ROHM AND HAAS DELAWARE VALLEY INC.
ADMINISTRATIVE RECORD FILE *
INDEX OF DOCUMENTS

VOLUME I

RCRA PERMITTING
Part A Permit Application
A. Notification

1) U.S. EPA Notification of Hazardous Waste Activity, 07/29/80. P. 1-4. An Acknowledgement of Notification of Hazardous Waste Activity Verification form is attached.

2) Letter to EPA, Region III, from Mr. Lynwood J. Krischke, Rohm and Haas Delaware Valley Inc., re: Transmittal of the Notification of Hazardous Waste Activity form, 08/12/80. P. 5-9. The Notification and two Acknowledgement of Notification of Hazardous Waste Activity Verification forms are attached.

B. Correspondence and Part A Supporting Documents

1) Letter to Mr. William Carr, Rohm and Haas Delaware Valley Inc., from U.S. EPA, re: Acknowledgement of the Application for a Hazardous Waste Permit, 12/16/80. P. 1-2. A portion of the envelope is attached.

2) Letter to Mr. Lynwood Krischke, Rohm and Haas Delaware Valley Inc., from U.S. EPA, re: Acknowledgement of the Application for a Hazardous Waste Permit, 12/23/80. P. 3-3.

3) Letter to Mr. W. D. Carr, Rohm and Haas Delaware Valley Inc., from Ms. Shirley D. Bulkin, U.S. EPA, re: Completion of Part A Hazardous Waste Permit Application processing, 07/28/81. P. 4-8. A Conditions of Operation During Interim Status form and a Part A Permit Application - Description of Hazardous Wastes are attached.

4) Letter to Mr. Lynwood Krischke, Rohm and Haas Delaware Valley Inc., from Ms. Shirley D. Bulkin, U.S. EPA, re: Completion of Part A Hazardous Waste Permit Application processing, 07/28/81. P. 9-13. A Conditions of Operation During Interim Status form, a Part A Permit Application - Description of Hazardous Waste, and a note regarding asbestos are attached.

* Administrative Record File available 05/30/89, updated 08/23/91.

Note: Company name or organizational affiliation is identified in the index only when it appears in the record.

C. Part A Permit Application

1) U.S. EPA General Information form for the Bristol Plant, 10/31/80. P. 1-15. The U.S. EPA Hazardous Waste Permit Application form, a site map, and six photographs of the waste storage areas are attached.

2) Letter to EPA, Region III, from Mr. Lynwood J. Krischke, Rohm and Haas Delaware Valley Inc., re: Transmittal of the U.S. EPA General Information form and the U.S. EPA Hazardous Waste Permit Application form, 11/17/80. P. 16-25. The following are attached:

   a) the General Information form;
   b) the Application form;
   c) a site description;
   d) a site map;
   e) a photograph of the hazardous drummed waste storage area.

Part B Permit EPA-State

D. Permit Correspondence

1) Letter to Mr. William D. Carr, Rohm and Haas Delaware Valley Inc., from Mr. Stephen R. Wassersug, U.S. EPA, re: Formal request for Part B of the Hazardous Waste Permit Application, 08/23/82. P. 1-2. A certified mail receipt is attached.

2) Letter to Mr. Lynwood Krischke, Rohm and Haas Delaware Valley Inc., from Mr. Stephen R. Wassersug, U.S. EPA, re: Formal request for Part B of the Hazardous Waste Permit Application, 10/21/83. P. 3-4.

3) Letter to Mr. Jerry C. Brock, Rohm and Haas Delaware Valley Inc., from Mr. Stephen R. Wassersug, U.S. EPA, re: Notice of Decision, 07/24/84. P. 5-9. A handwritten note regarding the location of the permit and two certified mail receipts are attached.

E. Part B Permit Application

1) Letter to Mr. Stephen R. Wassersug, U.S. EPA, from Mr. Jerry C. Brock, Rohm and Haas Delaware Valley Inc., re: Transmittal of the Part B Permit Application - Bristol Plant, 02/18/83. P. 1-408. The Application is attached.

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F. Part B Final Determination

1) U.S. EPA Permit for Hazardous Waste Storage, Rohm and Haas Delaware Valley, Inc., 08/27/84. P. 1-218.

2) Letter to Mr. Jerry C. Brock, Rohm and Haas Delaware Valley Inc., from Mr. Wayne L. Lynn, Pennsylvania Department of Environmental Resources (PADER), re: Transmittal of the PADER Hazardous Waste Storage, Treatment and Disposal Permit for the Bristol Plant, 03/29/85. P. 219-459. The permit and a letter regarding the PADER permit are attached.

Closure/Post-Closure

G. Closure Plans

1) Letter to Mr. Steven [sic] R. Wassersug, U.S. EPA, from Mr. Robert J. O'Larnic, Rohm and Haas Delaware Valley Inc., re: Closure Plan for the Croydon Plant/Bristol Plant Area B, 08/26/83. P. 1-3. The Closure Plan and a Routing and Transmittal Slip regarding the Closure Plan are attached.

H. Closure/Post Closure Correspondence

1) Letter to Mr. Robert J. O'Larnic, Rohm and Haas Delaware Valley Inc., from Mr. Henry J. Sokolowski, U.S. EPA, re: Closure Plan approval, 10/17/83. P. 1-1.

2) Letter to Mr. Steven [sic] R. Wassersug, U.S. EPA, from Mr. Robert J. O'Larnic, Rohm and Haas Delaware Valley Inc., re: Notification that the Croydon Plant was closed according to the schedule submitted to EPA and PADER, 01/31/84. P. 2-3.

3) Letter to Mr. Robert J. O'Larnic, Rohm and Haas Delaware Valley, Inc., from Mr. James A. Dolan, PADER, re: Closure Plan approval and authorization to proceed with closure for the Croydon Storage Area, 06/14/84. P. 4-4.

I. Closure Certification

1) Memorandum to Mr. Hank Sokolowski, U.S. EPA, from Mr. Carl Spadaro, U.S. EPA, re: Closure Certification, 07/5/84. P. 1-4. A letter regarding the Closure Certification, a Professional Engineer Certification of Closure form, and an Owner Certification of Closure form are attached.

2) Letter to Mr. Robert J. O'Larnic, Rohm and Haas Delaware Valley Inc., from Mr. James A. Dolan, PADER, re: Acknowledgement of the certifications of closure, 07/6/84. P. 5-10. The following are attached:

   a) a memorandum regarding an inspection of the facility;
   b) an Owner Certification of Closure form;
   c) a Professional Engineer Certification of Closure form;
   d) a letter regarding authorization to proceed with closure;
   e) a letter regarding the Closure Plan.

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J. Background Reports and Studies

1) Report: Landfill Investigation for Rohm and Haas, Bristol, Pennsylvania, prepared by BCM Easternm, Inc., 04/84. P. 1-438. A topographic map of the landfill is attached.

2) Letter to Mr. Walter H. Graham, U.S. EPA, from Mr. Richard J. Grzywinski, BCM Eastern, Inc., re: Transmittal of the Laboratory Quality Assurance/Quality Control Program Report, 06/12/84. P. 439-478. The report and a memorandum regarding the review of the report are attached.

3) Report: Executive Summary Landfill Investigation Reports, Rohm and Haas Company, Bristol, Pennsylvania, prepared by BCM Eastern, Inc., 02/85. P. 479-516.

4) Report: Final Report on Landfill Water Resampling, prepared by BCM Eastern, Inc., 02/85. P. 517-921.

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5) Report: Soil Resampling and Analysis Program, prepared by BCM Eastern, Inc., 02/85. P. 922-991.

6) Report: Landfill Geophysical Investigation Magnetic Survey Report, Rohm and Haas Company, Bristol, Pennsylvania, prepared by BCM Eastern, Inc., 02/85. P. 992-1274.

7) Report: Landfill Geophysical Investigation Terrain Conductivity Report, Rohm and Haas Company, Bristol, Pennsylvania, prepared by BCM Eastern, Inc., 02/85. P. 1275-1426.

8) Report: Landfill Geophysical Investigation, Ground-Penetrating Radar Survey, prepared by GeoSight and BCM Eastern, Inc., 02/85. P. 1427-1468.

9) Report: Confirmation Test Pit Investigation, prepared by BCM Eastern, Inc., 02/85. P. 1469-1492. A handwritten table entitled "Test Pits with Drums" is attached.

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10) Report: Landfill Air Monitoring Program, prepared by BCM Eastern Inc., 02/18/85. P. 1493-1554. The following are attached:

    a) a memorandum regarding a review of the Air Quality Study Report;

b) a memorandum regarding a request to review theAir Quality Study Report;
c) a report entitled "Rohm and Haas Landfill Technical Review and Compliance Evaluation of Remedial Investigation Documents, Draft Final Report";
d) a table entitled "Review Summary of U.S. EPA Technical Review and Compliance Evaluation of Remedial Investigation Documents".

11) Report: Report on Manufacturing Areas A & C, Preliminary Groundwater and Surface Water Investigation, prepared by BCM, 06/85. P. 1555-2023.

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12) Report: Waste Investigation and Removal Plan for the Bristol Township Sewage Treatment Plant, prepared by BCM, 12/85. P. 2024-2553.

13) Report: Interim Landfill Groundwater Monitoring Program, Report on July-August 1985 Sampling, prepared by BCM, 01/86. P. 2554-2879. The following are attached:

a) a report entitled "The Interim Landfill Groundwater Monitoring Program, Report on October, 1985 Sampling";
b) a report entitled "The Interim Landfill Groundwater Monitoring Program, Report on January, 1986 Sampling";
c) a map of monitoring well locations.

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14) Report: TCE in Groundwater in the Vicinity of River Road, Bristol Township, Pennsylvania, prepared by BCM, 03/86. P. 2880-3196.

15) Report: Report on the Soil Boring Investigation, Conducted at the Chemical Leaman, Bristol Plant Site, prepared by BCM, 04/86. P. 3197-3247.

16) Report: Report on the Soil Sampling Conducted at the Chemical Leaman, Bristol, Pennsylvania Plant Site, prepared by BCM, 04/86. P. 3248-3307.

17) Report: River Road Test Pit Investigation, prepared by BCM, 04/86. P. 3308-3331. Two maps regarding test pit locations are attached.

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18) Report: Report on Buried Waste Investigation, Trailer Staging Area, prepared by BCM, 04/86. P. 3332-3850.

19) Report: Report on PCE Groundwater Investigation, prepared by BCM, 04/86. P. 3851-4353.

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20) Report: Landfill Groundwater Sampling, February, 1985 and July, 1985, prepared by BCM, 05/86. P. 4354-4788. A map of monitoring well locations is attached.

21) Tidal Tributary to the Delaware River, prepared by BCM, 05/86. P. 4789-4838.

22) Report: Report on Ammonium Sulfate Investigation, prepared by BCM, 05/86. P. 4839-5091. References are listed on P. 4881.

23) Report: Executive Summary, Environmental Investigation Reports, prepared by BCM Eastern Inc., 07/86. P. 5092-5117.

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24) Letter to Mr. Jack Kelly, U.S. EPA, from Ms. Mary M. King, BCM, re: Transmittal of EPA Data Verification - Rohm and Haas Bristol Landfill, 09/09/86. P. 5118-5637. The following are attached:

    a) the EPA Data Verification Report;
    b) a letter regarding a standard operating procedures manual;
    c) the standard operating procedures manual;
    d) a table of contents;
    e) a report entitled "Gross Alpha and Gross Beta Radioactivity in Drinking Water, Method 900.0";
    f) a report entitled, "Gross Radium Alpha Screening Procedure for Drinking Water (High Solids Samples) Method 900.1".

25) Report: Air Surveillance Program, prepared by BCM, 10/86. P. 5638-5646.

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26) Report: Waste Removal Project at the Bristol Township Sewage Treatment Plant, prepared by BCM, 07/87. P. 5647-6216.

27) Report: Review of Tentatively Identified Organics in Groundwater, September, 1986, Sample Round, prepared by BCM, 11/87. P. 6217-6546.

28) Memorandum to Mr. Jack Kelly, U.S. EPA, from Mr. James Barron, U.S. EPA, re: Transmittal of analytical reports for the Rohm and Haas Landfill, 11/20/87. P. 6547-6580. The reports are attached.

29) Report: Waste Removal Project, Phase II, at the Bristol Township Sewage Treatment Plant, prepared by BCM, 03/88. P. 6581-6614.

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K. RFA, RFI Correspondence

1) Letter to Mr. Paul Rosenstock, Rohm and Haas Delaware Valley, Inc., from Mr. Robert E. Greaves, U.S. EPA, re: EPA rview of the Rohm and Haas Landfill RFI, 11/11/89. P. 1-6. A risk calculation sheet is attached.

2) Letter to Ms. Humane Zia, U.S. EPA, from Ms. Mary M. Mang and Mr. William H. Fleming, Jr., BCM Engineers, re: Response to EPA's review of the Rohm and Haas RFI submission, 02/06/90. P. 7-18. EPA's review letter and risk calculation sheet are attached.

3) Letter to Ms. Maureen Essenthier, U.S. EPA, from Ms. Mary M. Mang, BCM Engineers, re: Transmittal of documents provided in response to EPA's comments on the RFI, 03/06/90. P. 19-163. The following documents are attached:

   a) a drawing showing test pit locations and photographs taken during the test pit investigation;
   b) a map of the bedrock surface and a map of the water table contour;
   c) ground water monitoring data collected from wells on or adjacent to the Bristol Township Authority property;
   d) two tables showing carcinogenic and noncarcinogenic risk associated with the Rohm and Haas Landfill.

4) Letter to Ms. Maureen Essenthier, U.S. EPA, from Mr. R. Thomas Numbers, BCM Engineers, re: Transmittal of the minutes for a meeting held to discuss changes contained in the RFI Workplans, 05/29/90. P. 164-169. The meeting minutes, the proposed meeting agenda, and a handwritten list of attendees are attached.

5) Letter to Mr. Paul D. Rosenstock, Rohm and Haas Delaware Valley, Inc., from Mr. Joseph A. Kotlinski, U.S. EPA, re: The ground water modeling addendum for the RFI, 06/14/90. P. 170-172.

L. RCRA Facility Investigation (RFI) Final Report

1) Letter to Mr. Edward M. Powell, U.S. EPA, from Mr. Paul D. Rosenstock, Rohm and Haas Delaware Valley Inc., re: Transmittal of the Remedial Investigation Addendum, 03/15/88. P. 1-576. The Bristol Landfill Remedial Investigation Addendum, Volume I is attached.

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2) Report: The Bristol Landfill Remedial Investigation Addendum, Volume II, prepared by BCM Engineers, 03/88. P. 577-1488.

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3) Report: The Bristol Landfill Remedial Investigation Addendum, Volume III, prepared by BCM Engineers, 03/88. P. 1489-2197.

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Facility Remediation

M. Corrective Measures Study (CMS) Final Report

1) Report: Final Corrective Measures Study for Rohm and Haas Landfill, Bristol, Pennsylvania, Volume One, prepared by BCM Engineers, Inc., 05/90. P. 1-557.

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2) Report: Final Corrective Measures Study for Rohm and Haas Landfill, Bristol, Pennsylvania, Volume Two, prepared by BCM Engineers, Inc., 05/90. P. 558-1389.

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3) Report: Final Corrective Measures Study for Rohm and Haas Landfill, Bristol, Pennsylvania, Volume Three, prepared by BCM Engineers, Inc., 05/90. P. 1390-2319.

VOLUME XVIII

N. CMS, CMI Correspondence

1) Letter to Mr. Robert E.J. Leonard, Rohm and Haas Delaware Valley, Inc., from Ms. Patricia M. Tan, U.S. EPA, re: EPA comments on the ground water media protection standards, 10/31/90. P. 1-4.

2) Memorandum to the file from Ms. Maureen Essenthier, U.S. EPA, re: Meeting to discuss the proposed removal of drums from landfill area B and of high concentration wastes from landfill area A, 11/01/90. P. 5-9. A list of meeting attendees is attached.

3) Letter to Ms. Maureen Essenthier, U.S. EPA, from Mr. S. Garry Howell, U.S. EPA, re: Recycling of rhoplex wastes at Rohm and Haas, 11/19/90. P. 10-10.

4) Letter to Ms. Maureen Essenthier, U.S. EPA, from Ms. Mary M. Mang, BCM Engineers, re: Outline of a schedule for submission of deliverables agreed upon at the November 1, 1990 meeting, 12/14/90. P.11-12.

5) Letter to Ms. Patricia M. Tan, U.S. EPA, from Ms. Mary M. Mang, BCM Engineers, re: Response to 10/31/90 letter from EPA concerning revisions to the proposed Media Protection Standards for the CMS, 12/21/90. P.13-42. A copy of the 10/31/90 letter and the revisions to the proposed Media Protection Standards report are attached.

6) Report: Technical Memorandum, Assessment of Off-Site Public Health Risks Posed by a Hypothetical Catastrophic Release from Drummed Materials in Section B of the Rohm and Haas Bristol Landfill, prepared by ENVIRON Corporation, 02/91. P. 43-176.

7) Report: Analytical Results, prepared by Aquatec Inc., 04/12/91. P. 177-380.

8) Letter to Ms. Diane Schott, U.S. EPA, from Ms. Mary M. Mang, BCM Engineers, re: Results of an analysis of the feasibility for aquifer restoration by flushing the southeastern portion of landfill area A, 05/14/91. P. 381-984. The analytical report is attached.

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9) Memorandum to Ms. Diane Schott, U.S. EPA, from Mr. Roy L. Smith, U.S. EPA, re: Comparison of risk for landfill areas A and B, 06/02/91. P. 985-987. The risk calculations are attached.

10) Letter to Ms. Diane Schott, U.S. EPA, from Mr. Roy L. Smith, U.S. EPA, re: Comments prepared by an EPA Toxicologist on the Off-Site Risk Assesment Addendum, 06/19/91. P. 988-989.

11) Letter to Ms. Mary Mang, BCM Engineers, from Ms. Diane B. Schott, U.S. EPA, re: EPA comments on the drum sampling data at landfill area B, 06/20/91. P. 990-991.

12) Memorandum to file from Ms. Diane Schott, U.S. EPA, re: June 27, 1991 meeting to discuss the landfill investigation and the CMS, 07/02/91. P. 992-1043. The following are attached:

    a) a meeting agenda;
    b) a handwritten list of meeting attendees;
    c) a list of needed revisions for the CMS;
    d) a letter commenting on the Off-Site Risk Assessment Addendum;
    e) a letter commenting on drum sampling data at landfill area B;

f) a letter responding to comments on the drum sampling data.

13) Letter to Ms. Diane B. Schott, U.S. EPA, from Ms. Mary M. Mang, BCM Engineers, re: Transmittal of revised reports related to landfill area B, 07/03/91. P. 1044-1422. The revised reports, Drummed Waste Investigation Results for Landfill Section B and Data Comparison Report, Toxic Characteristics Leaching Procedure, Split Samples, are attached.

14) Letter to Mr. Robert J. Leonard, Rohm and Haas Delaware Valley Inc., from Ms. Diane B. Schott, U.S. EPA, re: Revision of the CMS to reflect the final disposition of wastes in the event the Rohm and Haas property is sold, 07/10/91. P. 1423-1423.

15) Letter to Ms. Dianne [sic] Schott, U.S. EPA, from Mr. Stephen T. Washburn, ENVIRON Corporation, re: Transmittal of the final version of an addendum to their 02/91 report, 07/15/91. P. The report, Addendum, Assessment of Off-Site Public Health Risks Posed by a Hypothetical Catastrophic Release from Drummed Materials in Section B of the Rohm and Haas Bristol Landfill, is attached.

16) Letter to Ms. Diane B. Schott, U.S. EPA, from Ms. Mary M. Mang and Mr. William H. Fleming, BCM Engineers, re: Response to EPA comments on the CMS, 07/24/91. P. 1455-1661. The following are attached:

a) a copy of the EPA document, "Revisions Needed for Corrective Measure Study";
b) an evaluation of ground water dilution;
c) a revised table 6-1 detailing Media Protection Standards;
d) additional revisions to the CMS.

17) Letter to Mr. Robert J. Leonard, Rohm and Haas Delaware Valley Inc., from Ms. Diane B. Schott, U.S. EPA, re: Submission deadline for revised calculations for the Media Protection Standards, 07/31/91. P.1662-1662.

18) Letter to Ms. Diane B. Schott, U.S. EPA from Ms. Mary M. Mang, BCM Engineers, re: Transmittal of tables concerning Media Protection Standards, 08/14/91. P. 1663-1796. The tables are attached.

19) Letter to Ms. Diane Schott, U.S. EPA, from Ms. Camille Costa, Dynamac Corporation, re: Transmittal of a letter report concerning air sampling analysis, 08/16/91. P. 1797-1798. The letter report is attached.

VOLUME XX

Enforcement

O. Signed 3008(h) Order

1) Administrative Order on Consent, In the Matter of Rohm and Haas Delaware Valley Inc., 01/06/89. P. 1-93.

P. Miscellaneous Correspondence

1) Report: Barium, prepared by Clement Associates, 10/85. P. 1-3. References are listed on P. 3.

2) Report: Benzene, prepared by Clement Associates, 10/85. P. 4-8. References are listed on P. 7-8.

3) Report: Chromium, prepared by Clement Associates, 10/85. P. 9-13. References are listed on P. 12-13.

4) Report: Lead, prepared by Clement Associates, 10/85. P. 14-18. References are listed on P. 18.

5) Report: Methylene Chloride, prepared by Clement Associates, 10/85. P. 19-22. References are listed on P. 22.

6) Report: Phenol, prepared by Clement Associates, 10/85. P. 23-26. References are listed on P. 26.

7) Report: 1,1,1-Trichloroethane, prepared by Clement Associates, 10/85. P. 27-30. References are listed on P. 29-30.

8) Report: 1,1,2-Trichloroethane, prepared by Clement Associates, 10/85. P. 31-33. References are listed on P. 33.

9) Report: Trichloroethylene, prepared by Clement Associates, 10/85. P. 34-37. References are listed on P. 36-37.

Permitting

Q. Permit Correspondence

1) Letter to Mr. George A. Schnabel, Rohm and Haas Company, from Mr. Bruce P. Smith, U.S. EPA, re: Request for information regarding the Solid Waste Management Units (SWMU) at both the Croydon Plant and the Bristol Plant, 07/08/87. P. 1-3.

2) Letter to Mr. Edward Powell, U.S. EPA, from Mr. Paul D. Rosenstock, Rohm and Haas Delaware Valley Inc., re: Response to the Solid Waste Management Unit information request letter dated July 8, 1987, 08/14/87. P. 4-21. References are listed on P. 11-13.

PUBLIC PARTICIPATION

R. Correspondence with the Public, Public Meeting Notes, Response to Comments

1) Transcript of Public Hearing, re: Draft Permit Issuance to Rohm and Haas Delaware Valley Inc., 05/03/84. P. 1-59.

COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA) INFORMATION

SITE IDENTIFICATION

S. Correspondence and Supporting Documentation

1) Organics Analysis Data Sheet, Sample Number C0048, prepared by JTC Environmental Consultants, Inc., (undated). P. 1-49. The following are attached:

   a) nine Organics Traffic Reports for Sample Numbers C0047 - C0055;
   b) three Inorganics Analysis Data Sheets for Sample Numbers MC8062, MC8063, and MC8064;
   c) four Organics Analysis Data Sheets for Sample Numbers C0276 - C0279;
   d) eight Organics Analysis Data Sheets for Sample Numbers C0047 - C0054.

T. Preliminary Assessment/Site Inspection Reports

1) U.S. EPA Site Inspection Report, 05/13/80. P. 1-11.

U. Hazardous Ranking System Reports

1) Report: National Priorities List Site, Rohm and Haas Company Landfill, Bristol Township, Pennsylvania, prepared by U.S. EPA, 12/23/84. P. 1-230. References are listed on P. 30-31.

VOLUME XXI

REMEDIAL ENFORCEMENT PLANNING

V. Potentially Responsible Parties General Correspondence

1) Letter to Mr. George A. Schnabel, Rohm and Haas Company, from Mr. Stephen R. Wassersug, U.S. EPA, re: Notice letter to perform corrective action, 11/20/85. P. 1-157. The following are attached:

   a) a certified mail receipt;
   b) a letter regarding the operations and waste materials deposited within the Bristol Landfill;
   c) a U.S. EPA 104(e) information request letter and response.

2) Memorandum to Mr. Jack Kelly, U.S. EPA, from Ms. Libby Rhoads, U.S. EPA, re: Technical evaluation of the Remedial Investigation documents, 12/19/85. P. 158-159.

3) Memorandum to Mr. Jack Kelly, U.S. EPA, from Ms. Alyce T. Fritz, U.S. EPA, re: Rohm and Haas Landfill investigation reports, 02/06/86. P. 160-161.

4) Letter to Mr. George Schnabel, Rohm and Haas Company, from Mr. Jack Kelly, U.S. EPA, re: Comments regarding BCM's Landfill investigation reports of April, 1984 and February, 1985, 04/09/86. P. 162-175. A memorandum regarding the landfill investigation reports and a memorandum regarding comments on the technical evaluation of the Remedial Investigation are attached.

5) Letter to Mr. George Schnabel, Rohm and Haas Company, from Mr. Jack Kelly, U.S. EPA, re: Bristol Township Sewage Treatment Plant, 05/02/86. P. 176-203. A memorandum regarding the carcinogenic risk assessment and a Site Safety Plan are attached.

6) Memorandum to Mr. Jack Kelly, U.S. EPA, from Ms. Libby Rhoads, U.S. EPA, re: Aquatic baseline survey of Hog Run Creek, 08/14/86. P. 204-205.

7) Memorandum to Mr. Jack Kelly, U.S. EPA, from Ms. Alyce T. Fritz, U.S. EPA, re: Review of the aquatic baseline survey of Hog Run Creek, 09/16/86. P. 206-208.

8) Letter to Mr. George Schnabel, Rohm and Haas Company, from Mr. Jack Kelly, U.S. EPA, re: EPA's contractor review of Bristol Landfill reports, 02/06/87. P. 209-210.

REMEDIAL RESPONSE PLANNING

W. Correspondence and Supporting Documentation

1) Report: Final Review and Comment Report for Rohm and Haas Landfill, prepared by NUS Corporation, 06/19/85. P. 1-90. The following are attached:

   a) a handwritten note regarding maps and figures used by NUS Corporation;
   b) a site location map for Rohm and Haas site;
   c) a figure showing Cross-Section A-A' Observed Groundwater Level on February, 1984;
   d) a figure showing Cross-Section B-B' Observed Groundwater Level on February, 1984;
   e) a contour map of the Top of Bedrock;
   f) a figure showing Groundwater Contour Map Observed on February 1984;
   g) a figure showing TCE Concentration in Groundwater of the Contaminated Layer;
   h) a figure showing Concentration of TCE Dissolved in Groundwater;

i) a figure showing Concentration of PCE in Groundwater;
j) a figure showing Concentration of Chloroform in Groundwater;
k) a figure showing Concentration of Benzene in Groundwater;
l) a figure showing Suspected Contamination ofGroundwater On-site;
m) three sample data summary forms;
n) a map showing the Configuration of the Bedrock Surface;
o) a map showing Generalized Potentiometric Surface of the Potomac-Raritan-Magothy Aquifer for 1900;
p) a map showing Generalized Potentiometric Surface of the Potomac-Raritan-Magothy Aquifer System for 1968;
q) a handwritten note regarding hydrogeologic conditions;
r) a handwritten note regarding groundwater contamination;
s) a handwritten note regarding surface water contamination;
t) a handwritten note regarding potential impact on NS side;
u) a handwritten note regarding gaps of information.

2) Report: Rohm and Haas Landfill, Technical Review and Compliance Evaluation of Remedial Investigation Documents, Draft Final Report, prepared by Versar, Inc., 11/13/85. P. 91-144. References are on P. 137-138.

3) Letter to Mr. Harold Byer, U.S. EPA, from Mr. Bruce R. Pluta, NUS Corporation; Mr. Richard Cromer, NUS Corporation; and Mr. Garth Glenn, NUS Corporation, re: Transmittal of the Final Field Trip Report for Rohm and Haas Landfill, 09/25/86. P. 145-167. The report is attached.

4) Letter to Mr. Jack Kelly, U.S. EPA, from Mr. Jeffrey P. Orient, NUS Corporation, re: Transmittal of the Trip Report for Rohm and Haas Landfill, 11/07/86. P. 168-171. The report is attached.

5) Report: Final Evaluation Report, Evaluation of Remedial Investigation Reports, Rohm and Haas Site, Bristol, Pennsylvania, prepared by NUS Corporation, 01/87. P. 172-194.

6) Report: Final Evaluation Report, Evaluation of Site Investigation Reports, Bristol Plant Facility, Rohm and Haas Site, Bristol, Pennsylvania, prepared by NUS Corporation, 12/21/87. P. 195-216. An Acknowledgement of Receipt form is attached.

X. SITE SPECIFIC GUIDANCE

1) Excerpt from Federal Register, Volume 50, Number 69, Proposed Rules, prepared by U.S. EPA, 04/10/85. P. 1-8.

2) Federal Register, Part VII, National Priorities List for Uncontrolled Hazardous Waste Sites, Proposed Rule, 40 CFR, Part 300, prepared by U.S. EPA, 06/24/88. P. 9-18.

Statement of Basis

1) Statement of Basis for Rohm and Haas DVI, Bristol Facility, Bristol Landfill, 08/23/91.

Record of Decision

1) Resource Conservation and Recovery Act Record of Decision, Rohm and Haas Delaware Valley Inc. Bristol Landfill, Bristol, PA, 12/31/91.

ROHM
PART
NOTIF

ROHM AND HAAS DELAWARE VALLEY INC.
RCRA PERMITTING/Part A Permit
Notification

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

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

A.1

EPA — U.S. ENVIRONMENTAL PROTECTION AGENCY

NOTIFICATION OF HAZARDOUS WASTE ACTIVITY

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

INSTALLATION'S EPA I.D. NO.	PAD002292068
I. NAME OF INSTALLATION	~~ROHM AND HAAS COMPANY~~
II. INSTALLATION MAILING ADDRESS	~~BRISTOL PIKE~~ BRISTOL, PA 19007
III. LOCATION OF INSTALLATION	~~BRISTOL PIKE~~ BRISTOL, PA 19007

DETACH

FOR OFFICIAL USE ONLY

COMMENTS: C

INSTALLATION'S EPA I.D. NUMBER: F PAD002292068 3 1 | APPROVED: | DATE RECEIVED (yr., mo., & day): 800817 | AUG 11 1980 000155

I. NAME OF INSTALLATION

ROHM AND HAAS DELAWARE VALLEY INC.

II. INSTALLATION MAILING ADDRESS

STREET OR P.O. BOX: 3 PO BOX 219

CITY OR TOWN: 4 BRISTOL | ST.: PA | ZIP CODE: 19007

III. LOCATION OF INSTALLATION

STREET OR ROUTE NUMBER: 5 RT 413 AND OLD RT. 13

CITY OR TOWN: 6 BRISTOL | ST.: PA | ZIP CODE: 19007

IV. INSTALLATION CONTACT

NAME AND TITLE (last, first, & job title): 2 ~~CARR, WILLIAM PLANT MANAGER~~ ROSENSTOCK PAUL ENV ENG | PHONE NO. (area code & no.): 215-785-8470

V. OWNERSHIP

A. NAME OF INSTALLATION'S LEGAL OWNER: 8 ROHM AND HAAS DELAWARE VALLEY INC.

B. TYPE OF OWNERSHIP (enter the appropriate letter into box): F = FEDERAL, M = NON-FEDERAL — M

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

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

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

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

VIII. FIRST OR SUBSEQUENT NOTIFICATION

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

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

C. INSTALLATION'S EPA I.D. NO.: PAD002292068

IX. DESCRIPTION OF HAZARDOUS WASTES

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

I.D. – FOR OFFICIAL USE ONLY

S			T/A	C
W	PAD002282068		2	1

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

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

1	2	3	4	5	6
F002	F020				
7	8	9	10	11	12

added 4-29-85 deleted 8-19-85

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

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

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

31	32	33	34	35	36
P003	P024	P053	P106	U002	U004
37	38	39	40	41	42
U007	U008	U009	U013	U031	U054
43	44	45	46	47	48
U056	U057	U102	U112	U113	U118

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

49	50	51	52	53	54

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

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

X. CERTIFICATION

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

SIGNATURE	NAME & OFFICIAL TITLE *(type or print)*	DATE SIGNED
William D. Carr	William D. Carr - Plant Manager	7/29/80

EPA Form 8700-12 (6-80) REVERSE

100000

INSTALLATION I.D. NO. AD 002292068
CONTINUATION OF ITEM IX, SECTION C

I.D. – FOR OFFICIAL USE ONLY
W PAD002292068 T/A C

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

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

1	2	3	4	5	6
7	8	9	10	11	12

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

13	14	15	16	17	18
19	20	21	22	23	24
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C. COMMERCIAL CHEMICAL PRODUCT HAZARDOUS WASTES. Enter the four–digit number from 40 CFR Part 261.33 for each chemical substance your installation handles which may be a hazardous waste. Use additional sheets if necessary.

31 U122	32 U133	33 U140	34 U147	35 U151	36 U154
37 U159	38 U161	39 U162	40 U188	41 U197	42 U201
43 U210	44 U220	45 U223	46 U228	47 U239	48 U114

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

49	50	51	52	53	54

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

☐ 1. IGNITABLE (D001) ☐ 2. CORROSIVE (D002) ☐ 3. REACTIVE (D003) ☐ 4. TOXIC (D000)

X. CERTIFICATION

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

SIGNATURE	NAME & OFFICIAL TITLE *(type or print)*	DATE SIGNED
William D. Carr	William D. Carr - Plant Manager	7-29-80

EPA Form 8700-12 (6-80) REVERSE

DETACH A

EPA

ACKNOWLEDGEMENT OF NOTIFICATION OF HAZARDOUS WASTE ACTIVITY
(VERIFICATION)

000004

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

EPA I.D. NUMBER → PAD002292068

ROHM AND HAAS DELAWARE VALLEY INC
PO BOX 219
BRISTOL PA 19007

INSTALLATION ADDRESS → RT 413 AND OLD RT 13
BRISTOL PA 19007

EPA Form 8700-12B (4-80) 10/09/80

ROHM AND HAAS DELAWARE VALLEY INC.
P.O. BOX 219, BRISTOL, PA. 19007
(215) 785-8000

REPLY TO:
CROYDON PLANT
P.O. BOX 302
BRISTOL, PA. 19007
(215) 785-8260

A.2

REGISTERED MAIL

August 12, 1980

EPA Region III
P.O. Box 1480
Philadelphia, PA 19107

Gentlemen:

Enclosed is a completed Notification Form for hazardous waste activity at the Croydon Plant of Rohm and Haas Delaware Valley Inc.

Very truly yours,

Lynwood J. Krischke
Croydon Plant Manager

LJK/hmy
Enc.

000005

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

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

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

NOTIFICATION OF HAZARDOUS WASTE ACTIVITY

INSTALLATION'S EPA I.D. NO.	
I. NAME OF INSTALLATION	
II. INSTALLATION MAILING ADDRESS	PLEASE PLACE LABEL IN THIS SPACE
III. LOCATION OF INSTALLATION	

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

DETACH

FOR OFFICIAL USE ONLY

COMMENTS: C [illegible] 00170

INSTALLATION'S EPA I.D. NUMBER: F PAD087105714 T/A C

APPROVED:

DATE RECEIVED (yr., mo., & day): 800815

I. NAME OF INSTALLATION

Rohm and Haas Delaware Valley Inc.

II. INSTALLATION MAILING ADDRESS

STREET OR P.O. BOX: 3 PO Box 302

CITY OR TOWN: 4 Bristol — ST.: PA — ZIP CODE: 19007

III. LOCATION OF INSTALLATION

STREET OR ROUTE NUMBER: 5 River Road

CITY OR TOWN: 6 Croydon — ST.: PA — ZIP CODE: 19020

IV. INSTALLATION CONTACT

NAME AND TITLE *(last, first, & job title)*: 2 Krischke Lynwood Plant Manager

PHONE NO. *(area code & no.)*: 215-785-8260

V. OWNERSHIP

A. NAME OF INSTALLATION'S LEGAL OWNER: 8 Rohm and Haas Delaware Valley Inc.

DETACH

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

F = FEDERAL
M = NON-FEDERAL

M

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

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

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

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

VIII. FIRST OR SUBSEQUENT NOTIFICATION

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

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

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

IX. DESCRIPTION OF HAZARDOUS WASTES

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

D. – FOR OFFICIAL USE ONLY

S															T/A	C
W	K	H	D	0	8	2	1	0	5	7	1	4			2	1
1	2													13	14	15

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

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

1: F002	2: F003	3:	4:	5:	6:
7:	8:	9:	10:	11:	12:

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

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

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31: P003	32: P053	33: U002	34: U007	35: U008	36: U009
37: U013	38: U113	39: U122	40: U133	41: U147	42: U151
43: U162	44: U197	45: U229	46: U239	47:	48:

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

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

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

X. CERTIFICATION

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

SIGNATURE	NAME & OFFICIAL TITLE *(type or print)*	DATE SIGNED
L Krischke	Lynwood Krischke Vice President/Croydon Plant Manager	Aug. 12, 1980

EPA Form 8700-12 (6-80) REVERSE

EPA

ACKNOWLEDGEMENT OF NOTIFICATION OF HAZARDOUS WASTE ACTIVITY
(VERIFICATION)

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

EPA I.D. NUMBER ➤ PAD 08 710 5714

INSTALLATION ADDRESS ➤ Robert J. O'Larnic, Asst. Manager
Mr.
Environmental Control Dept.
Rohm and Haas Delaware Valley, Inc.,
Bristol Plant Area B
P. O. Box 219
Bristol, PA 19007

2/7/84

EPA Form 8700-12B (4-80)

000008

EPA

ACKNOWLEDGEMENT OF NOTIFICATION OF HAZARDOUS WASTE ACTIVITY
(VERIFICATION)

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

EPA I.D. NUMBER ➤ PAD 08 710 5714

Rohm & Haas-Del. Valley Inc.-Croydan Plt.
P.O. Box 302
Bristol, PA 19007

INSTALLATION ADDRESS ➤ River Road
Croydon, PA 19020

EPA Form 8700-12B (4-80)

000009

ROHM & HAAS, INC. / RCRA PERMITTING
PART A PERMIT APPLICATION
CORRESPONDENCE AND SUPPORTING DOCUMENTS

B.1

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
6TH AND WALNUT STREETS
PHILADELPHIA, PENNSYLVANIA 19106

EPA I.D. # PAD002292068

December 16, 1980

Rohm and Haas Del. Val. Inc.
Mr. William Carr
P.O. Box 219
Bristol, Pa. 19007

Re: Acknowledgment of Application for a Hazardous Waste Permit

This is to acknowledge that the Environmental Protection Agency has received: (1) A notification pursuant to Section 3010 of the Resource Conservation and Recovery Act for the facility located at the address shown above; and (2) Part A of a Hazardous Waste Permit Application for that facility, including a signed statement that the operation of the facility, or its construction, began prior to November 19, 1980. While the information provided by these submissions has not been fully reviewed for completeness or accuracy, EPA will accept this information as an initial qualification for interim status pursuant to Section 3005 of the Act. If after further review of this information, EPA determines that the owner or operator did not fulfill all the requirements for interim status, EPA may treat the owner or operator as not having qualified for interim status pursuant to that section and will advise the owner or operator of that determination. Facility owners and operators with interim status must comply with the standards set forth at 40 CFR Part 265 until a permit is issued. Interim status may be terminated if the owner or operator fails to furnish any additional information requested by EPA in order to process a permit application.

AS DELAWARE VALLEY INC.
9
19007

BRISTOL
NOV-3'80
U.S. POSTAGE
1 79
20002

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
6TH AND WALNUT STREETS
PHILADELPHIA, PENNSYLVANIA 19106

B.2

EPA I.D. # PAD087105714 December 23, 1980

Rohm & Haas
Del. Val. Inc. Croydon Plant
Mr. Lynwood Krischke
P.O. Box 302
Bristol, Pa. 19007

Re: Acknowledgment of Application for a Hazardous Waste Permit

This is to acknowledge that the Environmental Protection Agency has received: (1) A notification pursuant to Section 3010 of the Resource Conservation and Recovery Act for the facility located at the address shown above; and (2) Part A of a Hazardous Waste Permit Application for that facility, including a signed statement that the operation of the facility, or its construction, began prior to November 19, 1980. While the information provided by these submissions has not been fully reviewed for completeness or accuracy, EPA will accept this information as an initial qualification for interim status pursuant to Section 3005 of the Act. If after further review of this information, EPA determines that the owner or operator did not fulfill all the requirements for interim status, EPA may treat the owner or operator as not having qualified for interim status pursuant to that section and will advise the owner or operator of that determination. Facility owners and operators with interim status must comply with the standards set forth at 40 CFR Part 265 until a permit is issued. Interim status may be terminated if the owner or operator fails to furnish any additional information requested by EPA in order to process a permit application.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
6TH AND WALNUT STREETS
PHILADELPHIA, PENNSYLVANIA 19106

JUL 28 1981

B.3

Mr. W. D. Carr
Rohm and Haas Del. Val. Inc.
P. O. Box 219
Bristol, PA 19007

Dear Mr. Carr:

This is to acknowledge that the Environmental Protection Agency has completed processing the information submitted in your Part A Hazardous Waste Permit Application. It is the Agency's opinion, based on the assumption that the information submitted is complete and accurate, you as an owner or operator of a hazardous waste management facility have met the requirements of Section 3005(e) of the Resource Conservation and Recovery Act (RCRA) for Interim Status. EPA has not verified the information submitted. If it is determined that the information is incomplete or inaccurate, you may be asked to provide additional information or in certain circumstances it may be determined that you do not qualify for interim status. In addition, this notice does not preclude a citizen from taking legal action under the provisions of Section 7002 of RCRA.

A facility not meeting the requirements for interim status under Section 3005 of RCRA may be required to close until such time as a hazardous waste permit is issued. Interim status may also be terminated, according to procedures in 40 CFR Part 124, if the owner or operator fails to furnish additional information which EPA requests in order to process a permit application.

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

The enclosure to this letter identifies the processes your facility may use, their design capacities, and types of waste your facility may accept during interim status. This information was obtained from the Part A Permit Application. If you wish to handle new wastes, change processes, increase the design capacity of existing processes, or change ownership or operational control of the facility, you may do so only as provided in 40 CFR Sections 122.22 and 122.23.

If you have any questions concerning this letter, please write to the address shown or call Bill Walsh at 215/597-1230.

Sincerely yours,

Shirley D. Bulkin

Shirley D. Bulkin
Chief, Administrative Support Section
Permit Enforcement Branch

Enclosure

CONDITIONS OF OPERATION DURING
INTERIM STATUS

Date Prepared: July 28, 1981

The information shown below is based solely on the information that the owner and operator of this facility submitted in Part A of the Hazardous Waste Permit Application. This is not a determination by EPA that this facility is an environmentally acceptable facility for treating, storing or disposing of the hazardous wastes listed below.

1. Facility name, location, and EPA Identification Number.

Name: Rohm and Haas Del. Val. Inc

Location: Route 413 and Old Route 413
Bristol TWP., PA 19007

EPA I.D. No.: PAD 00 229 2068

II. EPA considers the following to be the owner or operator of the facility and therefore the person(s) who must comply with the requirements set forth in 40 CFR Parts 122 and 265.

Owner's Name: W. D. Carr

Operator's Name:

III. During the period of interim status, the facility may use only the following processes for treating, storing or disposing of hazardous waste, up to the design capacities that are indicated.

PROCESS	DESIGN CAPACITY
S01	468,000 Gals.
S02	14,700 Gals.
T01	8,600 Gals/Day

IV. During the period of interim status, the facility may handle only the hazardous wastes with the following EPA Hazardous Waste Numbers, and/or solid waste exhibiting hazardous characteristics with the following EPA Hazardous Waste Numbers.

____ ____ ____ ____ ____

____ ____ ____ ____ ____

*See Attachment

ontinued from page 2.
OTE: 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): VPAD002292068

FOR OFFICIAL USE ONLY: 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	F002	20,000	P	S01	See Note (1) on Page 4
2	D001	300,000	P	S01	" "
3	D002	400,000	P	S01	" "
4	D002	2,000,000	P	S02	
5	D002	350,000	P	S01 T01	
6	D002	5,000,000	P	T01	
7	D001	50,000	P	S01	See Note (2) on Page 4
8	D002				Included with above
9	D003				" " "
10	D001	25,000	P	S01	See Note (1) on Page 4
11	002				Included with above
12	D005	250,000	P	S01	See Note (1) on Page 4
13	D006				Included with above
14	P003	1,000	P	S01	See Note (3) on Page 4
15	P024	1,000	P	S01	" "
16	P053	1,000	P	S01	Deleted 11/25/80 F.R. WW
17	P106	1,000	P	S01	" "
18	U002	1,000	P	S01	" "
19	U004	1,000	P	S01	" "
20	U007	1,000	P	S01	" "
21	U008	1,000	P	S01	" "
22	U009	1,000	P	S01	" "
23	U013	10,000	P	S01	Deleted 11/25/80 F.R. WW See Note (1) on Page 4
24	U031	1,000	P	S01	See Note (3) on Page 4
25	U052 ~~U054~~	1,000	P	S01	" "
26	U056	1,000	P	S01	" "

AMENDED 11/25/80 F.R. WW

000007

CONTINUE ON REVERSE

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

Form Approved OMB No. 158-S80004

EPA I.D. NUMBER (enter from page 1)	FOR OFFICIAL USE ONLY
W P A D 0 0 2 2 9 2 0 6 8 T/A C 1	W DUP T/A C 2 DUP

DESCRIPTION OF HAZARDOUS WASTES (continued)

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (If a code is not entered in D(1))
1	U057	1,000	P	S01	See Note (3) on Page 4
2	U102	1,000	P	S01	"
3	U112	1,000	P	S01	"
4	U113	1,000	P	S01	"
5	U114	1,000	P	S01	"
6	U118	1,000	P	S01	"
7	U122	1,000	P	S01	"
8	U133	1,000	P	S01	"
9	U140	1,000	P	S01	" Modified 11/25/80
10	U147	1,000	P	S01	"
	U151	1,000	P	S01	"
12	U154	1,000	P	S01	"
13	U159	1,000	P	S01	" Modified 11/25/80
14	U161	1,000	P	S01	"
15	U162	1,000	P	S01	" Modified 11/25/80
16	U188	1,000	P	S01	"
17	U197	1,000	P	S01	" Modified 11/25/80
18	U201	1,000	P	S01	"
19	U210	1,000	P	S01	"
20	U220	1,000	P	S01	"
21	U223	1,000	P	S01	" Modified 11/25/80
22	U228	1,000	P	S01	"
23	U239	1,000	P	S01	" Modified 11/25/80
25					
26					000008

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
6TH AND WALNUT STREETS
PHILADELPHIA, PENNSYLVANIA 19106

JUL 28 1981

Mr. Lynwood Krischke
Rohm and Haas Del. Val. Inc.
P. O. Box 302
Bristol, PA 19007

Dear Mr. Krischke:

This is to acknowledge that the Environmental Protection Agency has completed processing the information submitted in your Part A Hazardous Waste Permit Application. It is the Agency's opinion, based on the assumption that the information submitted is complete and accurate, you as an owner or operator of a hazardous waste management facility have met the requirements of Section 3005(e) of the Resource Conservation and Recovery Act (RCRA) for Interim Status. EPA has not verified the information submitted. If it is determined that the information is incomplete or inaccurate, you may be asked to provide additional information or in certain circumstances it may be determined that you do not qualify for interim status. In addition, this notice does not preclude a citizen from taking legal action under the provisions of Section 7002 of RCRA.

A facility not meeting the requirements for interim status under Section 3005 of RCRA may be required to close until such time as a hazardous waste permit is issued. Interim status may also be terminated, according to procedures in 40 CFR Part 124, if the owner or operator fails to furnish additional information which EPA requests in order to process a permit application.

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

The enclosure to this letter identifies the processes your facility may use, their design capacities, and types of waste your facility may accept during interim status. This information was obtained from the Part A Permit Application. If you wish to handle new wastes, change processes, increase the design capacity of existing processes, or change ownership or operational control of the facility, you may do so only as provided in 40 CFR Sections 122.22 and 122.23.

B.4

If you have any questions concerning this letter, please write to the address shown or call Bill Walsh at 215/597-1230.

Sincerely yours,

Shirley D. Bulkin

Shirley D. Bulkin
Chief, Administrative Support Section
Permit Enforcement Branch

Enclosure

CONDITIONS OF OPERATION DURING
INTERIM STATUS

Date Prepared: July 28, 1981

The information shown below is based solely on the information that the owner and operator of this facility submitted in Part A of the Hazardous Waste Permit Application. This is not a determination by EPA that this facility is an environmentally acceptable facility for treating, storing or disposing of the hazardous wastes listed below.

I. Facility name, location, and EPA Identification Number.

Name: Rohm and Haas Del. Val. Inc.

Location: River Road
Croydon, PA 19020

EPA I.D. No.: PAD 08 710 5714

II. EPA considers the following to be the owner or operator of the facility and therefore the person(s) who must comply with the requirements set forth in 40 CFR Parts 122 and 265.

Owner's Name: Lynwood Krischke

Operator's Name:

III. During the period of interim status, the facility may use only the following processes for treating, storing or disposing of hazardous waste, up to the design capacities that are indicated.

PROCESS	DESIGN CAPACITY
S01	8,800 Gals.

IV. During the period of interim status, the facility may handle only the hazardous wastes with the following EPA Hazardous Waste Numbers, and/or solid waste exhibiting hazardous characteristics with the following EPA Hazardous Waste Numbers.

