCRUBBERS IN VITAMINS COMPLEX - HAVE HAD HISTORICAL CITIZEN COMPLAINTS (LAST COMPLAINT in April)

(2) BASF HAS BEEN NOTIFYING NRC, SERC, LEPC ON OFF-SITE TRANSFERS OF ASBESTOS. According to BASF, this activity is subject to release reporting since off-site disposal facility doesn't have federal permits. Refer to Attachment 5 for copies of CERCLA/EPCRA notices.

(3) Initial notification under Benzene Waste Operations NESHAP was in May, 1993 (Refer to Attachment 6).

(4) Refer to Attachment 7 for listing of air permit information

BASF Corporation

BASF

CERTIFIED MAIL - RETURN RECEIPT REQUESTED
SERC: P 121 664 506
LEPC: P 121 664 507

September 20, 1993

Mr. Kent Kanagy
Michigan Department of Natural Resources
State Emergency Response Commission
P.O. Box 30028
Lansing, MI 48909

Mr. Mark R. Sparks
Acting LEPC Chairperson
Title III Local Emergency Planning Committee
10250 Middlebelt Road
Detroit, MI 48242

Dear Sirs:

On September 14, 1993 the BASF Corporation facility at Wyandotte, Michigan experienced a release of a hazardous substance requiring notification under CERCLA 103 and EPCRA 304. Verbal notification was provided to the NRC, SERC, and the LEPC on September 15, 1993. The NRC Case Number is 197864. Pursuant to 40 CFR 355.40(b)(3), this submittal constitutes the written, follow-up notification.

This release is a result of the routine, ongoing removal of asbestos from the facility. The off-site transfer of asbestos has been conducted in compliance with all applicable rules and standards. This activity is subject to release reporting since the off-site disposal facility does not have a federal permit in place. BASF does not have a sufficient basis for establishing this release as continuous and stable, so we intend to report it on a per-occurrence basis.

Chemical Name/CAS Number: Asbestos/1332-21-4

Quantity Released: 20 pounds (friable)

Approximate Time of Release: 4:30 pm on September 14, 1993

Removal Contractor: Thermico Inc.
38281 Schoolcraft Road, Suite G
Livonia, MI 48150

Disposal Facility: BFI Arbor Hills Landfill
10690 West Six Mile Road
Northville, MI 48167

Cause of Releases: Pipe insulation removal at Polyol Plant.

1609 Biddle Avenue, Wyandotte, Michigan 48192 (313) 246-6100

All other details required by 40 CFR 355.40(b)(3) are not applicable to this notification. There are no health risks, medical attention is not required, and no environmental media is affected. Furthermore, neither corrective action nor preventive measures will take place since removal projects are an ongoing activity at the facility, off-site transfers are an inherent aspect of these projects, and this activity will be conducted in compliance with the rules.

If you are in need of any additional information, please call me at (313) 246-6429.

Sincerely,

Karen LeMieux

Karen A. LeMieux
Ecology Services Engineer

bc: Armand Boisvenue
RFColonnese
GTDurst
RMRosen

File: 1993 Chemical Release Report
Circ: CDL, DPT, KAL-last

INTERNAL NOTIFICATION OF ASBESTOS RELEASE

Important: this form must be completed by responsible individual and received by Site Ecology Services Department within 9 days of external verbal notification.

Description of Project: EPO STEAM TIE IN

Date of external verbal notification: ~~9-14-93~~ 9/15/93 KAR

Disposal Facility Name: BFI

Address: 10690 W. 6 MILE ROAD
NORTHVILLE, MI 48167

Contact and phone number: 313-349-7230

Date of Shipment	Approx. Time of Shipment	Quantity of Asbestos Shipped (lbs)	Transporter
9-14-93	4:30 pm	20 lbs	THERMICO INC.

Will there be additional reports to document the continuation of asbestos releases from this removal project?

Yes ☐
No ☒

This form has been completed by:

Name ARMAND BOISVENUE
Company BASF CORPORATION
Address 1609 BIDDLE WYANDOTTE, MI, 48192
Phone Number 313-246-6780

Send completed form to:

Charlie Anderson
Ecology Services Department
BASF Corporation
1609 Biddle Ave.
Wyandotte, MI 48190
(313)246-5131

MICHIGAN DEPARTMENT OF NATURAL RESOURCES
AIR QUALITY DIVISION

PR 5601
(rev 2/91)

WASTE SHIPMENT RECORD BFI # 180537

GENERATOR

1. Work site name and mailing address
BASF Corporation
1609 Biddle Avenue
Wyandotte, MI 48192

Owner's name
Same
Owner's contact:
Armand Boisvenue

Owner's phone #
313-246-6780

2. Operator's name and address: THERMICO, INC.
38281 Schoolcraft Suite G
Livonia, Michigan 48150

Operator phone #
591-5930

3. Waste disposal site (WDS) name, mailing address, and physical site location:
BFI 10690 W. 6 Mile Rd. Northville, MI 48617

WDS phone #
(313)-349-7230

4. Name and Address of responsible agency:
AIR QUALITY DIVISION, MICHIGAN DEPARTMENT OF NATURAL RESOURCES
P.O. BOX 30028
LANSING, MI 48909

5. Description of materials	6. Containers No.	type	7. total quantity M3	(yds)
Friable Asbestos Pipe Covering		B		

8. Special handling instructions and additional information

9. OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled and are in all respects in proper condition for transport by highway according to applicable international and government regulations.

Print/type name & title	Signature	Month Day Year
ALAN WERLE/SUPERVISOR	Alan Werle	09 14 93

TRANSPORTER

10. Transporter 1 (Acknowledgment of receipt of materials)

Printed/typed name & title:	Signature	Month Day Year
Thermico Inc./		

Address & telephone number:
38281 Schoolcraft Rd. Sw. G Livonia, MI 48150 (313) 591-5930

11. Transporter 2 (Acknowledgment of receipt of materials)

Printed/typed name & title	Signature	Month Day Year

Address:
Phone:

12. Discrepancy indication space:

DISPOSAL

13. Waste disposal site owner or operator:
Certification of receipt of asbestos materials covered by this manifest except as noted in item 12.

Printed/typed name & title	Signature	Month Day Year

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV.
If waste is NOT asbestos waste, complete only Sections I, II and III.

No. 180537

Section I. GENERATOR (Generator completes all of Section I)

a. Generator Name: BASF Corp.
b. Generating Location:
c. Address: 1609 Biddle Ave. Wyandotte, MI. 48192
d. Address:
e. Phone No.: (313) 246-6780
f. Phone No.:

If owner of the generating facility differs from the generator, provide:

g. Owner's Name:
h. Owner's Phone No.:

i. BFI WASTE CODE: EXEMPT

Containers

j. Description of Waste: Fiber Asbestos Pipe Covering

k. Quantity: 00001 Units: P No.: 04 TYPE: B

TYPE
DM - METAL DRUM
DP - PLASTIC DRUM
B - BAG
BA - 6 MIL. PLASTIC BAG or WRAP
T - TRUCK
O - OTHER

UNITS
P - POUNDS
Y - YARDS
M³ - CUBIC METERS
Y³ - CUBIC YARDS
O - OTHER

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

ARMAND BORVENUE [signature]
Generator Authorized Agent Name — Signature — Shipment Date

Section II TRANSPORTER (Generator complete a-d; Transporter I complete e-g; Transporter II complete h-n)

TRANSPORTER I

a. Name: THERMICO INC.
b. Address: 38281 Schoolcraft Rd. Suite G Livonia, MI. 48150
c. Driver Name/Title: PRINT/TYPE
d. Phone No.: (313) 591-5930
e. Truck No.: 37
f. Vehicle License No./State: TD 6497 MI.

Acknowledgement of Receipt of Materials.

g. Driver Signature — Shipment Date

TRANSPORTER II

h. Name:
i. Address:
j. Driver Name/Title: PRINT/TYPE
k. Phone No.:
l. Truck No.:
m. Vehicle License No./State:

Acknowledgement of Receipt of Materials.

n. Driver Signature — Shipment Date

Section III DESTINATION (Generator completes a-d, destination site completes e-f.)

a. Site Name: BFI
b. Physical Address: 10690 W. Lamb Rd. Northville, MI. 48617
c. Phone No.: (313) 349-7230
d. Mailing Address:
e. Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

f. Name of Authorized Agent — Signature — Receipt Date

Section IV ASBESTOS (Generator complete a-d, f, g, Operator* completes e.)

a. Operator's* Name: THERMICO INC.
b. Operator's* Phone No.: (313) 591-5930
c. Operator's* Address: 38281 Schoolcraft Rd. Suite G Livonia, MI. 48150
d. Special Handling Instructions and additional information:

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consigment are fully and accurately described ...

Release Reporting - Initial Telephone Notification

No.

Facility Information

Facility Name:	BASF Corporation
Facility Emergency Contact:	Karen LeMieux
Telephone Number:	313-246-6429
Facility Address Location:	1609 Biddle Avenue
City/Community:	Wyandotte, MI
County:	Wayne
ZIP:	48192-3799

Release Information

Chemical Name/Identity:	Asbestos 1332-21-4		
Is the chemical an EHS?	Y	(N)	Transported 9/14/93 @ 4:30 RCRA Licensed.
Chemical Name/Identity:			
Is the chemical an EHS?	Y	N	
Chemical Name/Identity:			
Is the chemical an EHS?	Y	N	

Notification Information

NRC Assigned Case Number:	197864	
Agency Contacted:	National Response Center	
Contact Name:	Petty Officer Mauldin	
Telephone Number:	(800) 424-8802	
Date:	9/15/93	3:55 pm
Agency Contacted:	Mich. DNR ~~Pollution Emergency Alert Sys~~	
Contact Name:	Ray Spaulding Livonia left msg 9/15 @ 4:00 PM	
Telephone Number:	[redacted] 953 0241	
Date:	9/15	
Agency Contacted:	Wayne County Emergency Mgmt. Div	
Contact Name:	Jeanine	
Telephone Number:	942-5289	
Date:	9/15	(Class I)

Form CRITN-A

BASF Corporation

BASF

CERTIFIED MAIL - RETURN RECEIPT REQUESTED
SERC: P 092 301 411
LEPC: P 092 301 412

May 21, 1993

Mr. Kent Kanagy
Michigan Department of Natural Resources
State Emergency Response Commission
P.O. Box 30028
Lansing, MI 48909

Mr. Mark R. Sparks
Acting LEPC Chairperson
Title III Local Emergency Planning Committee
10250 Middlebelt Road
Detroit, MI 48242

Dear Sirs:

On May 14, 1993 the BASF Corporation facility at Wyandotte, Michigan experienced a release of a hazardous substance requiring notification under CERCLA 103 and EPCRA 304. Verbal notification was provided to the NRC, SERC, and the LEPC on May 14, 1993. The NRC Case Number is 173670. Pursuant to 40 CFR 355.40(b)(3), this submittal constitutes the written, follow-up notification.

This release is a result of the routine, ongoing removal of asbestos from the facility. The off-site transfer of asbestos has been conducted in compliance with all applicable rules and standards. This activity is subject to release reporting since the off-site disposal facility does not have a federal permit in place. BASF does not have a sufficient basis for establishing this release as continuous and stable, so we intend to report it on a per-occurrence basis.

Chemical Name/CAS Number: Asbestos/1332-21-4

Quantity Released: 15 pounds (friable)

Approximate Time of Release: 12:00 noon on May 14, 1993

Removal Contractor: Thermico Inc.
38281 Schoolcraft Road, Suite G
Livonia, MI 48150

Disposal Facility: BFI Arbor Hills Landfill
10690 West Six Mile Road
Northville, MI 48167

Cause of Releases: Pipe insulation removal at Polyol Plant unloading rack.

1609 Biddle Avenue, Wyandotte, Michigan 48192 (313) 246-6100

INTERNAL NOTIFICATION OF ASBESTOS RELEASE

Important: this form must be completed by responsible individual and received by Site Ecology Services Department within 9 days of external verbal notification.

Description of Project: RE-ROUTE 8B PIG LINE IN 3BB

Date of external verbal notification: 5-14-93

Disposal Facility Name: BFI ARBOR HILLS LANDFILL

Address: 10690 W. 6 MILE RD
NORTHVILLE, MI 48617

Contact and phone number: (313) 349-7230

Date of Shipment	Approx. Time of Shipment	Quantity of Asbestos Shipped (lbs)	Transporter
5-14-93	12:00 NOON	30 lbs (TOT)	THERMICO
		15 lbs (FRIABLE)	

Will there be additional reports to document the continuation of asbestos releases from this removal project?

Yes ☐
No ☒

This form has been completed by:

Name: CARLTON E. LOCKLEY
Company: BASF CORPORATION
Address: 1609 BIDDLE AVE.
Phone Number: 246-5017

Send completed form to:

Karen A. LeMieux
Ecology Services Department
BASF Corporation
1609 Biddle Ave.
Wyandotte, MI 48192-3799
(313) 246-6429

Asbestos Release Reporting - Initial Telephone Notification

No.

Facility Information

Facility Name:	BASF Corporation
Facility Emergency Contact:	~~Karen Lettieux~~
Telephone Number:	313-246-6429
Facility Address Location:	1609 Biddle Avenue
City/Community:	Wyandotte, MI
County:	Wayne
ZIP:	48192-3799

Release Information

Chemical Name/Identity:	Asbestos 1332-21-4	
Is the chemical an EHS?	Y	(N)
Chemical Name/Identity:		
Is the chemical an EHS?	Y	N
Chemical Name/Identity:		
Is the chemical an EHS?	Y	N

Notification Information

NRC Assigned Case Number:	173670
Agency Contacted:	National Response Center
Contact Name:	Petty Offree Beshoar
Telephone Number:	(800) 424-8802
Date:	5/14/93 12:25 pm
Agency Contacted:	Mich. DNR Pollution Emergency Alert Sys
Contact Name:	5/14 Left message with Air Division
Telephone Number:	800-292-4706 Referred to 953-0241 (Lin office)
Date:	313 9530241 5/14/93 12:40
Agency Contacted:	Wayne County Emergency Mgmt. Div
Contact Name:	Denise
Telephone Number:	942-5289
Date:	5/14/93 12:40

Form CRITN-A

BASF Corporation

BASF

Certified Mail -
Return Receipt Requested
P 092 301 409

May 24, 1993

Regional Administrator
US EPA, Region V
230 South Dearborn Street
Chicago, Illinois 60604

SUBJECT: Initial Notification under Benzene Waste Operations NESHAP

Dear Sir/Madame:

This is to fulfill the initial notification requirement for BASF Corporation's Wyandotte, Michigan site, required under the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Benzene Waste Operations promulgated with clarifying amendments on January 7, 1993 (58 FR 3071) and the NESHAP source reporting requirements under 40 CFR 61.10.

We have reviewed the composition of each waste stream generated by the Wyandotte Site and have identified one source that is regulated under the NESHAP.

FACILITY

BASF Corporation
1609 Biddle Avenue
Wyandotte, Michigan 48192-3799

LOCATION

Benzene is used in laboratories located in the two research buildings, Central R&D and Chemical Engineering. The wastes are collected at the point of generation in 1 - 5 gallon containers. Other waste solvents are collected in this waste stream as well. The contents of the small containers are transferred to a 55 gallon drum located in the R & D waste accumulation area. The full drums are sent to the site's Central Waste Accumulation Storage Area (CWASA) for transport to an approved disposal facility. See attached site map for locations.

OPERATION

Benzene is used in various capacities in the research labs: as an analytical standard; as a solvent in process development; in organic synthesis; etc. All waste benzene from research activities are collected as BASF internal waste steam code W105. This waste stream has been characterized as containing 0-1% benzene and 0-10% water. The exact benzene content cannot be determined as the high and varied solvent content of the waste interferes with the ability to identify and quantify individual components.

1609 Biddle Avenue, Wyandotte, Michigan 48192 (313) 246-6100

BENZENE - MONTHLY AVERAGE

The site generated 7,400 pounds of waste stream W105 in the last 12 months. At a maximum benzene content of 1%, the average monthly benzene waste generation is 6.2 pounds.

CONTROLS

The waste benzene is collected in containers that are sealed when not receiving wastes.

COMPLIANCE REQUIREMENTS

The benzene in aqueous wastes is 74.4 pounds per year (< 2,200 pounds per year), therefore this notification constitutes fulfillment of all requirements under the NESHAP for Benzene Waste Operations.

If you have any questions concerning this notification, please contact Karen LeMieux, Ecology Services Engineer, at (313) 246-6429.

Sincerely,

D. P. Thiel
Manager, Quality & Ecology Services

attachment
kal

CC: Dennis Drake
Chief, Air Quality Division
Michigan Department of Natural Resources
P.O. Box 30028
Lansing, Michigan 48909

Jamal Naas
Engineer, Enforcement
Air Pollution Control Division
Wayne County Department of Public Health
640 Temple Street, Suite 700
Detroit, Michigan 48201

AIR PERMIT
INFORMATION

BASF CORPORATION CHEMICALS DIVISION
WYANDOTTE SITE

	PLANT	INSTALLATION PERMIT NO.	OPERATING PERMIT NO.	DATE ISSUED	SOURCE I.D.	VENT DESCRIPTION	CONTROL EQUIPMENT	RATED CAPACITY	ALLOWABLE EMISSIONS NOT TO EXCEED
1	TPU EXTRUDER	C-8233 ISSUED 10/24/89	C-8233	02/09/90	155	THERMOPLASTIC POLYURETHANE EXTRUDERS	NONE	1,800 SCFM	0.0052 LB/HR NOR 0.023 TON/YR OF DIPPI *
2	TPU SYNTHESIS	C-8931	PENDING	06/26/90	160 (VS 01)	MDI STORAGE TANKS (2)	CARBON BED	8,700 GAL	2.7 UG/SEC NOR 0.003 LB/YR OF MDI **
3	TPU SYNTHESIS	C-8932	PENDING	06/26/90	161 (VS 02)	LUPRAGEN STORAGE TANK	CARBON BED	270 GAL	0.9 UG/SEC NOR 0.0011 LB/YR OF LUPRAGEN 1.2 UG/SEC NOR 0.0015 LB/YR OF DIPPI **
4	TPU SYNTHESIS	C-8933	PENDING	06/26/90	162 (VS 03)	LUPRAGEN OVEN	NONE	6,250 CFM	10.5 UG/SEC NOR 0.006 LB/YR OF LUPRAGEN 1.8 UG/SEC NOR 0.001 LB/YR OF DIPPI **
5	TPU SYNTHESIS	C-8934	PENDING	06/26/90	163 (VS 04)	POLYDIOL REFILL VESSELS (2)	NONE		
6	TPU SYNTHESIS	C-8935	PENDING	06/26/90	164 (VS 05)	MDI REFILL VESSEL	CARBON BED		9.6 UG/SEC NOR 0.01 LB/YR OF MDI **
7	TPU SYNTHESIS	C-8936	PENDING	06/26/90	165 (VS 06)	BUTANEDIOL REFILL VESSEL	NONE		
8	TPU SYNTHESIS	C-8937	PENDING	06/26/90	166 (VS 07)	LUPRAGEN DOSING VESSEL	CARBON BED		5.9 UG/SEC NOR 0.0024 LB/YR OF LUPRAGEN 0.8 UG/SEC NOR 0.0003 LB/YR OF DIPPI **

04/15/93

* FROM 08/30/89 WAYNE COUNTY HEALTH DEPARTMENT AIR POLLUTION CONTROL DIVISION LETTER.
** FROM 03/23/93 WAYNE COUNTY HEALTH DEPARTMENT AIR POLLUTION CONTROL DIVISION LETTER (REVISION OF 06/04/90 LETTER).

AIR PERMIT
INFORMATION

BASF CORPORATION CHEMICALS DIVISION
WYANDOTTE SITE

	PLANT	INSTALLATION PERMIT NO.	OPERATING PERMIT NO.	DATE ISSUED	SOURCE I.D.	VENT DESCRIPTION	CONTROL EQUIPMENT	RATED CAPACITY	ALLOWABLE EMISSIONS NOT TO EXCEED
9	TPU SYNTHESIS	C-8938	PENDING	06/26/90	167 (VS 08)	REACTION BELT HOT ZONE	WATER SCRUBBER	588 CFM	0.0017 G/SEC NOR 115 LB/YR OF DIPPI 0.00037 G/SEC NOR 26 LB/YR OF MDI 0.0019 G/SEC NOR 134 LB/YR OF LUPRAGEN 0.03 G/SEC NOR 0.097 TONS/YR OF 1,4-BUTANEDIOL *
10	TPU SYNTHESIS	C-8939	PENDING	06/26/90	168 (VS 09, 10 & 11)	REACTION BELT COOL ZONE	NONE	11,500 CFM	0.33 G/SEC NOR 11.6 TON/YR OF 1,4-BUTANEDIOL 0.0091 G/SEC NOR 632.2 LB/YR OF LUPRAGEN 0.0068 G/SEC NOR 471 LB/YR OF DIPPI 0.0018 G/SEC NOR 130 LB/YR OF MDI *
11	TPU SYNTHESIS	C-8940	PENDING	06/26/90	169 (VS 12)	MIX POT AREA/ MAIN MIXING HEAD	NONE	706 CFM	
12	TPU SYNTHESIS	C-8930	PENDING	06/26/90	170 (VS 25)	POLYDIOL STORAGE TANKS (2)	NONE	26,400 GAL	
13	TPU SYNTHESIS	C-8929	PENDING	06/26/90	171 (VS 26)	BUTANIEDIOL STORAGE TANK	NONE	8,700 GAL	
14	TPU SYNTHESIS	C-8941	PENDING	06/26/90	172 (VS 15)	MIX POT CLEANING OPERATION OVEN	WATER SCRUBBER	371 CFM	
15	TPU SYNTHESIS	C-8942	PENDING	06/26/90	173 (VS 16 VIA VS 17)	SILOS (3)	DUST COLLECTOR	70 CFM	0.0004 G/SEC NOR 26 LB/YR OF PARTICULATES 0.00021 G/SEC NOR 14.4 LB/YR OF DIPPI *

04/15/93

* FROM 03/23/93 WAYNE COUNTY HEALTH DEPARTMENT AIR POLLUTION CONTROL DIVISION LETTER (REVISION OF 06/04/90 LETTER).

AIR PERMIT
INFORMATION

BASF CORPORATION CHEMICALS DIVISION
WYANDOTTE SITE

	PLANT	INSTALLATION PERMIT NO.	OPERATING PERMIT NO.	DATE ISSUED	SOURCE I.D.	VENT DESCRIPTION	CONTROL EQUIPMENT	RATED CAPACITY	ALLOWABLE EMISSIONS NOT TO EXCEED
16	TPU SYNTHESIS	C-8943	PENDING	06/26/90	174 (VS 17)	DOUBLE CONE BLENDERS (2)	DUST COLLECTOR	1,471 CFM	0.008 G/SEC NOR 0.29 TON/YR OF PARTICULATES 0.0000864 G/SEC NOR 0.3 LB/YR OF DIPPI *
17	TPU SYNTHESIS	C-8944	PENDING	06/26/90	175 (VS 18)	DICER	NONE	1,176 CFM	0.0015 G/SEC NOR 105 LB/YR OF DIPPI *
18	TPU SYNTHESIS	C-8945	PENDING	06/26/90	176 (VS 19)	DISCONTINUOUS DRYER	CARBON BED	147 CFM	0.00163 G/SEC NOR 4 LB/YR OF DIPPI *
19	TPU SYNTHESIS	C-8946	PENDING	06/26/90	177 (VS 13)	BELT AREA VENTILATION	NONE	10,500 CFM	
20	TPU SYNTHESIS	C-8947	PENDING	06/26/90	178 (VS 27)	TABLE VENTILATION	NONE	3,000 CFM	

04/15/93

* FROM 03/23/93 WAYNE COUNTY HEALTH DEPARTMENT AIR POLLUTION CONTROL DIVISION LETTER (REVISION OF 06/04/90 LETTER).

AIR PERMIT
INFORMATION

BASF CORPORATION CHEMICALS DIVISION
WYANDOTTE SITE

	PLANT	INSTALLATION PERMIT NO.	OPERATING PERMIT NO.	DATE ISSUED	SOURCE I.D.	VENT DESCRIPTION	CONTROL EQUIPMENT	RATED CAPACITY	MAXIMUM ALLOWABLE EMMISSIONS
21 ~~24~~	VITAMIN E	C-5315 ✓	5-21554	04/06/89	042	TMHQ HOPPER	FABRIC FILTER COLLECTOR	3200 ACFM	1.46 LBS/HR NOR 5.25 TONS/YR OF PARTICULATES *
25	VITAMIN E	C-4559-62 ✓	5-21560	04/06/89	040	(4) UNITS VACUUM PUMPS (PHARMA DISTRIBUTIION)	NONE	9000 CU FT/HR	0.00 LBS/HR NOR 0.00 TONS/YR OF PARTICULATE *
26	VITAMIN E	C-4563 ✓	5-21555	04/06/89	044	SILICA AIRVEYING SYSTEM - VITAMIN E ***	SETTLING CHAMBER FABRIC FILTER COLLECTOR	1200 ACFM	0.10 LBS/1000 LBS OF EXHAUST NOR 2.4 TONS/YR OF PARTICULATE *
27	VITAMIN E	C-4564 ✓	5-22981	04/06/89	045	SILICA SILO	FABRIC FILTER COLLECTOR	700 ACFM	0.10 LBS/1000 LBS OF EXHAUST NOR 1.4 TONS/YR OF PARTICULATE *
28	VITAMIN E	C-4558 ✓	5-21548	04/06/89	041	SLURRY TANK - VITAMIN E	NONE		0.00 LBS/HR NOR 0.00 TONS/YR OF PARTICULATE *
29	VITAMIN E	C-4565 ✓	5-21556	04/06/89	043	E50% BAGGING OPERATION FILTER ***	FABRIC FILTER COLLECTOR	500 ACFM	0.10 LBS/1000 LBS OF EXHAUST NOR 0.99 TONS/YR OF PARTICULATE *
30	VITAMIN POWDERS	C-5525 C-5526 ✓	5-21543	04/06/89	070	VITAMIN A SPRAY TOWER ***	SINGLE CYCLONE FABRIC FILTER COLLECTOR	2500 SCFM	0.10 LBS/1000 LBS OF EXHAUST NOR 2.4 TONS/YR OF PARTICULATE *
31	VITAMIN POWDERS	C-5527-31 ✓	500418 - 21	09/18/85	071	VITAMIN A FLUID BED DRYER (3 UNITS) 22 ~~E743~~	SINGLE CYCLONE FABRIC FILTER COLLECTOR		0.10 LBS/1000 LBS OF EXHAUST NOR 2.5 TONS/YR OF PARTICULATE *
32	VITAMIN POWDERS	C-5532 C-5533 ✓	500422	09/18/85	072	VITAMIN A PRODUCT TRANSFER BLOWER ***			0.10 LBS/1000 LBS OF EXHAUST NOR 0.14 TONS/YR OF PARTICULATE *
33	VITAMIN POWDERS	C-5534 C-5535 ✓	5-21540	04/06/89	073	VITAMIN A SPOT VENTILATION SYSTEM VITAMIN A STORAGE SILO	FABRIC FILTER COLLECTOR	1760 SCFM	0.10 LBS/1000 LBS OF EXHAUST NOR 1.41 TONS/YR OF PARTICULATE *
34	VITAMIN POWDERS	C-5536 C-5537 ✓	5-21539	04/06/89	074	VITAMIN A STARCH COLLECTION BLOWER ***	SINGLE CYCLONE FABRIC FILTER COLLECTOR		0.10 LBS/1000 LBS OF EXHAUST NOR 0.48 TONS/YR OF PARTICULATE *
35	VITAMIN POWDERS	C-6746 ✓	5-22982	04/06/89	075	AIR HEATER FOR SPRAY DRYER ***	NONE	1.5 MILLION BTU/HR USING NATURAL GAS	0.00 LBS/HR NOR 0.00 TONS/YR OF PARTICULATE **

* FROM 10/07/88 WAYNE COUNTY AIR POLLUTION CONTROL DIVISION LETTER.
** AS PER 11/28/90 PHONE CONVERSATION WITH JAI SINGH, EXEMPT FROM PERMITTING (SECTION 411(A)1 OF THE ORDINANCE).
*** VENT DESCRIPTION REVISED IN 06/07/90 CERTIFICATE OF OPERATION.

03/14/92

AIR PERMIT
INFORMATION

BASF CORPORATION CHEMICALS DIVISION
WYANDOTTE SITE

	PLANT	INSTALLATION PERMIT NO.	OPERATING PERMIT NO.	DATE ISSUED	SOURCE I.D.	VENT DESCRIPTION	CONTROL EQUIPMENT	RATED CAPACITY	MAXIMUM ALLOWABLE EMMISSIONS
36	VITAMIN POWDERS	C-9167 ✓	C-9167	01/30/92	076	SPRAY DRYER AND SPOT VENTILATION EXHAUST ** MODIFIED TO SPRAY DRYER	2 BAG FILTERS 1 CYCLONE	3,000 CFM	0.10 LBS/1000 LBS OF EXHAUST NOR 0.14 LB/HR NOR 0.43 TONS/YR OF PARTICULATE ***
	VITAMIN POWDERS		*****		077	DOUBLE CONE DRYER (CHANGE TO SCRUBBER EXHAUST)	SCRUBBER		
	VITAMIN FOOD BLENDS		*		078	FOOD BLENDS LABELER	NONE		
37	VITAMIN POWDERS	C-9166 ✓	C-9166	01/30/92	079	SPOT DUST COLLECTION	FABRIC FILTER	1,600 CFM	0.10 LBS/1000 LBS OF EXHAUST NOR 0.092 LB/HR NOR 0.288 TONS/YR OF PARTICULATE ***
38	VITAMIN POWDERS	C-9168 ✓	C-9168	01/30/92	200	POWDER PLANT VACUUM CLEANING	FABRIC FILTER	500 CFM	0.10 LBS/1000 LBS OF EXHAUST NOR 0.0228 LB/HR NOR 0.0.071 TONS/YR OF PARTICULATE ***
39	VITAMIN POWDERS	C-9165	C-9165	01/30/92	201	BAGHOUSE DUST COLLECTOR (BL-801 CHARGING SYSTEM)	FABRIC FILTER	400 CFM	0.10 LBS/1000 LBS OF EXHAUST NOR 0.018 LB/HR NOR 0.025 TONS/YR OF PARTICULATE ***
40	VITAMIN E	C-9100 ✓	C-9100	11/14/91	047	NITROGEN PADDING SYSTEM	NONE	2.5 SCFM	1.4 LBS/HR NOR 33 LBS/DA NOR 4.5 TONS/YR OF VOC ****

* AS PER 11/28/90 PHONE CONVERSATION WITH JAI SINGH, EXEMPT FROM PERMITTING (SECTION 411(A)1 OF THE ORDINANCE).
** VENT DESCRIPTION REVISED IN 06/07/90 CERTIFICATE OF OPERATION.
*** FROM 05/24/91 WAYNE COUNTY AIR POLLUTION CONTROL DIVISION LETTER.
**** FROM 09/04/91 WAYNE COUNTY AIR POLLUTION CONTROL DIVISION LETTER.
***** REMOVED FROM SERVICE AS PER 04/04/91 PHONE CONVERSATION WITH WAYNE COUNTY AIR POLLUTION CONTROL DIVISION.

03/14/92

AIR PERMIT
INFORMATION

BASF CORPORATION CHEMICALS DIVISION
WYANDOTTE SITE

	PLANT	INSTALLATION PERMIT NO.	OPERATING PERMIT NO.	DATE ISSUED	SOURCE I.D.	VENT DESCRIPTION	CONTROL EQUIPMENT	RATED CAPACITY	ALLOWABLE EMISSIONS NOT TO EXCEED
37	CHEMICAL ENGINEERING RESEARCH	C-5277	5-21563	04/06/89	050	PIX REACTOR VENTS (2)	TOTAL CONDENSORS		0.001 LBS/HR NOR 1.6 LBS/YR PIX 0.025 LBS/HR NOR
					"				32 LBS/YR N-METHYLPIPERIDINE 6.25 LBS/HR NOR 4.0 TONS/YR VOC (METHYL CHLORIDE) *
38	CHEMICAL ENGINEERING RESEARCH		5-21561	04/06/89	051	DEV CHEM VENTS (2)	TOTAL CONDENSORS		NOT SPECIFIED
39	CHEMICAL ENGINEERING RESEARCH	C-8877	C-8877	12/05/91	052	EAST STEAM JETS (EJECTORS)	BAROMETRIC CONDENSERS		0.5 LBS/HR NOR 84 LBS/YR SOLVENT A (CONFIDENTIAL) **
40	CHEMICAL ENGINEERING RESEARCH	C-8873	C-8873	12/05/91	053	TANK TK-52	NONE		0.1 LBS/HR NOR 78 LBS/YR SOLVENT A (CONFIDENTIAL) **
41	CHEMICAL ENGINEERING RESEARCH	C-8876	C-8876	12/05/91	054	REACTOR R-30	NONE		1.6 LBS/HR NOR 0.53 TONS/YR SOLVENT A (CONFIDENTIAL) **
42	CHEMICAL ENGINEERING RESEARCH	C-8872	C-8872	12/05/91	055	MEASURE TANK T-28	NONE		
43	CHEMICAL ENGINEERING RESEARCH	C-8875	C-8875	12/05/91	056	REACTOR R-17	NONE		
44	CHEMICAL ENGINEERING RESEARCH	C-8878	C-8878	12/05/91	057	DRUMMING HOOD	NONE		1.0 LBS/HR NOR 93 LBS/YR SOLVENT A (CONFIDENTIAL) 0.00076 LBS/HR NOR
					"				0.015 LBS/YR NVP 0.36 LBS/HR NOR 3.6 LBS/YR CYCLOHEXYLAMINE **
45	CHEMICAL ENGINEERING RESEARCH	C-8874	C-8874	12/05/91	058	SCALE TANK T-63	NONE		0.7 LBS/HR NOR 0.29 TONS/YR SOLVENT A (CONFIDENTIAL) 0.24 LBS/HR NOR 139 LBS/YR
					"				SOLVENT B (CONFIDENTIAL) 1 LB/HR NOR 9.6 LBS/YR CYCLOHEXYLAMINE **

04/15/93

* FROM AIR PERMIT SUMMARY BY WAYNE COUNTY AIR POLLUTION CONTROL DIVISION.
** FROM 07/17/91 PERMIT CONDITIONS LETTER BY WAYNE COUNTY AIR POLLUTION CONTROL DIVISION.

	PLANT	INSTALLATION PERMIT NO.	OPERATING PERMIT NO.	DATE ISSUED	SOURCE I.D.	VENT DESCRIPTION	CONTROL EQUIPMENT	RATED CAPACITY	ALLOWABLE EMISSIONS NOT TO EXCEED
	CHEMICAL ENGINEERING RESEARCH	C-9028 PERMIT CANCELED NOT INSTALLED		08/06/91	500	NaMBT REACTOR	FABRIC FILTER	2,000 GAL	0.02 LBS/HR NOR 1.2 LBS/YR 2-MBT *
46	CHEMICAL ENGINEERING RESEARCH	C-9699 ISSUED 04/06/93 CHLOR AMINE HCL			501 504 505	REACTOR R-1 VIA MECH VENT SYS REACTOR R-2 DRYER Z-1 VIA MECH VENT SYS	NONE SCRUBBER T-5 SCRUBBER T-9	300 GAL 300 GAL 4 CUBIC FEET	49.4 LBS/BATCH NOR 3.71 TON/YR TOT VOC'S -- 3.84 LB/BATCH NOR 0.29 TON/YR TOT HCl & SO2 ***
47	CHEMICAL ENGINEERING RESEARCH	C-10110 ISSUED 04/06/93 AMINE OXIDE			054 058 503	REACTOR R-30 SCALE TANK T-63 HOLD TANK T-64	CONDENSER E-4 NONE NONE	2,000 GAL 1,000 GAL 774 GAL	6.4 LBS/BATCH NOR 243.0 LBS/YR TOTAL VOC'S FROM ALL VENT SOURCES ***
		"			052 057	EAST STEAM JETS DRUMMING HOOD EF-S	BAROMETRIC CONDENSER NONE	7,000 CFM	
	CHEMICAL ENGINEERING RESEARCH	**			503	HOLD TANK TK-64 BLEND TANK TK-65		774 GAL	
48	CHEMICAL ENGINEERING RESEARCH	C-10109 ISSUED 04/06/93 ACID ESTER			054 054 057	REACTOR R-30 " DRUMMING HOOD EF-S	CONDENSER E-5 CONDNESER E-4 NONE	2,000 GAL 2,000 GAL 7,000 CFM	3.4 LBS/BATCH NOR 112.2 LBS/YR TOTAL VOC'S FROM ALL VENT SOURCES ***
		"			052	EAST STEAM JETS	BAROMETRIC CONDENSER		
49	CHEMICAL ENGINEERING RESEARCH	C-10034 ISSUED 01/04/93 MONO-N-ACYL AM			501 504	REACTOR R-2 VIA MECH VENT SYS REACTOR R-2	NONE CONDENSER E-2	300 GAL 300 GAL	0.15 LB/HR NOR 6.1 LB/YR VOC (CHARGING)--0.05 LB/HR NOR 4.01 LB/YR VOC (REACTION) ****

04/15/93

* FROM 07/17/91 PERMIT CONDITIONS LETTER BY WAYNE COUNTY AIR POLLUTION CONTROL DIVISION.
** PERMIT NOT REQUIRED SINCE BOTH EMISSION RATES AND TOXICITY ARE VERY LOW, AS AGREED DURING VERBAL CONVERSATION WITH KWON ON 12/05/91. NOTE THAT ANY CHANGES TO THIS SYSTEM AFTER 12/05/91 MAY BE SUBJECT TO AIR PERMITTING.
*** FROM 03/22/93 PERMIT CONDITIONS LETTERS BY WAYNE COUNTY AIR POLLUTION CONTROL DIVISION
**** FROM 01/04/93 PERMIT CONDITIONS LETTER BY WAYNE COUNTY AIR POLLUTION CONTROL DIVISION

AIR PERMIT
INFORMATION

BASF CORPORATION CHEMICALS DIVISION
WYANDOTTE SITE

	PLANT	INSTALLATION PERMIT NO.	OPERATING PERMIT NO.	DATE ISSUED	SOURCE I.D.	VENT DESCRIPTION	CONTROL EQUIPMENT	RATED CAPACITY	MAXIMUM ALLOWABLE EMMISSIONS
70 ~~69~~	ELASTOCELL	C-7907	5-23008	04/10/89	300	SOLVENT STORAGE TANK (TK-111) BREATHER VENT	VAPOR RETURNS	3000 gal	0.78 LBS/YEAR OF VOC EMISSIONS *
70	ELASTOCELL	C-7908	5-23009	04/10/89	301	SOLVENT STORAGE TANK (TK-112) BREATHER VENT	VAPOR RETURNS	3000 gal	0.78 LBS/YEAR OF VOC EMISSIONS *
71	ELASTOCELL	C-7909	5-23010	04/10/89	302	MOLD CLEANING UNIT	FABRIC FILTER DUST COLLECTOR	1,320 CFM	0.003 LBS/HOUR NOR 0.012 TONS/YEAR OF PARTICULATE *
72	ELASTOCELL	C-8206	5-23018	04/10/89	303	NITROGEN DEBURRING MACHINE	FABRIC FILTER DUST COLLECTOR	300 SCFM	0.003 LBS/HOUR NOR 0.012 TONS/YEAR OF PARTICULATE *
73	ELASTOCELL	C-7910	5-23011	04/10/89	304	REACTOR (R-210)	CENTRIFUGAL SEPARATOR		NOT SPECIFIED
74	ELASTOCELL	C-7911	5-23012	04/10/89	305	REACTOR (R-220)	CENTRIFUGAL SEPARATOR		NOT SPECIFIED
75	ELASTOCELL	C-7912	5-23013	04/10/89	306	REACTOR (R-230)	CENTRIFUGAL SEPARATOR		NOT SPECIFIED
76	ELASTOCELL	C-7913	5-23014	04/10/89	307	VACUUM PUMPS	NONE		0.042 TONS/YEAR OF VOC EMISSIONS *
77	ELASTOCELL	C-7914	5-23015	04/10/89	308	NDI HOPPER	NONE		NOT SPECIFIED
78	ELASTOCELL	C-7915	5-23016	04/10/89	309	MOLD LINE EXHAUSTS (4)	NONE		NOT SPECIFIED
79	ELASTOCELL	C-7916 C-9073	5-23017 C-9073	04/29/91 11/14/91	310	OVENS AND GENERAL BUILDING EXHAUST	OIL MIST COLLECTOR	2,000 CFM	0.02 LB/HR NOR 170 LB/YR TOTAL SUSPENDED AND CONDENSIBLE PARTICULATES (WHITE OIL) **
80	ELASTOCELL	C-7906	5-23007	04/10/89	311	CROSS-LINKING WORK STATION EXHAUST	NONE	1,500 CFM	NOT SPECIFIED

* FROM 10/07/88 WAYNE COUNTY HEALTH DEPARTMENT AIR POLLUTION CONTROL DIVISION LETTER.
** FROM 04/29/91 WAYNE COUNTY HEALTH DEPARTMENT AIR POLLUTION CONTROL DIVISION LETTER.