*See Attachments

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

Form Approved OMB No. 158-S80004

EPA I.D. NUMBER (enter from page 1)	FOR OFFICIAL USE ONLY
W A D 0 8 7 1 0 5 7 1 4 T/A C 1	W DUP T/A C 2 DUP

D. 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	F002	800	P	S01	
2	~~U229~~ U219	CHANGED 11/25/80 F.R.			Included with above
3	D001	50,000	P	S01	
4	~~U013~~	TEMP. SUSPENDED 500 11/25/80 F.R.	P	S01	See Note 1 on Page 4
5	U151	1	P	S01	" "
6	F003	500	P	S01	See Note 2 on Page 4
7	U002				Included with above
8	U239	modified 11/25/80 FR			" "
9	P003	100	P	S01	See Note 2 on Page 4
10	~~P053~~	DELETED 11/25/80 FR 100	P	S01	" "
	U007	1,000	P	S01	" "
12	U008	1,000	P	S01	" "
13	U009	1,000	P	S01	" "
14	U113	1,000	P	S01	" "
15	U122	2,000	P	S01	" "
16	U133	100	P	S01	" "
17	U147	100	P	S01	" "
18	U162	1,000 11/25/80 modified	P	S01	" "
19	U197	100 11/25/80 modified	P	S01	" "
20	D002	1,000	P	S01	" "
21	D003	100	P	S01	" "
22					
23					
24					
25					
26					

000012

CONTINUE ON REVERSE

ATTACHMENT

EPA has deferred final promulgation of the listing of asbestos (U013) as a hazardous waste in the Federal Register of November 25, 1980 (page 78538). Since disposal of asbestos is regulated under the Clean Air Act, it is possible that a permit-by-rule would be issued under RCRA when asbestos is finally listed as a hazardous waste.

ROHM AND HAAS DELAWARE VALLEY INC.
RCRA PERMITTING/Part A Permit
Part A Permit Application

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

Form Approved OMB No. 158-R0175

C.1

FORM 1 GENERAL

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

GENERAL INFORMATION

Consolidated Permits Program

(Read the "General Instructions" before starting.)

RECEIVED
RCRA SECTION
EPA REGION III
Nov 19 80 00050

I. EPA I.D. NUMBER

F PAD002292068

GENERAL INSTRUCTIONS

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

LABEL ITEMS

EPA I.D. NUMBER	PAD002292068
III. FACILITY NAME	~~ROHM AND HAAS COMPANY~~
V. FACILITY MAILING ADDRESS	~~BRISTOL PIKE~~ BRISTOL, PA 19007
VI. FACILITY LOCATION	~~BRISTOL PIKE~~ BRISTOL, PA 19007

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
A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A)		X	
B. Does or will this facility *(either existing or proposed)* include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S.? (FORM 2B)		X	
C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)	X		
D. Is this a proposed facility *(other than those described in A or B above)* which will result in a discharge to waters of the U.S.? (FORM 2D)		X	
E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)	X		X
F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)		X	
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)		X	
H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)		X	
I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X	
J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X	

III. NAME OF FACILITY

1 SKIP ROHM AND HAAS DEL. VAL. INC. BRISTOL PLANT

IV. FACILITY CONTACT

A. NAME & TITLE *(last, first, & title)*	B. PHONE *(area code & no.)*
2 CARR, WILLIAM PLANT MANAGER	215 785 8110

V. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX	B. CITY OR TOWN	C. STATE	D. ZIP CODE
3 P.O. BOX 219			
4 BRISTOL		PA	19007

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER	B. COUNTY NAME	C. CITY OR TOWN	D. STATE	E. ZIP CODE	F. COUNTY CODE *(if known)*
5 RT 413 AND OLD RT 413	BUCKS				
6 BRISTOL TWP.			PA	19007	

EPA Form 3510-1 (6-80)

C00001

CONTINUE ON REVERSE

CONTINUED FROM THE FRONT

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

A. FIRST	B. SECOND
2821 (specify) Plastics & Synthetic Resins	2869 (specify) Industrial Organic Chemicals
C. THIRD	**D. FOURTH**
7 9 (specify) Misc. Plastic Products	2879 (specify) Pesticides & Agricultural Chem.

VIII. OPERATOR INFORMATION

A. NAME: ROHM AND HAAS DELAWARE VALLEY INC.

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

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

D. PHONE (area code & no.): A 215 785 8000

E. STREET OR P.O. BOX: P.O. BOX 219

F. CITY OR TOWN: BRISTOL

G. STATE: PA

H. ZIP CODE: 19007

IX. INDIAN LAND

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

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water): N PA0012769

D. PSD (Air Emissions from Proposed Sources): P

B. UIC (Underground Injection of Fluids): U

E. OTHER (specify): (specify) See Attachment

C. RCRA (Hazardous Wastes):

E. OTHER (specify): (specify)

XI. MAP

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

XII. NATURE OF BUSINESS (provide a brief description)

Manufacture of acrylic polymers and resins, purification of acrylic monomers and acids, manufacture of plastic sheet products, enzymes and pesticides.

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
William D. Carr Vice President, Rohm and Haas Del. Val. Inc.	W D Carr	10/31/80

COMMENTS FOR OFFICIAL USE ONLY

Attachment to Form 3510-1
EPA I.D. No. PAD002292068

1. Commonwealth of Pennsylvania
   Sanitary Water Board
   Industrial Wastes Permit No. 76216

2. Delaware River Basin Commission
   Certificate of Entitlement #249

3. Pennsylvania Department of
   Environmental Resources

#9-313-003 - Bldg. 66 Water Scrubbers
9-313-006 - EA Closed Circuit System
9-313-007 - BA & MA Closed Circuit System
9-313-009 - Bldg. 133 Venturi Scrubber
9-313-020 - Continuous Pellet Molding Powder Process
9-313-022 - Mix Tank Vent Scrubber, Bldg. 66
9-313-026 - Belt Sander, Bldg. 38
9-313-027 - Planer & Saw, Bldg. 68
9-313-031 - Kydex Dust Collector
9-313-038 - Pellet Blending, PM Plant
9-313-040 - Polykettle Vent Scrubbers, Bldg. 51

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

Form Approved OMB No. 158-S80004

FORM 3 RCRA

EPA

ENVIRONMENTAL PROTECTION AGENCY

HAZARDOUS WASTE PERMIT APPLICATION

Consolidated Permits Program

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

I. EPA I.D. NUMBER

S													T/A	C
F	P	A	D	0	0	2	2	9	2	0	5	8		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.)*

C 8 — FOR EXISTING FACILITIES, PROVIDE THE DATE *(yr., mo., & day)* OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED *(use the boxes to the left)* — YR. 17 / MO. / DAY

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

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

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

[ ] 1. FACILITY HAS INTERIM STATUS

[ ] 2. FACILITY HAS A RCRA PERMIT

III. PROCESSES – CODES AND DESIGN CAPACITIES

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

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

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

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

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

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

S: C — DUP — T/A: — 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. PROCESS DESIGN CAPACITY 1. AMOUNT	B. 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
X-1	S 0 2	600	G		5				
X-2	T 0 3	20	E		6				
1	S 0 1	468,000	G		7				
	S 0 2	~~14,700~~ deleted	G		8				
3	T 0 1	8,600	U		9				
4					10				

Continued from the front.

III. PROCESSES *(continued)*

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

IV. DESCRIPTION OF HAZARDOUS WASTES

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

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

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

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

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

D. PROCESSES

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

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

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

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

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

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

 CONTINUE ON PAGE 3

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

Form Approved OMB No. 158-S80004

EPA I.D. NUMBER (enter from page 1)	FOR OFFICIAL USE ONLY
W P A D 0 0 2 2 9 2 0 6 8	W DUP 2 DUP

D. DESCRIPTION OF HAZARDOUS WASTES (continued)

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
1	F 0 0 2	20,000	P	S 0 1	See Note (1) on Page 4
2	D 0 0 1	300,000	P	S 0 1	" "
3	D 0 0 2	400,000	P	S 0 1	" "
4	D 0 0 2	2,000,000	P	S 0 2	
5	D 0 0 2	350,000	P	S 0 1 T 0 1	
6	D 0 0 2	5,000,000	P	T 0 1	
7	D 0 0 1	50,000	P	S 0 1	See Note (2) on Page 4
8	D 0 0 2				Included with above
9	D 0 0 3				" " "
10	D 0 0 1	25,000	P	S 0 1	See Note (1) on Page 4
11	D 0 0 2				Included with above
	D 0 0 5	250,000	P	S 0 1	See Note (1) on Page 4
13	D 0 0 6				Included with above
14	P 0 0 3	1,000	P	S 0 1	See Note (3) on Page 4
15	P 0 2 4	1,000	P	S 0 1	" "
16	P 0 5 3	1,000	P	S 0 1	" deleted 11/25/80 F.R. WW
17	P 1 0 6	1,000	P	S 0 1	" "
18	U 0 0 2	1,000	P	S 0 1	" "
19	U 0 0 4	1,000	P	S 0 1	" "
20	U 0 0 7	1,000	P	S 0 1	" "
21	U 0 0 8	1,000	P	S 0 1	" "
22	U 0 0 9	1,000	P	S 0 1	" "
23	U 0 1 3	10,000	P	S 0 1 - deleted 11/25/80 F.R. WW	See Note (1) on Page 4
24	U 0 3 1	1,000	P	S 0 1	See Note (3) on Page 4
25	U 0 ~~5 4~~ 52 - AMENDED 11/25/80 F.R. WW	1,000	P	S 0 1	" "
26	U 0 5 6	1,000	P	S 0 1	" "

EPA Form 3510-3 (6-80)

CONTINUE ON REVERSE

000006

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

Form Approved OMB No. 158-S80004

EPA I.D. NUMBER (enter from page 1)	FOR OFFICIAL USE ONLY
W P A D 0 0 2 2 9 2 0 6 8 T/A C 1	W DUP T/A C 2 DUP

DESCRIPTION OF HAZARDOUS WASTES *(continued)*

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
1	U057	1,000	P	S01	See Note (3) on Page 4
2	U102	1,000	P	S01	"
3	U112	1,000	P	S01	"
4	U113	1,000	P	S01	"
5	U114	1,000	P	S01	"
6	U118	1,000	P	S01	"
7	U122	1,000	P	S01	"
8	U133	1,000	P	S01	"
9	U140	1,000	P	S01	" Modified 11/25/80.
10	U147	1,000	P	S01	"
11	U151	1,000	P	S01	"
12	U154	1,000	P	S01	"
13	U159	1,000	P	S01	" Modified 11/25/80
14	U161	1,000	P	S01	"
15	U162	1,000	P	S01	" Modified 11/25/80
16	U188	1,000	P	S01	"
17	U197	1,000	P	S01	" Modified 11/25/80
18	U201	1,000	P	S01	"
19	U210	1,000	P	S01	"
20	U220	1,000	P	S01	"
21	U223	1,000	P	S01	" Modified 11/25/80
22	U228	1,000	P	S01	"
23	U239	1,000	P	S01	" Modified 11/25/80
24					
25					
26					

Continued from the front.

IV. DESCRIPTION OF HAZARDOUS WASTES (Continued)

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

NOTES:

1. These hazardous wastes are disposed of off-site at permitted (or interim status) commercial disposal facilities.
2. This hazardous waste consists of small containers of chemicals from Research activities. In addition to the characteristics listed these chemicals may occasionally exhibit any of the EP toxicity characteristics.
3. These hazardous wastes are commercial chemical products used as raw materials in manufacturing processes at this facility. While such materials are seldom discarded, it may be necessary to do so occasionally.

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

S													T/A	C
F	P	A	D	0	0	2	2	9	2	0	6	8		6

V. FACILITY DRAWING

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

VI. PHOTOGRAPHS

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

VII. FACILITY GEOGRAPHIC LOCATION

LATITUDE (degrees, minutes, & seconds)	LONGITUDE (degrees, minutes, & seconds)
40 05 36	74 52 06

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
William D. Carr	W D Carr	10/31/80

X. OPERATOR CERTIFICATION

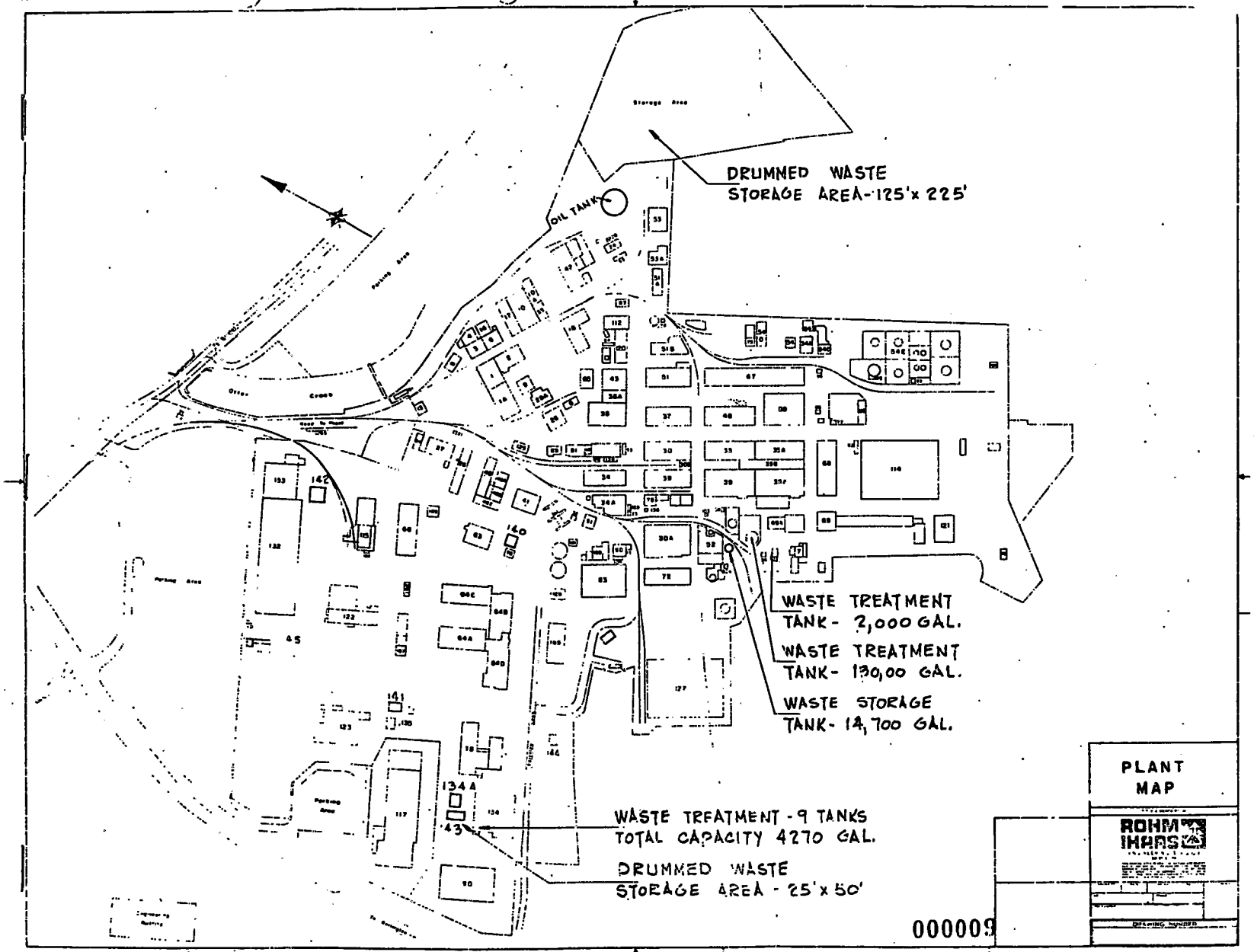
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, 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
William D. Carr	W D Carr	10/31/80

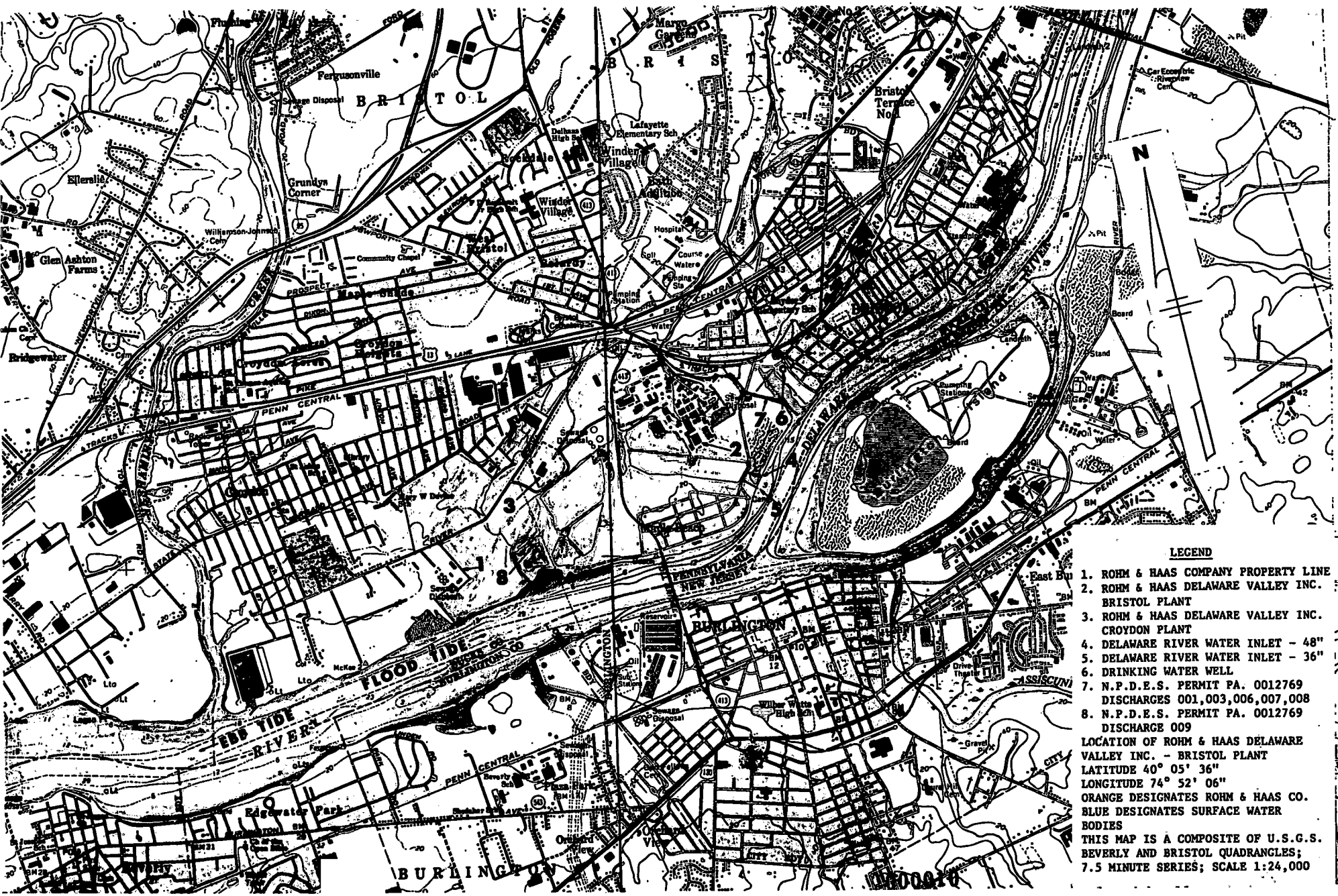
CONTINUE ON PAGE 5

Continued from page 4.

Form Approved OMB No. 158-S80004



000009



LEGEND

1. ROHM & HAAS COMPANY PROPERTY LINE
2. ROHM & HAAS DELAWARE VALLEY INC. BRISTOL PLANT
3. ROHM & HAAS DELAWARE VALLEY INC. CROYDON PLANT
4. DELAWARE RIVER WATER INLET - 48"
5. DELAWARE RIVER WATER INLET - 36"
6. DRINKING WATER WELL
7. N.P.D.E.S. PERMIT PA. 0012769 DISCHARGES 001,003,006,007,008
8. N.P.D.E.S. PERMIT PA. 0012769 DISCHARGE 009

LOCATION OF ROHM & HAAS DELAWARE VALLEY INC. - BRISTOL PLANT
LATITUDE 40° 05' 36"
LONGITUDE 74° 52' 06"
ORANGE DESIGNATES ROHM & HAAS CO.
BLUE DESIGNATES SURFACE WATER BODIES
THIS MAP IS A COMPOSITE OF U.S.G.S. BEVERLY AND BRISTOL QUADRANGLES; 7.5 MINUTE SERIES; SCALE 1:24,000

Attachment to Form 3510-3
EPA I.D. No. PAD002292068

The Bristol, PA, plant of Rohm and Haas Delaware Valley Inc. owns and operates a biological waste treatment plant for all chemically contaminated aqueous wastes. This plant consists of a trickling filtration system followed by a lagoon system with a permitted point-source discharge. The trickling filtration system consists of two trickling filters and associated clarifiers, sludge thickener and dewatering plant. The lagoon system consists of four large lagoons totaling approximately 57 acres.

This waste water treatment plant has not been designated as a hazardous waste treatment facility in this permit application because the untreated aqueous waste entering the system does not meet the definition of a hazardous waste under normal plant operating conditions. The untreated waste water does not contain any of the wastes listed in Part 261, Subpart D (261.31 and 261.32), nor does it exhibit any of the characteristics of Part 261, Subpart C. Because of the low level of contaminants in the untreated waste water it does not have a measurable flash point or reactivity characteristic. The pH of daily composite samples is consistently greater than 2.0 and less than 12.5 and, in fact, is normally within the range of 6.0-8.5 without addition of reagents. Such a range is necessary to maintain biological activity in the trickling filtration system. Heavy metals content is substantially below the limits set for the EP toxicity test and none of the pesticides listed in this test is used or produced at this facility.

Accidental chemical spills occur infrequently within the plant. Areas with clear potentials for spillage, such as tank truck loading/unloading stations and tank farms, are protected with dikes or other collection systems. In other instances, absorbent diking materials are used to contain and collect spilled materials. However, it is obviously impossible to contain every accidental spillage. Therefore, occasionally some chemical spillage reaches the waste water collection system, and may cause it to become hazardous with respect to either pH or flammability for periods of time up to a few hours. We do not believe that such accidental, infrequent, short-duration events require permitting of a waste water treatment facility any more than a spill during transportation requires permitting of the spill site.

000012

10/15/80

Waste Treatment Tank
2,000 Gal.

10/15/80

Waste Storage Tank
14,700 Gal.

10/15/80

Building 134

Contains 9 Waste Treatment Tanks

Total Capacity 4270 Gal.

10/15/80

Drummed Waste Storage Area
25' x 50'

10/15/80

Waste Treatment
Tank

130,000 Gal.

10/15/80

Drummed Waste Storage Area

125' x 225'

ROHM AND HAAS DELAWARE VALLEY INC.
P.O. BOX 219, BRISTOL, PA. 19007
(215) 785-8000

REPLY TO:
CROYDON PLANT
P.O. BOX 302
BRISTOL, PA. 19007
(215) 785-8260

C.2

REGISTERED MAIL

November 17, 1980

EPA Region III
P.O. Box 1480
Philadelphia, PA 19107

Gentlemen:

Attached is a completed Application Form 1, with Form 3 attached, for hazardous waste activity at the Croydon Plant of Rohm and Haas Delaware Valley Inc.

Very truly yours,

Lynwood J. Krischke
Croydon Plant Manager

LJK/hmy
Attach.

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

Form Approved OMB No. 158-R0175

ENVIRONMENTAL PROTECTION AGENCY

GENERAL INFORMATION

Consolidated Permits Program

(Read the "General Instructions" before starting.)

I. EPA I.D. NUMBER

F PAD087105714

II. LABEL ITEMS

I. EPA I.D. NUMBER

III. FACILITY NAME

IV. FACILITY MAILING ADDRESS

V. FACILITY LOCATION

Nov 1980 000506

PLEASE PLACE LABEL IN THIS SPACE

GENERAL INSTRUCTIONS

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

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

VII. NAME OF FACILITY

ROHM AND HAAS DEL. VAL. INC. ~~CROYDON PLANT~~ BRISTOL PLANT

VIII. FACILITY CONTACT

A. NAME & TITLE *(last, first, & title)*	B. PHONE *(area code & no.)*
KRISCHKE LYNWOOD PLANT MANAGER	215 785 8261

IX. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX: PO BOX 302

B. CITY OR TOWN	C. STATE	D. ZIP CODE
BRISTOL	PA	19007

X. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER: RIVER ROAD

B. COUNTY NAME: BUCKS

C. CITY OR TOWN	D. STATE	E. ZIP CODE	F. COUNTY CODE *(if known)*
CROYDON	PA	19020	

000017

EPA Form 3510-1 (6-80)

CONTINUE ON REVERSE

ONTINUED FROM THE FRONT

SIC CODES *(4-digit, in order of priority)*

A. FIRST	B. SECOND
2821 (specify) Plastics & Synthetic Resins	C 7 (specify)
C. THIRD	**D. FOURTH**
(specify)	C 7 (specify)

OPERATOR INFORMATION

A. NAME	B. Is the name listed in Item VIII-A also the owner?
ROHM AND HAAS DELAWARE VALLEY INC.	☒ YES ☐ NO

C. STATUS OF OPERATOR *(Enter the appropriate letter into the answer box; if "Other", specify.)*

F = FEDERAL
S = STATE
P = PRIVATE
M = PUBLIC *(other than federal or state)*
O = OTHER *(specify)*

P (specify)

D. PHONE *(area code & no.)*

C A 215 785 8260

E. STREET OR P.O. BOX	
PO BOX 302	

F. CITY OR TOWN	G. STATE	H. ZIP CODE
BRISTOL	PA	19007

IX. INDIAN LAND

Is the facility located on Indian lands?

☐ YES ☒ NO

EXISTING ENVIRONMENTAL PERMITS

A. NPDES *(Discharges to Surface Water)*	D. PSD *(Air Emissions from Proposed Sources)*	
N	C T I 9 P	
B. UIC *(Underground Injection of Fluids)*	**E. OTHER** *(specify)*	
U	C T I 9 09-313-012	(specify) Pa. Dept. of Environmental Resources (Scrubber System)
C. RCRA *(Hazardous Wastes)*	**E. OTHER** *(specify)*	
R	C T I 9	(specify)

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.

NATURE OF BUSINESS *(provide a brief description)*

Manufacture of synthetic emulsion polymers and resins.

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
Lynwood Krischke V.P., Croydon Plant Manager	Lynwood Krischke	11/17/80

COMMENTS FOR OFFICIAL USE ONLY

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

Form Approved OMB No. 158-S80004

FORM 3 RCRA

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

HAZARDOUS WASTE PERMIT APPLICATION

Consolidated Permits Program

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

I. EPA I.D. NUMBER

S													T/A	C
F	P	A	D	0	8	7	1	0	5	7	1	4		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	6 9	0 9	

[ ] 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
posal:		
IECTION 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
GALLONS	G
LITERS	L
CUBIC YARDS	Y
CUBIC METERS	C
GALLONS PER DAY	U
LITERS PER DAY	V
TONS PER HOUR	D
METRIC TONS PER HOUR	W
GALLONS PER HOUR	E
LITERS PER HOUR	H
ACRE-FEET	A
HECTARE-METER	F
ACRES	B
HECTARES	Q

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

S		T/A	C
C	DUP		1

LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY	LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
X-1	S 0 2	600	G		5				
X-2	T 0 3	20	E		6				
1	S 0 1	8,800	G		7				
					8				
3					9				
4					10				

000019

CONTINUE ON REVERSE

Continued from the front.

III. PROCESSES *(continued)*

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

IV. DESCRIPTION OF HAZARDOUS WASTES

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

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

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

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

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

D. **PROCESSES**

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

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

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

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

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

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
X-1	K 0 5 4	900	P	T 0 3 D 8 0	
X-2	D 0 0 2	400	P	T 0 3 D 8 0	
X-3	D 0 0 1	100 010000	P	T 0 3 D 8 0	000020
X-4	D 0 0 2				*included with above*

 CONTINUE ON PAGE 3

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

Form Approved OMB No. 158-S80004

EPA I.D. NUMBER (enter from page 1)	FOR OFFICIAL USE ONLY
W P A D 0 8 7 1 0 5 7 1 4 T/A C 1	W DUP T/A C 2 DUP

V. DESCRIPTION OF HAZARDOUS WASTES (continued)

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
1	F002	800	P	S01	
2	~~U222~~ U219	CHANGED 11/25/80 F.R.			Included with above
3	D001	50,000	P	S01	
4	~~U013~~	TEMP. SUSPENDED 500 11/25/80 F.R.	P	S01	See Note 1 on Page 4
5	U151	1	P	S01	" "
6	F003	500	P	S01	See Note 2 on Page 4
7	U002				Included with above
8	U239	modified 11/25/80 FR			" "
9	P003	100	P	S01	See Note 2 on Page 4
10	~~P053~~	DELETED 11/25/80 FR 100	P	S01	" "
11	U007	1,000	P	S01	" "
12	U008	1,000	P	S01	" "
13	U009	1,000	P	S01	" "
14	U113	1,000	P	S01	" "
15	U122	2,000	P	S01	" "
16	U133	100	P	S01	" "
17	U147	100	P	S01	" "
18	U162	1,000 11/25/80 modified	P	S01	" "
19	U197	100 11/25/80 modified	P	S01	" "
20	D002	1,000	P	S01	" "
21	D003	100	P	S01	" "
22					
23					
24					
25					000021
26					

EPA Form 3510-3 (6-80)

CONTINUE ON REVERSE

Continued from the front.

IV. DESCRIPTION OF HAZARDOUS WASTE (Continued)

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

NOTES: (1) These hazardous wastes are non-routine items that may occasionally be generated from plant maintenance activities.

(2) These hazardous wastes are commercial chemical products used as raw materials in manufacturing processes at this facility. While such materials are seldom discarded, it may be necessary to do so occasionally. Volume estimates are based on usage level/incident potential.

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

												T/A	C
P	A	D	0	8	7	1	0	5	7	1	4		6

V. FACILITY DRAWING

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

VI. PHOTOGRAPHS

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

VII. FACILITY GEOGRAPHIC LOCATION

LATITUDE *(degrees, minutes, & seconds)*	LONGITUDE *(degrees, minutes, & seconds)*
40 05 20	74 51 34

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.)*

3. STREET OR P.O. BOX	4. CITY OR TOWN	5. ST.	6. ZIP CODE
	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
Lynwood Krischke	Lynwood Krischke	11/17/80

X. OPERATOR CERTIFICATION

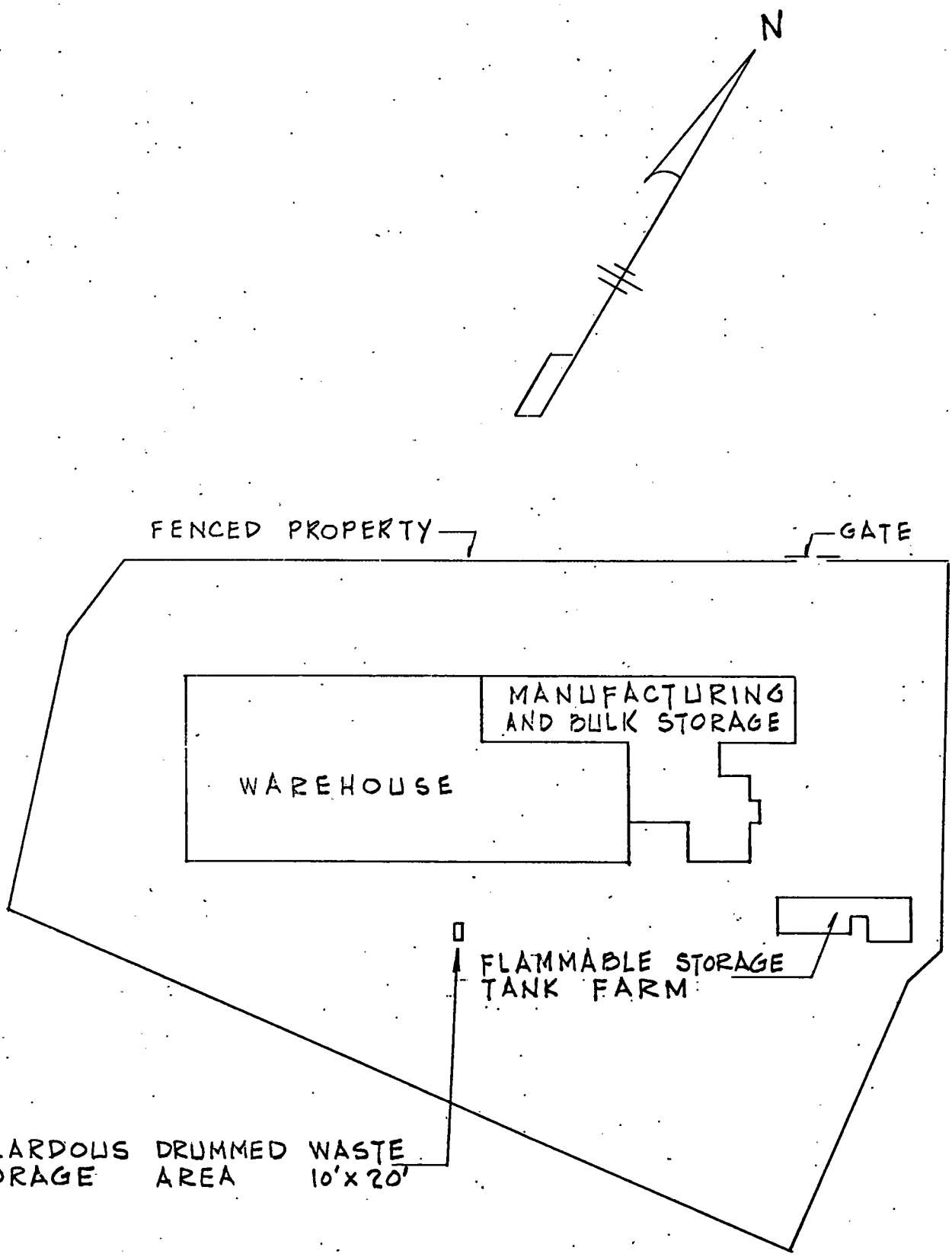
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, 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
Lynwood Krischke	Lynwood Krischke	11/17/80

Continued from page 4.

Form Approved OMB No. 158-S80004

V. FACILITY DRAWING *(see page 4)*



OB NO. SCALE: APPX. 1" = 200'

DRAWN

CROYDON PLANT

000023

Attachment to Form 3510-3
EPA I.D. No. PAD 087105714

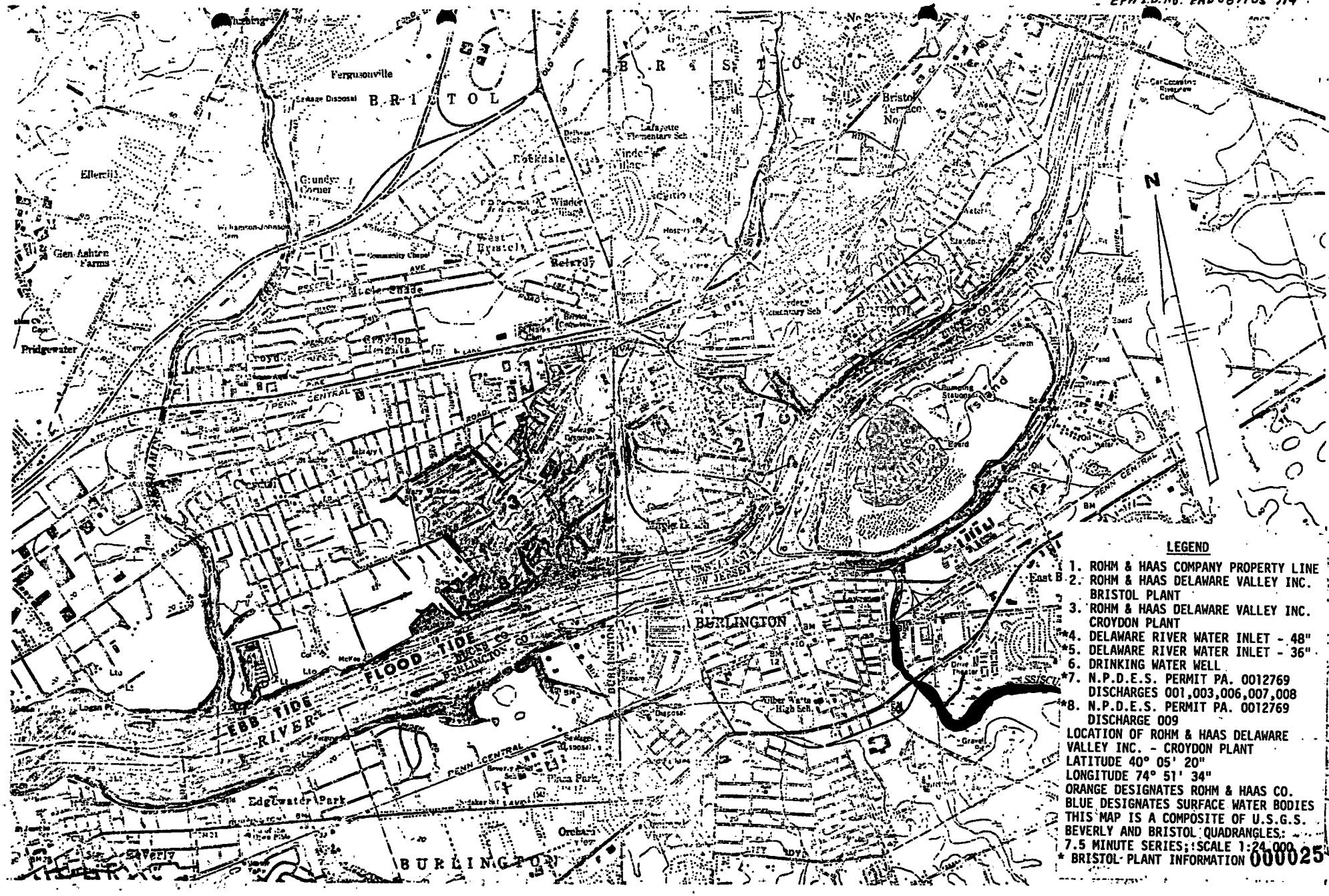
The Croydon Plant of Rohm and Haas Delaware Valley Inc. is located on property which is contiguous to the Bristol, PA, plant of Rohm and Haas Delaware Valley Inc. Chemically contaminated aqueous waste from the Croydon Plant flows directly to the biological waste treatment plant operated by the Bristol Plant. We have not designated this waste stream as a hazardous waste, since it does not meet the definition of a hazardous waste under normal operating conditions. The following statements are copied from the Bristol Plant application (EPA I.D. No. PAD 002292068) to more fully describe this system.

"The Bristol, PA, plant of Rohm and Haas Delaware Valley Inc. owns and operates a biological waste treatment plant for all chemically contaminated aqueous wastes. This plant consists of a trickling filtration system followed by a lagoon system with a permitted point-source discharge. The trickling filtration system consists of two trickling filters and associated clarifiers, sludge thickener and dewatering plant. The lagoon system consists of four large lagoons totaling approximately 57 acres."

"This waste water treatment plant has not been designated as a hazardous waste treatment facility in this permit application because the untreated aqueous waste entering the system does not meet the definition of a hazardous waste under normal plant operating conditions. The untreated waste water does not contain any of the wastes listed in Part 261, Subpart D (261.31 and 261.32), nor does it exhibit any of the characteristics of Part 261, Subpart C. Because of the low level of contaminants in the untreated waste water it does not have a measurable flash point or reactivity characteristic. The pH of daily composite samples is consistently greater than 2.0 and less than 12.5 and, in fact, is normally within the range of 6.5-8.5 without addition of reagents. Such a range is necessary to maintain biological activity in the trickling filtration system. Heavy metals content is substantially below the limits set for the EP toxicity test and none of the pesticides listed in this test is used or produced at this facility."

"Accidental chemical spills occur infrequently within the plant. Areas with clear potentials for spillage, such as tank truck loading/unloading stations and tank farms, are protected with dikes or other collection systems. In other instances, absorbent diking materials are used to contain and collect spilled materials. However, it is obviously impossible to contain every accidental spillage. Therefore, occasionally some chemical spillage reaches the waste water collection system, and may cause it to become hazardous with respect to either pH or flammability for periods of time up to a few hours. We do not believe that such accidental, infrequent, short-duration events require permitting of a waste water treatment facility any more than a spill during transportation requires permitting of the spill site."

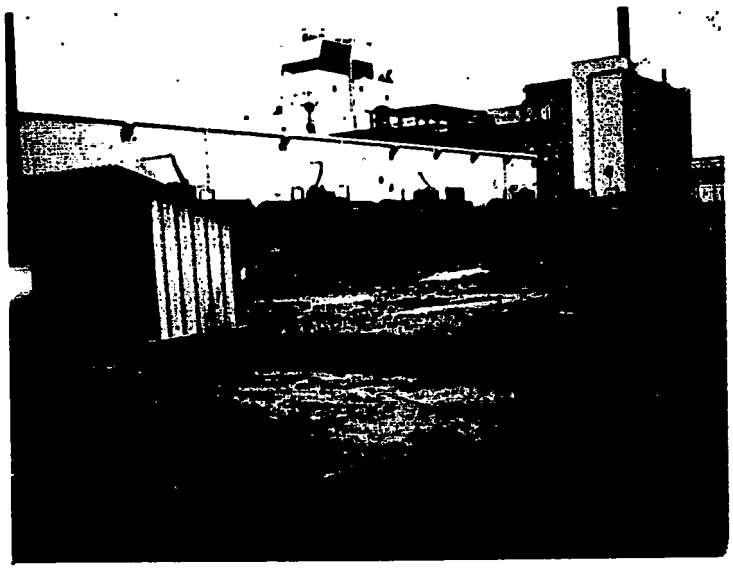
EPA I.D. No. PAD087105714



EPA I.D. NO. PAD 087105714

S01 - HAZARDOUS DRUMMED
WASTE STORAGE AREA

11/17/80



ROHM & HAAS, INC. / RCRA PERMITTING
PART B PERMIT EPA-STATE
PERMIT CORRESPONDENCE

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
6TH AND WALNUT STREETS
PHILADELPHIA, PENNSYLVANIA 19106

D.1

AUG 23 1982

Certified Mail
Return Receipt Requested

Mr. William D. Carr, Vice Pres.
Rohm and Haas Del Val Inc.
P.O. Box 219
Bristol, PA 19007

Re: EPA Identification No. PAD 00 229 2068
Facility Name: Rohm and Haas Del Val Inc.
Rt. 413 and Old Rt. 413
Bristol Twp., PA 19007

Dear Mr. Carr:

This letter constitutes a formal request for Part B of your application for a hazardous waste management facility permit under the Resource Conservation and Recovery Act (RCRA) for the facility referenced above. This request is made under the authority of regulation 40 CFR § 122.22(a).

Enclosed for your reference is a list of the items which constitute Part B as applicable to your facility type. These items must be submitted by February 18, 1983. If any of this information is being submitted under a claim of confidentiality, please indicate this fact. (For more information on confidentiality see regulation 40 CFR Part 2.)

Should you have any questions about these requirements, please contact Ms. Shirley Bulkin on 215/597-4269 or the address shown above.

You should be aware that the Commonwealth of Pennsylvania is applying to EPA for Phase II interim authorization to administer the State hazardous waste facility permitting program in lieu of the Federal program. Until such a time as Pennsylvania actually receives authorization, both Federal and State programs will coexist.

You will receive a request for a State permit application from the Commonwealth of Pennsylvania. The State regulations may differ from the Federal regulations. We encourage the applicant to become aware of State permit application requirements. For further information concerning the State requirements, the applicant should contact Mr. Gary Galida of the Department of Environmental Resources, Bureau of Solid Waste Management in Harrisburg at 717/787-7381.

Sincerely yours,

for Robert H. Allen
Stephen R. Wassersug
Director, Air & Waste Management Division

Enclosure: List of Part B Requirements
Part 264 Standards

P 311 559 534

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL
(See Reverse)

SENT TO
Rohm & Haas Co.

STREET AND NO.
Independence Mall We

P.O., STATE AND ZIP CODE
Phila. Pa. 19105

POSTAGE				$
CONSULT POSTMASTER FOR FEES	CERTIFIED FEE			¢
	OPTIONAL SERVICES	SPECIAL DELIVERY		¢
		RESTRICTED DELIVERY		¢
		RETURN RECEIPT SERVICE	SHOW TO WHOM AND DATE DELIVERED	¢
			SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	¢
			SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	¢
			SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	¢
TOTAL POSTAGE AND FEES				$
POSTMARK OR DATE				

000002

PS Form 3800, Apr. 1976

Bucks

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
6TH AND WALNUT STREETS
PHILADELPHIA, PENNSYLVANIA 19106

D.2

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

OCT 21 1983

Mr. Lynwood Krischke
Vice President
Croydon Plant Manager
Rohm and Haas Delaware Valley, Inc.
P. O. Box 302
Bristol, PA 19007

Re: EPA Identification Number: PAD 08 710 5714
Facility Name: Rohm and Haas Delaware Valley, Inc., Croydon Plant

Dear Mr. Krischke:

This letter constitutes a formal request for Part B of your application for a hazardous waste management facility permit under the Resource Conservation and Recovery Act (RCRA) for the facility referenced above. This request is made under the authority of regulation 40 CFR §270.

Under Federal requirements, an existing interim status facility that has been requested by EPA to submit a Part B is allowed at least six months to submit the required data to EPA. EPA then has 60 days from the date of receipt of a Part B submittal in which to notify the facility whether or not the application is complete. If it is not complete, EPA issues a Notice of Deficiency advising the facility as to what must be submitted for the application to be determined complete. The facility then has 30 days in which to submit the required information; otherwise, it may be subject to an enforcement action and possible loss of interim status.

Enclosed for your reference is a list of the items which constitute Part B as applicable to your facility type. These items must be submitted by April 30, 1984. Please submit three copies of your Part B application. If any of this information is being submitted under a claim of confidentiality, please indicate this fact. Claims for confidentiality must be supported under the requirements of 40 CFR Part 2.

Should you have any questions about these requirements, please contact Jack Potosnak at (215) 597-0961 or at the address shown above.

Sincerely yours,

Stephen R. Wassersug, Director
Air and Waste Management Division

Enclosures: List of Part B Requirements
Deconsolidated Permit Regulations
Guidance Manual

cc: PA - DER

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

JUL 24 1984

Certified Mail
Return Receipt Requested

D.3

Mr. Jerry C. Brock
Vice President/Plant Manager
Rohm & Haas Delaware Valley, Inc.
P. O. Box 219
Bristol, PA 19007

Re: Notice of Decision

Dear Mr. Brock:

In accordance with regulation 40 C.F.R. Section 124.15 promulgated under the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Sections 6901 et seq., I have made the determination to issue a permit for storage of hazardous waste to Rohm & Haas Delaware Valley, Inc. Enclosed is RCRA Permit No. PAD 00 229 2068 with an issue date of July 27, 1984, an effective date of August 27, 1984, and an expiration date of August 26, 1994.

Rohm & Haas Delaware Valley, Inc., or any person who submitted comments on the draft permit may, under regulation 40 C.F.R. Section 124.19, petition the Administrator of the United States Environmental Protection Agency to review any condition of the permit provided the appeal is filed within 30 days of the issuance of this final permit decision.

The petition must include a statement of the reasons supporting that review including a demonstration that any issues raised were developed during the public comment period to the extent required by the regulations governing public comment. See regulations 40 C.F.R. Sections 124.10 and .12. When appropriate, the petitioner should include a showing that the contested condition is based on: (1) clearly erroneous finding of fact or conclusion of law; or (2) an exercise of discretion or an important policy consideration that the Administrator should review in his discretion.

CONCURRENCES

YMBOL	3HW32	3HW32	3HW30	3RC20	3HW11	3HWOO		
SURNAME	CLARK	SOKOLOWSKI	ALLEN	SISKIND	SCHAUL	WASSERSUG		
DATE	7/16/84	7/16/84	7/20/84	7/18/84	7/17	7/24/84		

000002

EPA Form 1320-1 (12-70)

OFFICIAL FILE COPY

GPO : 1983 0 - 403-201

The Administrator must issue an order that grants or denies the petition within a reasonable time following the filing of the petition. Public notice of any grant of administrative review under regulation 40 C.F.R. Section 124.19 must be given as provided in regulation 40 C.F.R. Section 124.10. The public notice must contain a briefing schedule for the appeal and a statement that any interested persons may file amicus briefs. If review is denied, notice need only be sent to the respective petitioners and the permittee.

If you should decide to appeal the permit, please direct your petition to:

U.S. Environmental Protection Agency
Office of the Administrator (A-100)
Waterside Mall
401 M Street, SW
Washington, DC 20460

Should you have any questions concerning this Notice of Decision, please feel free to contact Cynthia Clark at the above address or at (215) 597-5321.

Sincerely,

Original Signed By

Stephen R. Wassersug, Director
Hazardous Waste Management Division

Enclosures: RCRA Storage Permit with Attachments 1-7
Response to Comments

cc: Mr. Wayne Lynn
Regional Solid Waste Manager
PA Department of Environmental Resources
1875 New Hope Street
Norristown, PA 19401 (w/enclosures)

Al Dalberto

7/27/84

Permit in separate file

P 350 660 559

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL
(See Reverse)

SENT TO
Jerry C. Brock
STREET AND NO.
Rohm + Haas Del Va
P.O. STATE AND ZIP CODE
Box 219 Bristol P

POSTAGE		$ 1900
CONSULT POSTMASTER FOR FEES — CERTIFIED FEE		¢
OPTIONAL SERVICES — SPECIAL DELIVERY		¢
OPTIONAL SERVICES — RESTRICTED DELIVERY		¢
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RETURN RECEIPT SERVICE — SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY		¢
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RETURN RECEIPT SERVICE — SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY		¢
TOTAL POSTAGE AND FEES		$

POSTMARK OR DATE

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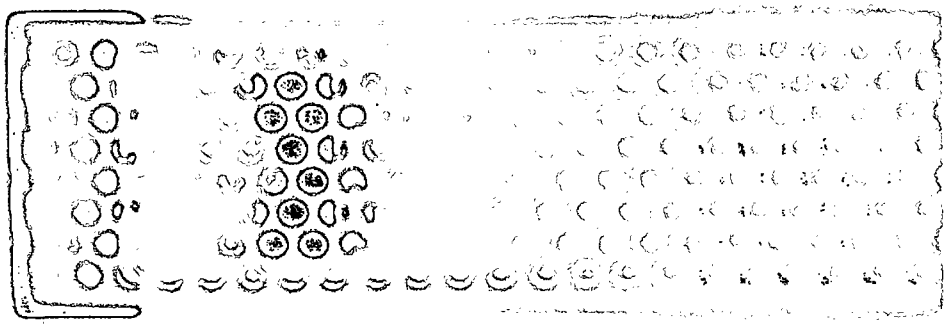
PS Form 3800, Apr. 1976



PS Form 3811, Dec. 1980

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

○ SENDER: Complete items 1, 2, 3, and 4.
Add your address in the "RETURN TO" space on reverse.