03/12/92

AIR PERMIT
INFORMATION

BASF CORPORATION CHEMICALS DIVISION
WYANDOTTE SITE

	PLANT	INSTALLATION PERMIT NO.	OPERATING PERMIT NO.	DATE ISSUED	SOURCE I.D.	VENT DESCRIPTION	CONTROL EQUIPMENT	RATED CAPACITY	MAXIMUM ALLOWABLE EMMISSIONS
81	ELASTOCELL	C-7905	5-23006	04/10/89	312	SOLVENT CLEANING STATION EXHAUST	NONE	4,000 CFM	NOT SPECIFIED

03/12/92

AIR PERMIT
INFORMATION

BASF CORPORATION CHEMICALS DIVISION
WYANDOTTE SITE

PLANT	INSTALLATION PERMIT NO.	OPERATING PERMIT NO.	DATE ISSUED	SOURCE I.D.	VENT DESCRIPTION	CONTROL EQUIPMENT	RATED CAPACITY	MAXIMUM ALLOWABLE ~~EMISSIONS~~ EMISSIONS NOT TO EXC
83 82 ELASTOGRAN MACHINERY	~~C-8897~~ 9592 ISSUED 3/11/92	~~C-8897~~ C-9592 ~~ISSUED 03/05/91~~	~~03/05/91~~ 06/03/92	120	ELASTOGRAN MIXING HEAD CLEANING OPERATION	NONE	5,400 CFM	0.06 LBS/HR NOR 254 LBS/YR OF ETHYLENE GLYCOL MONOMETHYL ETHER *
"	C-8897, ISSUED 05/14/90	C-8897	03/05/91	"	"			* *
"	C-				AUTOPAK FOAM SPRAY PROCESS	NONE		.0041 g/hr NOR 2.5 g/yr MDI

03/12/92

* FROM ~~05/23/90~~ 03/13/92 WAYNE COUNTY AIR POLLUTION CONTROL DIVISION LETTER.

* FROM ORIGINAL PERMIT FOR WYANDOTTE SITE LOCATION, RELOCATED TO 13TH STREET IN 01/92

AIR PERMIT
INFORMATION

BASF CORPORATION CHEMICALS DIVISION
WYANDOTTE SITE

PLANT	INSTALLATION PERMIT NO.	OPERATING PERMIT NO.	DATE ISSUED	SOURCE I.D.	VENT DESCRIPTION	CONTROL EQUIPMENT	RATED CAPACITY	MAXIMUM ALLOWABLE EMMISSIONS
EPC	SUBMITTED 03/20/92			374	LINE 4 PRODUCT PACKOUT	FABRIC FILTER F-424	20 SCFM	
EPC	SUBMITTED 03/20/92			375	LINE 5 PRODUCT PACKOUT	FABRIC FILTER F-524	20 SCFM	
EPC	SUBMITTED 03/20/92			376	LINE 6 MINERAL FILLER HOOD	FABRIC FILTER X-606	1,100 LB/HR 350 SCFM	
EPC	SUBMITTED 03/20/92			377	LINE 6 PRODUCT PACKOUT	FABRIC FILTER F-624	20 SCFM	
EPC	SUBMITTED 03/20/92			378	EXTRUDER VENT, LINES 4-6	VENTURI SCRUBBER	7500 SCFM	

11/10/92

AIR PERMIT
INFORMATION

BASF CORPORATION CHEMICALS DIVISION
WYANDOTTE SITE

	PLANT	INSTALLATION PERMIT NO.	OPERATING PERMIT NO.	DATE ISSUED	SOURCE I.D.	VENT DESCRIPTION	CONTROL EQUIPMENT	RATED CAPACITY	MAXIMUM ALLOWABLE EMMISSIONS
150 ~~99~~	STEAM FACILITY	C-5639	5-21557	04/06/89	060	BOILER- 0018 STEAM GENERATORS #1	NONE	49.90 MBTU/HOUR	4.5 LBS/HOUR NOR 16.0 TONS/YEAR OF PARTICULATE DURING OIL USAGE *
100	STEAM FACILITY	C-5640	5-21558	04/06/89	060	BOILER- 0018 STEAM GENERATORS #2	NONE	49.90 MBTU/HOUR	4.5 LBS/HOUR NOR 16.6 TONS/YEAR OF PARTICULATE DURING OIL USAGE *
101	STEAM FACILITY	C-5641	5-21559	04/06/89	060	BOILER- 0018 STEAM GENERATORS #3	NONE	49.90 MBTU/HOUR	4.5 LBS/HOUR NOR 16.6 TONS/YEAR OF PARTICULATE DURING OIL USAGE *
102	STEAM FACILITY	C-5642	5-22995	04/06/89	060	BOILER- 0018 STEAM GENERATORS #4	NONE	49.90 MBTU/HOUR	4.5 LBS/HOUR NOR 16.6 TONS/YEAR OF PARTICULATE DURING OIL USAGE *

03/12/92

* BASED ON LIMITATIONS SET FORTH IN WAYNE COUNTY HEALTH DEPARTMENT AIR POLLUTION CONTROL DIVISION LETTERS DATED 11/20/87 AND 10/07/88.

AIR PERMIT
INFORMATION

BASF CORPORATION CHEMICALS DIVISION
WYANDOTTE SITE

	PLANT	INSTALLATION PERMIT NO.	OPERATING PERMIT NO.	DATE ISSUED	SOURCE I.D.	VENT DESCRIPTION	CONTROL EQUIPMENT	RATED CAPACITY	MAXIMUM ALLOWABLE EMMISSIONS
	EPP		***		125	TCP STORAGE TANK (TK-701)	NONE		
	EPP		***		126	PP RECEIVING TANK (TK-704)	NONE		
	EPP		***		127	PP TRANSFER BLOWER (BL-704)	NONE		
	EPP		***		128	PP WEIGH HOPPER (H-710)	NONE		
	EPP		***		129	BUTANE STORAGE TANK (TK-700)	NONE		
	EPP		***		131	PROCESS WATER TANK (TK-760)	NONE		
	EPP		***		132	ARMOSTAT STORAGE TANK (TK730)	NONE		
	EPP		***		133	IMPREGATION VESSEL (D-710)	NONE		
	EPP		***		135	GAS HOLDER (TK-780)	NONE		8636 hrs
103	EPP	C-8107	5-23254	03/14/90	136 137	A-D EXHAUST VENT (X-740)	DUST COLLECTOR (F-780)		.044 LBS/HR NOR .19 TONS/YR OF PARTICULATE *
104	EPP	C-8109	5-23255	03/14/90	138	A/B EXHAUST VENT (X-741)	DUST COLLECTOR (F-741)		.044 LBS/HR NOR .19 TONS/YR OF PARTICULATE *
	EPP		***		139	EXHAUST VENT (F-780)	NONE		

* FROM 11/01/89 AIR POLLUTION CONTROL LETTER.
*** PERMIT NOT REQUIRED AS PER 12/4/89 TELEPHONE CONVERSATION WITH P. KURIKESU OF THE WAYNE COUNTY AIR POLLUTION CONTROL DIVISION

01/05/93

AIR PERMIT
INFORMATION

BASF CORPORATION CHEMICALS DIVISION
WYANDOTTE SITE

	PLANT	INSTALLATION PERMIT NO.	OPERATING PERMIT NO.	DATE ISSUED	SOURCE I.D.	VENT DESCRIPTION	CONTROL EQUIPMENT	RATED CAPACITY	MAXIMUM ALLOWABLE EMMISSIONS
	EPP		***		140	EXHAUST VENT (F-741)	NONE		
	EPP		***		141	RECYCLE WATER TANK (TK-782)	NONE		
	EPP		***		142	NEUTRALIZATION TANK (TK-781)	NONE		
	EPP		***		143	MOLDING MACHINE (2) (Z-770/Z-771)	NONE		
	EPP		N/A			FUGITIVE EMISSIONS			5.28 LBS/HR NOR 23.13 TONS/YR OF VOC *
	EPP		****		145	TCP FLEXIBLE CONVEYOR	DUST COLLECTOR		
105	EPP	C-8904	C-8904	12/23/92	146	NITRIC ACID STORAGE TANK (TK-702)	SCRUBBER		6 LBS/YR OF NITRIC ACID
	EPP					RAILCAR AND TRUCK LOADING		8,761.4	
	EPP				147	~~[illegible]~~ Transfer Blower	stack	8,760	
					148	Weigh Hopper	stack		
						Impregnation vessel			
						Gas holder			

* FROM 11/01/89 AIR POLLUTION CONTROL LETTER.
*** PERMIT NOT REQUIRED AS PER 12/04/89 TELEPHONE CONVERSATION WITH P. KURIKESU OF THE WAYNE COUNTY AIR POLLUTION CONTROL DIVISION
**** PERMIT NOT REQUIRED AS PER 8/12/92 LETTER FROM LILLIAN WOOLLEY OF THE WAYNE COUNTY AIR POLLUTION CONTROL DIVISION

01/05/93

149 Finished product conv w/ Blower
150 Storage Silos (3)
151 Screening/~~TCP~~ exhaust

TSCA-PCBs

1. Did the facility have or does it have any PCB electrical equipment? What equipment (type and quantity) is on-site?

NO

2. Does the facility have a PCB equipment storage area for disposal or reuse? Describe the storage area (i.e., concrete pad, walls, roof, curbs).

3. Are there any labels/markings on the PCB equipment?

4. Is there any leaking PCB electrical equipment? Describe.

5. Does the facility have any hydraulic systems? Any leaking?

Interview Questions/Records Review

1. If the facility has PCB electrical equipment, was it tested? What were the test results?

NO PCB ITEMS

2. If the facility has any hydraulic systems, when were they tested for PCBs? What were the test results?

TESTED IN 1989 - PCB CLEAN

EPCRA

Interview Questions/Records Review

1. Were there any chemical releases in excess of the reportable Superfund quantities (see below *)? Who was provided the notification? Was it oral or written?

None in 1993

2. Does the facility manufacture, process, or use any toxic chemicals in a quantify greater than 10,000 lbs/yr? Identify them. Are any of them section 313 chemicals (see below)?

YES

3. If the answer to question 2 is yes, has the facility submitted the toxic chemical release form (R)?

YES

	YES	NO
4. Are you aware of the Emergency Planning and Community Right-to-Know Act?	✓	

Section 302-303 Emergency Planning

5. Have you used, produced, manufactured, or stored any Extremely Hazardous Substances (EHSs) in quantities greater than the threshold planning quantities for the calendar years? (Current year and one year prior)	1993	✓	
	1992	✓	
6. If yes, has your facility notified the State Emergency Response Commission (SERC) and the Local Emergency Planning Committee (LEPC) that it meets reporting requirements and has named an emergency coordinator to work with the LEPC?		✓	

Section 304 Accidental Release Notification

	YES	NO
Is your facility aware of the accidental release notification requirements?	✓	
8. Has the facility had any accidental releases of CERCLA or EPCRA hazardous materials above the reportable quantities in the years? (Current year and one year prior) 1993		✓
1992		✓

9. Provide the following information for each release:

DATE	TIME	CHEMICAL	QUANTITY
1991	11/2/91	Ethylene Oxide	27 LBS

10. If the facility did experience accidental releases of CERCLA or EPCRA hazardous materials above the reportable quantities, did the facility supply a written follow-up report to the SERC and LEPC for each and every release?

Provide the dates the follow-up reports were submitted to the SERC and LEPC for each and every release identified above.

DATE OF RELEASE	DATE OF FOLLOW-UP TO SERC	DATE OF FOLLOW-UP TO LEPC
1991	11/12/91	11/12/91 (1)

Section 311-312 Hazardous Chemical Reporting

	YES	NO
11. Is your facility required by OSHA to possess Material Safety Data Sheets (MSDSs) for hazardous chemicals under OSHA?	✓	
12. Do you, or did you store any hazardous material(s) greater than the threshold quantities designated for each hazardous material, at any time during: (Current year and one year Prior)? 1993	✓	
1992	✓	

13. For each hazardous material stored above the threshold planning quantity identified in #1 above, has your facility submitted a copy of the MSDS for the hazardous material to the following authorities?

SERC	✓	
LEPC	✓	
FIRE DEPT.	✓	

14. Has your facility submitted Emergency Hazardous Chemical Inventory Forms (TIER I or II) to the SERC, LEPC, and Fire Department for the following years? (Latest two reporting years, not current year. Current years report not due to March 1, of next year)

			SERC	LEPC	LFD
For calendar year	1993	Y/N	✓	✓	✓
For calendar year	1992	Y/N	✓	✓	✓

* The chemical subject to these requirements can be found in EPA publication number 560/4-92-011, January 1992, "Title III, List of Lists".

NOTES

(1) Refer to Attachment 8 for written follow-up notification

(2) BASF is also sending notifications on off-site shipments of asbestos wastes. See discussion in AIR checklist.

(3) Refer to Attachment 9 for 1992 EPCRA 313 Release Data Summary

(4) Refer to Attachment 10 for updated list of 311 MSDS Reporting

BASF Corporation

BASF

CERTIFIED MAIL - RETURN
RECEIPT REQUESTED
SERC: P 257 499 387
LEPC: P 257 499 388
ERD: P 257 499 389

November 12, 1991

Mr. Kent Kanagy
Michigan Department of Natural Resources
State Emergency Response Commission
P.O. Box 30028
Lansing, MI 48909

Mr. Oladipo Oyinson
Michigan Department of Natural Resources
Environmental Response Division
38980 Seven Mile Road
Livonia, MI 48152

Mr. Mark R. Sparks
Acting LEPC Chairperson
Title III Local Emergency Planning Committee
10250 Middlebelt Road
Detroit, MI 48242

Dear Sirs:

On November 2, 1991 the BASF Corporation facility at Wyandotte, Michigan experienced a release of an extremely hazardous substance requiring notification under EPCRA Section 304. Verbal notification was provided on November 2, 1991 to the NRC, SERC (Wayne County Department of Public Health), and LEPC. Verbal notification was provided to the local fire department on November 7, 1991. The NRC Case Number is 64776. Pursuant to 40 CFR 355.40(b)(3), this submittal constitutes the written, follow-up notification.

Chemical Name	Ethylene Oxide
CAS Number	75-21-8
Quantity Released	27 pounds
Location	Polyols Plant
Approximate Time of Release	9:55 A.M.
Environmental Medium Affected	Air
Anticipated Acute or Chronic Health Risks	None
Medical Attention Requirements	None
Resulting Precautions	None

1609 Biddle Avenue. Wyandotte. Michigan 48192 (313) 246-6100

Cause of Incident: As a result of a defective pressure gauge which read low, excess nitrogen was introduced into the ethylene oxide storage tank. The elevated pressure caused the process safety valve to lift for approximately 20 seconds. A total of 27 pounds of ethylene oxide gas was released to the air. Out of 5 flammable vapor detectors located in the diked area, only one indicated an elevated reading. Upon being reset within one minute, it indicated normal readings of 0-5% Lower Explosive Limit.

Immediate Corrective Action Taken: The backup process safety valve was immediately put into service. The faulty pressure gauge was removed and replaced with a new, calibrated gauge. Two regulators, one which controls the nitrogen pad and one which vents the storage tank, were removed, calibrated, and placed back into service.

Preventive Action Plan: A second pressure gauge has been installed to indicate the internal pressure of the ethylene oxide storage tank. In addition, plant personnel will be counseled on changing regulator settings without proper notification to maintenance or supervisors.

If you are in need of any additional information, please call Charles Anderson at (313) 246-6209.

Sincerely,

Charles E. Anderson

Charles E. Anderson
Ecology Services Engineer

bc: MBuller
GTDurst
MHEhrlich
DCFigg
CDLaScola
RMLawrence
TMLynch
HLMcDonald
RRosen

		Onsite Releases (lbs)				Offsite Transfers (lbs)									
		Air Emissions		To	To	To	CH	CH	CH	Col	Mich	Mot	Petro	Ross	Waym
Chemical	Unit(s)	Fugitive	Point	Water	Land	POTW	Brain	Chic	Nat	Drum	Disp	Oil	Chem	Inc	Disp
	Res Serv	0	74			38							180		
	Polym	B	27	A	A								1,000	B	
Acrylonitrile	Total	B	101	A	A	38							1,180	B	
Bisphenol-A	Polym	B	B	B	B						B				
Chloromethane	Res Serv	0	962												
Diaminotoluene	Polym	A	A	47	A	B			C					A	
	EPO	A										19,000			
	Polym	A	A	A	A	23,000									
	Ureth	0	0							2					
Ethylene Glycol	Total	A	A	A	A	23,000				2		19,000			
	Res Serv	4	60			12									
	Polym	B	1,800	B	A	B					B				
Ethylene Oxide	Total	B	1,860	B	A	B					B				
Glycol Ethers	Ad/Phos	0	0	0		0				1,680					
	Ad/Phos	0	9			2									
	Vit	21	4,500			0	280	560							
Hydrochloric Acid	Total	21	4,509			2	280	560							
Manganese Compds	Ad/Phos		0			0									44
	Polym	A	A	0	A									C	
	TPU	A	B	0		0								17,600	
	Ureth	0	0												
MBI (MDI)	Total	12	B	0	A	0								19,000	
	Ad/Phos	190	72										19,000	984	
	Res Serv	10	150			4,100									
	Polym	B	0	B	B									B	
	Vit	560	1,900			140,000							1,080		
Methanol	Total	1,010	2,122	B	B	144,100							20,080	1,300	
	Ad/Phos		0			0									19
	EPC	0	0			0									
Nickel Compds	Total	0	0			0									19
	Ad/Phos	A	A			0									
	EPO		3	0		0									
	Res Serv					170									
Nitric Acid	Total	A	A	0		170									
	Ad/Phos		4	0		9									
	Res Serv	0	0												
	Polym	0	A	0	A										
Phosphoric Acid	Total	0	A	0	A	9									
	Res Serv	8	140												
	Polym	B	18,600	1,020	B	6,000					B				
Propylene Oxide	Total	B	18,740	1,020	B	6,000					B				
	Res Serv	0	38			20							93		
	Polym	B	490	B	A								600	100	
Styrene	Total	B	528	B	A	20							693	100	
	Elast	1	1	0											
	Polym	A	A	0	A										
	St Fac	1	1	0											
Sulfuric Acid	Total	A	A	0	A										
	Ad/Phos		0			0									
	Polym	A	A	0	B									B	
	Ureth	0	0												
TDI (mixed)	Total	A	A	0	B	0								B	
o-Toluidine	Polym	A	A	A	A	72			B						
	Ad/Phos		5			0									
	EPC	0	0			0									
	Vit		0			2,800					160,000				
Zinc Compounds	Total	0	5			2,800					160,000				

BASF Corporation

BASF

CERTIFIED MAIL - RETURN RECEIPT REQUESTED
MDNR: P 121 664 370
WCEMD: P 121 664 371
WFD: P 121 664 372

June 30, 1993

Kent Kenagy
Title III Coordinator
Michigan Dept. of Natural Resources
Environmental Response Division
Title III Notification
300 S. Washington Square
Lansing, MI 48933

Mark Sparks
Wayne County Emergency Management Division
10250 Middlebelt Road
Detroit, MI 48242

Captain John Gregurich
Wyandotte Fire Department
266 Maple
Wyandotte, MI 48192

RE: Emergency Planning and Community Right-to-Know Act (EPCRA) Section 311 - MSDS Reporting

Dear Sir or Madame:

Pursuant to EPCRA 311, this submittal constitutes an updated list of the subject hazardous substances for the BASF Corporation site in Wyandotte, Michigan. The list groups chemicals into 5 hazard categories, as described in the footnotes on the attached MSDS Report.

If you have any questions concerning the attached information, please contact Doug Thiel, our Manager of Quality Assurance and Ecology Services at (313) 246-6209.

Sincerely,

Karen A. LeMieux
Ecology Services Engineer

Attachment

bc: CEAnderson, BMBarkel, RJCarr, RDavenport, SRDerters, NNDiaconnis, GTDurst, TMLynch, ROliver, RMRosen, JFSchneider, JATaylor, SWendzinski

File: EPCRA 311 - External Reports

Circulate: CDL, KAL, DPT

1609 Biddle Avenue, Wyandotte, Michigan 48192 (313) 246-6100

MSDS REPORT EPCRA SECTION 311

Hazardous Substances Reported Through 06/30/93
BASF Corporation Wyandotte, Michigan

Report Date: 07/01/93

Hazardous Substance	CAS Number	Hazard Category A	C	F	P	R	Hazardous Component(s)
1,4-Butanediol Bulk	110-63-4	X					
2-Butanol	78-92-2	X		X			
Acetic Anhydride	108-24-7	X		X			
Acrylonitrile	107-13-1	X	X	X			
Axkleen 900		X					Sodium Hydroxide
Batch (B3) Talc		X	X				Polycaprolactam
Batch PA(B3)-Cu Stab		X					Polycaprolactam
Bis-Phenol A	80-05-7	X	X				
Butane	106-97-8	X		X			
Carbon Black Regal 300 I	1333-86-4	X	X				Carbon Black
Chardol 570		X					Polyester and Polyether Polyols, Ethylene Glycol
Crown Ethers		X					1,6,11 - Trioxacyclopentadecane, var mol weights
Desmodur 15	3173-72-6	X	X				Naphthalene Diisocyanate
Dimethyl Formamide Liquid	68-12-2	X	X	X			
Dipropylene Glycol	25265-71-8	X	X				
Elastollan S-Series TPU		X					
Ethylene Glycol	107-21-1	X	X				
Ethylene Oxide	75-21-8	X	X	X			
Ethylenediamine	107-15-3	X	X	X			
Euthylen Black 00-6005 C4			X				Carbon Black, Polyethylene
Exxelor VA 1803	31069-12-3	X	X				Ethylene Propylene
Fiber Glass VET 20A 9600 TEX		X					Fibrous Glass
Fiber Glass VET 20B 9600 TEX		X	X				Fibrous Glass
Fiberglass - PPG 3540		X					Fibrous Glass
Filter Aid	68855-54-9		X				Diatomaceous Earth, Amorphous Silica
Gardobond 24 F		X	X				Hydrofluoric Acid, Hydrofluorosilicic Acid
Gardoclean 650		X	X				Sodium Nitrite, Tetrapotassium Pyrophosphate
Glycerine	56-81-5	X		X			
Heptane	142-82-5	X		X			
Hi Sil 213	63231-67-4		X				Silicon Dioxide
Hydrochloric Acid (liquid)	7647-01-0	X	X				
Hydrogen Chloride (gas)	7647-01-0	X	X				

Notes:

A = Acute (immediate) health hazard
C = Chronic (delayed) health hazard
F = Fire hazard
P = Sudden release of pressure hazard
R = Reactive hazard

Hazardous Substances Reported Through 06/30/93
BASF Corporation Wyandotte, Michigan

Report Date: 07/01/93

Hazardous Substance	CAS Number	Hazard Category A	C	F	P	R	Hazardous Component(s)
Sodium Silicate Solution	6834-92-0	X					
Styrene	100-42-5	X	X	X			
Sulfuric Acid 66	7664-93-9	X	X				
Terol 375		X	X				Ethylene Glycol
Tetrasodium Pyrophosphate, Anh	7722-88-5	X					
TMP, Molten	77-99-6	X					Trimethylolpropane
Toluene	108-88-3	X	X	X			
Toluene Diamine (TDA)	25376-45-8	X	X				
Toluene Diisocyanate (mixed)	26471-62-5	X	X				
Tridecylamine	2869-34-3	X					
Trimethylhydroquinone	700-13-0	X					
Ultradur B4300G6 Black 511		X					Fibrous Glass, Carbon Black
Ultramid 90	24993-04-2	X	X				Polyamide
Ultramid A3EG7 Grey 22591			X				Fibrous Glass
Ultramid A3EG7 Grey 22832			X				Fibrous Glass
Ultramid A3K White 00413			X				
Ultramid A3K White 15356		X	X				Titanium Dioxide
Ultramid A3K White 15390		X	X				
Ultramid A3Z Unc		X					
Ultramid B3 Natural	25038-54-4	X					Polycaprolactam
Ultramid B35 Natural	25038-54-4	X					Polycaprolactam
Ultramid B3EG10 White 15373		X	X				Polycaprolactam, Fibrous Glass, Zinc Sulfide
Ultramid B3EG3 Black 564		X	X				Polycaprolactam, Fibrous Glass, Carbon Black
Ultramid B3EG3 Unc		X	X				
Ultramid B3EG5 Black 00564		X	X				Polycaprolactam, Fibrous Glass, Carbon Black
Ultramid B3EG5 Blue 21446		X	X				Polycaprolactam, Fibrous Glass
Ultramid B3EG5 Green 19379		X	X				Polycaprolactam, Fibrous Glass
Ultramid B3EG5 Green 19393			X				Polycaprolactam, Fibrous Glass
Ultramid B3EG5 Grey 22882		X	X				Polycaprolactam, Fibrous Glass
Ultramid B3EG5 Red 17377		X	X				Polycaprolactam, Fibrous Glass
Ultramid B3EG5 Red 17426		X	X				Polycaprolactam, Fibrous Glass
Ultramid B3EG5 Red 17431		X	X				

Notes:

A = Acute (immediate) health hazard
C = Chronic (delayed) health hazard
F = Fire hazard
P = Sudden release of pressure hazard
R = Reactive hazard

SDWA-UIC

Observations

1. Are there any discharges other than sanitary waste (i.e., industrial wastes) into or onto (Including drain fields) the ground? Is an on-site septic disposal system used? Describe the discharges and disposal system.

NO

Interview Questions/Records Review

1. Does the facility have or has it had any wells (dug, drilled or driven), dry wells, leachfields, or septic systems? Did they receive(d) commercial or industrial waste (liquid and/or solid), cooling water, or drainage from roof drains, floor drains, or parking lots? If yes, give a description.

- Extraction and monitoring wells associated with FDC remediation are on-site. not disposal wells
- Historical TIO wells

2. Does the facility have a permit? _____

3. What is the current status of wells (active, abandoned, water construction, repairs)?

4. If the wells are inactive, what was the date they were last used? _____

5. Well Location ____1/4, ____1/4, ____1/4, Township ____, Range ____, Section ____. (Written Description, Landmarks, Street intersections, or Geologic Descriptions with Lat/Long.)

	YES	NO
6. Maps of Facilities	____	____
Diagrams of Construction	____	____
Consultant Reports	____	____
Photographs	____	____
Fluid Analysis	____	____

7. Total Number of Wells: ____ Number of Wells Inspected: ____

8. Date of Original Construction: _____, Date of Modification: _____, Depth _____

9. Waste Disposal Formation and Depth _____

_____

10. Underground Source of Drinking Water (USDW) Name: _____

_____

Depth: _____, ( ) Confined ( ) Unconfined

11. Depth of Closest Water Wells: _____
Distance from Site: _____
Nearby Surface Waters Possibly Affected: _____

SDWA-PWS

Interview Questions/Record Reviews

1. What is the facility's source of drinking water? Does the facility have a private well? How many people does it serve?

City Water

2. Is the water sampled and analyzed for contaminants? Are the results reported to the State or EPA?

yes

ENVIRONMENTAL ASSESSMENT

1. Is there any evidence of environmental impacts that haven't been addressed? Possible examples include:

- additional evidence of spills, leaks
- vegetation damage in the surrounding area
- odors in the surrounding neighborhood
- neighborhood covered with "dusts"
- poor water quality in streams near the facility

• groundwater contamination to be investigated under RCRA corrective action order

2, Were there situations of possible excessive occupational exposures that should be referred to OSHA?

none observed at time of inspection

P^2

(1) Refer to Attachment II for a summary of EPCRA 313 POLLUTION PREVENTION DATA AND HAZARDOUS WASTE MINIMIZATION ACTIVITIES.

BASF - Wyandotte

SITE SUMMARY OF 1992 EPCRA 313 POLLUTION PREVENTION DATA

		Source Reduction and Recycling Activities																					
		Released				Off-Site Energy Recovery				Recycled				On-Site Treatment				Off-Site Treatment				Event	Index
Chemical	Unit(s)	1991	1992	1993	1994	1991	1992	1993	1994	1991	1992	1993	1994	1991	1992	1993	1994	1991	1992	1993	1994	1992	1992
	Res Serv	85	74	74	74	55	183	183	183	0	0	0	0					60	38	38	38	0	1.13
	Polym	550	290	300	300	1,300	1,000	1,100	1,100	0	0	0	0	280,000	270,000	310,000	310,000					0	0.87
Acrylonitrile	Total	635	364	374	374	1,355	1,183	1,283	1,283	0	0	0	0	280,000	270,000	310,000	310,000	60	38	38	38	0	0.87
Bisphenol-A	Polym	260	1,300	260	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.00
Chloromethane	Res Serv	900	962	627	627	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.70
Diaminotoluene	Polym	74	62	62	62	1,000	0	0	0	0	0	0	0	0	0	0	0	37	1,000	1,000	1,000	0	1.02
	EPO	5	5	5	5	0	0	0	0	15,000	19,000	15,000	15,000	0	0	0	0	0	0	0	0	0	1.20
	Polym	20	20	20	20	0	0	0	0	0	0	0	0	0	0	0	0	18,000	23,000	24,000	24,000	0	1.27
	Ureth	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	0	1.00
Ethylene Glycol	Total	25	25	25	25	0	0	0	0	15,000	19,000	15,000	15,000	0	0	0	0	18,002	23,002	24,002	24,002	0	1.27
	Res Serv	12	64	67	65	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	1.00
	Polym	9,100	2,600	2,000	750	0	0	0	0	0	0	0	0	21,000	23,000	24,000	25,000	500	250	250	250	0	0.84
Ethylene Oxide	Total	9,112	2,664	2,067	815	0	0	0	0	0	0	0	0	21,000	23,000	24,000	25,000	512	250	250	250	0	0.84
Glycol Ethers	Ad/Phos	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	145	1,680	0	0	0	11.70
	Ad/Phos	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3.15
	Vit	1,600	4,521	4,700	5,000	0	0	0	0	0	0	0	0	68,000	87,000	91,000	96,000	81	840	880	920	5	1.38
Hydrochloric Acid	Total	1,600	4,530	4,700	5,000	0	0	0	0	0	0	0	0	68,000	87,000	91,000	96,000	81	842	880	920	5	2.26
Manganese Compds	Ad/Phos	0	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.48
	Polym	260	15	15	15	660	0	0	0	0	0	0	0	0	390	390	390	330	910	1,000	1,000	0	0.51
	TPU	32	242	242	242	8,960	0	0	0	0	0	0	0	0	203	203	203	1,120	17,600	17,600	17,600	0	3.50
	Ureth	0	0	0	0					0	0	0	0	2	2	2	2					0	1.00
MBI (MDI)	Total	292	257	257	257	9,620	0	0	0	0	0	0	0	2	595	595	595	1,450	18,510	18,600	18,600	0	2.00
	Ad/Phos	294	262	78	0	15,107	19,000	6,000	0	0	0	0	0	0	0	0	0	0	984	295	0	0	0.88
	Res Serv	0	160	160	160	0	0	0	0	0	0	0	0	0	0	0	0	15	4,100	4,100	4,100	0	50.00
	Polym	180	750	250	250	47	0	0	0	0	0	0	0	0	0	0	0	130	280	280	280	0	1.11
	Vit	1,300	2,385	2,500	2,600	0	1,000	1,000	1,000	0	0	0	0	0	0	0	0	124,000	139,850	150,000	155,000	0	1.38
Methanol	Total	1,774	3,557	2,988	3,010	15,154	20,000	7,000	1,000	0	0	0	0	0	0	0	0	124,145	145,214	154,675	159,380	0	2.97
	Ad/Phos	5	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.65
	EPC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00
Nickel Compds	Total	5	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.32

BASF – Wyandotte

SITE SUMMARY OF 1992 EPCRA 313 POLLUTION PREVENTION DATA

		Source Reduction and Recycling Activities																					
		Released				Off-Site Energy Recovery				Recycled				On-Site Treatment				Off-Site Treatment				Event Index	
Chemical	Unit(s)	1991	1992	1993	1994	1991	1992	1993	1994	1991	1992	1993	1994	1991	1992	1993	1994	1991	1992	1993	1994	1992	1992
	Ad/Phos	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.05
	EPO	10	10	10	10	0	0	0	0	0	0	0	0	150,000	150,000	220,000	220,000	0	0	0	0	0	1.20
	Res Serv	0	0	0	0	0	0	0	0	0	0	0	0	0	430	0	0	0	0	0	0	17	
Nitric Acid	Total	13	10	10	10	0	0	0	0	0	0	0	0	150,000	150,430	220,000	220,000	0	0	0	0	17	1.20
	Ad/Phos	1	4	0	0	0	0	0	0	0	0	0	0	49	0	0	0	0	9	0	0	0	3.81
	Res Serv	0	0	0	0	0	0	0	0	0	0	0	0	250	250	250	250	0	0	0	0	0	2.50
	Polym	10	10	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00
Phosphoric Acid	Total	11	14	10	10	0	0	0	0	0	0	0	0	299	250	250	250	0	9	0	0	0	2.58
	Res Serv	13	148	145	143	0	0	0	0	0	0	0	0	0	0	0	0	128	0	0	0	0	1.00
	Polym	57,300	20,100	11,200	11,200	0	0	0	0	0	0	0	0	122,000	140,000	143,000	153,000	1,650	6,000	6,200	6,200	0	0.88
Propylene Oxide	Total	57,313	20,248	11,345	11,343	0	0	0	0	0	0	0	0	122,000	140,000	143,000	153,000	1,778	6,000	6,200	6,200	0	0.88
	Res Serv	155	38	38	38	140	93	93	93	0	0	0	0	0	0	0	0	125	20	20	20	0	1.13
	Polym	1,200	1,000	1,000	1,000	770	600	600	600	0	0	0	0	160,000	141,000	162,000	170,000	0	100	0	0	0	0.88
Styrene	Total	1,355	1,038	1,038	1,038	910	693	693	693	0	0	0	0	160,000	141,000	162,000	170,000	125	120	20	20	0	0.88
	Elast	10	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.80
	Polym	10	15	15	15	0	0	0	0	0	0	0	0	5	5	5	5	0	0	0	0	0	0.67
	St Fac	2	2	2	2	0	0	0	0	0	0	0	0	194,270	201,600	200,000	200,500	0	0	0	0	0	1.05
Sulfuric Acid	Total	22	19	19	19	0	0	0	0	0	0	0	0	194,275	201,605	200,005	200,505	0	0	0	0	0	1.05
		11	0	0	0	8	0	0	0	0	0	0	0	70	0	0	0	274	0	0	0	0	0.56
		15	260	260	260	1	0	0	0	0	0	0	0	47	557	500	450	5	459	410	350	0	1.30
		0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	0	0	0	0	0	1.00
		26	260	260	260	9	0	0	0	0	0	0	0	119	557	500	450	279	459	410	350	0	0.93
		20	20	20	15	0	0	0	0	0	0	0	0	0	0	0	0	35	260	260	200	0	1.75
		1	79	0	0	0	0	0	0	0	0	0	0	0	0	0	0	87	0	0	0	0	4.96
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.00
		0	160,000	84,000	0	0	0	0	0	0	0	84,000	180,000	0	0	0	0	124,200	2,800	2,800	2,800	0	1.38
		1	160,079	84,000	0	0	0	0	0	0	0	84,000	180,000	0	0	0	0	124,287	2,800	2,800	2,800	0	2.40

19-Aug-93

WASTE MINIMIZATION ACTIVITIES

HAZARDOUS WASTE

- NMP Reclamation (2,300 gals)
- Isocyanate Resale (56,000 lbs)
- Sulfuric Acid Resale
- DMF Reclamation *
- Zinc Chloride Recycling *
- Polyol Filter Cake Reduction

NONHAZARDOUS WASTE

- Empty Container Reclamation (21,144 cont. ~ 436 K lbs)
- Pallet Recycling/Reuse (80,000 lbs)
- Office Paper Recycling (42,000 lbs)
- Cardboard Recycling (70,000 lbs)
- Plastic Recycling *, (93,000 lbs)
- Scrap Metal Recycling (500,000 lbs)
- Battery Recycling (1,000 lbs)
- Polyol Resale
- Resin Resale (153,000 lbs.)
- EPO Resale (100,000 lbs)

* - implementing action plan

WMT00130

OCTOBER 20, 1993

LIST OF ATTENDEES
BASF - USEPA REGION 5

NAME	TITLE	REPRESENTING	PHONE NO.
1. Diane Sharrow	Env. Sci	USEPA Region 5	(312) 886-6199
2. Laura Lodisio	Env. Sci.	U.S. EPA Region 5	(312) 886-7090
3. Doug Thiel	Mgr. Quality	BASF Corp	(313) 246-6209
4. ADAM BICKEL	Ecology Services	BASF CORP.	(313) 246-6836
5. DALE WEBSTER	MW Ecology	BASF CORP	(313) 246-6208
6. Douglas Martin	Attorney	BASF	(201) 316-3222
7. John B. Byrnes	Remediation	BASF CORP	(201) 397-4528
8. REG PALLESEN	Ass't Regional Counsel	EPA/ORC	312-886-5825 or 312-886-0555
9.			
10.			

BASF Corporation

MID064197742 **BASF**

BASF North Works
Wyandotte, MI

CERTIFIED MAIL: RETURN RECEIPT REQUESTED
EPA: P 401 235 673
MDNR: P 401 235 674

~~[illegible]~~

7/17/96 wrong ID no.
this is for BASF ⇒ Wyandotte, North Works.

August 1, 1990

Waste Management Division
U.S. EPA - Region V
230 S. Dearborn Street
Chicago, IL 60604

Director
Michigan Dept. Natural Resources
P. O. Box 30028
Lansing, MI 48909

To Whom It May Concern:

Subject: Civil Action 80-73699 Consent Decree

Pursuant to Section IX and V.B.2 of the referenced Consent Decree, provided herewith are the numerical results of groundwater samples taken in June from the wells on the site. Wells A through J are sampled and analyzed once a year and Wells K through M are sampled and analyzed quarterly.

Very truly yours,

K Padar

K. Padar
Ecology Services Engineer

mh
enc.

RECEIVED
AUG 7 1990
OFFICE OF RCRA
Waste Management Division
U.S. EPA, REGION V

1609 Biddle Avenue, Wyandotte, Michigan 48192 (313) 246-6100

CIVIL ACTION 80-73699 - CONSENT DECREE

ANALYTICAL RESULTS FOR
SAMPLES TAKEN

JULY 1990

Well No.	Elv. Feet	Concentration (ppb)				
		Benzo-(a) Pyrene	Naphthalene	Penta Chloro Phenol	Hg	As
A	574.57	≤10	≤10	≤250	49	160
B	574.26	≤100	≤1,000	≤500	85	580
C	574.16	≤10	≤100	≤400	88	520
D	575.80	-	≤200	≤250	1,400	9,200
E	575.90	≤10	≤200	≤75	1,900	8,200
F	577.14	-	≤500	-	130	160
G	576.86	-	≤10	≤10	17	220
H	575.62	ND	≤10	-	8	<100
I	577.16	≤10	≤10	-	5	120
J	578.87	≤100	≤1,000	≤250	3	180
K	575.96	-	≤10	≤35	220	140
L	576.96	ND	ND	-	6	ND
M	Dry	-	-	-	-	-

Elevation of the Trenton Channel 574.98 Ft.