(CONSULT POSTMASTER FOR FEES)

1. The following service is requested (check one).
   - ☑ Show to whom and date delivered ..... ¢
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2. ☐ RESTRICTED DELIVERY ¢
   (*The restricted delivery fee is charged in addition to the return receipt fee.*)

TOTAL $

3. ARTICLE ADDRESSED TO:
Mr. Jerry C. Brock
Vice President/Plant Manager
Rohm & Haas Delaware Valley, Inc.
P.O. Box 219 Bristol, PA 19007

4. TYPE OF SERVICE
☐ REGISTERED ☐ INSURED
☑ CERTIFIED ☐ COD
☐ EXPRESS MAIL

ARTICLE NUMBER
#P 350 660 559

(Always obtain signature of addressee or agent)

I have received the article described above.
SIGNATURE ☐ Addressee ☑ Authorized agent

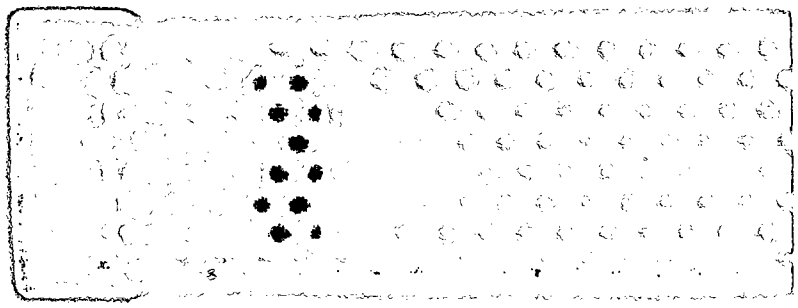
5. DATE OF DELIVERY
2-27-84

POSTMARK

6. ADDRESSEE'S ADDRESS (*Only if requested*)

7. UNABLE TO DELIVER BECAUSE:
00000

8. EMPLOYEE'S INITIALS



ROHM & HAAS, INC. / RCRA PERMITTING
PART B PERMIT EPA-STATE
PART B PERMIT APPLICATION

ROHM AND HAAS DELAWARE VALLEY INC.
RCRA PERMITTING/Part B Permit
Part B Permit Application

ROHM AND HAAS DELAWARE VALLEY INC.
P.O. BOX 219, BRISTOL, PA. 19007
(215) 785-8000

E.1

February 18, 1983

RECEIVED
RCRA PERMITS & PESTICIDES SECT
FEB 22 1983
EPA, R3

Mr. Stephen R. Wassersug, Director
Air & Waste Management Division
United States Environmental Protection Agency
Region III
6th and Walnut Streets
Philadelphia, Pennsylvania 19106

RE: EPA Identification No. PAD 002292068
Facility Location: Rohm and Haas Delaware Valley Inc.
Bristol Plant
Rt. 413 and Old Rt. 13
Bristol Twp., PA 19007

Dear Mr. Wassersug:

Enclosed are two copies of the Bristol Plant Part B application for a hazardous waste management facility permit. The application is being submitted in response to your request of August 23, 1982 and to fulfill the requirements of the Resource Conservation and Recovery Act. Included in this application is a revision of Part A; the original was submitted on October 31, 1980.

It should be noted that, effective February 1, 1983, the Rohm and Haas Delaware Valley Inc. Bristol Plant and Croydon Plant (EPA Identification Number PAD 087105714) are considered one installation for corporate administrative purposes. However, these plants are still separate for RCRA purposes.

There will be no hazardous waste management facility (TSD) at the Croydon Plant. Further, Croydon Plant waste is shipped to the Bristol Plant over a public highway between the two plants. Therefore, the plants are separate facilities under RCRA. Thus, no Croydon Plant information is included in the Bristol Plant's Part B application.

Sincerely yours,

ROHM AND HAAS DELAWARE VALLEY INC
BRISTOL PLANT

Jerry C. Brock

Jerry C. Brock, Vice President/
Plant Manager

ma

000001

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Appendix D:

Pennsylvania DOT Container Specifications
Corrosion Testing Data
Specifications for Wooden Pallets
Submersible Pump Description and Specifications
Hose Specifications

Appendix E: No Entry

Appendix F:

Container Storage Area Inspection Log Sheet
Material Safety Data Sheet
Container Storage Area Log Sheet

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Environmental Manual - Hazardous Waste Procedure
Bristol Plant Procedure for Mutual Aid
Coordination Agreement with the Croydon Fire Company

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Certificate of Sudden Occurrence Liability Coverage

Appendix J: No Entry

Appendix K: No Entry

A

000011

SECTION A

A Part A Application - Revisions No. 1
[40 CFR Sections 122.4(d) and 122.24]

Since the original Part A submission on October 31, 1980, changes have occurred in (a) the plant manufacturing and research pilot plant operations and (b) RCRA regulations (or interpretations of them) to the extent that Part A must be revised. The revised Part A follows in this Section. The original Part A is included in Appendix A.

A-1 Part A Revisions

The following revisions are noted:

1. EPA Form 3510-1 (6-80)

   a. Section IV - Revised Facility Contact
   b. Section XII - Exclusion of the words "and acids"
   c. Section XIII - Revised Certification

2. EPA Form 3510-3 (6-80)

   a. Section II-B - Revision of original Part A
   b. Section IV - Description of Hazardous waste revisions
   c. Section V - Facility Drawing revision
   d. Section VI - Photograph revision
   e. Section IX - Owner Certification revision
   f. Section X - Operator Certification revision

A-2 Major Revision Comments

The major revisions include the elimination of all waste treatment areas and the elimination of one of the two drum storage areas. The following comments on these revisions can be more easily followed by referring to the original Part A facility drawing in Figure A-1 following page 2.

1. Item No. 1 - This hazardous waste storage area is smaller than previously anticipated. Reduced dimensions are 60 feet by 125 feet.

2. Items No. 2 and No. 3 - Originally, simple neutralization of the waste material from Building 62 was conducted inprocess in a hard-piped system. At the time of the original Part A submission the manufacturing plan was to take a waste material from Building 62, store it in the large 130,000 gallon tank for further processing, and

A-2 Major Revision Comments (cont'd)

2. (cont'd)

then return it to Building 62 for simple neutralization. Later, it was determined that this material was spent, so the plan for storage and further processing was never implemented. The simple neutralization continues to take place in the process in a hard-piped system. The process discharge is not a hazardous waste.

3. Item No. 4 - The process generating wastes that were stored in this 14,700 gallon tank was permanently shutdown in early 1982. The tank was drained, flushed and taken out of service.

4. Item No. 5 - Operations in this research pilot plant were modified such that the simple neutralization of various materials occurs as part of the batch manufacturing process. Wastes are no longer shipped from the building to return at a later date for simple neutralization. Most of the process neutralization systems are hard piped. However, because of the versatile nature of a research pilot plant, on occasion some process flexible connections must be used.

5. Item No. 6 - This storage pad will not be used for the storage of hazardous materials. This storage pad was never a hazardous waste storage pad when considering the 90-day rule.

The only other major revision to Part A is an updating of the list of hazardous wastes.

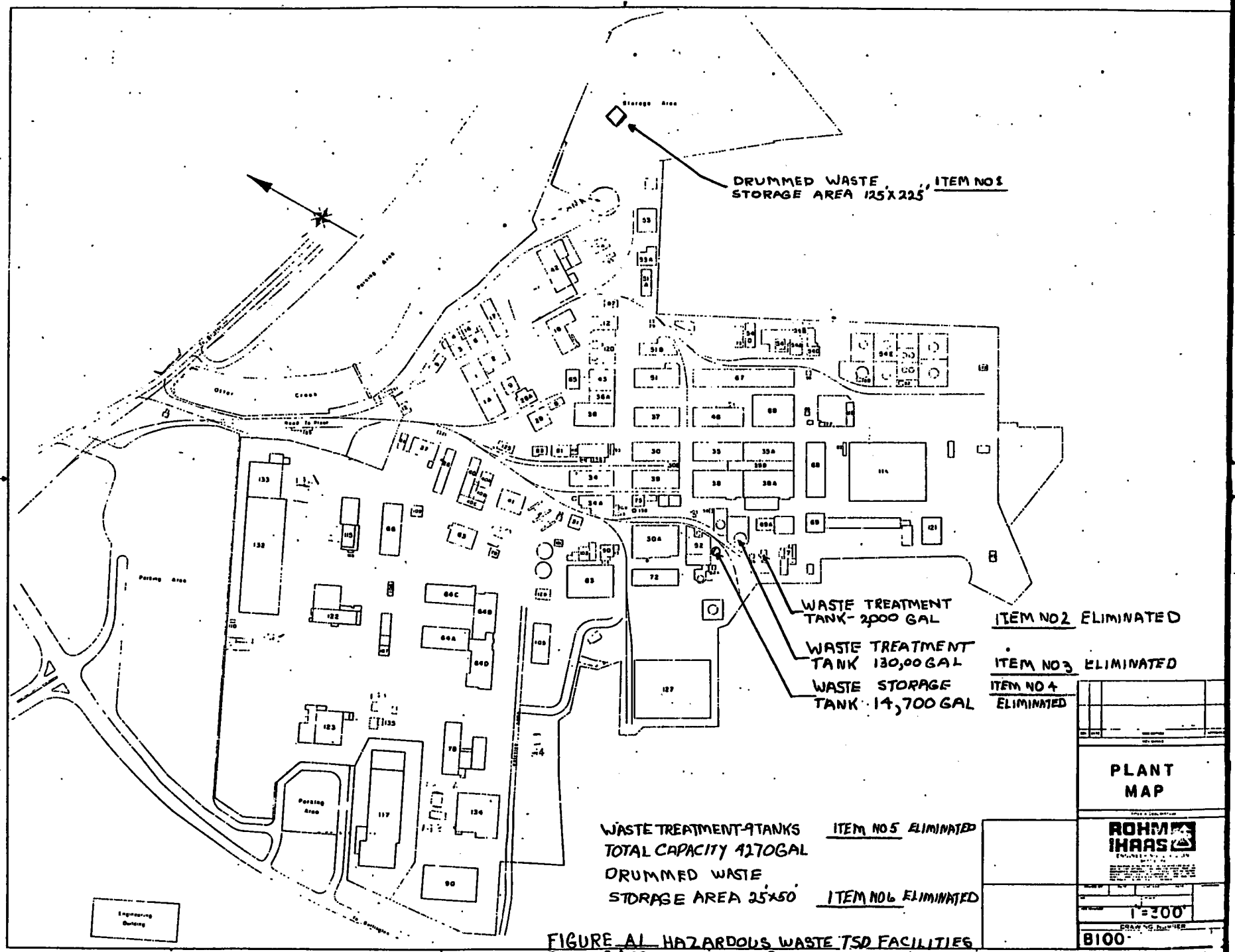


FIGURE A1 HAZARDOUS WASTE TSD FACILITIES
DRAWING 1 AS PER ORIGINAL PART A SUBMISSION, 10-31-80

000014

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

Form Approved OMB No. 158-R0175

FORM 1 GENERAL

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

GENERAL INFORMATION

Consolidated Permits Program

I. EPA I.D. NUMBER

F P A D 0 0 2 2 9 2 0 6 8

GENERAL INSTRUCTIONS

If a preprinted label has been provided, affi it in the designated space. Review the inform ation carefully; if any of it is incorrect, cro through it and enter the correct data in th appropriate fill—in area below. Also, if any c the preprinted data is absent *(the area to th left of the label space lists the informatio that should appear)*, please provide it in th proper fill—in area*(s)* below. If the label complete and correct, you need not complet Items I, III, V, and VI *(except VI-B whic must be completed regardless)*. Complete a items if no label has been provided. Refer t the instructions for detailed item descrip tions and for the legal authorizations unde which this data is collected.

LABEL ITEMS

EPA I.D. NUMBER

III. FACILITY NAME

V. FACILITY MAILING ADDRESS

VI. FACILITY LOCATION

PAD002292068

Rohm and Haas Delaware Valley Inc.
Bristol Plant
P. O. Box 219
Bristol, PA 19007

Route 413 and Old Route 13
Bristol, PA 19007

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

III. NAME OF FACILITY

1 SKIP ROHM AND HAAS DEL. VAL. INC. BRISTOL PLANT

IV. FACILITY CONTACT

A. NAME & TITLE *(last, first, & title)*	B. PHONE *(area code & no.)*
2 BROCK, JERRY PLANT MANAGER	215 785 8110

V. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX

3 PO BOX 219

B. CITY OR TOWN	C. STATE	D. ZIP CODE
4 BRISTOL	PA	19007

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER

5 RT. 413 AND OLD RT. 13

B. COUNTY NAME

BUCKS

C. CITY OR TOWN	D. STATE	E. ZIP CODE	F. COUNTY CODE *(if known)*
6 BRISTOL TOWNSHIP	PA	19007	

Attachment to Form 3510-1
EPA I.D. No. PAD002292068

1. Commonwealth of Pennsylvania
   Sanitary Water Board
   Industrial Wastes Permit No. 762I6

2. Delaware River Basin Commission
   Certificate of Entitlement #249

3. Pennsylvania Department of
   Environmental Resources

#9-313-003 - Bldg. 66 Water Scrubbers
9-313-006 - EA Closed Circuit System
9-313-007 - BA & MA Closed Circuit System
9-313-009 - Bldg. 133 Venturi Scrubber
9-313-020 - Continuous Pellet Molding Powder Process
9-313-022 - Mix Tank Vent Scrubber, Bldg. 66
9-313-026 - Belt Sander, Bldg. 38
9-313-027 - Planer & Saw, Bldg. 68
9-313-031 - Kydex Dust Collector
9-313-038 - Pellet Blending, PM Plant
9-313-040 - Polykettle Vent Scrubbers, Bldg. 51

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

Form Approved OMB No. 158-S80004

FORM 3 RCRA

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

HAZARDOUS WASTE PERMIT APPLICATION

Consolidated Permits Program

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

I. EPA I.D. NUMBER

	F	P	A	D	0	0	2	9	2	0	6	8

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 revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

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

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

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

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

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

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

☒ 1. FACILITY HAS INTERIM STATUS

☐ 2. FACILITY HAS A RCRA PERMIT

III. PROCESSES – CODES AND DESIGN CAPACITIES

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

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

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

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

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

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

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

C — DUP — T/A: C — 1

LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY	LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT	B. 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
X-1	S02	600	G		5				
X-2	T03	20	E		6				
1	S01	56,300	G		7				
2					8				
3					9				
4					10				

Continued from the front.

III. PROCESSES *(continued)*

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

IV. DESCRIPTION OF HAZARDOUS WASTES

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

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

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

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

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

D. PROCESSES

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

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

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

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

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

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

Continued from page 2.

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

Form Approved OMB No. 158-S80004

EPA I.D. NUMBER (enter from page 1)	FOR OFFICIAL USE ONLY
W P A D 0 0 2 2 9 2 0 6 8 T/A C 1	W DUP T/A C 2 DUP

7. 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	U008	3000	P	S01	See Note (2) on Page 4
2	D001				Included with Above
3	D002				Included with Above
4	F003	190,000	P	S01	See Note (2) on Page 4
5	D001				Included with Above
6	D002	2000	P	S01	See Notes (1) & (3) on Page 4
7	F003	3000	P		See Note (1) on Page 4
8	D001				Included with Above
9	D001 F003	2000	P	S01	See Note (1) on Page 4 Included with Above
10	F003	634,000	P	S01	See Note (2) on Page 4
11	F005				Included with Above
12	D001				Included with Above
13	D002	2000	P	S01	See Note (1) on Page 4
14	F002	5000	P	S01	See Note (1) on Page 4
15	F003	10,000	P	S01	See Note (2) on Page 4
16	D001				Included with Above
17	D001	10,000	P	S01	See Note (1) on Page 4
18	D005	350,000	P	S01	See Note (1) on Page 4
19	D006				Included with Above
20	D001	120,000	P	S01	See Note (1) on Page 4
21	D001	250,000	P	S01	See Note (1) on Page 4
22	D001	50,000	P	S01	See Note (1) on Page 4
23	D001	4000	P	S01	See Notes (1) & (3) on Page 4
24	D001	155,000	P	S01	See Note (1) on Page 4
25	D001 F003	50,000	P	S01	See Note (1) on Page 4 Included with Above
26	D001	2000	P	S01	See Note (1) on Page 4

EPA Form 3510-3 (6-80)

CONTINUE ON REVERSE

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.

NOTES

1. These hazardous wastes are disposed of off-site at permitted (or interim status) commercial disposal facilities.

2. These hazardous wastes are reused/recovered by burning in our Powerhouse boilers for energy recovery.

3. These hazardous wastes consist of containers of chemicals from laboratory activities.

4. These hazardous wastes are commercial chemical products used as raw materials in manufacturing processes at this facility. While such materials are seldom discarded, it may be necessary to do so occasionally.

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

F PAD002292068 T/A 6

V. FACILITY DRAWING

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

VI. PHOTOGRAPHS

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

VII. FACILITY GEOGRAPHIC LOCATION

LATITUDE *(degrees, minutes, & seconds)*	LONGITUDE *(degrees, minutes, & seconds)*
40 05 36	74 52 06

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
Jerry C. Brock	Jerry C. Brock	2/17/83

X. OPERATOR CERTIFICATION

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

A. NAME *(print or type)*	B. SIGNATURE	C. DATE SIGNED
Jerry C. Brock	Jerry C. Brock	2/17/83

CONTINUE ON PAGE 5

Continued from page 2.

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

Form Approved OMB No. 158-S80004

EPA I.D. NUMBER (enter from page 1)	FOR OFFICIAL USE ONLY
W P A D 0 0 2 2 9 2 0 6 8 — 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))
27	D001	2000	P	S01	See Note (1) on Page 4
28	D001	1000	P	S01	See Notes (1) & (3) on Page 4
29	F003	150,000	P	S01	See Note (1) on Page 4
30	D002	2000	P	S01	See Notes (1) & (3) on Page 4
31	P003	1000	P	S01	See Note (4) on Page 4
32	P024	1000	P	S01	"
33	P028	1000	P	S01	"
34	P089	1000	P	S01	"
35	P035	1000	P	S01	"
36	P106	1000	P	S01	"
37	U002	1000	P	S01	"
	U003	1000	P	S01	"
39	U007	1000	P	S01	"
40	U008	5000	P	S01	"
41	U009	1000	P	S01	"
42	U031	1000	P	S01	"
43	U052	1000	P	S01	"
44	U056	1000	P	S01	"
45	U057	1000	P	S01	"
46	U069	1000	P	S01	"
47	U077	1000	P	S01	"
48	U080	1000	P	S01	"
49	U083	1000	P	S011	"
50	U096	1000	P	S01	"
	U102	1000	P	S01	"
52	U112	1000	P	S01	"

EPA Form 3510-3 (6-80)

CONTINUE ON REVERS

000022

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

Form Approved OMB No. 158-S80004

EPA I.D. NUMBER (enter from page 1)	FOR OFFICIAL USE ONLY
W P A D 0 0 2 2 9 2 0 6 8 T/A C 1	W DUP T/A C 2 DUP

IV. DESCRIPTION OF HAZARDOUS WASTES (continued)

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
53	U 1 1 3	1000	P	S 0 1	See Note (4) on Page 4
54	U 1 1 8	1000	P	S 0 1	"
55	U 1 2 1	1000	P	S 0 1	"
56	U 1 2 2	1000	P	S 0 1	"
57	U 1 2 3	1000	P	S 0 1	"
58	U 1 3 3	1000	P	S 0 1	"
59	U 1 4 0	1000	P	S 0 1	"
60	U 1 4 7	1000	P	S 0 1	"
61	U 1 5 1	10	P	S 0 1	"
62	U 1 5 4	1000	P	S 0 1	"
63	U 1 5 9	1000	P	S 0 1	"
64	U 1 6 1	1000	P	S 0 1	"
65	U 1 6 2	1000	P	S 0 1	"
66	U 1 8 2	1000	P	S 0 1	"
67	U 1 8 8	1000	P	S 0 1	"
68	U 1 9 7	1000	P	S 0 1	"
69	U 2 0 1	1000	P	S 0 1	"
70	U 2 1 0	1000	P	S 0 1	"
71	U 2 2 0	1000	P	S 0 1	"
72	U 2 2 3	1000	P	S 0 1	"
73	U 2 2 8	1000	P	S 0 1	"
74	U 2 3 9	1000	P	S 0 1	"
75					
76					
77					
78					

EPA Form 3510-3 (6-80)

CONTINUE ON REVERSE

Attachment to Form 3510-3
EPA I.D. No. PAD002292068

The Bristol, PA, plant of Rohm and Haas Delaware Valley Inc. owns and operates a biological waste treatment plant for all chemically contaminated aqueous wastes. This plant consists of a trickling filtration system followed by a lagoon system with a permitted point-source discharge. The trickling filtration system consists of two trickling filters and associated clarifiers, sludge thickener and dewatering plant. The lagoon system consists of four large lagoons totaling approximately 57 acres.

This waste water treatment plant has not been designated as a hazardous waste treatment facility in this permit application because the untreated aqueous waste entering the system does not meet the definition of a hazardous waste under normal plant operating conditions. The untreated waste water does not contain any of the wastes listed in Part 261, Subpart D (261.31 and 261.32), nor does it exhibit any of the characteristics of Part 261, Subpart C. Because of the low level of contaminants in the untreated waste water it does not have a measurable flash point or reactivity characteristic. The pH of daily composite samples is consistently greater than 2.0 and less than 12.5 and, in fact, is normally within the range of 6.0-8.5 without addition of reagents. Such a range is necessary to maintain biological activity in the trickling filtration system. Heavy metals content is substantially below the limits set for the EP toxicity test and none of the pesticides listed in this test is used or produced at this facility.

Accidental chemical spills occur infrequently within the plant. Areas with clear potentials for spillage, such as tank truck loading/unloading stations and tank farms, are protected with dikes or other collection systems. In other instances, absorbent diking materials are used to contain and collect spilled materials. However, it is obviously impossible to contain every accidental spillage. Therefore, occasionally some chemical spillage reaches the waste water collection system, and may cause it to become hazardous with respect to either pH or flammability for periods of time up to a few hours. We do not believe that such accidental, infrequent, short-duration events require permitting of a waste water treatment facility any more than a spill during transportation requires permitting of the spill site.

Continued from page 4.

V. FACILITY DRAWING *(see page 4)*

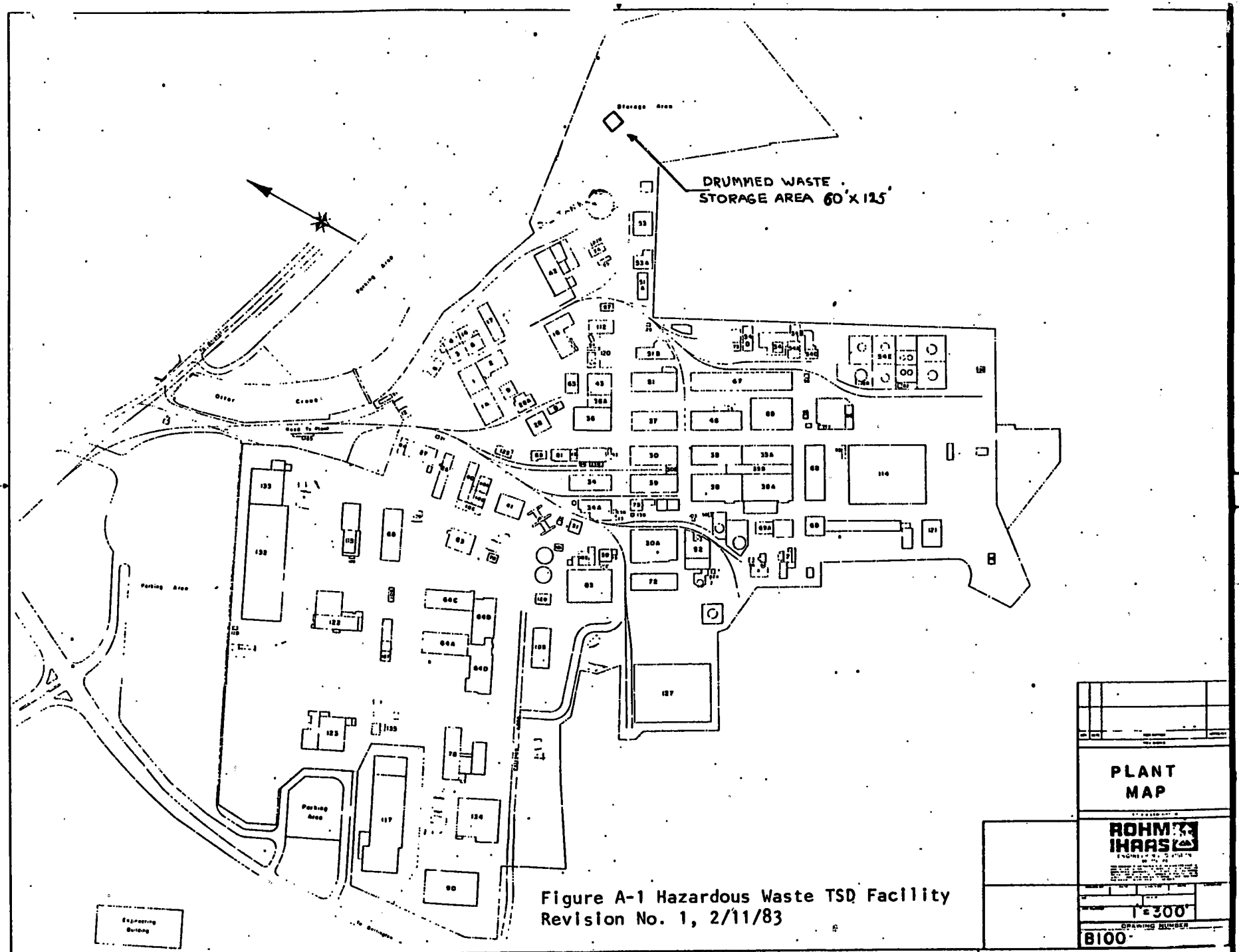
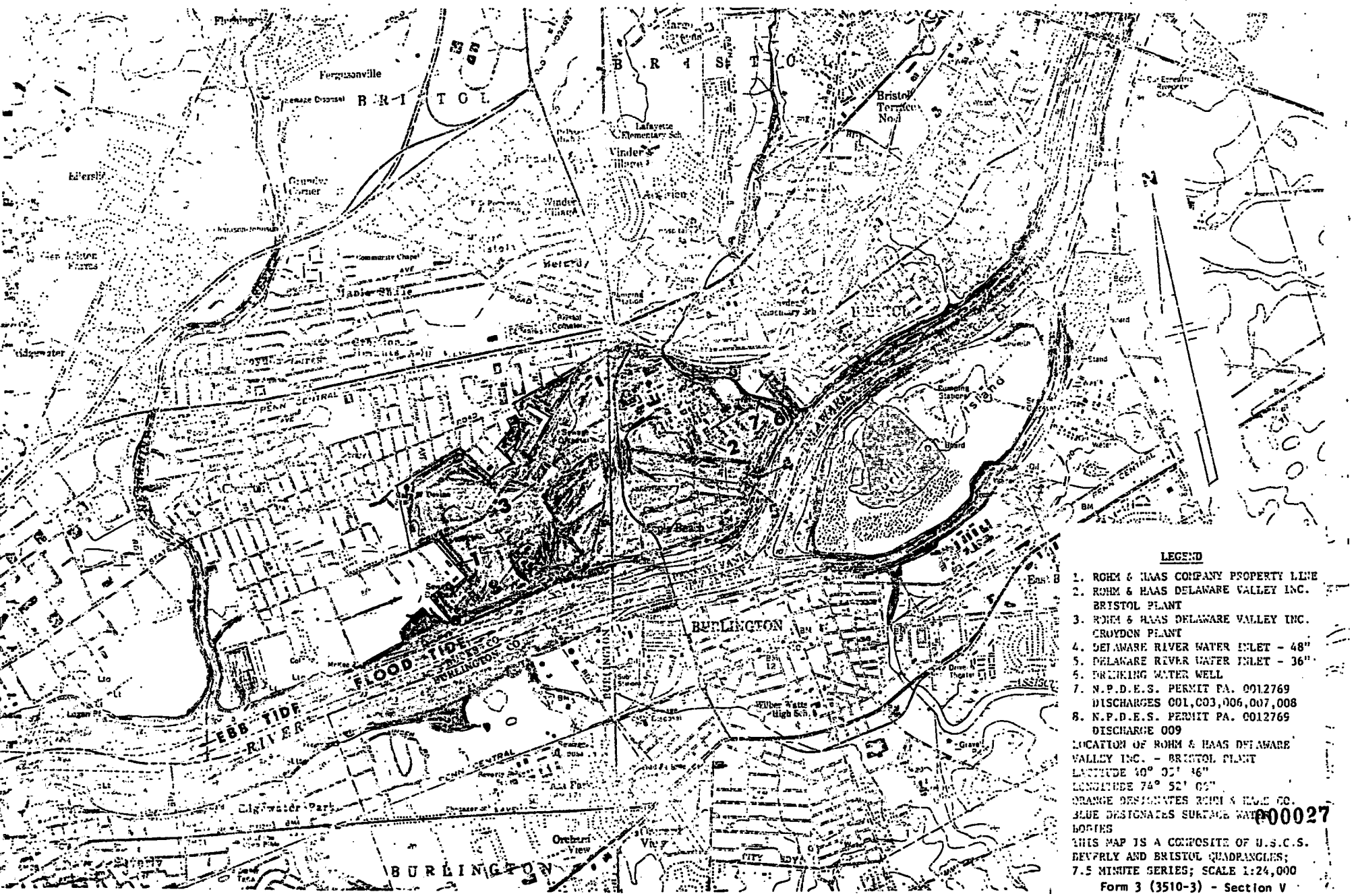


Figure A-1 Hazardous Waste TSD Facility
Revision No. 1, 2/11/83

000026



LEGEND

1. ROHM & HAAS COMPANY PROPERTY LINE
2. ROHM & HAAS DELAWARE VALLEY INC. BRISTOL PLANT
3. ROHM & HAAS DELAWARE VALLEY INC. CROYDON PLANT
4. DELAWARE RIVER WATER INLET - 48"
5. DELAWARE RIVER WATER INLET - 36"
6. DRINKING WATER WELL
7. N.P.D.E.S. PERMIT PA. 0012769 DISCHARGES 001,003,006,007,008
8. N.P.D.E.S. PERMIT PA. 0012769 DISCHARGE 009

LOCATION OF ROHM & HAAS DELAWARE VALLEY INC. - BRISTOL PLANT
LATITUDE 40° 05' 46"
LONGITUDE 74° 52' 05"
ORANGE DESIGNATES ROHM & HAAS CO.
BLUE DESIGNATES SURFACE WATER BODIES
THIS MAP IS A COMPOSITE OF U.S.G.S. BEVERLY AND BRISTOL QUADRANGLES; 7.5 MINUTE SERIES; SCALE 1:24,000

Form 3 (3510-3) - Section V

SECTION B

FACILITY DESCRIPTION

B-1 General Description
[40CFR 122.25(a)(1)]

The Bristol Plant of Rohm and Haas Delaware Valley Inc. is located in Bristol Township, Bucks County, Pennsylvania. The plant site is adjacent to and southwest of the Borough of Bristol along the Delaware River Estuary. The street address is:

Rohm and Haas Delaware Valley Inc.
Bristol Plant
Route 413 and Old Route 13
Bristol, PA 19007

The mailing address is:

Rohm and Haas Delaware Valley Inc.
Bristol Plant
P.O. Box 219
Bristol, PA 19007

The Bristol Plant of Rohm and Haas Delaware Valley Inc. hereafter referred to as the "Bristol Plant" has been manufacturing chemicals for industry at this site since 1916. Employment has ranged from a high of 3,000 employees during the 1950's and 1960's to the current level of about 1,000 employees - about one third of these are engaged in research/pilot plant activities.

The Bristol Plant is a diverse chemical plant manufacturing numerous chemical and plastic products. The major processes include emulsion, solution and bulk polymerization, monomer purification, sheet extrusion, and pesticide synthesis. Major products include Acryloid® Coating Products and Acryloid® Oil Additive, Plexiglas® Acrylic Sheet, Kydex® Acrylic-PVC Alloy Sheet, Karathane® Miticide and Fungicide, Acryloid® PVC-Modifiers, Plexiglas® Molding Powders, and methacrylate and acrylate monomers.

Hazardous wastes are generated on site from two distinctly different activities; namely, manufacturing operations and research/pilot plant operations.

B-1 General Description (cont'd)
[40CFR 122.25(a)(1)]

a) Manufacturing Operations

The hazardous wastes routinely generated are itemized in Section C. On the Waste Description Report sheets in Section C under the heading Description of Source, the various wastes are tied to the operations producing them; e.g. Methanol Distillation Residue is the residue from the distillation recovery of methanol from spent methanol-water waste used to purify crude dinitrocapryl phenol.

b) Research/Pilot Plant Operations

The research/pilot plant operations generate small quantities of non-routine wastes from company confidential reactions. Each waste is identified as to its hazardous nature and is a waste from a reaction using chemicals listed in Part A as hazardous raw materials/intermediates/products.

Occasionally hazardous wastes are received from Rohm and Haas Company facilities at (a) Spring House, Pennsylvania (a research laboratory), (b) Croydon, Pennsylvania (a manufacturing plant), (c) Kensington, Connecticut (a manufacturing plant) and (d) sales offices and warehouses. Wastes from (a) and (c) are reused/recovered by burning in our Power House for heat value. Wastes from (b) are intended for either reuse/recovery as fuel in our boilers or for storage prior to shipment for disposal. Wastes from (d), in addition to the options for wastes from (b), could also be recovered by reworking into salable product.

Hazardous wastes are currently stored under interim status on two diked macadem storage pads. However, in the planned upgrading of the storage areas it has been determined that only one hazardous waste storage area is needed. The planned upgrading of this hazardous waste storage area will start when the storage facility permit is issued and will be operational within 12 months (see Section D).

The contact and party responsible for hazardous waste management at the Bristol Plant is:

Guy C. Murdoch (215) 785-8475
Group Leader, Development, Environmental and Utilities Department

B-2 Topograhic Map
[40 CFR Section 122.25(a)(19)]

Figure B-1 is a topographic map of the Bristol manufacturing and research/pilot plant operations showing the following items:

1. Date and certification
2. Map orientation
3. Scale: 1" - 100'
4. Contours: 2 foot intervals of elevation
5. 100 year flood plain area
6. Surface waters and direction of flow
7. Facility boundaries
8. Plant water wells
9. Buildings and structures
10. Water intakes and discharges
11. Surface water sewer inlets
12. Hazardous waste storage facility

The topographic map shows most of the area 1,000 feet beyond the facility fence line; however, to get a better overview Figure B-2, a 1980 aerial photo is included. The U.S.G.S. 7.5 minute series; scale 1:24,000 included with the RCRA Part A submission is included here (as Figure B-3) for a broader overview. The Federal Insurance Administration flood map, Figure B-4, is included.

Land Uses: Figure B-2 shows surrounding land-use areas. The closest residential area is in the Borough of Bristol, about 1/3 mile to the northeast of the plant fence line.

Hazardous Waste Management Facility Boundary: The hazardous waste management facility boundary consists of a concrete storage pad for containers (maximum containment at 1,024 drums at 55 gallons each). Figure B-1 shows the location of the storage pad.

Wind Rose: Figure B-5 shows a wind rose of meteorological data from over 40,000 hourly observations at the Philadelphia International Airport. The airport is located approximately 25 miles southwest of the Bristol Plant.

Access Control: The hazardous waste storage facility is located within the Bristol Plant. The entire plant is surrounded by a fence and entrance into the plant is monitored by the plant security guards. Further details concerning access control are discussed in Section F-1.

B-2 Topograhic Map (cont'd)
[40 CFR Section 122.25(a)(19)]

Injection and Withdrawal Wells: The Bristol Plant has no injection wells. There are five operational withdrawal wells used to supply cooling water for indirect cooling of manufacturing operations during the summer months. Two of the wells (Nos. 3 and 10) are located within the plant fence while three wells (Nos. 4, 9 and 11) are located outside the fence on idle ground owned by Rohm and Haas Company, see Figure B-1. These five wells are owned and operated by the Bristol Plant. There are no other wells located on-site or off-site within 1,000 feet of the facility.

Buildings, TSD Areas, Other Structures: Figure B-1 shows the building and structures on the property as well as the waste storage area.

Recreation Areas: Not applicable.

Run-Off Control Systems: The hazardous container storage facility has a roof to direct rainfall from the pad. The elevated container pad prevents run-on. Waste spillages on the container pad will be contained in the sump collection system, see Sections D and F.

Access and Internal Roads: Figure B-6 shows the roads within the plant and the access roads leading to the plant.

Storm, Sanitary and Process Sewers: Storm water throughout the manufacturing facility is directed into the non-contact cooling water system which discharges directly into either Otter Creek or the recycle system (Schmidt's Lake), see Figure B-1. The sanitary sewer system throughout the plant is directed to the Bristol Borough Sewage Treatment Plant. There are no surface drains to this sanitary system. The dilute non-hazardous waste process streams are directed to a process water sewer system - the closest surface drain is over 500 feet uphill (4 foot rise) from the storage facility, see Figure B-1. There are no connections from the storage facility to any sewer system.

Loading and Unloading Areas: A loading/unloading trailer dock is located to the southeast of the container storage pad. Ramps are provided at the storage facility to allow for easy access on and off the pad.

Fire Control Facilities: Fire hydrants are located throughout the manufacturing facility as are fixed sprinklers and fire extinguishers. Two fire trucks and trained fire brigade are on standby. The container storage facility has a fire hydrant within 25 feet, several fire extinguishers, and heat detector alarms.

B-2 Topograhic Map (cont'd)
[40 CFR Section 122.25(a)(19)]

Surface Waters: The plant, as shown in Figures B-1, B-2 and B-3 is influenced by a recyle/intake lake system (Schmidt's Lake and Lake Idaline) and the Delaware River to the south and Otter Creek to the east.

Flood Control/Drainage Barriers: General drainage from the plant site is (a) to Otter Creek to the Delaware River and (b) to the Schmidt's Lake/ Lake Idaline non-contact recycle cooling water system. The container storage facility is located outside the 100 year floodplain.

B-3 Location Information

B-3a Seismic Standard
[40CFR Sections 264.18(a) and 122.25(a)(11)(i) and (ii)]

Because this is an existing rather than a new facility, the Seismic Standard does not apply.

B-3b Floodplain Stardard
[40CFR Sections 122.25(a)(11)(iii) and 264.18(b)]

The Bristol Plant is located in Bristol Township, Bucks County, Pennsylvania, west of the Delaware River Estuary and south of a small, tidal, river tributary named Otter Creek.

Figure B-4 is a Federal Insurance Administration (FIA) floodmap for the Township of Bristol, Bucks County, Pennsylvania. (This floodmap was obtained, as recommended in the EPA Part B Training Seminar on December 14, 1982, from the National Flood Insurance Program, P. O. Box 34294, Bethesda, Maryland 20034.) The heavily shaded Zone A defines the area within the 100 year floodplain. The lightly shaded Zone B shows the area in the 100 to 500 year floodplain while the Zone C area without shading defines the area of minimal flooding. The location of the waste storage area was added and it can be seen that it is outside the 100 year floodplain area.

Also, the location of the 100 year floodplain area is shown on the Bristol Plant Topographic Map, Figure B-1. This figure clearly shows that although the eastern and southern extremities of the Bristol manufacturing facility are in the 100 year floodplain, the hazardous waste storage facility is located outside of the 100 year floodplain.

The following is a discussion of the different flood elevations shown in Figures B-1 and B-4.

B-3b Floodplain Standard (cont'd)
[40CFR Sections 122.25(a)(11)(iii) and 264.18(b)]

Figure B-4: The 100 year flood elevation shown on the FIA Map is 11 feet, as referenced to the National Geodetic Vertical Datum of 1929. However, House Document No. 348, Delaware River and Bay, states that the August, 1964 flood elevation was slightly higher at 11.3 feet mean sea level (MSL). (This information is from the Hydraulics Branch of the United States Corps of Engineers in Philadelphia, Pennsylvania.) The higher and more restrictive flood elevation of 11.3 feet MSL was used as the flood elevation for the Bristol Plant.

Figure B-1: The Topographic Map Note No. 5 states that the elevations shown refer to a Rohm and Haas datum which is 3.28 feet below the National Geodetic Vertical Datum of 1929. For this reason the 11.3 feet (MSL) flood elevation was increased by 3.28 feet to 14.6 feet on this map to establish the 100 year floodplain area.

B-3b(1) Demonstration of Compliance
[40CFR Section 122.25(a)(ii)(iv)]

Since the hazardous waste storage facility is located outside the 100 year floodplain, this section is not applicable.

B-4 Traffic Patterns
[40CFR Section 122.25(a)(10)]

The Bristol Plant is accessible via Pennsylvania Route 413 and Old Route 13 as shown in Figure B-6. From the traffic light at Route 413 onto Avenue A and around the main parking lot to the plant entrance is about 1/4 mile. From Old Route 13 to the plant entrance is about 1/8 mile. Automobile, truck and heavy equipment enter the plant through the main gate. Occasionally the main gate must be closed because of road repairs and when this happens the secondary gate is used with a security guard in attendance. Railroad traffic enters and leaves through either the rail gate or the secondary gate.

Traffic control throughout the plant is accomplished through stop signs and red lights at heavily travelled intersections. These are shown in Figure B-6. Color coded traffic routes are used for various deliveries throughout the plant, including the exiting of loaded tractor trailers of hazardous wastes being shipped for disposal. All the roads within the plant are two-way and suitable for automobile, truck and heavy equipment traffic. No traffic signals are located within the plant.

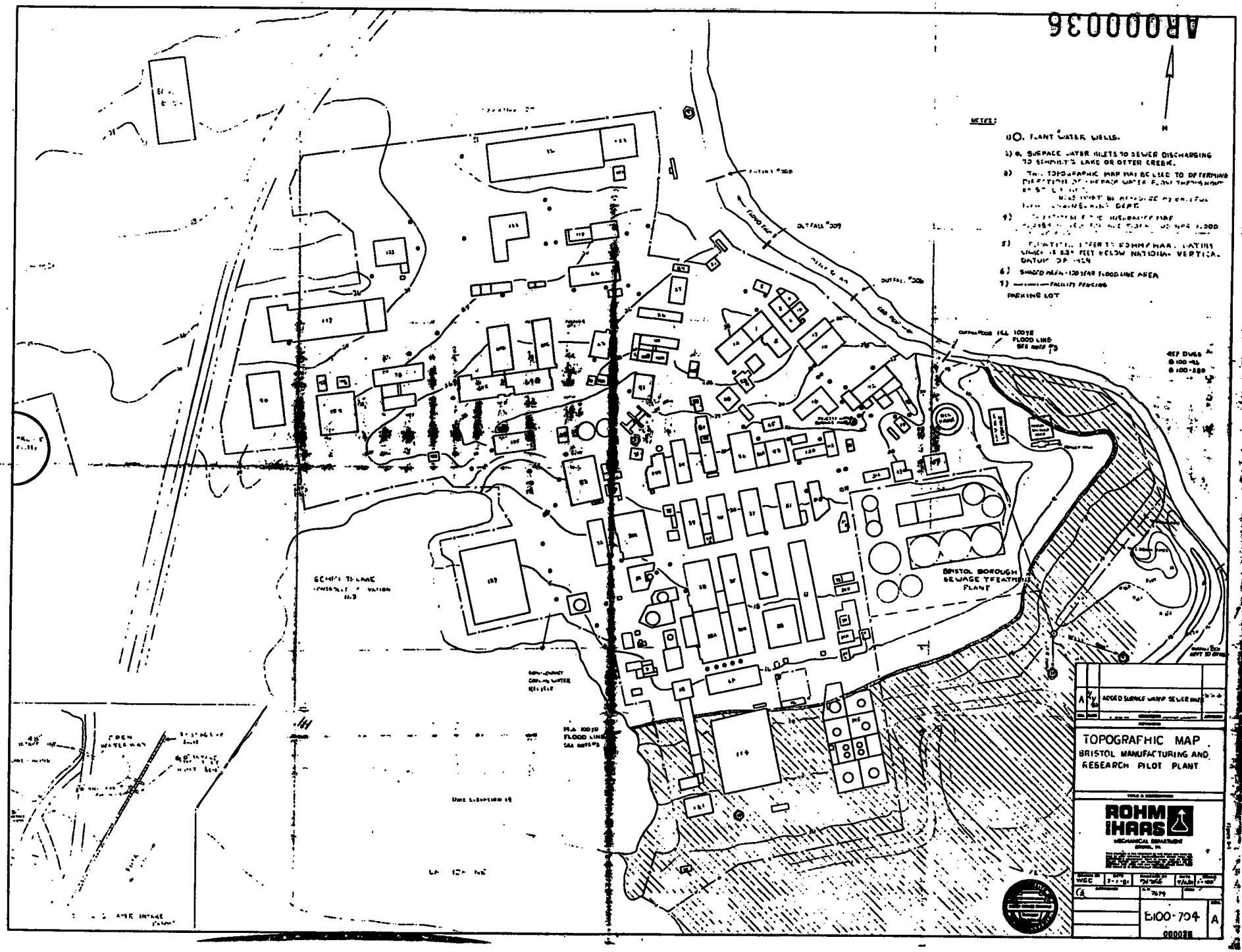
B-4 Traffic Patterns (cont'd)
[40CFR Section 122.25(a)(10)]

Hazardous wastes are generated at numerous locations throughout the plant, see Figure B-6, and any of the roads indicated in Figure B-6 can be used when transporting the waste to the container storage area. Forklift trucks are used to transport the drums from the various generating stations to the container storage facility. The estimated hazardous waste volume generated in the plant is 350 drums (19,250 gallons total) per month. The maximum weight of a fully loaded forklift truck is 14,500 pounds. To minimize the possiblity of drums falling during transport, a maximum of four drums per load (220 gallons total) is allowed.

Forty-foot tractor trailers (licensed to haul hazardous wastes) deliver shipments of wastes from other Rohm and Haas locations, as per Section B-1, for either recovery by burning in our Power House or for storage prior to shipment for disposal. Also, the same sized and licensed tractor trailers are used to ship wastes for disposal. The rigs can hold 80 drums (4,400 gallons total) with the maximum weight of a fully loaded rig being 73,200 pounds.

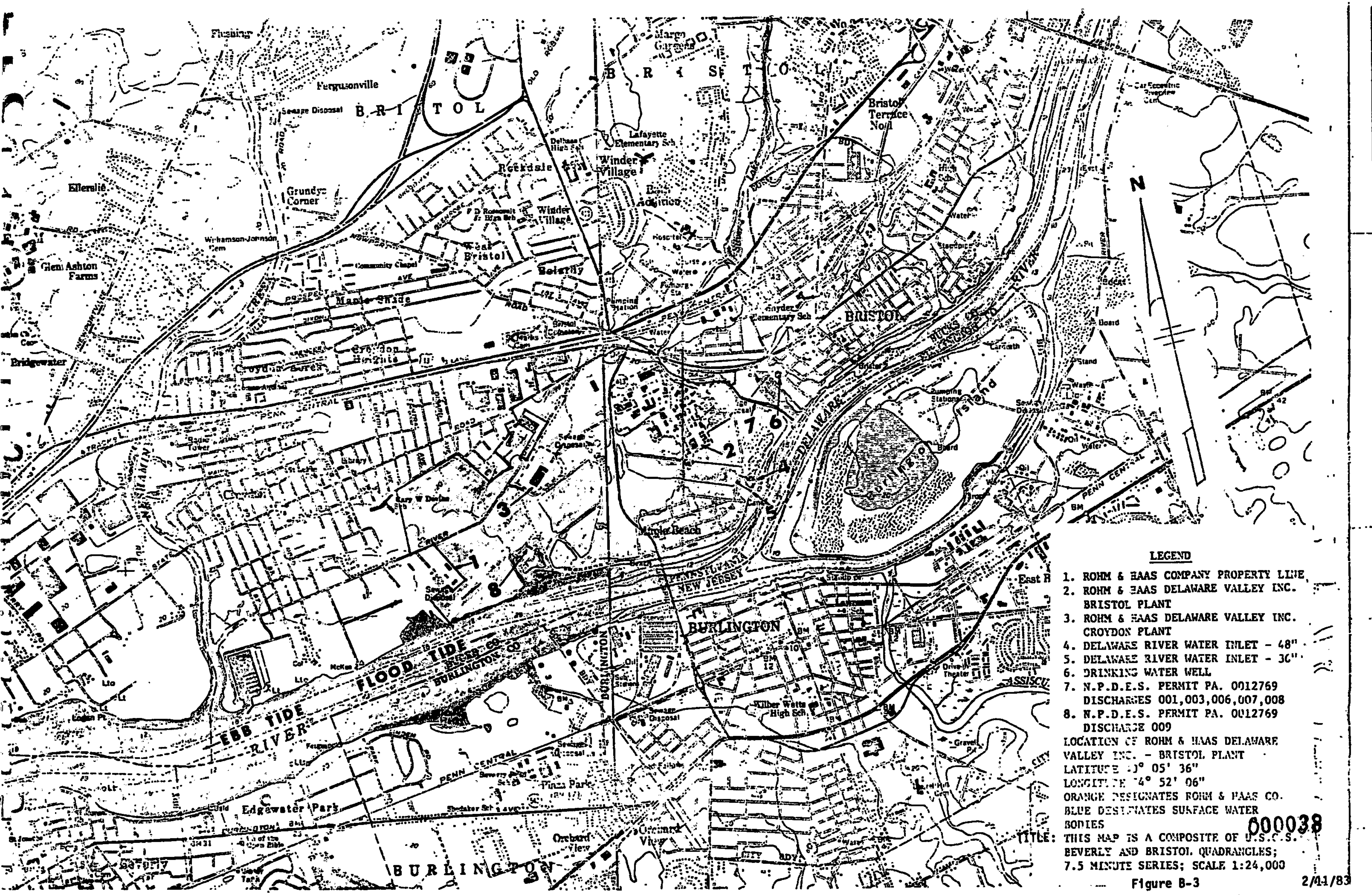
Incoming tractor trailers, after Gate House verificaton, proceed through the main gate and travel south on 7th Street to Avenue H. Here, after a full stop, the rig makes a left turn and travels east to the container storage pad for unloading. The reverse occurs when tractor trailers leave the plant with shipments for the disposal site. The leaving rigs proceed either over Avenue A to Pennsylvania Route 413 or to Old Route 13. There are approximately 1 to 2 incoming deliveries and 4 to 6 outgoing shipments per month. The area around the Bristol Plant entrance (major highway onto company road to Gate House) is light industrial.