ND = Not Detected

BASF Corporation

RECEIVED
WMD RCRA
RECORD CENTER

MAY 19 1990

BASF

CERTIFIED MAIL - RETURN RECEIPT REQUESTED
EPA: P 164 348 724
EPA: P 164 348 725

RECEIVED
FEB 06 1990
U.S. EPA, REGION V
WASTE MANAGEMENT DIVISION
OFFICE OF THE DIRECTOR

January 31, 1990

Waste Management Division
U.S. EPA - Region V
230 S. Dearborn Street
Chicago, IL 60604

Mr. Oladipo Oyinsan, Supervisor
Michigan Dept. Natural Resources
505 W. Main Street
Northville, MI 48167

To Whom It May Concern:

Subject: Civil Action 80-73699 Consent Decree

Pursuant to Section IX and V.B.2 of the referenced Consent Decree, provided herewith are the numerical results of groundwater samples taken in December, 1989 from the three newer wells on the site.

Very truly yours,

H. Dale Roush
Manager
Quality & Ecology Services

mh
enc.

1609 Biddle Avenue, Wyandotte, Michigan 48192 (313) 246-6100

CIVIL ACTION 80-73699 - CONSENT DECREE

ANALYTICAL RESULTS FOR SAMPLES TAKEN

DECEMBER, 1989

		Concentration (ppb)				
Well No.	Elv. Feet	Benzo(A) Pyrene	Naphthalene	Penta Chlorophenol	Hg	As
K	574.78	-	ND	ND	580	100
L	575.71	ND	ND	-	ND	ND
M	Dry	-	-	-	-	-

Elevation of the Trenton Channel: 573.53 ft.

BASF Corporation
Chemicals Division

— Compliance File

BASF

MI
WI

CERTIFIED MAIL - RETURN RECEIPT
REQUESTED P 164 348 697

O: WMD
CC: RF

December 20, 1989

Mr. Valdas V. Adamkus
USEPA Region V
Region V Administrator
230 S. Dearborn Street
Chicago, IL 60604

MID 064 197 742

Re: Exception Report 40 CFR § 262.42

Dear Mr. Adamkus:

On October 7, 1989, 2,000 gallons of nonhazardous alkaline liquid, regulated by the State of Michigan under Act 136 with waste number 002L, was transported by American Industrial Marine Service for disposal at the E. I. DuPont, Deepwater, New Jersey facility. The shipment was manifested on Michigan manifest MI 01799600.

On November 8, 1989 I contacted Ms. Barbara Boggs at the E. I. DuPont facility to check on the status of manifest MI 01799600. Ms. Boggs informed me the shipment had been received on October 9, 1989 with the Bill of Lading but no manifest was entered into their system. To verify the receipt and disposition of the shipment Ms. Boggs sent me a signed copy of the Scale Ticket and Bill of Lading.

Enclosed is a copy of the Scale Ticket and Bill of Lading. The transporters signature is located on the bottom line of the Bill of Lading with the TSD facility operator signature adjacent to the shipment description. In addition, the manifest MI 1799600 is referenced on the Bill of Lading under the Carrier's No..

Evidently some confusion was encountered by the transporter and disposal facility regarding a nonhazardous shipment of material into the State of New Jersey with a Michigan manifest. As a result the Michigan manifest was voided by the transporter and the shipment was documented on a Bill of Lading.

RECEIVED
JAN 03 1990
RCRA-IMS
U.S. EPA. REGION V

RECEIVED
DEC 28 1989
U.S. EPA REGION V
OFFICE OF REGIONAL ADMINISTRATOR

1609 Biddle Avenue, Wyandotte, Michigan 48192 (313) 246-6100

In summary, the manifest MI 1799600 was not received by BASF Corporation within 45 days although the nonhazardous alkaline waste was received and disposed of by the E. I. DuPont, Deepwater, New Jersey facility by virtue of the Bill of Lading and Scale Ticket documentation. If any further information is required, please contact me at (313) 246-6836.

Sincerely,

Adam C. Bickel

Adam C. Bickel
Waste Coordinator

acb
enc.

cc: State of Michigan DNR
Waste Management Division
505 W. Main Street
Northville, MI 48167

RECEIVED
JAN 03 1990
RCRA-IMS
U.S. EPA, REGION V

382156

RECEIVED 11/13/89 AEB

DATE 10-9-89

CARRIER AMIN

COMMODITY WASTE

PURCHASE ORDER NO.

RECEIVING REPORT NO.

REMARKS: OW - 093
Rel - 070

WEIGHT

60500 LB GROSS

38820 LB TARE

21680 NET

TRUCK NO.

TRACTOR NO. 29

TRAILER NO. 120

E. I. DU PONT DE NEMOURS & CO. (INC.)
CHAMBERS WORKS

This Shipping Order must be legibly filled in, in ink, in Indelible Pencil, or in Carbon, and retained by the Agent.

Shipper's No. XNJDep1034

American Industrial Marine
(Name of Carrier)

Carrier's No. X MT/1799600

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of the Bill of Lading,

at 19 From

the property described below, in apparent good order, except as noted (contents and conditions of contents of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Official, Southern, Western and Illinois Freight Classification in effect on the date thereof, if this is a rail or rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor carrier shipment.

Shipper hereby certifies that he is familiar with all the terms and conditions of the said bill of lading, including those on the back thereof, set forth in the classification or tariff which governs the transportation of this shipment, and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

Consigned to E.I. DuPont Chambers Works
(Mail or street address at consignee—For purposes of notification only.)

Destination Deepwater State NJ Zip County Delivery Address ★ same

★To be filled in only when shipper desires and governing tariffs provide for delivery thereof.)

Route

Delivering Carrier American Industrial Marine Car or Vehicle Initials A29 No. A120

No. Packages	Kind of Package, Description of Articles, Special Marks and Exceptions	*WEIGHT (Subject to Correction)	Class or Rate	Check Column
1	Non-hazardous non-regulated tanker appx gal, 2000 PH10 Release # OWO-093-070 Seal #s OWD-385373 # OWD-385375	NJDEPS 10340		

Subject to Section 7 of Conditions of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

(Signature of Consignor)

If charges are to be prepaid, write or stamp here; "To be Prepaid."

Received $ to apply in prepayment of the charges on the property described hereon.

Agent or Cashier

Per (The signature here acknowledges only the amount prepaid.)

Charges Advanced:

$ JAN 03 1990

†Shipper's imprint in lieu of stamp; not a part of Bill of Lading approved by the Interstate Commerce Commission.

RECEIVED
RCRA-IMS
EPA, REGION V

*If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is carrier's or shipper's weight.

—Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.

The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding per

†The fi[illegible]xes used for this sh[illegible]ment conform to the specifications set forth in the box maker's certificate thereon, and all other requirements of the Consolidated Freight Classification.

American Industrial Marine Shipper, Per [signature] agent for AIMS 10-3-89

Agent must detach and retain this Shipping Order and must sign the Original Bill of Lading.

Permanent post-office address of shipper,

2

1983 PRINTED IN U.S.A.
VilsonJones

RECEIVED
NCIRA-MS
U.S. EPA, REGION V

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

STATE OF MICHIGAN

JAMES J. BLANCHARD, Governor

DEPARTMENT OF NATURAL RESOURCES

DAVID F. HALES, Director

S.E. MICHIGAN FIELD OFFICE
Waste Management Division
505 W. Main
Northville, MI 48167

BASF North Works Wyandotte

out of compl
CB

March 14, 1989

H. Dale Roush
BASF Corp. - Chemicals Div.
1609 Biddle Ave.
Wyandotte, MI 48192

RE: MID 064197742

Dear Mr. Roush,

On March 9, 1989, an inspection was conducted at your facility located at 1609 Biddle Ave., Wyandotte, MI. The purpose of the inspection was to evaluate compliance of that facility with the requirements of Subtitle C of the Resource Conservation and Recovery Act (RCRA) of 1976, as amended; Michigan's Hazardous Waste Management Act, Act 64 of 1979, as amended; Michigan's Liquid Industrial Waste Hauling Act, Act 136, P.A. 1969, as amended; and Land Disposal Restriction requirements of Subtitle C of the Resource Conservation and Recovery Act (RCRA) of 1976, as amended.

As a result of that inspection, it has been determined that your facility is in violation of the following requirement(s):

1. Copies of notifications are not being maintained for all shipments of restricted hazardous wastes as required by 40 CFR 268.7(a)(5).

2. The waste analysis plan must be updated to cover Part 268 requirements.

3. The Vitamin E filter drop accumulation box must be labeled with the words "Hazardous Waste" and the hazardous waste code as required by Act 64, R299.9306(1)(b)(c) (because this accumulation is greater than the equivalent of 55 gallons, it is not a satellite accumulation).

RCRA LAND DISPOSAL RESTRICTION INSPECTION

Facility: MID 064 197 742

U.S. EPA I.D. No.: BASF Corp. - Chemicals Division

Street: 1609 Biddle Ave.

City: Wyandotte State: MI Zip Code: 48192

Telephone: 313-246-6429

Operator: same

Street:

City: State: Zip Code:

Telephone:

Owner: BASF AG

Street:

City: State: Zip Code:

Telephone:

Inspection Date: 3/9/89 Time: 930 - 510 Weather Conditions:

	Name	Affiliation	Telephone
Inspectors:	Daria Devantier	DNR-WMD	344-4670
	Don Mbamah	"	"

Facility Representatives: Lyman Anderson, Douglas Thiel, Adam Bickel

	RCRA Status	F-Solvent	LDR Status California List	First Third
Generator		✓	✓	
Transporter				
Treater				
Storer		✓	✓	
Disposer				

Revised 9-26-88

BASF Chem. Div
3/9/89

GEN

RCRA LAND DISPOSAL RESTRICTION INSPECTION

GENERATOR CHECKLIST

GENERATOR REQUIREMENTS

A. <u>BDAT Treatability Group - Treatment Standards Identification</u>

1. F-Solvent Wastes: Does the generator correctly determine the appropriate treatability group of the waste?

   ✓ Yes ____ No ____ NA

   If yes, check the appropriate treatability group.

   ____ Wastewaters containing solvents (less than or equal to 1% TOC by weight)
   ____ Pharmaceutical wastewater containing spent methylene chloride
   ✓ All other spent solvent wastes

2. California List Wastes: Does the generator correctly determine the appropriate treatment standard of the waste?

   a. For liquid hazardous waste that contains PCBs at concentrations greater than or equal to 50 but less 500 ppm, is the treatment in accordance with existing TSCA thermal treatment regulations for burning in high efficiency boilers (40 CFR 761.60) or incineration (40 CFR 761.70)?

      ____ Yes ____ No ✓ NA

      If yes, specify the method: _____

   b. For liquid hazardous waste that contains PCBs at concentrations greater than or equal to 500 ppm, is the waste incinerated or disposed of by other approved alternate methods (40 CFR 761. 60 (e))?

      ____ Yes ____ No ✓ NA

      If yes, specify the method and state whether the facility has submitted a written request to the Regional Administrator or Assistant Administrator for an exemption from the incineration requirement:

      _____
      _____
      _____

3. First Third Wastes: Does the generator correctly determine the appropriate treatability group of the waste?

✓ Yes ____ No ____ NA

If yes, check the appropriate treatability group.

____ Wastewater (less than 1% TOC by weight and less than 1% filterable solids)
✓ Nonwastewaters

List the waste code and check the correct treatment standard group.

Waste Code	Wastewater	Nonwastewater
U221		✓
U223		✓

B. Waste Analysis

1. F-Solvent Wastes

a. Does the generator determine whether the F-solvent waste exceeds treatment standards?

✓ Yes ____ No ____ NA

How was this determination made?

- Knowledge of waste

✓ Yes ____ No

If yes, is any supporting data available for review? Describe how this is adequate. analyses, MSDS

- TCLP

____ Yes ____ No

If yes, provide the date of last test, the frequency of testing, and note any problems. Attach test results.

b. Does the F-solvent waste exceed applicable treatability group treatment standards upon generation [268.7(a)(2)]?

✓ Yes ____ No ____ NA

If yes, specify the waste stream: numerous F-series

c. Does the generator dilute the F-solvent waste as a substitute for adequate treatment [268.3]?

____ Yes ✓ No ____ NA

d. How does the generator test F-solvent waste when a process or waste stream changes?

_____

_____

_____

2. California List Wastes

a. Does the generator determine whether the waste is a liquid according to the Paint Filter Liquids Test (PFLT method 9095) as described by SW-846?

✓ Yes ____ No ____ NA

b. If the waste is determined to be a liquid according to PFLT, is an absorbent added to the waste?

____ Yes ✓ No ____ NA

What type of absorbent is used? _____

Check the types of waste to which absorbent is added.

____ Liquid hazardous waste having a pH less than or equal to 2

____ Liquid hazardous waste containing metals

____ Liquid hazardous waste containing free cyanides

c. Does the generator determine whether the concentration levels (not extract or filtrate) in the waste equal or exceed the prohibition levels or whether the waste has a pH of less than or equal to 2.0 based on:

- Knowledge of wastes

✓ Yes ____ No ____ NA

If yes, is any supporting data available for review? Describe how this is adequate. analysis

- Testing

____ Yes ____ No ____ NA

If yes, list test method used: _____

d. Does the generator determine if concentration levels in the PFLT filtrate exceed cyanide and metals concentration levels?

____ Yes ____ No ✓ NA

- If yes, list test method used and constituent and concentration levels that exceeded prohibition levels: _____

e. Does the generator dilute the waste as a substitute for adequate treatment [268.3]?

____ Yes ✓ No ____ NA

3. First Third Wastes:

a. Does the generator correctly determine the appropriate treatment standard of the waste?

✓ Yes ____ No ____ NA

Note: The treatment standards for first third wastes are given in Appendix D.

b. Does the generator determine whether the First Third waste exceeds treatment standards upon generation?

✓ Yes ____ No ____ Soft hammer

If yes, specify the waste stream: U221, U223

How was this determination made?

- Knowledge of waste

✓ Yes ____ No

If yes, is any supporting data available for review? Describe how this is adequate. listed

- TCLP

____ Yes ____ No ____ NA

- Total Constituent Analysis

____ Yes ____ No ____ NA

Provide the date of last test, the frequency of testing, and note any problems. Attach test results.

_____

_____

c. Does the generator dilute the waste as a substitute for adequate treatment [268.3]?

____ Yes ✓ No ____ NA

d. How does the generator test the waste when a process or waste stream changes?

N/A

_____

_____

C. Management

1. On-Site Management

Is restrict waste or waste that exceeds the treatment standards treated, stored, or disposed on-site?

✓ Yes ____ No

If yes, the TSD Checklist must be completed.

2. Off-Site Management

a. Does the generator ship any waste that exceeds the treatment standards to an off-site treatment or storage facility?

✓ Yes ____ No

b. Does the generator provide notification to the treatment or storage facility [268.7(a)(1)]?

✓ Yes ____ No

c. Does notification contain the following?

EPA Hazardous waste number(s)	✓ Yes	____ No
Applicable treatment standards	✓ Yes	____ No
Manifest number	✓ Yes	____ No
Waste analysis data, if available	____ Yes	____ No

Identify off-site treatment or storage facilities: _____

d. Does the generator ship any waste that meets the treatment standards to an off-site disposal facility?

____ Yes ✓ No

e. Does the generator provide notification and certification to the disposal facility [268.7(a)(2)]?

✓ Yes ____ No

f. Does notification contain the following?

EPA Hazardous waste number(s)	✓ Yes	____ No
Applicable treatment standards	✓ Yes	____ No
Manifest number	✓ Yes	____ No
Waste analysis data, if available	____ Yes	____ No
Certification that the waste meets treatment standards	____ Yes	✓ No

Identify off-site land disposal facilities: first 1/3 wastes went to incineration solidtek

g. Is the waste subject to a nationwide variance, case by case extension (268.5), or petition (268.6)?

____ Yes ✓ No ____ NA

h. If yes, does the generator provide notification to the off-site receiving facility that the waste is not prohibited from land disposal [268.7(a)(3)]?

____ Yes ____ No

i. If yes, does the notification contain the following information?

EPA Hazardous waste number	____ Yes	____ No
The corresponding treatment standards and all applicable prohibitions	____ Yes	____ No
Manifest number	____ Yes	____ No
Waste analysis data, if available	____ Yes	____ No
Date the waste is subject to the prohibitions	____ Yes	____ No

j. Does the generator retain copies of all notices and certifications for a period of 5 years?

____ Yes ✓ No

D. <u>Demonstration and Certification -- "Soft Hammer" Wastes</u>

a. Has the generator attempted to locate and contract with treatment and recovery facilities that provide treatment that yields the greatest environmental benefit [268.8(a)(1)]?

went for incineration ✓ Yes ____ No

b. Has the generator submitted to the Regional Adminstration a demonstration and certification containing the following information to document its efforts to locate practically available treatment:

A list of facilities and facility officials contacted?	✓ Yes	____ No
Addresses	✓ Yes	____ No
Telephone Numbers	✓ Yes	____ No
Contact dates	✓ Yes	____ No

Attach a copy of the demonstration and certification example attached

c. If the generator has determined that there is no practically available treatment for its wastes, has it sent documentation to EPA demonstrating why it was not able to obtain treatment or recovery for the waste?

____ Yes ____ No NA

If yes, attach a copy of written discussion.

d. Does the generator ship his waste off-site for treatment?

✓ Yes ____ No

Describe the type of treatment and treatment facilities incineration

e. Did the generator send a copy of its demonstration and certification to the receiving facility with the first shipment of waste?

✓ Yes ____ No

f. Does the generator provide certification with each subsequent shipment of wastes?

✓ Yes ____ No

g. Does the generator provide the following notification to the receiving facility with each shipment of waste?

(i) EPA Hazardous waste number ✓ Yes ____ No

(ii) Manifest number ✓ Yes ____ No

(iii) Waste analysis data, if available ✓ Yes ____ No

h. Does the generator retain copies of all notices, demonstrations, and certifications for a period of 5 years?

✓ Yes ____ No

E. <u>Treatment Using RCRA 264/265 Exempt Units or Processes</u>
(i.e., boilers, furnaces, distillation units, wastewater treatment tanks, elementary neutralization, etc.)

Are treatment residuals generated from units or processes exempt under RCRA 264/265?

____ Yes ✓ No

If yes, list types of waste treatment units and processes:

BASF - Chem. Div.
3/9/89

TSD

RCRA LAND DISPOSAL RESTRICTION INSPECTION

TSD CHECKLIST

TSD REQUIREMENTS

A. General Facility Standards

1. Does the waste analysis plan cover Part 268 requirements [264.13 or 265.13]?

o F-solvent	____ Yes	____ No	____ NA
o California List	____ Yes	____ No	____ NA
o First Third	____ Yes	____ No	____ NA

2. Does the facility obtain representative chemical and physical analyses of wastes and residues?

✓ Yes ____ No

a. What date was the waste analysis plan last revised? all waste streams (routine) were evaluated last year ('88) in spring

b. Are analyses conducted on-site or off-site?

✓ On-site ✓ Off-site

Identify off-site lab: Clayton, Burmah

c. Is F-solvent waste analyzed using TCLP?

____ Yes ✓ No ____ NA

d. Is First Third waste analyzed using the analytical method that is appropriate for the objective of the specified BDAT (i.e., total constituent analysis for destruction technologies and TCLP for stabilization/fixation technologies)?

____ Yes ____ No ✓ NA

Note: The appropriate analytical methods (TCLP or total constituent) for first third wastes with specified treatment standards are given in Appendix D.

e. Describe the frequency of sampling: used knowledge

3. Are the operating records, including analyses and quantities, complete [264.73/265.73]?

✓ Yes ____ No

B. Storage (268.50)

1. Are restricted wastes stored on-site?

✓ Yes ____ No

If no, go to C, Treatment.

2. If yes, check the appropriate method.

____ Tanks
✓ Containers

3. Are all containers clearly marked to identify the contents and date(s) entering storage?

✓ Yes ____ No ____ NA

4. Do operating records track the location, quantity of the wastes, and dates that the wastes enter and leave storage?

✓ Yes ____ No

5. Do operating records agree with container labeling?

✓ Yes ____ No ____ NA

6. Do operating records contain copies of the notice, certification, and demonstration (if applicable) from the generator for the past 5 years?

✓ Yes ____ No

7. Have wastes been stored for more than 1 year since the applicable LDR regulations went into effect?

____ Yes ✓ No ____ NA

If yes, can the facility show that such accumulation is necessary to facilitate proper recovery, treatment, or disposal?

____ Yes ____ No

If yes, state how: _____

8. Have tanks been emptied at least once per year since the applicable LDR regulations went into effect?

____ Yes ____ No ✓ NA

If yes, do the operating records show that the volume of waste removed from tanks annually equals or is more than the tank volume?

____ Yes ____ No

9. Are all tanks clearly marked with a description of the contents, the quantity of wastes received, and date(s) entering storage, or is such information recorded and maintained in the operating record?

____ Yes ____ No ✓ NA

_____

C. <u>Treatment</u>

1. Does the facility treat restricted wastes other than in surface impoundments?

____ Yes ____ No

If no, go to D, Treatment in Surface Impoundments.

2. Describe the treatment processes:

_____

_____

_____

3. Does the facility, in accordance with an acceptable waste analysis plan, determine whether the residue or residue extract (for treatment standards expressed as concentrations in the waste extract) from all treatment processes is less than treatment standards [268.7(b)]?

____ Yes ____ No

4. Is dilution used as a substitute for treatment?

____ Yes ____ No

6. Are notifications, demonstration, and certification (if applicable) prepared by the generators kept in the facility's operating record?

____ Yes ____ No

7. Does the facility ship any waste or treatment residue that meets the treatment standards to an off-site disposal facility?

____ Yes ____ No ____ NA

If yes, does the treatment facility provide notification and certification to the disposal facility?

____ Yes ____ No

If yes, does notification contain the following?

EPA Hazardous waste number(s)	____ Yes	____ No
Applicable treatment standards	____ Yes	____ No
Manifest number	____ Yes	____ No
Waste analysis data, if available	____ Yes	____ No
Certification that the waste meets the treatment standards	____ Yes	____ No

Identify off-site disposal facilities: _____

_____

_____

8. Does the facility ship any "soft hammer" waste to an off-site disposal facility?

_____ Yes _____ No _____ NA

If yes, does the treatment facility send a copy of the generator's demonstration (if applicable) and certification to the disposal facility?

_____ Yes _____ No

D. Treatment in Surface Impoundments

1. Are restricted wastes placed in surface impoundments for treatment?

_____ Yes _____ No

If no, go to E, Land Disposal.

2. If yes, did the facility submit to the Agency the waste analysis plan and certification of compliance with minimum technology and ground-water monitoring requirements?

_____ Yes _____ No

3. If the minimum technology requirements have not been met, has a waiver been granted for that unit?

_____ Yes _____ No _____ NA

4. Are representative samples of the sludge and supernatant from the surface impoundment tested separately, acceptably, and in accordance with the sampling frequency and analysis specified in the waste analysis plan?

_____ Yes _____ No

Attach test results.

5. Do the hazardous waste residues (sludges or liquids) exceed the treatment standards specified in 268.41, or where no treatment standards are established for a waste, the applicable prohibition levels?

_____ Yes _____ No

6. Provide the frequency of analyses conducted on treatment residues: _____

_____

_____

7. Does the operating record adequately document the results of waste analyses performed in accordance with 268.41?

_____ Yes _____ No

8. Do the hazardous waste residues exceed the treatment standards (268.41) or do not meet the prohibition levels?

Sludge _____ Yes _____ No

Supernatant _____ Yes _____ No

a. If yes, are sludge and supernatant removed adequately on an annual basis?

_____ Yes _____ No

b. Are adequate precautions taken to protect liners, and do records indicate that liner integrity is inspected?

_____ Yes _____ No

c. Are residues subsequently managed in another surface impoundment?

_____ Yes _____ No

d. Are residues treated prior to disposal?

_____ Yes _____ No

If yes, are waste residues treated on-site or off-site?

_____ On-site _____ Off-site

Identify treatment method: _____

_____

_____

E. Land Disposal

1. Are restricted wastes placed in land disposal units such as landfills, surface impoundments, waste piles, wells, land treatment units, salt domes/beds, mines/caves, or concrete vault or bunker?

____ Yes ____ No

Note: Do not include surface impoundments addressed in D, Treatment in Surface Impoundments.

If yes, specify which units and what wastes each unit has received: _____

_____

2. Are these wastes disposed of in a new, replacement, or laterally expanded landfill or impoundment that meets the minimum technology requirements (double liner and leachate collection) and groundwater monitoring?

____ Yes ____ No

3. Does the facility operating record have notices, certifications, and demonstration (if applicable) from generators/storer/treaters for 5 years [268.7(c); 268.7(a),(b)]?

____ Yes ____ No

4. Does the facility obtain waste analysis data or test the wastes (according to the waste analysis plan) to determine that the wastes comply with the applicable treatment standards [268.7(c)]?

____ Yes ____ No

If yes, at what frequency? _____

_____

5. If restricted wastes that exceed the treatment standards are placed in land disposal units (excluding national capacity variances) [268.30(a)], does facility have an approved waiver based on no migration petition [268.6], an approved case-by-case capacity extension [268.5], or variance [268.44]?

____ Yes ____ No

6. Does the facility dispose of restricted wastes that are subject to a national capacity variance?

____ Yes ____ No

7. Does the facility have notices [268.7(a)(3)] and records of disposal for disposed wastes that are subject to a national capacity variance, case-by-case extensions [268.5], or no migration petitions [268.6]?

____ Yes ____ No ____ NA

8. What is the volume of the restricted wastes disposed of to date?

_____

_____

9. If the facility has a case-by-case extension, is the facility making progress as described in progress reports?

____ Yes ____ No ____ NA

10/14/88

BASF Corporation
Chemicals Division

BASF

October 12, 1988

Mr. Valdas V. Adamkus
Region V Administrator
230 S. Dearborn Street
Chicago, IL 60604

Subject: Soft Hammer Demonstration and Certification Documents

Dear Mr. Adamkus:

Enclosed you will find the required "Soft Hammer" demonstration and certification forms.

If any further information is required please contact me at (313) 246-6429.

Sincerely,

Lyman A. Anderson
Ecology Supervisor

enclosure

cc: State of Michigan DNR
Waste Management Division
505 W. Main Street
Northville, MI 48167

1609 Biddle Avenue, Wyandotte, Michigan 48192 (313) 246-6100

From: BASF Chemical Corporation
EPA ID# MTD064197742
1609 Biddle Ave
Wyandotte, MI 48192

To: Regional Administrator U.S. E.P.A.
Mr. Valdas V. Adamkus
Region V U.S. E.P.A.
230 S. Dearborn Street
Chicago, IL 60604

Re: Soft Hammer Demonstration/Certification

In accordance with the Environmental Protection Agency's land disposal restrictions governing the first third schedule wastes, I have enclosed a soft hammer demonstration and certification as per CFR 168.8(a)(2) for the waste stream described by:

US EPA Hazardous Waste Code(s): U223

SolidTek profile number: 0127 - 36

Common Name: Toluene Diisocyanate

The demonstration reflects our efforts to locate practically available treatment that affords the greatest environmental benefit. Based on our search for such treatment, we have determined that (check one):

____ 1). No practically available treatment exists, See attached demonstration, attachments 2 and 3, for further details.

X 2). The best practically available treatment is: D (insert the treatment numbers(s) from the attachment 4). See the attached demonstration, attachments 2,3, and 4 for further details.

If any further information is required, please contact me at:

(313) 246 - 6429 (telephone number).

Lyman A Anderson (Signature)

Lyman A Anderson (Type or Printed Name)

Ecology Supervisor (Title)

10/12/88 (Date)

Attachment 1

SOFT BARRIER DEMONSTRATION

	FACILITY OWNER/OPERATOR	LOCATION	TREATMENT METHOD	TELEPHONE	CONTACT	DATE	EXPLANATION *
1.	SolidTek Systems, Inc. 5371 Cook Road Morrow, GA 30260		Fuels Blending and Incineration	(419) 874-8144	Jeff Huskisson	10/12/88	D
2.							
3.							
4.							

* - EXPLANATION - for no available treatment - insert the number key from Attachment 3.

for available treatment - insert the letter key from Attachment 4.

ATTACHMENT 3

FIRST THIRD "SOFT-HAMMER" DEMONSTRATION
No Available Practical Alternative to Land Disposal

Explanation Of Why No Treatment Is Practically Available

I have not been able to locate practically available treatment or recovery for the waste described in the cover letter because, (refer to checked items, and any additional comments):

(1) _____ No recovery facilities have been located which will be able to recover the hazardous constituents of this waste.

(2) _____ There is no safe and legal treatment or recovery operation which I can perform practically at my site that will appreciably reduce the toxicity or mobility of the hazardous constituents of the waste.

(3) _____ I have not been treating this waste at my site in the past, using a treatment technology which has been found to appreciably reduce the toxicity or mobility or mobility of the hazardous constituents of the waste.

(4) _____ Stabilization treatment will not appreciably reduce the toxicity or mobility of the hazardous constituents of this waste.

(5) _____ Incineration, thermal oxidation or other destruction technologies will not appreciably reduce the toxicity or mobility of the hazardous constituents of the waste.

(6) _____ I have examined the possibilities of recovery/recycling, incineration, other destruction technologies, and stabilization, in that order or preference, I have not been able to locate any such treatment facilities that will accept this waste.

(7) _____ The cost of treatment, shipment and disposal at the treatment/recovery facilities that have been located is greater than or equal to twice the cost of shipment and disposal at the RCRA landfill.

Additional Comments:

(8) ____

ATTACHMENT 4

FIRST THIRD "SOFT-HAMMER DEMONSTRATION

Soft-Hammer Waste For Which Alternative Treatment or Recovery Has Been Located

A — Rotary Kiln Incineration is a practically available technology that yields the greatest environmental benefit. This waste is principally organic residues which are best destroyed by incineration.

B — Liquid Injection Incineration is a practically available technology that yields the greatest environmental benefit. This waste is principally pumpable organic residues which are best destroyed by incineration.

C — Fuels Blending is a practically available technology that yields the greatest environmental benefit. This waste has a heating value greater than or equal to 5,000 BTU per pound and can be best reused as a hazardous waste fuel.

D — A combination of Fuels Blending, and/or Rotary Kiln or Liquid Injection is a practically available technology that yields the greatest environmental benefit. This is due to the properties of my waste which may vary slightly, from one load to the next. Solid nondispersible residues will need to be incinerated; but the pumpable or dispersible portions may be blended for hazardous waste fuels usage (when the BTU's, chlorine, ash, etc. are within the required ranges); or else incinerated.

E — Chemical Precipitation (with filtration or decanting) is a practically available technology that yields the greatest environmental benefit. This should reduce the toxicity/mobility of the hazardous constituents by reducing the toxic volume of the waste.

F — Filtration is a practically available technology that yields the greatest environmental benefit. This should reduce the toxicity/mobility of the hazardous constituents by reducing the toxic volumes of the waste.

G — Stabilization is a practically available technology that yields the greatest environmental benefit. Stabilization will reduce the mobility of the hazardous constituents of the waste. I have examined recovery and destruction technologies and found that they were not practically available for the following reason(s):

H — Chemical oxidation is a practically available technology that yields the greatest environmental benefit. Chemical oxidation will reduce the toxicity of hazardous constituents in the waste.

This waste is not suitable for incineration or fuels due to:

I — the low percentage of hazardous organic constitutents presents,
J — the low heating value of the waste,
K — the high percentage of inorganic constituents present,
L — the lack of located available capacity of incineration or fuels blending facilities.

This waste is not suitable for recovery due to:

M — The hazardous constituents are present in concentations that make recovery technologically impossible.
N — The hazardous constituents are present in concentrations that make recovery economically infeasible.
O — No recovery facilities were located that could treat this type of waste.
P — No recovery facilities were located that had capacity to treat this type of waste.

Q — The treatment technology identified above is a past practice that has been demonstrated to meaningfully reduce the toxicity and/or mobility of the waste.

Additional Comments:

"SOFT-HAMMER WASTES RESTRICTED AS OF AUGUST 8, 1988
LAND DISPOSAL RESTRICTION NOTIFICATION AND CERTIFICATION FORM
FIRST-THIRD WASTES FOR WHICH NO TREATMENT STANDARDS HAVE BEEN SET

Generator Name: BASF Corp. SolidTek Profile Number: 0127-02

EPA ID Number: MID064197742 Manifest Number: 12835

This form is submitted to SolidTek Systems, Inc., in accordance with 40 CFR Part 268, which restricts the land disposal of certain hazardous wastes. I have marked the appropriate box below to indicate whether alternative treatment has been found for my waste. (See reverse side for the list of "soft-hammer" wastes and instructions for using this form.)

[X] A. SOFT-HAMMER WASTE FOR WHICH ALTERNATIVE TREATMENT OR RECOVERY HAS BEEN LOCATED

The soft-hammer waste(s) I generate is (are) Toluene Diisocyanate (U223). I have identified a practically available treatment technology that is the most environmentally beneficial while still meeting the criteria for being practical. Accompanying the initial shipment of waste represented by this form, I submitted a demonstration in accordance with 40 CFR 268.8 (a) (1), including a list of facilities and facility officials contacted, complete with addresses, telephone numbers, and contact dates, and a justification that I have chosen the best treatment that is practically available.

"I certify under the penalty of law that the requirements of 40 CFR 268.8 (a) (1) have been met and that I have contracted to treat my waste (or will otherwise provide treatment) by the practically available technology which yields the greatest environmental benefit, as indicated in my demonstration. I believe that the information submitted is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

[ ] B. SOFT-HAMMER WASTE FOR WHICH DISPOSAL IN LANDFILL OR SURFACE IMPOUNDMENT IS THE ONLY PRACTICAL ALTERNATIVE TO TREATMENT CURRENTLY AVAILABLE

The soft-hammer waste(s) I generate or have treated is (are)_____. I have made a good-faith effort to locate and contract with treatment and/or recovery facilities currently available which can meaningfully reduce the toxicity or mobility of hazardous constituents in the waste, as an alternative to land disposal. I have found no such alternative facility. Accompanying the initial shipment of waste represented by this form, I submitted a demonstration in accordance with 40 CFR 268.8 (a) (2), including a list of facilities and facility officials contacted, addresses, telephone numbers, contact dates and an explanation of why no treatment is practically available. This soft-hammer waste must be disposed of in landfill or available impoundment meeting the minimum technological requirements until treatment standards are set for the waste or May 8, 1990 whichever occurs first.

"I certify under penalty of law that the requirements of 40 CFR 268.8 (a) (1) have been met and that disposal in a landfill or surface impoundment is the only practical alternative to treatment currently available. I believe that the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false informations, including the possibility of fine and imprisonment."

[ ] C. SOFT-HAMMER WASTE HAS BEEN TREATED BY TREATMENT OR RECOVERY FACILITY

The following waste(s) has been treated in accordance with the generator's demonstration:_____.

"I certify under the penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been maintained properly so as to comply with treatment as specified in the generator's demonstration. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

[ ] D. SOFT-HAMMER WASTE DESTINED FOR LAND DISPOSAL OTHER THAN IN LANDFILL OR SURFACE IMPOUNDMENT (e.g. DEEP INJECTION WELL) OR SUBJECT TO A TWO YEAR VARIANCE

The soft-hammer waste(s) I generate is (are)_____. This waste is being disposed of in a land disposal unit other than a landfill or surface impoundment and therefore is not subject to the certification and demonstration requirements of Section "B".

I hereby certify that all information submitted in this and all associated documents is complete and accurate to the best of my knowledge and information.

Lyman A. Anderson — Ecology Supervisor — 10/12/88

Signature — Title — Date

BASF Corporation
Chemicals Division

BASF

O: WMD
CC: RF

October 25, 1988

NOV 2 1 1988
U.S. SWB - RMS V

Regional Administrator
USEPA, Region V
230 South Dearborn Street
Chicago, Illinois 60604

SUBJECT: EXCEPTION REPORT 242.42 40CFR

Dear Sir:

Attached is a copy of Manifest AR278556 for a waste shipment to ENSCO, El Dorado, Arkansas.

Attached also is a copy of a letter from ENSCO Great Lakes Environmental Services, Inc. explaining why the shipment was delayed.

In addition to the communication problems between the partys, the Manifest was misfiled by Conrail and had to be located.

The problem has finally been resolved and the waste disposed of.

Yours truly,

LA Anderson,
Ecology Supervisor

kmb
att.

cc: Michigan DNR
HDRoush
DThiel

RECEIVED

NOV 0 1 1988

U. S. EPA REGION 5
OFFICE OF REGIONAL ADMINISTRATOR

1609 Biddle Avenue, Wyandotte, Michigan 48192 (313) 246-6100

22077 Mound Rd., P.O. Box 1208, Warren, MI 48[illegible]-1208 • (313) 758-0400 • MI 1-800-482-4484 [illegible].S. 1-800-482-4482 • Telex 211894 DOSS UR

ensco
great lakes
environmental
services, inc.
a subsidiary of
environmental systems company

October 17, 1988

Mr. Lyman Anderson
BASF Chemical Co.
1609 Biddle
Wyandotte, MI 48192

Re: Dimethylformamide shipment to ENSCO

Dear Mr. Anderson:

Great Lakes Environmental Services, Inc. arranged disposal approval for BASF's DMF/Resin waste at ENSCO in El Dorado, Arkansas.

As a cost saving measure, BASF Wyandotte arranged through Corporate Headquarters to transport the waste utilizing Conrail. Conrail routed the shipment through three other lines concluding with Union Pacific in El Dorado, Arkansas. The shipment arrived in Arkansas without problems until it was time for Union Pacific to switch the rail car onto ENSCO's railspur. The proceeding events are outlined as follows:

I. Union Pacific notified ENSCO that the shipment couldn't be switched until BASF paid their bill (suggesting a $9.00 per mile charge while on Union Pacific's line).

II. ENSCO notified Great Lakes Environmental Services, Inc., and in-turn Great Lakes Environmental Services, Inc. notified BASF, who contacted Conrail. Conrail's employee in charge of hazardous waste shipments notified Great Lakes Environmental Services, Inc. and BASF that Union Pacific surcharges customers a penalty fee of $9.00 per mile on waste shipments.

III. BASF Corporate and Conrail were to negotiate these charges with Union Pacific. Then Union Pacific would release the rail car to ENSCO for incineration.

IV. A few weeks passed and ENSCO informed Great Lakes Environmental Services, Inc. that the rail car was still held by Union Pacific. Great Lakes Environmental Services, Inc. notified BASF Wyandotte, and BASF Wyandotte informed BASF Corporate of the situation. BASF Corporate informed us that the bill was negotiated and the car should have been released already, and they would contact Conrail to get the situation straightened out.

V. After two more weeks passed, ENSCO contacted Great Lakes Environmental Services, Inc. informing us that Union Pacific still had not released the car because of billing problems. Finally, we contacted Union Pacific directly to solve this problem. We discovered that through a clerical error, the bill of lading did not include the statement the shipment was prepaid and not C.O.D. A new bill of lading completed by BASF was sent to Conrail for delivery to Union Pacific and release of the tanker.

VI. Then a week after the bill of lading was sent, ENSCO notified us that the tanker still was not switched over. Finally, after a few phone calls to BASF and Union Pacific, the shipment was switched over to ENSCO's yard.

As you can see, the problems associated with this shipment were primarily due to the fact there was misconstrued communication between Union Pacific and Conrail, and a minor problem associated with the improper completion of the bill of lading.