The roads throughout the plant and from the Gate House to the major highways are constructed and paved in accordance with the Pennsylvania Department of Highways, specifications as per Form 408, 1970. The Rohm and Haas Engineering Division Road Construction Specifications (incorporating PENNDOT specifications) are included in Appendix B. All plant roads are asphaltic surfaced and the load bearing capacity is 22,400 pounds per axle, equaling PennDOT weight specifications (see Appendix B).



AR000036
NOTES:
1) PLANT WATER WELLS.
2) SURFACE WATER INLETS TO SEWER DISCHARGING TO SCHMIDT'S LAKE OR OTTER CREEK.
6) SHADED AREA - 100 YEAR FLOOD LINE AREA
7) FACILITY FENCING
PARKING LOT
OUTFALL #007
OUTFALL #006
FLOOD LINE
BRISTOL BOROUGH SEWAGE TREATMENT PLANT
OPEN WATERWAY
TOPOGRAPHIC MAP
BRISTOL MANUFACTURING AND RESEARCH PILOT PLANT
ROHM HAAS
MECHANICAL DEPARTMENT
B100-704
A

RESIDENTIAL
INDUSTRIAL
RESIDENTIAL
INDUSTRIAL
RESIDENTIAL
SANDY TIDAL
OTHER ROHM AND HAAS FACILITIES
SANDY
GRASS
APPROX. SCALE
800



LEGEND

1. ROHM & HAAS COMPANY PROPERTY LINE
2. ROHM & HAAS DELAWARE VALLEY INC. BRISTOL PLANT
3. ROHM & HAAS DELAWARE VALLEY INC. CROYDON PLANT
4. DELAWARE RIVER WATER INLET - 48"
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7. N.P.D.E.S. PERMIT PA. 0012769 DISCHARGES 001,003,006,007,008
8. N.P.D.E.S. PERMIT PA. 0012769 DISCHARGE 009

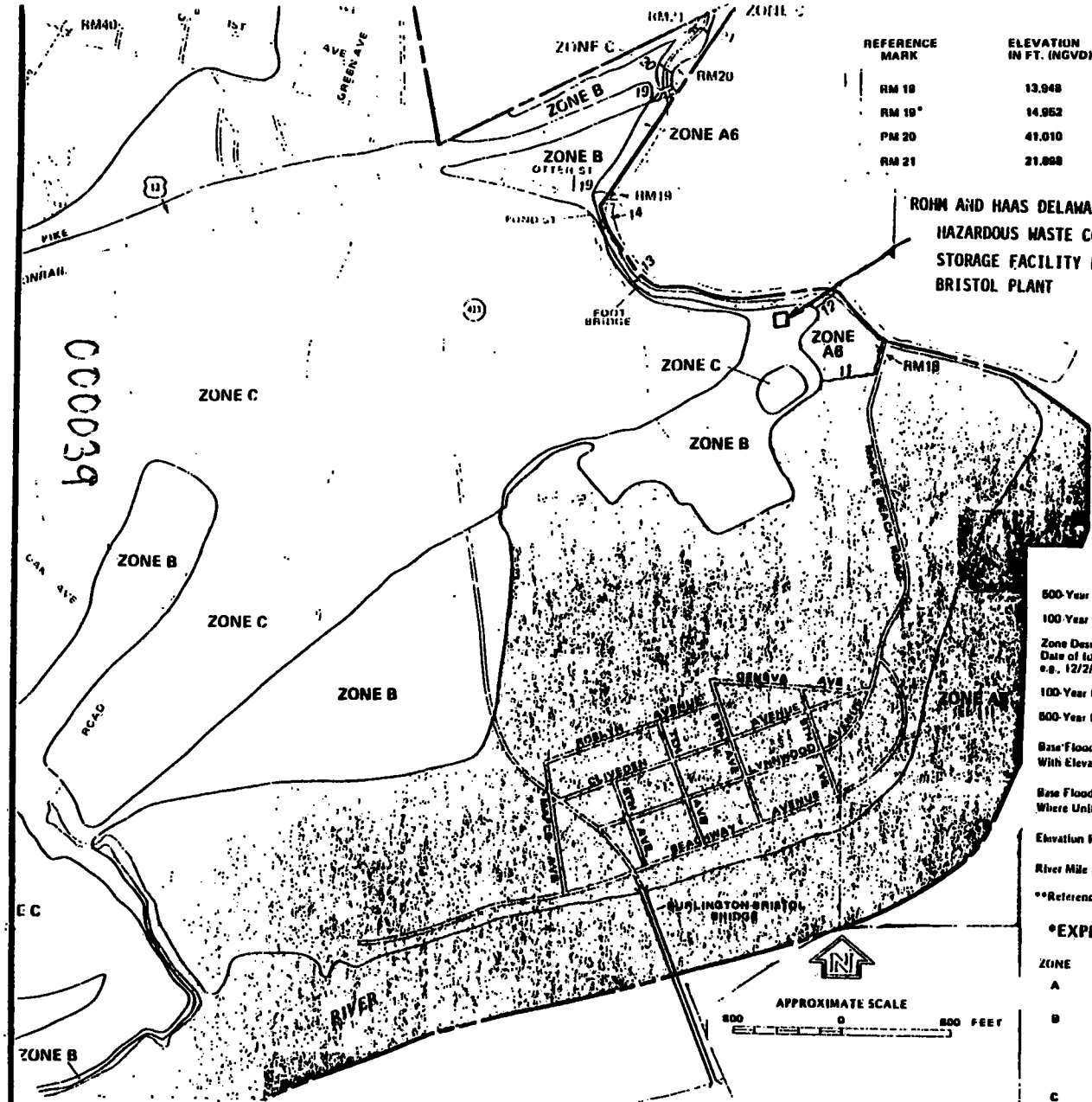
LOCATION OF ROHM & HAAS DELAWARE VALLEY INC. - BRISTOL PLANT
LATITUDE 40° 05' 36"
LONGITUDE 74° 52' 06"
ORANGE DESIGNATES ROHM & HAAS CO.
BLUE DESIGNATES SURFACE WATER BODIES

TITLE: THIS MAP IS A COMPOSITE OF U.S.G.S. BEVERLY AND BRISTOL QUADRANGLES; 7.5 MINUTE SERIES; SCALE 1:24,000

000038

Figure B-3

2/11/83



ELEVATION REFERENCE MARKS

REFERENCE MARK	ELEVATION IN FT. (NGVD)[1]	DESCRIPTION OF LOCATION
RM 19	13.948	Chiseled square on top of wall in northwest corner of Maple Beach Road bridge over Mill Creek.
RM 19*	14.952	Chiseled square in top of wall in northeast corner of Otter Street bridge over Mill Creek.
RM 20	41.010	Chiseled square in top of northeast wing wall of CONRAIL bridge over Mill Creek.
RM 21	21.898	Pennsylvania Department of Highways disc in southwest corner of United States Route 13 bridge over Mill Creek.

FEDERAL INSURANCE ADMINISTRATION
FLOOD MAP

FIGURE B-4

KEY TO MAP

500-Year Flood Boundary	
100-Year Flood Boundary	ZONE B
Zone Designations* With Date of Identification e.g., 12/2/74	
100-Year Flood Boundary	ZONE B
500-Year Flood Boundary	
Base Flood Elevation Line With Elevation In Feet**	513
Base Flood Elevation In Feet Where Uniform Within Zone**	(EL 987)
Elevation Reference Mark	RM7 ×
River Mile	• 1.5

**Referenced to the National Geodetic Vertical Datum of 1929

*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100 year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood (Medium shading)
C	Areas of minimal flooding. (No shading)

NATIONAL FLOOD INSURANCE PROGRAM

TOWNSHIP OF
BRISTOL,
PENNSYLVANIA
BUCKS COUNTY

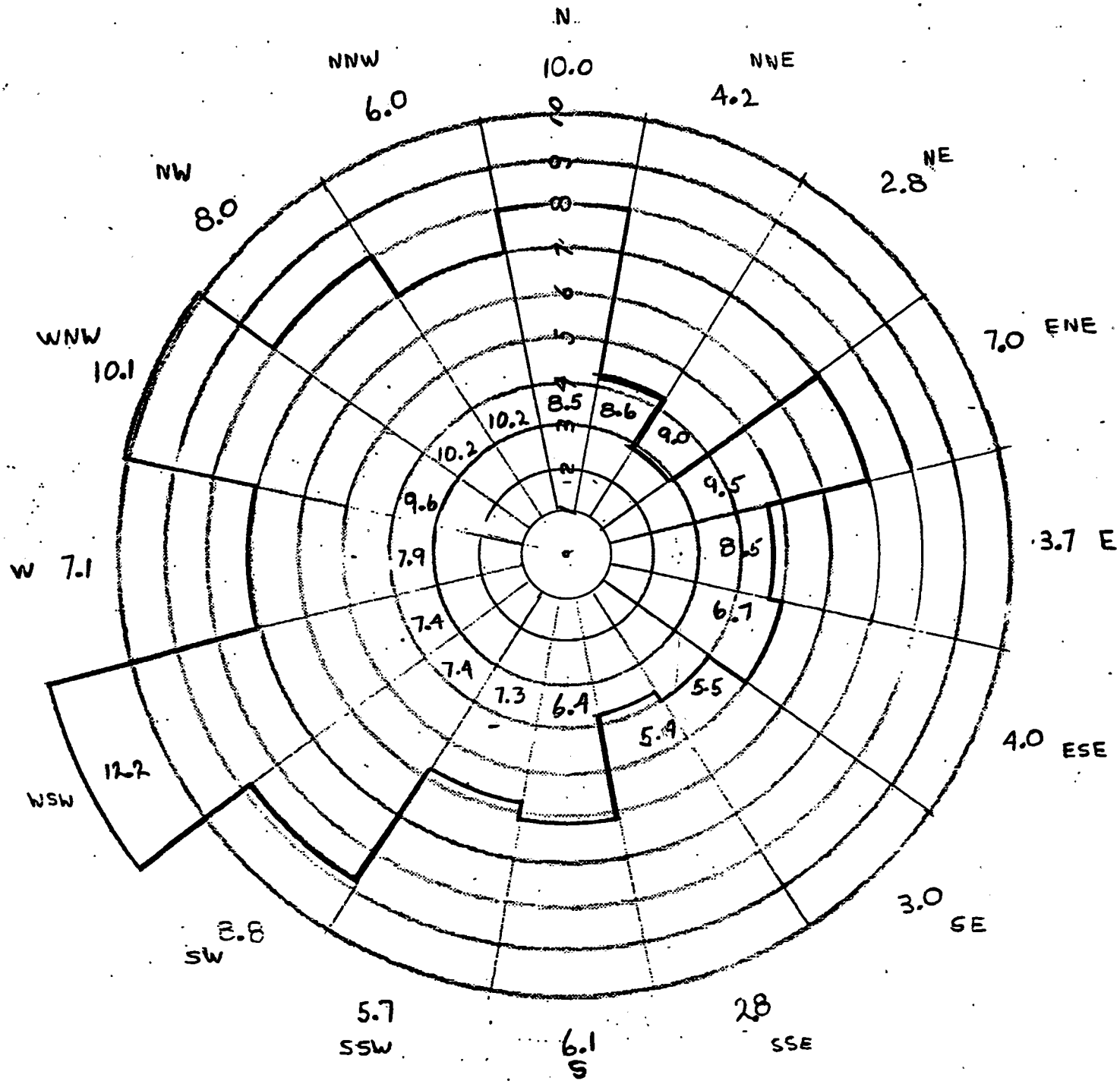
COMMUNITY-PANEL NUMBER
420984 0010 B

PAGE 10 OF 10
(SEE MAP INDEX FOR PAGES NOT PRINTED)

EFFECTIVE
SEPTEMBER 29, 1978

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FEDERAL INSURANCE ADMINISTRATION

000039



OUTER CIRCLE OF NUMBERS & CONCENTRIC CIRCLES INDICATE % OF HOURLY OBSERVATIONS BY DIRECTION

INNER CIRCLE OF NUMBERS GIVES AVERAGE WIND SPEED, KNOTS, (FROM) EACH DIRECTION

FIGURE B-5 FIVE YEAR WIND ROSE 1960-64 INCL.

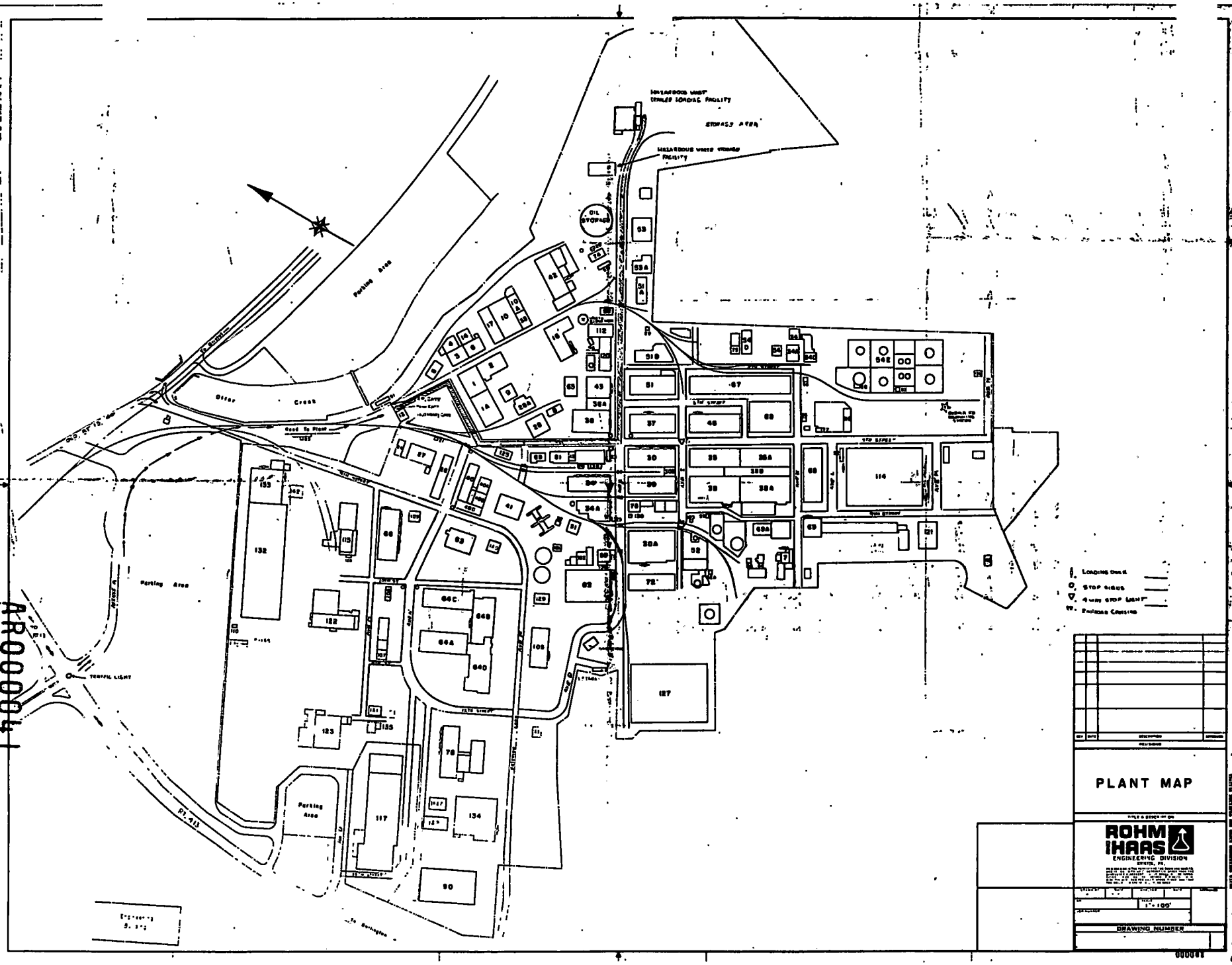
PHILA INT. AIRPORT 43799 HOURLY OBSERVATION

1856 CALMS

JOB NO.

AWN W.GC		Figure B-5
DATE 2-9-83	0 1 2 3 ORIGINAL DRAWING SCALE	SKM 3242
APPROVED	ROHM AND HAAS CO. BRISTOL, PA.	000040
SCALE		

W&E PHOENIX®



Parking Area
Otter Creek
Road To Plant
Parking Area
Parking Area
TRAFFIC LIGHT
Rt. 413
OIL STORAGE
STORAGE AREA
LOADING DOCK
STOP SIGNS
4 WAY STOP LIGHT
Railroad Crossing
PLANT MAP
ROHM HAAS
ENGINEERING DIVISION
BRISTOL, PA.
1" = 100'
DRAWING NUMBER

AR000041

C

000042

SECTION C

WASTE CHARACTERISTICS

This section describes the chemical and physical nature of the hazardous wastes stored at the Bristol Plant and the Waste Analysis Plan for evaluating the wastes to assure that sufficient information is available for their safe handling. The information submitted is in accordance with the requirements of 40 CFR Sections 122.25(a)(2) and (3).

C-1 Chemical and Physical Analysis
[40 CFR 122.25(a)(2)]

Preamble to List of Wastes, Table C-1 and Waste Description Sheets.

Bristol Plant operations result in the production of chemically/physically similar wastes in several areas of the plant. In the past, we have identified each point source separately even as operations of a similar nature expanded into several buildings throughout the plant. Recently, we have started to combine multiple point sources, when physical/chemical/reactive compatibility makes it technically feasible. This consolidation has reduced the complexity of our waste management.

We propose to build on this simplification by the use of the thirty-five generic wastes listed (Table C-1), while retaining the integrity of intra-generic-group separation where necessary to address the fine points of handling and packaging. Therefore, each of the thirty-five generic wastes (Table C-1) represents a group of one to ten point sources.

Example 1

Generic Code/Name

9-3314G	GMAA Type-PH	D001, D002, U008

Members of this Generic Group

9-3314	Glacial Acrylic Acid Pump Flush	U008, D001, D002
9-3157	Extract Stripper/Solvent (contains glacial methacrylic acid)	D001, D002
9-3067	Glacial Acrylic Acid Monomer Mix	D001, D002

A drum of GAA Pump Flush would be identified as 9-3314G; a drum of GAA Monomer Mix would be identified as 9-3314G-3067. As a practical matter, all three of the above point sources in waste 9-3314G are handled in the same manner and are burned as fuel in our Power House. In the future, if we start another point source which fits the 9-3314G generic waste

C-1 Chemical and Physical Analysis (cont'd)
[40 CFR 122.25(a)(2)]

description (Waste Description Report, see Figure C-1) we propose to add it to the generic group. If the new point source does not fit 9-3314G or any other of the thirty-five generic wastes, we would seek a modification of our permit.

Example 2

Generic Code/Name

9-3109G	Halo-Organic Liquid-CD	F002

Members of this Generic Group

9-3109	PCE Distillate (Tetrachloroethylene)	F002
9-3679	MDC Distillate (Methylene Chloride)	F002

A drum of PCE Distillate would be identified in-house as 9-3109G and specifically described as Tetrachloroethylene for purposes of shipping and for information to the commercial disposer. A drum of MDC Distillate would be identified in-house as 9-3109G-3679 and specifically described as Methylene Chloride for purposes of shipping and for information to the commercial disposer.

In addition to the recurring process waste streams, we occasionally generate non-recurring wastes by discard of commercial products, off-specification species, and spills. The potential waste substances drawn from the P-series and U-series lists (Section 261.33) are listed (in Part A). In the event that we generate a waste consisting of any of the substances in Part A (P and U Series), we will handle them as hazardous waste for disposal, including the storage in our isolation cells, if necessary, to assure the separation of non-compatibles.

In case of a spill, we have a plant procedure for containment, pick-up, packaging, disposal and reporting (see Section G). We have listed a generic waste for spill packaging/disposal. Waste 9-3070G represents the waste generated by containment/pick-up of a spill of common solvent or monomers. Waste 9-3070G-3073 represents the waste generated by containment/pick-up of a spill of pesticides Karathane, Lethane or intermediate substances.

To provide compatibility segregation on the storage pad, we propose to divide the thirty-five generic wastes into four color-coded groups in accordance with the EPA Hazardous Waste Compatibility Chart (see Appendix C).

C-1 Chemical and Physical Analysis (cont'd)
[40 CFR 122.25(a)(2)]

EPA Hazardous Waste Compatibility Chart

Drum Color-Code	Reactivity Number	Reactivity Group Name
Brown	4	Alcohols and Glycols
	13	Esters
	16	Hydrocarbons, aromatic
	17	Halogenated organics
	19	Ketones
	27	Nitrocompounds, organic
	29	Hydrocarbons, aliphatic, saturated
	101	Combustible and Flammable, miscellaneous
	103	Polymerizable compounds
	106	Water and Mixtures Containing Water
Green	24	Metals and Metal Compounds, toxic
	104	Oxidizing agents
Blue	10	Caustics
	20	Mercaptans and other Organic Sulfides
Orange	1	Acids, mineral, non-oxidizing
	3	Acids, organic

The compatibility color-code assignments for each of the thirty-five generic wastes would be as shown in Table C-2.

This system of generic wastes will allow us to systematically collect, package, handle and properly dispose of our waste products in a manner which is consistent with the environmental protection objectives of RCRA. At the same time it will provide a system which is workable to our plant.

The following Waste Description Reports provide detailed descriptions of each of the thirty-five generic wastes.

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: 9-3314-G Building: Burma Rd., Spring House Date: 1/14/83

Waste Name: GMAA Type - PH

RCRA HAZARD CLASSIFICATION:

			EPA NUMBER
Non-Specific Sources List (Section 261.31)	Yes ☐	No ☐	
Specific Sources List (Section 261.32)	Yes ☐	No ☐	
Acute Hazardous Waste List (Section 261.33e)	Yes ☐	No ☐	
Toxic Wastes List (Section 261.33f)	Yes ☒	No ☐	U008
Ignitability (Section 261.21) - FLASH POINT below 140 °F	Yes ☒	No ☐	D001
Corrosivity (Section 261.22)			
pH - Below 2	Yes ☒	No ☐	
Corrosion Rate - _____ inches/year	Yes ☒	No ☐	D002
Reactivity (Section 261.23) -	Yes ☐	No ☒	
Eptoxicity (Section 261.24)			
Arsenic _____ mg/L; Lead _____ mg/L	Yes ☐	No ☒	
Barium _____ mg/L; Mercury _____ mg/L	Yes ☐	No ☒	
Cadmium _____ mg/L; Selenium _____ mg/L	Yes ☐	No ☒	
Chromium _____ mg/L; Silver _____ mg/L	Yes ☐	No ☒	

Properties (Appearance/General Description) Clear, water-white or colored liquid with acrid odor.

☒ Liquid	☐ Solid	☐ Wet Cake/Paste	☐ Gas	☐ Single-Phase	☐ Multi-phase
Viscosity (like):		☒ Water	☐ Thin Syrup	☐ Thick Syrup	☐ Jelly/Paste
Density (like):		☐ Water	☒ Lighter Than	☐ Heavier Than	
Water Solubility:		☐ Negligible	☒ Partly	☐ Completely	

TYPICAL COMPOSITION (List Components)

	Composition Range (%)
Methacrylic Acid	0-100
Acrylic Acid	0-100
Acetic Acid	0-10
Maleic Acid	0-1
Butyl Acetate	0-60
Common Solvents	0-60

(cont'd)

WASTE CODE: 9-3314-G

WASTE NAME: GMAA Type - PH

DESCRIPTION OF SOURCE:

Monomer drainings from transfer pumps. Excess monomer mixes from Research and Pilot Plant operations in polymer development.

CONTAINER OPTIONS:

1. ICC-37M/2SL, tight head metal drum with molded polyethylene insert
   55 gallons - Diameter 22 3/4" - Height 35 1/2" (more or less)
2. Polyethylene Drum (DOT approved), tight head
   55 gallons - Diameter 24" - Height 35 3/4" (more or less)
3. DOT 17E, tight head metal drum with Fusioncote (polyethylene) lining
   55 gallon - Diameter 22 1/2" - Height 34 3/4" (more or less)

EPA REACTIVITY GROUP NO.: 3

BRISTOL COMPATIBILITY GROUP: ☐ Brown ☐ Green ☐ Blue ☒ Orange

STORAGE INSTRUCTION:

Stage drums on waste storage pad in ORANGE compatibility section.

Pallet - Wooden warehouse pallet, 48" x 48" (Specification 2707)

DISPOSAL METHOD AND PROCEDURE

☐ Process Recycle ☒ Power House Fuel ☐ Chemical Sewer

☐ Commercial Disposer ☐ Other

Description of Procedure Blend with third stage bottoms and burn as fuel in Powerhouse.

000047

RCRA:1/17/83

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: 9-3190-G Building: 40,64,78,105,134 Date: 1/14/83

Waste Name: Lab Pack - Corrosive Caustic - CD

RCRA HAZARD CLASSIFICATION:

			EPA NUMBER
Non-Specific Sources List (Section 261.31)	Yes ☐	No ☒	
Specific Sources List (Section 261.32)	Yes ☐	No ☒	
Acute Hazardous Waste List (Section 261.33e)	Yes ☐	No ☒	
Toxic Wastes List (Section 261.33f)	Yes ☐	No ☒	
Ignitability (Section 261.21) - FLASH POINT ____ °F	Yes ☐	No ☒	
Corrosivity (Section 261.22)			
pH - above 12.5	Yes ☒	No ☐	
Corrosion Rate - ____ inches/year	Yes ☐	No ☒	D002
Reactivity (Section 261.23) - ____	Yes ☐	No ☒	
Eptoxicity (Section 261.24)			
Arsenic ____ mg/L; Lead ____ mg/L	Yes ☐	No ☐	*
Barium ____ mg/L; Mercury ____ mg/L	Yes ☐	No ☐	
Cadmium ____ mg/L; Selenium ____ mg/L	Yes ☐	No ☐	
Chromium ____ mg/L; Silver ____ mg/L	Yes ☐	No ☐	

Properties (Appearance/General Description) Small jars of laboratory reagents packed in "Oil Dry".

☒ Liquid ☒ Solid ☐ Wet Cake/Paste ☐ Gas ☐ Single-Phase ☐ Multi-phase

Viscosity (like): ☐ Water ☐ Thin Syrup ☐ Thick Syrup ☐ Jelly/Paste

Density (like): ☐ Water ☐ Lighter Than ☐ Heavier Than

Water Solubility: ☐ Negligible ☐ Partly ☐ Completely

TYPICAL COMPOSITION (List Components) Composition Range (%)

Miscellaneous jars of laboratory reagents, either liquid or solid, DOT corrosive (caustic). The liquid and solid items are segregated in different drums. Jars are stabilized by "Oil Dry" in the drum. Each drum has a Serial Number and packing list attached to the drum and copied to Development, Environmental and Utilities Department.

* Pending examination of packing list.

(cont'd)

WASTE CODE: 9-3190-G

WASTE NAME: Lab Pack - Corrosive Caustic - CD

DESCRIPTION OF SOURCE:

Obsolete laboratory samples - housecleaning.

CONTAINER OPTIONS:

1. DOT 17H, reconditioned metal drum, open head
   55 gallon - Diameter 22 1/2" - Height 34 3/4" (more or less)

2. DOT 37A, metal pail with Unichrome lining, open head
   5 gallon - Diameter 11 1/4" - Height 13 1/4" (more or less)

EPA REACTIVITY GROUP NO.: 10

BRISTOL COMPATIBILITY GROUP: ☐ Brown ☐ Green ☒ Blue ☐ Orange

STORAGE INSTRUCTION:

Stage drums on waste storage pad in BLUE compatibility section.

Pallet - Wooden warehouse pallet, 48" x 48", Specification 2707

DISPOSAL METHOD AND PROCEDURE

☐ Process Recycle ☐ Power House Fuel ☐ Chemical Sewer

☒ Commercial Disposer ☐ Other

Description of Procedure Secure landfill at commercial disposer's site. Each drum subject to preshipment authorization by the disposer based on examination of the drum contents list.

C00049

RCRA:1/17/83

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: 9-3343-G Building: 34 Date: 1/14/83

Waste Name: Alcohol Type - PH

RCRA HAZARD CLASSIFICATION:

			EPA NUMBER
Non-Specific Sources List (Section 261.31)	Yes [X]	No [ ]	F003
Specific Sources List (Section 261.32)	Yes [ ]	No [X]	
Acute Hazardous Waste List (Section 261.33e)	Yes [ ]	No [X]	
Toxic Wastes List (Section 261.33f)	Yes [ ]	No [X]	
Ignitability (Section 261.21) - FLASH POINT below 140 °F	Yes [X]	No [ ]	D001
Corrosivity (Section 261.22)			
pH -	Yes [ ]	No [X]	
Corrosion Rate - inches/year	Yes [ ]	No [X]	
Reactivity (Section 261.23) -	Yes [ ]	No [X]	
Eptoxicity (Section 261.24)			
Arsenic mg/L Lead mg/L	Yes [ ]	No [X]	
Barium mg/L Mercury mg/L	Yes [ ]	No [X]	
Cadmium mg/L Selenium mg/L	Yes [ ]	No [X]	
Chromium mg/L Silver mg/L	Yes [ ]	No [X]	

Properties (Appearance/General Description) Slightly colored to dark liquid.

[X] Liquid	[ ] Solid	[ ] Wet Cake/Paste	[ ] Gas	[ ] Single-Phase	[ ] Multi-phase
Viscosity (like):		[X] Water	[ ] Thin Syrup	[ ] Thick Syrup	[ ] Jelly/Paste
Density (like):		[ ] Water	[X] Lighter Than	[ ] Heavier Than	
Water Solubility:		[ ] Negligible	[ ] Partly	[X] Completely	

TYPICAL COMPOSITION (List Components)

	Composition Range (%)
Methanol	0-95
Isopropanol	0-60
Toluene	0-30
Benzyldimethylamine	
Dinitrocaprylphenol (DNCP)	0-5
DNCP Crotonate	
Polymethylmethacrylate	0-3
Methyl trimethoxysilane	0-10

(cont'd)

WASTE CODE: 9-3343-G

WASTE NAME: Alcohol Type - PH

DESCRIPTION OF SOURCE:

Solvent boil-out and rinse of processing and distillation equipment.

CONTAINER OPTIONS:

DOT 17E, tight head metal drum
55 gallon - Diameter 22 1/2" - Height 34 3/4" (more or less)

EPA REACTIVITY GROUP NO.: 4

BRISTOL COMPATIBILITY GROUP: [X] Brown [ ] Green [ ] Blue [ ] Orange

STORAGE INSTRUCTION:

Stage drums on waste storage pad in BROWN capability section.

Pallet - Wooden warehouse pallet, 48" x 48" Specification 2707

DISPOSAL METHOD AND PROCEDURE

[ ] Process Recycle [X] Power House Fuel [ ] Chemical Sewer
[ ] Commercial Disposer [ ] Other

Description of Procedure Blend with third stage bottoms and burn as fuel in Powerhouse.

000051

RCRA:1/17/83

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: 9-3048-G Building: 134 Date: 1/14/83

Waste Name: Ester - CD

RCRA HAZARD CLASSIFICATION:

			EPA NUMBER
Non-Specific Sources List (Section 261.31)	Yes [X]	No [ ]	F003
Specific Sources List (Section 261.32)	Yes [ ]	No [X]	
Acute Hazardous Waste List (Section 261.33e)	Yes [ ]	No [X]	
Toxic Wastes List (Section 261.33f)	Yes [ ]	No [X]	
Ignitability (Section 261.21) - FLASH POINT below 140 °F	Yes [X]	No [ ]	D001
Corrosivity (Section 261.22)			
pH -	Yes [ ]	No [X]	
Corrosion Rate - inches/year	Yes [ ]	No [X]	
Reactivity (Section 261.23) -	Yes [ ]	No [X]	
Eptoxicity (Section 261.24)			
Arsenic mg/L Lead mg/L	Yes [ ]	No [X]	
Barium mg/L Mercury mg/L	Yes [ ]	No [X]	
Cadmium mg/L Selenium mg/L	Yes [ ]	No [X]	
Chromium mg/L Silver mg/L	Yes [ ]	No [ ]	

Properties (Appearance/General Description) Colored liquid, multiphase water layer, organic layer, salt layer.

[X] Liquid	[X] Solid	[ ] Wet Cake/Paste	[ ] Gas	[ ] Single-Phase	[ ] Multi-phase
Viscosity (like):		[X] Water	[ ] Thin Syrup	[ ] Thick Syrup	[ ] Jelly/Paste
Density (like):		[ ] Water	[X] Lighter Than	[ ] Heavier Than	
Water Solubility:		[ ] Negligible	[X] Partly	[ ] Completely	

TYPICAL COMPOSITION (List Components)

	Composition Range (%)
Esters - ethyl acetate, etc.	20-80
Water	20-80
Sludge - salts	5-20

(cont'd)

WASTE CODE: 9-3048-G

WASTE NAME: Ester - CD

DESCRIPTION OF SOURCE:

Spent, recovered reaction solvent from pilot plant operation.

CONTAINER OPTIONS:

DOT 17E, tight head metal drum
55 gallon - Diameter 22 1/2" - Height 34 3/4" (more or less)

EPA REACTIVITY GROUP NO.: 13

BRISTOL COMPATIBILITY GROUP: [x] Brown [ ] Green [ ] Blue [ ] Orange

STORAGE INSTRUCTION:

Stage drums on waste storage pad in BROWN compatibility section.

Pallet - Wooden warehouse pallet, 48" x 48", Specification 2707

DISPOSAL METHOD AND PROCEDURE

[ ] Process Recycle [ ] Power House Fuel [ ] Chemical Sewer

[x] Commercial Disposer [ ] Other

Description of Procedure Incineration or solidification and secure landfill at commercial disposer's site.

000053

RCRA:1/17/83

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: 9-3173-G Building: 134 Date: 1/14/83

Waste Name: Solvent/PCB - CD

RCRA HAZARD CLASSIFICATION:

			EPA NUMBER
Non-Specific Sources List (Section 261.31)	Yes [X]	No [ ]	F003
Specific Sources List (Section 261.32)	Yes [ ]	No [X]	
Acute Hazardous Waste List (Section 261.33e)	Yes [ ]	No [X]	
Toxic Wastes List (Section 261.33f)	Yes [ ]	No [X]	
Ignitability (Section 261.21) - FLASH POINT below 140 °F	Yes [XX]	No [ ]	D001
Corrosivity (Section 261.22)			
pH -	Yes [ ]	No [X]	
Corrosion Rate - inches/year	Yes [ ]	No [X]	
Reactivity (Section 261.23) -	Yes [ ]	No [X]	
Eptoxicity (Section 261.24)			
Arsenic mg/L Lead mg/L	Yes [ ]	No [X]	
Barium mg/L Mercury mg/L	Yes [ ]	No [X]	
Cadmium mg/L Selenium mg/L	Yes [ ]	No [X]	
Chromium mg/L Silver mg/L	Yes [ ]	No [X]	

Properties (Appearance/General Description) Clear to dark liquid.

[X] Liquid [ ] Solid [ ] Wet Cake/Paste [ ] Gas [ ] Single-Phase [ ] Multi-phase

Viscosity (like): [X] Water [ ] Thin Syrup [ ] Thick Syrup [ ] Jelly/Paste

Density (like): [ ] Water [X] Lighter Than [ ] Heavier Than

Water Solubility: [ ] Negligible [XX] Partly [ ] Completely

TYPICAL COMPOSITION (List Components)

	Composition Range (%)
Xylene	0-99
Acetate ester solvent	0-20
Alcohol solvent	0-60
Water	0-30
Acetic acid	0-2.5
Dichlorobiphenyls or polychlorinated biphenyls	10-2000 ppm
Dichloroazobenzene	0-500 ppm

(cont'd)

WASTE CODE: 9-3173-G

WASTE NAME: Solvent/PCB - CD

DESCRIPTION OF SOURCE:

Waste process solvents containing PCB type compounds from pilot plant operations.

CONTAINER OPTIONS:

DOT 17E, tight head metal drum with Fusioncote (polyethylene) lining
55 gallon - Diameter 22 1/2" - Height 34 3/4" (more or less)

EPA REACTIVITY GROUP NO.: 16

BRISTOL COMPATIBILITY GROUP: [X] Brown [ ] Green [ ] Blue [ ] Orange

STORAGE INSTRUCTION:

Stage drums on waste storage pad in BROWN compatibility section.

Pallet - Wooden warehouse pallet, 48" x 48", Specification 2707

DISPOSAL METHOD AND PROCEDURE

[ ] Process Recycle [ ] Power House Fuel [ ] Chemical Sewer

[X] Commercial Disposer [ ] Other

Description of Procedure Incinerate in equipment approved for dioxin at commercial disposer's site.

000055

RCRA:1/17/83

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: 9-3451-G Building: 34, 51 Date: 1/14/83

Waste Name: Aromatic - PH

RCRA HAZARD CLASSIFICATION:

	Yes	No	EPA NUMBER
Non-Specific Sources List (Section 261.31)	X		F003
Specific Sources List (Section 261.32)		X	
Acute Hazardous Waste List (Section 261.33e)		X	
Toxic Wastes List (Section 261.33f)		X	
Ignitability (Section 261.21) - FLASH POINT Below 140 °F	X		D001
Corrosivity (Section 261.22)			
pH -		X	
Corrosion Rate - inches/year		X	
Reactivity (Section 261.23) -		X	
Eptoxicity (Section 261.24)			
Arsenic mg/L Lead mg/L		X	
Barium mg/L Mercury mg/L		X	
Cadmium mg/L Selenium mg/L		X	
Chromium mg/L Silver mg/L		X	

Properties (Appearance/General Description) Yellow to dark colored.

X Liquid	Solid	Wet Cake/Paste	Gas	Single-Phase	Multi-phase
Viscosity (like):		X Water	Thin Syrup	Thick Syrup	Jelly/Paste
Density (like):		Water	X Lighter Than	Heavier Than	
Water Solubility:		X Negligible	Partly	Completely	

TYPICAL COMPOSITION (List Components)	Composition Range (%)
Xylene	0-99
Toluene	0-99
Laktane	0-99
Methacrylate copolymers	0-20
Butyl carbitol chloride and associated compounds	0-20

(cont'd)

WASTE CODE: 9-3451-G

WASTE NAME: Aromatics - PH

DESCRIPTION OF SOURCE:

Spent, recovered reaction solvents and spent solvents from equipment boil-out or rinse in solution polymer and synthetic organic chemical operations.

CONTAINER OPTIONS:

DOT 17E, tight head metal drum
55 gallon - Diameter 22 1/2" - Height 34 3/4" (more or less)

EPA REACTIVITY GROUP NO.: 16

BRISTOL COMPATIBILITY GROUP: [X] Brown [ ] Green [ ] Blue [ ] Orange

STORAGE INSTRUCTION:

Stage drums on waste storage pad in BROWN compatibility section.

Pallet - Wooden warehouse pallet, 48" x 48", Specification 2707

DISPOSAL METHOD AND PROCEDURE

[ ] Process Recycle [X] Power House Fuel [ ] Chemical Sewer
[ ] Commercial Disposer [ ] Other

Description of Procedure Blend with third stage bottoms and burn as fuel in Powerhouse.

000057

RCRA:1/17/83

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: 9-3196-G Building: 134 Date: 1/14/83

Waste Name: Off Grade C-9211-CD

RCRA HAZARD CLASSIFICATION:

			EPA NUMBER
Non-Specific Sources List (Section 261.31)	Yes ☐	No ☒	
Specific Sources List (Section 261.32)	Yes ☐	No ☒	
Acute Hazardous Waste List (Section 261.33e)	Yes ☐	No ☒	
Toxic Wastes List (Section 261.33f)	Yes ☐	No ☒	
Ignitability (Section 261.21) - FLASH POINT 83 °F	Yes ☒	No ☐	D001
Corrosivity (Section 261.22)			
pH - 3	Yes ☒	No ☐	
Corrosion Rate - inches/year	Yes ☒	No ☐	D002
Reactivity (Section 261.23) -	Yes ☐	No ☐	
Eptoxicity (Section 261.24)			
Arsenic mg/L; Lead mg/L	Yes ☐	No ☒	
Barium mg/L; Mercury mg/L	Yes ☐	No ☒	
Cadmium mg/L; Selenium mg/L	Yes ☐	No ☒	
Chromium mg/L; Silver mg/L	Yes ☐	No ☒	

Properties (Appearance/General Description) Dark amber gelled liquid, xylene odor

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☒ Liquid	☐ Solid	☐ Wet Cake/Paste	☐ Gas	☐ Single-Phase	☐ Multi-phase
Viscosity (like):		☐ Water	☐ Thin Syrup	☐ Thick Syrup	☒ Jelly/Paste
Density (like):		☒ Water	☐ Lighter Than	☐ Heavier Than	
Water Solubility:		☒ Negligible	☐ Partly	☐ Completely	

TYPICAL COMPOSITION (List Components)	Composition Range (%)
Chlorinated, alkyl isothiazolin - 3-one and related compounds	50
Xylene	45
Ethyl Acetate	5

(cont'd)

WASTE CODE: 9-3106-G

WASTE NAME: Off Grade C-9211-CD

DESCRIPTION OF SOURCE:

Off grade experimental product from pilot plant.

CONTAINER OPTIONS:

Polyethylene Drum (DOT approved) tight head
55 gallons - Diameter 24" - Height 35 3/4" (more or less)
Overpacked by
Metal Recovery Drum, open head, code 1650
85 gallons - Diameter 26" - Height 38 3/8" (more or less)

EPA REACTIVITY GROUP NO.: 17

BRISTOL COMPATIBILITY GROUP: [X] Brown [ ] Green [ ] Blue [ ] Orange

STORAGE INSTRUCTION:

Stage on waste storage pad in BROWN compatibility section
Pallet - Wooden warehouse pallet, 48" X 48", specification 2707

DISPOSAL METHOD AND PROCEDURE

[ ] Process Recycle [ ] Power House Fuel [ ] Chemical Sewer
[X] Commercial Disposer [ ] Other

Description of Procedure Incineration or secure landfill at commercial disposer site.

000059

RCRA:1/17/83

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: 9-3109-G Building: 134 Date: 1/14/83

Waste Name: Halo-organic Liquid - CD

RCRA HAZARD CLASSIFICATION:

			EPA NUMBER
Non-Specific Sources List (Section 261.31)	Yes [X]	No [ ]	F002
Specific Sources List (Section 261.32)	Yes [ ]	No [X]	
Acute Hazardous Waste List (Section 261.33e)	Yes [ ]	No [X]	
Toxic Wastes List (Section 261.33f)	Yes [ ]	No [X]	
Ignitability (Section 261.21) - FLASH POINT ____ °F	Yes [ ]	No [X]	
Corrosivity (Section 261.22)			
pH - ____	Yes [ ]	No [X]	
Corrosion Rate - ____ inches/year	Yes [ ]	No [X]	
Reactivity (Section 261.23) - ____	Yes [ ]	No [X]	
Eptoxicity (Section 261.24)			
Arsenic ____ mg/L; Lead ____ mg/L	Yes [ ]	No [X]	
Barium ____ mg/L; Mercury ____ mg/L	Yes [ ]	No [X]	
Cadmium ____ mg/L; Selenium ____ mg/L	Yes [ ]	No [X]	
Chromium ____ mg/L; Silver ____ mg/L	Yes [ ]	No [X]	

Properties (Appearance/General Description) Water white to pale yellow liquid.

[X] Liquid [ ] Solid [ ] Wet Cake/Paste [ ] Gas [ ] Single-Phase [ ] Multi-phase

Viscosity (like): [X] Water [ ] Thin Syrup [ ] Thick Syrup [ ] Jelly/Paste

Density (like): [ ] Water [ ] Lighter Than [X] Heavier Than

Water Solubility: [X] Negligible [ ] Partly [ ] Completely

TYPICAL COMPOSITION (List Components)	Composition Range (%)
Perchloroethylene (tetrachloroethylene)	0-100
Methylene dichloride	0-100
Impurities	0-5

(cont'd)

WASTE CODE: 9-3109-G

WASTE NAME: Halo-organic liquid - CD

DESCRIPTION OF SOURCE:

Spent solvents from pilot plant.

CONTAINER OPTIONS:

DOT 17E, tight head metal drum
55 gallon - Diameter 22 1/2" - Height 34 3/4" (more or less).

EPA REACTIVITY GROUP NO.: 17

BRISTOL COMPATIBILITY GROUP: [X] Brown [ ] Green [ ] Blue [ ] Orange

STORAGE INSTRUCTION:

Stage drums on waste storage pad in BROWN compatibility section.

DISPOSAL METHOD AND PROCEDURE

[ ] Process Recycle [ ] Power House Fuel [ ] Chemical Sewer

[X] Commercial Disposer [ ] Other

Description of Procedure Incineration or solidification and secure landfill at commercial disposer's site.

000061

RCRA:1/17/83

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: 9-3035G Building: 134, 34 Date: 1/14/83

Waste Name: HALO-ORGANIC LIQUID - PH

RCRA HAZARD CLASSIFICATION:

	Yes	No	EPA NUMBER
Non-Specific Sources List (Section 261.31)	☐	☒	
Specific Sources List (Section 261.32)	☐	☒	
Acute Hazardous Waste List (Section 261.33e)	☐	☒	
Toxic Wastes List (Section 261.33f)	☐	☒	
Ignitability (Section 261.21) - FLASH POINT below 140 °F	☒	☐	D001
Corrosivity (Section 261.22)			
pH -	☐	☒	
Corrosion Rate - inches/year	☐	☒	
Reactivity (Section 261.23) -	☐	☒	
Eptoxicity (Section 261.24)			
Arsenic mg/L; Lead mg/L	☐	☒	
Barium mg/L; Mercury mg/L	☐	☒	
Cadmium mg/L; Selenium mg/L	☐	☒	
Chromium mg/L; Silver mg/L	☐	☒	

Properties (Appearance/General Description) Slightly colored to black liquid.

☒ Liquid ☐ Solid ☐ Wet Cake/Paste ☐ Gas ☐ Single-Phase ☐ Multi-phase

Viscosity (like): ☒ Water ☐ Thin Syrup ☐ Thick Syrup ☐ Jelly/Paste

Density (like): ☐ Water ☐ Lighter Than ☒ Heavier Than

Water Solubility: ☐ Negligible ☒ Partly ☐ Completely

TYPICAL COMPOSITION (List Components)

	Composition Range (%)
Butyl chloride	0-100
Butyl carbitol chloride	0-60
Chlorex	0-20
Butyl carbitol	0-70
Water	0-20

(cont'd)

WASTE CODE: 9-3035-G

WASTE NAME: Halo-organic liquid - pH

DESCRIPTION OF SOURCE:

Spent solvents and waste distillation fractions from synthetic organic chemicals manufacture.

CONTAINER OPTIONS:

DOT 17E, tight head metal drum
55 gallon - Diameter 22 1/2" - Height 34 3/4" (more or less).

EPA REACTIVITY GROUP NO.: 17

BRISTOL COMPATIBILITY GROUP: ☒ Brown ☐ Green ☐ Blue ☐ Orange

STORAGE INSTRUCTION:

Stage drums on waste storage pad in BROWN compatibility section.

Pallet - Wooden warehouse pallet, 48" x 48", Specification 2707

DISPOSAL METHOD AND PROCEDURE

☐ Process Recycle ☒ Power House Fuel ☐ Chemical Sewer
☐ Commercial Disposer ☐ Other

Description of Procedure Blend with third stage bottoms to 0.5% chlorine (maximum) and burn as fuel in powerhouse.

C00063

RCRA:1/17/83

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: 9-3419-G Building: 39, 69 Date: 1/14/83

Waste Name: Ketone - PH

RCRA HAZARD CLASSIFICATION:

			EPA NUMBER
Non-Specific Sources List (Section 261.31)	Yes [X]	No [ ]	F003
Specific Sources List (Section 261.32)	Yes [ ]	No [X]	
Acute Hazardous Waste List (Section 261.33e)	Yes [ ]	No [X]	
Toxic Wastes List (Section 261.33f)	Yes [ ]	No [X]	
Ignitability (Section 261.21) - FLASH POINT below 140 °F	Yes [X]	No [ ]	D001
Corrosivity (Section 261.22)			
pH -	Yes [ ]	No [X]	
Corrosion Rate - inches/year	Yes [ ]	No [X]	
Reactivity (Section 261.23) -	Yes [ ]	No [X]	
Eptoxicity (Section 261.24)			
Arsenic mg/L / Lead mg/L	Yes [ ]	No [X]	
Barium mg/L / Mercury mg/L	Yes [ ]	No [X]	
Cadmium mg/L / Selenium mg/L	Yes [ ]	No [X]	
Chromium mg/L / Silver mg/L	Yes [ ]	No [X]	

Properties (Appearance/General Description) Slightly colored to dark colored liquid.