I hope that this situation will not hinder any future endeavors between Great Lakes Environmental Services, Inc. and BASF. Should you have further questions pertaining to this or any other issue, please feel free to call.

Sincerely,

GREAT LAKES ENVIRONMENTAL SERVICES, INC.

Frank L. Bacheldor
Environmental Services Coordinator

FLB/jb

STATE OF ARKANSAS
Department of Pollution Control and Ecology
P. O. Box 9583 Little Rock, Arkansas 72219
Telephone 501-562-7444

6

Please print or type. *(Form designed for use on elite (12-pitch) typewriter.)*

Form Approved. OMB No. 2050-0039. Expires 9-30-88

AR 1-88

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: M ID 06 4 1 9 7 7 4 2 7 — Manifest Document No.: 3 0 7 5

2. Page 1 of

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
[illegible] Chemical
1609 Biddle
Wyandotte, MI 48192-3799

4. Generator's Phone (313) 246-6804

A. State Manifest Document Number: AR- 278556

B. State Generator's ID

5. Transporter 1 Company Name

6. US EPA ID Number

C. State Transporter's ID

D. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
ENSCO, Incorporated
American Oil Road
El Dorado, AR 71730

10. US EPA ID Number: A R D 0 6 9 7 4 8 1 9 2

G. State Facility's ID

H. Facility's Phone: (501) 863-7173

11. US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Waste Combustible Liquid, N.O.S. NA1993, RQ	0 0 1	T C	150000	P	D001
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above a.) #3999
b.) Contains DimethylFormamide
Placarded: Combustible

K. Handling Codes for Wastes Listed Above

if no alternate TSDF, return to generator

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and Arkansas state regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name | Signature | Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name | Signature | Month Day Year

GENERATOR

TRANSPORTER

FACILITY

EPA Form 8700-22 (Rev. 9-86) Previous edition is obsolete.

GENERATOR INITIAL COPY

NATURAL RESOURCES COMMISSION
THOMAS J. ANDERSON
MARLENE J. FLUHARTY
GORDON E. GUYER
JERRY KAMMER
O. STEWART MYERS
DAVID D. OLSON
RAYMOND POUPORE

STATE OF MICHIGAN

JAMES J. BLANCHARD, Governor

DEPARTMENT OF NATURAL RESOURCES

Gordon E. Guyer, Director

S.E. MICHIGAN FIELD OFFICE
Waste Management Division
505 W. Main
Northville, MI 48167

January 28, 1988

BASF Northwoods

H. Dale Roush
BASF Corp. - Chemicals Division
1609 Biddle Avenue
Wyandotte, MI 48192

RE: MID 064197742

Dear Mr. Roush,

On January 20, 1988, an inspection was conducted at your facility located at 1609 Biddle Aven., Wyandotte, MI. The purpose of the inspection was to evaluate compliance of that facility with the requirements of Subtitle C of the Resource Conservation and Recovery Act (RCRA) of 1976, as amended; Michigan's Hazardous Waste Management Act, Act 64 of 1979, as amended; Michigan's Liquid Industrial Waste Hauling Act, Act 136, P.A. of 1969, as amended; and Land Disposal Restriction requirements of Subtitle C of the Resource Conservation and Recovery Act (RCRA) of 1976, as amended.

As a result of that inspection, it has been determined that your facility is in violation of the following requirements:

1. Analyses of waste streams must be repeated as necessary to ensure that it is accurate and up to date as required by 40 CFR 265.13 (a)(3). All routinely generated waste streams at BASF must be re-evaluated. Send analysis results to this office with the waste code designation that BASF will use.

2. Notification is required to accompany any land disposal restricted hazardous wastes going for storage, treatment, or disposal. When BASF re-evaluates all waste streams, attention must be given as to whether or not each stream meets the definition of an F-series solvent or a

California waste. Based on the inspection, notification must accompany BASF's two F002 and two D002 waste streams. Send to this office an example notification form for each stream that BASF will adopt.

3. A contingency plan consistent with the requirements of 40 CFR Part 265 Subpart D has not been prepared. Copies of example plans have been sent. Send to this office a copy of BASF's newly revised and updated contingency plan.

4. A copy of the contingency plan must be sent to local police and fire departments, hospital, and local emergency response teams as required by 40 CFR 265.53.

5. The containment area for the dumpster at the polyol plant was contaminated with the polyol filter cake. This is unacceptable management of a waste that BASF has designated as a hazardous waste. Submit documentation to this office that this area has been cleaned.

6. A financial assurance mechanism for closure and liability insurance as required by Act 64, Part 7, was not available for review during the inspection. Forward this information to this office.

We request your response by February 22, 1988 documenting your corrective actions to these violations.

If you have any questions, please contact me at (313) 344-4670.

Sincerely,

Daria W. Devantier

Daria W. Devantier
Environmental Quality Analyst

Enclosure
DWD:bs
cc: B. Okwumabua
U.S. EPA, Region V

RCRA/ACT 64 INSPECTION REPORT

U.S. EPA I.D. Number MLD064197742
(or Michigan)

FACILITY NAME
(Mailing Address) BASF Corp - Chemicals Division
1609 Biddle Avenue
Wyandotte MICHIGAN 48192
CITY ZIP CODE

DATE 1/20/88 TIME OF INSPECTION (FROM) 9am (TO) 210pm

PERSON(S) INTERVIEWED	TITLE	TELEPHONE
Lyman Anderson	Quality Assurance	246-6429
Dale Roush	Mng-Quality Assurance	

INSPECTOR(S)	AGENCY/TITLE	TELEPHONE
Daria Devantier	DNR-WMD/EQA	344-4670

Primary Business of this Facility:
vitamin E & vitamin A
urethanes, adhesives to come on line

Reason for Inspection:

✓ Routine ____ Follow-up ____ Complaint

Based upon the inspection, this facility: FORM

____ is a non-generator/liquid industrial waste generator A
____ conditionally exempt small quantity generator A
____ small quantity generator A
✓ generator B
____ transporter C
✓ treatment/storage/disposal facility D

also land ban

Date of Last Inspection 12/10/85

BASF Corp
Chemicals Div
1/20/88

INSPECTION FORM D
Part 6 of Rules
P.A. 64 of 1979

TREATMENT, STORAGE, DISPOSAL FACILITY

This Facility:

✓ Generates Hazardous Waste (Also use Generator Appendix)

_____ Treats Hazardous Waste

✓ Stores Hazardous Waste

_____ Disposes of Hazardous Waste

_____ Transports Hazardous Waste (Also use Form C)

This Facility:

_____ Accepts wastes from off-site sources

✓ Handles only its own wastes

If applicable, hazardous waste is stored in the following:

✓ Drums (Containers)

_____ Above-ground tanks

_____ Underground tanks

_____ Waste piles

_____ Lagoons

_____ Other

_____ Not applicable

If applicable, hazardous wastes are treated/disposed in the following:
(Attach appropriate checklist)

_____ Surface Impoundments

_____ Waste piles

_____ Land Treatment

_____ Landfills

_____ Incineration/Thermal Treatment

_____ Chemical, Physical and Biological Treatment

_____ Above-ground tanks

INSPECTION D

_____Underground tanks

_____Drums

_____Other

_____Not applicable

WASTE STREAMS

Hazardous Waste Code/Name	Source	Type of Storage	How Much
waste resin F002	Methylene chloride		
toluene diamin w/absorbent D002	spills		
Zinc Hydroxide filter cake D002	zinc chloride purification process		
chlorinated solvents F002	labs		
polyol filter cake D001 D002 (chem-met)			

Vacuum pump oil - D001

acrylonitrite (a U waste) 009

5% constituent

* re-analysis to be done

* storage areas
- vitamins plant - one roll-off box
- polyol plant - has one roll-off box
  - satellite accumulation of vac. pump oil
- central waste storage - in a building - storage not greater than 90 days

INSPECTION FORM D
Part 6 Rules
P.A. 64 of 1979

HAZARDOUS WASTE TREATMENT, STORAGE AND DISPOSAL FACILITY
Applies to Those Facilities That Do Not Have an Act 64 Permit

General Facility Standards
Rule 601, 40 CFR 265, Subpart B

	Yes	No	N/A	Violation Class
1. If required, have the following been notified:				
a.) Notified Director of receipt of hazardous waste from a foreign source? 265.12(a)			✓	II
b.) Notified Director of change of owner or operator. 40 CFR Part 270. 265.12(b)			✓	II

Comments:

	Yes	No	N/A	Violation Class
2. General Waste Analysis: 265.13				
a.) Has the owner or operator obtained a detailed chemical and physical analysis of the waste? 265.13(a)	✓			I
b.) Does the owner or operator have a detailed waste analysis plan on file at the facility? 265.13(b)		✓		I
c.) Does the waste analysis plan specify procedures for inspection and analysis of each movement of hazardous waste from off-site? 265.13(c)			✓	I

* needs updating ... some analyses not redone for several years

Comments:

INSPECTION FORM D

	Yes	No	N/A	Violation Class
3. Security - If applicable, do security measures include:				
a.) 24-hour surveillance? 265.14(b)(1)				I
or				
b.) i. Artificial or natural barrier around facility? 265.14(b)(2)(i)	✓			I
and				
ii. Controlled entry? 265.14(b)(2)(ii)	✓			I
c.) Danger sign(s) at entrance? 265.14(c)	✓			I

Comments: near storage area

	Yes	No	N/A	Violation Class
4. Owner or operator inspections: 265.15*				
a.) Does the owner or operator inspect the facility for malfunctions, deterioration, operator errors, and discharges of hazardous waste that may affect human health or the environment? 265.15(a)	✓			II
b.) Does the owner or operator have a written inspection schedule at the facility? 265.15(b)(1)	✓			II
c.) If so, does the schedule address the inspection of the following items:				
i. Monitoring equipment? 265.15(b)(1)	✓			II
ii. Safety and emergency equipment?	✓			II
iii. Security devices? 265.15(b)(1)	✓			II
iv. Operating and structural equipment (i.e. dikes, pumps, etc.)? 265.15(b)(1)	✓			II

poly of pond watch checks facility as whole

* These violations are Class II, unless observations of hazardous conditions or violations are noted in the log and not corrected which result in the release or actual harm to the environment or human health; in such instances violations are Class I.

INSPECTION FORM D

	Yes	No	N/A	Violation Class
v. Type of problems to be looked for during the inspection (e.g. leaky fitting, defective pump, etc.)?	✓			II
vi. inspection frequency (based upon the possible deterioration rate of the equipment)? 265.15(b)(4)	✓			II
d.) Are areas subject to spills inspected daily when in use? 265.15(b)(4)	✓			II
e.) Does the owner or operator maintain an inspection log or summary of owner or operator inspections?	✓			II
f.) Does the inspection log contain the following information: 265.15(d)				
i. The date and time of the inspection? 265.15(d)	✓			II
ii. The name of the inspector? 265.15(d)	✓			II
iii. A notation of the observations made? 265.15(d)	✓			II
iv. The date and nature of any repairs or remedial actions? 265.15(d)	✓			II

Comments: basically every employee in plants are trained ... an employee descip. on every employee in personnel records

	Yes	No	N/A	Violation Class
5. Do personnel training records include: 265.16				
a.) Job titles? 265.16(d)(1)	✓			I
b.) Job descriptions? 265(d)(2)	✓			I
c.) Description of training? 265.16(d)(3)	✓			I

INSPECTION FORM D

	Yes	No	N/A	Violation Class
d.) Records of training? 265.16(d)(4)	✓			II
e.) Do new personnel receive required training within six months? 265.16(d)	✓			I
f.) Do personnel training records indicate that personnel have taken part in an annual review of training? 264.16(c)	✓			I

Comments: 6/4/87

6. If required, are the following special requirements for ignitable, reactive, or incompatible wastes addresses? 265.17				I
a.) Special handling? 265.17(a)				I
b.) No smoking signs? 265.17(a)	✓			I
c.) Separation and protection from ignition sources? 265.17(a)	✓			I

Comments:

PREPAREDNESS AND PREVENTION
Rule 606, 40 CFR 265, Subpart C

1. Is there any evidence of fire, explosion, or release of hazardous waste or hazardous waste constituents 40 CFR Rule 265.31		✓		I

Comments:

INSPECTION FORM D

	Yes	No	N/A	Violation Class
2. If required, does this facility have the following equipment: 40 CFR 265.32				
a.) Internal communications or alarm systems. 40 CFR 265.32(a)	✓			I
b.) Telephone or 2-way radios at the scene of operations. 40 CFR 265.32(b)	✓			I
c.) Portable fire extinguishers, fire control, spill control equipment and decontamination equipment. 40 CFR 265.32(c)	✓			I
d.) Indicate the volume of water and/or foam available for fire control.				

Comments: city water, pumps to access river water

	Yes	No	N/A	Violation Class
3. Testing and Maintenance of Emergency Equipment: 265.33				
a.) Has the owner or operator established testing and maintenance procedures for emergency equipment? 265.33	✓			
b.) Is emergency equipment maintained in operable condition? 265.33	✓			
c.) If required, has owner or operator provided immediate access to internal alarms? 40CFR.265.34(a)	✓			
d.) Is there adequate aisle space for unobstructed movement for personnel and emergency equipment. 40 CFR 265.35.	✓			I

INSPECTION FORM D

	Yes	No	N/A	Violation Class
Comments:				
4. Has the owner or operator attempted to make arrangements with local authorities in case of emergencies. 40 CFR 265.37	✓			II

Comments: fire dept has made regular forms - Wyandotte Fire

CONTINGENCY PLAN AND EMERGENCY PROCEDURES
Rule 607, 40 CFR 265 Subpart D.

	Yes	No	N/A	Violation Class
1. Does the contingency plan contain the following information:				
a.) The actions facility personnel must take to comply with 265.51 and 265.56 in response to fires, explosions, or any unplanned release of hazardous waste? (If the owner has a Spill Prevention Control and Countermeasures (SPCC) Plan, he needs only to amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this Part (As applicable). 265.52(a)		✓		I
b.) Arrangements or attempts to make arrangements agreed to by local police departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services, pursuant to 40 CFR 265.52(c) 265.37		✓		II
c.) Names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator. 40 CFR 265.52(d)	✓			II

INSPECTION FORM D

	Yes	No	N/A	Violation Class
d.) A list of all emergency equipment at the facility which includes the location and physical description of each item on the list, and a brief outline of its capabilities. 40 CFR 265.52(e)		✓		II
e.) An evacuation plan for facility personnel where there is a possibility that evacuation could be necessary? (This plan must describe signal(s) to be used to begin evacuation, evacuation routes and alternate evacuation routes.) 40 CFR 265.52(f)		✓		II
f.) Is the facility emergency coordinator identified. 40 CFR 265.55	✓			II
g.) Is coordinator familiar with all aspects of site operation and emergency procedures. 40 CFR 265.55	✓			II
h.) Does the Emergency Coordinator have the authority to carry out the Contigency Plan. 40 CFR 265.55 ?				II
i.) If an emergency situation has occurred at this facility, has the emergency coordinator followed the emergency procedures listed in 265.56.			✓	I
j.) Has contingency plan been amended to reflect changes in regulations, plan failure, changes in the facility, list of emergency coordinators, changes in emergency equipment. 40 CFR 265.54		✓		II

Comments: _____

INSPECTION FORM D

	Yes	No	N/A	Violation Class
2. Are copies of the contingency plan available at site and local emergency organizations. 40 CFR 265.53(a) 264.53(b)		✓		II

Comments:

USE OF MANIFEST SYSTEM
Rule 601(2)(b)

1. Does this facility receive hazardous waste accompanied by a manifest. If yes, complete the following:	NO			
a.) Are copies signed and dated. Rule 608(1)(a)				I
b.) Are significant discrepancies noted on the manifest. Rule 608(1)(b)				I
c.) Are transporters given 1 copy of the signed manifst. Rule 608(1)(c)				I
d.) Are copies sent to the generator within 30 days. Rule 608(1)(d)				I
e.) Are copies of the manifest retained for 3 years.				I
f.) Are copies of the manifest returned to DNR within 10 days after end of month. Rule 608 (1)(f)				II

Comments:

INSPECTION FORM D

	Yes	No	N/A	Violation Class
2. Does this facility ship hazardous waste off-site. If yes, complete Generator Appendix. Rule 608(3)	✓			N/A

Comments:

	Yes	No	N/A	Violation Class
3. For unreconciled significant discrepancies in manifests has the Director been notified. Rule 608(4)			✓	I

Comments:

RECORDKEEPING

Rule 601(3) 40 CFR 265. Subpart E

	Yes	No	N/A	Violation Class
1. Does the owner or operator of this facility maintain an operating record? Rule 609(1)	✓			II

Comments:

2. Does this operating record contain: 265.73

	Yes	No	N/A	Violation Class
a.) The method(s) and date(s) of each waste's treatment, storage, or disposal as required in 40 CFR Part 265.73(b)(1) Appendix E	✓			II

INSPECTION FORM D

	Yes	No	N/A	Violation Class
b.) The location and quantity of each hazardous waste within the facility? (This information should be cross-referenced to specific manifest number, if waste was accompanied by a manifst.) 265.73(b)(2)	✓			II
c.) If this facility disposes of hazardous waste on-site, is there a map or diagram of disposal area. 265.73(b)(2)			✓	II
d.) Records and results of all waste analyses, trial tests, monitoring data, and operator inspections? 265.73(b)(3)	✓			II
e.) Reports detailing all incidents that required implementation of the Contingency Plan? 265.73(b)(4) no emergencies			✓	II
f.) Records and results of inspections as required in 40 CFR 264.15(d) 265.73(b)(5)	✓			II
g.) If required, monitoring, testing, or analytical when required by construction permit or operating license. Rule 265.73(b)(6)			✓	II
h.) Closure and post closure cost estimates. 265.73(b)(7)	✓			II

Comments: _____

3. Are all required records available and maintained for at least 3 years. 265.74(3)	✓			II

INSPECTION FORM D

	Yes	No	N/A	Violation Class
Comments:				

REPORTING

	Yes	No	N/A	Violation Class
1. Has the owner or operator submitted a biennal report to the required administration by March 1 of even numbered years? 265.75	✓			II

Comments: filed a generator report

	Yes	No	N/A	Violation Class
2. If applicable, for TSD's that receive hazardous waste from off-site sources. Rule 265.76			✓	I
a.) Has the facility accepted any hazardous waste from an off-site generator subject to Rule 205 without a manifest or shipping paper?				I
b.) If "a" is yes, provide the identity of the source of the waste and a description of the quantity, type, and date received for each unmanifested hazarous waste shipment.				I

USE AND MANAGEMENT OF CONTAINERS
Drums/Roll-off Boxes/Gondolas

	Yes	No	N/A	Violation Class
1. Is hazardous waste accumulated in containers? If no, skip to tank section.	✓			N/A
a.) Is each container clearly marked with accumulation date and hazardous waste number Rule 306(1)(c) If no, how many _____	✓			I

INSPECTION FORM D

		Yes	No	N/A	Violation Class
b.)	Has more than 90 days elapsed since date marked (Operaing license needed as required in Part 5 of Rules) If yes, how many drums _____. Accumulation dates _____.		✓		I
c.)	Is each container labeled or marked clearly with the words "Hazardous Waste" rule 306(c). If no, how many _____.	✓			I
d.)	Are containers in good condition Rule 306(1)(a), 40 CFR 265.171. If no, specifically what is their conditions._____	✓			I
e.)	Are containers compatible with waste in them. RULE 306(1)(a) 40 CFR 265.172. If no, explain _____	✓			I
f.)	Are containers stored closed, Rule 306(1)(a), 40 CFR 265.173(a) If no, how many _____.	✓			I
g.)	Are containers managed to prevent leaks? Rule 306(1)(a), 40 CFR 265.173(b) If no, explain _____	✓			I
h.)	Are containers inspected weekly for leaks and defects? Rule 306(1)(a) 40 CFR 265.174. Mondays	✓			I
i.)	Are ignitable and reactive wastes stored at least 15 meters (50 Feet) from property line? (Indicate if waste is ignitable or reactive) Rule 306(1)(a) 40 CFR 265.176. If no, explain _____	✓			I
j.)	Are uncompatible wastes stored in separate containers (If not the provisions of 40 CFR 265.17(b) apply) Rule 306(1)(a) 40 CFR 265.176. If no, explain _____	✓			I

INSPECTION FORM D

	Yes	No	N/A	Violation Class
k.) Are containers of uncompatible waste separated or protected from each other by physical barriers or sufficient distance? Rule 306(1)(a) 40 CFR 265.177.	✓			I

Comments: roll-off at polyol plant has spilled waste in containment area

3. If storing free liquid, does hazardous waste storage area include: rule 306(1)(a) 40 CFR 264.175.				
a.) Impervious base free of cracks. 40 CFR 264.175(b)(1)	✓			I
b.) Containment capable of holding 10% of volume of containers or 10% of largest container whichever is greater.	✓			I

Comments:

4. Is hazardous waste being accumulated at the point of generation, Rule 306(2)	✓			N/A
If yes:				
a.) Is container less than 55 gallons or one quart of acutely hazardous waste? Rule 306(2)	✓			I
b.) Is container under control or operator and near point of generation and under control of operator? Rule 306(2)	✓			I
c.) Are containers in good condition? Rule 306(2) 40 CFR 265.171	✓			I

INSPECTION FORM D

	Yes	No	N/A	Violation Class
d.) Are containers compatible with waste in them? Rule 306(2) 40 CFR 265.172	✓			I
e.) Are containers stored closed when not in use and managed to prevent leaks? Rule 306(2 40 CFR 265.173	✓			I
f.) Are containers marked with the words "Hazardous Waste" and waste number (or other words that identify the contents) Rule 306(2)	✓			I

Comments: _____

TANKS

1. Is hazardous waste accumulated in tanks? If no, skip to c.		✓		N/A
a.) Is each tank labeled or marked with the words "Hazardous Waste", Rule 306(1)(a), 40 CFR 252.34(a)				I
b.) Are tanks used to store only those wastes which will not cause corrosion, leaking or premature failure of the tank? Rule 306(1)(a), 40 CFR 262.192(b).				I
c.) Do uncovered tanks have at least 60 cm (2 feet) of freeboard, or dikes or other containment structure. Rule 306(1)(a), 40 CFR 265.192(c)?				I
d.) Do continuous feed systems have a wastefeed cutoff? Rule 306(1)(a), 40 CFR 265.192(d).				I
e.) Are required daily and weekly inspections done? Rule 306(1)(a), 40 CFR 265.194?				II

INSPECTION FORM D

	Yes	No	N/A	Violation Class
f.) Are reactive and ignitable wastes in tanks protected or rendered non-active or non-ignitable? Indicate if waste is ignitable or reactive. (If waste is rendered non-reactive or non-ignitable, see treatment requirements. 261.21 or 261.23 Rule 306(1)(a), 40 CFR 265.199	___	___	___	II
g.) Are incompatible wastes stored in separate tanks? (If not, the provisions of 40 CFR 265.17(b) apply.) Rule 306(1)(a), 40 CFR 265.199.	___	___	___	I
h.) Has the owner or operator observed the National Fire Protection Association's buffer zone requirements for tanks containing ignitable or reactive wastes? Rule 306(1)(a) 40 CFR 198 (3)(b)	___	___	___	I

Tank capacity: _____ gallons

Tank diameter: _____ feet

Distance of tank from property line _____ feet.

(See tables 2-1 through 206 of NFPA's "Flammable and Combustible Liquids Code - 1977" to determine compliance.)

Comments: _____

_____

_____

_____

2. Do above ground tanks have a 150% containment area constructed of impervious material, or if tanks hold incompatible wastes is each tank structurally enclosed? Rule 615(3)	___	___	___	I

INSPECTION FORM D

	Yes	No	N/A	Violation Class
Comments:				
3. Do owners and operators of underground tanks do all the following:				
a.) Provide secondary adequate containment and leachate collection system. Rule 615(4)(a)				I
b.) Conduct an inventory of the contents of the tanks at least twice a month. rule 615(4)(b)				I
c.) Conduct leachate sampling at least once a year. Rule 615 (4)(c)				I
d.) Maintain an accurate inventory of the tank. Rule 615(4)(d)				I
Comments:				
4. Is hazardous waste accumulated in other than tanks or containers? If yes, explain _____.		✓		N/A
Comments:				

INSPECTION FORM D

CLOSURE AND POST CLOSURE (Part 265 Subpart G)
Part 7 of Act 64 Rules

	Yes	No	N/A	Violation Class
1. Closure 265.112				
a.) Is the facility closure plan available for inspection?	✓			I
b.) Does the plan identify				
i. maximum extent unclosed during facility life?	✓			I
ii. maximum hazardous waste inventory?	✓			I
iii. estimated year of closure no date of est. closure	✓			I
iv. schedule of closure activities	✓			I

Comments: ☆ financial assurance mechanism not available for review

*2. Post-Closure 265.118 - Act 64 Rules				
a.) Is the post-closure plan available for inspection?				I
b.) Does this plan contain:				
i. description of groundwater monitoring activities and frequencies?				I
ii. description of maintenance activities and frequencies for				
AA. integrity of cap. final cover, or containment structures, where applicable.				I
BB. facility monitoring equipment.				I

INSPECTION FORM D

	Yes	No	N/A	Violation Class
iii. name, address, and phone number of person or office to contact during post-closure care period?	___	___	___	I
c.) Has the post-closure period begun?	___	___	___	N/A
d.) Is the written post-closure cost estimate available? 265.144	___	___	___	I

Comments: _____

_____

_____

_____

* Applies only to disposal facilities.

BASF Corp
Chemicals Div
1/20/88

	Yes	No	N/A	Violation Class

GENERATOR APPENDIX

Section A: Scope

Complete this Appendix if the owner or operator of a TSD facility also generates hazardous waste that is subsequently shipped off-site for treatment, storage, or disposal.

Manifest Requirements

		Yes	No	N/A	Violation Class
1.	a.) Does the generator have copies of the manifest available for review and on-site. 262.40	✓			II
	b.) Examine manifests for shipments in past 6 months. Indicate approximate number of manifested shipments during that period.				

Comments: _____

		Yes	No	N/A	Violation Class
2.	Do the manifest forms examined contain the following information (If so, make copies of, or record information from manifests that do not contain the critical elements:				
	a.) Manifest document number (Rule 304(2)(a)?	✓			II
	b.) The generator's name, mailing address, telephone number, and EPA Identification number. Rule 204(2)(b)	✓			II
	c.) The name and EPA ID number of transporter. Rule 304(2)(c)	✓			II
	d.) Name, address, and EPA ID number of designated permitted facility and alternate facility. Rule 304(2)(d)	✓			II
	e.) The description of waste(s)(DOT shipping name, DOT hazard class, DOT identification number. Rule 304(2)(e)	✓			II

GENERATOR APPENDIX

	Yes	No	N/A	Violation Class
f.) The total quantity of waste(s) and the type and number of containers loaded. Rule 304(1)(f)	✓			II
g.) Hazardous waste number describing the wastes. Rule 304(1)(g)	✓			II
h.) Certification as required in Rule 304(1)(h)	✓			II
i.) Signatures as required in Rule 304(4)	✓			I
j.) Waste minimization program/ certification				I

Comments: _____

3. Reportable exceptions. Rule 308(3), 40 CFR 262.42

	Yes	No	N/A	Violation Class
a.) For manifests examined in (2) (except for shipments within the last 35 days), enter the number of manifests for which the generator has NOT received a signed copy from the designated facility within 35 days of the date of shipment.	0			I
b.) For manifests indicated in (4a), enter the number for which the generator has submitted exception reports (40 CFR 262.42) to the Regional Administrator.				

Comments: _____

BASF Corp - Chemicals Div.
1/20/88

GEN

RCRA LAND DISPOSAL RESTRICTION INSPECTION

GENERATOR CHECKLIST

GENERATOR REQUIREMENTS

A. BDAT Treatability Group - Treatment Standards Identification

1. F-Solvent Wastes: Does the generator correctly determine the appropriate treatability group of the waste?

   ✓ Yes ____ No ____ NA

   If yes, check the appropriate treatability group.

   ____ Wastewaters containing solvents (less than or equal to 1% TOC by weight)
   ____ Pharmaceutical wastewater containing spent methylene chloride
   ✓ All other spent solvent wastes

2. California List Wastes: Does the generator correctly determine the appropriate treatment standard of the waste?

   a. For liquid hazardous waste that contains PCBs at concentrations greater than or equal to 50 but less 500 ppm, is the treatment in accordance with existing TSCA thermal treatment regulations for burning in high efficiency boilers (40 CFR 761.60) or incineration (40 CFR 761.70)?

      ____ Yes ____ No ✓ NA

      If yes, specify the method: _____

   b. For liquid hazardous waste that contains PCBs at concentrations greater than or equal to 500 ppm, is the waste incinerated or disposed of by other approved alternate methods (40 CFR 761. 60 (e))?

      ____ Yes ____ No ✓ NA

      If yes, specify the method and state whether the facility has submitted a written request to the Regional Administrator or Assistant Administrator for an exemption from the incineration requirement:

      _____
      _____
      _____

B. Waste Analysis

1. F-Solvent Wastes

a. Does the generator determine whether the F-solvent waste exceeds treatment standards?

✓ Yes ____ No ____ NA

How was this determination made?

- Knowledge of waste

✓ Yes ____ No

If yes, note how this is adequate: has analysis & MSDS info.

- TCLP

____ Yes ____ No

If yes, provide the date of last test, the frequency of testing, and note any problems. Attach test results.

b. Does the F-solvent waste exceed applicable treatability group treatment standards upon generation [268.7(a)(2)]?

✓ Yes ____ No ____ NA

If yes, specify the waste stream: see inspection report

c. Does the generator dilute the F-solvent waste as a substitute for adequate treatment [268.3]?

____ Yes ✓ No ____ NA

d. How does the generator test F-solvent waste when a process or waste stream changes?

2. California List Wastes

a. Does the generator determine whether the waste is a liquid according to the Paint Filter Liquids Test (PFLT method 9095) as described by SW-846?

____ Yes ✓ No ____ NA

b. If the waste is determined to be a liquid according to PFLT, is an absorbent added to the waste?

____ Yes ____ No ✓ NA

What type of absorbent is used? _____

Check the types of waste to which absorbent is added.

____ Liquid hazardous waste having a pH less than or equal to 2

____ Liquid hazardous waste containing HOCs in concentrations greater than or equal to 1,000 mg/L, but less than 10,000 mg/L

____ Liquid hazardous waste containing metals

____ Liquid hazardous waste containing free cyanides

c. Does the generator determine whether the concentration levels (not extract or filtrate) in the waste equal or exceed the prohibition levels or whether the waste has a pH of less than or equal to 2.0 based on:

- Knowledge of wastes

✓ Yes ____ No ____ NA

If yes, note how this is adequate: has 2 D002 streams they're handling as such but as result of inspection, will re-test

- Testing

____ Yes ____ No ____ NA

If yes, list test method used: _____

d. Does the generator determine if concentration levels in PFLT extract exceed cyanide and metals concentration levels?

____ Yes ____ No ✓ NA

- If yes, list test method used and constituent and concentration levels that exceeded prohibition levels: _____

e. Does the generator dilute the waste as a substitute for adequate treatment [268.3]?

____ Yes ✓ No ____ NA

C. Management

1. On-Site Management

Is waste that exceeds the treatment standards treated, stored, or disposed on-site?

✓ Yes ____ No

If yes, the TSD Checklist must be completed.

2. Off-Site Management

a. Does the generator ship any waste that exceeds the treatment standards to an off-site treatment or storage facility?

✓ Yes ____ No

If yes, does the generator provide notification to the treatment or storage facility [268.7(a)(1)]?

____ Yes ✓ No

If yes, does notification contain the following?

EPA Hazardous waste number(s)	____ Yes	____ No
Applicable treatment standards	____ Yes	____ No
Manifest number	____ Yes	____ No
Waste analysis data, if available	____ Yes	____ No

Identify off-site treatment or storage facilities: _____

b. Does the generator ship any waste that meets the treatment standards to an off-site disposal facility?

____ Yes ✓ No

If yes, does the generator provide notification and certification to the disposal facility [268.7(a)(2)]?

____ Yes ____ No

If yes, does notification contain the following?

EPA Hazardous waste number(s)	____ Yes	____ No
Applicable treatment standards	____ Yes	____ No
Manifest number	____ Yes	____ No
Waste analysis data, if available	____ Yes	____ No
Certification that the waste meets treatment standards	____ Yes	____ No

Identify off-site land disposal facilities: _____

c. If the waste is subject to a nationwide variance (e.g., solvent-water mixtures less than 1%), extension (268.5), or petition (268.6), does the generator provide notification to the off-site disposal facility that the waste is exempt from land disposal restrictions [268.7(a)(3)]?

____ Yes ____ No ✓ NA

D. Treatment Using RCRA 264/265 Exempt Units or Processes (i.e., boilers, furnaces, distillation units, wastewater treatment tanks, elementary neutralization, etc.)

Are treatment residuals generated from units or processes exempt under RCRA 264/265?

____ Yes ✓ No

If yes, list types of waste treatment units and processes:

_____

RCRA LAND DISPOSAL RESTRICTION INSPECTION

TSD CHECKLIST

TSD REQUIREMENTS

A. General Facility Standards

1. Does the waste analysis plan cover Part 268 requirements [264.13 or 265.13]?

   o F-solvent ____ Yes ✓ No ____ NA

   o California List ____ Yes ✓ No ____ NA

2. Does the facility obtain representative chemical and physical analyses of wastes and residues?

   ✓ Yes ____ No

   a. What date was the waste analysis plan last revised? Co. is planning to retest waste streams

   b. Are analyses conducted on-site or off-site?

   ✓ On-site ____ Off-site

   Identify off-site lab: ____

   c. Is F-solvent waste analyzed using TCLP?

   ____ Yes ✓ No ____ NA

   d. Describe the frequency of sampling: Co. has not tested their own streams for some time

   e. Describe procedures used to identify manifest discrepancies: ____

   does not receive waste from other sources.

3. Are the operating records, including analyses and quantities, complete [264.73/265.73]?

   ✓ Yes ____ No

B. Storage (268.50)

1. Are restricted wastes stored on-site?

TSD

✓ Yes ___ No

currently, no storage beyond 90 is occurring.

If no, go to C, Treatment in Surface Impoundments.

2. If yes, check the appropriate method.

✓ Tanks
Containers

3. Are all containers clearly marked to identify the contents and date(s) entering storage?

✓ Yes ___ No ___ NA

4. Do operating records track the location, quantity of the wastes, and dates that the wastes enter and leave storage?

✓ Yes ___ No

5. Do operating records agree with container labeling?

✓ Yes ___ No ___ NA

6. Have wastes been stored for more than 1 year since the applicable LDR regulations went into effect?

___ Yes ✓ No ___ NA

If yes, can the facility show that such accumulation is necessary to facilitate proper recovery, treatment, or disposal?

___ Yes ___ No

If yes, state how: _____

7. Have tanks been emptied at least once per year since the applicable LDR regulations went into effect?

____ Yes ____ No ✓ NA

If yes, do the operating records show that the volume of waste removed from tanks annually equals or is more than the tank volume?

____ Yes ____ No

8. Are all tanks clearly marked with a description of the contents, the quantity of wastes received, and date(s) entering storage, or is such information recorded and maintained in the operating record?

____ Yes ____ No ✓ NA

_____

_____

_____

C. Treatment

1. Does the facility treat restricted wastes other than in surface impoundments?

____ Yes ✓ No

If no, go to D, Treatment in Surface Impoundments.

2. Describe the treatment processes:

_____

_____

_____

3. Does the facility, in accordance with an acceptable waste analysis plan, determine whether the residue from all treatment processes is less than treatment standards [268.7(b)]?

____ Yes ____ No

4. Describe frequency of testing treatment residuals:

_____

_____

_____

5. Is dilution used as a substitute for treatment?

____ Yes ____ No

6. Are notifications prepared by the generators kept in the facility's operating record?

____ Yes ____ No

7. Does the facility ship any waste or treatment residue that meets the treatment standards to an off-site disposal facility?

____ Yes ____ No ____ NA

If yes, does the treatment facility provide notification and certification to the disposal facility?

____ Yes ____ No

If yes, does notification contain the following?

EPA Hazardous waste number(s)	____ Yes	____ No
Applicable treatment standards	____ Yes	____ No
Manifest number	____ Yes	____ No
Waste analysis data, if available	____ Yes	____ No
Certification that the waste meets the treatment standards	____ Yes	____ No

Identify off-site disposal facilities: _____

_____

_____

D. Treatment in Surface Impoundments

1. Are restricted wastes placed in surface impoundments for treatment?

____ Yes ✓ No

If no, go to E, Land Disposal.

2. If yes, did the facility submit to the Agency the waste analysis plan and certification of compliance with minimum technology and ground-water monitoring requirements?

____ Yes ____ No

3. If the minimum technology requirements have not been met, has a waiver been granted for that unit?

____ Yes ____ No

4. Are representative samples of the sludge and supernatant from the surface impoundment tested separately, acceptably, and in accordance with the sampling frequency and analysis specified in the waste analysis plan?

____ Yes ____ No

Attach test results.

5. Do the hazardous waste residues (sludges or liquids) exceed the treatment standards specified in 268.41?

____ Yes ____ No

6. Provide the frequency of analyses conducted on treatment residues: _____

7. Does the operating record adequately document the results of waste analyses performed in accordance with 268.41?

____ Yes ____ No

8. Are the hazardous waste residues that exceed the treatment standards (268.41) removed adequately and on an annual basis?

Sludge ____ Yes ____ No

Supernatant ____ Yes ____ No

a. If no, and supernatant is determined to exceed treatment concentrations, is annual volume of liquid flowing through the impoundment greater than the impoundment volume?

____ Yes ____ No

b. Are adequate precautions taken to protect liners, and do records indicate that liner integrity is inspected?

____ Yes ____ No

c. Are residues subsequently managed in another surface impoundment?

_____ Yes _____ No

d. Are residues treated prior to disposal?

_____ Yes _____ No

If yes, are waste residues treated on-site or off-site?

_____ On-site _____ Off-site

Identify treatment method: _____

_____

_____

E. Land Disposal

1. Are restricted wastes placed in land disposal units such as landfills, surface impoundments waste piles, wells, land treatment units, salt domes/beds, mines/caves, or concrete vault or bunker?

_____ Yes ✓ No

Note: Do not include surface impoundments addressed in D, Treatment in Surface Impoundments.

If yes, specify which units and what wastes each unit has received: _____

_____

2. Does the facility operating record have notices and certifications from generators/storer/treaters [268.7(c); 268.7(a),(b)]?

_____ Yes _____ No

3. Does the facility obtain waste analysis data or test the wastes (according to the waste analysis plan) to determine that the wastes comply with the applicable treatment standards [268.7(c)]?

_____ Yes _____ No

If yes, at what frequency? _____

_____

4. If restricted wastes that exceed the treatment standards are placed in land disposal units (excluding national capacity variances) [268.30(a)], does facility have an approved waiver based on no migration petition [268.6], an approved case-by-case capacity extension [268.5], or variance [268.44]?

____ Yes ____ No

5. Does the facility dispose of restricted wastes that are subject to a national capacity variance?

____ Yes ____ No

If yes, are these wastes disposed of in a new, replacement, or laterally expanded landfill or impoundment that meets the minimum technology requirements (double liner and leachate collection)?

____ Yes ____ No

6. Does the facility have notices [268.7(a)(3)] and records of disposal for disposed wastes that are subject to a national capacity variance, case-by-case extensions [268.5], or no migration petitions [268.6]?

____ Yes ____ No ____ NA

7. What is the volume of the restricted wastes disposed of to date?

_____

_____

8. If the facility has a case-by-case extension, is the facility making progress as described in progress reports?

____ Yes ____ No ____ NA

NATURAL RESOURCES COMMISSION
THOMAS J. ANDERSON
ENE J. FLUHARTY
EN V. MONSMA
EWART MYERS
D D. OLSON
RAYMOND POUPORE
HARRY H. WHITELEY

STATE OF MICHIGAN

JAMES J. BLANCHARD, Governor

DEPARTMENT OF NATURAL RESOURCES

RONALD O. SKOOG, Director

S.E. Michigan Field Office
15500 Sheldon Road
Northville, MI 48167

February 18, 1986

Mr. H. Dale Roush
BASF Wyandotte Corp.
1609 Biddle Avenue
Wyandotte, MI 48192

RE: MID 064197742

Dear Mr. Roush:

This letter is to acknowledge receipt of your letter dated February 5, 1986, indicating your compliance program for RCRA deficiencies cited during my inspection on December 10, 1985. The reinspection of your storage area on January 24, 1986, found it to be significantly improved. I consider your response acceptable at this time. However, the confusion about the identification and location of your storage area remains to be resolved. This office needs to be copied on information that you submit to EPA regarding this issue including the amended Part A. The adequacy of your program will be evaluated during future inspections.

Thank you for your cooperation. If you have any questions, please feel free to contact me at (313) 459-9180.

Sincerely,

Margaret A. Field's
HAZARDOUS WASTE DIVISION

cc: U.S. EPA, Region V
B. Okwumabua

BASF CORPORATION CHEMICALS D ON

BASF

February 5, 1986

CERTIFIED NO.
P 447 526 738

Ms. Margaret A. Fields
Hazardous Waste Division
Michigan Dept. Natural Resources
15500 Sheldon Road
Northville, MI 48167

RECEIVED
FEB 06 1986
HAZARDOUS WASTE DIV

Dear Ms. Fields:

Re: MID 064197742

This letter responds to specific items which were addressed in your letter of December 30, 1985 as discrepancies regarding requirements of Subtitle C of RCRA.

Item 1 - The Vitamin E Plant produces an acetic acid by-product which is subsequently sold to Treuger Chemical Co. in Dauxhall, NJ. There is a purchase agreement between the parties. The facility manager is James Roach (201) 964-5460. Mr. Roach has informed BASF the material is utilized "as is" during the processing of cement. BASF has received a net gain of more than $9,100 as a result of these sales.

Wyandotte's Transparent Iron Oxide Pigments (TIOP) process utilizes high quality ferrous sulfate crystals as a major raw material. The crystal form is generated as a salable by-product in steel pickling processes at Walker Wire in Livonia, MI and at Everlock in Taylor, MI. There is a purchase agreement between the parties. Another source of ferrous sulfate is a liquid product which is manufactured at BASF's Huntington, WVa facility.

BASF has always considered the two sources of ferrous sulfate crystals used at its Wyandotte Works as a key raw material and never as a hazardous waste. Neither of the suppliers has ever advised BASF that they consider their products to be a hazardous waste. Utilization of this material is essential to the business of producing high-quality pigments.

In light of this expressed concern that any ferrous sulfate that BASF purchases but does not consume "may" be subject to treatment as a hazardous waste, BASF will dispose of any such excess material as hazardous until final resolution of the question.

Item 2 - There is apparently a misidentification as to the exact location of the containerized storage area at the Wyandotte site. The plot plan submitted as part of the Part A application has been in error. BASF will submit an amended plot plan with an amended Part A application which is consistent with current operations and the Closure Plan which was revised and submitted in April 1985.

1609 Biddle Avenue, Wyandotte, Michigan 48192 (313) 246-6100

NATURAL RESOURCES COMMISSION
THOMAS J. ANDERSON
MARLENE J. FLUHARTY
STEPHEN V. MONSMA
STEWART MYERS
DAVID D. OLSON
RAYMOND POUPORE
HARRY H. WHITELEY

STATE OF MICHIGAN

JAMES J. BLANCHARD, Governor

DEPARTMENT OF NATURAL RESOURCES

RONALD O. SKOOG, Director

S.E. Michigan Field Office
15500 Sheldon Road
Northville, MI 48167

December 30, 1985

Mr. H. Dale Roush
BASF Wyandotte Corporation
1609 Biddle Avenue
Wyandotte, Michigan 48192

Re: MID 064197742

Dear Mr. Roush:

On December 10, 1985, acting as a representative of the United States Environmental Protection Agency, I performed an inspection of your facility located at 1609 Biddle Avenue, Wyandotte, Michigan. The purpose of this inspection was to evaluate compliance of that facility with the requirements of Subtitle C of the Resource Conservation and Recovery Act (RCRA) as amended.

As a result of that inspection, it has been determined that the above facility is in violation of some of the requirements of Subtitle C of RCRA. Specifically, the following was found:

(1) 40 CFR 261.2, e(1), F - These sections allow certain recycled materials to be exempt from the definition of solid waste and, therefore, regulation, if there is documentation that the materials meet the exclusion.

The facility's waste acetic acid generated by the Vitamin E plant is considered a high grade material which is sold at about 75% of the going rate for the commercial product. This would indicate the material qualifies for the 261.2e exemption, however, there was no information available regarding its end use let alone documentation of the material being recycled or used as a commercial product substitute.

This facility also used ferrous sulfate crystals separated from pickling liquor (K062) that were supplied by Ever Lock in Taylor. These were used in BASF's pigment operation. This appears to also be exempt if proper documentation is available. If the facility receives quantity in excess of that which is used in pigments, the excess may be a regulated waste.

(2) 40 CFR 270.71 - This section states that during interim status a facility shall not treat, store or dispose of hazardous waste except as specified in the Part A. Revisions can be made in the Part A as allowed in Section 270.72.

The facility representatives last submitted a revised Part A on June 25, 1981. This was again revised by letter dated September 5, 1984, which requested removal of an inoperative incinerator. The resulting Part A lists these storage areas: (1) a drum storage area within the research building; (2) an outdoor drum storage area; and (3) the bulk storage of the waste acetic acid discussed above.

The facility closure plan dated April 23, 1985, and the inspection identified differences from the Part A.

The drum storage area (1) within the research building was no longer listed as a storage area but rather was considered a satellite area. This will be discussed later. The closure plan identified a 90 day storage area in a warehouse. However, this site was actually being used for longer than 90 days and for offsite (Troy) waste storage. This was not in compliance with the Part A and its revisions.

(3) Only generators storing their own wastes (up to 90 days) and transporters (for 10 days) are allowed to store wastes without being in compliance with TSD requirements. The facility had eight drums of wastes from offsite and was not in compliance with:

(a) 265.13	Waste analysis
(b) 265.71	Manifests
(c) 265.73	Operating record

(4) 40 CFR 265 Subpart D - This section requires a contingency plan to be prepared containing updated emergency numbers and to be distributed to local agencies.

The facility's contingency (PIP) plan had not been updated. The numbers for three local and one state agency were wrong. The plan needs to be updated and distributed to the referenced local agencies.

The following are not violations but areas needing further review.

(A) The facility's liability insurance is worded such that it appears the entire BASF corporation has a two million dollar aggregate policy. This is required for each of the four BASF - TSD facilities and, therefore, needs clarification.

(B) The facility listed the isocyanate and polyol filter cake wastes as corrosive (D002) on the Part A. As both are reportedly water reactive, it would seem the hazards would be better represented by the reactive (D003) designation.

(C) The position was taken that only the two environmental positions required training. The presence of waste placed in a reportedly closed storage area, off site waste in storage, unknown waste containers placed in the storage and missing labels and dates would seem to indicate that others at the facility need to be trained.

(D) The storage in the research lab area is said to be a satellite area. This was not inspected. The facility needs to ensure that the area complies with the satellite area conditions.

(E) The proposed closure of the paved outdoor storage area should be able to be done easily when waste is no longer stored there. It appeared to be clean and well maintained.

(F) The facility had requested a variance from classification as solid waste for the heptane and methanol waste streams. These were used as carrier solvents in the vitamin manufacturing operation. The operations seemed to be environmentally sound and an efficient use of materials. It's been recommended that the variance be approved.

You are requested to respond to this letter by January 30, 1986, providing documentation to this office regarding those actions taken to correct these violations. If you have any questions regarding this matter, please feel free to contact me at (313) 459-9180.

Sincerely,

Margaret A. Field's
HAZARDOUS WASTE DIVISION

MAF:mlm
enc.
cc: U.S. EPA, Region V
B. Okwumabua

RCRA INSPECTION REPORT

EPA Identification Number: [redacted]

Installation Name: BASF WYANDOTTE CORP

Location Address: 1609 BIDDLE AVE

City: WYANDOTTE State: MI 48192

Date of Inspection [redacted] Time of Inspection (from) 9:30AM (to) 4PM

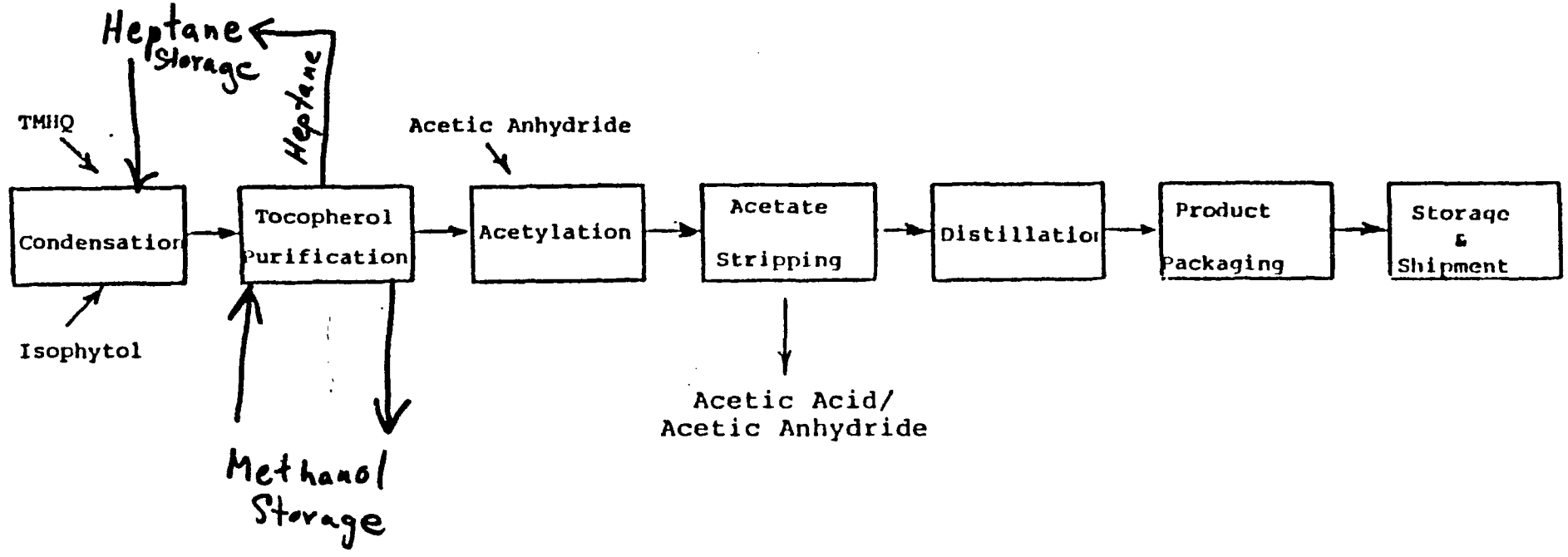
Person(s) Interviewed	Title	Telephone
H. DALE ROUSH	MNGR ENVIR. PROT. HEALTH + SAFETY	(313) 282-3300

Inspector(s)	Agency/Title	Telephone
MARGARET FIELDS	MDNR/EQA	(313) 459-9180

Installation Activity (mark only one box)	Inspection Form(s)
[X] Treatment/Storage/Disposal per 40 CFR §265.1 and/or Generation and/or Transportation	A
[ ] Treatment/Storage/Disposal (No Generation or Transportation)	A
[ ] Generation and Transportation	B,C
[ ] Generation Only	B
[ ] Transportation Only	C

Process Flow Diagram

Vitamin E Plant



INSPECTION FORM A

Section A: SCOPE OF INSPECTION.

1. Interim status standards for treatment storage or disposal of HAZARDOUS WASTES SUBJECT TO 40 CFR 265.1. Complete Inspection Form A sections B, C, D, E, and G.

2. Place an "X" in the box(es) corresponding to the facility's treatment, storage and disposal processes, and generation and/or transportation activity (if any). Complete only the applicable sections and appendixes.

Permit application process(es) (EPA Form 3510-3)			Inspection Form A section(s)
S01	[X]	storage in containers	I
S02	[ ]	storage in tanks Considered a product see letter	J
T01	[ ]	treatment in tanks	J
S04	[ ]	storage in surface impoundment	K,F
T02	[ ]	treatment in surface impoundment	K,F
D83	[ ]	disposal in surface impoundment	K,F
S03	[ ]	storage in waste pile	L
D81	[ ]	disposal by land application	M,F
D80	[ ]	disposal in landfill	N,F
T03	[ ]	treatment by incineration Notified but never used & withdrew	O/P
T04	[ ]	treatment in devices other than tanks, surface impoundments, or incinerators	Q

Other activities

GENERATOR	[X]	APPENDIX	GN
TRANSPORTER	[ ]	APPENDIX	TR

3. Indicate any hazardous waste processes, by process code, which have been omitted from Part A of the facility's permit application.

NONE - But recommend reclassifying isocyanates as D003 + adding D003

4. Indicate any hazardous waste processes (by process code and line number on EPA Form 3510-3 page 1 of 5) which appear to be eligible for exclusion per 40 CFR 265.1(c). Provide a brief rationale for the possible exclusion.

The part A shows incineration but this has been withdrawn by letter

Section B: GENERAL FACILITY STANDARDS: (Part 265 Subpart B)

	YES	NO	NI*	Remarks
1. Has the Regional Administrator been notified regarding: 265.12				
a. Receipt of hazardous waste from a foreign source?		X		
→ b. Facility expansion?				The facility had a new storage area
c. Change of owner or operator?	Maybe			Change in Organization & papers to BASF Corp. due to recent acquisition
2. General Waste Analysis: 265.13				
a. Has the owner or operator obtained a detailed chemical and physical analysis of the waste?	X			
b. Does the owner or operator have a detailed waste analysis plan on file at the facility?				No waste rec'd from off site. Two waste streams are reviewed
c. Does the waste analysis plan specify procedures for inspection and analysis of each movement of hazardous waste from off-site?				Reportedly - However wastes were on site from the Troy facility
3. Security - Do security measures include: (if applicable) 265.14				
a. 24-Hour surveillance?	X			
or				
b. i. Artificial or natural barrier around facility?	X			
and				
ii. Controlled entry?	X			
c. Danger sign(s) at entrance?				
4. Owner or operator inspections: 265.15				
a. Does the owner or operator inspect the facility for malfunctions, deterioration, operator errors, and dischanges of hazardous waste that may affect human health or the environment?	X			

*Not Inspected

	YES	NO	NI	Remarks
b. Does the owner or operator have an inspection schedule at the facility?	X			
c. If so, does the schedule address the inspection of the following items:				
i. monitoring equipment?				None necessary
ii. safety and emergency equipment?			X	
iii. security devices?				
iv. operating and structural equipment (i.e. dikes, pumps, etc.)?				Not located during inspection
v. type of problems to be looked for during the inspection (e.g. leaky fitting, defective pump, etc.)?				
vi. inspection frequency (based upon the possible deterioration rate of the equipment)?				
d. Are areas subject to spills inspected daily when in use?	X			
e. Does the owner or operator maintain an inspection log or summary of owner or operator inspections?	X			Containing area observed other to be located
f. Does the inspection log contain the following information:				
i. the date and time of the inspection?	X			
ii. the name of the inspector?	X			
iii. a notation of the observations made?	X			
iv. the date and nature of any repairs or remedial actions?	X			
5. Do personnel training records include: 265.16				
a. Job titles?				Separate
b. Job descriptions?				Solid Waste Coordinators

	YES	NO	NI	Remarks
c. Description of training?	X			~~But~~ As part of safety sessions
d. Records of training?	X			
e. Did facility personnel receive the required training by 5-19-81?			X	
f. Do new personnel receive required training within six months?			X	
g. Do personnel training records indicate that personnel have taken part in an annual review of initital training?	X			But required review + required personnel not clear.

6. If required, are the following special requirements for ignitable, reactive, or incompatible wastes addressed? 265.17

a. Special handling?				
b. No smoking signs?				
c. Separation and protection from ignition sources?				

Section C: PREPAREDNESS AND PREVENTION: (Part 265 Subpart C)

	YES	NO	NI	Remarks
1. Maintenance and Operation of Facility: 265.31				
Is there any evidence of fire, explosion, or release of hazardous waste or hazardous waste constituent?		X		
2. If required, does the facility have the following equipment: 265.32				
a. Internal communications or alarm systems?	X			pager
b. Telephone or 2-way radios at the scene of operations?	X			
c. Portable fire extinguishers, fire control, spill control equipment and decontamination equipment?	X			

Indicate the volume of water and/or foam available for fire control:

city water

	YES	NO	NI	Remarks
3. Testing and Maintenance of Emergency Equipment: 265.33				
a. Has the owner or operator established testing and maintenance procedures for emergency equipment?	X			fire extinguisher by contractor
b. Is emergency equipment maintained in operable condition?	X			
4. Has owner or operator provided immediate access to internal alarms? (if needed) 265.34	X			
5. Is there adequate aisle space for unobstructed movement?	X			
6. Has the owner or operator attempted to make arrangements with local authorities in case of an emergency at the facility?	X	~~X~~		Regular fire dept visits & orientation but not specific to wastes

Section D: CONTINGENCY PLAN AND EMERGENCY PROCEDURES: (Part 265 Subpart D)

	YES	NO	NI	Remarks
1. Does the Contingency Plan contain the following information: 265.52				
a. The actions facility personnel must take to comply with §265.51 and 265.56 in response to fires, explosions, or any unplanned release of hazardous waste? (If the owner has a Spill Prevention, Control, and Countermeasures (SPCC) Plan, he needs only to amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this Part (as applicable.)	X			
b. Arrangements agreed by local police departments, fire departments hospitals, contractors, and State and local emergency response teams to coordinate emergency services pursuant to §265.37?		X		
c. Names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinators?	X			But needs update
d. A list of all emergency equipment at the facility which includes the location and physical description of each item on the list and a brief outline of its capabilities?		X		
e. An evacuation plan for facility personnel where there is a possibility that evacuation could be necessary? (This plan must describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes?)				unmanned
2. Are copies of the Contingency Plan available at the site and local emergency organizations? 265.53		X		

	YES	NO	NI	Remarks
3. Emergency Coordinator 265.55				
a. Is the facility Emergency Coordinator identified?	X			
b. Is coordinator familiar with all aspects of site operation and emergency procedures?	X			
c. Does the Emergency Coordinator have the authority to carry out the Contingency Plan?	X			
4. Emergency Procedures 265.56				
If an emergency situation has occurred at this facility, has the Emergency Coordinator followed the emergency procedures listed in 265.56?				NA - None

Section E: MANIFEST SYSTEM, RECORDKEEPING, AND REPORTING: (Part 265 Subpart E)

	YES	NO	NI	Remarks
** 1. Use of Manifest System 265.71				
a. Does the facility follow the procedures listed in §265.71 for processing each manifest? (Particularly sending a copy of the signed manifest back to the generator within 30 days after delivery.)	X			As a generator must ensure for Troy waste shipments
b. Are records of past shipments retained for 3 years?	X			
** 2. Does the owner or operator meet requirements regarding manifest discrepancies? 265.72				None observed

** Not applicable to owners or operators of on-site facilities that do not receive any waste from off-site sources.

	YES	NO	NI	Remarks
3. Operating Record 265.73				
a. Does the owner or operator maintain an operating record as required in 265.73?	X			Not in same form
b. Does the operating record contain the following information:				
i. The method(s) and date(s) of each waste's treatment, storage, or disposal as required in 40 CFR Part 265 Appendix I?				Recent inventory not located during inspection
ii. The location and quantity of each hazardous waste within the facility? (This information should be cross-referenced to specific manifest number, if waste was accompanied by by a manifest.)	X			Theoretically the facility has only one storage site but some material was found in an old storage area.
***iii. A map or diagram of each cell or disposal area				

*** only applies to disposal facilities

	YES	NO	NI	Remarks
showing the location and quantity of each hazardous waste? (This information should be cross-referenced to specific manifest number, if waste was accompanied by a manifest.)				Reportedly one site - but had mail in two sites.
iv. Records and results of all waste analyses, trial tests, monitoring data, and operator inspections?	X			except for Troy wastes
v. Reports detailing all incidents that required implementation of the Contingency Plan?				No incidents
vi. All closure and post closure costs as applicable?	X			
4. Availability of Records 265.74				
Are all facility records required under 40 CFR Part 265 available for inspection?	X			
**Unmanifested Waste Reports 265.76				
a. Has the facility accepted any hazardous waste from an off-site generator subject to 40 CFR 262.20 without a manifest or or shipping paper?	X			8 Drums of wastes from Troy BASF
b. If "a" is yes, provide the identity of the source of the waste and a description of the quantity, type, and date received for each unmanifested hazardous waste shipment.				

** Not applicable to owners or operators of on-site facilities that do not receive any hazardous from off-site sources.

Section G - [illegible]OSURE AND POST CLOSURE (Part 2[illegible] Subpart G)

	YES	NO	NI	Remarks
1. Closure 265.112				
a. Is the facility closure plan available for inspection?			X	Reviewed by Ken Damrel & accepted per letter dated 7/24/85
b. Does the plan identify:				
i. maximum extent unclosed during facility life?				
ii. maximum hazardous waste inventory?				
iv. estimated year of closure?				
v. schedule of closure activities?				
c. Has closure begun?				
*2. Post-Closure 265.118				
a. Is the post-closure plan available for inspection?	NA			
b. Does this plan contain:				
i. description of groundwater monitoring activities and frequencies?				
ii. description of maintenance activities and frequencies for				
AA. integrity of cap, final cover, or containment structures, where applicable				
BB. facility monitoring equipment				
iii. name, address, and phone number of person or office to contact during post-closure care period?				
c. Has the post-closure period begun?				
d. Is the written post-closure cost estimate available? 265.144				

*[illegible]lies only to disposal facilities.

Section I - USE AND MANGEMENT OF CONTAINERS (Part 265, Subpart I)

		YES	NO	NI	Remarks
1.	Are containers in good condition? 265.171	X			
2.	Are containers compatible with waste in them? 265.172	X			
3.	Are containers managed to prevent leaks? 265.173	X			
4.	Are containers stored closed?	X			
5.	Are containers inspected weekly for leaks and defects.	X			
6.	Are ignitable and reactive wastes stored at least 15 meters (50 feet) from the facility property line? (Indicate if waste is ignitable or reactive). 265.176	X			
7.	Are incompatible wastes stored in separate containers? (If not, the provisions of 40 CFR 265.17(b) apply). 265.177	X			
8.	Are containers of incompatible waste separated or protected from each other by physical barriers or sufficient distance?	X			

Except for miscellaneous containers of unknown wastes not maintained in any particular fashion. ~~a~~ Some of these were open and the area had evidence of spill clean ups. A very sloppy operation contrasting with the intended organized storage area.

Appendix GN

Section A: Scope

1. Complete this Appendix if the owner or operator of a TSD facility also generates hazardous waste that is subsequently shipped off-site for treatment, storage, or disposal.

Section B: MANIFEST REQUIREMENTS (Part 262, Subpart B)

	YES	NO	NI	Remarks
(1) Does the operator have copies of the manifest available for review? 262.40	X			
(2) Examine manifests for shipments in past 6 months. Indicate approximate number of manifested shipments during that period.	≈12 day but ≈50 no day			
(3) Do the manifest forms examined contain the following information: (If possible, make copies of, or record information from, manifest(s) that do not contain the critical elements). 262.21				
a. Manifest document number?	X			
b. Name, mailing address, telephone number, and EPA ID number of Generator	X			
c. Name and EPA ID Number of Transporter(s)?	X			
d. Name, address, and EPA ID Number Designated permitted facility and alternate facility?	X			
e. The description of the waste(s) (DOT shipping name, DOT hazard class, DOT identification number)?	X			
f. The total quantity of waste(s) and the type and number of containers loaded?	X			
g. Required certification?	X			
h. Required signatures?	X			

(4) Reportable exceptions 262.42

a. For manifests examined in (2) (except for shipments within the last 35 days), enter the number of manifests for which the generator has NOT received a signed copy from the designated facility within 35 days of the date of shipment. None

b. For manifests indicated in (4a), enter the number for which the generator has submitted exception reports (40 CFR 262.42) to the Regional Administrator. NA

Section C: PRE-TRANSPORT REQUIREMENTS (Part 262, Subpart C)

	YES	NO	NI	Remarks
1. Is waste packaged in accordance with DOT regulations? (Required prior to movement of hazardous waste off-site) 262.30	X			
2. Are waste packages marked and labeled in accordance with DOT regulations concerning hazardous waste materials? (Required for movement of hazardous waste off-site) 262.31 262.32	X			
3. If required, are placards available to transporters of hazardous waste? 262.33	X			

4. On-site accumulation of generated hazardous wastes. A HWMF may accumulate hazardous waste it generates either (A) in its storage facility [265.1(b)] or (B) in accordance with 40 CFR 262.34 [see 265.1(c)(7)]. Option B restricts all accumulation to tanks and containers. If the installation elects option A, check this box ☒ and skip to Section D. If the installation elects option B, complete the following observations: See 40 CFR 262.34 January 11, 1982 Revision

a. Is each container clearly marked with the start of accumulation date?				
b. Have more than 90 days elapsed since the date inspected in (a)?				
c. Do wastes remain in accumulation tanks for more than 90 days?				
d. Is each container and tank labeled or marked clearly with the words "Hazardous Waste"?				

Section D: - RECORDKEEPING AND REPORTING (Part 262, Subpart D)

	YES	NO	NI	Remarks
1. Are all test results and analyses needed for hazardous waste determinations retained for at least three years? 262.40	X			

Section E: - INTERNATIONAL SHIPMENTS (Part 262, Subpart E)

	YES	NO	NI	Remarks
1. Has the installation imported or exported Hazardous Waste? 262.50			NA	- None

(If answered Yes, complete the following as applicable.)

a. Exporting Hazardous waste; has a generator:

	YES	NO	NI	Remarks
i. Notified the Administrator in writing?				NA
ii. Obtained the signature of the foreign consignee confiming delivery of the waste(s) in the foreign country?				
iii. Met the Manifest requirements?				
b. Importing Hazardous Waste; has the generator met the manifest requirements?				

BASF Wyandotte Corporation

BASF

Wyandotte, Michigan 48192
313-246-6100
TWX: 810-231-5756 (BASFWYAN)

CERTIFIED MAIL:
P 447 526 733

December 6, 1985

742

Waste Management Division
United States Environmental
Protection Agency - Region V
230 South Dearborn Street
Chicago, IL 60604

Director
Michigan Department of
Natural Resources
P. O. Box 30028
Lansing, MI 48909

To Whom It May Concern:

Subject: Civil Action 80-73699
Consent Decree

Pursuant to Section IX and V.B.2, of the referenced Consent Decree, provided herewith are the numerical results of groundwater samples taken in September from the wells remaining on the site.

Very truly yours,

H. D. Roush
Manager
Quality Assurance and
Environmental Affairs

mh
attachment

RECEIVED
DEC 13 1985
U.S. EPA, REGION V
WASTE MANAGEMENT DIVISION
OFFICE OF THE DIRECTOR

CIVIL ACTION 80-73699 - CONSENT DECREE

ANALYTICAL RESULTS FOR
SAMPLES TAKEN

SEPTEMBER 16, 1985

Well No.	Water Elv.feet	Concentration (ppb)					
		Benzo-(a) pyrene	Napthalene	PCB's	Penta-chlorophenol	Hg	As
1	575.51	ND	30	ND	ND	ND	50
2S	575.50	ND	1,474	ND	ND	1	50
2D	575.73	ND	993	ND	ND	ND	400
3S	576.17	ND	1,026	ND	ND	4	24,000
3D	575.72	ND	770	ND	ND	9	22,000
4	577.36	ND	40	ND	ND	3	200
5	576.50	ND	22	ND	ND	ND	400
6	574.53	ND	5,428	ND	ND	20	250
9S	576.21	ND	76	ND	ND	ND	10,000
9D	578.95	ND	160	ND	ND	ND	100
				ND	ND		

Elevation of the Trenton Channel 576.53 feet

S-Shallow
D-Deep
ND - Not detected

KF9.2A

RECEIVED
DEC 13 1985
U.S. EPA, REGION V
WASTE MANAGEMENT DIVISION
OFFICE OF THE DIRECTOR

BASF Wyandotte Corporation

BASF

Wyandotte, Michigan 48192
313 246-6100
TWX: 810-231-5756 (BASFWYAN)

December 11, 1984

RECEIVED
DEC 17 1984
WASTE MANAGEMENT BRANCH

RECEIVED
DEC 1 1984
U.S. EPA, REGION V
WASTE MANAGEMENT DIVISION
OFFICE OF THE DIRECTOR

EPA Regional Administrator
Region V
Waste Management Branch
230 South Dearborn Street
Chicago, IL 60604

Gentlemen:

Subject: RCRA Manifest Exception Report

On October 9, 1984, a manifested shipment of seventy-eight 55-gallon steel drums containing miscellaneous chemicals, lab-packed and transported by Triangle Resources Industries, Greenbrier, Tennessee, left our premises for disposal at SCA Services in Pinewood, SC. Since the manifest had not been returned to BASF Wyandotte Corporation (BWC) within the 45-day period, BWC began a trace of the shipment.

On November 30, 1984, TRI reported that proper approval had not been obtained from SCA Services as originally indicated. The shipment is currently being held at Greenbrier, Tennessee awaiting formal SCA acceptance.

SCA approval is expected during the week of December 10, 1984, at which time the shipment will proceed as planned. Mr. Barry Fogle, TRI, will promptly notify BWC when this occurs.

Yours truly,

L. A. Anderson
Senior Quality Assurance Engineer

LAA/mh

cc: Mr. Barry Fogle
Triangle Resources Industries
Greenbrier, TN

RECEIVED
DEC 17 1984
WASTE MANAGEMENT BRANCH

South Carolina Department of Health and Environmental Control

Bureau of Solid & Hazardous Waste Mgt.
2600 Bull Street, Columbia, SC 29201
Phone: (803) 758-5681
Emergency & Holidays: (803) 758-5531

Please print or type (Form designed for use on elite (12-pitch) typewriter)

Form Approved OMB No 2000-0404 Expires 7-31-86

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: MID064197742 — Manifest Document No.:

2. Page 1 of 3 — Information in the shaded areas is not required by Federal law, but is by State law.

3. Generator's Name and Mailing Address
BASF Wyandotte
1609 Biddle Ave., Wyandotte, MI 48192

4. Generator's Phone (313) 246-6166

A. State Manifest Document Number: LNG-597-0011

B. State Generator's ID:

5. Transporter 1 Company Name: Triangle Resource Industries

6. US EPA ID Number: MDD980554653

C. State Transporter's ID:

D. Transporter's Phone: 800-251-1227

7. Transporter 2 Company Name:

8. US EPA ID Number:

E. State Transporter's ID:

F. Transporter's Phone:

9. Designated Facility Name and Site Address
S.C. SCA Services, Inc.
Rt. 1, Box 255
Pinewood, S.C. 29125

10. US EPA ID Number: SCD070375985

G. State Facility's ID:

H. Facility's Phone: 803-452-5003

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Waste Sodium Hydrogen Bisulfite NA 2693 ORM-B	3	DM	750	P	6666
b. waste Poison B solid nos UN 2811 Poison B	6	DM	1500	P	6666
c. Waste Poison B Liquid nos UN 2810 Poison B	1	DM	8	P	6666
d. Waste Poison B solid nos UN 2811 Poison B	1	DM	8	P	6666

J. Additional Descriptions for Materials Listed Above

a. PW-01886-PCL7
b. PW-01886-PCL3
c. PW-01886-PCL3
d. PW-01886-PCL3

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

Wear respiratory equipment and protective clothing. In case of spill, contain with absorbant. Notify Barry Fogle at 1-800-251-1227 or 615-244-8960.

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations and State laws.

Printed/Typed Name: Lyman A Anderson — Signature: Lyman A Anderson — Date: Month 10 Day 09 Year 84

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: M. L. THOMAS — Signature: M. L. Thomas — Date: Month 10 Day 09 Year 84

18. Transporter 2 Acknowledgement or Receipt of Materials

Printed/Typed Name: — Signature: — Date: Month Day Year

19. Discrepancy Indication Space

a. lbs. c. lbs.
b. lbs. d. lbs.

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Barry Fogel — Signature: — Date: Month Day Year

11/30/84 still in transit } Barry Fogel [illegible] clarification 12/1/84.
regional fouled up }

GENERATOR 1ST COPY

78

South Carolina Department of Health and Environmental Contr

Please print or type (Form designed for use on Elite (12 pitch) typewriter) Form Approved OMB No 2000 0404 Expires 7 31

UNIFORM HAZARDOUS WASTE MANIFEST *(Continuation Sheet)*

21 Generator's US EPA ID No: M1D064197742 — Manifest Document No.: 00001

22. Page: 2

Information in the shaded areas is not required by Federal law, but is by State law.

23 Generator's Name: BASF Wyandotte, 1609 Biddle Ave, Wyandotte Mi 48192 (313) 246-6166

L. State Manifest Document Number: LNG-597-0011

M. State Generator's ID:

24 Transporter ___ Company Name: TRIANGLE RESOURCE INDUSTRIES

25. US EPA ID Number: MDD980554653

N. State Transporter's ID:

O. Transporter's Phone: 800-251-122

26. Transporter ___ Company Name:

27. US EPA ID Number:

P. State Transporter's ID:

Q. Transporter's Phone:

28. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	29 Containers No.	Type	30 Total Quantity	31 Unit Wt/Vol	R Waste No.
a. Poison B Liquid nos UN 2810 Poison B	14	DM	3500	P	6666
b. Waste Flammable Liquid poisonous nos UN 1992 Flammable Liquid	8	DM	2000	P	0001
c. Waste Flammable Liquid nos UN 1993 Flammable Liquid	3	DM	750	P	0001
d. Waste Corrosive Liquid nos UN 1760 Corrosive Material	2	DM	500	P	0002
e. Waste Corrosive Liquid nos UN 1760 Corrosive Material	1	DM	8	P	0002
f. Waste Corrosive solid nos UN 1759 Corrosive Material	10	DM	2500	P	0002
g. Waste corrosive solid nos UN 1759 Corrosive Material	1	DM	8	P	0002
Waste Combustible Liquid nos NA 1993 Combustible Liquid	26	DM	6500	P	6666
i. Waste Vanadium Pentoxide UN 2862 ORM-E	1	DM	250	P	0120

S. Additional Descriptions for Materials Listed Above

a PW-01886-PCL3 d PW-01886-PCL2 g PW-01886-PCL2
b PW-01886-PCL4 e PW-01886-PCL2 h PW-01886-PCL1
c PW-01886-PCL4 f PW-01886-PCL2 i PW-01886-PCL5

T. Handling Codes for Wastes Listed Above

32. Special Handling Instructions and Additional Information

33 Transporter ___ Acknowledgement of Receipt of Materials

Printed/Typed Name: M. L. Thomas — Signature: M. L. Thomas — Date: Month 10 Day 09

34. Transporter ___ Acknowledgement of Receipt of Materials

Printed/Typed Name: — Signature: — Date: Month Day

35 Discrepancy Indication Space

GENERATOR

TRANSPORTER

FACILITY

South Carolina Department of Health and Environmental Contr

Please print or type (Form designed for use on elite (12 pitch) typewriter.) Form Approved OMB No 2000 0404 Expires 7 31

UNIFORM HAZARDOUS WASTE MANIFEST *(Continuation Sheet)*

21. Generator's US EPA ID No: MID064197742 — Manifest Document No.: 00001

22. Page: 3

Information in the shaded areas is not required by Federa law, but is by State law.

23. Generator's Name: BASF Wyandotte
1609 Biddle Ave
Wyandotte Mi 48192 (313) 246-6166

L. State Manifest Document Number: ZGN-597-0011

M. State Generator's ID:

24. Transporter ___ Company Name: TRIANGLE RESOURCE INDUSTRIES

25. US EPA ID Number: MDD980554653

N. State Transporter's ID:

O. Transporter's Phone: 800-251-122

26. Transporter ___ Company Name:

27. US EPA ID Number:

P. State Transporter's ID:

Q. Transporter's Phone:

28. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	29. Containers No.	Type	30. Total Quantity	31. Unit Wt/Vol	R Waste No.
a. Waste Maleic Anhydride ORM-A UN 2215	1	DM	250	P	0147
b.					
c.					
d.					
e.					
f.					
g.					
h.					
i.					

S. Additional Descriptions for Materials Listed Above

a. PW-01886-PCL9 d. g.
b. e. h.
c. f. i.

T. Handling Codes for Wastes Listed Above

32. Special Handling Instructions and Additional Information

33. Transporter ___ Acknowledgement of Receipt of Materials

Printed/Typed Name: M. L. THOMAS — Signature: M. L. Thomas — Date: Month 10 Day 09 Y

34. Transporter ___ Acknowledgement of Receipt of Materials

Printed/Typed Name: — Signature: — Date: Month Day Y

35. Discrepancy Indication Space

a. b. c. d. e. f. g. h. i.

GENERATOR

TRANSPORTER

FACILITY

NATURAL RESOURCES COMMISSION
THOMAS J. ANDERSON
[illegible] CAROLLO
[illegible]OB A. HOEFER
STEPHEN F. MONSMA
HILARY F. SNELL
PAUL H. WENDLER
HARRY H. WHITELEY

JES 8/29/84

STATE OF MICHIGAN

JAMES J. BLANCHARD, Governor

DEPARTMENT OF NATURAL RESOURCES

STEVENS T. MASON BUILDING
BOX 30028
LANSING, MI 48909

RONALD O. SKOOG, Director

Code O

Hazardous Waste Division
9311 Groh Road
Grosse Ile, Michigan 48138

July 31, 1984

Mr. H. Dale Roush
BASF Wyandotte Corporation
1609 Biddle Avenue
Wyandotte, Michigan 48192

Re: MID 064197742
RCRA TSD Inspection

Dear Mr. Roush:

On July 25, 1984, under authority of the United States Environmental Protection Agency (U.S. EPA) your facility was inspected to determine compliance with Subtitle C of the Resource Conservation and Recovery Act (RCRA) of 1976, as amended. The company generates and stores hazardous waste and is subject to the Act.

No violations of the RCRA generator or interim status standards were observed.

Thank you for your cooperations.

Sincerely,

William E. Stone

William E. Stone
Water Quality Specialist
Compliance Section
Hazardous Waste Division
(313) 675-0860

WES/sc
cc: Ben Okwumabua

RCRA Inspection Report

EPA Identification Number: [redacted]

Installation Name: BASF Wyandotte Corp.

Location Address: 1609 Biddle Ave.

City: Wyandotte State: Michigan 48192

Date of inspection: [redacted] Time of inspection (from) 9a (to) 12 noon

Person(s) interviewed	Title	Telephone
H. Dale Rousch	Mgr-Env. Prot.	313)282-3300
	Health & Safety	
Lynn Anderson		

Inspector(s)	Agency/Title	Telephone
Lynn King	Mi DNR-HWD/WQS	
William E. Stone	Mi DNR	313)675-0860

Installation Activity (mark only one box)	Inspection Form(s)
☒ Treatment/Storage/Disposal per 40 CFR 265.1 and/or Generation and/or Transportation	A
☐ Treatment/Storage/Disposal (no generation or Transportation)	A
☐ Generation and Transportation	B, C
☐ Generation only	B
☐ Transportation only	C

cc: Ben Okwumabua
H. Dale Rousch

INSPECTION FORM A

Section A: SCOPE OF INSPECTION.

1. Interim status standards for treatment storage or disposal of HAZARDOUS WASTES SUBJECT TO 40 CFR 265.1. Complete Inspection Form A sections B, C, D, E, and G.