[X] Liquid [ ] Solid [ ] Wet Cake/Paste [ ] Gas [ ] Single-Phase [ ] Multi-phas

Viscosity (like): [XX] Water [ ] Thin Syrup [ ] Thick Syrup [ ] Jelly/Past

Density (like): [ ] Water [X] Lighter Than [ ] Heavier Than

Water Solubility: [ ] Negligible [ ] Partly [X] Completely

TYPICAL COMPOSITION (List Components)	Composition Range (%)
Acetone	0-99
t-Butylaminoethylmethacrylate residues/tars	0-20
Methacrylate monomers	0-50

(cont'd)

WASTE CODE: 9-3419-G

WASTE NAME: Ketone - pH

DESCRIPTION OF SOURCE:

Spent solvent from equipment boil-out and rinses in monomer preparation and polymerization operations.

CONTAINER OPTIONS:

DOT 17E, tight head metal drum
55 gallon - Diameter 22 1/2 - Height 34 3/4" (more or less)

EPA REACTIVITY GROUP NO.: 19

BRISTOL COMPATIBILITY GROUP: ☒ Brown ☐ Green ☐ Blue ☐ Orange

STORAGE INSTRUCTION:

Stage drums on waste storage pad in BROWN compatibility section

Pallet - Wooden warehouse pallet, 48" x 48", Specification 2707

DISPOSAL METHOD AND PROCEDURE

☐ Process Recycle ☒ Power House Fuel ☐ Chemical Sewer

☐ Commercial Disposer ☐ Other

Description of Procedure Blend with third stage bottoms and burn as fuel in Powerhouse.

000065

RCRA:1/17/83

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: 9-3193-G Building: 30, 66, 134 Date: 1/14/83

Waste Name: Mercaptans - CD

RCRA HAZARD CLASSIFICATION:

			EPA NUMBER
Non-Specific Sources List (Section 261.31)	Yes ☐	No ☒	
Specific Sources List (Section 261.32)	Yes ☐	No ☒	
Acute Hazardous Waste List (Section 261.33e)	Yes ☐	No ☒	
Toxic Wastes List (Section 261.33f)	Yes ☐	No ☒	
Ignitability (Section 261.21) - FLASH POINT below 140 °F	Yes ☒	No ☐	
Corrosivity (Section 261.22)			
pH -	Yes ☐	No ☒	
Corrosion Rate - inches/year	Yes ☐	No ☒	
Reactivity (Section 261.23) -	Yes ☐	No ☒	
Eptoxicity (Section 261.24)			
Arsenic mg/L Lead mg/L	Yes ☐	No ☒	
Barium mg/L Mercury mg/L	Yes ☐	No ☒	
Cadmium mg/L Selenium mg/L	Yes ☐	No ☒	
Chromium mg/L Silver mg/L	Yes ☐	No ☒	

Properties (Appearance/General Description) Water-white to yellow liquid with garlic or rotten egg odor.

☒ Liquid	☐ Solid	☐ Wet Cake/Paste	☐ Gas	☐ Single-Phase	☐ Multi-phase
Viscosity (like):		☒ Water	☐ Thin Syrup	☐ Thick Syrup	☐ Jelly/Paste
Density (like):		☐ Water	☒ Lighter Than	☐ Heavier Than	
Water Solubility:		☐ Negligible	☒ Partly	☐ Completely	

TYPICAL COMPOSITION (List Components)	Composition Range (%)
n-Dodecyl mercaptan	0-100
t-Dodecyl mercaptan	0-100
C_2 to C_{10} alkyl mercaptan	0-100
Mercaptoethanol	0-100
Dimethyl sulfoxide	0-100
Water	0-90

(cont'd)

WASTE CODE: 9-3193-G

WASTE NAME: Mercaptans - CD

DESCRIPTION OF SOURCE:

Obsolete raw materials and distillate from synthetic organic chemical reactions in pilot plant.

CONTAINER OPTIONS:

Raw materials: Supplier's drum

Other Waste:

DOT 17E, tight head metal drum
55 gallon - Diameter 22 1/2" - Height 34 3/4" (more or less)

EPA REACTIVITY GROUP NO.: 20

BRISTOL COMPATIBILITY GROUP: ☐ Brown ☐ Green ☒ Blue ☐ Orange

STORAGE INSTRUCTION:

Stage drums on waste storage pad in BLUE compatibility section

Pallet - Wooden warehouse pallet, 48" x 48", Specification 2707

DISPOSAL METHOD AND PROCEDURE

☐ Process Recycle ☐ Power House Fuel ☐ Chemical Sewer

☒ Commercial Disposer ☐ Other

Description of Procedure Incineration or solidification and secure landfill at commercial disposer's site.

000067

RCRA:1/17/83

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: 9-3483-G Building: 46 Date: 1/14/83

Waste Name: Pigmented Plastic

RCRA HAZARD CLASSIFICATION:

	Yes	No	EPA NUMBER
Non-Specific Sources List (Section 261.31)	☐	☒	
Specific Sources List (Section 261.32)	☐	☒	
Acute Hazardous Waste List (Section 261.33e)	☐	☒	
Toxic Wastes List (Section 261.33f)	☐	☒	
Ignitability (Section 261.21) - FLASH POINT ____ °F	☐	☒	
Corrosivity (Section 261.22)			
pH - ____	☐	☒	
Corrosion Rate - ____ inches/year	☐	☒	
Reactivity (Section 261.23) - ____	☐	☒	
Eptoxicity (Section 261.24)			
Arsenic ____ mg/L; Lead > 5 mg/L	☒	☐	D005
Barium 456 mg/L; Mercury ____ mg/L	☒	☐	D006
Cadmium 19 mg/L; Selenium ____ mg/L	☒	☐	D008
Chromium ____ mg/L; Silver ____ mg/L	☒	☐	

Properties (Appearance/General Description) Vari-colored powder and sawdust

---

☐ Liquid ☒ Solid ☐ Wet Cake/Paste ☐ Gas ☐ Single-Phase ☐ Multi-phase

Viscosity (like): ☐ Water ☐ Thin Syrup ☐ Thick Syrup ☒ Jelly/Paste

Density (like): ☐ Water ☐ Lighter Than ☒ Heavier Than

Water Solubility: ☒ Negligible ☐ Partly ☐ Completely

TYPICAL COMPOSITION (List Components)

	Composition Range (%)
Polyvinyl chloride or acrylic plastic	60-90
Processing aids and pigments	10-40

(cont'd)

WASTE CODE: 9-3483-G

WASTE NAME: Pigmented Plastic - CD

DESCRIPTION OF SOURCE:

Dust from vacuum cleaner that purifies workroom air in powder mix room in plastic sheet manufacturing. Sawdust from trimming edges of extruded sheet.

CONTAINER OPTIONS:

40-50 gallon metal drum, open head, Specification 0014

EPA REACTIVITY GROUP NO.: 24

BRISTOL COMPATIBILITY GROUP: ☐ Brown ☒ Green ☐ Blue ☐ Orange

STORAGE INSTRUCTION:

Stage drums on waste storage pad in GREEN compatibility section.

Pallet - Wooden warehosue pallet, 48" x 48", Specification 2707

DISPOSAL METHOD AND PROCEDURE

☐ Process Recycle ☐ Power House Fuel ☐ Chemical Sewer

☒ Commercial Disposer ☐ Other

Description of Procedure Secure landfill at commercial disposer's site.

000069

RCRA:1/17/83

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: 9-3353-G Building: 34, 40, 64 Date: 1/14/83

Waste Name: Karathane Draining - PH

RCRA HAZARD CLASSIFICATION:

			EPA NUMBER
Non-Specific Sources List (Section 261.31)	Yes ☐	No ☒	
Specific Sources List (Section 261.32)	Yes ☐	No ☒	
Acute Hazardous Waste List (Section 261.33e)	Yes ☐	No ☒	
Toxic Wastes List (Section 261.33f)	Yes ☐	No ☒	
Ignitability (Section 261.21) - FLASH POINT below 140 °F	Yes ☒	No ☐	D001
Corrosivity (Section 261.22)			
pH -	Yes ☐	No ☒	
Corrosion Rate - inches/year	Yes ☐	No ☒	
Reactivity (Section 261.23) -	Yes ☐	No ☒	
Eptoxicity (Section 261.24)			
Arsenic mg/L Lead mg/L	Yes ☐	No ☒	
Barium mg/L Mercury mg/L	Yes ☐	No ☒	
Cadmium mg/L Selenium mg/L	Yes ☐	No ☒	
Chromium mg/L Silver mg/L	Yes ☐	No ☒	

Properties (Appearance/General Description) Dark red liquid

☒ Liquid	☐ Solid	☐ Wet Cake/Paste	☐ Gas	☐ Single-Phase	☐ Multi-phase
Viscosity (like):		☐ Water	☒ Thin Syrup	☐ Thick Syrup	☐ Jelly/Paste
Density (like):		☐ Water	☐ Lighter Than	☒ Heavier Than	
Water Solubility:		☒ Negligible	☐ Partly	☐ Completely	

TYPICAL COMPOSITION (List Components)	Composition Range (%)
Dinitrocaprvl phenol (DNCP)	0-15
DNCP crotonate	0-80
2-chloro-2'-thiocyano diethyl ether	0-60
Laktane	0-60
DNCP related compounds	0-30

(cont'd)

WASTE CODE: 9-3353-G

WASTE NAME: Karathane Draining - pH

DESCRIPTION OF SOURCE:

Off-grade Karathane or Lethane. Left over samples after analysis of production. Overage retained plant samples.

CONTAINER OPTIONS:

DOT 17E, tight end metal drum
55 gallon -Diameter 22 1/2" - Height 34 3/4" (more or less)

EPA REACTIVITY GROUP NO.: 27

BRISTOL COMPATIBILITY GROUP: [X] Brown [ ] Green [ ] Blue [ ] Orange

STORAGE INSTRUCTION:

Stage on waste storage pad in BROWN compatibility section

Pallet - Wooden warehouse pallet, 48" x 48", Specification 2707

DISPOSAL METHOD AND PROCEDURE

[ ] Process Recycle [X] Power House Fuel [ ] Chemical Sewer
[ ] Commercial Disposer [ ] Other

Description of Procedure Blend with third stage bottoms and burn as fuel in Powerhouse.

000071

RCRA:1/17/83

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: 9-3061-G Building: 36,37,42,46,66,134 Date: 1/14/83

Waste Name: Hydrocarbon Draining - PH

RCRA HAZARD CLASSIFICATION:

			EPA NUMBER
Non-Specific Sources List (Section 261.31)	Yes ☐	No ☒	
Specific Sources List (Section 261.32)	Yes ☐	No ☒	
Acute Hazardous Waste List (Section 261.33e)	Yes ☐	No ☒	
Toxic Wastes List (Section 261.33f)	Yes ☐	No ☒	
Ignitability (Section 261.21) - FLASH POINT below 140 °F	Yes ☒	No ☐	
Corrosivity (Section 261.22)			
pH -	Yes ☐	No ☒	
Corrosion Rate - inches/year	Yes ☐	No ☒	
Reactivity (Section 261.23) -	Yes ☐	No ☒	
Eptoxicity (Section 261.24)			
Arsenic mg/L Lead mg/L	Yes ☐	No ☒	
Barium mg/L Mercury mg/L	Yes ☐	No ☒	
Cadmium mg/L Selenium mg/L	Yes ☐	No ☒	
Chromium mg/L Silver mg/L	Yes ☐	No ☒	

Properties (Appearance/General Description) Dark liquid with some dispersable sediment.

☒ Liquid	☒ Solid	☐ Wet Cake/Paste	☐ Gas	☐ Single-Phase	☒ Multi-phase
Viscosity (like):		☐ Water	☒ Thin Syrup	☐ Thick Syrup	☐ Jelly/Paste
Density (like):		☐ Water	☒ Lighter Than	☐ Heavier Than	
Water Solubility:		☒ Negligible	☐ Partly	☐ Completely	

TYPICAL COMPOSITION (List Components)	Composition Range (%)
No. 2 Fuel Oil	0-80
No. 6 Fuel Oil	0-80
Hydrocarbon Solvent	0-20
Aqua Seal (Methylene dichloride emulsion)	0-2
Lubricating Oil	0-100
Sediment	0-10
Heat transfer oil	0-100

(cont'd)

WASTE CODE: 9-3061-G

WASTE NAME: Hydrocarbon Draining - pH

DESCRIPTION OF SOURCE:

Oil draining and rinses from equipment cleaning in Powerhouse. Spent lubricating oil from Powerhouse turbines. Oil rinses from machine shop. Spent heat transfer oil.

CONTAINER OPTIONS:

DOT 17E, tight head metal drum
55 gallon - Diameter 22 1/2" - Height 34 3/4" (more or less)

EPA REACTIVITY GROUP NO.: 29

BRISTOL COMPATIBILITY GROUP: [X] Brown [ ] Green [ ] Blue [ ] Orange

STORAGE INSTRUCTION:

Stage drums on waste storage pad in BROWN compatibility section.

Pallet - Wooden warehouse pallet, 48" x 48", Specification 2707

DISPOSAL METHOD AND PROCEDURE

[ ] Process Recycle [X] Power House Fuel [ ] Chemical Sewer

[ ] Commercial Disposer [ ] Other

Description of Procedure Blend with third stage bottoms and burn as fuel in Powerhouse.

000073

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: 9-3070-G Building: Any Area Date: 1/14/83

Waste Name: Adsorbed Spill - CD

RCRA HAZARD CLASSIFICATION: EPA NUMBER

Non-Specific Sources List (Section 261.31)	Yes ☐	No ☒	
Specific Sources List (Section 261.32)	Yes ☐	No ☒	
Acute Hazardous Waste List (Section 261.33e)	Yes ☐	No ☒	
Toxic Wastes List (Section 261.33f)	Yes ☐	No ☒	
Ignitability (Section 261.21) - FLASH POINT below 140 °F	Yes ☒	No ☐	
Corrosivity (Section 261.22)			
pH -	Yes ☐	No ☒	
Corrosion Rate - inches/year	Yes ☐	No ☒	
Reactivity (Section 261.23) -	Yes ☐	No ☒	
Eptoxicity (Section 261.24)			
Arsenic mg/L Lead mg/L	Yes ☐	No ☒	
Barium mg/L Mercury mg/L	Yes ☐	No ☒	
Cadmium mg/L Selenium mg/L	Yes ☐	No ☒	
Chromium mg/L Silver mg/L	Yes ☐	No ☒	

Properties (Appearance/General Description) Organic material adsorbed on sand or "Oil Dry"; soda ash as necessary to neutralize acid.

☐ Liquid	☒ Solid	☒ Wet Cake/Paste	☐ Gas	☐ Single-Phase	☐ Multi-phas
Viscosity (like):		☐ Water	☐ Thin Syrup	☐ Thick Syrup	☒ Jelly/Past
Density (like):		☐ Water	☐ Lighter Than	☒ Heavier Than	
Water Solubility:		☐ Negligible	☒ Partly	☐ Completely	

TYPICAL COMPOSITION (List Components)	Composition Range (%
Sand or "Oil Dry"	~80
Hydrocarbon solvent, Monomer, Pesticide	~20
Soda Ash	Varies

(cont'd)

WASTE CODE: 9-3070-G

WASTE NAME: Adsorbed Spill - CD

DESCRIPTION OF SOURCE:

Clean up of spills of common solvents, monomers, solution polymers, pesticides. Spills of uncommon or special problem materials are handled by DEU Department on an individual basis.

CONTAINER OPTIONS:

DOT 17H, reconditioned metal drum, open head
55 gallon - Diameter 22 1/2" - Height 34 3/4" (more or less)

EPA REACTIVITY GROUP NO.: 101

BRISTOL COMPATIBILITY GROUP: [X] Brown [ ] Green [ ] Blue [ ] Orange

STORAGE INSTRUCTION:

Stage drums on waste storage pad in BROWN compatibility section

Pallet - Wooden warehouse pallet, 48" x 48", Specification 2707

DISPOSAL METHOD AND PROCEDURE

[ ] Process Recycle [ ] Power House Fuel [ ] Chemical Sewer
[X] Commercial Disposer [ ] Other

Description of Procedure Secure landfill at commercial disposer's site.

000075

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: 9-3284-G Building: 134, Burma Road Date: 1/14/83

Waste Name: Solvent Draining - PH

RCRA HAZARD CLASSIFICATION:

			EPA NUMBER
Non-Specific Sources List (Section 261.31)	Yes ☐	No ☒	
Specific Sources List (Section 261.32)	Yes ☐	No ☒	
Acute Hazardous Waste List (Section 261.33e)	Yes ☐	No ☒	
Toxic Wastes List (Section 261.33f)	Yes ☐	No ☒	
Ignitability (Section 261.21) - FLASH POINT below 140 °F	Yes ☒	No ☐	
Corrosivity (Section 261.22)			
pH -	Yes ☐	No ☒	
Corrosion Rate - inches/year	Yes ☐	No ☒	
Reactivity (Section 261.23) -	Yes ☐	No ☒	
Eptoxicity (Section 261.24)			
Arsenic mg/L Lead mg/L	Yes ☐	No ☒	
Barium mg/L Mercury mg/L	Yes ☐	No ☒	
Cadmium mg/L Selenium mg/L	Yes ☐	No ☒	
Chromium mg/L Silver mg/L	Yes ☐	No ☒	

Properties (Appearance/General Description) Slightly colored to dark liquid.

☒ Liquid	☐ Solid	☐ Wet Cake/Paste	☐ Gas	☐ Single-Phase	☐ Multi-phase
Viscosity (like):		☒ Water	☐ Thin Syrup	☐ Thick Syrup	☐ Jelly/Paste
Density (like):		☐ Water	☒ Lighter Than	☐ Heavier Than	
Water Solubility:		☐ Negligible	☒ Partly	☐ Completely	

TYPICAL COMPOSITION (List Components)	Composition Range (%)
Toluene	Varies
Xylene	"
Methanol	"
Acetone	"
Non-Hazardous Impurities	Traces

(cont'd)

WASTE CODE: 9-3284-G

WASTE NAME: Solvent Drainings - PH

DESCRIPTION OF SOURCE:

Kettle boil-outs and solvent rinses from cleaning equipment in pilot plant. Solvent pump drainings.

CONTAINER OPTIONS:

DOT 17E, tight head metal drum
55 gallon - Diameter 22 1/2" - Height 34 3/4" (more or less)

EPA REACTIVITY GROUP NO.: 101

BRISTOL COMPATIBILITY GROUP: [X] Brown [ ] Green [ ] Blue [ ] Orange

STORAGE INSTRUCTION:

Stage drums on waste storage pad in BROWN compatibility section

Pallet - Wooden warehouse pallet, 48" x 48", Specification 2707

DISPOSAL METHOD AND PROCEDURE

[ ] Process Recycle [X] Power House Fuel [ ] Chemical Sewer
[ ] Commercial Disposer [ ] Other

Description of Procedure Blend with third stage bottoms and burn as fuel in Powerhouse

000077

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: 9-3495-G Building: 30, 133, Burma Road Date: 1/14/83

Waste Name: Polymer/Thick Drainings - CD

RCRA HAZARD CLASSIFICATION:

	Yes	No	EPA NUMBER
Non-Specific Sources List (Section 261.31)	☐	☒	
Specific Sources List (Section 261.32)	☐	☒	
Acute Hazardous Waste List (Section 261.33e)	☐	☒	
Toxic Wastes List (Section 261.33f)	☐	☒	
Ignitability (Section 261.21) - FLASH POINT below 140 °F	☒	☐	D001
Corrosivity (Section 261.22)			
pH -	☐	☒	
Corrosion Rate - inches/year	☐	☒	
Reactivity (Section 261.23) -	☐	☒	
Eptoxicity (Section 261.24)			
Arsenic mg/L; Lead mg/L	☐	☒	
Barium mg/L; Mercury mg/L	☐	☒	
Cadmium mg/L; Selenium mg/L	☐	☒	
Chromium mg/L; Silver mg/L	☐	☒	

Properties (Appearance/General Description) Viscous liquid to waxy solid.

☒ Liquid	☒ Solid	☐ Wet Cake/Paste	☐ Gas	☐ Single-Phase	☐ Multi-phase
Viscosity (like):		☐ Water	☐ Thin Syrup	☒ Thick Syrup	☒ Jelly/Paste
Density (like):		☒ Water	☐ Lighter Than	☐ Heavier Than	
Water Solubility:		☒ Negligible	☐ Partly	☐ Completely	

TYPICAL COMPOSITION (List Components)	Composition Range (%)
Gelled Hydrocarbon Oil	0-100
Solid Plastic or Polymer Syrup	0-100
Resin Solution	0-100
Acrylic and Styrene Copolymers in Solvents (toluene, xylene)	0-100
Additive Mix	0-100
Stearic Acid, Stearyl Alcohol	
Dodecyl Mercaptan, Methylsalicylate	

(cont'd)

WASTE CODE: 9-3495-G

WASTE NAME: Polymer/Thick Draining - CD

DESCRIPTION OF SOURCE:

Line purges from resin solution manufacture. Gelled containers of waste monomer or hydrocarbon oil. Additive mix line purges from plastic pellets manufacturing.

CONTAINER OPTIONS:

DOT 17E, tight head metal drum
55 gallon - Diameter 22 1/2" - Height 34 3/4"

DOT 17H, reconditioned metal drum
55 gallon - Diameter 22 1/2" - Height 34 3/4" (more or less)

EPA REACTIVITY GROUP NO.: 101

BRISTOL COMPATIBILITY GROUP: [x] Brown [ ] Green [ ] Blue [ ] Orange

STORAGE INSTRUCTION:

Stage drums on waste storage pad in BROWN compatibility section.

DISPOSAL METHOD AND PROCEDURE

[ ] Process Recycle [ ] Power House Fuel [ ] Chemical Sewer

[x] Commercial Disposer [ ] Other

Description of Procedure Incineration or secure landfill at commercial disposer's site. Solidify as necessary.

000079

RCRA:1/17/83

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: 9-3456-G Building: 30, 38, 40, 64, WBT Date: 1/14/83

Waste Name: Filter Media/Dirty Glass - CD

RCRA HAZARD CLASSIFICATION:

			EPA NUMBER
Non-Specific Sources List (Section 261.31)	Yes ☐	No ☒	
Specific Sources List (Section 261.32)	Yes ☐	No ☒	
Acute Hazardous Waste List (Section 261.33e)	Yes ☐	No ☒	
Toxic Wastes List (Section 261.33f)	Yes ☐	No ☒	
Ignitability (Section 261.21) - FLASH POINT below 140 °F	Yes ☒	No ☐	D001
Corrosivity (Section 261.22)			
pH -	Yes ☐	No ☒	
Corrosion Rate - inches/year	Yes ☐	No ☒	
Reactivity (Section 261.23) -	Yes ☐	No ☒	
Eptoxicity (Section 261.24)			
Arsenic mg/L / Lead mg/L	Yes ☐	No ☒	
Barium mg/L / Mercury mg/L	Yes ☐	No ☒	
Cadmium mg/L / Selenium mg/L	Yes ☐	No ☒	
Chromium mg/L / Silver mg/L	Yes ☐	No ☒	

Properties (Appearance/General Description) Spent filter cartridges (or paper); empty, dirty glass (some broken); adsorbent "Oil-Dry", sample vials.

☐ Liquid	☒ Solid	☐ Wet Cake/Paste	☐ Gas	☐ Single-Phase	☒ Multi-phase
Viscosity (like):		☐ Water	☐ Thin Syrup	☐ Thick Syrup	☒ Jelly/Paste
Density (like):		☐ Water	☐ Lighter Than	☒ Heavier Than	
Water Solubility:		☒ Negligible	☐ Partly	☐ Completely	

TYPICAL COMPOSITION (List Components)	Composition Range (%)
Filter cartridges and filter paper	Varies
Dirty glass jars and cans	"
Sample vials (one ounce approximately)	"
- Polymers and non-hazardous liquids	"

(cont'd)

WASTE CODE: 9-3456-G

WASTE NAME: Filter Media/ Dirty Glass - CD

DESCRIPTION OF SOURCE:

Spent filter cartridges from monomer, solvent and polymer solution transfers. Dirty glass from plant and laboratory samplings.

CONTAINER OPTIONS:

DOT 17H, reconditioned metal drum
55 gallon - Diameter 22 1/2" - Height 34 3/4" (more or less)

EPA REACTIVITY GROUP NO.: 101

BRISTOL COMPATIBILITY GROUP: [X] Brown [ ] Green [ ] Blue [ ] Orange

STORAGE INSTRUCTION:

Stage drums on waste storage pad in BROWN compatibility section.

DISPOSAL METHOD AND PROCEDURE

[ ] Process Recycle [ ] Power House Fuel [ ] Chemical Sewer

[X] Commercial Disposer [ ] Other

Description of Procedure Secure landfill at commercial disposer's site.

000081

RCRA:1/17/83

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: 9-3215-G Building: 40,64,78,105,134 Date: 1/14/83

Waste Name: Lab Pack - Flammable - CD

RCRA HAZARD CLASSIFICATION:

			EPA NUMBER
Non-Specific Sources List (Section 261.31)	Yes ☐	No ☒	
Specific Sources List (Section 261.32)	Yes ☐	No ☒	
Acute Hazardous Waste List (Section 261.33e)	Yes ☐	No ☒	
Toxic Wastes List (Section 261.33f)	Yes ☐	No ☒	
Ignitability (Section 261.21) - FLASH POINT below 140 °F	Yes ☒	No ☐	D001
Corrosivity (Section 261.22)			
pH -	Yes ☐	No ☒	
Corrosion Rate - inches/year	Yes ☐	No ☒	
Reactivity (Section 261.23) -	Yes ☐	No ☒	
Eptoxicity (Section 261.24)			
Arsenic mg/L Lead mg/L	Yes ☐	No ☐	*
Barium mg/L Mercury mg/L	Yes ☐	No ☐	
Cadmium mg/L Selenium mg/L	Yes ☐	No ☐	
Chromium mg/L Silver mg/L	Yes ☐	No ☐	

Properties (Appearance/General Description) Small jars of laboratory reagents packed in "Oil Dry" in drum.

☐ Liquid	☒ Solid	☐ Wet Cake/Paste	☐ Gas	☐ Single-Phase	☐ Multi-phase
Viscosity (like):		☐ Water	☐ Thin Syrup	☐ Thick Syrup	☐ Jelly/Paste
Density (like):		☐ Water	☐ Lighter Than	☐ Heavier Than	
Water Solubility:		☐ Negligible	☐ Partly	☐ Completely	

TYPICAL COMPOSITION (List Components) Composition Range (%)

Miscellaneous jars of laboratory reagents, either liquid or solid, DOT Flammable. The liquid and solid samples are segregated in different drums. Jars are stabilized by "Oil Dry" in the drum. Each drum has a Serial Number and packing list attached to the drum and copied to Development, Environmental and Utilities Department.

* Pending examination of packing list.

(cont'd)

WASTE CODE: 9-3215-G

WASTE NAME: Lab Pack - Flammable - CD

DESCRIPTION OF SOURCE:

Obsolete laboratory samples - housecleaning.

CONTAINER OPTIONS:

DOT 17H, reconditioned metal drum, open head
55 gallon - Diameter 22 1/2" - Height 34 3/4" (more or less)

DOT 37A, metal pail with Unichrome lining, open head
55 gallon - Diameter 11 1/4" - Height 13 1/4"

EPA REACTIVITY GROUP NO.: 101

BRISTOL COMPATIBILITY GROUP: [x] Brown [ ] Green [ ] Blue [ ] Orange

STORAGE INSTRUCTION:

Stage drums on waste storage pad in BROWN compatibility section

Pallet - Wooden warehouse pallet, 48" x 48", Specification 2707

DISPOSAL METHOD AND PROCEDURE

[ ] Process Recycle [ ] Power House Fuel [ ] Chemical Sewer

[x] Commercial Disposer [ ] Other

Description of Procedure Secure landfill at commercial disposer's site. Each drum subject to preshipment authorization by the disposer's examination of the drum contents list.

000083

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: 9-3659-G Building: 40,64,78,105,134 Date: 1/14/83

Waste Name: Sample Jars - Flammable - CD

RCRA HAZARD CLASSIFICATION:

	Yes	No	EPA NUMBER
Non-Specific Sources List (Section 261.31)	☐	X	
Specific Sources List (Section 261.32)	☐	X	
Acute Hazardous Waste List (Section 261.33e)	☐	X	
Toxic Wastes List (Section 261.33f)	☐	X	
Ignitability (Section 261.21) - FLASH POINT below 140 °F	X	☐	D001
Corrosivity (Section 261.22)			
pH -	☐	X	
Corrosion Rate - inches/year	☐	X	
Reactivity (Section 261.23) -	☐	X	
Eptoxicity (Section 261.24)			
Arsenic mg/L; Lead mg/L	☐	X	
Barium mg/L; Mercury mg/L	☐	X	
Cadmium mg/L; Selenium mg/L	☐	X	
Chromium mg/L; Silver mg/L	☐	X	

Properties (Appearance/General Description) Sample jars of resin solution, polymer powder and process samples from pilot plant.

X Liquid	☐ Solid	X Wet Cake/Paste	☐ Gas	☐ Single-Phase	X Multi-phase
Viscosity (like):		X Water	X Thin Syrup	X Thick Syrup	☐ Jelly/Paste
Density (like):		X Water	X Lighter Than	X Heavier Than	
Water Solubility:		X Negligible	X Partly	X Completely	

TYPICAL COMPOSITION (List Components)	Composition Range (%)
Resin Samples	Varies
Acrylic polymer in common solvents or neutral oil	"
Process Samples	"
Pilot Plant	"
Plastic Powder Samples	"
Laboratories	"
Adsorbent "Oil Dry" added to hold any liquid	"

(cont'd)

WASTE CODE: 9-3659-G

WASTE NAME: Sample Jars - Flammable - CD

DESCRIPTION OF SOURCE:

Samples left after completion of analysis of production. Process samples from pilot plant.

CONTAINER OPTIONS:

DOT 17H, reconditioned metal drum, open head
55 gallon - Diameter 22 1/2" - Height 34 3/4" (more or less)

EPA REACTIVITY GROUP NO.: 101

BRISTOL COMPATIBILITY GROUP: ☒ Brown ☐ Green ☐ Blue ☐ Orange

STORAGE INSTRUCTION:

Stage drums on waste storage pad in BROWN compatibility section.

Pallet - Wooden warehouse pallet, 48" x 48", Specification 2707

DISPOSAL METHOD AND PROCEDURE

☐ Process Recycle ☐ Power House Fuel ☐ Chemical Sewer

☒ Commercial Disposer ☐ Other

Description of Procedure Secure landfill at commercial disposer's site.

000085

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: 9-3226-G Building: 134 Date: 1/14/83

Waste Name: DPE/Solvent - CD

RCRA HAZARD CLASSIFICATION:

			EPA NUMBER
Non-Specific Sources List (Section 261.31)	Yes ☐	No ☒	
Specific Sources List (Section 261.32)	Yes ☐	No ☒	
Acute Hazardous Waste List (Section 261.33e)	Yes ☐	No ☒	
Toxic Wastes List (Section 261.33f)	Yes ☐	No ☒	
Ignitability (Section 261.21) - FLASH POINT below 140 °F	Yes ☒	No ☐	D001
Corrosivity (Section 261.22)			
pH -	Yes ☐	No ☒	
Corrosion Rate - inches/year	Yes ☐	No ☒	
Reactivity (Section 261.23) -	Yes ☐	No ☒	
Eptoxicity (Section 261.24)			
Arsenic mg/L / Lead mg/L	Yes ☐	No ☒	
Barium mg/L / Mercury mg/L	Yes ☐	No ☒	
Cadmium mg/L / Selenium mg/L	Yes ☐	No ☒	
Chromium mg/L / Silver mg/L	Yes ☐	No ☐	

Properties (Appearance/General Description) Pale to dark colored liquid.

☒ Liquid	☐ Solid	☐ Wet Cake/Paste	☐ Gas	☐ Single-Phase	☐ Multi-phase
Viscosity (like):		☒ Water	☐ Thin Syrup	☐ Thick Syrup	☐ Jelly/Paste
Density (like):		☐ Water	☒ Lighter Than	☐ Heavier Than	
Water Solubility:		☒ Negligible	☐ Partly	☐ Completely	

TYPICAL COMPOSITION (List Components)	Composition Range (%)
Diphenyl ether	5-95
Solvent (toluene, xylene, methanol, etc.)	5-95

(cont'd)

WASTE CODE: 9-3226-G

WASTE NAME: DPE/Solvent

DESCRIPTION OF SOURCE:

Rinse and reaction solvents from pilot plant operations.

CONTAINER OPTIONS:

DOT 17E, tight head metal drum
55 gallon - Diameter 22 1/2" - Height 34 3/4" (more or less)

EPA REACTIVITY GROUP NO.: 101

BRISTOL COMPATIBILITY GROUP: [X] Brown [ ] Green [ ] Blue [ ] Orange

STORAGE INSTRUCTION:

Stage drums on waste storage pad in BROWN compatibility section

Pallet - Wooden warehouse pallet, 48" x 48", Specification 2707

DISPOSAL METHOD AND PROCEDURE

[ ] Process Recycle [ ] Power House Fuel [ ] Chemical Sewer

[X] Commercial Disposer [ ] Other

Description of Procedure Solidification and secure landfill at commercial disposer's site.
Incineration only in burner certified capable of dioxin destruction.

000087

RCRA:1/17/83

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: 9-3195-G Building: 134 Date: 1/14/83

Waste Name: Beads/Solvent - CD

RCRA HAZARD CLASSIFICATION:

			EPA NUMBER
Non-Specific Sources List (Section 261.31)	Yes ☐	No ☒	
Specific Sources List (Section 261.32)	Yes ☐	No ☒	
Acute Hazardous Waste List (Section 261.33e)	Yes ☐	No ☒	
Toxic Wastes List (Section 261.33f)	Yes ☐	No ☒	
Ignitability (Section 261.21) - FLASH POINT below 140 °F	Yes ☒	No ☐	D001
Corrosivity (Section 261.22)			
pH -	Yes ☐	No ☒	
Corrosion Rate - inches/year	Yes ☐	No ☒	
Reactivity (Section 261.23) -	Yes ☐	No ☒	
Eptoxicity (Section 261.24)			
Arsenic mg/L Lead mg/L	Yes ☐	No ☒	
Barium mg/L Mercury mg/L	Yes ☐	No ☒	
Cadmium mg/L Selenium mg/L	Yes ☐	No ☒	
Chromium mg/L Silver mg/L	Yes ☐	No ☒	

Properties (Appearance/General Description) White-to-brown plastic beads, wet with solvent.

☐ Liquid	☒ Solid	☐ Wet Cake/Paste	☐ Gas	☐ Single-Phase	☐ Multi-phase
Viscosity (like):		☐ Water	☐ Thin Syrup	☐ Thick Syrup	☒ Jelly/Paste
Density (like):		☐ Water	☐ Lighter Than	☒ Heavier Than	
Water Solubility:		☒ Negligible	☐ Partly	☐ Completely	

TYPICAL COMPOSITION (List Components)	Composition Range (%)
Ion-exchange/Adsorbent Beads	50-100
(crosslinked styrene or acrylic polymer)	
Solvent (toluene, isopropanol, etc.)	0-50

(cont'd)

WASTE CODE: 9-3195-G

WASTE NAME: Beads/Solvent - CD

DESCRIPTION OF SOURCE:

Off-grade material from pilot plant preparation of experimental material.

CONTAINER OPTIONS:

DOT 17H, reconditioned metal drum, open head
55 gallon - Diameter 22 1/2" - Height 34 3/4" (more or less)

EPA REACTIVITY GROUP NO.: 101

BRISTOL COMPATIBILITY GROUP: [X] Brown [ ] Green [ ] Blue [ ] Orange

STORAGE INSTRUCTION:

Stage drums on waste storage pad in BROWN compatibility section.

Pallet - Wooden warehouse pallet, 48" x 48", Specification 2707

DISPOSAL METHOD AND PROCEDURE

[ ] Process Recycle [ ] Power House Fuel [ ] Chemical Sewer
[X] Commercial Disposer [ ] Other

Description of Procedure Secure landfill at commercial disposer's site.

000089

RCRA:1/17/83

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: 9-3189-G Building: 34 Date: 1/14/83

Waste Name: Lethane Draining - CD

RCRA HAZARD CLASSIFICATION:

			EPA NUMBER
Non-Specific Sources List (Section 261.31)	Yes ☐	No ☒	
Specific Sources List (Section 261.32)	Yes ☐	No ☒	
Acute Hazardous Waste List (Section 261.33e)	Yes ☐	No ☒	
Toxic Wastes List (Section 261.33f)	Yes ☐	No ☒	
Ignitability (Section 261.21) - FLASH POINT below 140 °F	Yes ☒	No ☐	D001
Corrosivity (Section 261.22)			
pH -	Yes ☐	No ☒	
Corrosion Rate - inches/year	Yes ☐	No ☒	
Reactivity (Section 261.23) -	Yes ☐	No ☒	
Eptoxicity (Section 261.24)			
Arsenic mg/L; Lead mg/L	Yes ☐	No ☒	
Barium mg/L; Mercury mg/L	Yes ☐	No ☒	
Cadmium mg/L; Selenium mg/L	Yes ☐	No ☒	
Chromium mg/L; Silver mg/L	Yes ☐	No ☒	

Properties (Appearance/General Description) Black liquid with solid residue on bottom of drum.

☐ Liquid	☒ Solid	☐ Wet Cake/Paste	☐ Gas	☐ Single-Phase	☒ Multi-phase
Viscosity (like):		☒ Water	☐ Thin Syrup	☐ Thick Syrup	☒ Jelly/Paste
Density (like):		☐ Water	☒ Lighter Than	☐ Heavier Than	
Water Solubility:		☐ Negligible	☒ Partly	☐ Completely	

TYPICAL COMPOSITION (List Components)

	Composition Range (%)
2-butoxy-2'-thiocyanodiethyl ether	60-65
Diethylene glycol n-butyl ether	3-5
2-butoxy-2'-chlorodiethyl ether	1-2
Methanol	5-7
Methane sulfonic acid	0.5-1.0
Sodium chloride	18-22
Sodium thiocyanate	5-10

(cont'd)

WASTE CODE: 9-3189-G

WASTE NAME: Lethane Draining - CD

DESCRIPTION OF SOURCE:

Lethane batches aborted because of error.

CONTAINER OPTIONS:

DOT 17E, tight head metal drum
55 gallon - Diameter 22 1/2" - Height 34 3/4" (more or less)

EPA REACTIVITY GROUP NO.: 101

BRISTOL COMPATIBILITY GROUP: [X] Brown [ ] Green [ ] Blue [ ] Orange

STORAGE INSTRUCTION:

Stage drums on waste storage pad in BROWN compatibility section.

Pallet - Wooden warehouse pallet, 48" x 48", Specification 2707

DISPOSAL METHOD AND PROCEDURE

[ ] Process Recycle [ ] Power House Fuel [ ] Chemical Sewer

[X] Commercial Disposer [ ] Other

Description of Procedure Draw liquid layer off drum and blend it with third stage bottoms and burn it as fuel in Powerhouse. Add "Oil Dry" to residue and send it to secure landfill at commercial disposer's site.

000091

RCRA:1/17/83

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: 9-3942-G Building: 30,34,38,39,69,78,111,BR Date: 1/14/83

Waste Name: Monomer Drainings - PH

RCRA HAZARD CLASSIFICATION:

			EPA NUMBER
Non-Specific Sources List (Section 261.31)	Yes ☐	No ☒	
Specific Sources List (Section 261.32)	Yes ☐	No ☒	
Acute Hazardous Waste List (Section 261.33e)	Yes ☐	No ☒	
Toxic Wastes List (Section 261.33f)	Yes ☐	No ☒	
Ignitability (Section 261.21) - FLASH POINT ____ °F	Yes ☒	No ☐	D001
Corrosivity (Section 261.22)			
pH - ____	Yes ☐	No ☒	
Corrosion Rate - ____ inches/year	Yes ☐	No ☒	
Reactivity (Section 261.23) - ____	Yes ☐	No ☒	
Eptoxicity (Section 261.24)			
Arsenic ____ mg/L; Lead ____ mg/L	Yes ☐	No ☒	
Barium ____ mg/L; Mercury ____ mg/L	Yes ☐	No ☒	
Cadmium ____ mg/L; Selenium ____ mg/L	Yes ☐	No ☒	
Chromium ____ mg/L; Silver ____ mg/L	Yes ☐	No ☒	

Properties (Appearance/General Description) Clear to straw color liquid.

☒ Liquid	☐ Solid	☐ Wet Cake/Paste	☐ Gas	☐ Single-Phase	☐ Multi-phase
Viscosity (like):		☒ Water	☐ Thin Syrup	☐ Thick Syrup	☐ Jelly/Paste
Density (like):		☐ Water	☒ Lighter Than	☐ Heavier Than	
Water Solubility:		☐ Negligible	☒ Partly	☐ Completely	

TYPICAL COMPOSITION (List Components)	Composition Range (%)
Acrylic and Methacrylate esters	1-100
Methyl methacrylate, Methyl acrylate, etc.	
Methacrylamide	0-10
Styrene	0-90
Common solvents	0-99
toluene, xylene, methanol, etc.	
Inihibitor - Hydroquinone, etc.	1000 ppm. min.

(cont'd)

WASTE CODE: 9-3942-G

WASTE NAME: Monomer Draining - PH

DESCRIPTION OF SOURCE:

Pump draining. Aborted batch monomer mixes. Laboratory drainings. Sample drainings.

CONTAINER OPTIONS:

DOT 17E, tight end metal drum
55 gallon - Diameter 22 1/2" - Height 34 3/4" (more or less)

EPA REACTIVITY GROUP NO.: 103

BRISTOL COMPATIBILITY GROUP: [X] Brown [ ] Green [ ] Blue [ ] Orange

STORAGE INSTRUCTION:

Stage drums on waste storage pad in BROWN compatibility section.

Pallet - Wooden warehouse pallet, 48" x 48", Specification 2707

DISPOSAL METHOD AND PROCEDURE

[ ] Process Recycle [X] Power House Fuel [ ] Chemical Sewer
[ ] Commercial Disposer [ ] Other

Description of Procedure Blend with third stage bottoms and burn as fuel in Powerhouse.

C00093

RCRA:1/17/83

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: 9-3500-G Building: 66 Date: 1/14/83

Waste Name: IKMA Dust - CD

RCRA HAZARD CLASSIFICATION:

			EPA NUMBER
Non-Specific Sources List (Section 261.31)	Yes ☐	No ☒	
Specific Sources List (Section 261.32)	Yes ☐	No ☒	
Acute Hazardous Waste List (Section 261.33e)	Yes ☐	No ☒	
Toxic Wastes List (Section 261.33f)	Yes ☐	No ☒	
Ignitability (Section 261.21) - FLASH POINT ____ °F	Yes ☐	No ☒	
Corrosivity (Section 261.22)			
pH - ____	Yes ☐	No ☒	
Corrosion Rate - ____ inches/year	Yes ☐	No ☒	
Reactivity (Section 261.23) - ____	Yes ☐	No ☒	
Eptoxicity (Section 261.24)			
Arsenic ____ mg/L; Lead ____ mg/L	Yes ☐	No ☒	
Barium ____ mg/L; Mercury ____ mg/L	Yes ☐	No ☒	
Cadmium ____ mg/L; Selenium ____ mg/L	Yes ☐	No ☒	
Chromium ____ mg/L; Silver ____ mg/L	Yes ☐	No ☒	

Properties (Appearance/General Description) Fine white powder

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☐ Liquid ☒ Solid ☐ Wet Cake/Paste ☐ Gas ☐ Single-Phase ☐ Multi-phase

Viscosity (like): ☐ Water ☐ Thin Syrup ☐ Thick Syrup ☒ Jelly/Paste

Density (like): ☐ Water ☒ Lighter Than ☐ Heavier Than

Water Solubility: ☐ Negligible ☐ Partly ☒ Completely

TYPICAL COMPOSITION (List Components) Composition Range (%)

Potassium methacrylate	100

(cont'd)

WASTE CODE: 9-3500-G

WASTE NAME: IKMA Dust - CD

DESCRIPTION OF SOURCE:

Cleaning fines from baghouse after production of potassium methacrylate in the spray dryer.

CONTAINER OPTIONS:

DOT 17H, reconditioned metal drum, open head
55 gallon - Diameter 22 1/2" - Height 34 3/4" (more or less)

EPA REACTIVITY GROUP NO.: 103

BRISTOL COMPATIBILITY GROUP: [X] Brown [ ] Green [ ] Blue [ ] Orange

STORAGE INSTRUCTION:

Stage drums on waste storage pad in BROWN compatibility section.

Pallet - Wooden warehouse pallet, 48" x 48", Specification 2707

DISPOSAL METHOD AND PROCEDURE

[ ] Process Recycle [ ] Power House Fuel [ ] Chemical Sewer

[X] Commercial Disposer [ ] Other

Description of Procedure Secure landfill at commercial disposer's site.

000095

RCRA:1/17/83

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: 9-3177-G Building: 40,64,78,105,134 Date: 1/14/83

Waste Name: Lab Pack - Oxidizer - CD

RCRA HAZARD CLASSIFICATION:

			EPA NUMBER
Non-Specific Sources List (Section 261.31)	Yes ☐	No ☒	
Specific Sources List (Section 261.32)	Yes ☐	No ☒	
Acute Hazardous Waste List (Section 261.33e)	Yes ☐	No ☒	
Toxic Wastes List (Section 261.33f)	Yes ☐	No ☒	
Ignitability (Section 261.21) - FLASH POINT Oxidizer °F	Yes ☒	No ☐	D001
Corrosivity (Section 261.22)			
pH -	Yes ☐	No ☒	
Corrosion Rate - inches/year	Yes ☐	No ☒	
Reactivity (Section 261.23) -	Yes ☐	No ☒	
Eptoxicity (Section 261.24)			
Arsenic mg/L Lead mg/L	Yes ☐	No ☐	*
Barium mg/L Mercury mg/L	Yes ☐	No ☐	
Cadmium mg/L Selenium mg/L	Yes ☐	No ☐	
Chromium mg/L Silver mg/L	Yes ☐	No ☐	

Properties (Appearance/General Description) Small jars of laboratory reagents packed in "Oil Dry" in drum.

☐ Liquid	☒ Solid	☐ Wet Cake/Paste	☐ Gas	☐ Single-Phase	☐ Multi-phase
Viscosity (like):		☐ Water	☐ Thin Syrup	☐ Thick Syrup	☐ Jelly/Paste
Density (like):		☐ Water	☐ Lighter Than	☐ Heavier Than	
Water Solubility:		☐ Negligible	☐ Partly	☐ Completely	

TYPICAL COMPOSITION (List Components) Composition Range (%)

Miscellaneous jars of laboratory reagents, either liquid or solid, DOT oxidizer. The liquid and solid items are segregated in different drums. Jars are stabilized by "Oil Dry" in the drum. Each drum has a Serial Number and packing list attached to the drum and copied to Development, Environmental and Utilities Department.

* Pending examination of packing list.

(cont'd)

WASTE CODE: 9-3177-G

WASTE NAME: Lab Pack - Oxidizer -CD

DESCRIPTION OF SOURCE:

Obsolete laboratory samples -housecleaning.

CONTAINER OPTIONS:

DOT 17H, reconditioned metal drum, open head
55 gallon - Diameter 22 1/2" - Height 34 3/4" (more or less)

DOT 37A, metal pail with Unichrome lining, open head
5 gallon - Diameter 11 1/4" - Height 13 1/4" (more or less)

EPA REACTIVITY GROUP NO.: 104

BRISTOL COMPATIBILITY GROUP: ☐ Brown ☒ Green ☐ Blue ☐ Orange

STORAGE INSTRUCTION:

Stage drums on waste storage pad in GREEN compatibility section.

Pallet - Wooden warehouse pallet, 48" x 48", Specification 2702

DISPOSAL METHOD AND PROCEDURE

☐ Process Recycle ☐ Power House Fuel ☐ Chemical Sewer

☒ Commercial Disposer ☐ Other

Description of Procedure Secure landfill at commercial disposer's site.

C00097

RCRA:1/17/83

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: 9-3194-G Building: 66, 134 Date: 1/14/83

Waste Name: Plastic/Water - CD

RCRA HAZARD CLASSIFICATION:

			EPA NUMBER
Non-Specific Sources List (Section 261.31)	Yes ☐	No ☒	
Specific Sources List (Section 261.32)	Yes ☐	No ☒	
Acute Hazardous Waste List (Section 261.33e)	Yes ☐	No ☒	
Toxic Wastes List (Section 261.33f)	Yes ☐	No ☒	
Ignitability (Section 261.21) - FLASH POINT ____ °F	Yes ☐	No ☒	
Corrosivity (Section 261.22)			
pH - ____	Yes ☐	No ☒	
Corrosion Rate - ____ inches/year	Yes ☐	No ☒	
Reactivity (Section 261.23) - ____	Yes ☐	No ☒	
Eptoxicity (Section 261.24)			
Arsenic ____ mg/L; Lead ____ mg/L	Yes ☐	No ☒	
Barium ____ mg/L; Mercury ____ mg/L	Yes ☐	No ☒	
Cadmium ____ mg/L; Selenium ____ mg/L	Yes ☐	No ☒	
Chromium ____ mg/L; Silver ____ mg/L	Yes ☐	No ☒	

Properties (Appearance/General Description) Water wet plastic gum or beads

---

☐ Liquid	☒ Solid	☐ Wet Cake/Paste	☐ Gas	☐ Single-Phase	☐ Multi-phase
Viscosity (like):		☐ Water	☐ Thin Syrup	☐ Thick Syrup	☒ Jelly/Paste
Density (like):		☐ Water	☐ Lighter Than	☒ Heavier Than	
Water Solubility:		☐ Negligible	☒ Partly	☐ Completely	

TYPICAL COMPOSITION (List Components)

	Composition Range (%)
Potassium methacrylate polymer	0-90
Ion-exchange beads - crosslinked polymer	0-90
Water	10-50

(cont'd)

WASTE CODE: 9-3194-G

WASTE NAME: Plastic/Water - G

DESCRIPTION OF SOURCE:

Cleaning gum from filter in potassium methacrylate production.