2. Place an "X" in the box(es) corresponding to the facility's treatment, storage and disposal processes, and generation and/or transportation activity (if any). Complete only the applicable sections and appendixes.

Permit application process(es) (EPA Form 3510-3)			Inspection Form A section(s)
S01	[✓]	storage in containers	I
* S02	[✓]	storage in tanks applied for I.S. but do not store haz. waste in tanks	J
T01	[ ]	treatment in tanks	J
S04	[ ]	storage in surface impoundment	K,F
T02	[ ]	treatment in surface impoundment	K,F
D83	[ ]	disposal in surface impoundment	K,F
S03	[ ]	storage in waste pile	L
D81	[ ]	disposal by land application	M,F
D80	[ ]	disposal in landfill	N,F
* T03	[✓]	treatment by incineration applied for I.S. but do not incinerate haz. waste	O/P
T04	[ ]	treatment in devices other than tanks, surface impoundments, or incinerators	Q

Other activities

GENERATOR	[✓]	APPENDIX	GN
TRANSPORTER	[ ]	APPENDIX	TR

3. Indicate any hazardous waste processes, by process code, which have been omitted from Part A of the facility's permit application.

4. Indicate any hazardous waste processes (by process code and line number on EPA Form 3510-3 page 1 of 5) which appear to be eligible for exclusion per 40 CFR 265.1(c). Provide a brief rationale for the possible exclusion.

Section B: GENERAL FACILITY STANDARDS: (Part 265 Subpart B)

	YES	NO	NI*	Remarks
1. Has the Regional Administrator been notified regarding: 265.12				
a. Receipt of hazardous waste from a foreign source?		✓		
b. Facility expansion?			✓	None going on
c. Change of owner or operator?			✓	None Taken
2. General Waste Analysis: 265.13				
a. Has the owner or operator obtained a detailed chemical and physical analysis of the waste?	✓			Standard company procedure Classified by known characteristics Bulletin 28-03
b. Does the owner or operator have a detailed waste analysis plan on file at the facility?	✓			Notes don't change
c. Does the waste analysis plan specify procedures for inspection and analysis of each movement of hazardous waste from off-site?	✓			Use company form 2803 or Need waste characteristics sheet accompanies form
3. Security - Do security measures include: (if applicable) 265.14				
a. 24-Hour surveillance? or	✓			
b. i. Artificial or natural barrier around facility? and	✓			fence & River
ii. Controlled entry?	✓			guard
c. Danger sign(s) at entrance?	✓			
4. Owner or operator inspections: 265.15				
a. Does the owner or operator inspect the facility for malfunctions, deterioration, operator errors, and dischanges of hazardous waste that may affect human health or the environment?	✓			department contact people inspect daily

*Not Inspected

	YES	NO	NI	Remarks
b. Does the owner or operator have an inspection schedule at the facility?	✓			See a
c. If so, does the schedule address the inspection of the following items:				
i. monitoring equipment?			✓	Not required
ii. safety and emergency equipment?	✓			Monthly by safety d.v.
iii. security devices?	✓			handled by security [illegible] random patrol
iv. operating and structural equipment (i.e. dikes, pumps, etc.)?	✓			have none
v. type of problems to be looked for during the inspection (e.g. leaky fitting, defective pump, etc.)?	✓			
vi. inspection frequency (based upon the possible deterioration rate of the equipment)?	✓			See above
d. Are areas subject to spills inspected daily when in use?	✓			
e. Does the owner or operator maintain an inspection log or summary of owner or operator inspections?	✓			at individual facilities
f. Does the inspection log contain the following information:				
i. the date and time of the inspection?	✓			
ii. the name of the inspector?	✓			
iii. a notation of the observations made?	✓			
iv. the date and nature of any repairs or remedial actions?	✓			
5. Do personnel training records include: 265.16				
a. Job titles?	✓			
b. Job descriptions?	✓			

	YES	NO	NI	Remarks
c. Description of training?	✓			
d. Records of training?	✓			
e. Did facility personnel receive the required training by 5-19-81?	✓			
f. Do new personnel receive required training within six months?	✓			
g. Do personnel training records indicate that personnel have taken part in an annual review of initital training?				last annual Training on Haz. waste 4/83 CPR - First Aid file presentation etc also once/year min Monthly Safety meeting
6. If required, are the following special requirements for ignitable, reactive, or incompatible wastes addressed? 265.17				
a. Special handling?	✓			
b. No smoking signs?	✓			
c. Separation and protection from ignition sources?	✓			Incompatible/reactive stored separately

Section C: PREPAREDNESS AND PREVENTION: (Part 265 Subpart C)

	YES	NO	NI	Remarks
1. Maintenance and Operation of Facility: 265.31				
Is there any evidence of fire, explosion, or release of hazardous waste or hazardous waste constituent?	✓			
2. If required, does the facility have the following equipment: 265.32				
a. Internal communications or alarm systems?	✓			phones/radio/pagers/alarms
b. Telephone or 2-way radios at the scene of operations?	✓			See above
c. Portable fire extinguishers, fire control, spill control equipment and decontamination equipment?	✓			Overhead/Neutralizers in addition

Indicate the volume of water and/or foam available for fire control:

use city water & Dot River —

	YES	NO	NI	Remarks
3. Testing and Maintenance of Emergency Equipment: 265.33				
a. Has the owner or operator established testing and maintenance procedures for emergency equipment?	✓			
b. Is emergency equipment maintained in operable condition?	✓			
4. Has owner or operator provided immediate access to internal alarms? (if needed) 265.34	✓			
5. Is there adequate aisle space for unobstructed movement?	✓			
6. Has the owner or operator attempted to make arrangements with local authorities in case of an emergency at the facility?	✓			give fire & police tour on regular basis — local hospital

4/82-A

Section D: CONTINGENCY PLAN AND EMERGENCY PROCEDURES: (Part 265 Subpart D)

	YES	NO	NI	Remarks
1. Does the Contingency Plan contain the following information: 265.52				
a. The actions facility personnel must take to comply with §265.51 and 265.56 in response to fires, explosions, or any unplanned release of hazardous waste? (If the owner has a Spill Prevention, Control, and Countermeasures (SPCC) Plan, he needs only to amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this Part (as applicable.)	✓			
b. Arrangements agreed by local police departments, fire departments hospitals, contractors, and State and local emergency response teams to coordinate emergency services pursuant to §265.37?	✓			Company forsees no need for outside emergency assistance
c. Names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinators?	✓			
d. A list of all emergency equipment at the facility which includes the location and physical description of each item on the list and a brief outline of its capabilities?	✓			
e. An evacuation plan for facility personnel where there is a possibility that evacuation could be necessary? (This plan must describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes?)	✓			
2. Are copies of the Contingency Plan available at the site and local emergency organizations? 265.53		✓		See 1B

	YES	NO	NI	Remarks
3. Emergency Coordinator 265.55				
a. Is the facility Emergency Coordinator identified?	✓			
b. Is coordinator familiar with all aspects of site operation and emergency procedures?	✓			
c. Does the Emergency Coordinator have the authority to carry out the Contingency Plan?	✓			
4. Emergency Procedures 265.56				
If an emergency situation has occurred at this facility, has the Emergency Coordinator followed the emergency procedures listed in 265.56?			✓	no such emergency has occurred

Section E: MANIFEST SYSTEM, RECORDKEEPING, AND REPORTING: (Part 265 Subpart E)

	YES	NO	NI	Remarks
** 1. Use of Manifest System 265.71				Do not accept off site waste
a. Does the facility follow the procedures listed in §265.71 for processing each manifest? (Particularly sending a copy of the signed manifest back to the generator within 30 days after delivery.)				NA
b. Are records of past shipments retained for 3 years?				NA
** 2. Does the owner or operator meet requirements regarding manifest discrepancies? 265.72				NA

** Not applicable to owners or operators of on-site facilities that do not receive any waste from off-site sources.

	YES	NO	NI	Remarks
3. Operating Record 265.73				
a. Does the owner or operator maintain an operating record as required in 265.73?	✓			
b. Does the operating record contain the following information:				
i. The method(s) and date(s) of each waste's treatment, storage, or disposal as required in 40 CFR Part 265 Appendix I?	✓			
ii. The location and quantity of each hazardous waste within the facility? (This information should be cross-referenced to specific manifest number, if waste was accompanied by by a manifest.)	✓			
***iii. A map or diagram of each cell or disposal area				

*** only applies to disposal facilities

	YES	NO	NI	Remarks
showing the location and quantity of each hazardous waste? (This information should be cross-referenced to specific manifest number, if waste was accompanied by a manifest.)			NA	
iv. Records and results of all waste analyses, trial tests, monitoring data, and operator inspections?	✓			
v. Reports detailing all incidents that required implementation of the Contingency Plan?			NA	
vi. All closure and ~~post closure~~ costs as applicable?	✓			
4. Availability of Records 265.74				
Are all facility records required under 40 CFR Part 265 available for inspection?	✓			
5.**Unmanifested Waste Reports 265.76				
a. Has the facility accepted any hazardous waste from an off-site generator subject to 40 CFR 262.20 without a manifest or or shipping paper?				
b. If "a" is yes, provide the identity of the source of the waste and a description of the quantity, type, and date received for each unmanifested hazardous waste shipment.				

** Not applicable to owners or operators of on-site facilities that do not receive any hazardous from off-site sources.

Section F - GROUNDWATER MONITORING (Part 265 Subpart F)

Complete this section for facilities that treat, store, or dispose of hazardous waste in landfills, surface impoundments and/or by land treatment.

	YES	NO	NI	Remarks
1. Has the owner or operator of the facility implemented a groundwater monitoring system? 265.90	___	___	___	_____
If "no", Skip to number 11.				
2. Has the owner or operator of the facility implemented an alternate groundwater monitoring system as described in 265.90(d)?	___	___	___	_____
If "yes", skip to number 12. If "no", continue				
3. Does the groundwater monitoring system meet the following requirements of 265.91:				
a. At least one well installed hydraulically up-gradient from the limit of the waste management area?	___	___	___	_____
Indicate the total number of up-gradient wells.				
b. At least three wells installed hydraulically down-gradient at the limit of the waste management area?	___	___	___	_____
Indicate the total number of downgradient wells.	_____			
c. Are the number, locations, and depths of all wells sufficient to yield groundwater samples that are representative of groundwater under the facility?	___	___	___	_____

Sketch the locations of the wells relative to the waste management area.

	YES	NO	NI	Remarks
d. Are the monitoring wells constructed in accordance with 265.91(c) (e.g. properly cased, screened, etc.)?	___	___	___	_____
4. Has the owner or operator developed a written groundwater sampling and analysis plan that includes procedures and techniques for: 265.92				
a. Sample collection?	___	___	___	_____
b. Sample preservation and shipment?	___	___	___	_____
c. Analytical procedures?	___	___	___	_____
d. Chain of custody control?	___	___	___	_____
5. Does the owner or operator follow his groundwater sampling and analysis plan?	___	___	___	_____
6. Is the groundwater sampling and analysis plan maintained at the facility?	___	___	___	_____
7. Has the owner or operator determined the concentration or value of all the groundwater monitoring parameters of 265.92(b) in accordance with paragraphs c and d of 265.92?	___	___	___	_____

	YES	NO	NI	Remarks
8. Has the owner or operator developed an outline of a comprehensive groundwater quality assesment program that is capable of determining: 265.93				
a. Whether hazardous waste or hazardous waste constituents have entered the groundwater?				
b. The rate and extent of migration of hazardous waste or hazardous waste constituents in the groundwater?				
c. The concentration of hazardous waste or hazardous waste constituents in the groundwater?				
*9. Has the owner or operator performed a statistical analysis of his groundwater monitoring data as required in 265.93(b)?			X	
*10. Was there a statistically significant increase (or pH decrease) detected in any well?			X	
a. If "yes," has the owner or operator responded in accordance with the procedures prescribed in 265.93 paragraphs c through f?			X	
Skip to number 14				
11. Has the owner or operator prepared a written groundwater monitoring waiver demonstration for the facility?				
a. Is the waiver demonstration maintained at the facility?				
b. Has the waiver demonstration been certified by a qualified geologist or geotechnical engineer?				

Note: Inspectors should request a copy of the waiver document.

c. Skip questions 12, 13, and 14.

*These requirements do not take effect until the first 6 months after November 19, 1982. The latest date for compliance with these requirements is May 19, 1983.

	YES	NO	NI	Remarks
12. Has the owner or operator submitted an alternate groundwater monitoring system to the Regional Administrator?	___	___	___	_____
a. Has the plan been certified by a qualified geologist or geotechnical engineer?	___	___	___	_____

Note: If the plan for an alternate groundwater monitoring system was not submitted to the Regional Administrator the inspector should request a copy for review.

13. Does the alternate groundwater monitoring plan address the requirements of 265.90(d)?	___	___	___	_____
14. Does the owner or operator submit reports and maintain records as required in 265.94?	___	___	___	_____

Section G - CLOSURE AND POST CLOSURE (Part 265 Subpart G)

	YES	NO	NI	Remarks
Closure 265.112				
a. Is the facility closure plan available for inspection?	✓			
b. Does the plan identify:				
i. maximum extent unclosed during facility life?	✓			
ii. maximum hazardous waste inventory?	✓			
iv. estimated year of closure?	✓			contingent on operation
v. schedule of closure activities?	✓			
c. Has closure begun?		✓		
*2. Post-Closure 265.118				
a. Is the post-closure plan available for inspection?				
b. Does this plan contain:				
i. description of groundwater monitoring activities and frequencies?				
ii. description of maintenance activities and frequencies for				
AA. integrity of cap, final cover, or containment structures, where applicable				
BB. facility monitoring equipment				
iii. name, address, and phone number of person or office to contact during post-closure care period?				
c. Has the post-closure period begun?				
d. Is the written post-closure cost estimate available? 265.144				

*Applies only to disposal facilities.

Section I - USE AND MANGEMENT OF CONTAINERS (Part 265, Subpart I)

		YES	NO	NI	Remarks
1.	Are containers in good condition? 265.171	✓			
2.	Are containers compatible with waste in them? 265.172	✓			
3.	Are containers managed to prevent leaks? 265.173	✓			
4.	Are containers stored closed?	✓			
5.	Are containers inspected weekly for leaks and defects.	✓			daily
6.	Are ignitable and reactive wastes stored at least 15 meters (50 feet) from the facility property line? (Indicate if waste is ignitable or reactive). 265.176	✓			
7.	Are incompatible wastes stored in separate containers? (If not, the provisions of 40 CFR 265.17(b) apply). 265.177	✓			
8.	Are containers of incompatible waste separated or protected from each other by physical barriers or sufficient distance?	✓			

Section J - TANKS (Part 265, Subpart J)

	YES	NO	NI	Remarks
1. Are tanks used to store only those wastes which will not cause corrosion, leakage or premature failure of the tank? 265.192			✓	Tank not in use
2. Do uncovered tanks have at least 60 cm (2 feet) of freeboard, or dikes or other containment structures?				
3. Do continuous feed systems have a waste-feed cutoff?				
4. Are waste analyses done before the tanks are used to store a substantially different waste than before? 265.193				
5. Are required daily and weekly inspections done? 265.194				
6. Are reactive & ignitable wastes in tanks protected or rendered non-reactive or non-ignitable? 265.198 Indicate if waste is ignitable or reactive. (If waste is rendered non-reactive or non-ignitable, see treatment requirements.)				
7. Are incompatible wastes stored in separate tanks? 265.199 (If not, the provisions of 40 CFR 265.17(b) apply.)				

8. Has the owner or operator observed the National Fire Protection Associations buffer zone requirements for tanks containing ignitable or reactive wastes?

Tank capacity: _____gallons

Tank diameter: _____feet

Distance of tank from property line _____ feet

(See table 2 - 1 through 2 - 6 of NFPA's "Flammable and Combustible Liquids Code - 1977" to determine compliance.)

Section K - SURFACE IMPOUNDMENTS (Part 265, Subpart K)

	YES	NO	NI	Remarks
1. Do surface impoundments have at least 60 cm (2 feet) of freeboard? 265.222	___	___	___	_____
2. Do earthen dikes have protective covers? 265.223	___	___	___	_____
3. Are waste analyses done when the impoundment is used to store a substantially different waste than before? 265.225	___	___	___	_____
4. Is the freeboard level inspected at least daily? 265.226	___	___	___	_____
5. Are the dikes inspected weekly for evidence of leaks or deterioration?	___	___	___	_____
6. Are reactive & ignitable wastes rendered non-reactive or non-ignitable before storage in a surface impoundment? (If waste is rendered non-reactive or non-ignitable, see treatment requirements.) 265.229	___	___	___	_____
7. Are incompatible wastes stored in different impoundments? (If not, the provisions of 40 CFR 265.17(b) apply.) 265.230	___	___	___	_____

Section L - WASTE PILES (40 CFR Part 265, Subpart L)

	YES	NO	NI	Remarks
1. Are waste piles covered or protected from dispersal by wind? 265.251	___	___	___	_____
2. Is each in-coming movement of waste analyzed before being added to the waste pile? 265.252	___	___	___	_____
3. Are [illegible]hate, run-off, and run-on co[illegible]d as per the requirements of [illegible]3? 265.253	___	___	___	_____
4. Are reactive & ignitable wastes rendered non-reactive or non-ignitable before storage in a pile? Indicate if waste is ignitable or reactive. (If waste is rendered non-reactive or non-ignitable, see treatment requirements.) 265.256	___	___	___	_____
5. Are piles of reactive or ignitable waste protected from materials or conditions that might cause them to ignite or react?	___	___	___	_____
6. Are incompatible wastes stored in different piles? (If not, the provisions of 40 CFR 265.17(b) apply.) 265.257	___	___	___	_____
7. Are piles of incompatible waste protected by barriers or distance from other waste?	___	___	___	_____

Section M - LAND TREATMENT (Part 265, Subpart M)

	YES	NO	NI	Remarks
1. Is treated hazardous waste capable of biological or chemical degradation? 265.272	___	___	___	_____
2. Are run-off and run-on diverted from the facility or collected				
3. Is waste analyzed according to 265.273?	___	___	___	_____
4. If food chain crops are grown at the facility, has the owner or operator addressed the requirements of 265.276?	___	___	___	_____
5. Is an unsaturated zone monitoring plan designed and implemented to detect the vertical migration of hazardous waste and provide information on the background concentrations of the hazardous waste available? 265.278	___	___	___	_____
6. Does the unsaturated zone monitoring plan address the minimum information specified in 265.278?	___	___	___	_____
7. Are records kept regarding application dates and rates, quantities, and locations, of all hazardous waste placed in the facility? 265.279	___	___	___	_____
8. Are the special requirements fulfilled regarding land treatment of ignitable or reactive wastes? (Indicate if waste is ignitable or reactive.) 265.281	___	___	___	_____
9. Are incompatible wastes land treated? (If yes, 265.17(b) applies) 265.282	___	___	___	_____

Section N - LANDFILLS (Part 265, Subpart N)

	YES	NO	NI	Remarks
1. General Operating Requirements 265.302 Does the facility provide the following:				
a. Diversion of run-on away from active portions of the fill?	___	___	___	_____
b. Collection of run-off from active portions of the fill?	___	___	___	_____
c. Is collected run off treated?	___	___	___	_____
d. Control of wind dispersal of hazardous waste?	___	___	___	_____
2. Surveying and Recordkeeping 265.309 Does the Operating Record Include:				
a. A map showing the exact location and dimensions of each cell?	___	___	___	_____
b. The contents of each cell and the location of each hazardous waste type withing each cell?	___	___	___	_____
Special requirements for ignitable or reactive waste. Are ignitable or reactive wastes treated so the resulting mixture is no longer ignitable or reactive? (Indicate if waste is ignitable or reactive.) 265.312	___	___	___	_____
4. Special Requirements for Incompatible Wastes. 265.313 Does the owner or operator dispose of incompatible waste in separate cells? (If not, the provisions of 40 CFR 265.17(b) apply.)	___	___	___	_____

Note: If waste is rendered non-reactive or non-ignitable see treatment requirements. If not, the provisions of 40 CFR 265.17(b) apply.

	YES	NO	NI	Remarks
5. Special requirements for liquid waste 265.314				
a. Are bulk or non-containerized liquids placed in the landfill? If "yes," complete items i, ii, and iii.				
i. Does the landfill have a chemically and physically resistant liner system?	___	___	___	_____
ii. Does the landfill have a functional leachate collection system?	___	___	___	_____
iii. Are free liquids stabilized prior to or immediately after placement in the landfill?	___	___	___	_____
b. Have containers holding free liquids been placed in landfill since March 22, 1982?	___	___	___	_____
6. Special requirements for Containers 265.315 Are empty containers crushed flat, shredded, or similarly reduced in volume before being buried beneath the surface of the landfill?	___	___	___	_____

Section O/P - INCINERATION AND THERMAL TREATMENT (40 CFR Part 265, Subparts O and P)

1. Determination of Steady State I=incinerator T=thermal

a. Type of unit (i.e., type of incinerator or thermal treatment): _____

b. Components and steady state condition: I 265.343 T 265.373

Was each component at steady state prior to adding waste?

Component	YES	NO	NI	Remarks

2. Waste Analysis I 265.345 T 265.375

a. Minimum requirements, for wastes not previously burned/treated.

i. Required analyses; has an analysis been performed for the following?

Heating value				
Halogen content				
Sulfur content				

ii. Has documented or written data been substituted for analysis of either:

Lead?				
Mercury:				

b. List other paramters for which the waste is tested to enable owner or operator to establish steady state or determine the types of pollutants which may be emitted. (Note in Remarks any which you feel should be tested.)

	YES	NO	NI	Remarks
3. Monitoring and Inspections I 265.347 T 265.37				
a. Are combustion/emission control instruments monitored at least every 15 minutes?	___	___	___	_____
b. Is steady state maintained or corrections attempted?	___	___	___	_____
c. Is stack plume observed at least hourly for normal color and opacity?	___	___	___	_____
d. Did any stack observations made by owner or operator show a plume different than normal?**	___	___	___	_____
e. If "yes" to (d) above, were corrections made to return emissions to normal appearance?**	___	___	___	_____
f. Are the complete unit and associated equipment inspected daily for leaks, spills, and fugitive emissions?	___	___	___	_____

**Specify in Remarks for what period of time this was checked.

g. Are emergency shutdown controls and system alarms checked daily for proper operation?	___	___	___	_____

4. Open Burning T 265.382 (open burning does not apply to incineration)

a. Only complete this part if the facility open burns hazardous waste.

i. Does this facility burn only waste explosives? (A No answer means other hazardous waste is open-burned).	___	___	___	_____

	YES	NO	NI	Remarks
ii. It this facility open-burns waste explosives, does it burn the waste at a distance greater than or equal to the minimum specified distance (below)	___	___	___	_____

Pounds of waste explosives or propellants	Minimum distance from open burning or detonation to the property of others	
0 to 100.....	204 m	670 ft
101 to 1,000.....	380 m	1,250 ft
1,001 to 10,000.....	530 m	1,730 ft
10,0001 to 30,000.....	690 m	2,260 ft

Section Q - CHEMICAL, PHYSICAL AND BIOLOGICAL TREATMENT (Part 265, Subpart Q)

	YES	NO	NI	Remarks
1. Is equipment used to treat only those wastes which will not cause leakage, corrosion, or premature failure? 265.401	___	___	___	_____
2. Is a continuously fed system equipped with a means of hazardous waste inflow stoppage or control (e.g., cut-off system)?	___	___	___	_____
3. Has the owner or operator addressed the waste analysis requirements of 265.402?	___	___	___	_____
4. Are inspection procedures followed according to 265.403?	___	___	___	_____
5. Are the special requirements fulfilled for ignitable or reactive wastes? 265.405	___	___	___	_____
6. Are incompatible wastes treated? (If yes, 265.17(b) applies.) 265.406	___	___	___	_____

Note: EPA has temporarily suspended the applicability of the requirements of the hazardous waste regulations in 40 CFR Parts 122, 264 and 265 to owners and operators of (1) wastewater treatment tanks that receive, store, and treat wastewaters that are hazardous waste or that generate, store or treat a wastewater treatment sludge which is a hazardous waste where such wastewaters are subject to regulation under Sections 402 or 307(b) of the Clean Water Act (33 U.S.C. 1251 et seq.) and (2) neutralization tanks, transport vehicles, vessels, or containers which neutralize wastes which are hazardous only because they exhibit the corrosivity characteristics under 40 CFR §261.22, or are listed as hazardous wastes in Subpart D of 40 CFR Part 261 only for this reason.

Section A: Scope

1. Complete this Appendix if the owner or operator of a TSD facility also generates hazardous waste that is subsequently shipped off-site for treatment, storage, or disposal.

Section B: MANIFEST REQUIREMENTS (Part 262, Subpart B)

	YES	NO	NI	Remarks
(1) Does the operator have copies of the manifest available for review? 262.40	✓			
(2) Examine manifests for shipments in past 6 months. Indicate approximate number of manifested shipments during that period. 40				
(3) Do the manifest forms examined contain the following information: (If possible, make copies of, or record information from, manifest(s) that do not contain the critical elements). 262.21				
a. Manifest document number?	✓			
b. Name, mailing address, telephone number, and EPA ID number of Generator	✓			
c. Name and EPA ID Number of Transporter(s)?	✓			
d. Name, address, and EPA ID Number Designated permitted facility and alternate facility?	✓			
e. The description of the waste(s) (DOT shipping name, DOT hazard class, DOT identification number)?	✓			
f. The total quantity of waste(s) and the type and number of containers loaded?	✓			
g. Required certification?	✓			
h. Required signatures?	✓			

(4) Reportable exceptions 262.42

a. For manifests examined in (2) (except for shipments within the last 35 days), enter the number of manifests for which the generator has NOT received a signed copy from the designated facility within 35 days of the date of shipment. 0

b. For manifests indicated in (4a), enter the number for which the generator has submitted exception reports (40 CFR 262.42) to the Regional Administrator. NA

Section C: PRE-TRANSPORT REQUIREMENTS (Part 262, Subpart C)

	YES	NO	NI	Remarks
1. Is waste packaged in accordance with DOT regulations? (Required prior to movement of hazardous waste off-site) 262.30	✓			
2. Are waste packages marked and labeled in accordance with DOT regulations concerning hazardous waste materials? (Required for movement of hazardous waste off-site) 262.31 262.32	✓			
3. If required, are placards available to transporters of hazardous waste? 262.33	✓			

4. On-site accumulation of generated hazardous wastes. A HWMF may accumulate hazardous waste it generates either (A) in its storage facility [265.1(b)] or (B) in accordance with 40 CFR 262.34 [see 265.1(c)(7)]. Option B restricts all accumulation to tanks and containers. If the installation elects option A, check this box ☒ and skip to Section D. If the installation elects option B, complete the following observations: See 40 CFR 262.34 January 11, 1982 Revision

elect option A but are complying with B (portion)

	YES	NO	NI	Remarks
a. Is each container clearly marked with the start of accumulation date?	✓			
b. Have more than 90 days elapsed since the date inspected in (a)?	✓			
c. Do wastes remain in accumulation tanks for more than 90 days?			NA	
d. Is each container and tank labeled or marked clearly with the words "Hazardous Waste"?	✓			

Section D: - RECORDKEEPING AND REPORTING (Part 262, Subpart D)

	YES	NO	NI	Remarks
1. Are all test results and analyses needed for hazardous waste determinations retained for at least three years? 262.40	✓			

Section E: - INTERNATIONAL SHIPMENTS (Part 262, Subpart E)

	YES	NO	NI	Remarks
1. Has the installation imported or exported Hazardous Waste? 262.50	✓			

(If answered Yes, complete the following as applicable.)

a. Exporting Hazardous waste; has a generator:

	YES	NO	NI	Remarks
i. Notified the Administrator in writing?	✓	~~NI~~		
ii. Obtained the signature of the foreign consignee confiming delivery of the waste(s) in the foreign country?	✓			
iii. Met the Manifest requirements?	✓			
b. Importing Hazardous Waste; has the generator met the manifest requirements?			NA	

BASF Wyandotte Corporation

100 Cherry Hill Road
P.O. Box 181
Parsippany, N.J. 07054
201/263-5280

Keith Fry
Director
Corporate Environmental Protection

Certified Mail
P35-1210736
July 20, 1984

Waste Management Division
United States Environmental Protection
Agency - Region V
230 S. Dearborn Street
Chicago, IL 60604

SUBJECT: Consent Decree Civil Action 80-73699

Dear Sir:

Pursuant to Section IX.A. of the referenced Consent Decree, BASF Wyandotte Corporation (BWC) hereby appoints the undersigned as its Coordinator. The Alternate Coordinator is:

David R. Anderson
Corporate Environmental Protection
BASF Wyandotte Corporation
PO Box 181
100 Cherry Hill Road
Parsippany, NJ 07054
201-263-5445

Pursuant to Section IX.B. of the Consent Decree the BWC Project Manager is:

Rodney E. Brandau, P.E.
BASF Wyandotte Corporation
1609 Biddle Avenue
Wyandotte, MI 48192
313-264-6105

In the absence of Mr. Brandau the Field Representative should contact the office of:

C.W. Axce
General Works Manager
BASF Wyandotte Corporation
1609 Biddle Avenue
Wyandotte, MI 48192
313-264-6161

Pursuant to Section IX.C. of the Consent Decree notice is hereby given that construction will commence July 23, 1984. On July 3, 1984 notice was given as required by this section that construction would commence as soon as possible after the Consent Decree was entered by the Court. The Court entered the Consent Decree July 18, 1984.

Pursuant to Section V.A.1. of the Consent Decree BASF Wyandotte Corporation certifies:

a. Final design of the Site Modification Program was complete prior to the entry of the Consent Decree.

b. Bid packages were prepared and bids were solicited prior to entry of the Consent Decree.

Pursuant to Section V.A.2. of the Consent Decree BASF Wyandotte Corporation certifies:

a. That the existing fencing has been maintained since the date of entry of the Consent Decree.

b. That a lock has been maintained on the entrance gate since the date of entry of the Consent Decree.

Very truly yours,

BASF Wyandotte Corporation

Keith Fry

Keith Fry, Director
Corporate Environmental Protection

mjc

cc: E.L. Valentine
Michigan Attorney General's Office

985 7/20/83 Code O

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

STATE OF MICHIGAN

JAMES J. BLANCHARD, Governor

DEPARTMENT OF NATURAL RESOURCES

STEVENS T. MASON BUILDING
BOX 30028
LANSING, MI 48909
HOWARD A. TANNER, Director
Hazardous Waste Division
Detroit Area
9311 Groh Road
Grosse Ile, Michigan 48138

June 22, 1983

Mr. H. Dale Roush
BASF Wyandotte Corporation
1609 Biddle Avenue
Wyandotte, Michigan 48192

MID 064197742

Dear Mr. Roush:

On June 17, 1983, your facility was inspected to determine compliance with Subtitle C of the Resource Conservation and Recovery Act (RCRA) of 1976, as amended. The company generates and stores hazardous waste and is subject to the Act.

No violations of the RCRA Generator or Interim Status Standards were observed.

Thank you for your cooperation. Feel free to contact me at (313) 675-0860 if you have any questions.

Sincerely,

William E. Stone

William E. Stone
Water Quality Specialist
Compliance Section
Hazardous Waste Division

WES/sc
cc: Ken Burda (3)

RCRA Inspection Report

BASF Wyandotte Corporation
1609 Biddle Avenue
Wyandotte, Michigan 48192

MID 064197742

The facility is a chemical research and manufacturing complex. It consists of five plants: 1) Research and Development, 2) Polyal Production 3) Vitamin A Production, 4) Vitamin E Production and 5) Transparent Iron Oxide Pigments Production.

The facility generates and stores the following hazardous wastes:

Waste	Plant	Container	Transporter	Disposer
Wash Solvent (D001)	R&D	55 gal. drums	K&D	SCA incinerator
Isocyanate (D003)	R&D	55 gal. drums	K&D	SCA
Lab Packs (variable)	R&D	55 gal. drums	K&D	Wayne Disposal
Filter Cake (D001 & D002)	Polyal	Roll off	K&D	Chem Met
Filter Cake (0030)	Vita A	Roll off	K&D	Chem Met

cc: Ken Burda (3)
BASF

JES 7/20/83
code

RCRA Inspection Report

EPA Identification Number: [redacted]

Installation Name: BASF Wyandotte Corp.

Location Address: 1609 Biddle Ave.

City: Wyandotte State: Mi. 48192

Date of inspection: [redacted] Time of inspection (from) 1p (to) 3:30p

Person(s) interviewed	Title	Telephone
H. Dale Roush	Mgr. - Env. Protection Health & Safety	313) 282-3300

Inspector(s)	Agency/Title	Telephone
William E. Stone	MiDNR-HWD/WQS	313) 675-0860

Installation Activity (mark only one box) — Inspection Form(s)

- [X] Treatment/Storage/Disposal per 40 CFR 265.1 and/or Generation and/or Transportation — A
- [ ] Treatment/Storage/Disposal (no generation or Transportation) — A
- [ ] Generation and Transportation — B, C
- [ ] Generation only — B
- [ ] Transportation only — C

cc: Ken Burda (3)
Company

BASF

INSPECTION FORM A

MID 064197742

Section A: SCOPE OF INSPECTION.

1. Interim status standards for treatment storage or disposal of HAZARDOUS WASTES SUBJECT TO 40 CFR 265.1. Complete Inspection Form A sections B, C, D, E, and G.

2. Place an "X" in the box(es) corresponding to the facility's treatment, storage and disposal processes, and generation and/or transportation activity (if any). Complete only the applicable sections and appendixes.

Permit application process(es) (EPA Form 3510-3)			Inspection Form A section(s)
S01	[X]	storage in containers	I
S02	[X]	storage in tanks-not currently a waste	J
T01	[ ]	treatment in tanks	J
S04	[ ]	storage in surface impoundment	K,F
T02	[ ]	treatment in surface impoundment	K,F
D83	[ ]	disposal in surface impoundment	K,F
S03	[ ]	storage in waste pile	L
D81	[ ]	disposal by land application	M,F
D80	[ ]	disposal in landfill	N,F
T03	[X]	treatment by incineration applied for Interim status but do not incinerate hazardous waste	O/P
T04	[ ]	treatment in devices other than tanks, surface impoundments, or incinerators	Q

Other activities

GENERATOR	[X]	APPENDIX	GN
TRANSPORTER	[ ]	APPENDIX	TR

3. Indicate any hazardous waste processes, by process code, which have been omitted from Part A of the facility's permit application.

4. Indicate any hazardous waste processes (by process code and line number on EPA Form 3510-3 page 1 of 5) which appear to be eligible for exclusion per 40 CFR 265.1(c). Provide a brief rationale for the possible exclusion.

cc: Ken Burda (3)
Company

Section B: GENERAL FACILITY STANDARDS: (Part 265 Subpart B)

	YES	NO	NI*	Remarks
1. Has the Regional Administrator been notified regarding: 265.12				
a. Receipt of hazardous waste from a foreign source?		X		NA
b. Facility expansion?				NA
c. Change of owner or operator?				NA
2. General Waste Analysis: 265.13				
a. Has the owner or operator obtained a detailed chemical and physical analysis of the waste?	X			
b. Does the owner or operator have a detailed waste analysis plan on file at the facility?	X			Receive no off site waste plan related to waste characterization forms req by Act 64
c. Does the waste analysis plan specify procedures for inspection and analysis of each movement of hazardous waste from off-site?				NA
3. Security - Do security measures include: (if applicable) 265.14				
a. 24-Hour surveillance? or	X			
b. i. Artificial or natural barrier around facility? and	X			Fenced + lighted
ii. Controlled entry?	X			
c. Danger sign(s) at entrance?	X			
4. Owner or operator inspections: 265.15				
a. Does the owner or operator inspect the facility for malfunctions, deterioration, operator errors, and dischanges of hazardous waste that may affect human health or the environment?	X			

*Not Inspected

	YES	NO	NI	Remarks
b. Does the owner or operator have an inspection schedule at the facility?	X			
c. If so, does the schedule address the inspection of the following items:				
i. monitoring equipment?		X		
ii. safety and emergency equipment?	X			seperate sch.
iii. security devices?	X			seperate sch.
iv. operating and structural equipment (i.e. dikes, pumps, etc.)?	X			
v. type of problems to be looked for during the inspection (e.g. leaky fitting, defective pump, etc.)?	X			
vi. inspection frequency (based upon the possible deterioration rate of the equipment)?	X			
d. Are areas subject to spills inspected daily when in use?	X			
e. Does the owner or operator maintain an inspection log or summary of owner or operator inspections?	X			
f. Does the inspection log contain the following information:				
i. the date and time of the inspection?	X			
ii. the name of the inspector?	X			
iii. a notation of the observations made?	X			
iv. the date and nature of any repairs or remedial actions?	X			
5. Do personnel training records include: 265.16				
a. Job titles?	X			Seperate
b. Job descriptions?	X			Rotll Solid Waste Coordinators

	YES	NO	NI	Remarks
c. Description of training?	X			
d. Records of training?	X			
e. Did facility personnel receive the required training by 5-19-81?			X	
f. Do new personnel receive required training within six months?			X	NA
g. Do personnel training records indicate that personnel have taken part in an annual review of initital training?	X			4/83
6. If required, are the following special requirements for ignitable, reactive, or incompatible wastes addressed? 265.17				
a. Special handling?	X			
b. No smoking signs?	X			
c. Separation and protection from ignition sources?	X			

Section C: PREPAREDNESS AND PREVENTION: (Part 265 Subpart C)

Maintenance and Operation of Facility: 265.31	YES	NO	NI	Remarks
Is there any evidence of fire, explosion, or release of hazardous waste or hazardous waste constituent?		X		
2. If required, does the facility have the following equipment: 265.32				
a. Internal communications or alarm systems?	X			
b. Telephone or 2-way radios at the scene of operations?	X			
c. Portable fire extinguishers, fire control, spill control equipment and decontamination equipment?	X			ext. absorbants

Indicate the volume of water and/or foam available for fire control:

Municipal & River Intake

3. Testing and Maintenance of Emergency Equipment: 265.33				
a. Has the owner or operator established testing and maintenance procedures for emergency equipment?	X			Ext. inspect 1/mon.
b. Is emergency equipment maintained in operable condition?	X			
4. Has owner or operator provided immediate access to internal alarms? (if needed) 265.34	X			
5. Is there adequate aisle space for unobstructed movement?	X			
6. Has the owner or operator attempted to make arrangements with local authorities in case of an emergency at the facility?	X			Give tours to Fire Hospital staff on staff of BASF

Section D: CONTINGENCY PLAN AND EMERGENCY PROCEDURES: (Part 265 Subpart D)

	YES	NO	NI	Remarks
Does the Contingency Plan contain the following information: 265.52				
a. The actions facility personnel must take to comply with §265.51 and 265.56 in response to fires, explosions, or any unplanned release of hazardous waste? (If the owner has a Spill Prevention, Control, and Countermeasures (SPCC) Plan, he needs only to amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this Part (as applicable.)	X			
b. Arrangements agreed by local police departments, fire departments hospitals, contractors, and State and local emergency response teams to coordinate emergency services pursuant to §265.37?	Done	needed		Hospital Chief of Staff is BAGF physicial
c. Names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinators?	X			On-site fire + protection -Have given tours to Fire
d. A list of all emergency equipment at the facility which includes the location and physical description of each item on the list and a brief outline of its capabilities?	X			In Emergency Proc manual Fire ext. by Dept. Spill equip listed in old PIPP
e. An evacuation plan for facility personnel where there is a possibility that evacuation could be necessary? (This plan must describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes?)	X			See Above In Emergency Proc. manual
2. Are copies of the Contingency Plan available at the site and local emergency organizations? 265.53	X	X	at site	-local don't want

	YES	NO	NI	Remarks
Emergency Coordinator 265.55				
a. Is the facility Emergency Coordinator identified?	X			
b. Is coordinator familiar with all aspects of site operation and emergency procedures?	X			
c. Does the Emergency Coordinator have the authority to carry out the Contingency Plan?	X			
4. Emergency Procedures 265.56				
If an emergency situation has occurred at this facility, has the Emergency Coordinator followed the emergency procedures listed in 265.56?				NA.