Off-grade beads from pilot plant.

CONTAINER OPTIONS:

DOT 17H, reconditioned metal drum, open head
55 gallon - Diameter 22 1/2" - Height 34 3/4" (more or less)

EPA REACTIVITY GROUP NO.: 106

BRISTOL COMPATIBILITY GROUP: [X] Brown [ ] Green [ ] Blue [ ] Orange

STORAGE INSTRUCTION:

Stage drums on waste storage pad in BROWN compatibility section.

Pallet - Wooden warehouse pallet, 48" x 48", Specification 2707

DISPOSAL METHOD AND PROCEDURE

[ ] Process Recycle [ ] Power House Fuel [ ] Chemical Sewer

[X] Commercial Disposer [ ] Other

Description of Procedure Secure landfill at commercial disposer's site.

000099

RCRA:1/17/83

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: 9-3227-G Building: 134 Date: 1/14/83

Waste Name: DPE/Water - CD

RCRA HAZARD CLASSIFICATION:

			EPA NUMBER
Non-Specific Sources List (Section 261.31)	Yes ☐	No ☒	
Specific Sources List (Section 261.32)	Yes ☐	No ☒	
Acute Hazardous Waste List (Section 261.33e)	Yes ☐	No ☒	
Toxic Wastes List (Section 261.33f)	Yes ☐	No ☒	
Ignitability (Section 261.21) - FLASH POINT ____ °F	Yes ☐	No ☒	
Corrosivity (Section 261.22)			
pH - ____	Yes ☐	No ☒	
Corrosion Rate - ____ inches/year	Yes ☐	No ☒	
Reactivity (Section 261.23) - ____	Yes ☐	No ☒	
Eptoxicity (Section 261.24)			
Arsenic ____ mg/L Lead ____ mg/L	Yes ☐	No ☒	
Barium ____ mg/L Mercury ____ mg/L	Yes ☐	No ☒	
Cadmium ____ mg/L Selenium ____ mg/L	Yes ☐	No ☒	
Chromium ____ mg/L Silver ____ mg/L	Yes ☐	No ☒	

Properties (Appearance/General Description) Pale to dark colored liquid.

☒ Liquid ☐ Solid ☐ Wet Cake/Paste ☐ Gas ☐ Single-Phase ☐ Multi-phase

Viscosity (like): ☒ Water ☐ Thin Syrup ☐ Thick Syrup ☐ Jelly/Paste

Density (like): ☒ Water ☐ Lighter Than ☐ Heavier Than

Water Solubility: ☐ Negligible ☐ Partly ☒ Completely

TYPICAL COMPOSITION (List Components)	Composition Range (%)
Water	Mostly
Dimethyl sulfoxide	Some
Sodium acetate	Some
Diphenyl ethers	Trace

(cont'd)

WASTE CODE: 9-3227-G

WASTE NAME: DPE/Water - CD

DESCRIPTION OF SOURCE:

Pilot plant water waste containing diphenyl ethers.

CONTAINER OPTIONS:

Polyethylene drum (DOT approved), tight head
55 gallon - Diameter 24" - Height 35 3/4" (more or less)

EPA REACTIVITY GROUP NO.: 106

BRISTOL COMPATIBILITY GROUP: [X] Brown [ ] Green [ ] Blue [ ] Orange

STORAGE INSTRUCTION:

Stage drums on waste storage pad in BROWN compatibility section.

Pallet - Wooden warehouse pallet, 48" x 48", Specification 2707

DISPOSAL METHOD AND PROCEDURE

[ ] Process Recycle [ ] Power House Fuel [ ] Chemical Sewer

[X] Commercial Disposer [ ] Other

Description of Procedure Solidification and secure landfill at Commercial disposer's site.
Incineration only in burner certified capable of dioxin destruction.

RCRA:1/17/83

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: 9-3620-G Building: 37 Date: 1/14/83

Waste Name: Extruder Distillate/Water - CD

RCRA HAZARD CLASSIFICATION:

			EPA NUMBER
Non-Specific Sources List (Section 261.31)	Yes ☐	No ☒	
Specific Sources List (Section 261.32)	Yes ☐	No ☒	
Acute Hazardous Waste List (Section 261.33e)	Yes ☐	No ☒	
Toxic Wastes List (Section 261.33f)	Yes ☐	No ☒	
Ignitability (Section 261.21) - FLASH POINT ____ °F	Yes ☐	No ☒	
Corrosivity (Section 261.22)			
pH - ____	Yes ☐	No ☒	
Corrosion Rate - ____ inches/year	Yes ☐	No ☒	
Reactivity (Section 261.23) - ____	Yes ☐	No ☒	
Eptoxicity (Section 261.24)			
Arsenic ____ mg/L Lead ____ mg/L	Yes ☐	No ☒	
Barium ____ mg/L Mercury ____ mg/L	Yes ☐	No ☒	
Cadmium ____ mg/L Selenium ____ mg/L	Yes ☐	No ☒	
Chromium ____ mg/L Silver ____ mg/L	Yes ☐	No ☒	

Properties (Appearance/General Description) Clear to deeply colored liquid.

☒ Liquid	☒ Solid	☐ Wet Cake/Paste	☐ Gas	☐ Single-Phase	☒ Multi-phase
Viscosity (like):	☒ Water	☐ Thin Syrup	☐ Thick Syrup	☐ Jelly/Paste	
Density (like):	☒ Water	☐ Lighter Than	☐ Heavier Than		
Water Solubility:	☐ Negligible	☒ Partly	☐ Completely		

TYPICAL COMPOSITION (List Components)	Composition Range (%)
Water	20-90
Stearic Acid	10-50
Methyl Salicylate	10-70
Methacrylic Ester	0-5
Organic Dye	0 - Trace

(cont'd)

WASTE CODE: 9-3620-G

WASTE NAME: Extruder Distillate/Water - CD

DESCRIPTION OF SOURCE:

Condensate from plastic pellet extruder vent.

CONTAINER OPTIONS:

DOT 17E, tight end metal drum
55 gallon - Diameter 22 1/2" - Height 34 3/4" (more or less)

EPA REACTIVITY GROUP NO.: 106

BRISTOL COMPATIBILITY GROUP: [X] Brown [ ] Green [ ] Blue [ ] Orange

STORAGE INSTRUCTION:

Stage drums on waste storage pad in BROWN compatibility section.

Pallet - Wooden warehouse pallet, 48" x 48", Specification 2707

DISPOSAL METHOD AND PROCEDURE

[ ] Process Recycle [ ] Power House Fuel [ ] Chemical Sewer
[X] Commercial Disposer [ ] Other

Description of Procedure Incineration or solidification and secure landfill at commercial disposer's site.

000103

RCRA:1/17/83

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: 9-3018-G Building: 7 Date: 1/14/83

Waste Name: Methanol Distillation Residue - CD

RCRA HAZARD CLASSIFICATION:

			EPA NUMBER
Non-Specific Sources List (Section 261.31)	Yes [X]	No [ ]	F003
Specific Sources List (Section 261.32)	Yes [ ]	No [X]	
Acute Hazardous Waste List (Section 261.33e)	Yes [ ]	No [X]	
Toxic Wastes List (Section 261.33f)	Yes [ ]	No [X]	
Ignitability (Section 261.21) - FLASH POINT above 140 °F	Yes [ ]	No [X]	
Corrosivity (Section 261.22)			
pH - 7-9	Yes [ ]	No [X]	
Corrosion Rate - 0.011 inches/year*	Yes [ ]	No [X]	
Reactivity (Section 261.23) -	Yes [ ]	No [X]	
Eptoxicity (Section 261.24)			
Arsenic ____ mg/L; Lead ____ mg/L	Yes [ ]	No [X]	
Barium ____ mg/L; Mercury ____ mg/L	Yes [ ]	No [X]	
Cadmium ____ mg/L; Selenium ____ mg/L	Yes [ ]	No [X]	
Chromium ____ mg/L; Silver ____ mg/L	Yes [ ]	No [X]	

Properties (Appearance/General Description) Dark red liquid. Saturated aqueous sodium sulfate with DNCP dispersed; cake sodium sulfate precipitated.

[X] Liquid	[X] Solid	[ ] Wet Cake/Paste	[ ] Gas	[ ] Single-Phase	[X] Multi-phase
Viscosity (like):		[ ] Water	[X] Thin Syrup	[ ] Thick Syrup	[ ] Jelly/Paste
Density (like):		[ ] Water	[ ] Lighter Than	[X] Heavier Than	
Water Solubility:		[ ] Negligible	[X] Partly	[ ] Completely	

TYPICAL COMPOSITION (List Components)	Composition Range (%)
Water	55-65
Sodium Sulfate	15-25
Dinitrocaprylphenol (DNCP)	15-25
Tars	2-4
Sodium nitrate, sulfite, bisulfite	Trace

* Corrosive to metal drum by experience.

(cont'd)

WASTE CODE: 9-3018-G

WASTE NAME: Methanol Distillation Residue - CD

DESCRIPTION OF SOURCE:

This waste is the residue from the distillation recovery of methanol from the spent methanol/water wash used to purify crude dinitrocapryl phenol.

CONTAINER OPTIONS:

This waste is corrosive to steel drums, based on experience.

1. ICC - 37M/2SL, tight head metal drum with polyethylene liner.
   55 gallon - Diameter 22 3/4" - Height 35 1/2" (more or less)
2. Polyethylene drum, tight head (DOT approved)
   55 gallon - Diameter 24" - Height 35 3/4" (more or less)
3. DOT 34, polyethylene drum, tight head
   55 gallon - Diameter 24" - Height 36 3/8" (more or less)

EPA REACTIVITY GROUP NO.: 106

BRISTOL COMPATIBILITY GROUP: [X] Brown [ ] Green [ ] Blue [ ] Orange

STORAGE INSTRUCTION:

Stage drums on waste storage pad in BROWN compatibility section.

Pallet - Wooden warehouse pallet, 48" x 48", Specification 2707

DISPOSAL METHOD AND PROCEDURE

[ ] Process Recycle [ ] Power House Fuel [ ] Chemical Sewer

[X] Commercial Disposer [ ] Other

Description of Procedure Solidification and secure landfill at commercial disposer's site.

C00105

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: 9-3297-G Building: 40,64,78,105,134 Date: 1/14/83

Waste Name: Emulsion Samples - CD

RCRA HAZARD CLASSIFICATION:

			EPA NUMBER
Non-Specific Sources List (Section 261.31)	Yes ☐	No ☒	
Specific Sources List (Section 261.32)	Yes ☐	No ☒	
Acute Hazardous Waste List (Section 261.33e)	Yes ☐	No ☒	
Toxic Wastes List (Section 261.33f)	Yes ☐	No ☒	
Ignitability (Section 261.21) - FLASH POINT ____ °F	Yes ☐	No ☒	
Corrosivity (Section 261.22)			
pH - ____	Yes ☐	No ☒	
Corrosion Rate - ____ inches/year	Yes ☐	No ☒	
Reactivity (Section 261.23) - ____	Yes ☐	No ☒	
Eptoxicity (Section 261.24)			
Arsenic ____ mg/L; Lead ____ mg/L	Yes ☐	No ☒	
Barium ____ mg/L; Mercury ____ mg/L	Yes ☐	No ☒	
Cadmium ____ mg/L; Selenium ____ mg/L	Yes ☐	No ☒	
Chromium ____ mg/L; Silver ____ mg/L	Yes ☐	No ☒	

Properties (Appearance/General Description) Water-based emulsion polymer. Sample jars in "Oil-Dry" or drained/mixed in container.

☒ Liquid	☒ Solid	☐ Wet Cake/Paste	☐ Gas	☐ Single-Phase	☒ Multi-phase
Viscosity (like):		☐ Water	☒ Thin Syrup	☐ Thick Syrup	☒ Jelly/Paste
Density (like):		☐ Water	☐ Lighter Than	☒ Heavier Than	
Water Solubility:		☐ Negligible	☒ Partly	☐ Completely	

TYPICAL COMPOSITION (List Components)

	Composition Range (%)
Emulsion polymer in jars (water-base)	40-60 plastic
"Oil-Dry" to stabilize jars	sufficient to stabilize jars
Emulsion polymer drained/mixed in drum	
Acrylic copolymer plastic	40-60
Water	60-40

(cont'd)

WASTE CODE: 9-3297-G

WASTE NAME: Emulsion Samples - CD

DESCRIPTION OF SOURCE:

Obsolete laboratory samples. Samples left over from specification analysis of production.

CONTAINER OPTIONS:

DOT 17H, reconditioned metal drum, open head
55 gallon - Diameter 22 1/2" - Height 34 3/4" (more or less)

DOT 17E, metal drum, tight head
55 gallon - Diameter 22 1/2" - Height 34 3/4" (more or less)

EPA REACTIVITY GROUP NO.: 106

BRISTOL COMPATIBILITY GROUP: [X] Brown [ ] Green [ ] Blue [ ] Orange

STORAGE INSTRUCTION:

Stage drums on waste storage pad in BROWN compatibility section.

Pallet - Wooden warehouse pallet, 48" x 48", Specification 2707

DISPOSAL METHOD AND PROCEDURE

[ ] Process Recycle [ ] Power House Fuel [ ] Chemical Sewer
[X] Commercial Disposer [ ] Other

Description of Procedure Secure landfill at commercial disposer's site.

C00107

RCRA:1/17/83

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: 9-3677-G Building: 40,64 Date: 1/14/83

Waste Name: Karathane/Water Drainings - CD

RCRA HAZARD CLASSIFICATION:

			EPA NUMBER
Non-Specific Sources List (Section 261.31)	Yes ☐	No ☒	
Specific Sources List (Section 261.32)	Yes ☐	No ☒	
Acute Hazardous Waste List (Section 261.33e)	Yes ☐	No ☒	
Toxic Wastes List (Section 261.33f)	Yes ☐	No ☒	
Ignitability (Section 261.21) - FLASH POINT ____ °F	Yes ☐	No ☒	
Corrosivity (Section 261.22)			
pH - ____	Yes ☐	No ☒	
Corrosion Rate - ____ inches/year	Yes ☐	No ☒	
Reactivity (Section 261.23) - ____	Yes ☐	No ☒	
Eptoxicity (Section 261.24)			
Arsenic ____ mg/L Lead ____ mg/L	Yes ☐	No ☒	
Barium ____ mg/L Mercury ____ mg/L	Yes ☐	No ☒	
Cadmium ____ mg/L Selenium ____ mg/L	Yes ☐	No ☒	
Chromium ____ mg/L Silver ____ mg/L	Yes ☐	No ☒	

Properties (Appearance/General Description) Dark liquid with some sludge packed in jars in "Oil Dry" in drum.

☒ Liquid ☐ Solid ☐ Wet Cake/Paste ☐ Gas ☐ Single-Phase ☒ Multi-phase

Viscosity (like): ☒ Water ☐ Thin Syrup ☐ Thick Syrup ☐ Jelly/Paste

Density (like): ☒ Water ☐ Lighter Than ☐ Heavier Than

Water Solubility: ☐ Negligible ☒ Partly ☐ Completely

TYPICAL COMPOSITION (List Components)	Composition Range (%)
Water	80-99
Karathane/DNCP/Lethane	0.1-20
Pyridine	0-10
Sodium Sulfate	0-10
Various Analytical Reagents	0-10

DNCP - Dinitrocaprvl phenol

(cont'd)

WASTE CODE: 9-3677-G

WASTE NAME: Karathane Water Draining

DESCRIPTION OF SOURCE:

Aqueous solution containing pesticide residues. Spent analytical solutions, equipment rinses. Neutralized to pH 7-9, if necessary.

CONTAINER OPTIONS:

DOT 17H, reconditioned metal drum, open head
55 gallon - Diameter 22 1/2" - Height 34 3/4" (more or less)

EPA REACTIVITY GROUP NO.: 106

BRISTOL COMPATIBILITY GROUP: [X] Brown [ ] Green [ ] Blue [ ] Orange

STORAGE INSTRUCTION:

Stage drums on waste storage pad in BROWN compatibility section.

Pallet - Wooden warehouse pallet, 48" x48", Specification 2707

DISPOSAL METHOD AND PROCEDURE

[ ] Process Recycle [ ] Power House Fuel [ ] Chemical Sewer

[X] Commercial Disposer [ ] Other

Description of Procedure Secure landfill at commercial disposer's site.

000109

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: 9-3217-G Building: 40,64,78,105,134 Date: 1/14/83

Waste Name: Lab Pack - Irritant - CD

RCRA HAZARD CLASSIFICATION:

			EPA NUMBER
Non-Specific Sources List (Section 261.31)	Yes ☐	No ☒	
Specific Sources List (Section 261.32)	Yes ☐	No ☒	
Acute Hazardous Waste List (Section 261.33e)	Yes ☐	No ☒	
Toxic Wastes List (Section 261.33f)	Yes ☐	No ☒	
Ignitability (Section 261.21) - FLASH POINT ____ °F	Yes ☐	No ☒	
Corrosivity (Section 261.22)			
pH - ____	Yes ☐	No ☒	
Corrosion Rate - ____ inches/year	Yes ☐	No ☒	
Reactivity (Section 261.23) - ____	Yes ☐	No ☒	
Eptoxicity (Section 261.24)			
Arsenic ____ mg/L; Lead ____ mg/L	Yes ☐	No ☐	*
Barium ____ mg/L; Mercury ____ mg/L	Yes ☐	No ☐	
Cadmium ____ mg/L; Selenium ____ mg/L	Yes ☐	No ☐	
Chromium ____ mg/L; Silver ____ mg/L	Yes ☐	No ☐	

Properties (Appearance/General Description) Small jars of laboratory reagents packed in "Oil Dry."

☐ Liquid	☒ Solid	☐ Wet Cake/Paste	☐ Gas	☐ Single-Phase	☐ Multi-phase
Viscosity (like):		☐ Water	☐ Thin Syrup	☐ Thick Syrup	☐ Jelly/Paste
Density (like):		☐ Water	☐ Lighter Than	☐ Heavier Than	
Water Solubility:		☐ Negligible	☐ Partly	☐ Completely	

TYPICAL COMPOSITION (List Components) Composition Range (%)

Miscellaneous jars of laboratory reagents, either liquid or solid, DOT Irritant. The liquid and solid items are segregated in different drums. Jars are stabilized by "Oil Dry" in drum. Each drum has a Serial Number and packing list attached to drum and copied to Development, Environmental and Utilities Department.

* Pending examination of packing list.

(cont'd)

WASTE CODE: 9-3217-G

WASTE NAME: Lab Pack - Irritant - CD

DESCRIPTION OF SOURCE:

Obsolete laboratory samples.

CONTAINER OPTIONS:

DOT 17H, reconditioned metal drum, open head
55 gallon - Diameter 22 1/2" - Height 34 3/4" (more or less)

DOT 37A, metal pail with Unichrome lining, open head
5 gallon - Diameter 11 1/4" - Height 13 1/4" (more or less)

EPA REACTIVITY GROUP NO.: _____

BRISTOL COMPATIBILITY GROUP: ☐ Brown ☐ Green ☐ Blue ☐ Orange

STORAGE INSTRUCTION:

The hazard classification and compatibility will be determined by the generating chemist when packing.

Pallet - Wooden warehouse pallet, 48" x 48", Specification 2707

DISPOSAL METHOD AND PROCEDURE

☐ Process Recycle ☐ Power House Fuel ☐ Chemical Sewer

☒ Commercial Disposer ☐ Other _____

Description of Procedure Secure landfill at commercial disposer's site. Each drum subject to preshipment authorization by the disposer based on his examination of the drum contents list.

RCRA:1/17/83

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: 9-3216-G Building: 40,64,78,105,134 Date: 1/14/83

Waste Name: Lab Pack - Corrosive Acid - CD

RCRA HAZARD CLASSIFICATION:

			EPA NUMBER
Non-Specific Sources List (Section 261.31)	Yes ☐	No ☒	
Specific Sources List (Section 261.32)	Yes ☐	No ☒	
Acute Hazardous Waste List (Section 261.33e)	Yes ☐	No ☒	
Toxic Wastes List (Section 261.33f)	Yes ☐	No ☒	
Ignitability (Section 261.21) - FLASH POINT ____ °F	Yes ☐	No ☒	
Corrosivity (Section 261.22)			
pH - < 2	Yes ☒	No ☐	
Corrosion Rate - ____ inches/year	Yes ☒	No ☐	D002
Reactivity (Section 261.23) - ____	Yes ☐	No ☒	
Eptoxicity (Section 261.24)			
Arsenic ____ mg/L Lead ____ mg/L	Yes ☐	No ☐	*
Barium ____ mg/L Mercury ____ mg/L	Yes ☐	No ☐	
Cadmium ____ mg/L Selenium ____ mg/L	Yes ☐	No ☐	
Chromium ____ mg/L Silver ____ mg/L	Yes ☐	No ☐	

Properties (Appearance/General Description) Small jars of laboratory reagents packed in "Oil Dry" in drum.

☐ Liquid	☒ Solid	☐ Wet Cake/Paste	☐ Gas	☐ Single-Phase	☐ Multi-phase
Viscosity (like):		☐ Water	☐ Thin Syrup	☐ Thick Syrup	☐ Jelly/Paste
Density (like):		☐ Water	☐ Lighter Than	☐ Heavier Than	
Water Solubility:		☐ Negligible	☐ Partly	☐ Completely	

TYPICAL COMPOSITION (List Components) Composition Range (%)

Miscellaneous jars of laboratory reagents, either liquid or solid, DOT Corrosive (acid). The liquid and solid items are segregated in different drums. Jars are stabilized by "Oil Dry" in the drum. Each drum has a Serial Number and packing list attached to the drum and copied to Development, Environmental and Utilities Department.

* Pending examination of packing list.

(cont'd)

WASTE CODE: 9-3216-G

WASTE NAME: Lab Pack - Corrosive Acid - CD

DESCRIPTION OF SOURCE:

Obsolete laboratory samples.

CONTAINER OPTIONS:

DOT 17H, reconditioned metal drum, open head
55 gallon - Diameter 22 1/2" - Height 34 3/4" (more or less)

DOT 37A, metal pail with Unichrome lining, open head
5 gallon - Diameter 11 1/4" - Height 13 1/4" (more or less)

EPA REACTIVITY GROUP NO.: _____

BRISTOL COMPATIBILITY GROUP: ☐ Brown ☐ Green ☐ Blue ☐ Orange

STORAGE INSTRUCTION:

The hazard classification and compatibility will be determined by the generating chemist when packing.

Pallet - Wooden warehouse pallet, 48" x 48", Specification 2707

DISPOSAL METHOD AND PROCEDURE

☐ Process Recycle ☐ Power House Fuel ☐ Chemical Sewer

☒ Commercial Disposer ☐ Other _____

Description of Procedure Secure landfill at commercial disposer's site. Each drum subject to preshipment authorization by the disposer based on his examination of the drum contents list.

000113

RCRA:1/17/83

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: 9-3354-G Building: 40, 64, 78, 105, 134 Date: 1/14/83

Waste Name: Lab Pack - Poison B - CD

RCRA HAZARD CLASSIFICATION:

			EPA NUMBER
Non-Specific Sources List (Section 261.31)	Yes ☐	No ☒	
Specific Sources List (Section 261.32)	Yes ☐	No ☒	
Acute Hazardous Waste List (Section 261.33e)	Yes ☐	No ☒	
Toxic Wastes List (Section 261.33f)	Yes ☐	No ☒	
Ignitability (Section 261.21) - FLASH POINT ____ °F	Yes ☐	No ☒	
Corrosivity (Section 261.22)			
pH - ____	Yes ☐	No ☒	
Corrosion Rate - ____ inches/year	Yes ☐	No ☒	
Reactivity (Section 261.23) - ____	Yes ☐	No ☒	
Eptoxicity (Section 261.24)			
Arsenic ____ mg/L Lead ____ mg/L	Yes ☐	No ☐	*
Barium ____ mg/L Mercury ____ mg/L	Yes ☐	No ☐	
Cadmium ____ mg/L Selenium ____ mg/L	Yes ☐	No ☐	
Chromium ____ mg/L Silver ____ mg/L	Yes ☐	No ☐	

Properties (Appearance/General Description) Small jars of laboratory reagents packed in "Oil-Dry" in drum.

☒ Liquid	☒ Solid	☐ Wet Cake/Paste	☐ Gas	☐ Single-Phase	☐ Multi-phas
Viscosity (like):		☐ Water	☐ Thin Syrup	☐ Thick Syrup	☐ Jelly/Past
Density (like):		☐ Water	☐ Lighter Than	☐ Heavier Than	
Water Solubility:		☐ Negligible	☐ Partly	☐ Completely	

TYPICAL COMPOSITION (List Components) Composition Range (%)

Miscellaneous jars of laboratory reagent either liquid or solid, DOT Poison B. The liquid and solid items are segregated in different drums. Jars are stabilized by "Oil-Dry" in the drum. Each drum has a Serial Number and packing list attached to the drum and copied to Development, Environmental and Utilities Department.

* Pending examination of packing list.

(cont'd)

WASTE CODE: 9-3354-G

WASTE NAME: Lab Pack - Poison B - CD

DESCRIPTION OF SOURCE:

Obsolete laboratory samples.

CONTAINER OPTIONS:

DOT 17H, reconditioned metal drum, open-head
55 Gallon - Diameter 22 1/2" - Height 34 3/4" (more or less)

DOT 37A, metal pail with Unichrome lining, open-head
5 gallon - Diameter 11 1/4" - Height 13 1/4" (more or less)

EPA REACTIVITY GROUP NO.: _____

BRISTOL COMPATIBILITY GROUP: ☐ Brown ☐ Green ☐ Blue ☐ Orange

STORAGE INSTRUCTION: The hazard classification and compatibility will be determined by the generating chemist when packing.

Pallet - Wooden warehouse pallet, 48" X 48", Specification 2707

DISPOSAL METHOD AND PROCEDURE

☐ Process Recycle ☐ Power House Fuel ☐ Chemical Sewer

☒ Commercial Disposer ☐ Other _____

Description of Procedure Secure landfill at commercial disposer's site. Each drum subject to preshipment authorization by the disposer based on his examination of the drum contents list.

000115

RCRA:1/17/83

C-2 Waste Analysis Plan
[40 CFR 122.25(a)(3)]

Introduction

This waste analysis plan is to be followed to determine whether a waste is hazardous according to RCRA and to provide the information necessary for proper handling and storage. Most of the time the RCRA Hazards have been defined on the basis of our in-house knowledge and experience. When a new waste is generated, the production or pilot plant unit submits a representative sample and the Waste Disposal Form (Form 2222, see Appendix) to the Environmental Chemist. The Chemical Engineer and/or Process Chemist familiar with the process aids in submission of Form 2222 and is available as an expert resource to the Environmental Chemist. The Environmental Chemist evaluates the Form 2222 information which includes a description of the source, chemical composition and general physical description. Additional information or analytical data are obtained if necessary. In addition to the Chemical Engineer and/or Process Chemist, the Environmental Chemist has many resources to aid him in evaluation of the waste, assignment of RCRA Hazardous Waste Numbers and decisions leading to procedures for handling in storage. These resources include the following handbooks:

1. N. Irving Sax, Dangerous Properties of Industrial Materials
2. Chemical Rubber Company, Handbook of Chemistry and Physics
3. N. A. Lange, Handbook of Chemistry
4. National Fire Protection Association, Fire Protection Guide on Hazardous Materials
5. NIOSH, Registry of Toxic Effects of Chemical Substances
6. J. J. Keller and Associates, Inc., Hazardous Materials Guide - Shipping, Handling and Transportation
7. Rohm and Haas Company, Material Safety Data Sheets Catalog
8. R. E. Kirk and D. F. Othmer, Encyclopedia of Chemical Technology
9. G. G. Hawley, The Condensed Chemical Dictionary
10. Rohm and Haas Delaware Valley Inc., Research Library, Bristol Branch

C-2 Waste Analysis Plan (cont'd)
[40 CFR 122.25(a)(3)]

Our Plant is not a hazardous waste treatment or disposal facility. If we were receiving waste from an outside company for disposal at our site, it would be responsible and necessary for us to run analyses on the waste to check the properties indicated by the generator. In our case, we have been storing wastes generated by our own people who are expert in the source processes and wastes composition and physical description. These experts describe the waste on Form 2222. It is not necessary to obtain additional analytical data to determine composition, and many properties such as flash point, pH and corrosivity can be found in the handbook resources mentioned above, or can be deduced from examination of the composition. If the Form 2222 information is ever insufficient, it is returned for more information. The sample supplied with Form 2222 is primarily useful to provide the Environmental Chemist with a visual familiarity with the waste (consistency, color, phases, odor) and secondarily to provide stock for analysis. In summary, our situation has made it unnecessary to analyze for composition and properties that our own people tell us are present. We have not analyzed for hazards known to be present, and knowledge of our own processes allows us to responsibly deny hazards known to be absent. Analysis for the hazardous constituents or properties known to be present, and so stated, adds nothing to our ability to make the proper decisions for handling the waste or assigning the hazardous waste number. Conversely, we are rigorous in our analysis of any waste which we claim to be non-hazardous and desire to handle as a non-hazardous waste.

In the past our procedures for sampling have followed the spirit and overall principles prescribed in EPA Test Methods (Physical/Chemical) for Evaluating Solid Waste, SW-846, Section One; sufficient sampling to provide a typical representative sample for examination. Waste evaluation (analysis) for RCRA, DOT and other hazards has been based on in-house knowledge and experience. In the future, we propose the sampling and analysis schemes specified in Tables C-3 and C-4, respectively, which are in practical compliance with EPA SW-846.

Wastes which recur regularly from established processes will be reviewed annually or sooner if there is a deliberate change in process or equipment. The Plant Safety Department requires a Health, Safety and Environmental Review whenever there is a process or equipment change.

C-2 Waste Analysis Plan (cont'd)
[40 CFR 122.25(a)(3)]

We receive ignitable wastes from off-site locations within our own company. The solvent/monomer mixtures from Spring House, Croydon and Kensington are burned as fuel in our Power House. The obsolete sample stock from our sales office warehouses at various locations are sent on to the commercial disposer. The off-site location provides a letter of analysis and manifest for the solvent/monomer mixes for the Power House fuels. The Sales warehouses provide a list of the obsolete samples and manifest. The off-site wastes are identified, characterized and assigned compatibility at the off-site locations which are within our own company. Therefore, it is not necessary to resample and analyze this material. The off-site locations are:

1. Rohm and Haas Company
   Spring House Laboratories
   Spring House, PA 19477

2. Rohm and Haas Delaware Valley Inc.
   Croydon Plant, P.O. Box 302
   Bristol, PA 19007

3. Rohm and Haas Connecticut Inc.
   Old Brickyard Lane
   Kensington, CT 06037

4. Rohm and Haas Company
   Branch Office Warehouses
   Charlotte, NC and Southfield, MI

The "Waste Description Report" which is provided for each of our thirty-five generic wastes (Section C-1) collates the information available from all sources, provides a check-list of the RCRA Hazard Classifications and shows the rationale for the hazard classification. In addition, it gives a description of the source, the container options, EPA Reactivity Group Number, compatibility color group, storage instruction and disposal method. The rationale for hazard classification is summarized for all thirty-five generic wastes in Table C-1.

Waste Analysis Plan

1. Determine whether the waste is listed in Sections 261.31 or 261.32. If so, assign the appropriate hazardous waste number.

2. If (1) does not apply, determine whether the waste is a commercial product listed in Section 261.33(e) or (f). If so, assign the appropriate hazardous waste number.

3. Determine whether the waste exhibits any of the characteristics identified in Section 261, Subpart C. Most of the time the characteristics are determined by in-house knowledge and experience. Our resources are described in the Introduction to this Waste Analysis Plan. To confirm the characteristics assigned

C-2 Waste Analysis Plan (cont'd)
[40 CFR Section 122.25(a)(3)]

3. (cont'd)

by in-house knowledge and experience, we will obtain analytical data from in-house laboratories or an outside commercial laboratory and the EPA Test Methods for Evaluating Solid Waste (SW-846, Second Edition) will be followed.

A. Ignitability (261.21)

i. A liquid with flash point less than 140°F.

ii. Not a liquid, but can burn vigorously and persistently to cause a hazard.

iii. An ignitable, compressed gas.

iv. An oxidizer.

B. Corrosive (261.22)

i. Aqueous material with pH equal to or less than 2 or equal to or greater than 12.5.

ii. A liquid which will corrode steel faster than 0.250 inches per year.

C. Reactivity (261.23)

i. Unstable

ii. Reacts violently with water

iii. Forms explosive mixture with water

iv. Generates toxic fumes with water

v. Cyanide or sulfide

vi. Detonates

vii. Designated explosive

We do not store reactive waste at Bristol Plant.

C-2 Waste Analysis Plan (cont'd)
[40 CFR Section 122.25(a)(3)]

3. (cont'd)

D. EP Toxicity (261.24)

i. The extract from the waste contains elements or compounds listed in 40 CFR Section 261.24, Table 1 (Attachment No. 5) in excess of the maximum concentrations indicated.

Any tests for the listed elements or compounds will be made at the discretion of the designated person. The elements of specific interest are:

Arsenic	Lead
Barium	Mercury
Cadmium	Selenium
Chromium	Silver

We do not handle any of the listed pesticide compounds at Bristol Plant.

4. In addition to the applicable analyses which are performed in (3), each waste will be examined for:

A. Appearance

B. Relative Density (liquids only)

C. Relative Water Solubility

D. Relative Viscosity

E. Composition

i. Major constituents

ii. Hazardous or problem constituents

5. The initial analyses will be reviewed and/or repeated as frequently as necessary to assure that the data is accurate and up-to-date. This frequency will be at the discretion of the Environmental Chemist. Manufacturing process changes which could effect the quality of the waste will be cause for resampling and analysis.

C-2 Waste Analysis Plan (cont'd)
[40 CFR Section 122.25(a)(3)]

Analytical Methods

The following analytical procedures will be used to determine if a waste exhibits the specified properties. EPA Test Methods (physical and chemical) for Evaluating Solid Waste, SW-846, Second Edition, specifies the test methods.

In the past our procedures for sampling have followed the spirit and overall principles prescribed in EPA Test Methods (Physical/Chemical) for Evaluating Solid Waste, SW-846, Section One; sufficient sampling to provide a typical representative sample for examination. Waste evaluation (analysis) for RCRA, DOT and other hazards has been based on in-house knowledge and experience. In the future, we propose the sampling and analysis schemes specified in Tables C-3 and C-4, respectively, which are in practical compliance with EPA SW-846.

1. Sampling

   The sampling will be sufficient to provide a typical, representative sample. Refer to SW-846, Second Edition, Section One, Sampling of Solid Waste.

2. Ignitability

   We have in-house capability to run flash point at Laboratory 47, Bristol. Refer to SW-846, Second Edition, Section Two (2.1.1., Ignitability, Method 1020).

3. pH

   We have in-house capability to run pH in the Environmental Laboratory. Refer to SW-846, Second Edition, Section Nine, Method 9040.

4. Corrosivity

   We have in-house capability to run corrosivity at our Spring House Research Laboratories (PRM). In addition, we have the resource of their expert opinion on matters of corrosion. Refer to SW-846, Second Edition, Section Two (2.1.2., Corrosivity).

C-2 Waste Analysis Plan (cont'd)
[40 CFR Section 122.25(a)(3)]

5. Reactivity

Bristol Plant does not store reactive waste. The Environmental Chemist will determine if a material is reactive. Refer to SW-846, Second Edition, Section Two (2.1.3., Reactivity).

6. EP Toxicity

EP toxicity analysis will be run by an independent, outside laboratory. We currently use Analytics, Richmond, Virginia. They use the EPA Method, SW-846, Second Edition, Section Two (2.1.4., Extraction Procedure Toxicity, Method 1310).

7. Appearance

Appearance will be determined by visual inspection of the waste by the Environmental Chemist. This will include the color and consistency (i.e. liquid, solid, wet cake/paste, gas, single phase or multiphase).

8. Compositional Analyses

The concentration of the major hazardous components of the waste will be determined by an appropriate test method. Whenever possible, the procedures described in SW-846, Second Edition, should be used. Since these methods are not all-inclusive nor always applicable, the test used will be at the discretion of the Environmental Chemist in consultation with in-house Analytical Development Laboratory 65.

9. Specific Gravity

Specific gravity of the waste may be determined by the method specified in Standard Methods for the Examination of Water and Waste Water, 15th Edition, Method 213E, page 129.

In some instances, it will be sufficient for the Environmental Chemist to indicate the relative specific gravity (i.e. lighter than, equal to, heavier than water) based upon knowledge of the composition.

C-2 Waste Analysis Plan (cont'd)
[40 CFR Section 122.25(a)(3)]

10. Water Solubility

The Environmental Chemist will describe the water solubility in relative terms (i.e. completely, partly, negligible).

11. Viscosity

The Environmental Chemist will describe the viscosity in relative terms (i.e. completely, partly, negligible).

12. Other Analyses

Any other analyses required to insure that sufficient information is available for the proper handling of the waste will be run. Whenever possible, the procedure described in SW-846, Second Edition, should be used. Since these methods are not always inclusive nor always applicable, the test used will be at the discretion of the Environmental Chemist in consultation with in-house Analytical Development Laboratory 65.

Records

The records of analysis are filed in Laboratory 65 which performs some of the tests or arranges for analyses by an independent, outside laboratory. Duplicate files are maintained in the Environmental Laboratory and at the container storage facility. The information from analyses and general examination of the wastes is collated on the Waste Disposal Form (Form 2222) and on the Waste Description Report (see Appendix for samples of these forms) and filed in the Environmental Laboratory.

GCM:dpmg:2/9/83
RCRA.2

TABLE C-1

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

LIST OF WASTES[c]

WASTE CODE	NAME	HAZARD	BASIS FOR HAZARD DESCRIPTION
9-3314-G	GMAA Type - pH	U008 D001 D002	Acrylic Acid Flash Point below 140°F Corrosive to steel
9-3190-G	Lab Pack - Corrosive Caustic - CD	D002	pH above 12.5
9-3343-G	Alcohol Type - pH	F003 D001	Spent Methanol Flash Point below 140°F
9-3048-G	Ester - CD	F003 D001	Spent Ethyl Acetate Flash Point below 140°F
9-3173-G	Solvent/PCB - CD	D001 F003	Flash Point below 140°F Spent Xylene
9-3451-G	Aromatics - pH	F003 F005 D001	Spent Xylene Spent Toluene Flash Point below 140°F
9-3196-G	Off-Grade C-9211 - CD	D001 D002	Flash Point below 140°F Corrosive to steel
9-3109-G	Halo-Organic Liquid - CD	F002	Spent Tetrachloroethylene Spent Methylene Dichloride
9-3035-G	Halo-Organic Liquid - pH	D001	Flash Point below 140°F
9-3149-G	Ketone - pH	F003 D001	Spent Acetone Flash Point below 140°F
9-3193-G	Mercaptans - CD	D001	Flash Point below 140°F
9-3483-G	Pigmented Plastic - CD	D005 D006 D008	EP Toxicity, Barium 456 mg/L EP Toxicity, Cadmium 19 mg/L EP Toxicity, Lead > 5 mg/L
9-3353-G	Karathane Drainings - pH	D001	Flash Point below 140°F
9-3061-G	Hydrocarbon Draining - pH	D001	Flash Point below 140°F
9-3070-G	Absorbed Spill - CD	D001	Flash Point below 140°F

TABLE C-1 - LIST OF WASTES[c]

WASTE CODE	NAME	HAZARD	BASIS FOR HAZARD DESCRIPTION
9-3284-G	Solvent Draining - pH	D001	Flash Point below 140°F
9-3495-G	Polymer/Thick Drainings - CD	D001	Flash Point below 140°F
9-3456-G	Filter Media/Dirty Jars - CD	D001	Flash Point below 140°F
9-3215-G	Lab Pack - Flammable - CD	D001	Flash Point below 140°F
9-3659-G	Sample Jars - Flammable - CD	D001	Flash Point below 140°F
9-3226-G	DPE/Solvent - CD	D001 F003	Flash Point below 140°F Spent Xylene
9-3195-G	Beads/Solvent - CD	D001	Flash Point below 140°F
9-3189-G	Lethane Draining - CD	D001	Flash Point below 140°F
9-3942-G	Monomer Draining - pH	D001	Flash Point below 140°F
9-3500-G	IKMA Dust - CD	(a)	(a)
9-3177-G	Lab Pack - Oxidizer - CD	D001	Oxidizer
9-3194-G	Plastic/Water - CD	(a)	(a)
9-3227-G	DPE/Water - CD	(a)	(a)
9-3620-G	Extruder Distillate/Water - CD	(a)	(a)
9-3018-G	Methanol Distillation Residue - CD	F003	Spent Methanol Distillation Residue
9-3297-G	Emulsion Samples - CD	(a)	(a)
9-3677-G	Karathane/Water Drainings - CD	(a)	(a)
9-3217-G	Lab Pack - Irritant - CD	(b)	(b)
9-3216-G	Lab Pack - Corrosive Acid - CD	D002	pH less than 2 Corrosive to steel
9-3354-G	Lab Pack - Poison B - CD	(b)	(b)

(a) This waste is not a hazardous waste by RCRA analysis. It is handled as a hazardous waste because it is convenient and environmentally sound practice to contract the treatment, incineration and solidification/ secure landfill services of a commercial disposer qualified to handle hazardous waste, rather than try to qualify this waste for disposal in a facility restricted to non-hazardous waste.

For example, waste 9-3677-G, Karathane/Water Drainings, is not a hazardous waste. It is spent, neutralized, aqueous analytical solutions from quality control analysis of pesticides (Karathane and Lethane) production. The spent solutions are collected in quart jars which are placed in the waste collection drum with sufficient absorbent material to stabilize the jars and absorb the liquid in case of jar breakage. This waste must go to secure landfill even though it is not a hazardous waste. The codisposal landfill in our area will not accept such a waste.

(b) The RCRA hazard classification of this Lab-Pack waste cannot be determined with certainty until the list of drum contents (miscellaneous laboratory reagents) is examined. The laboratory chemist who prepares the Lab-Pack is responsible to assign the appropriate RCRA Hazard Codes.

Lab-Packs are separated to comply with the DOT classification of the contents. Thus, Flammable Liquid, Flammable Solid, Poison B, Oxidizer, etc. substances are consigned to separate drums. The laboratory chemist who prepares the Lab-Pack is responsible for the DOT classification and separation.

(c) In addition to the recurring process waste streams, we occasionally generate non-recurring wastes by discard of commercial products, off-specification species and spills. The potential waste substances drawn from the P-series and U-series lists (Section 261.33) are listed (in Part A). In the event that we generate a waste consisting of any of the substances in Part A (P and U Series), we will handle them as hazardous waste for disposal, including the storage in our isolation cells, if necessary, to assure the separation of non-compatibles.

GCM:dpmg/clk:2/9/83
RCRA

TABLE C-2

ASSIGNMENT OF COMPATIBILITY COLOR-CODES TO THIRTY-FIVE GENERIC WASTES

Compatibility Color	EPA Hazardous Waste Compatibility Chart		Thirty-Five Generic Wastes	
	Reactivity Number	Substance Name	Code Number	Generic Waste Name
Brown	4	Alcohols and Glycols	9-3343G	Alcohol Type - PH
	13	Esters	9-3048G	Ester - CD
	16	Hydrocarbon, aromatic	9-3173G	Solvent/PCB - CD
			9-3451G	Aromatics - PH
	17	Halogenated Organics	9-3196G	Off-Grade C-9211 - CD
			9-3109G	Halo-organic liquid - CD
			9-3035G	Halo-organic liquid - PH
	19	Ketones	9-3419G	Ketone - PH
	27	Nitrocompounds, organic	9-3353G	Karathane Draining - PH
	29	Hydrocarbon, aliphatic, saturated	9-3061G	Hydrocarbon Draining - PH
	101	Combustible, Flammable, miscellaneous	9-3070G	Absorbed Spill - CD
			9-3284G	Solvent Draining - PH
			9-3495G	Polymer/Thick Draining - CD
			9-3456G	Filter Media/Dirty Glass - CD
			9-3215G	Lab Pack-Flammable - CD
			9-3659G	Sample Jars-Flammable - CD
			9-3226G	DPE/Solvent - CD
			9-3195G	Beads/Solvent - CD
			9-3189G	Lethane Draining - CD
	103	Polymerizable Compounds	9-3942G	Monomer Draining - CD
			9-3500G	IKMA Dust - CD
	106	Water and Mixtures Containing Water	9-3194G	Plastic/Water - CD
			9-3227G	DPE/Water - CD
			9-3620G	Extruder Distillate/Water - CD
			9-3018G	Methanol Distillation Residue - CD
			9-3297G	Emulsion Samples - CD
			9-3677G	Karathane/Water - CD

C00127

TABLE C-2

ASSIGNMENT OF COMPATIBILITY COLOR-CODES TO THIRTY-FIVE GENERIC WASTES

Compatibility Color	EPA Hazardous Waste Compatibility Chart		Thirty-Five Generic Wastes	
	Reactivity Number	Substance Name	Code Number	Generic Waste Name
Green	24	Metals and Metal Compounds, toxic	9-3483G	Pigmented Plastic - CD
	104	Oxidizing Agents	9-3177G	Lab Pack-Oxidizer - CD
Blue	10	Caustic	9-3190G	Lab Pack-Corrosive Caustic - CD
	20	Mercaptans and other organic sulfides	9-3193G	Mercaptans - CD
Orange	3	Acids, organic	9-3314G	GMAA Type - PH
	1	Acids, mineral, non-oxidizing	9-3216G	Lab Pack-Corrosive Acid - CD
The hazard clasification and compatibility of these Lab Packs will be determined by the generating chemist when packing.			9-3217G	Lab Pack-Irritant - CD
			9-3354G	Lab Pack-Poison B - CD

C00128

TABLE C-3

METHODS(1) AND FREQUENCY(2) OF SAMPLING HAZARDOUS WASTE

WASTE CODE	WASTE NAME	DESCRIPTION OF SAMPLING	FREQUENCY
9-3314-G	GMAA Type - PH	Composite of top and bottom sample from drum by modified Coliwasa.	Annually
9-3190-G	Lab Pack - Corrosive Caustic - CD	No sample. Evaluate list of contents.	Each drum
9-3343-G	Alcohol Type - PH	Composite of samples from pipe during transport from vessel to tank wagon.	Annually
9-3048-G	Ester - CD	Composite of top and bottom samples from drum by modified Coliwasa.	Annually
9-3173-G	Solvent/PCB - CD	Composite of top and bottom samples from drum by modified Coliwasa.	Annually
9-3451-G	Aromatics - PH	Composite of top and bottom samples from drum by modified Coliwasa.	Annually
9-3196-G	Off-grade C-9211 - CD	Composite of top and bottom samples from drum by modified Coliwasa.	Every lot
9-3109-G	Halo-organic liquid - CD	Composite of top and bottom samples from drum by modified Coliwasa.	Annually

C00129

TABLE C-3

METHODS(1) AND FREQUENCY(2) OF SAMPLING HAZARDOUS WASTE

WASTE CODE	WASTE NAME	DESCRIPTION OF SAMPLING	FREQUENCY
9-3035-G	Halo-organic liquid - PH	Composite of top and bottom sample from drum by modified Coliwasa.	Annually
9-3149-G	Ketone - PH	Composite of top and bottom samples from drum by modified Coliwasa.	Annually
9-3193-G	Mercaptans - CD	Composite of top and bottom samples from drum by modified Coliwasa.	Annually
9-3483-G	Pigmented Plastic - CD	Composite of drum by thief.	Annually
9-3353-G	Karathane Drainings - PH	Composite of top and bottom samples from drum by modified Coliwasa.	Annually
9-3061-G	Hydrocarbon Draining - PH	Composite of top and bottom samples from drum by modified Coliwasa.	Annually
9-3070-G	Adsorbed Spill - CD	Composite of drum by auger.	Annually
9-3284-G	Solvent Draining - PH	Composite of top and bottom samples from drum by modified Coliwasa.	Annually

C00130

TABLE C-3

METHODS(1) AND FREQUENCY(2) OF SAMPLING HAZARDOUS WASTE

WASTE CODE	WASTE NAME	DESCRIPTION OF SAMPLING	FREQUENCY
9-3495-G	Polymer/Thick Drainings - CD	Composite of top and bottom sample from drum by modified Coliwasa or trier.	Annually
9-3456-G	Filter Media/Dirty jars - CD	Inspect contents and take representative sample.	Annually
9-3215-G	Lab Pack - Flammable - CD	No sample. Evaluate list of contents.	Each drum
9-3659-G	Sample jars - Flammable - CD	Remove three random jars.	Annually
9-3226-G	DPE/Solvent - CD	Composite of top and bottom samples from drum by modified Coliwasa.	Annually
9-3195-G	Beads/Solvent - CD	Composite of drums by trier.	Annually
9-3189-G	Lethane Draining - CD	Composite sample of top portion of drum by modified Coliwasa and bottom portion of drum by trier.	Annually
9-3942-G	Monomer Draining - PH	Composite of top and bottom of drum by modified Coliwasa.	Annually

RCRA.3/clk

TABLE C-3

METHODS(1) AND FREQUENCY(2) OF SAMPLING HAZARDOUS WASTE

WASTE CODE	WASTE NAME	DESCRIPTION OF SAMPLING	FREQUENCY
9-3500-G	IKMA Dust - CD	Composite of drum by thief.	Annually
9-3177-G	Lab Pack - Oxidizer - CD	No sample. Evaluate list of contents	Each drum
9-3194-G	Plastic/Water - CD	Composite sample of drum by modified Coliwasa or by trier.	Annually
9-3227-G	DPE/Water - CD	Composite of top and bottom of drum by modified Coliwasa.	Annually
9-3620-G	Extruder Distillate/Water - CD	Composite of top and bottom of drum by modified Coliwasa or trier.	Annually
9-3018-G	Methanol Distillation Residue - CD	Composite sample of top portion of drum by modified Coliwasa and bottom portion of drum by trier.	Annually
9-3297-G	Emulsion Samples - CD	Remove three random jars.	Annually
9-3677-G	Karathane/Water - CD	Remove three random jars.	Annually

C00132

TABLE C-3

METHODS[1] AND FREQUENCY[2] OF SAMPLING HAZARDOUS WASTE

WASTE CODE	WASTE NAME	DESCRIPTION OF SAMPLING	FREQUENCY
9-3217-G	Lab Pack - Irritant - CD	No sample. Evaluate list of contents.	Each drum
9-3216-G	Lab Pack - Corrosive Acid - CD	No sample. Evaluate list of contents.	Each drum
9-3354-G	Lab Pack - Poison B - CD	No sample. Evaluate list of contents.	Each drum

(1) Guidelines from EPA Test Methods (physical and chemical) for Evaluating Solid Waste, SW-846, Second Edition, Section One (1.2).