Section E: MANIFEST SYSTEM, RECORDKEEPING, AND REPORTING: (Part 265 Subpart E)

	YES	NO	NI	Remarks
** Use of Manifest System 265.71				
a. Does the facility follow the procedures listed in §265.71 for processing each manifest? (Particularly sending a copy of the signed manifest back to the generator within 30 days after delivery.)				
b. Are records of past shipments retained for 3 years?				
** 2. Does the owner or operator meet requirements regarding manifest discrepancies? 265.72				
3. Operating Record 265.73				
a. Does the owner or operator maintain an operating record as required in 265.73?	X			not in same form
b. Does the operating record contain the following information:				
i. The method(s) and date(s) of each waste's treatment, storage, or disposal as required in 40 CFR Part 265 Appendix I?	Keep inventory & manifests			
ii. The location and quantity of each hazardous waste within the facility? (This information should be cross-referenced to specific manifest number, if waste was accompanied by by a manifest.)	X			see i.
***iii. A map or diagram of each cell or disposal area				

** Not applicable to owners or operators of on-site facilities that do not receive any waste from off-site sources.

*** only applies to disposal facilities

	YES	NO	NI	Remarks
showing the location and quantity of each hazardous waste? (This information should be cross-referenced to specific manifest number, if waste was accompanied by a manifest.)			X	NA
iv. Records and results of all waste analyses, trial tests, monitoring data, and operator inspections?	X			
v. Reports detailing all incidents that required implementation of the Contingency Plan?			X	NA
vi. All closure and post closure costs as applicable?	X			
4. Availability of Records 265.74				
Are all facility records required under 40 CFR Part 265 available for inspection?	X			
5. **Unmanifested Waste Reports 265.76				
a. Has the facility accepted any hazardous waste from an off-site generator subject to 40 CFR 262.20 without a manifest or or shipping paper?				
b. If "a" is yes, provide the identity of the source of the waste and a description of the quantity, type, and date received for each unmanifested hazardous waste shipment.				

** Not applicable to owners or operators of on-site facilities that do not receive any hazardous from off-site sources.

Section F - GROUNDWATER MONITORING (Part 265 Subpart F)

Complete this section for facilities that treat, store, or dispose of hazardous waste in landfills, surface impoundments and/or by land treatment.

	YES	NO	NI	Remarks
1. Has the owner or operator of the facility implemented a groundwater monitoring system? 265.90	___	___	___	_____
If "no", Skip to number 11.				
2. Has the owner or operator of the facility implemented an alternate groundwater monitoring system as described in 265.90(d)?	___	___	___	_____
If "yes", skip to number 12. If "no", continue				
3. Does the groundwater monitoring system meet the following requirements of 265.91:				
a. At least one well installed hydraulically up-gradient from the limit of the waste management area?	___	___	___	_____
Indicate the total number of up-gradient wells.				
b. At least three wells installed hydraulically down-gradient at the limit of the waste management area?	___	___	___	_____
Indicate the total number of downgradient wells.	_____			
c. Are the number, locations, and depths of all wells sufficient to yield groundwater samples that are representative of groundwater under the facility?	___	___	___	_____

Sketch the locations of the wells relative to the waste management area.

	YES	NO	NI	Remarks
d. Are the monitoring wells constructed in accordance with 265.91(c) (e.g. properly cased, screened, etc.)?	___	___	___	_____
4. Has the owner or operator developed a written groundwater sampling and analysis plan that includes procedures and techniques for: 265.92				
a. Sample collection?	___	___	___	_____
b. Sample preservation and shipment?	___	___	___	_____
c. Analytical procedures?	___	___	___	_____
d. Chain of custody control?	___	___	___	_____
5. Does the owner or operator follow his groundwater sampling and analysis plan?	___	___	___	_____
6. Is the groundwater sampling and analysis plan maintained at the facility?	___	___	___	_____
7. Has the owner or operator determined the concentration or value of all the groundwater monitoring parameters of 265.92(b) in accordance with paragraphs c and d of 265.92?	___	___	___	_____

	YES	NO	NI	Remarks
8. Has the owner or operator developed an outline of a comprehensive groundwater quality assesment program that is capable of determining: 262.93				
a. Whether hazardous waste or hazardous waste constituents have entered the groundwater?	___	___	___	_____
b. The rate and extent of migration of hazardous waste or hazardous waste constituents in the groundwater?	___	___	___	_____
c. The concentration of hazardous waste or hazardous waste constituents in the groundwater?	___	___	___	_____
*9. Has the owner or operator performed a statistical analysis of his groundwater monitoring data as required in 265.93(b)?	___	___	X	_____
*10. Was there a statistically significant increase (or pH decrease) detected in any well?	___	___	X	_____
a. If "yes," has the owner or operator responded in accordance with the procedures prescribed in 265.93 paragraphs c through f?	___	___	X	_____
Skip to number 14				
11. Has the owner or operator prepared a written groundwater monitoring waiver demonstration for the facility?	___	___	___	_____
a. Is the waiver demonstration maintained at the facility?	___	___	___	_____
b. Has the waiver demonstration been certified by a qualified geologist or geotechnical engineer?	___	___	___	_____

Note: Inspectors should request a copy of the waiver document.

c. Skip questions 12, 13, and 14.

*These requirements do not take effect until the first 6 months after November 19, 1982. The latest date for compliance with these requirements is May 19, 1983.

	YES	NO	NI	Remarks
12. Has the owner or operator submitted an alternate groundwater monitoring system to the Regional Administrator?	___	___	___	_____
a. Has the plan been certified by a qualified geologist or geotechnical engineer?	___	___	___	_____

Note: If the plan for an alternate groundwater monitoring system was not submitted to the Regional Administrator the inspector should request a copy for review.

13. Does the alternate groundwater monitoring plan address the requirements of 265.90(d)?	___	___	___	_____
14. Does the owner or operator submit reports and maintain records as required in 265.94?	___	___	___	_____

Section G - [illegible]OSURE AND POST CLOSURE (Part [illegible] Subpart G)

	YES	NO	NI	Remarks
1. Closure 265.112				
a. Is the facility closure plan available for inspection?	X			
b. Does the plan identify:				
i. maximum extent unclosed during facility life?			X	NA
ii. maximum hazardous waste inventory?	X			
iv. estimated year of closure?				NA
v. schedule of closure activities?	X			
c. Has closure begun?		X		
*2. Post-Closure 265.118				
a. Is the post-closure plan available for inspection?				
b. Does this plan contain:				
i. description of groundwater monitoring activities and frequencies?				
ii. description of maintenance activities and frequencies for				
AA. integrity of cap, final cover, or containment structures, where applicable				
BB. facility monitoring equipment				
iii. name, address, and phone number of person or office to contact during post-closure care period?				
c. Has the post-closure period begun?				
d. Is the written post-closure cost estimate available? 265.144				

[illegible]plies only to disposal facilities.

Section I - USE AND MANGEMENT OF CONTAINERS (Part 265, Subpart I)

		YES	NO	NI	Remarks
	Are containers in good condition? 265.171	X			
2.	Are containers compatible with waste in them? 265.172		X		
3.	Are containers managed to prevent leaks? 265.173	X			
4.	Are containers stored closed?	X			
5.	Are containers inspected weekly for leaks and defects.	X			
6.	Are ignitable and reactive wastes stored at least 15 meters (50 feet) from the facility property line? (Indicate if waste is ignitable or reactive). 265.176	X			
7.	Are incompatible wastes stored in separate containers? (If not, the provisions of 40 CFR 265.17(b) apply). 265.177				NA
8.	Are containers of incompatible waste separated or protected from each other by physical barriers or sufficient distance?				NA

Section J - TANKS (Part 265, Subpart J)

	YES	NO	NI	Remarks
1. Are tanks used to store only those wastes which will not cause corrosion, leakage or premature failure of the tank? 265.192	X			The material being stored is not currently a waste. It is saleable used acetic acid. They listed this tank as a precaution.
2. Do uncovered tanks have at least 60 cm (2 feet) of freeboard, or dikes or other containment structures?				NA
3. Do continuous feed systems have a waste-feed cutoff?				NA
4. Are waste analyses done before the tanks are used to store a substantially different waste than before? 265.193				NA
5. Are required daily and weekly inspections done? 265.194	X			
6. Are reactive & ignitable wastes in tanks protected or rendered non-reactive or non-ignitable? 265.198 Indicate if waste is ignitable or reactive. (If waste is rendered non-reactive or non-ignitable, see treatment requirements.)				NA
7. Are incompatible wastes stored in separate tanks? 265.199 (If not, the provisions of 40 CFR 265.17(b) apply.)				NA

8. Has the owner or operator observed the National Fire Protection Associations buffer zone requirements for tanks containing ignitable or reactive wastes?

Tank capacity: _____ gallons

Tank diameter: _____ feet

Distance of tank from property line _____ feet

(See table 2 - 1 through 2 - 6 of NFPA's "Flammable and Combustible Liquids Code - 1977" to determine compliance.)

Section K - SURFACE IMPOUNDMENTS (Part 265, Subpart K)

	YES	NO	NI	Remarks
1. Do surface impoundments have at least 60 cm (2 feet) of freeboard? 265.222	___	___	___	_____
2. Do earthen dikes have protective covers? 265.224	___	___	___	_____
3. Are waste analyses done when the impoundment is used to store a substantially different waste than before? 265.225	___	___	___	_____
4. Is the freeboard level inspected at least daily? 265.226	___	___	___	_____
5. Are the dikes inspected weekly for evidence of leaks or deterioration?	___	___	___	_____
6. Are reactive & ignitable wastes rendered non-reactive or non-ignitable before storage in a surface impoundment? (If waste is rendered non-reactive or non-ignitable, see treatment requirements.) 265.229	___	___	___	_____
7. Are incompatible wastes stored in different impoundments? (If not, the provisions of 40 CFR 265.17(b) apply.) 265.230	___	___	___	_____

Section L - WASTE PILES (40 CFR Part 265, Subpart L)

	YES	NO	NI	Remarks
1. Are waste piles covered or protected from dispersal by wind? 265.251	___	___	___	_____
2. Is each in-coming movement of waste analyzed before being added to the waste pile? 265.252	___	___	___	_____
3. Are leachate, run-off, and run-on controlled as per the requirements of 265.253? 265.253	___	___	___	_____
4. Are reactive & ignitable wastes rendered non-reactive or non-ignitable before storage in a pile? Indicate if waste is ignitable or reactive. (If waste is rendered non-reactive or non-ignitable, see treatment requirements.) 265.256	___	___	___	_____
5. Are piles of reactive or ignitable waste protected from materials or conditions that might cause them to ignite or react?	___	___	___	_____
6. Are incompatible wastes stored in different piles? (If not, the provisions of 40 CFR 265.17(b) apply.) 265.257	___	___	___	_____
7. Are piles of incompatible waste protected by barriers or distance from other waste?	___	___	___	_____

Section M - LAND TREATMENT (Part 265, Subpart M)

	YES	NO	NI	Remarks
1. Is treated hazardous waste capable of biological or chemical degradation? 265.270	___	___	___	_____
2. Are run-off and run-on diverted from the facility or collected				
3. Is waste analyzed according to 265.273?	___	___	___	_____
4. If food chain crops are grown at the facility, has the owner or operator addressed the requirements of 265.276?	___	___	___	_____
5. Is an unsaturated zone monitoring plan designed and implemented to detect the vertical migration of hazardous waste and provide information on the background concentrations of the hazardous waste available? 265.278	___	___	___	_____
6. Does the unsaturated zone monitoring plan address the minimum information specified in 265.278?	___	___	___	_____
7. Are records kept regarding application dates and rates, quantities, and locations, of all hazardous waste placed in the facility? 265.279	___	___	___	_____
8. Are the special requirements fulfilled regarding land treatment of ignitable or reactive wastes? (Indicate if waste is ignitable or reactive.) 265.281	___	___	___	_____
9. Are incompatible wastes land treated? (If yes, 265.17(b) applies) 265.282	___	___	___	_____

Section N - LANDFILLS (Part 265, Subpart N)

	YES	NO	NI	Remarks
General Operating Requirements 265.302 Does the facility provide the following:				
a. Diversion of run-on away from active portions of the fill?	___	___	___	_____
b. Collection of run-off from active portions of the fill?	___	___	___	_____
c. Is collected run off treated?	___	___	___	_____
d. Control of wind dispersal of hazardous waste?	___	___	___	_____
2. Surveying and Recordkeeping 265.309 Does the Operating Record Include:				
a. A map showing the exact location and dimensions of each cell?	___	___	___	_____
b. The contents of each cell and the location of each hazardous waste type withing each cell?	___	___	___	_____
3. Special requirements for ignitable or reactive waste. Are ignitable or reactive wastes treated so the resulting mixture is no longer ignitable or reactive? (Indicate if waste is ignitable or reactive.) 265.312	___	___	___	_____
4. Special Requirements for Incompatible Wastes. 265.313 Does the owner or operator dispose of incompatible waste in separate cells? (If not, the provisions of 40 CFR 265.17(b) apply.)	___	___	___	_____

Note: If waste is rendered non-reactive or non-ignitable see treatment requirements. If not, the provisions of 40 CFR 265.17(b) apply.

	YES	NO	NI	Remarks
5. Special requirements for liquid waste 265.314				
a. Are bulk or non-containerized liquids placed in the landfill? If "yes," complete items i, ii, and iii.				
i. Does the landfill have a chemically and physically resistant liner system?	___	___	___	_____
ii. Does the landfill have a functional leachate collection system?	___	___	___	_____
iii. Are free liquids stabilized prior to or immediately after placement in the landfill?	___	___	___	_____
b. Have containers holding free liquids been placed in landfill since March 22, 1982?	___	___	___	_____
6. Special requirements for Containers 265.315 Are empty containers crushed flat, shredded, or similarly reduced in volume before being buried beneath the surface of the landfill?	___	___	___	_____

Section O/P - INCINERATION AND THERMAL TREATMENT (40 CFR Part 265, Subparts O and P)

1. Determination of Steady State I=incinerator T=thermal

a. Type of unit (i.e., type of incinerator or thermal treatment): _____

b. Components and steady state condition: I 265.343 T 265.373

Was each component at steady state prior to adding waste?

Component	YES	NO	NI	Remarks

2. Waste Analysis I 265.345 T 265.375

a. Minimum requirements, for wastes not previously burned/treated.

i. Required analyses; has an analysis been performed for the following?

Heating value				
Halogen content				
Sulfur content				

ii. Has documented or written data been substituted for analysis of either:

Lead?				
Mercury:				

Do not incinerate hazardous wastes

b. List other paramters for which the waste is tested to enable owner or operator to establish steady state or determine the types of pollutants which may be emitted. (Note in Remarks any which you feel should be tested.)

	YES	NO	NI	Remarks
3. Monitoring and Inspections I 265.347 T 265.37				
a. Are combustion/emission control instruments monitored at least every 15 minutes?	___	___	___	_____
b. Is steady state maintained or corrections attempted?	___	___	___	_____
c. Is stack plume observed at least hourly for normal color and opacity?	___	___	___	_____
d. Did any stack observations made by owner or operator show a plume different than normal?**	___	___	___	_____
e. If "yes" to (d) above, were corrections made to return emissions to normal appearance?**	___	___	___	_____
f. Are the complete unit and associated equipment inspected daily for leaks, spills, and fugitive emissions?	___	___	___	_____

**Specify in Remarks for what period of time this was checked.

g. Are emergency shutdown controls and system alarms checked daily for proper operation?	___	___	___	_____

4. Open Burning T 265.382 (open burning does not apply to incineration)

a. Only complete this part if the facility open burns hazardous waste.

i. Does this facility burn only waste explosives? (A No answer means other hazardous waste is open-burned).	___	___	___	_____

	YES	NO	NI	Remarks
ii. It this facility open-burns waste explosives, does it burn the waste at a distance greater than or equal to the minimum specified distance (below)	___	___	___	_____

Pounds of waste explosives or propellants	Minimum distance from open burning or detonation to the property of others	
0 to 100.....	204 m	670 ft
101 to 1,000.....	380 m	1,250 ft
1,001 to 10,000.....	530 m	1,730 ft
10,0001 to 30,000.....	690 m	2,260 ft

Section Q - CHEMICAL, PHYSICAL AND BIOLOGICAL TREATMENT (Part 265, Subpart Q)

	YES	NO	NI	Remarks
1. Is equipment used to treat only those wastes which will not cause leakage, corrosion, or premature failure? 265.401	___	___	___	_____
2. Is a continuously fed system equipped with a means of hazardous waste inflow stoppage or control (e.g., cut-off system)?	___	___	___	_____
3. Has the owner or operator addressed the waste analysis requirements of 265.402?	___	___	___	_____
4. Are inspection procedures followed according to 265.403?	___	___	___	_____
5. Are the special requirements fulfilled for ignitable or reactive wastes? 265.405	___	___	___	_____
6. Are incompatible wastes treated? (If yes, 265.17(b) applies.) 265.406	___	___	___	_____

Note: EPA has temporarily suspended the applicability of the requirements of the hazardous waste regulations in 40 CFR Parts 122, 264 and 265 to owners and operators of (1) wastewater treatment tanks that receive, store, and treat wastewaters that are hazardous waste or that generate, store or treat a wastewater treatment sludge which is a hazardous waste where such wastewaters are subject to regulation under Sections 402 or 307(b) of the Clean Water Act (33 U.S.C. 1251 et seq.) and (2) neutralization tanks, transport vehicles, vessels, or containers which neutralize wastes which are hazardous only because they exhibit the corrosivity characteristics under 40 CFR §261.22, or are listed as hazardous wastes in Subpart D of 40 CFR Part 261 only for this reason.

Section A: Scope

1. Complete this Appendix if the owner or operator of a TSD facility also generates hazardous waste that is subsequently shipped off-site for treatment, storage, or disposal.

Section B: MANIFEST REQUIREMENTS (Part 262, Subpart B)

	YES	NO	NI	Remarks
(1) Does the operator have copies of the manifest available for review? 262.40	X			
(2) Examine manifests for shipments in past 6 months. Indicate approximate number of manifested shipments during that period. 40				
(3) Do the manifest forms examined contain the following information: (If possible, make copies of, or record information from, manifest(s) that do not contain the critical elements). 262.21				
a. Manifest document number?	X			
b. Name, mailing address, telephone number, and EPA ID number of Generator	X			
c. Name and EPA ID Number of Transporter(s)?	X			
d. Name, address, and EPA ID Number Designated permitted facility and alternate facility?	X			
e. The description of the waste(s) (DOT shipping name, DOT hazard class, DOT identification number)?	X			
f. The total quantity of waste(s) and the type and number of containers loaded?	X			
g. Required certification?	X			
h. Required signatures?	X			

(4) Reportable exceptions 262.42

a. For manifests examined in (2) (except for shipments within the last 35 days), enter the number of manifests for which the generator has NOT received a signed copy from the designated facility within 35 days of the date of shipment. 0 - none

b. For manifests indicated in (4a), enter the number for which the generator has submitted exception reports (40 CFR 262.42) to the Regional Administrator. NA

Section C: PRE-TRANSPORT REQUIREMENTS (Part 262, Subpart C)

	YES	NO	NI	Remarks
1. Is waste packaged in accordance with DOT regulations? (Required prior to movement of hazardous waste off-site) 262.30	X			
2. Are waste packages marked and labeled in accordance with DOT regulations concerning hazardous waste materials? (Required for movement of hazardous waste off-site) 262.31 262.32	X			
3. If required, are placards available to transporters of hazardous waste? 262.33	X			

4. On-site accumulation of generated hazardous wastes. A HWMF may accumulate hazardous waste it generates either (A) in its storage facility [265.1(b)] or (B) in accordance with 40 CFR 262.34 [see 265.1(c)(7)]. Option B restricts all accumulation to tanks and containers. If the installation elects option A, check this box ☒ and skip to Section D. If the installation elects option B, complete the following observations: See 40 CFR 262.34 January 11, 1982 Revision

elect option A

a. Is each container clearly marked with the start of accumulation date?				
b. Have more than 90 days elapsed since the date inspected in (a)?				
c. Do wastes remain in accumulation tanks for more than 90 days?				
d. Is each container and tank labeled or marked clearly with the words "Hazardous Waste"?				

Section D: - RECORDKEEPING AND REPORTING (Part 262, Subpart D)

	YES	NO	NI	Remarks
1. Are all test results and analyses needed for hazardous waste determinations retained for at least three years? 262.40	X			

Section E: - INTERNATIONAL SHIPMENTS (Part 262, Subpart E)

1. Has the installation imported or exported Hazardous Waste? 262.50	X			

(If answered Yes, complete the following as applicable.)

a. Exporting Hazardous waste; has a generator:

	YES	NO	NI	Remarks
i. Notified the Administrator in writing?		X		
ii. Obtained the signature of the foreign consignee confiming delivery of the waste(s) in the foreign country?	X			
iii. Met the Manifest requirements?	X			
b. Importing Hazardous Waste; has the generator met the manifest requirements?				NA

	YES	NO	NI	Remarks
Section A: SCOPE:				
1. Complete this Appendix if the owner or operator transports hazardous waste subject to 40 CFR 263.10.	___	___	___	_____
2. Does the transporter transport hazardous waste into the U.S. from abroad?	___	___	___	_____
3. Does the transporter transport hazardous waste out from the U.S.?	___	___	___	_____
4. Does the transporter mix hazardous waste of different DOT shipping descriptions by placing them into a single container?	___	___	___	_____
Section B: MANIFEST SYSTEM AND RECORDKEEPING (Part 263, Subpart B)				
1. Are copies of completed manifests available for review and retained for three years. 263.22	___	___	___	_____
2. Estimate the number of manifests for shipments completed during the part 6 months.	_____			
3. Examine a representative number of manifests. Indicate number examined.	_____			
4. Did transporter properly sign and date the manifests examined?	___	___	___	_____
5. Do any manifests indicate shipments delivered to other than the designated facility? 263.21	___	___	___	_____
If (5) is "no," skip 6 and 7.	___	___	___	_____
6. Do any manifests indicate shipments delivered to other than an alternate facility?	___	___	___	_____
7. Are shipments delivered to alternate facilities only because emergency prevents delivery to the designated facility?	___	___	___	_____

EPA

BASF Wyandotte Corporation

Wyandotte, Michigan 48192
313 282-3300
Telex: 0230-647 (BASFWYANA WYTE)
TWX: 810-231-5750 (BASFWYAN)

September 28, 1982

Registered Mail

#920
GES
11/1/82

MID064197742

Mr. Earle Latimer
Water Quality Specialist
Department of Natural Resources
Resource Recovery Division
Hazardous Waste Section
P. O. Box 30028
Lansing, MI 48909

Dear Mr. Latimer:

This letter is in response to your September 1, 1982 RCRA inspection of the BASF Wyandotte Corporation (BWC) facility located in Wyandotte, EPA Facility No. MID 064 197 742, and your follow-up correspondence of September 16, 1982, wherein certain deficiencies were noted.

Section 265.16 - Personnel Training

Facility personnel have successfully completed a program of classroom instruction and on-the-job training which teaches them to perform their hazardous waste management duties in a way that ensures protection of the environment and compliance to this Part prior to the date of inspection.

The MDNR staff interpretation that the specific individual who may be called upon to place containers on a waste hauler's vehicle should be included in the personnel training and documentation is considered by BWC to exceed what is required by statute. Nevertheless, BWC requires that all employees who operate fork lift equipment are trained and certified as licensed fork lift operators. This training encompasses emergency response to spill situations.

Subpart D - Contingency Plan and Emergency Procedures, Sections 265.51, 52, 53, 54, 55 and 56

Currently, each hazardous waste generating area of the Wyandotte facility has developed their own Contingency Plan and Emergency Procedures. It is BWC's intention to combine these various plans and incorporate their provisions into the Site's PIPP per DNR staff's suggestion.

RECEIVED
SEP 30 1982
ACT 64

The specific distribution (Police and Fire Departments, hospitals, etc. ...) of the revised PIPP will be made available to emergency response teams which BWC may call upon to provide emergency services, as required under Section 265.53(b).

These administrative deficiencies are not considered to be violations by BWC and will be promptly corrected.

Very truly yours,

H. D. Roush
Manager
Quality Assurance, Hygiene
and Environmental Protection

HDR/mh

cc: Mr. A. Howard
Mich. Dept. of Natural Resources
Lansing, MI 48909

BASF Wyandotte Corporation

Wyandotte, Michigan 48192
313 282-3300
Telex: 0230-647 (BASFWYANA WYTE)
TWX: 810-231-5750 (BASFWYAN)

EPA

September 28, 1982

Registered Mail

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Water Quality Specialist
Department of Natural Resources
Resource Recovery Division
Hazardous Waste Section
P. O. Box 30028
Lansing, MI 48909

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RECEIVED
SEP 29 1982
ACT 64

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H. D. Roush
Manager
Quality Assurance, Hygiene
and Environmental Protection

HDR/mh

cc: Mr. A. Howard
Mich. Dept. of Natural Resources
Lansing, MI 48909

STATE OF MICHIGAN

CERTIFIED MAIL

#920 CPA

NATURAL RESOURCES COMMISSION

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DEPARTMENT OF NATURAL RESOURCES

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RESOURCE RECOVERY DIVISION

P.O. BOX 30028
LANSING, MI 48909

ADMINISTRATION/RESOURCE RECOVERY SECTION
517/373-0540

PLANNING SECTION/ HAZARDOUS WASTE SECTION
517/373-1818

GEOLOGY SECTION
517/373-0907

September 16, 1982

Mr. H. Dale Roush
BASF Wyandotte Corp.
1600 Biddle Ave.
Wyandotte, MI

Dear Mr. Roush:

SUBJECT: Resource Conservation and Recovery Act Inspection

On September 1, 1982 staff of the MDNR conducted an investigation of your facility located at above address to evaluate compliance of that facility with the requirements of Subtitle C of the Resource Conservation and Recovery Act (RCRA), as amended.

As a result of that investigation, staff of the MDNR have determined that the above facility is in violation of the requirements of Subtitle C of RCRA. Specifically, staff found: violations of the following:

265.16(a)(1)(2)(3),(a)(b)(c)(d)(1)(2)(3)(4)(e), Subpart B-General Facility Standards Personnel Training

265.51(a)(b) - Contingency Plan and Emergency Procedures

265.52(a)(b)(c)(d)(e)(f) - Content of Contingency Plan

265.53(a)(b) - Copies of Contingency Plan

265.54(a)(b)(c)(d)(e) - Amendment of Contingency Plan.

265.55 - Emergency Coordinator

265.56(a)(1)(2)(b)(c)(d)(1)(2)(e)(f)(g)(h)(1)(2)(i)(j)(1)(2)(3)(4)(5)(6)(7) - Emergency Procedures

RECEIVED
SEP 20 1982

Please respond within seven working days with your plan of action for correcting the above deficiencies.

Sincerely,

RESOURCE RECOVERY DIVISION

Earle R. Latimer

Earle Latimer, Water Quality Specialist
Hazardous Waste Section

R-1026-6 10/80

cc: Al Howard

#920

RCRA Inspection Report

A Identification Number [redacted]

Installation Name: BASF Wyandotte Corp.

Location Address: 1600 Biddle Ave.

City: Wyandotte State: MI

Date of inspection: [redacted] Time of inspection (from) 4:45 pm (to) 6 pm

Person(s) interviewed	Title	Telephone
H. Dale Roush	~~Mgr.-Env.Protection~~ Health & safety	313-282-3300

Inspector(s)	Agency/Title	Telephone
Earle Latimer	DNR, Wat. Qual. Spec.	373-1818

Installation Activity (mark only one box)	Inspection Form(s)
[X] Treatment/Storage/Disposal per 40 CFR 265.1 and/or Generation ~~and/or~~ Transportation	A
[ ] Treatment/Storage/Disposal (no generation or Transportation)	A
[ ] Generation and Transportation	B, C
[ ] Generation only	B
[ ] Transportation only	C

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BASF — [illegible]

INSPECTION FORM A

Section A: SCOPE OF INSPECTION.

1. Interim status standards for treatment storage or disposal of HAZARDOUS WASTES SUBJECT TO 40 CFR 265.1. Complete Inspection Form A sections B, C, D, E, and G.

2. Place an "X" in the box(es) corresponding to the facility's treatment, storage and disposal processes, and generation and/or transportation activity (if any). Complete only the applicable sections and appendixes.

Permit application process(es) (EPA Form 3510-3)			Inspection Form A section(s)
S01	[X]	storage in containers	I
S02	[ ]	storage in tanks	J
T01	[ ]	treatment in tanks	J
S04	[ ]	storage in surface impoundment	K,F
T02	[ ]	treatment in surface impoundment	K,F
D83	[ ]	disposal in surface impoundment	K,F
S03	[ ]	storage in waste pile	L
D81	[ ]	disposal by land application	M,F
D80	[ ]	disposal in landfill	N,F
T03	[ ]	treatment by incineration	O/P
T04	[ ]	treatment in devices other than tanks, surface impoundments, or incinerators	Q

Other activities

GENERATOR	[X]	APPENDIX	GN
TRANSPORTER	[ ]	APPENDIX	TR

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3. Indicate any hazardous waste processes, by process code, which have been omitted from Part A of the facility's permit application.

4. Indicate any hazardous waste processes (by process code and line number on EPA Form 3510-3 page 1 of 5) which appear to be eligible for exclusion per 40 CFR 265.1(c). Provide a brief rationale for the possible exclusion.

Section B: GENERAL FACILITY STANDARDS: (Part 265 Subpart B)

	YES	NO	NI*	Remarks
1. Has the Regional Administrator been notified regarding: 265.12				
a. Receipt of hazardous waste from a foreign source?		✓		
b. Facility expansion?		✓		
c. Change of owner or operator?		✓		
2. General Waste Analysis: 265.13				
a. Has the owner or operator obtained a detailed chemical and physical analysis of the waste?	✓			
b. Does the owner or operator have a detailed waste analysis plan on file at the facility?	✓			
c. Does the waste analysis plan specify procedures for inspection and analysis of each movement of hazardous waste from off-site?	✓			
3. Security - Do security measures include: (if applicable) 265.14				
a. 24-Hour surveillance?	✓			
or				
b. i. Artificial or natural barrier around facility?	✓			
and				
ii. Controlled entry?	✓			
c. Danger sign(s) at entrance?	✓			
4. Owner or operator inspections: 265.15				
a. Does the owner or operator inspect the facility for malfunctions, deterioration, operator errors, and dischanges of hazardous waste that may affect human health or the environment?	✓			

*Not Inspected

	YES	NO	NI	Remarks
b. Does the owner or operator have an inspection schedule at the facility?	✓			
c. If so, does the schedule address the inspection of the following items:				
i. monitoring equipment?		✓		None
ii. safety and emergency equipment?	✓		✓	
iii. security devices?	✓		✓	
iv. operating and structural equipment (i.e. dikes, pumps, etc.)?	✓		✓	
v. type of problems to be looked for during the inspection (e.g. leaky fitting, defective pump, etc.)?	✓		✓	
vi. inspection frequency (based upon the possible deterioration rate of the equipment)?	✓		✓	
d. Are areas subject to spills inspected daily when in use?	✓		✓	
e. Does the owner or operator maintain an inspection log or summary of owner or operator inspections?	✓		✓	
f. Does the inspection log contain the following information:				
i. the date and time of the inspection?	✓		✓	
ii. the name of the inspector?	✓		✓	
iii. a notation of the observations made?	✓		✓	
iv. the date and nature of any repairs or remedial actions?	✓		✓	
5. Do personnel training records include: 265.16				
a. Job titles?		✓		
b. Job descriptions?		✓		

	YES	NO	NI	Remarks
c. Description of training?		✓		
d. Records of training?		✓		
e. Did facility personnel receive the required training by 5-19-81?		✓		
f. Do new personnel receive required training within six months?		✓		
g. Do personnel training records indicate that personnel have taken part in an annual review of initital training?		✓		
6. If required, are the following special requirements for ignitable, reactive, or incompatible wastes addressed? 265.17				
a. Special handling?	✓			
b. No smoking signs?	✓			
c. Separation and protection from ignition sources?	✓			

Section C: PREPAREDNESS AND PREVENTION: (Part 265 Subpart C)

	YES	NO	NI	Remarks
1. Maintenance and Operation of Facility: 265.31				
Is there any evidence of fire, explosion, or release of hazardous waste or hazardous waste constituent?		✓		
2. If required, does the facility have the following equipment: 265.32				
a. Internal communications or alarm systems?	✓			
b. Telephone or 2-way radios at the scene of operations?	✓			
c. Portable fire extinguishers, fire control, spill control equipment and decontamination equipment?	✓			

Indicate the volume of water and/or foam available for fire control:

CITY OF WYANDOTTE

	YES	NO	NI	Remarks
3. Testing and Maintenance of Emergency Equipment: 265.33				
a. Has the owner or operator established testing and maintenance procedures for emergency equipment?	✓			
b. Is emergency equipment maintained in operable condition?	✓			
4. Has owner or operator provided immediate access to internal alarms? (if needed) 265.34	✓			
5. Is there adequate aisle space for unobstructed movement?	✓			
6. Has the owner or operator attempted to make arrangements with local authorities in case of an emergency at the facility?	✓			

Section D: CONTINGENCY PLAN AND EMERGENCY PROCEDURES: (Part 265 Subpart D)

	YES	NO	NI	Remarks
1. Does the Contingency Plan contain the following information: 265.52				
a. The actions facility personnel must take to comply with §265.51 and 265.56 in response to fires, explosions, or any unplanned release of hazardous waste? (If the owner has a Spill Prevention, Control, and Countermeasures (SPCC) Plan, he needs only to amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this Part (as applicable.)		✓		
b. Arrangements agreed by local police departments, fire departments hospitals, contractors, and State and local emergency response teams to coordinate emergency services pursuant to §265.37?		✓		
c. Names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinators?		✓		
d. A list of all emergency equipment at the facility which includes the location and physical description of each item on the list and a brief outline of its capabilities?		✓		
e. An evacuation plan for facility personnel where there is a possibility that evacuation could be necessary? (This plan must describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes?)		✓		
2. Are copies of the Contingency Plan available at the site and local emergency organizations? 265.53		✓		

	YES	NO	NI	Remarks
3. Emergency Coordinator 265.55				
a. Is the facility Emergency Coordinator identified?	✓			
b. Is coordinator familiar with all aspects of site operation and emergency procedures?	✓			
c. Does the Emergency Coordinator have the authority to carry out the Contingency Plan?	✓			
4. Emergency Procedures 265.56				
If an emergency situation has occurred at this facility, has the Emergency Coordinator followed the emergency procedures listed in 265.56?	✓			

Section I - USE AND MANGEMENT OF CONTAINERS (Part 265, Subpart I)

	YES	NO	NI	Remarks
1. Are containers in good condition? 265.171	✓			
2. Are containers compatible with waste in them? 265.172	✓			
3. Are containers managed to prevent leaks? 265.173	✓			
4. Are containers stored closed?	✓			
5. Are containers inspected weekly for leaks and defects.	✓			
6. Are ignitable and reactive wastes stored at least 15 meters (50 feet) from the facility property line? (Indicate if waste is ignitable or reactive). 265.176	✓			
7. Are incompatible wastes stored in separate containers? (If not, the provisions of 40 CFR 265.17(b) apply). 265.177	✓			
8. Are containers of incompatible waste separated or protected from each other by physical barriers or sufficient distance?	✓			

Section A: Scope

1. Complete this Appendix if the owner or operator of a TSD facility also generates hazardous waste that is subsequently shipped off-site for treatment, storage, or disposal.

Section B: MANIFEST REQUIREMENTS (Part 262, Subpart B)

	YES	NO	NI	Remarks
(1) Does the operator have copies of the manifest available for review? 262.40	✓			
(2) Examine manifests for shipments in past 6 months. Indicate approximate number of manifested shipments during that period. 180				
(3) Do the manifest forms examined contain the following information: (If possible, make copies of, or record information from, manifest(s) that do not contain the critical elements). 262.21				
a. Manifest document number?	✓			
b. Name, mailing address, telephone number, and EPA ID number of Generator	✓			
c. Name and EPA ID Number of Transporter(s)?	✓			
d. Name, address, and EPA ID Number Designated permitted facility and alternate facility?	✓			
e. The description of the waste(s) (DOT shipping name, DOT hazard class, DOT identification number)?	✓			
f. The total quantity of waste(s) and the type and number of containers loaded?	✓			
g. Required certification?	✓			
h. Required signatures?	✓			

(4) Reportable exceptions 262.42

a. For manifests examined in (2) (except for shipments within the last 35 days), enter the number of manifests for which the generator has NOT received a signed copy from the designated facility within 35 days of the date of shipment. 0

b. For manifests indicated in (4a), enter the number for which the generator has submitted exception reports (40 CFR 262.42) to the Regional Administrator. 0

Section C: PRE-TRANSPORT REQUIREMENTS (Part 262, Subpart C)

	YES	NO	NI	Remarks
Is waste packaged in accordance with DOT regulations? (Required prior to movement of hazardous waste off-site) 262.30	✓			
2. Are waste packages marked and labeled in accordance with DOT regulations concerning hazardous waste materials? (Required for movement of hazardous waste off-site) 262.31 262.32	✓			
3. If required, are placards available to transporters of hazardous waste? 262.33	✓			

4. On-site accumulation of generated hazardous wastes. A HWMF may accumulate hazardous waste it generates either (A) in its storage facility [265.1(b)] or (B) in accordance with 40 CFR 262.34 [see 265.1(c)(7)]. Option B restricts all accumulation to tanks and containers. If the installation elects option A, check this box ☐ and skip to Section D. If the installation elects option B, complete the following observations: See 40 CFR 262.34 January 11, 1982 Revision

	YES	NO	NI	Remarks
a. Is each container clearly marked with the start of accumulation date?	✓			
b. Have more than 90 days elapsed since the date inspected in (a)?	✓			
c. Do wastes remain in accumulation tanks for more than 90 days?	✓			
d. Is each container and tank labeled or marked clearly with the words "Hazardous Waste"?	✓			

Section D: - RECORDKEEPING AND REPORTING (Part 262, Subpart D)

	YES	NO	NI	Remarks
1. Are all test results and analyses needed for hazardous waste determinations retained for at least three years? 262.40	✓			

Section E: - INTERNATIONAL SHIPMENTS (Part 262, Subpart E)

	YES	NO	NI	Remarks
1. Has the installation imported or exported Hazardous Waste? 262.50	✓			See BASF Letter to EPA. Dated 4/26/82

(If answered Yes, complete the following as applicable.)

a. Exporting Hazardous waste; has a generator:

	YES	NO	NI	Remarks
i. Notified the Administrator in writing?		✓		
ii. Obtained the signature of the foreign consignee confiming delivery of the waste(s) in the foreign country?	✓			
iii. Met the Manifest requirements?	✓			
b. Importing Hazardous Waste; has the generator met the manifest requirements?				Only EXPORTS WASTE.

STATE IDENTIFICATION NUMBER (If Applicable)

MID 064193742 EPA IDENTIFICATION NUMBER

265.11

Also a Generator

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ACT 64

RCRA INSPECTION REPORT - INTERIM STATUS STANDARDS
TREATMENT, STORAGE, AND DISPOSAL FACILITIES
Form A - General Facility Standards

122.7(i)

I. General Information:

(265.74)

(A) Facility Name: BASF WYANDOTTE CORPORATION

(B) Street: 1609 BIDDLE AVENUE

(C) City: WYANDOTTE (D) State: MICH. (E) Zip Code: 48192

(F) Phone: 313-282-3300 (G) County: WAYNE

(H) Operator: (MR. DALE ROUSH, COMPANY CONTACT)

(I) Street: SAME AS ABOVE

(J) City: (K) State: (L) Zip Code

(M) Phone: (N) County:

(O) Owner: BASF WYANDOTTE CORPORATION

(P) Street: 100 CHERRY HILL RD

(Q) City: PARSIPPANY (R) State: NEW JERSEY (S) Zip Code: 07054

(T) Phone: 201-263-3400 (U) County:

(V) Date of Inspection: SEPT. 18, 1981 (W) Time of Inspection (From) 8:30 A.M. (To)

(X) Weather Conditions: CLOUDY OVERCAST, RAINY, STEADY BREEZE, MID 50°'S F

Rev. 1-26-81/J.B.