(2) Sampling will be done sooner than the anniversary time if there is a change in process or equipment which presents the potential for a change in the hazardous condition of the waste. Plant policy requires a Health, Safety and Environmental Review whenever a new process or equipment is started up or whenever there is a change in a process or equipment.

000133

TABLE C-4

PARAMETERS - RATIONALE - TEST METHODS FOR HAZARDOUS WASTES

Waste Code	Waste Name	Parameters	Rationale	Test Method	Reference (1)
9-3314-G	GMAA Type - PH	Flash Point Acrylic Acid	May be ignitable May be present	Setaflash, closed cup Gas chromatograph	Section Two 1020 Section Eight 8015
9-3190-G	Lab Pack - Corrosive Caustic - CD	No analysis	Evaluate list of contents of drum.		
9-3343-G	Alcohol Type - PH	Methanol Flash Point	May be present Ignitable. Methanol flash point is 52°F	Gas chromatograph Setaflash, closed cup	Section Eight 8015 Section Two 1020
9-3048-G	Ester - CD	Ethyl Acetate Flash Point	May be present Ignitable. Ethyl Acetate flash point is 24°F	Gas chromatograph Setaflash, closed cup	Section Eight 8015 Section Two 1020
9-3173-G	Solvent/PCB - CD	Polychloro-biphenyl Xylene Flash Point	PCB is toxic hazard May be present Ignitable solvents	Gas chromatograph Gas chromatograph Setaflash, closed cup	Section Eight 8080 Section Eight 8020 Section Two 1020
9-3451-G	Aromatics - PH	Xylene Toluene Flash Point	May be present May be present Ignitable. Flash point of Toluene - 40°F, Xylene 81°F	Gas chromatograph Gas chromatograph Setaflash, closed cup	Section Eight 8020 Section Eight 8020 Section Two 1020
9-3196-G	Off-Grade C-9211 - CD	Identify component	Non-recurring	Pilot plant data	-----
9-3109-G	Halo-organic liquid - CD	Identify component	Tetrachloroethylene Methylene Chloride	Gas chromatograph Gas chromatograph	Section Eight 8010 Section Eight 8010
9-3035-G	Halo-organic liquid - PH	Flash Point	May be ignitable	Setaflash, closed cup	Section Two 1020
9-3149-G	Ketone - PH	Acetone Flash Point	May be present Ignitable, Acetone flash point is 0°F	Gas chromatograph Setaflash, closed cup	Section Eight 8015 Section Two 1020
9-3193-G	Mercaptans - CD	Flash Point Functional group identity	May be ignitable Mercaptan, Sulfoxide	Setaflash, closed cup Infra red	Section Two 1020 Laboratory 65

000134

TABLE C-4

PARAMETERS - RATIONALE - TEST METHODS FOR HAZARDOUS WASTES

Waste Code	Waste Name	Parameters	Rationale	Test Method	Reference (1)
9-3483-G	Pigmented Plastic - CD	Cadmium, Barium, Lead	Barium/Cadmium/Lead salts expected	EP Toxicity	Section Two 1310
9-3353-G	Karathane Drainings - PH	Flash Point	May be ignitable	Setaflash, closed cup	Section Two 1020
9-3061-G	Hydrocarbon Draining - PH	Flash Point	May be ignitable	Setaflash, closed cup	Section Two 1020
9-3070-G	Adsorbed Spill - CD	Flash Point	May be ignitable	Setaflash, closed cup	Section Two 1020
9-3284-G	Solvent Draining - PH	Flash Point	Ignitable solvents	Setaflash, closed cup	Section Two 1020
9-3495-G	Polymer/Thick Drainings - CD	Flash Point	May be ignitable	Setaflash, closed cup	Section Two 1020
9-3456-G	Filter Media/Dirty Jars - CD	Flash Point	May be ignitable	Setaflash, closed cup	Section Two 1020
9-3215-G	Lab Pack - Flammable - CD	No analysis	Evaluate list of contents of drum		----
9-3659-G	Sample Jars - Flammable - CD	Flash Point	May be ignitable	Check jar label or Setaflash, closed cup	Existing in-house data, Section 1020
9-3226-G	DPE/Solvent - CD	Flash Point Xylene, Methanol, Toluene	May be ignitable May be present	Setaflash, closed cup Gas chromatograph	Section Two 1020 Section Eight 8015, 8020
9-3195-G	Beads/Solvent - CD	Flash Point	May be ignitable	Setaflash, closed cup	Section Two 1020
9-3189-G	Lethane Draining - CD	Flash Point	May be ignitable	Setaflash, closed cup	Section Two 1020
9-3942-G	Monomer Draining - PH	Flash Point	May be ignitable. Methyl Methacrylate flash point is 50°F	Setaflash, closed cup	Section Two 1020
9-3500-G	IKMA Dust - CD	pH of 5% solution in water	May be corrosive	pH meter	Section Nine 9040, modified
9-3177-G	Lab Pack - Oxidizer - CD	No analysis	Evaluate list of contents of drum.		

TABLE C-4

PARAMETERS - RATIONALE - TEST METHODS FOR HAZARDOUS WASTES

Waste Code	Waste Name	Parameters	Rationale	Test Method	Reference (1)
9-3194-G	Plasic/Water - CD	pH of 5% slurry	May be corrosive	pH Meter	Section Nine 9040, modified
9-3227-G	DPE/Water - CD	pH	May be corrosive	pH Meter	Section Nine 9040
9-3620-G	Extruder Distillate/Water - CD	pH	May be corrosive	pH Meter	Section Nine 9040
9-3018-G	Methanol Distillation Residue - CD	Methanol Flash Point pH	May be present Should be above 140°F Should be 6-9	Gas chromatograph	Section Eight 8015 Section Two 1020 Section Nine 9040
9-3297-G	Emulsion Samples - CD	Flash Point	Look for packing error	Setaflash, closed cup	Section Two 1020
9-3677-G	Karathane/Water - CD	pH	Should be neutralized	pH Meter	Section Nine 9040
9-3217-G	Lab Pack - Irritant - CD	No analysis	Evaluate list of contents of drum		----
9-3216-G	Lab Pack - Corrosive Acid - CD	No analysis	Evaluate list of contents of drum		----
9-3354-G	Lab Pack - Poison B - CD	No analysis	Evaluate list of contents of drum		----

(1) Unless otherwise specified - EPA Test Methods (Physical and Chemical) For Evaluating Solid Waste, SW-846, Second Edition.

GCM:dpmg:2/9/83
RCRA.4

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

ste Code: _____ Building: _____ Date: _____

W-ste Name: _____

RCRA HAZARD CLASSIFICATION: EPA NUMBER

Non-Specific Sources List (Section 261.31)	Yes ☐	No ☐	_____
Specific Sources List (Section 261.32)	Yes ☐	No ☐	_____
Acute Hazardous Waste List (Section 261.33e)	Yes ☐	No ☐	_____
Toxic Wastes List (Section 261.33f)	Yes ☐	No ☐	_____
Ignitability (Section 261.21) - FLASH POINT _____ °F	Yes ☐	No ☐	_____
Corrosivity (Section 261.22)			
pH - _____	Yes ☐	No ☐	_____
Corrosion Rate - _____ inches/year	Yes ☐	No ☐	_____
Reactivity (Section 261.23) - _____	Yes ☐	No ☐	_____
Eptoxicity (Section 261.24)			
Arsenic _____ mg/L Lead _____ mg/L	Yes ☐	No ☐	_____
Barium _____ mg/L Mercury _____ mg/L	Yes ☐	No ☐	_____
Cadmium _____ mg/L Selenium _____ mg/L	Yes ☐	No ☐	_____
Chromium _____ mg/L Silver _____ mg/L	Yes ☐	No ☐	_____

Properties (Appearance/General Description) _____

☐ Liquid	☐ Solid	☐ Wet Cake/Paste	☐ Gas	☐ Single-Phase	☐ Multi-phase
scosity (like):		☐ Water	☐ Thin Syrup	☐ Thick Syrup	☐ Jelly/Paste
nsity (like):		☐ Water	☐ Lighter Than	☐ Heavier Than	
ater Solubility:		☐ Negligible	☐ Partly	☐ Completely	

YPICAL COMPOSITION (List Components) Composition Range (%)

_____

_____

_____

_____

_____

_____

_____

_____

Figure C-1

C00137

SECTION D

PROCESS INFORMATION

The information provided in this section is submitted in accordance with the requirements of 40 CFR Part 122.25(b)(1). Other regulations addressed to complete this section include 40 CFR Sections 264.17, 264.175, 264.264, and 264.177.

The Bristol Plant currently stores hazardous waste under interim status standards. With the submission of RCRA Part B and after receiving an approved permit, the Bristol Plant plans to upgrade the current storage facility on the following schedule:

Event	Months After Receipt of Approved Permit
1. Receipt of approved permit	Start
2. Allocation of funds	3 months
3. Issue roof structure purchase order	5
4. Issue foundation and pad construction purchase order	7
5. Construction start	8
6. Construction finish	9
7. Contingency (mainly weather)	12

The completion time from the receipt of an approved permit to an operational upgraded container storage facility is twelve months.

This section discusses specific process information for the storage of containers on the upgraded, 7,500 square foot container storage facility. The designs and specifications submitted here are all certified by a registered professional engineer.

The Bristol Plant does not store hazardous wastes in tanks, waste piles, and surface impoundments. Also, the Bristol Plant does not own or operate an incinerator.

D-1 Containers
[40 CFR 122.25(b)(1)]

D-1a Containers With Free Liquids

The maximum operational inventory of drums in storage at any given time during the life of the facility is not expected to exceed 300 drums. The present container storage area, which is located outdoors at the northeast end of the facility, is currently storing 200 drums. Drummed waste includes polymer/thick drainings, alcohols and methanol distillation residues, all of which contain free liquids. Consequently, specific information provided in this section will follow a format required for containers storing free liquids.

There is 7,500 square feet in the container storage area, 310 square feet for ramp areas providing forklift access to each of the storage cells, 399 square feet for sump areas, and 3,425 square feet for aisle space. The remaining 3,366 square feet is actual storage area and is divided into 17 containment sections separated by curbs to permit the storage of incompatible wastes. A plan view and cross-sectional view of the container storage area is provided in Figure D-1. Storage cells A-AA, B, C, D and E can each store 128 drums stacked two-drums high (total 640 drums). Storage cells F, G, H, J, K, L, M, N, P, R, S and T can each hold 32 drums stacked two-drums high (total 384 drums). The total drum storage capacity of the storage facility is 1,024 drums (55 gallon size); however, the maximum number routinely stored is 300 drums.

D-1a(1) Description of Containers
[40 CFR Sections 264.171 and 264.172]

There are 18 different Bristol Plant coded drum containers used to store waste at the facility. Of these, 17 are regulated by Pennsylvania Department of Transportation specifications and one is non-regulated. The various types can be broken down, as follows:

Drum Size

1.	5 gallon	-	4 types
2.	40-50 gallon	-	1
3.	55 gallon	-	13

Drum Material

1.	Polyethylene	-	2 types
2.	Metal	-	16

D-1a(1) Description of Containers (cont'd)
[40 CFR Sections 264.171 and 264.172]

Drum Interior

1.	Plain	-	6 types
2.	Coated	-	10
3.	Lined	-	2

For more detail, see Table D-1. The drums are either low carbon steel or polyethylene and meet the Pennsylvania DOT specifications (see Appendix D). Only new or reconditioned clean drums are used for storage of wastes, intended for shipment, for disposal. Wastes stored for reuse/recovery for heat value in our Power House boiler use either new or recycled drums. (The recycled drums are managed, see Section F, to allow only compatible materials in each drum.) The waste containers are color-coded (via painting) by the generating department according to compatibility, as shown in Section C, Table C-2.

Stenciling is done by the generating department to identify the waste. Proper shipping labels, as per Pennsylvania DOT regulations, are added by the container storage facility operator just prior to shipping off-site for disposal.

Each waste described in the Waste Description Report (see Section C), has several container options. These options were arrived at by considering the compatibility of each waste to the container. It must be noted that in many instances, metal containers with both plain and coated interiors are listed. This shows that the plain interiors (uncoated) are the prime storage containers and meet all the compatibility considerations, and the other drums (coated, etc.) are replacement types available for use.

The Bristol Plant has had many years of experience in determining how to receive, store and ship our raw materials, intermediates, products, and waste materials and this experience is routinely considered when establishing waste/container compatibility. Specific corrosion testing data for monomers, organic acids and solvents is included in Appendix D; generally the processing of these materials accounts for the largest quantities of our hazardous wastes for disposal. In addition, compatibility information is available from the textbooks listed in Section C. Also, see the Waste Description Report sheets in Section C.

D-1a(2) Container Management Practices
[40 CFR Section 264.173]

Prior to transfer to the container storage area, wastes are placed in the proper containers by the generating departments. The drums are sealed, stencil identified, color coded and palletized by compatibility. The drums are transferred, one pallet load at a time, by forklift truck to the container storage area. Here the forklift operator checks with the container storage area operator who verifies that the drums are stencil identified, color coded and secure. If the drums are ready for storage, the container storage operator stamps the day's date on the drum, records the receipt in the operating log, and directs the forklift driver to the proper storage cell, based on the color-coded compatibility for the drums. The cells are color identified to match the incompatibility color codes. If the drums fail to meet the storage standards, they are returned to the generating department for correction. There are four color codes for compatibility: brown, green, blue and orange, and 17 cells in the storage area. This allows for ample space and flexibility in the storing of containers by compatibility and the isolation of incompatibles for the following:

1. Routinely generated washes, as listed in Section C.

2. Non-routine discards of raw materials, as listed in Section A.

3. Future modifications to the waste generation list.

The drums are stored on pallets (see Figure D-1) to elevate them from contact with standing liquids. If necessary, the 55-gallon drums are stacked two high (less than nine feet). The maximum width and depth of a group of containers does not exceed the equivalent of eight 55-gallon drums wide by eight 55-gallon drums deep. Aisle space of at least six feet separates the groups and is maintained at all times. A main aisle twelve feet wide is maintained through the storage area.

To reduce the potential for accidents, vehicular traffic on the pad is limited, by pad design, to forklift activity when adding or removing pallets of waste material. Emergency access is provided through the pad's narrow (60 feet), open design and with a 30 foot wide roadway around the storage pad for movement of emergency equipment, e.g. fire trucks, snow plows, etc. The storage facility is located away from any source of open flames and any other sources of ignition. The storage area is covered with a roof (see Figure D-1), therefore, few drums will actually receive full sunlight. No reactive wastes are stored at the facility. Once waste materials are put into drums by the generating departments, there are very few occasions, if any, for the drum to be reopened. The hazardous waste containers are not opened, handled or stored in a manner that may cause them to rupture or to leak. The storage facility and containers are inspected weekly (see Section F-2).

D-1a(3) Secondary Containment System Design and Operation
[40 CFR Sections 122.25(b)(1) and 264.175(b)]

The container storage pad is constructed of re-inforced concrete, designed for live loads of 1,000 lbs./square foot. A pallet 4 foot x 4 foot holding a maximum of 5,000 pounds (eight 55-gallon drums plus two pallets) would exert a live load of 312 pounds per square foot, well within the storage pad design. The cell storage area is seamless with the expansion joints located on aisle or walkways. All containers stored in the facility will be on pallets (see Appendix for specifications), e.g. four 55-gallon drums on a four foot square pallet. Based on the storage pad design (see Figure D-1) and the maximum number of drums that could be stored in each cell, the following is a verification of the spill holding capacity.

A. Storage

Cell	Maximum Storage Gallons	Maximum Storage Ft.^{3}*	Containment Necessary (10%) Gallons	Containment Necessary (10%) Ft.^{3}
A/AA	7,040	941.2	704	94.1
B, C, D, E	7,040 each	941.2 each	704 each	94.1 each
F, G, H, J, K, L, M, N, P, R, S, T	1,760 each	235.3 each	176 each	23.5 each

* 1 Ft.^{3} = 7.48 gallons

B. Containment

Cell	Sump Vol. (Ft.^{3})	Sloped Cell Volume Total Cell (Ft.^{3})	Sloped Cell Volume - Submerged Pallet Vol. (Ft.^{3})	Sloped Cell Volume - Net Cell (Ft.^{3})	Total Ft.^{3} Sump and Cell
A/AA	265	118	30	88	353
B, C, D, E	86 each	38 each	13 each	25 each	111 each
F, G, H, J, K, L, M, N, P, R, S, T	21 each	11 each	3 each	8 each	29 each

D-1a(3) Secondary Containment System Design and Operation (cont'd)
[40 CFR Sections 122.25(b)(1) and 264.175(b)]

C. Containment Comparision

Cell	Containment Necessary Gallons	Ft.3*	Containment Provided Gallons	Ft.3
A/AA	704	94.1	2,640	353
B, C, D, E	704 each	94.1 each	830 each	111 each
F, G, H, J, K, L, M, N, P, R, S, T	176 each	23.5 each	217 each	29 each

The above comparison shows that there is sufficient spill holding capacity to contain 10% of the total volume of the containers in each cell and the entire volume of the largest container (55-gallon drum). It should be noted that there is a significant surplus of containment provided in cell A/AA. This is in anticipation of future needs when containers larger than a 55-gallon drum might be used. (Any container change such as this would be submitted following the permit modification procedure.)

The concrete pad will be maintained in good condition, free of any gaps, holes or cracks. The concrete is compatible with all materials stored. 6 to 8.5 inch high curbs within the storage area were constructed as partitions to isolate the various cells for the storage of incompatible wastes in the same storage facility. The base of the storage facility is constructed of six foot (minimum) thick reinforced concrete and the surface in each storage cell is sloped 1% (1/8 inch per foot) toward its respective sump area. Cell areas are poured without joints, i.e. all expansion joints are located on elevation 18.0 walkways.

The pad will be regularly inspected as discussed in Section F-2 to ensure that it remains impervious and in good condition. A portable, submersible pump (see description and specifications in Appendix D) and hoses (see specifications in Appendix D) will be stored on the pad for emergency use. With the roof on the storage facility deflecting rainfall from the pad and the storage facility elevation (two inches above grade at the southwest corner to several feet at the northeast corner) preventing run-on, the only containment requiring pumping will be from spills on the pad. The pump is capable of pumping up to 125 gallons per minute (regulated by valve and depending on characteristics of waste) to provide rapid transfer to emergency containers. This will prevent overflow of the collection system from precipitation or spills.

D-1a(3) Secondary Containment System Design and Operation (cont'd)
[40 CFR Sections 122.25(b)(1) and 264.175(b)]

Run-on is prevented from entering the storage facility by two ways. The storage pad is elevated above grade: two inches at the southwest corner to several feet at the northeast corner. Also, the land immediately surrounding the containment area is graded to encourage drainage away from the area.

The safety and security of the facility is provided by the Bristol Plant safety and security systems, as per Section F.

D-1a(4) Removal of Liquids From Collection System

All seventeen storage cells have their own separate collection sump. A portable submersible pump (see design and specification sheet in Appendix D) is provided along with the appropriate lengths of hose (see specification sheet in Appendix D). Since precipitation (rainfall/run on) is prevented by design (roof/elevation), the collection liquid of concern would be from a spill. The separate storage cells and separate sumps provide that only compatible materials are collected in each sump. Therefore, in the event of a spill, the collected materials are pumped (rate up to 125 GPM, but normally controlled at about 20 to 25 GPM) to drums compatible to the spilled material. All spilled material and decontamination solvents will be handled and disposed of as hazardous materials.

D-1b Containers Without Free Liquids

All the containers managed by the Bristol Plant can and do contain free liquids; therefore, Sections D-1b, D-1b(1), D-1b(2), D-1b(3), and D-1b(4) are not applicable.

D-2 Tanks
[40 CFR 122.25(b)(2)]

The Bristol Plant does not manage any tanks storing hazardous materials for disposal; therefore, this section is not applicable.

D-3 Waste Piles
[40 CFR Section 122.25(b)(4)(i) and (ii)]

The Bristol Plant does not manage any waste piles; therefore, this section is not applicable.

D-4 Surface Impoundments
[40 CFR Sections 122.25(b)(3) and 264.220-264.223]

The Bristol Plant does not manage any surface impoundments of hazardous materials; therefore, this section is not applicable.

D-5 Incinerators
[40 CFR Sections 122.25(b)(5) and 264.340-264.351]

The Bristol Plant does not manage an incinerator; therefore, this section is not applicable.

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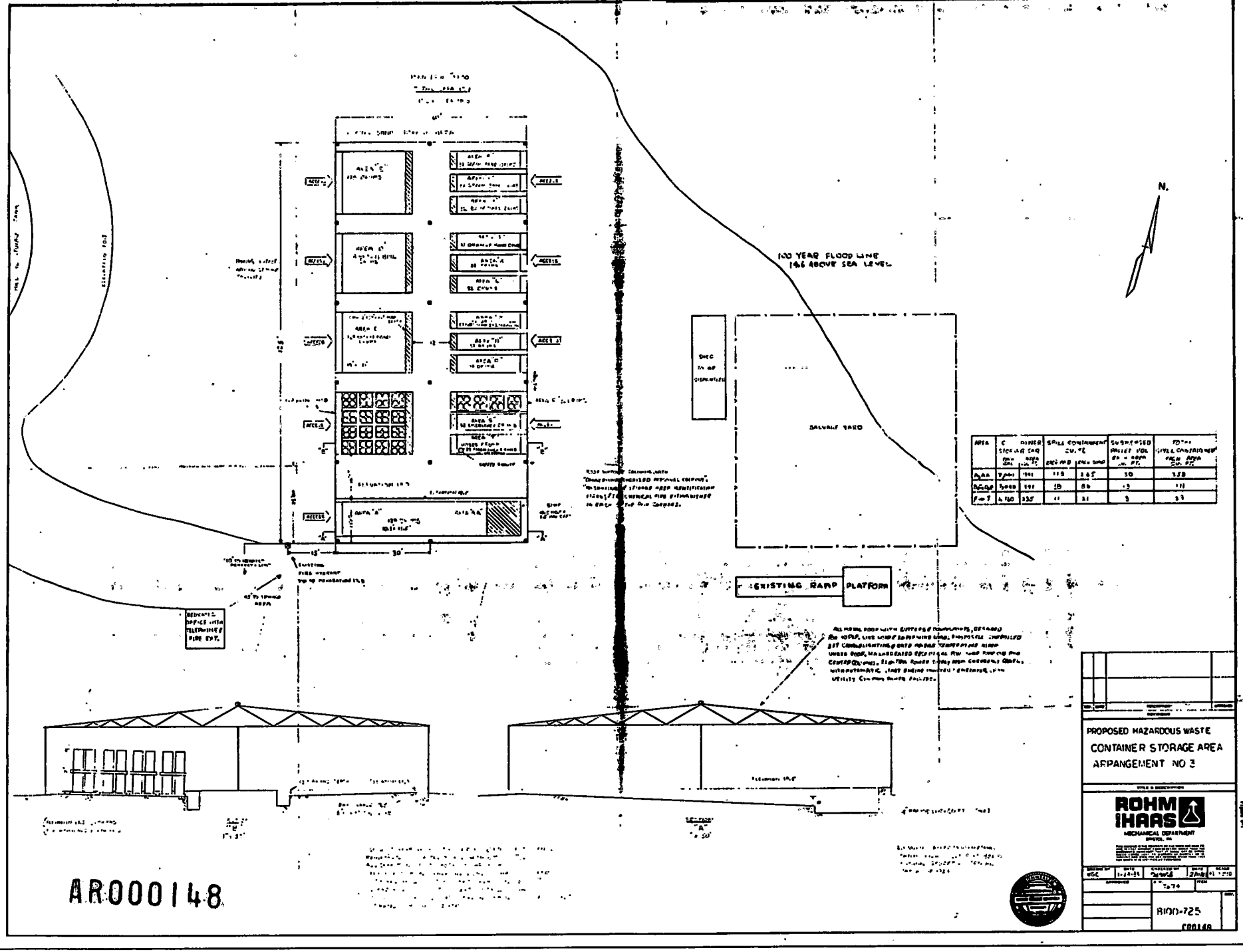
RCRA.4

TABLE D-1

SUMMARY OF DRUM, PAIL AND PALLET SPECIFICATIONS*

CODE	DOT	DESCRIPTION	COMMENT
0014	---	40-50 gallon, metal open-head	Used for Modified PVC dust
1546	17E	55-gallon, metal tight head	Plain interior
1538	17E	55-gallon, metal tight head	Phosphatized interior
1519	17E	55-gallon, metal open head	Lacquer interior
1542	17E	55-gallon, metal tight head	Phosphatized interior
1528	17E	55-gallon, metal tight head	Phosphatized interior
1558	17E	55-gallon, metal tight head	Phosphatized interior
1552	17E	55-gallon, metal tight head	Polyethylene lining
1568	17E	55-gallon, metal tight head	Unichrome interior
1535	17H	55-gallon, metal open head	Plain interior
1565	17H	55-gallon, metal open head	Rust inhibited interior
1586	37M/25L	55-gallon, metal tight head	Polyethylene insert
8954	Ex/7035	55-gallon, polyethylene tight head	
8959	34	55-gallon, polyethylene tight head	Reconditioned
1002	37A	5-gallon, metal open head	Unichrome interior
1006	17E	5-gallon, metal tight head	Plain interior
1053	37A	5-gallon, metal tight head	Inland 1C-25 interior
1060	17E	5-gallon, metal tight head	Inland 1C-25 interior
2707	---	Wooden warehouse pallet, 48" x 48" x 6"	

*For complete specifications by code number, see Appendix D.


100 YEAR FLOOD LINE
146 ABOVE SEA LEVEL
N.
SALVAGE YARD
EXISTING RAMP
PLATFORM
30'
PROPOSED HAZARDOUS WASTE
CONTAINER STORAGE AREA
ARRANGEMENT NO 3
ROHM HAAS
MECHANICAL DEPARTMENT
R100-725
C00148

AR000148

E

000149

SECTION E

GROUND WATER MONITORING SYSTEMS
[40 CFR Section 265.90-265.94]

The requirements for ground water monitoring are not applicable to a storage facility such as the facility owned and operated by the Bristol Plant.

F

SECTION F

PROCEDURES TO PREVENT HAZARDS

The information provided in this section is submitted in accordance with the requirements of 40 CFR Section 122.25(a)(4), (5), (6), (8), and (9). Other regulations addressed to complete this section include 40 CFR Section 264.14, 264.15, 264.17, and 264.174.

The Bristol Plant will address the following subject areas (referenced above): general security provisions; inspection schedule; request for a waiver of preparedness and prevention requirements; spill prevention, containment, and countermeasures plan; and prevention of accidental ignition or reaction of ignitable, reactive or incompatible wastes.

F-1 Security

F-1a Security Procedures and Equipment
[40 CFR Section 122.25(a)(4) and 264.14]

The Bristol Plant storage facility is located within the Bristol Plant manufacturing facility. The security of the storage facility relies on the security measures taken to protect the manufacturing plant. In addition to the general plant security provisions such as security guards, perimeter fencing and lighting, several other features assure the safety and security of the plant. Television cameras monitor movement around the plant entrances. A public address system services all parts of the plant 24 hours a day. An internal telephone system (with phones in most plant areas) is provided - selected emergency phones have direct public address capabilities. The same telephone system is used for communications outside the plant. A fire alarm system is provided and tested daily to assure reliability.

Employees are required to use a magnetically coded identification card to activate a gate/turnstile for entrance to the plant. Visitors and contractors must sign a log sheet and be issued an identification card before entrance is possible.

F-1a(1) 24-Hour Surveillance System
[40 CFR Section 264.14(b)(1)]

Trained plant protection officers maintain 24-hour security at the Bristol Plant. The security is monitored using four remote television cameras with monitors located in the plant Guard House. Duplicate monitors are located in the office of the plant's Safety and Health Director. The field of vision of the cameras is indicated in Figure F-1.

F-1a(1) 24-Hour Surveillance System
[40 CFR Section 264.14(b)(1)]

All traffic entering and exiting the plant is monitored by the plant protection officers; pedestrian traffic (employees, visitors and contractors) through the identification card system; and vehicular traffic (cars, trucks and rail) through the identification card/temporary pass system and access gates remotely controlled from inside the Guard House.

The Guard House is manned 24 hours a day with one guard per shift except the 8 to 4 shift, Monday through Friday, when two guards are on duty. Guards normally work an 8-hour shift.

F-1a(2) Barrier and Means to Control Entry
[40 CFR Section 264.14(b)(2)(i) and (ii)]

The entire Bristol Plant, except for two parking lots and some idle land, is surrounded by a chain link fence (see Figure F-2). The fence specifications are as follows:

1. Type - chain link, galvanized steel
2. Height - 6.0 feet
3. Gauge - No. 6
4. Posts - 2-1/4" diameter, galvanized steel, every 10.0 feet
5. Fence Top - No. 12.5 barbed wire, three strands, 5-1/2 inches apart facing into the Plant at an angle of 45°

There are two controlled access points for foot traffic into the plant. One is for Research personnel and is controlled by an electronic gate which is monitored remotely by a television camera in the Guard House, Building 12 (see Figures F-1 and F-2). The other access point is at the plant Guard House which is manned 24-hours a day. Personnel on foot may enter the plant through three electronically activated turnstiles located within the Guard House. The gate access system uses a Rusco magnetically encoded card with identity pictures, and is controlled using a Data General computer. The access status of the card varies with the needs of the card holder (employee, contractor, visitor).

There is a controlled gate between the plant and the Rohm and Haas Plastic Engineering Laboratory. This gate is activated by the magnetically encoded cards and is monitored remotely by a television camera.

F-1a(2) Barrier and Means to Control Entry (cont'd)
[40 CFR Section 264.14(b)(2)(i) and (ii)]

Vehicular traffic (cars, trucks and rail) enters the plant with either an encoded identification card or through the issuance of a temporary gate pass, after presenting proper identification. There are three access gates located at the Guard House:

1. Main Vehicular Entrance - always closed, opened by either an encoded identification card or by the security guards.

2. Secondary Vehicles (including rail) Entrance - always closed; used usually for rail traffic; sometimes used for other vehicular traffic.

3. Railroad Entrance - always closed, used only for rail traffic.

In addition to the controlled access gates listed above, there are emergency gates located along the length of fence (see Figure F-2). These gates are six feet high and eight feet wide and are constructed with the same specifications as the fence. These gates are master locked at all times and are only used for unusual or emergency situations. The keys are restricted and available only through the Guard House and the Safety and Health Director and they must be logged out.

In addition to the fence which completely surrounds the plant, the following natural barriers exist (see Figure F-2). In the southern and southwestern quadrant are two bodies of water, Lake Idaline and Schmidt's Lake. In the northeast quadrant is Otter Creek.

F-1a(3) Warning Signs
[40 CFR Section 264-14(c)]

Warning signs are located at each gate and are legible from a distance of at least 25 feet and are OSHA approved. These signs bear the following legend:

Danger: Unauthorized Personnel
Keep Out

No smoking signs legible from a distance of at least 25 feet are located at the main entrance of the Plant. Except for designated areas, smoking within the Plant is prohibited at all times.

F-1b Waiver
[40 CFR Section 264.14(a)]

The Bristol Plant does not request a waiver of the requirements stated in Section 264.14(a)(1) and (2).

F-2 Inspection Schedule
[40 CFR 122.25(a)(5), 264.15]

The Bristol Plant Inspection Schedule (Table F-1) is subdivided into General Inspection Requirements (Part A) and Specific Process Requirements (Part B). Inspection procedures or frequencies recommended by the manufacturer for equipment or structures are included. This inspection schedule is kept at the facility.

F-2a General Inspection Requirements
[40 CFR 264.15(a) and (6) and 264.33]

The inspection schedule lists the safety, emergency and security devices, and monitoring, operating and structural equipment that is inspected. The inspection schedule includes areas inside and outside of buildings and where hazardous waste is handled.

F-2a(1) Types of Problems
[40 CFR 264.15(b)(3)]

The inspection schedule identifies the types of problems that are looked for during the inspection (e.g., malfunctions, deteriorations, leaks, etc.).

F-2a(2) Frequency of Inspection
[40 CFR Section 264.15(b)(4)]

The schedule identifies the frequency of inspection for items on the schedule and the department responsible for conducting the inspection. The frequency is based on the rate of possible deterioration of the equipment and the probability of an environmental or human health incident if the deterioration, malfunction or operator error should go undetected between inspections. Areas subject to spills, such as loading and unloading areas, are inspected daily when in use.

F-2b Specific Process Inspection Requirements

F-2b(1) Container Inspection
[40 CFR 264.174]

Inspections of the container storage area will be conducted per the inspection schedule provided in Table F-1, Part B. The results of each inspection will be recorded on inspection log sheets entitled "Container Storage Area Inspection Log Sheet". The log sheet includes the inspector's name, title and/or clock number, date and time of inspection, items of inspection, typical problems encountered, status of the item, observations made, and the date and nature of repairs and remedial action. Typical problems encountered with each item of inspection, included in the inspection schedule, are provided on the log sheet to serve as a reminder to the inspector and to ensure a complete inspection. The inspector is required to check the status of each item and indicate whether its condition is acceptable or unacceptable. Regardless of the status, observations are made as to the number of containers, aisle space, height of container, stacking, cell inventory, etc. If the status of a particular item is unacceptable, appropriate information is recorded, including date and nature of repairs/remedial action. Generally the inspection will cover container integrity, stencil/label/color code compliance, cell/pad inventory and overall condition of the storage facility. A sample log sheet is included in Appendix F. The inspection logs are maintained by the Material Control Department and are available as part of the operating log at the waste storage facility.

Other security, safety and emergency inspections as per the General Inspection Requirements (Part A) are conducted and records are maintained by the specified responsible departments.

F-2c Remedial Actions
[40 CFR Sections 264.15(c) and 264.255]

Any deterioration or malfunction of equipment, structures or containment revealed by the inspection will be remedied on a schedule that prevents an environmental or human health hazard. If inspections reveal that non-emergency maintenance is needed, the repairs will be completed to prevent further damage and reduce the need for emergency repairs. If a hazard is imminent or has already occurred, remedial actions will be taken immediately.

In the event of an emergency involving the release of hazardous constituents to the environment, efforts will be directed towards containing the hazard. If unsuccessful, the Bristol Plant will notify the appropriate authorities per the Contingency Plan (see Section G for further details). If the containment efforts are successful, efforts will be directed toward removing the hazard and decontaminating the affected area.

F-2d Inspection Logs
[40 CFR 264.15(d)]

The container storage facility inspection log is maintained for each calendar year, as part of the operating log, in a three-ring binder at the waste storage facility. The inspection log sheets are entered by date. Where a specific container storage area item shows a three time unacceptable status check, a case history sheet will be prepared showing in more detail the problem and the corrective action (including dates) taken to return the item to an acceptable condition. This case history sheet will be entered in the three-ring binder. All case history sheets will be kept for at least three years. A copy of the inspection log sheet is included in Appendix F.

The general Bristol Plant security and local safety and emergency inspections are conducted by the various responsible departments as outlined in Table F-1. The inspection records are retained by the responsible departments for at least three years. All inspection records include the date and time of inspection, name of inspector, a notation of the observations made, and the date and nature of any repair or other remedial actions.

F-3 Waiver of Preparedness and Prevention Requirements
[40 CFR Section 122.25(a)(6), 264.32 and 264.35]

The Bristol Plant does not wish to request a waiver of the preparedness and prevention requirements under 40 CFR Section 264, Subpart C. Requirements of this Subpart are primarily addressed in Section D, Section F, and Section G of this application.

F-3a Equipment Requirements
[40 CFR Section 264.32]

Internal and external communications, emergency equipment and fire control equipment are discussed in Sections F and G.

F-3b Aisle Space Requirements
[40 CFR Section 264.35]

Aisle space requirements are addressed in Sections D, F and G.

F-4 Preventive Procedures, Structures and Equipment
[40 CFR Section 122.25(a)(8)]

F-4a Loading/Unloading Operations
[40 CFR Section 122.25(a)(8)(i)]

Loading operations at the facility, other than removal operations at the container storage area, take place in the processing and laboratory (small quantity) areas. The waste generated is loaded into drums or on occasion, a tank truck (for recycle as feed in our Power House boilers) for transport to the container storage facility. During the loading operation, spills are unlikely; however, in the event of an accident the material will be contained with sandbags, standard industrial absorbents, absorbent booms, pads and sheets. Contaminated materials will be shipped by an EPA authorized hauler to a permitted hazardous waste landfill and affected areas of the facility and equipment will be decontaminated. Additional protection is provided when loading a tank truck in that the truck is located in a diked area so that spilled materials will be contained and with operator attendance the quantities would be small. Prior to transport to the container storage area, the drums are sealed, properly color coded and stenciled and loaded onto pallets. The drums are transported to the storage facility by forklift trucks. The storage facility is constructed for easy on/off access by the forklift trucks. To minimize the possibility of drums falling during transport no more than four drums per load is allowed. If an accident should occur during transport, sandbag stations are located throughout the plant and at the container storage facility for rapid containment. In addition, absorbent materials are on site and quickly available. Also, the forklift trucks are equipped with two-way mobile FM radios, thus providing rapid response of manpower and equipment to any emergency call.

Wastes are delivered to the container storage area via both forklift trucks and tractor trailers. The forklift trucks secure their palletized load in the appropriate storage cell. The palletized drums in the tractor trailers are unloaded with forklift trucks using a standard industrial access ramp. The drums are secured in the appropriate storage cell. The operations of the forklift trucks, when moving wastes to and around the storage facility are no different than their operations throughout the Bristol Plant. Accidents are rare but if they should occur, containment and cleanup is rapid, as discussed above.

Wastes are shipped via EPA authorized haulers to permitted hazardous waste disposers. The loading of tractor trailers is similar to the unloading operations above; a forklift truck and the access ramp are used to load palletized drums on the tractor trailers for shipment. Any accidents would be handled as above.

F-4b Runoff
[40 CFR Section 122.25(a)(8)(ii)]

The storage facility has a roof to prevent rain from falling on the pad, essentially eliminating all routine runoff problems. However, as backup to this and to contain spills from any drum accidents that could occur, the storage facility is designed so that each storage cell is sloped and drains to its own catch basin. Each cell's containment system is greater than 10% of the maximum volume the cell can store. Collections of material in the catch basins will be handled as the waste contained in the cell. These collections will be removed in a timely fashion to maintain the 10% containment capability and the material will be handled and disposed of as the hazardous waste contained in the storage cell.

F-4c Water Supplies
[40 CFR Section 122.25(a)(8)(iii)]

Ground water contamination is averted by preventing the discharge of hazardous materials onto unprotected ground. The container storage area is constructed with an impervious base, dikes and catch basins to prevent any contaminated discharge from leaving the pad. Refer to Section D for a complete description of the design and construction of the container storage area.

F-4d Equipment and Power Failure
[40 CFR Section 122.25(a)(8)(iv)]

In the event of a power failure, generators will supply power to emergency lighting systems within the Plant. The Guard House, container storage area and the plant evacuation alarm are on the emergency power system. Since the storage facility utilizes only forklift trucks, equipment failures would have no adverse effects. Refer to the Emergency Procedures in the Contingency Plan, Section G, for more details.

F-4e Personnel Protection Equipment
[40 CFR Section 122.25(a)(8)(v)]

The Bristol Plant administers an initial and continuous training program detailing the use of proper protective equipment. Material Safety Data Sheets (MSDS), see sample in Appendix F, provide specific information (e.g. MSDS, Section VI - Spill or Leak Procedure, Section VII - Special Protection Information) on the chemicals handled at the plant and are available to each employee. Standard Operating Procedures include the necessary safety equipment needed on the job. A list of the personnel protection equipment utilized in the plant appears in Section G. First Aid is available at all times, see the Contingency Plan, Section G, for details.

F-5 Prevention of Ignition or Reaction of Ignitable, Reactive or Incompatible Wastes

F-5a Precautions to Prevent Ignition or Reaction of Ignitable or Reactive Waste
[40 CFR Sections 122.25(a)(9) and 264.17(a)]

The container storage area is the only area on the facility property where ignitable wastes are stored prior to shipment to a disposal facility. (Ignitable wastes, both listed and characteristic, are handled in containers and tanks, but are reused as fuel in our Power House boilers. All containers and tanks are at least 50 feet from the property line and are subject to all plant rules and regulations concerning no smoking and sources of ignition, as discussed later in this Section.) No reactive wastes are stored at the facility. (Prior to storage wastes that could possibly polymerize are inerted with the addition of inhibiting chemicals to levels exceeding that of finished product shipments.) The containers, as discussed in Section D-1, are compatible with the contained wastes; therefore, the only source of ignition is external to the containers.

The storage of ignitable wastes under a roof out of the direct sunlight minimizes a possible source of external ignition. An explosion proof motor and connections on the storage facility sump pump also minimize external ignition. No processing operations are near the container storage pad. Spark proof tools are used for any work on the storage pad near ignitable materials. "No Smoking" signs are posted at the plant entrance and around the pad.

F-5b General Precautions for Handling Ignitable or Reactive Wastes or to Prevent Accidentally Mixing Incompatible Wastes
[40 CFR Sections 122.25(a)(9), 264.17(b)]

General precautions for handling ignitable waste were discussed above. No reactive wastes, as discussed above, are stored in the container storage area. The precautions to prevent accidental mixing of incompatible wastes are discussed below in Sections F-5c and F-5d.

F-5c Management of Ignitable or Reactive Wastes in Containers
[40 CFR Sections 122.25(b)(1)(iii)]

Precautions taken in the container storage area to prevent accidential fire and explosion include the proper storage of containers (e.g. stacking, aisle space, labeling and sealing of containers), dikes, sump areas and a sump pump, and appropriate warning signs.

F-5c Management of Ignitable or Reactive Wastes in Containers (cont'd)
[40 CFR Sections 122.25(b)(1)(iii)]

Prior to being transferred to the storage area, each container is sealed, stenciled with waste identification information and color coded for compatibility identification. Before waste containers are entered into storage they are inspected at the storage pad by the operator in charge of the waste storage area to make sure the drums are secure and properly identified. Drums passing inspection are date stamped, logged in, and entered into storage in the appropriate cell, as per compatibility color code. They are stored on pallets to minimize contact with leaks or spills and they are never stacked more than nine feet high. The storage pad design restricts the forklift activity on the storage pad to entering and leaving one cell at a time thereby reducing the opportunity for accidents. Drums not passing inspection are returned to the generating site for correction. See Section F-5d for a brief description of the container management program.

The container storage area is located 90 feet from the closest company property line (see Figure B-1) which is in compliance with the National Fire Code Standards for outdoor storage of containers holding ignitable wastes.

F-5d Management of Incompatible Wastes in Containers
[40 CFR Sections 122.25(b)(1)(iii) and 264.177]

The management of wastes in containers in the Bristol Plant has been on-going since the 1950's. Color coded drums have been used to segregate wastes by compatibility for reuse/recovery of materials as fuel in our Power House boilers. In order to accommodate compatibility segregation for storage, in addition to burning, modifications to our procedure were made.

As part of the container management procedure, an operating log is maintained by the hazardous waste storage facility operator. This log records the movement to and location of each drum of hazardous waste stored on the pad, see Log Sheet Appendix F. (A computer program to handle this tracking is being investigated.) The log is divided into three sections:

- Hazardous Waste Data
- Manifest Documents
- Inspection

The first section contains log sheets detailing the movement of each drum of hazardous waste to and from the storage facility. A blank Container Storage Area Log Sheet is located in the Appendix F. The information on these sheets is used to prepare the quarterly report.

F-5d Management of Incompatible Wastes in Containers (cont'd)
[40 CFR Sections 122.25(b)(1)(iii) and 264.177]

The Waste Anaysis Sheets for each waste are kept on file at the storage facility and are referenced on the Log Sheet. During the hours of 4:30 p.m. and 8:00 a.m., the Night Superintendent and the Safety Shift Supervisor have access to these files in the event of an incident at the facility. The second section contains the copy of the manifest document which accompanies each offsite shipment of hazardous waste received, and a copy of each manifest document which accompanies each shipment of hazardous waste for disposal. The active manifest documents are stored at the container storage area. The completed documents are stored at the Material Control Department. The third section contains the inspection schedule and the inspection log sheets for the facility. See Section F-2 of this application for details.

A copy of the reports, detailing any incidents at the facility which require the implementation of the contingency plan, is kept on file by the Development, Environmental and Utility (DEU) Department. Also, all closure cost estimates for the facility are kept on file by the DEU Department.

A brief description of our container management program follows:

1. Drummed Waste from Manufacturing or Research Pilot Plant Sources

Wastes are collected in color coded drums in accordance with written instructions from the Development, Environmental and Utilities Department (DEU). The color codes are assigned to each waste to embrace compatible substances within a color and separate incompatible substances into different colors. The compatibility color groups have been assigned by DEU based upon the EPA Hazardous Waste Compatibility chart (see Appendix C). The drum is stenciled with the legend (example):

Waste Code Number:	9-3109G (3679)
Waste Name:	Halo-Organic Liquid
Building No:	134

on the color code band around the mid-section of the drum. The drums are palletized by color code; only one color to a pallet. When drums are ready for transfer to the waste storage pad, the foreman calls for a forklift truck to execute the transfer. The forklift dispatches authorized transfers to the waste storage pad only on Monday through Friday, between 8 a.m. and 2 p.m.

F-5d Management of Incompatible Wastes in Containers (cont'd)
[40 CFR Sections 122.25(b)(1)(iii) and 264.177]

1. Drummed Waste from Manufacturing or Research Pilot Plant Sources (cont'd)

In case of emergency, the Night Superintendent or General Services Manager may authorize night time or weekend transfers to an empty emergency cell, one center band color per storage pad cell. In such cases, a note describing the source of the off-hours-delivered waste and its location on the pad is left at the waste storage pad operator's office. The waste storage pad operator will date-stamp the drums and move this waste from the emergency cell to an appropriate section of the pad with advice from DEU, if necessary, and log in the transfer.

When the forklift operator arrives during the day shift at the waste storage pad, he checks in with the waste storage pad operator (by radio if necessary). The waste storage pad operator inspects the waste drums, date-stamps each drum on the color band, logs in the shipment, and instructs the forklift operator on where to store them, in an appropriate cell by color code. If the waste pad operator's visual inspection of the drums reveals any real or potential improper packaging, stencilling, or color coding, he returns the drums to their source and notifies DEU.

Any wastes which are consigned by DEU for reuse by burning as Power House fuel are collected in drums which have a white band around the bottom section in addition to the brown or orange compatibility band around the mid section. The white band allows the waste storage pad operator to quickly identify material to be burned. There are no burnable green or blue band materials. The white band (or supplemental fuel) materials are subject to the compatibility rules for separation indicated by the color bands (brown and orange) painted around the mid-section. These drums may be recycled for collecting of waste, but the color bands (brown/orange) keep their color identity and remain non-interchangeable. Thus, when the Production Department needs to package a burnable waste, orange/white or brown/white is specified in accordance with DEU instructions. The drums received may be new or used, but if used, then compatible by mid-section color is followed. White banded drums are not used to collect non-burnable waste. (However, if a packaged burnable waste degrades during storage and becomes too viscous to pump to the Power House, it is reclassified for hazardous waste disposal in the white banded drum.)

F-5d Management of Incompatible Wastes in Containers (cont'd)
[40 CFR Sections 122.25(b)(1)(iii) and 264.177]

1. Drummed Waste from Manufacturing or Research Pilot Plant Sources (cont'd)

To reuse/recover the wastes designated for burning as boiler fuel, the waste storage pad operator will pull drums with white bands around the bottom sections from a specific color coded compatibility cell and transfer them to the area set aside for handling the boiler fuel pumping operation. The emptied drums (to less than one inch residue) are placed in restricted storage for use only as white band recycleables by color code compatibility. If an emptied drum contains more than one inch of residue, it is disposed of as a hazardous waste.

To prevent a build-up of inventory, the waste storage pad operator will assemble drums from the pad for shipment to the commercial disposer. Shipments will consist of compatible wastes only (only one color code to each load). The waste storage pad operator will apply the DOT proper shipping name, UN or NA number by stencil, affix the appropriate DOT hazard label and prepare the shipping manifest. Wastes which are consigned by DEU to go to the commercial disposer are collected in new or clean reconditioned drums; they are not recycled back to Bristol Plant.

When a new material is discarded because of overage, contamination or obsolesence, the suppliers' drum is used if it is in good condition. Any drum that is not in shippable condition because it has been damaged, will be placed in a recovery drum (85 gallon). Waste 9-3483G Pigmented Plastic is packaged in used metal drums (Code 0014) which are in good condition. This waste does not require a DOT drum.

2. Drummed Wastes from Off-Site Sources

Bristol Plant receives waste materials from other locations within the Company. Materials from the Croydon Plant (adjacent) are transferred to our waste storage pad in accordance with all the rules and procedures described above for the Bristol intra-plant handling operations. The Croydon wastes are included in the lists of wastes for Bristol Plant. Croydon wastes are delivered directly to the Bristol waste storage pad operator who receives their manifest and logs in the shipment. The Croydon materials include Power House fuel and hazardous wastes for transfer to the commercial disposer.

F-5d Management of Incompatible Wastes in Containers (cont'd)
[40 CFR Sections 122.25(b)(1)(iii) and 264.177]

2. Drummed Wastes from Off-Site Sources (cont'd)

Materials from Spring House Laboratories and Kensington Plant (Connecticut) are limited to materials which are designated for Power House fuel. They are delivered to the Bristol waste storage pad operator who receives their manifest and logs in the shipment.