(Y) Person(s) Interviewed	Title	Telephone
MR. DALE ROUSH	MANAGER OF ENVIRONMENTAL PROTECTION HEALTH & SAFETY	313-282-3300
MR. DOUGLAS THIEL	INDUSTRIAL HYGIENE & ENVIRONMENTAL COORDINATOR	" " "

(Z) Inspection Participants	Agency/Title	Telephone
MESSRS. ROUSH & THIEL		
SUSAN NORTON	MICH. DEPT. OF NATURAL RESOURCES WATER QUALITY SPECIALIST	313-379-9692
ROY SCHRAMECK	MICH. D.N.R., WATER QUALITY DISTRICT ENGINEER	" " "

(AA) Preparer Information

Name	Agency/Title	Telephone
SUSAN NORTON	AS ABOVE	AS ABOVE

II. SITE ACTIVITY:

Complete sections I through VII for all treatment, storage, and/or disposal facilities. Complete the forms (in parenthesis) in section VIII corresponding to the site activities identified below:

X A. Storage and/or Treatment
1. Containers (I)
2. Tanks (J)
3. Surface Impoundments (K)
4. Waste Piles (L)

___ B. Land Treatment (M)

___ C. Landfills (N)

X D. Incineration and/or Thermal Treatment (O and P)

___ E. Chemical, Physical, and Biological Treatment (Q)

Note: If facility is also a generator or transporter of hazardous waste complete sections IX and X of this form as appropriate.

III. GENERAL FACILITY STANDARDS:
(Part 265 Subpart B)

	Yes	No	NI*	Remark
Has the Regional Administrator been notified regarding:				
1. Receipt of hazardous waste from a foreign source? 265.12(a)				NOT APPLICABLE - NO WASTE IMPORTED
2. Facility expansion? 122.23(b)2				NOT APPLICABLE - NO EXPANSION
(b) General Waste Analysis:				
1. Has the owner or operator obtained a detailed chemical and physical analysis of the waste? 265.13(a)	X			
2. Does the owner or operator have detailed waste analysis plan on file at the facility? 265.13(b)	X			
3. Does the waste analysis plan specify procedures for inspection and analysis of each movement of hazardous waste from off-site? 265.13(c)	X			
Security - Do security measures include: (if applicable) 265.14				
1. 24-Hour surveillance? 265.14(b)1	X			
2. Artificial or natural barrier around facility? 265.14(b)2	X			
3. Controlled entry? 265.14(b)2ii	X			
4. Danger sign(s) at entrance? 265.14(c)	X			
(D) Do Owner or Operator Inspections Include: 265.15				
1. Records of malfunctions? 265.15(a)1	X			
2. Records of operator error? 265.15(a)1	X			
3. Records of discharges? 265.15(a)1	X			

*NI - Not Inspected

265 Subpart B

	Yes	No	NI*	Remarks
4. Inspection schedule: 265.15(a)4	X			
5. Safety, emergency equipment? 265.15(b)1	X			
6. Security devices? 265.15(b)1	X			
7. Operating and structural devices? 265.15(b)1	X			
8. Inspection log? 265.15(d)	X			
(E) Do personnel training records include: (Effective 5/19/81) 265.16(d)				
1. Job Titles?	X	X		IN THE TRAINING RECORDS, THERE ARE PERSONS DESIGNATED BY NAME TO SERVE AS "ENVIRONMENTAL CONTACTS" WITHIN THE PLANT, THOUGH THIS IS NOT THEIR FORMAL JOB TITLE
2. Job Descriptions?	X			
3. Description of Training?	X			
4. Records of Training?	X			
5. Have facility personnel received required training by 5-19-81?	X			
6. Do new personnel receive required training within six months?	X			NOT APPLICABLE
	IS STATED IN COMPANY LOG			
(F) If required are the following special requirements for ignitable, reactive, or incompatible wastes addressed? 265.17				WASTE TANK & DRUM STORAGE AREAS ARE NOT MARKED AS "HAZARDOUS WASTE AREAS"
1. Special handling?	X			
2. No smoking signs?	X			
3. Separation and protection from ignition sources?	X			

*Not Inspected

IV. PREPAREDNESS AND PREVENTION:
(Part 265 Subpart C)

	Yes	No	NI	
Maintenance and Operation of Facility:				
1. Is there any evidence of fire, explosion, or release of hazardous waste or hazardous waste constituent? 265.31		X		
(b) If required, does the Facility have the Following Equipment: 265.32				
1. Internal communications or alarm systems? 265.32(a)	X			
2. Telephone or 2-way Radios at the scene of operations? 265.32(b)	X			
3. Portable fire extinguishers, fire control, spill control equipment and decontamination equipment? 265.32(c)	X			Company Has its own Fire Dept.

Indicate the volume of water and/or foam available for fire control: 265.32(d)

Units: Company is Supplied By Both City Water & Detroit River on East Boundary of Facility
Fire Hydrant Located South of Haz. Waste Storage Area
Company Has Foam Trailer.

(C) Testing and Maintenance of Emergency Equipment: 265.33 Recordkeeping required under 265.15(b)1				
1. Has the Owner or Operator established Testing and Maintenance Procedures for Emergency Equipment?	X			
2. Is Emergency Equipment Maintained in Operable Conditions?	X			
(D) Has Owner or Operator Provided Immediate Access to Internal Alarms? (if needed) 265.34	X			

*Not Inspected

(E) Is there adequate aisle space for unobstructed movement? X

265.35

V. CONTINGENCY PLAN AND EMERGENCY PROCEDURES:
(Part 265 Subpart D)

(A) Does the contingency Plan contain the following information:	Yes	No	NI*	Remarks
1. The actions facility personnel must take to comply with §265.51 and 265.56 in response to fires, explosions, or any unplanned release of hazardous waste? (If the owner has a Spill Prevention, Control, and Countermeasures (SPCC) Plan, he needs only to amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this Part (as applicable.)	X			
2. Arrangements agreed to by local police departments, fire departments hospitals, contractors, and State and local emergency response teams to coordinate emergency services pursuant to §265.37?	X			
3. Names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinators? 265.52(d)	X			ADDRESSES NOT INCLUDED
4. A list of all emergency equipment at the facility which includes the location and physical description of each item on the list and a brief outline of its capabilities? 265.52(e)	X			
5. An evacuation plan for facility personnel where there is a possibility that evacuation could be necessary? (This plan must describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes?) 265.52(f)	X			EVACUATION PLAN HAS BEEN DEVELOPED FOR THE ENTIRE PLANT; THE HAZARDOUS WASTE STORAGE AREA DOES NOT IN AND ITSELF NEED AN EVACUATION PLAN.

*Not Inspected

	Yes	No	NI*	Remarks
Are copies of the Contingency Plan Available at Site and local Emergency Organizations? yes NO 265.53				COPIES AVAILABLE AT SITE; HAVE NOT BEEN DISTRIBUTED TO LOCAL EMERGENCY ORGANIZATIONS
(C) Emergency Coordinator 265.55				
1. Is the facility Emergency Coordinator identified?	X			
2. Is coordinator familiar with all aspects of site operation and emergency procedures?	X			
3. Does the Emergency Coordinator have the authority to carry out the Contingency Plan?	X			
(D) Emergency Procedures				
If an emergency situation has occurred at this facility, has the Emergency Coordinator followed the emergency procedures listed in 265.56?				NOT APPLICABLE – NO EMERGENCY HAS OCCURRED AT PLANT.

VI. MANIFEST SYSTEM, RECORDKEEPING, AND REPORTING
(Part 265 Subpart E)

	Yes	No	NI*	Remarks
(A) Use of Manifest System				
1. Does the facility follow the procedures listed in §265.71 for processing each Manifest?				NOT APPLICABLE – COMPANY DOES NOT RECEIVE HAZARDOUS WASTE.
2. Are records of past shipments retained for 3 years 265.71(5)				SAME AS ABOVE
(B) Does the owner or operator meet requirements regarding Manifest Discrepancies? 265.72				SAME AS ABOVE

*NI - Not Inspected

(C) Operating Record 265.73	Yes	No	NI	
1. Does the owner or operator maintain an operating record as required in 265.73?	X			
2. Does the operating record contain the following information:				
**b. The method(s) and date(s) of each wastes treatment, storage, or disposal as required in Appendix I?	X			
c. The location and quantity of each hazardous waste within the facility?	X			
***d. A map or diagram of each cell or disposal area showing the location and quantity of each hazardous waste? (This information should be cross-referenced to specific manifest numbers if waste was accompanied by a manifest.)				NOT APPLICABLE
e. Records and results of all waste analyses, trial tests, monitoring data, and operator inspections?	X			
f. Reports detailing all incidents that required implementation of the contingency plan?	X			NOT APPLICABLE — NO EMERGENCY HAS OCCURRED
g. All closure and past closure costs as applicable? (Effective 5-19-81)	X			

** See page 33252 of the May 19, 1980, Federal Register.

*** Only applies to disposal facilities

Not Inspected

VIII. CLOSURE AND POST CLOSURE
(Part 265 Subpart G)

	Yes	No	NI*	Remarks
(A) Closure and Post Closure				
1. Closure Plan Available for Inspection by May 19, 1981? 265.112(a)	X			
2. Has this plan been submitted to the Regional Administrator 265.112(c)		X		NOT APPLICABLE
3. Has Closure begun? 265.112(c)		X		
4. Is closure estimate available by May 19, 1981? 265.142	X			
(B) Post Closure Care and Use of Property				
Has the Owner or Operator supplied a Post Closure Monitoring Plan (by May 19, 1981)? 265.117		X		NOT APPLICABLE

IX. FACILITY STANDARDS
(Part 265, Subparts I thru R)

I
USE AND MANAGEMENT OF CONTAINERS

Facility Name: BASF WYANDOTTE CORPORATION Date of Inspection: SEPT. 18, 1981

	Yes	No	NI*	Remarks
1. Are containers in good condition? 265.171	X			
2. Are containers compatible with waste in them? 265.172	X			
3. Are containers stored closed? 265.173(a)	X			
4. Are containers managed to prevent leaks? 265.173(b)	X			
5. Are containers inspected weekly for leaks and defects? 265.174	X			
6. Are ignitable & reactive wastes stored at least 15 meters (50 feet) from the facility property line? 265.176	Indicate if waste is: ☒ Ignitable, ☐ Reactive X			

*Not Inspected

	Yes	No	NI*	Remarks
7. Are incompatible wastes stored in separate containers? (If not, the provisions of 40 CFR 265.17(b) apply.) 265.177(a)	X			
8. Are containers of incompatible wastes separated or protected from each other physical barriers or sufficient distance? 265.177(c)	X			

J
TANKS

Facility Name: _____ Date of Inspection: _____

	Yes	No	NI	Remarks
1. Are tanks used to store only those wastes which will not cause corrosion, leakage or premature failure of the tank? 265.192(b)	X			ONLY 1 TANK ON PREMISES
2. Do uncovered tanks have at least 60 cm (2 feet) of freeboard, or dikes or other containement structures? 265.192(c)				NO UNCOVERED TANKS NOT APPLICABLE
3. Do continuous feed systems have a waste-feed cutoff? 265.192(d)				NOT APPLICABLE
4. Are waste analyses done before the tanks are used to store a substantially different waste than before? 265.193(a)				NOT APPLICABLE — ONLY ACETIC ACID/ACETIC ANNYDRIDE MIX STORED IN THE TANK
5. Are required daily and weekly inspections done? 265.194	X			
6. Are reactive & ignitable wastes in tanks protected or rendered non-reactive or non-ignitable? (If waste is rendered non-reactive or non-ignitable, see treatment requirements.) 265.198, 265.17				Indicate if waste is: ☐ Ignitable ☐ Reactive NOT APPLICABLE
7. Are incompatible waste stored in separate tanks? (If not, the provisions of 40 CFR 265.17(b) apply.) 265.199				NOT APPLICABLE

*Not Inspected

8. Has the owner or operator observed the National Fire Protection Associations buffer zone requirements for tanks containing ignitable or reactive wastes? NOT APPLICABLE

Tank capacity: 4600 gallons

Tank diameter: 8 FEET 6 INCHES ~~feet~~

Distance of tank from property line 300 METERS ~~feet~~

(See table 2 - 1 through 2 - 6 of NRPA's "Flammable and Combustible Code - 1977" to determine compliance.)

K
SURFACE IMPOUNDMENTS — NOT APPLICABLE

Facility Name: _____ Date of Inspection: _____

1. Do surface impoundments have at least 60 cm (2 feet) of freeboard? 265.222 ___ ___ ___ _____
2. Do earthen dikes have protective covers? 265.223 ___ ___ ___ _____
3. Are waste analyses done when the impoundment is used to store a substantially different waste than before? 265.225(a) ___ ___ ___ _____
4. Is the freeboard level inspected at least daily? 265.226(a)1 ___ ___ ___ _____
5. Are the dikes inspected weekly for evidence of leaks or deterioration? 265.226(a)2 ___ ___ ___ _____
6. Are reactive & ignitable wastes rendered non-reactive or non-ignitable before storage in a surface impoundment? (If waste is rendered non-reactive or non-ignitable, see treatment requirements.) 265.299(a)1 ___ ___ ___ _____
7. Are imcompatible wastes stored in different impoundments? (If not, the provisions of 40 CFR 265.17(b) apply.) 265.230 ___ ___ ___ _____

L

WASTE PILES — NOT APPLICABLE

Facility Name: _____ Date of Inspection: _____

	Yes	No	NI*	Remarks
1. Are waste piles covered or protected from the wind? 265.251	___	___	___	_____
2. Is each in-coming movement of waste analyzed before being added to the waste pile? 265.252	___	___	___	_____
3. Are leachate, run-off, and run-on controlled? (The effective date of this provision is Nov. 19, 1981.) 265.253	___	___	___	_____
4. Are reactive & ignitable wastes rendered non-reactive or non-ignitable before storage in a pile? (If waste is rendered non-reactive or non-ignitable, see treatment requirements.) 265.256(a)1	___	___	___	Indicate if waste is: ☐ Ignitable, ☐ Reactive _____
5. Are piles of reactive or ignitable waste protected? 265.256(a)2	___	___	___	_____
6. Are incompatible wastes stored in different piles? (If not, the provisions of 40 CFR 265.17(b) apply.) 265.257(a)	___	___	___	_____
7. Are piles of imcompatible waste protected by barriers or distance from other waste? 265.257(b)	___	___	___	_____

*Not Inspected.

LAND TREATMENT — NOT APPLICABLE

Facility Name: _____ Date of Inspection: _____

1. Is hazardous waste treated capable of biological or chemical degradation? 265.272(a)	___	___	___	_____
2. Are run-off and run-on diverted from the facility or collected (Effective date: November 19, 1981)? 265.272(b & c)	___	___	___	_____
3. Is waste analyzed according to 265.273? 265.13	___	___	___	_____
4. If food chain crops are grown at the facility, has the owner or operator addressed the requirements of 265.276?	___	___	___	_____
5. Is an unsaturated zone monitoring plan designed and implemented to detect the vertical migration of hazardous waste and provide information on the background concentrations of the hazardous waste available? 265.278(a)	___	___	___	_____
6. Does the unsaturated zone monitoring plan address the minimum information specified in 265.278?	___	___	___	_____
7. Are records kept regarding application dates, ~~and~~ rates, quantities, and locations of all hazardous waste placed in the facility? 265.279	___	___	___	_____
8. Are the special requirements fulfilled regarding land treatment of ignitable or reactive wastes? 265.281	___	___	___	_____
9. Are incompatible wastes land treated? (If yes, 265.17(b) applies) 265.282	___	___	___	_____

Indicate if waste is: ☐ Ignitable ☐ Reactive

*Not Inspected

N

LANDFILLS — NOT APPLICABLE

Facility Name: _____ Date of Inspection: _____

	Yes	No	NI*	Remarks
(A) General Operating Requirements Does the facility provide the following:				
**1. Diversion of run-on away from active portions of the fill? 265.302(a)	___	___	___	_____
**2. Collection of run-off from active portions of the fill? 265.302(b)	___	___	___	_____
**3. Is collected run off treated? 265.302(b)				_____
4. Control of wind disposal of hazardous waste? 265.302(d)	___	___	___	_____
(**Effective 11-19-81)				
(B) Surveying and Recordkeeping Does the Operating Record Include:				
1. A map showing the exact location and dimensions of each cell? 265.309(a)	___	___	___	_____
2. The contents of each cell and the location of each hazardous waste type withing each cell? 265.309(b)	___	___	___	_____
(C) Closure and Post-Closure				
1. Is the Closure Plan available for inspection by 5-19-81? 265.112(a)	___	___	___	_____
2. Has this plan been submitted to the Regional Administrator? 265.112(c)	___	___	___	_____
3. Has Closure begun? 265.112(c)	___	___	___	_____
4. Is Closure cost estimate available by 5-19-81? 265.142(a)				
(D) Special requirements ~~fro~~ for ignitable or reactive waste				
Are ignitable or reactive wastes treated so the resulting mixture is no longer ignitable or reactive? 265.312	___	___	___	_____

NOT APPLICABLE

	Yes	No	NI*	Remarks
(If waste is rendered non-reactive or non-ignitable see treatment requirements)				
If not, the provisions of 40 CFR 265.17(b) apply.	___	___	___	_____
(E) Special requirements for Incompatible Wastes.				
Does the owner or ooperator dispose of incompatible wastes in separate cells? 265.313	___	___	___	_____
If not, the provisions of 40 CFR 265.17(b) apply.	___	___	___	_____
(F) Special requirements for liquid waste (effective 11-19-81)				
1. Are bulk or non-containerized liquids placed in the landfill? 265.314(a)	___	___	___	_____
2. Does the landfill have a chemically and physically resistant liner system? 265.314(a)1	___	___	___	_____
3. Does the landfill have a functional leachate collection system? 265.314(a)1	___	___	___	_____
4. Are fee liquids stabilized prior to or immediately after placement in the landfill? 265.314(a)2	___	___	___	_____
(G) Special requirements for Containers (effective 11-19-81)				
Are empty containers crushed flat, shredded, or similarly reduced in volume before being, buried beneath the surface of the landfill? 265.315(a)	___	___	___	_____

*Not Inspected

O and P
INCINERATION and THERMAL TREATMENT

(A) Facility Name: BASF WYANDOTTE CORP.

(B) Date of Inspection: SEPT. 18, 1981

DURING INSPECTION INCINERATOR WAS OUT OF SERVICE; REPLACEMENT INCINERATOR IS ~~PLANNING~~ PLANNED; FUND APPROVAL EXPECTED SHORTLY. THE QUESTIONS BELOW ARE NOT APPLICABLE

I. Determination of Steady State

A. Type of unit (i.e., type of incinerator or thermal treatment:): _____

B. Components and steady state condition: I 265.343 Th 265.373

**** Was this component at SS prior to adding waste?

	Component	Yes	No	NI*	Remarks
1.					
2.					
3.					
4.					
5.					

II. Waste Analysis

265.13

A. Minimum requirements, for wastes not previously burned/treated.

1. Required analyses; has an analysis been performed for the following: I 265.345 Th 265.375	Yes	No	NI*	Remarks
a. Heating value				
b. Halogen content				
c. Sulfur content				

*Not Inspected

2. Documented, written data may be substituted for analysis for these. Are either present for: I 265.345 Th 265.375

THIS PAGE NOT APPLICABLE - SEE PREVIOUS PAGE

a. Lead? ___ ___ ___ _____

b. Mercury? ___ ___ ___ _____

B. Other parameters for which the waste is tested to enable owner or operator to establish steady state or determine the types of pollutants which may be emitted. (Note in Remarks any which you feel should be tested for.)

		Remarks
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____

III. Monitoring and Inspections

	Yes	No	NI*	Remarks
A. Combustion/emission control instruments monitored at least every 15 minutes I 265.345(a)1 Th 265.377(a)1	___	___	___	_____
B. Steady state maintained or corrections attempted? I 265.347(a)1 Th 265.377(a)1	___	___	___	_____
C. Stack Plume observed at least hourly for normal color and opacity? I 265.347(a)2 Th 265.377(a)2	___	___	___	_____
D. Did any stack observations made by owner or operator show a plume different than normal?** I 265.347(a)2 Th 265.377(a)2	___	___	___	_____
E. If yes to D above, were corrections made to return emissions to normal appearance?** I 265.347(a)2 Th 265.377(a)2	___	___	___	_____
F. Complete unit and associated equipment inspected daily for leaks, spills, and fugitive emissions? I 265.347(a)3 Th 265.377(a)3	___	___	___	_____
G. Emergency shutdown controls, system alarms checked daily for proper operation? I 265.347(a)3 Th 265.377(a)3	___	___	___	_____

*Not Inspected
**Specify in Remarks for what period of time this was checked.

A. Only complete this part if the facility open burns hazardous waste.

	Yes	No	NI*	Remarks
1. Does this facility burn only waste explosives? (A No answer means other hazardous waste is open-burned.) 265.382	___	___	___	_____
2. If this facility open-burns waste explosive, does it burn the waste at a distance greater than or equal to the minimum specified distance (below) 265.382	___	___	___	_____

265.382

Pounds of waste explosives or propellants	Minimum distance from open burning or detonation to the property of others	
0 to 100.....	204 m	670 ft
101 to 1,000.....	380 m	1.250 ft
1,001 to 10,000.....	530 m	1,730 ft
10,0001 to 30,000.....	690 m	2,260 ft

Q

CHEMICAL, PHYSICAL and BIOLOGICAL TREATMENT

NOT APPLICABLE.

Facility Name: _____

Date of Inspection: _____

	yes	No	NI*	Remarks
1. Is equipment used to treat only those wastes which will not cause leakage, corrosion, or premature failure?	___	___	___	_____
2. Is a continously fed system equipped with a means of hazardous waste inflow stoppage or control (e.g., cut-off system?)	___	___	___	_____

*Not Inspected

	Yes	No	NI*	Remarks
3. Has the owner or operator addressed the waste analysis requirements of 265.402?	___	___	___	_____
4. Are inspection procedures followed according to 265.403?	___	___	___	_____
5. Are the special requirements fulfilled for ignitable or reactive wastes?	___	___	___	_____
6. Are incompatible wastes treated? (If yes, 265.17(b) applies.)	___	___	___	_____

Note: EPA has temporarily suspended the applicability of the requirements of the hazardous waste regulations in 40 CFR Parts 122, 264 and 265 to owners and operators of (1) wastewater treatment tanks that receive, store, and treat wastewaters that are hazardous waste or that generate, store or treat a wastewater treatment sludge which is a hazardous waste where such wastewaters are subject to regulation under Sections 402 or 307(b) of the Clean Water Act (33 U.S.C. 1251 et seq.) and (2) neutralization tanks, transport vehicles, vessels, or containers which neutraliz wastes which are hazardous only because they exhibit the corrosivity characteristic under 40 CFR §261.22 or are listed as hazardous wastes in Subpart D of 40 CFR Part 261 only for this reason.

IX

Complete this section if the owner or operator of a TSD facility also generates hazardous waste that is subsequently shipped off-site for treatment, storage, or disposal.

1. MANIFEST REQUIREMENTS

	Yes	No	NI*	Remarks
(A) Does the operator have copies of the Manifest available for review? 262.23(a)3	X	___	___	_____
(B) Do the Manifest forms reviewed contain the following information: (If possible, make copies of/or record information from, manifest(s) that do not contain the critical elements)				
1. Manifest document number? 262.21(a)1	X	___	___	_____
2. Name, mailing address, telephone number, and EPA ID Number of Generator 262.21(a)2	X	___	___	_____

	Yes	No	NI*	Remarks
3. Name and EPA ID Number of Transporter(s)? 262.21(a)3	X			
4. Name, address, and EPA ID Number of Designated permitted facility and alternate facility? 262.21(a)4	X			
5. The description of the waste(s) (DOT shipping name, DOT hazard class, DOT identification number)? 262.21(a)5 DOT information in CFR 49 172.101, 172.202 and 172.203	X			
6. The total quantity of waste(s) and the type and number of containers loaded? 262.21(a)6	X			
7. Required Certification? 262.21(b)	X			
8. Required Signatures? 262.23(a)1	X			
(C) Does the Owner or Operator Submit Exception Reports when Needed? 262.42	X			NOT APPLICABLE – NO EXCEPTION REPORT HAS BEEN NECESSARY YET.

2. PRE-TRANSPORT REQUIREMENTS

	Yes	No	NI*	Remarks
Is waste packaged in accordance with DOT Regulations? (Required prior to movement of hazardous waste off site) 262.30 49 CFR Parts 173.178 and 179	X			
(B) Are waste packages marked and labeled in accordance with DOT Regulations concerning hazardous waste materials? (Required to movement of hazardous waste off site) 262.31 49 CFR Part 172	X			
(C) If required, are placards available to transfer? 262.33 49 CFR Part 172, Subpart F	X			

Omit Section 3 if the facility has interim status and its Part A permit application describes storage

3. On Site Accumulation

	Yes	No	NI*	Remarks
1. Are containers marked with start of accumulation date? 262.34(a)3	X			
2. Are the containers of hazardous waste removed from installation before they can accumulate for more than 90 days 262.34(a)1 If no, the facility must be storage or disposal facility 262.34(b)		X		
3. Are wastes stored in containers managed in accordance with 40 CFR Part 265.174 and 265.176 (weekly inspections of containers, containers holding ignitable or reactive wastes located at least 15 meters (50 Feet) from facility's property line?	X			
4. If wastes are stored in tanks, are the tanks managed according to the following requirements?				
a. Are tanks used to store only those wastes which will not cause corrosion leakage or premature failure of the tank? 265.192(b)	X			
b. Do uncovered tanks have at least 60 cm (2 feet) of freeboard, dikes, or other containment structures? 265.192(c)				NOT APPLICABLE
c. Do continous feed systems have a waste-feed cutoff? 265.192(d)				NOT APPLICABLE
d. Are required daily and weekly inspections done? 265.194	X			
e. Are reactive & ignitable wastes in tanks protected or rendered non-reactive or non-ignitable? (If waste is rendered non-reactive or non-ignitable, see treatment requirements? 265.198, 265.17				NOT APPLICABLE — WASTE IN TANK IS NEITHER REACTIVE NOR IGNITABLE.
f. Are incompatible wastes stored in separate tanks? (If not, the provisions of 40 CFR §265.17(b) apply) 265.199				NOT APPLICABLE

*Not Inspected

VI. RECORDKEEPING and REPORTING
(Part 262, Subpart D)

	Yes	No	NI*	Remarks
(A) Are Manifests, Annual Reports, Exception Reports, and all test results and analyses retained for at least three years? 265.71(a)5	X			
(B) Has the Generator submitted Annual Reports and Exception Reports as required?				NOT APPLICABLE — ANNUAL REPORT WAIVED FOR 1981. NO EXCEPTION REPORTS NEEDED SO FAR.

VII. INTERNATIONAL SHIPMENTS
(Part 262, Subpart E)

(A) Has the installation imported or exported Hazardous Waste? 262.50				NOT APPLICABLE — NO IMPORTING OR EXPORTING OF HAZ. WASTE.

(If A was answered Yes, then complete the following as applicable.)

NOT APPLICABLE

1. Exporting Hazardous waste, has a generator:				
a. Notified the Administrator in writing? 262.50(b)1				
b. Obtained the signature of the foreign consignee confirming delivery of the waste(s) in the foreign country? 262.50(b)2				
c. Met the Manifest requirements? 262.50(b)3				
2. Importing Hazardous Waste, has the generator: 262.50(d)				
a. Met the manifest requirements?				

*Not Inspected

NOT APPLICABLE

Complete this Section if the owner or operator transports hazardous waste.

I. MANIFEST SYSTEM AND RECORDKEEPING
(Subpart B)

	Yes	No	NI*	Remarks
A) Are copies of the completed manifests or shipping paper(s) available for review and retained for three years? 263.22(a)	___	___	___	_____

II. INTERNATIOINAL SHIPMENTS

	Yes	No	NI*	Remarks
. Does the Transporter record on the manifest the date the waste left the U.S.? 263.20(f)1	___	___	___	_____
. Are signed completed manifest(s) on file? 263.22(a) and 263.20(f)2	___	___	___	_____

V. MISCELLANEOUS

	Yes	No	NI*	Remarks
. Does Transporter transport hazardous waste into the U.S. from abroad 263.10(c)1	___	___	___	_____
. Does the Transporter mix hazardous waste of different DOT shipping descriptions by placing them into a single container? 263.10(c)2	___	___	___	_____

OTE: If (A) or (B) were answered "Yes" then the Transporter is also a Generator and must comply with the Generator regulations.

263.10(c)

*Not Inspected

REMARKS

Use this section to briefly describe site activities observed at the time of the inspection. Note any possible violations of Interim Status Standards.

BASE WYANDOTTE PRODUCES THE FOLLOWING CHEMICALS –
1600 BIDDLE, WYANDOTTE
PHARMACEUTICAL CHEMICALS, IRON OXIDE PIGMENTS, & URETHANE CHEMICALS. THE SITE IS ALSO THE RESEARCH AND DEVELOPMENT CENTER FOR THE ENTIRE CORPORATION.

THE WASTE FROM THE SINGLE TANK IS ACETIC ACID/ACETIC ANHYDRIDE RESULTING FROM BATCH OPERATIONS PRODUCING PHARMACEUTICAL CHEMICALS.

THE ONLY ON-SITE TREATMENT IS VAPOR INCINERATION FROM POLYURETHANE PROCESS

NO OFF-SITE WASTES ARE BROUGHT TO THIS PLANT

DRUMS CONTAIN PRIMARILY LIQUID HAZ. WASTE AND ARE STORED IN AN IMPERVIOUS BERMED AREA. THESE ARE MAINLY GENERATED BY RESEARCH & DEVELOPMENT SECTION. * FILTER CAKE IS ALSO DECLARED AS A HAZARDOUS WASTE & IS DERIVED FROM PHARMACEUTICAL & URETHANE PROCESSES.

* I.E., SMALL AMOUNTS OF HIGHLY VARIABLE MATERIALS.

Fill—in areas are spaced for elite type, i.e., 12 characters/inch.

Form Approved OMB No. 158-R0180

FORM 1 GENERAL

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

GENERAL INFORMATION

Consolidated Permits Program

(Read the "General Instructions" before starting.)

I. EPA I.D. NUMBER

F MID064197742 3 D

LABEL ITEMS

I. EPA I.D. NUMBER	MID064197742
II. FACILITY NAME	BASF WYANDOTTE CORPORATION
V. FACILITY MAILING ADDRESS	1609 BIDDLE AVE WYANDOTTE, MI 48192
VI. FACILITY LOCATION	1609 BIDDLE AVE WYANDOTTE, MI 48192

GENERAL INSTRUCTIONS

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

II. POLLUTANT CHARACTERISTICS

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

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

III. NAME OF FACILITY

1 SKIP BASF WYANDOTTE CORP.

IV. FACILITY CONTACT

A. NAME & TITLE *(last, first, & title)*	B. PHONE *(area code & no.)*
2 DIRECTOR, CORP. EN V. PROT. FRY, Keith	201 263 3400

V. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX

3 1609 Biddle Ave.

B. CITY OR TOWN	C. STATE	D. ZIP CODE
4 Wyandotte	MI	48192

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER

5 1609 Biddle Ave.

B. COUNTY NAME

Wayne

C. CITY OR TOWN	D. STATE	E. ZIP CODE	F. COUNTY CODE *(if known)*
6 Wyandotte	MI	48192	163

EPA Form 3510-1 (6-80)

NOV 19 1980

CONTINUE ON REVERSE

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

A. FIRST	B. SECOND
2819 (specify) Industrial Inorganic chemicals	2821 (specify) Synthetic resins
C. THIRD	**D. FOURTH**
2833 (specify) Medicinal chemicals	(specify)

VIII. OPERATOR INFORMATION

A. NAME: BASF WYANDOTTE CORP.

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

C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box; if "Other", specify.)

F = FEDERAL
S = STATE
P = PRIVATE
M = PUBLIC (other than federal or state)
O = OTHER (specify)

Status: P (specify)

D. PHONE (area code & no.): A 201 263 3400

E. STREET OR P.O. BOX: P.O. Box 181

F. CITY OR TOWN: B Parsippany

G. STATE: NJ

H. ZIP CODE: 07054

IX. INDIAN LAND

Is the facility located on Indian lands? ☐ YES X NO

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water): 9 N MI0000540	**D. PSD** (Air Emissions from Proposed Sources): 9 P
B. UIC (Underground Injection of Fluids): 9 U	**E. OTHER** (specify): 9 X MI0000566 (specify) NPDES
C. RCRA (Hazardous Wastes): 9 R	**E. OTHER** (specify): 9 X MI0001805 (specify) NPDES

XI. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property bounderies. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements. F 9: A/50

XII. NATURE OF BUSINESS (provide a brief description)

Manufacture of industrial inorganic chemicals, synthetic polyether polyol resins, medicinal chemicals; plus research and pilot plant activities supporting those businesses.

All correspondece regarding this application should be addressed to the office of the Director, Corporate Environmental Protection, BASF Wyandotte Corporation, P.O. Box 181, Parsippany, N.J. 07054

F9: A/51

XIII. CERTIFICATION (see instructions)

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

A. NAME & OFFICIAL TITLE (type or print)	B. SIGNATURE	C. DATE SIGNED
R.E. Dunn, Secretary	R E Dunn	11/17/80

COMMENTS FOR OFFICIAL USE ONLY

C

FORM 3 RCRA

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

HAZARDOUS WASTE PERMIT APPLICATION

Consolidated Permits Program

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

I. EPA I.D. NUMBER

S F M I D 0 6 4 1 9 7 7 4 2 T/A 3 C 1

FOR OFFICIAL USE ONLY

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

II. FIRST OR REVISED APPLICATION

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

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

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

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

C	YR.	MO.	DAY
8	~~79~~ +1695	01	01

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

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

YR.	MO.	DAY

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

[ ] 1. FACILITY HAS INTERIM STATUS

[ ] 2. FACILITY HAS A RCRA PERMIT

III. PROCESSES — CODES AND DESIGN CAPACITIES

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

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

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

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

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

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

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

S C DUP T/A 1 C 1

LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY	LINE NUMBER	A. PROCESS CODE (from list above)	B. 1. AMOUNT	B. 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
X-1	S02	~~600~~	~~G~~		~~5~~	~~S01~~	~~100 gal~~	~~Y~~	
X-2	T03	20	E		6	S01	~~30,000 000~~	G	Extra
1	S01	25,300 000	G		7				
2	~~S01~~	~~100~~	~~Y~~		8				
3	~~T02~~	~~999999999~~ ~~2 x 10~~	~~Y~~		9				
4	S02	4,000 000	G		10				

CONTINUE ON REVERSE

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

Form Approved OMB No. 158-S80004

EPA I.D. NUMBER (enter from page 1)	FOR OFFICIAL USE
W M I D 0 6 4 1 9 7 7 4 2 3 1	W DUP 2 DUP

IV. DESCRIPTION OF HAZARDOUS WASTES (continued)

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
1	~~D 0 0 0~~	~~1160000~~	~~T~~	~~T 0 2~~	
2	F 0 0 3	1600 000	P	S 0 1	
3	F 0 0 5	1600 000	P	S 0 1	
4	F 0 0 2	1000 000	P	S 0 1	
5	U 0 4 4	1000 000	P	S 0 1	
6	U 2 1 1	1000 000	P	S 0 1	
006	D 0 0 1	3.500	T	S 0 1	
8	~~D 0 0 0~~	~~2~~	~~T~~	~~S 0 1~~	
007	D 0 0 1				Included with above
10	~~D 0 0 0~~	~~500~~	~~P~~	~~S 0 1~~	
11	~~D 0 0 0~~	~~1000~~	~~P~~	~~S 0 1~~	
12	D 0 0 1	500 000	P	S 0 1	
13	D 0 0 1	500 000	T	S 0 1	
14	D 0 0 1	500 000	P	S 0 1	
15	U 0 0 9	500 000	P	S 0 1	
16	D 0 0 1	2500 000	P	S 0 1	
17	U 0 3 7	250 000	P	S 0 1	
18	~~D 0 0 0~~	~~5~~	~~T~~	~~S 0 1~~	
019	D 0 0 1				Included with above
20	~~D 0 0 0~~	~~8~~	~~T~~	~~S 0 1~~	
21	~~D 0 0 0~~	~~20~~	~~T~~	~~S 0 1~~	
22	~~D 0 0 0~~	~~22~~	~~T~~	~~S 0 1~~	
23	D 0 0 1	20000	T	S 0 1	
24	D 0 0 2	8.500	T	S 0 2	
25	~~D 0 0 0~~	~~20~~	~~T~~	~~S 0 1~~	
26					

EPA Form 3510-3 (6-80)

CONTINUE ON REVERSE

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

Continued from the front.

IV. DESCRIPTION OF HAZARDOUS WASTES *(continued)*

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

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

S													T/A	C
F	M	I	D	0	6	4	1	9	7	4	4	2	3	6

V. FACILITY DRAWING

All existing facilities must include in the space provided on page 5 a scale drawing of the facility *(see instructions for more detail).* F6: N/55

VI. PHOTOGRAPHS

All existing facilities must include photographs *(aerial or ground—level)* that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas *(see instructions for more detail).* F6: A/56

VII. FACILITY GEOGRAPHIC LOCATION

LATITUDE *(degrees, minutes, & seconds)*	LONGITUDE *(degrees, minutes, & seconds)*
42 12 46 0	0 83 0 8 47 0

VIII. FACILITY OWNER

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

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

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

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

IX. OWNER CERTIFICATION

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

A. NAME *(print or type)*	B. SIGNATURE	C. DATE SIGNED
R.E. Dunn, Secretary OK Re: memo	R.E. Dunn	11/17/80

X. OPERATOR CERTIFICATION

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

A. NAME *(print or type)*	B. SIGNATURE	C. DATE SIGNED
R.E. Dunn, Secretary OK Re: memo	R.E. Dunn	11/17/80

CONTINUE ON PAGE 5

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

A. Signature

X

☐ Agent
☐ Addressee

B. Received by (Printed Name) Stefan Japanik

C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

1. Article Addressed to:

Mr. David W. Sheaves / Enviro Team Leader
BASF Corporation
1609 Biddle Avenue
Wyandotte, Michigan 48192

Mail ☐ Express Mail
d ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number
(Transfer from service label) 7009 1680 0000 7679 6491

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

UNITED STATES POSTAL SERVICE

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

• Sender: Please print your name, address, and ZIP+4 in this box •

Bryan Gangwisch
U.S EPA / Region 5 / LM-8J
77 W. Jackson Blvd
Chicago, IL 60604

RECEIVED
DIVISION FRONT OFFICE
FEB 20 2014
LAND AND CHEMICALS DIVISION
U.S. EPA - REGION 5

UNITED STATES POSTAL SERVICE

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

• Sender: Please print your name, address, and ZIP+4 in this box •

Bryan Gangwisch
U.S. EPA/ Region 5/ LR-8J
77 W. Jackson Blvd
Chicago, Il 60604

RECEIVED
DIVISION FRONT OFFICE
JAN 29 2013
LAND AND CHEMICALS DIVISION
U.S. EPA - REGION 5

SENDER: *COMPLETE THIS SECTION*

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. David W. Shears
BASF Corporation
1609 Biddle Avenue
Wyandotte, MI 48192

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X [illegible] ☐ Agent ☐ Addressee

B. Received by (*Printed Name*) KATIE WEBSTER
C. Date of Delivery 1/24/2013

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☐ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (*Extra Fee*) ☐ Yes

2. Article Number
(*Transfer from service label*) 7009 1680 0000 7679 6033

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540