Materials from Sales Office warehouse are returned to the originating plant (Bristol). DEU examines these items and assigns the appropriate disposition. They are delivered to the Bristol waste storage pad operator who receives their manifest and logs in the shipment.

3. Bulk Waste

There are two listed hazardous waste streams which are transferred by bulk tank wagon from the manufacturing area to the Power House pumping station for burning as fuel. These wastes are Spent Methanol/BDMA and Spent Toluene/Coatings. They are compatible substances based on the EPA Hazardous Waste Compatibility Chart (Appendix C). These solvents are not corrosive and they are transported in two tank wagons interchangeably. Tank wagon 968 (Heil) is stainless steel (304) construction with a capacity of 4,650 gallons. Tank Wagon 876 (Frazin) is steel construction with a capacity of approximately 5,000 gallons. The wastes are compatible to both containers. The tank wagons are filled at the generation site and taken to the Power House for burning. They are always located at least 50 feet from the facility property line.

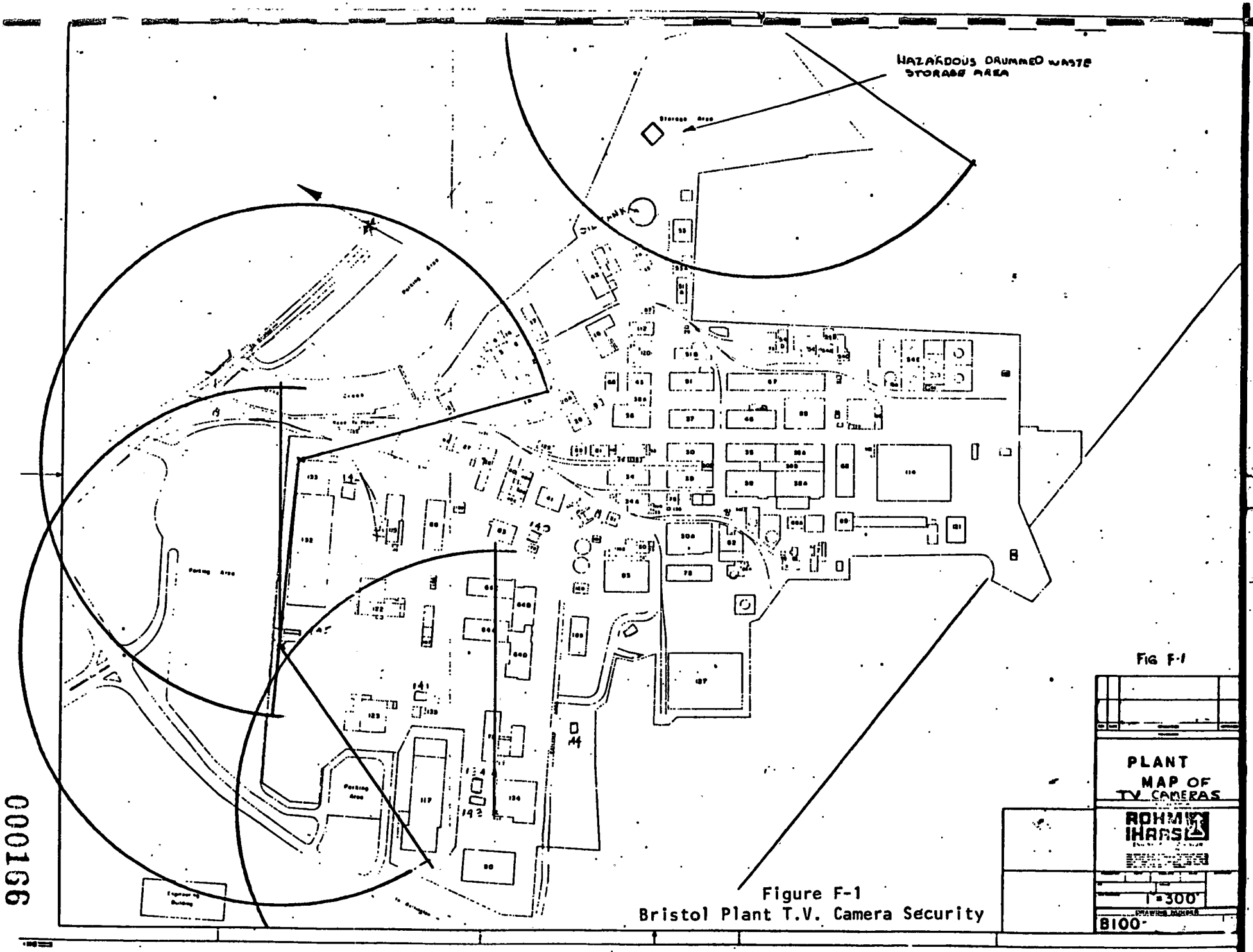


Figure F-1
Bristol Plant T.V. Camera Security

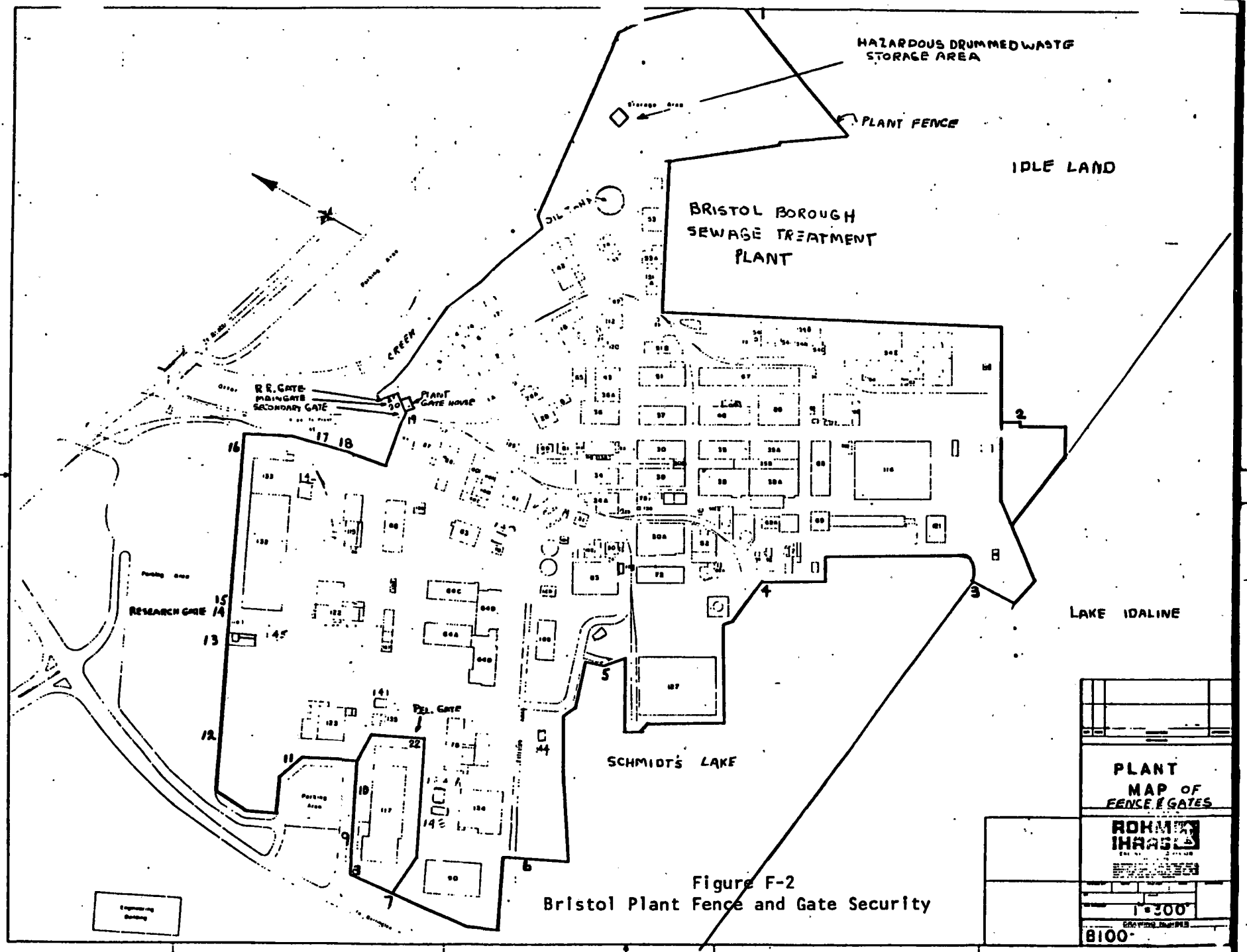


Figure F-2
Bristol Plant Fence and Gate Security

BRISTOL PLANT INSPECTION SCHEDULE

A. General Inspection Requirements

Area/Equipment	Specific Item	Types of Problems	Frequency	Department Responsible
Security	Perimeter Fencing	Corrosion, damage to chain link, barbed wire	Weekly	Health and Safety
	Gates	Corrosion	Quarterly	Health and Safety
	Remote Control Of Gates	Not operational	Daily	Health and Safety
	Locks	Corrosion, sticking	Quarterly	Health and Safety
	Warning Signs	Missing, damaged, illegible	Weekly	Health and Safety
	Remote Surveillance Equipment	Not operational	Daily	Health and Safety
	Perimeter Lighting	Not operational	Quarterly	Health and Safety
	Two-Way Radios	Transmitter or receiver	Daily	Health and Safety
	Telephone System	Power failure	Daily	Health and Safety
Safety and Emergency	Telephone System	Power failure	Daily, as used	Health and Safety
	Public Address System	Power failure	Daily, as used	Health and Safety
	Fire Alarm System (including Evacuation Alarm)	Power failure	Daily, as used	Health and Safety
	Emergency Generator	Fuel supply, spark plugs, oil	Monthly	Power House
	Auxilliary Generators	Fuel supply, spark plugs, oil	Monthly	Local Departments
	Emergency Lighting	Battery failure, lights	Monthly	Local Departments
			Quarterly Audit	Health and Safety
			Annually	Shop
	Weather Monitoring Equipment	Operable	Daily, as used	DEU Department
	Safety and Emergency Response Truck	Operable	Daily, as used	Health and Safety
		Contents (see Appendix F)	Quarterly Audit	Health and Safety
	Loading Docks	Spills and leaks	Daily	Local Departments
	Environmental Response Trailer	Tires, equipment, inventory (see Appendix F)	Weekly	DEU Department
	Cartridge Respirators	Seals	As used/Monthly	Local Departments
			Quarterly Audit	Health and Safety
	Disposable Respirators	Out of stock	As used/Monthly	Local Departments
			Quarterly Audit	Health and Safety
	Self Contained Breathing Apparatus	Air quantity in reserve, air delivery system	Monthly	Health and Safety
	Spare Air Bottles	Damaged, empty	Quarterly	Health and Safety
	Refilling Station	Not operable	Quarterly	Health and Safety

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BRISTOL PLANT INSPECTION SCHEDULE

A. General Inspection Requirements

Area/Equipment	Specific Item	Types of Problems	Frequency	Department Responsible
Safety and Emergency (cont'd)	Fixed Dry Chemical Extinguishing System	Not operable	Annually	Health and Safety
	Foam Systems	Not operable	Annually	Health and Safety
	Carbon Dioxide Systems	Not operable	Annually	Health and Safety
	Fire Hoses	Torn, pressure rupture	Annually	Health and Safety
	Fire Extinguishers	Not filled	Monthly	Local Departments
			Quarterly Audit	Health and Safety
			Annually	Health and Safety
		Hydro test	Every 5 years	Health and Safety
	Fire Hydrants	Water pressure	Annually	Health and Safety
	Portable Ladders	Damaged	Semi-Annually	Local Departments
			Quarterly Audit	Health and Safety
	Tank Rescue Kits		Weekly, As Used	Health and Safety
	Eye Wash Bottles, Fountains	Damaged, water pressure, blocked, not accessible	Monthly	Local Departments
			Quarterly Audit	Health and Safety
	Safety Islands and Stretchers	Damaged, not accessible	Monthly	Local Departments
			Quarterly Audit	Health and Safety
	Safety Showers	Water pressure	Quarterly	Local Departments
			Quarterly Audit	Health and Safety
	Fire Blankets	Dispensing	Quarterly	Local Departments
			Quarterly Audit	Health and Safety
	Standard Industrial Absorbents	Out of stock	As Used/Monthly	DEU Department
	Sandbags	Out of stock, torn	As Used	Local Departments
			Monthly	Material Control
	Sand, Loose	Out of stock	As Used/Monthly	Local Departments
			Monthly	Shop
	55-Gallon Drums	Damaged	As Used	Local Departments
	Freight Elevators	Not operable	Four Months	Shop
			Quarterly Audit	Health and Safety
			Annually	State of Penna.
	Passenger Elevators	Not operable	Four Months	Shop
			Quarterly Audit	Health and Safety
			Annually	State of Penna.

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BRISTOL PLANT INSPECTION SCHEDULE

A. General Inspection Requirements

Area/Equipment	Specific Item	Types of Problems	Frequency	Department Responsible
Safety and Emergency (cont'd)	Dumb Waiters	Not operable	Four Months	Shop
			Quarterly Audit	Health and Safety
			Annually	State of Penna.
	Forklift Trucks	Not operable	As Used	Maintained - Contract
			Quarterly Audit	Health and Safety
	Hoist	Not operable	Semi-Annually	Shop
			Quarterly Audit	Health and Safety
	Other Powered Industrial Trucks	Not operable	As Used/Annually	Garage
			Quarterly Audit	Health and Safety
	Slings	Not operable	Semi-Annually	Shop
			Quarterly Audit	Health and Safety
	Winch Truck	Not operable	Semi-Annually	Garage
			Quarterly Audit	Health and Safety
			Annually	State of Penna.
	Cherry Picker	Not operable	Annually	Garage
			Quarterly Audit	Health and Safety
			Annually	State of Penna.
	Overhead and Gantry Cranes	Not operable	Monthly	Shop
			Quarterly Audit	Health and Safety
	Foam Truck	Battery, tires, brakes	Daily	Health and Safety
		Equipment (coats, boots, etc.)	Monthly	Health and Safety
		Dispenses foam	Quarterly	Health and Safety
		Roadability	Semi-Annually	State of Penna.
			Semi-Annually	Manufacturer
	Fire Truck	Battery, tires, brakes	Daily	Health and Safety
		Equipment	Monthly	Health and Safety
		Operable	Quarterly	Health and Safety
		Roadability	Semi-Annually	State of Penna.

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BRISTOL PLANT INSPECTION SCHEDULE

B. Specific Process Requirements

Area/Equipment	Specific Item	Types of Problems	Frequency	Department Responsible
Container Storage Area	Wheeled 150 Pound Dry Chemical Extinguishers	Seal secure, area clear of obstructions, damaged	Weekly	Material Control
	Fire Hydrant	Area clear of obstructions	Weekly	Material Control
	Rate Of Rise Heat Detectors	Secure	Weekly	Material Control
	Safety Shower	Water pressure, area clear of obstructions	Weekly (Quarterly Audit by S&H)	Material Control
	Telephone	Power failure	Daily, As Used	Material Control
	Container Placement And Stacking	Aisle space, height of stacks	Weekly	Material Control
	Sealing Of Containers	Open lids	Weekly	Material Control
	Labeling Of Containers	Improper identification, date missing	Weekly	Material Control
	Containers	Corrosion, leakage, damage	Weekly	Material Control
	Segregation Of Incompatible Wastes	Stored in incorrect section of facility	Weekly	Material Control
	Pallets	Damaged	Weekly	Material Control
	Foundation	Cracks, uneven settling, wet spots, erosion	Weekly	Material Control
	Dikes	Cracks, deterioration	Weekly	Material Control
	Sump Area	Cracks, uneven settling, wet spots	Weekly	Material Control
	Sump Pump and Hoses	Operable, clean, ready to use	Weekly	Material Control
	Debris, Refuse	Clog dump, possible mixing with wastes	Weekly	Material Control
	Ramp	Cracks, uneven settlement	Weekly	Material Control
	Warning Signs/Segregated Cell Identification	Damaged, missing, obscured	Weekly	Material Control
	Handheld Two-Way Radio T/R	Operable	Daily, As Used	Material Control

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G

SECTION G

CONTINGENCY PLAN

The information contained herein is submitted in accordance with the requirements for a contingency plan, as contained in 40 CFR Section 1225.25(a)(7) and Section 264, Subpart D.

G Contingency Plan

[40 CFR Sections 122.25(a)(7) and 264.50-264.56]

The Bristol Plant operates under an EPA approved Spill Prevention, Control, and Countermeasures (SPCC) Plan as well as an approved Pennsylvania State DER Pollution Incident Prevention Program (PIPP). The contingency plan, as presented here, is a combination of the provisions of the SPCC Plan and the PIPP that have been amended to incorporate hazardous waste management provisions to comply with the requirements of 40 CRF Sections 122.25(a)(7) and 264.50-264.56. This contingency plan will be reviewed and amended under any of the following conditions:

- whenever the facility permit is revised,
- if the plan should fail in an emergency,
- if the facility's operations should change in any way that would alter the contingency plan, or
- if the list of emergency coordinators or emergency equipment should change.

G-1 General Information

The Bristol Plant of Rohm and Haas Delaware Valley Inc. is located in Bristol Township, Bucks County, Pennsylvania. The plant site is adjacent to and southwest of the Borough of Bristol along the Delaware River Estuary. The street address is:

Rohm and Haas Delaware Valley Inc.
Bristol Plant
Route 413 and Old Route 13
Bristol, PA 19007

The mailing address is:

Rohm and Haas Delaware Valley Inc.
Bristol Plant
P. O. Box 219
Bristol, PA 19007
Telephone: (215) 785-8000

G-1 General Information (cont'd)

The Bristol Plant of Rohm and Haas Delaware Valley Inc. has been manufacturing chemicals for industry at this site since 1916. Employment has ranged from a high of 3,000 employees during the 1950's and 1960's to the current level of about 1,000 employees - about one third of these are engaged in research/ pilot plant activities.

The Bristol Plant is a diverse chemical plant which manufactures numerous chemical and plastic products. Our major processes include emulsion, solution and bulk polymerization, monomer purification, sheet extrusion and pesticide synthesis. Major products include Acryloid® Coatings Products and Acryloid® Oil Additives, Plexiglas® Acrylic Sheet, Kydex® Acrylic-PVC Alloy Sheet, methacrylate and acrylate monomers, Karathane® Miticide and Fungicide, Acryloid® PVC-Modifiers and Plexiglas® Molding Powders.

The Bristol Plant generates hazardous wastes. These wastes are stored, prior to shipment for disposal, on the hazardous waste storage facility owned and operated by the Bristol Plant. The facility is located at the east end of the plant as shown in the plant map (Figure B-1). The facility is a container storage pad which, when upgraded as outlined in Section D, will comply with the requirements of 40 CFR Part 264. A conceptual drawing of the upgraded container storage pad is given as Figure D-1. The facility is discussed in detail in Section D of this permit application. A description of the wastes handled is given in Section C. Appropriate parts of these sections have been included in the contingency plan provided to emergency organizations by the Bristol Plant.

G-2 Emergency Coordinators
[40 CFR Sections 264.52(d) and 264.55]

When an emergency situation occurs at the Bristol Plant, the emergency coordinator has complete authority and is responsible for committing all resources necessary to effectively implement the contingency plan. The Bristol Plant's primary emergency coordinator is the Plant Manager, Mr. Jerry C. Brock. Alternate emergency coordinators are listed in the order in which they will assume responsibility in Table G-1. Between the hours of 4:30 p.m. and 8:00 a.m., the Night Superintendent, followed by the Safety Shift Supervisor, acts as the emergency coordinator until the day supervision and/or Environmental Control arrives. The Safety Shift Supervisor is in command of the Fire Brigade until the Health and Safety Director arrives. Table G-2 lists the telephone numbers of organizations that may be contacted by the emergency coordinator in the event of an emergency.

G-3 Implementation of the Contingency Plan
[40 CFR Section 264.51(b)]

The criteria for implementing the contingency plan are outlined below.

1. Fire and/or Explosion

   a. A fire causes the release of toxic fumes.

   b. The fire spreads and could possibly ignite materials at other locations onsite or could cause heat-induced explosions.

   c. The fire could possibly spread to offsite areas.

   d. Use of water or water and chemical fire suppressant could result in contaminated runoff.

   e. An imminent danger exists that an explosion could occur, causing a safety hazard because of flying fragments or shock waves.

   f. An imminent danger exists that an explosion could result in release of toxic material at the facility.

   h. An explosion has occurred.

2. Spills or Material Release

   a. The spill could result in release of flammable liquids or vapors, thus causing a fire or gas explosion hazard.

   b. The spill could cause the release of toxic liquids or fumes.

   c. The spill can be contained onsite, but the potential exists for ground water contamination.

   d. The spill cannot be contained onsite, resulting in offsite soil contamination and/or ground or surface water pollution.

3. Floods

   The hazardous waste container storage facility is located outside the 100 year floodplain.

G-4 Emergency Response Procedures

G-4a Notification
[40 CFR Section 264.56(a)]

In the event of an emergency, a fire alarm pull box is pulled, sending a signal to the Gate House, or the Gate House emergency number is called, 8080. Once the existence of an emergency is verified, the emergency coordinator is notified and the fire alarm is sounded throughout the plant. Each building has a specific series of alarm rings so the location of the emergency is immediately known to all facility personnel. The Fire Brigade assembles at the scene, and the Croydon Fire Department is notified via the direct line from the Gate House to the police dispatcher. If their assistance is required, the emergency coordinator will bring the Croydon Fire Department into the plant. Concurrently, the appropriate federal, state or local agencies will be notified as per Table G-2. The National Response Center will be notified, as appropriate, via their 24-hour telephone number: (800) 424-8802. The following information will be reported:

- Name of the person reporting the incident.
- Name, address, and identification number of facility.
- Phone number where the person reporting the spill can be reached.
- Date, time, and location of the incident.
- A brief description of the incident including type of incident, nature of hazardous material involvement and possible hazards to human health or the environment.
- The extent of injuries, if any.
- For each waste involved in the incident, the shipping name, hazard class and U. N. number of the waste, and quantity of the waste involved.

G-4b Identification of Hazardous Wastes
[40 CFR Section 264.56(b)]

The emergency coordinator will identify the character, amount and source of the release after a visual analysis of the material is made. If the visual analysis is inconclusive, samples will be taken for chemical analysis. The drums stored on the hazardous waste storage pad are individually identified, color coded and segregated into cells by compatibility, so this will aid in the rapid identification of the material released. The location of each drum is indicated on the Hazardous Waste Storage Pad Log Sheet, part of the Hazardous Storage Pad Operating Log (see Section F for details).

G-4d Control Procedures (cont'd)
[40 CFR Section 264.52(a)]

Fire and/or Explosion (cont'd)

Command Of Fire:

The Safety Shift Supervisor on duty shall command the fire fighting equipment and brigademen. Any technical assistance, advice or instructions offered by the department supervision of the emergency area for the safeguarding of personnel and/or property should be directed to the Safety Shift Supervisor. If operators or supervisors are needed to secure equipment in the emergency area, they will take action only after approval by the emergency coordinator. The decision to call outside fire departments to aid in fire fighting rests with the Safety Shift Supervisor, and he will direct their activities when they respond and are admitted to the plant.

Second Alarm:

Should the Safety Shift Supervisor require additional fire apparatus to combat the fire, he will notify the Gate House to strike a "second alarm". The desk guard will immediately notify the Bristol Township Police Department to dispatch the Croydon Fire Company to the main gate. He will then transmit, over the plant fire alarm system, the appropriate coded signal, and announce over the public address system and the plant radio system that a second alarm has been sounded from the appropriate location. He will then request that all General Service personnel not fighting the fire, and all raw material pumpers immediately report to the Gate House. These men will act as guides for incoming fire apparatus.

Upon the sounding of a second alarm, the emergency coordinator will immediately report to the Gate House to set up a command post and coordinate the required services. A guide will be assigned to accompany and direct all required fire apparatus to the location in the plant specified by the Safety Shift Supervisor. No apparatus shall be admitted to the plant unless requested by the Safety Shift Supervisor.

Control - Other Matters Arising From The Emergency

The emergency coordinator will deal with the matters which may arise from the fire emergency but do not pertain to the fire control. They include:

1. Protection of areas adjacent to the fire emergency area. The Safety Shift Supervisor shall offer advice as to the need to evacuate certain areas.

G-4d Control Procedures (cont'd)
[40 CFR Section 264.52(a)]

Fire and/or Explosion (cont'd)

2. Notification of Plant Management not in the plant at the time.

3. Dealing with injured employees and their families, police, rescue squads and pollution regulatory officials.

4. Liaison with Home Office Management and Public Relations people and members of the press.

Policing Of Fire Emergency Area:

Only members of the Emergency Control Team, line supervisory personnel of the area of the emergency, and other personnel essential in controlling the emergency are permitted at the site. They will station themselves at a safe location designated by the Safety Shift Supervisor. Normally, this will be near a vehicle with a radio in two-way communication with the Gate House.

Personnel not involved in or essential for controlling the emergency shall remain at their workplaces. The Emergency Control Team shall immediately determine through the Safety Shift Supervisor the limits of the emergency and they shall set up appropriate barricades and/or police the line to keep out all bystanders. They shall report frequently to the Safety Shift Supervisor and the emergency coordinator.

All Clear:

When the emergency has ended, an "all-clear" announcement will be made on the paging system.

Spill Or Material Release

The EPA approved Spill Prevention, Control and Countermeasures (SPCC) Plan, at the end of this Section, will be implemented in the event of a spill or material release. (The SPCC Plan was approved by Ecology and Environment, Inc. on July 22, 1982.) The call sequence for the emergency contacts found in the SPCC Plan (also in Table G-2) provide a quick-reference guideline to follow in the event of a major spill.

G-4d Control Procedures (cont'd)
[40 CFR Section 264.52(a)]

Spill Or Material Release (cont'd)

The standard operating procedures of the Bristol Plant require that an employee discovering a chemical spill or vapor release report it immediately to his supervisor. The supervisor will contact the appropriate member of the emergency response team and/or, if the problem warrants, the emergency coordinator. The following information will be obtained:

1. The material spilled or released.
2. Location of the release or spillage of hazardous material.
3. An estimate of quantity released and the rate of which it is being released.
4. The direction in which the spill or vapor or smoke release is heading.
5. Any injuries involved.
6. Fire and/or explosion or possibility of these events.
7. The area and materials involved and the intensity of the fire or explosion.

This information will help the emergency coordinator to assess the magnitude of the spill or release. If the accident is determined to lie within the company's emergency response capabilities, the emergency coordinator will contact and deploy the necessary in-plant personnel. If the accident is beyond plant capabilities, the emergency coordinator will contact the appropriate agencies. A list of agencies and telephone numbers can be found in Table G-2.

The initial response to any emergency will be to protect human health and safety, and the environment. Identification, containment, treatment and/or disposal will be the secondary response. See the Bristol Plant Spill Prevention and Countermeasure Procedure at the end of this Section.

G-4d Control Procedures (cont'd)
[40 CFR Section 264.52(a)]

Spill Or Material Release (cont'd)

Correcting the cause of the spill or release and spill containment must be accomplished quickly to minimize the impact. Stopping a pipeline transfer, closing a valve, and upending a container are common examples of stopping spills of material. Dikes, sumps, or sandbagging are examples of containment.

All spilled materials are assessed for potential recovery (1) as raw material, intermediate, or final product, (2) by purification into usable material, or (3) as fuel in the Power House boilers for heat value. If none of these recovery options appear likely, the spilled material will be absorbed via industrial absorbents, sand, etc. for disposal.

If, for some reason, a chemical spill is not contained within a dike or sump area, an area of isolation will be established around the spill. The size of the area will depend on the size of the spill and only those persons involved in overseeing or performing emergency operations will be allowed within the designated hazard area. If possible, the area will be roped or otherwise blocked off.

If the spill is not contained or otherwise controlled and results in material reaching a waterway, the Spill Notification Procedure (Section V of the Bristol Plant Spill Prevention and Countermeasure Procedure) is put into effect. Reportable spill quantities are those quantities exceeding the listings under the Solid Waste Disposal Act, Clean Air Act, Clean Water Act, and Toxic Substances Control Act. We also follow the same practice for any substances not listed in the Acts noted above, but which can be classified as a hazardous waste under RCRA. Also, any hazardous substance so identified but not listed in the above Acts is reportable when spill quantities exceed one pound. Section A-3 of the Bristol Plant Environmental Manual addresses this and is included in Appendix G. Within 15 days after the incident, a written report on any reportable hazardous waste discharge or spill shall be filed with the EPA Regional Administrator. This "Hazardous Waste Spill Report" will contain the following information:

- the name, address, and identification number, and the date, time, and location of the incident;
- a brief description of the circumstances causing the incident;

G-4d Control Procedures (cont'd)
[40 CFR Section 264.52(a)]

Spill Or Material Release (cont'd)

- a description of each of the hazardous wastes involved in the incident including the estimated quantity spilled by weight or volume;
- a legible copy of the manifest document, if applicable;
- a description of any contamination of land, water, or air that has occurred due to the incident; and
- a description of what actions are planned to prevent a similar occurrence in the future.

If the emergency coordinator determines that the plant is unable to handle the emergency, then local, state, and federal authorities will be notified of the situation. Evacuation of all potentially affected plant areas will be initiated as soon as possible.

In the case of a spill involving waste materials stored in the container storage facility, the spilled material will flow to the containment sump. Plant personnel wearing proper protective clothing, as directed by the emergency coordinator, will proceed to pump out sump (using the emergency sump pump provided) into compatible emergency drums. All contamination will be cleaned up, and the cell, sump and clean-up equipment will be decontaminated with appropriate solvents. The decontamination solvents will be handled as hazardous wastes.

If a spill results in the formation of a toxic cloud (by reaction with surrounding materials or by outbreak of fire), evacuations on impacted areas will be initiated.

Spills and vapor releases are documented (and retained for at least three years) on the following forms:

Spills: Foreman's Investigation of Chemical Spill (see Figure G-1).

Vapors: 1. Air Pollution Complaint - Inside Bristol Plant (see Figure G-2).

2. Air Pollution Complaint - Outside Bristol Plant (see Figure G-3).

General: Health-Environmental Adverse Reaction Report (see Figure G-4).

G-4e Prevention of Recurrence or Spread of Fires, Explosions or Releases
[40 CFR Section 264.56(e)]

The actions taken to prevent the recurrence or spread of fires, explosions or releases are:

- shut down the operation(s)
- contain and collect release
- isolate materials involved

The shutdown procedure for each process/building is part of the emergency evacuation plan for the Bristol Plant and is on file in both the Safety Department and the appropriate operating departments. Procedures for containing and collecting releases are detailed in the SPCC Plan (see Section G-4d). Materials not involved in the emergency will be physically isolated from the emergency. Where physical isolation is not possible, thermal isolation via cooling water will be used to prevent the spread of fire.

If the facility shuts down operations in response to an emergency, the emergency coordinator will monitor for leaks, pressure build-up, gas generation, or ruptures in valves, pipes or other equipment, wherever appropriate.

G-4f Storage and Treatment of Released Material
[40 CFR Section 264.56(g)]

The emergency coordinator will make the appropriate arrangements for treatment, storage or disposal of recovered waste, contaminated absorbant or any other material that results from a release, fire or explosion at the facility.

G-4g Incompatible Wastes
[40 CFR Section 264.56(h)]

Incompatible wastes will not be treated, stored or disposed of in the area surrounding the emergency site until cleanup procedures have been completed.

G-4h Post-Emergency Equipment Maintenance
[40 CFR Section 264.56(h)(2)]

Following any emergency, all emergency equipment listed in Section G-5 will be cleaned and fit for its intended use or it will be repaired or replaced. All emergency equipment will be inspected before operations are resumed.

G-4i Container Spills and Leakage
[40 CFR Section 264.171]

Refer to Section G-4d for the emergency response procedures for container spills and leakage.

G-4j Tank Spills and Leakage
[40 CFR Section 264.194(c)]

Refer to Section G-4d for a discussion of spills and emergency response procedures.

G-4k Waste Piles

The Bristol Plant does not manage any waste piles.

G-5 Emergency Equipment
[40 CFR Section 264.52(e)]

Throughout the Bristol Plant, there are approximately 1,250 hand or portable fire extinguishers, 212 fire hose lines, 19 fixed foam stations, 9 fixed carbon dioxide or Halon systems, and 11 fixed dry chemical systems, as well as 56 positive pressure demand self-contained breathing units with 93 spare air bottles and a refilling station capable of filling 25 bottles. Two safety response vehicles equipped with a wide variety of protective equipment (for 30 people) and tools for emergency heavy rescue operations are available, as are two fire engines: one a 1976 foam truck, with a 56 foot articulating arm, capable of delivering 1,000 gpm of water, and one 1956 Mack with a 750 gpm pump. The emergency equipment available is described in Table G-3, the contents of the emergency response vehicles is given in Section F, and appended to this contingency plan.

Emergency equipment dedicated to the hazardous waste storage pad includes four dry chemical extinguishers, a fire hydrant, a safety shower, spill control and clean-up equipment, a shed containing a fire extinguisher, a telephone, two-way radio, and protective clothing. A site plan showing the location of this equipment is given as Figure D-1.

The plant has two separate water supply systems: 1 million gallons of potable water supplied by the Bristol Borough water system and approximately 30 million gallons of raw river water contained in Lake Idaline and Schmidt's Lake. The Borough water system feeds the sprinkler systems located in fifty-four buildings having significant fire potential, and 15 red-top fire hydrants located throughout the plant. The sprinkler monitors are fed into the alarm system and automatically start two 2,000 gpm pumps -- one electric and the other is diesel powered. The river water feeds the 31 white-top fire hydrants via six 5,000 gpm pumps.

G-5 Emergency Equipment (cont'd)
[40 CFR Section 264.52(e)]

The Emergency Control Center is located at the Gate House which contains radios, the PA system, telephone communications, and video monitors. This building is fed by an emergency powerline and can be fed by a portable emergency generator. A direct telephone line links the Gate House to the Bristol Township Police Dispatcher.

G-6 Coordination Agreements
[40 CFR Sections 264.52(c) and 264.37]

The Bristol Plant and the Croydon Fire Department cooperate in an emergency under a mutual aid agreement. If there is an emergency in the plant and firefighting ability beyond that of the Fire Brigade is required, a second fire alarm signal is sent throughout the plant. The emergency coordinator at the Gate House notifies the Bristol Township Police dispatcher via a direct telephone link.

The Bristol Plant has supplied the Croydon Fire Department with hazard classification of each operating building, general evacuation procedure for the Bristol Plant, and a copy of the Bristol Plant Procedure for Mutual Aid. This information is given in the Appendix.

If the Croydon Fire Department is called into the Bristol Plant, the Croydon Fire Department Chief will report to the command post at the Gate House and will coordinate the activities of all outside fire companies, including the call-in of additional pieces of equipment as required. When outside fire company aid is required, fire police will control traffic through the parking lot and into the Gate House, and will park the cars of incoming volunteer firemen. Township Police control traffic on the roads surrounding the plant to expedite fire, medical or other emergency vehicles into or away from the plant. In the event of a medical emergency, Lower Bucks Hospital, Delaware Valley Medical Center and the Bucks County Rescue Squad are notified and are on stand-by. Patients transported to hospitals will have pinned to them medical information on their condition and a Material Safety Data Sheet(s) that describes the chemical(s) to which the patient was exposed.

G-7 Evacuation Plan
[40 CFR Section 264.52(f)]

Purpose:

This procedure will deal with the shutdown and evacuation of individual buildings and/or the entire plant.

Personnel Control:

All activities in connection with building or plant evacuation will be under the control of the emergency coordinator. During normal working hours, personnel control will be under the direction of the Plant Manager, or in his absence, the designated Plant Manager. During hours other than 8:00 a.m. to 4:30 p.m., the Night Superintendent when on duty, or Shift Foreman will direct personnel control until the Plant Manager, designated Plant Manager, or other area supervision arrives at the plant.

Traffic Control:

Emergency monitors, selected from the Plant Engineering and Plant Development groups, will man strategic locations to maintain emergency lines, guide employees away from the emergency and generally assist in the evacuation.

Conditions Requiring Shutdown Evacuation:

Shutdown and evacuation procedures should be carried out whenever the following conditions occur:

1. Serious fire in building or department.

2. General emergency, occurring in a section of the plant or affecting the entire plant, such as:

   a. Rupture of pipelines or tanks; and

   b. Uncontrolled conditions in process equipment which might result in fire, explosion or the release of toxic gases.

G-7 Evacuation Plan (cont'd)
[40 CFR Section 264.52(f)]

Notification of Evacuation:

Personnel will be notified of the need to evacuate buildings, departments or a plant area and will carry out their shutdown evacuation procedures when any one of the following signals are given:

1. When told to do so by a member of supervision, or when an individual building evacuation alarm is sounded.

2. When an announcement is made over the public address system that certain buildings or areas are to be evacuated.

3. When the plant emergency evacuation is sounded. This consists of:

   a. Sounding of the plant fire alarm system (bells and horns) continuously for six minutes (signal 10-10-10-10).

   b. Series of announcements over PA system at 30 second intervals.

Shutdown of Equipment:

Each area manager has developed plans for shutting down or placing on standby the equipment in the area. These plans describe each operator's responsibility in shutting down the area and are to be followed whenever a building or area evacuation is sounded or announced. Evacuation plans for each building are available from the Health and Safety Department.

Evacuation of Buildings:

Each area manager has developed procedures for evacuating buildings or departments that enable employees to safely shutdown equipment and assemble for a head count (called to 8081 or 8082) and proceed to a central assembly point. The possibility of toxic vapors release requires that evacuation routes be flexible and necessitates the designation of secondary assembly points. The primary and secondary assembly points are indicated in Figure G-5. The plan covers fire and other type emergencies in the building or department. In any case where a building or department is evacuated, the Safety Department is notified immediately and the evacuation signal sounded followed by PA and radio announcements.

Where buildings are shared by more than one department, shutdown-evacuation plans for each department are compatible and have been incorporated into one building plan.

G-7 Evacuation Plan (cont'd)
[40 CFR Section 264.52(f)]

Evacuation of Surrounding Buildings:

When a supervisor at the scene considers surrounding buildings endangered, he will call the Gate House on extension 8080, identify himself and tell the emergency coordinator that all buildings surrounding that building or that specific buildings are to be evacuated. The Gate House will announce the buildings to be evacuated over the PA system and sound the evacuation signal.

Plant Evacuation:

When a supervisor at the scene determines the need to evacuate the plant, he will tell the guard to activate the evacuation signal, even if it had previously been sounded for a local condition. He will also furnish the guard with necessary pertinent information to be incorporated into the evacuation PA announcements, i.e., areas to be avoided, precautions to be taken, wind direction, etc.

When the evacuation signal is sounded, each building and department will proceed with their evacuation in accordance with the building evacuation plan and proceed to their assembly point, taking into consideration information supplied by the PA announcements.

Annual Test:

Every building is to test their evacuation plans with a drill annually. The test can be touch and tag or full evacuation. Training is to be conducted annually prior to the drill.

Primary Plant Assembly Points:

There are two primary assembly locations as shown on Figure G-5. The following buildings are to assemble on the first floor of Building 64A in the Safety Conference Room: 63, 64, 66, 70, 78, 105, 106, 107, 109, 115, 117, 122, 123, 126, 132, 133, 134, 135, 140, 141, 142, 144. The remainder of the plant is to assemble on the first floor of the Cafeteria. Additional information and instructions will be issued at these assemblies. The plant PA systems will also be utilized for instructions.

G-7 Evacuation Plan (cont'd)
[40 CFR Section 264.52(f)]

Alternate Plant Assembly Points:

In the event that either of the primary assembly points are inaccessible, personnel will proceed to the nearest alternate assembly point, Building 114, 127 or the Power House. These locations are shown on Figure G-5. If unable to safely proceed to any of the above locations, personnel will proceed to the nearest plant gate.

Plant Evacuation Sample Announcement:

"Attention please. Attention please. The plant evacuation plan is now in effect. Please evacuate your building and proceed to assembly point. (A chemical leak has developed at "X", the wind is blowing these vapors in a "Y" direction, employees are to avoid this area.)

Repeat every 30 seconds, revising as necessary.

G-8 Required Reports
[40 CFR Sections 264.56(d), 264.56(i) and 264.73(b)(4)]

Written reports of emergency incidents requiring the implementation of the contingency plan will be submitted within 15 days to the EPA Regional Administrator. A form for reporting these emergency incidents is given as Figure G-6. A copy of this report is kept in the Health and Safety Department.

In addition to the federal reporting requirements, Bristol Plant has an internal report detailing the investigation of:

1. All fires, see Figure G-7.
2. Spills, as per SPCC Plan and Figures G-1 and G-4.
3. Air pollution complaints, see Figures G-2, G-3 and G-4.
4. Health and environmental incidents, see Figure G-4.
5. All injuries, see Figure G-8.
6. All near misses of the above that could have had serious consequences, see Figure G-9.

TABLE G-1

BRISTOL EMERGENCY CONTROL TEAM MEMBERS*

Name	Job Title	Home Address	Telephone Number Home	Office**
Primary Emergency Coordinator				
Jerry C. Brock	Plant Manger	16 Knotty Oak Drive Medford, NJ 08055	609-953-0842	8110
Night Superintendent Safety Shift Supervisor	Between the hours of 4:30 p.m. and 8:00 a.m., Monday through Friday, all day Saturday and Sunday			8116, Alt. 8329
Alternates				
Paul D. Rosenstock	Manager, Development, Environmental Control, and Utilities	3598 Neshaminy Valley Drive Neshaminy Valley, PA 19020	215-757-8623	8470
Robert J. O'Larnic	Asst. Environmental Manager	65 Tweed Road Levittown, PA 19056	215-949-2730	8219
Guy C. Murdoch	Group Leader, Development, Environmental Control and Utilities	Box 152 Wycombe, PA 18980	215-598-3346	8475
Henry C. Sullivan	Director, Health and Safety	537 Evergreen Lane Lafayette Hill, PA 19444	215-825-0233	8663
William C. Scott	Manager, General Services	173 Lookout Lane Willow Grove, PA 19090	215-659-1874	8168
David K. Eads	Manager, Project and Process Engineering	32 Forsythia Drive Levittown, PA 19056	215-949-3078	8441
William J. Ferry	Manager, Area A	22 Hanover Court Langhorne, PA 19047	215-968-9414	8407
Alan A. Kober	Manager, Area C	1716 Aidenn Lair Road Dresher, PA 19025	215-628-2426	8384

TABLE G-1

BRISTOL EMERGENCY CONTROL TEAM MEMBERS* (cont'd)

Name	Job Title	Home Address	Telephone Number Home	Telephone Number Office**
Francis V. Villani	Manager, Maintenance and Stores	325 Chestnut Street Moorestown, NJ 08057	609-778-1311	8336
David Spratt, D.O.	Medical Director	7212 Barnard Street Philadelphia, PA 19149	215-331-8696	8164
J. David Particelli	Personnel Director	104 Onondago Trail Medford Lakes, NJ 08055	609-654-7405	8154

* During off-hours, the Night Superintendent is in overall command until the Plant Manager arrives. Safety Shift Supervisors are in command of the Fire Brigade until the Health and Safety Director arrives.

** 215-785-

TABLE G-2

EMERGENCY CONTACTS

Emergency	Organization	Telephone
Medical	Delaware Valley Medical Center	245-2200
	Lower Bucks Hospital	785-9200
	Bucks County Rescue Squad	788-0444
Fire/ Explosion	Croydon Fire Department	Phone Link To Police Dispatcher

---

GOVERNMENT AGENCY TELEPHONE NUMBERS*

Agency	Telephone
1. Bristol Borough	
Plant Superintendent	(9) 785-4202
Borough Engineer	(9) 638-1130
Borough Manager	(9) 788-3828
2. Lower Bucks Municipal Authority (Levittown)	
Plant Superintendent (Water Plant)	(9) 945-1170
Plant Superintendent	(9) 945-1170
Authority Manager	(9) 945-7400
3. Philadelphia Torresdale Water Filtration Plant	
Superintendent	(73) 923-8091
Off-Hours, Call Filtration Plant	(730 355-8055
4. U.S. Coast Guard, Glouchester City, NJ	
Water Pollution Officer (Port of Philadelphia Area)	(73) 923-4320
Duty Officer, 24-Hour Number	(73) 923-4320
5. National Response Center*	
*If spill quantities warrant notification:	(9)-(1)-(800)-424-8802

GOVERNMENT AGENCY TELEPHONE NUMBERS* (cont'd)

Agency	Telephone
6. Pennsylvania Department of Environmental Resources	
A. Bucks County Department of Health	
Chief Environmental Engineer	(72) 1-343-2800
Off-hours contact Department of Health through the Bucks County Police Radio	(9) 945-3100
B. DER, Regional Office	
Regional Engineer	(73) 631-2404
Chief of Operations	(73) 631-2405
Nighttime	(73) 631-2400
7. Delaware River Basin Commission	(72) 1 - (609) 883-9500
8. Environmental Protection Agency	
Chief Oil and Hazard Material - or Assistant -	(73) 597-9898
24-Hour Number	(73) 597-9898

CALL SEQUENCES:

A. For any spill which can affect the quality of drinking water in the Estuary: 1, 2, 3, 4, 5, 6A, 7, 8, 6B.

B. For a SUPERFUND reportable spill which will not affect the quality of drinking water in the Estuary: 4, 5, 6A, 1.

C. For any oil spills to ground or surface waters: 4, 5, 6A, 1.

dpmg/RCRA.5

TABLE G-3

EMERGENCY EQUIPMENT

Equipment	Description
Fire Extinguishers	1,250
Fire Hose Lines	212
Fixed Foam Stations	19
Fixed Carbon Dioxide or Halon Systems	11
Foam Truck	1976, 56' articulating 1,000 GPM arm
Fire Engine	1956 Mack, 750 GPM
Self-Contained Breathing Units	56
Spare Air Bottles	93
Refilling Station	25 bottle capacity
White-Top Hydrants	31, lake water
Red-Top Hydrants	15, Borough water
Safety Response Trucks	
Two-Way Radios	
PA System	
Telephone System	
Video Monitors	

Dedicated To Pad:

1 Hydrant
1 Safety Shower
4 Fixed Dry Chemical Systems
Telephone
Two-Way Radio
Containment Material
Nozzle
Rubber Suit
Emergency Lighting
Rate-Of-Rise Heat Detectors

Figure G-1

FOREMAN'S INVESTIGATION OF CHEMICAL SPILL

AREA _____ DEPARTMENT _____ BUILDING _____

DATE & TIME OF SPILL _____ OPERATOR _____

QUANTITY & CHEMICAL SPILLED _____ TO:

_____ CHEMICAL SEWER _____ CLEAN WATER SEWER

_____ SANITARY SEWER _____ OTHER (IDENTIFY)

WAS SPILLAGE PROCEDURE FOLLOWED? _____ PERSON NOTIFIED _____

DESCRIPTION OF SPILL:

ARE PRESENT FACILITIES AND PROCEDURES ADEQUATE TO PREVENT A RECURRENCE? _____

IF NOT, EXPLAIN:

WHAT ACTION HAS BEEN TAKEN TO PREVENT A RECURRENCE?

WHAT QUANTITY WOULD HAVE BEEN LOST HAD THE SPILL NOT BEEN DETECTED? _____

INVESTIGATED BY: _____ DATE: _____

(FOREMAN OR NIGHT SUPERINTENDENT)

PLEASE INITIAL AND FORWARD TO:	INITIAL & DATE		COMMENTS
1. DAY FOREMAN			
2. AREA MANAGER			
3. PLANT MANAGER			
4. DEV. & ENV. CONTROL MANAGER			
5. ASST. ENV. CONTROL MANAGER			

THIS INVESTIGATION FORM TO COMPLETED WITHIN 24 HOURS OF THE SPILL.

FORM 14228 7/81

Figure G-2

Night Superintendent's Office
Person Reporting Air Pollution
ant Manager
ea Manager

Mr. J. Brock
Dr. D.K. Eads
Mr. R.J. O'Larnic
Dr. P.D. Rosenstock

AIR POLLUTION COMPLAINT - INSIDE BRISTOL PLANT

Issued To: _____ Date: _____

Source of Pollution: _____ Time: _____

Wind Condition: _____ Description of Observation: _____

_____

_____

_____

_____

_____ Issued By: _____

REPLY TO NOTICE

estions 1 and 2 to be Answered by Foreman; 3 and 4 by Area Manager or his Assistant.

1. Cause of Pollution: _____

2. Immediate Corrective Action Taken (If Any): _____

3. Are Additional Facilities Needed to Prevent this Pollution?: ☐ Yes ☐ No
4. Are Changes in Operating Procedures Needed to Prevent this Pollution?: ☐ Yes ☐ No
5. Remarks: _____

6. Circulation of Notice: (Please Initial)

_____ Day Foreman

_____ Asst. Area Manager

_____ Area Manager

R.J. O'Larnic

000195

FORM 14206 6/61

Figure G-3

cc: Plant Manager
Mr. R. J. O'Larnic
Dr. P.D. Rosenstock
Safety Department
Traffic Department (Tank Car Only)
DEC File

AIR POLLUTION COMPLAINT - OUTSIDE BRISTOL PLANT

Name of Complainant: _____ Date and Time: _____

Address: _____

Complaint Received By: _____

Where Pollution Was Noted: _____

Duration of Odor (Complainant's Estimate): _____

Complainant's Description of Pollution: _____

Investigator's Comment After Visiting Scene: _____

Investigated By: _____ Date and Time: _____

Weather Conditions (Check also with Lab. 7) _____

Remarks: _____

Probable Source of Pollution (If Rohm and Haas?, Can Area be Specified?) _____

Sample Taken: Yes ☐ No ☐ If No, Reason: _____

Analysis of Sample: _____

Action Taken: _____

Complainant Recontacted: Yes ☐ No ☐ If Yes, Summarize: If No, Reason: _____

(Attach Follow-up Information, If Any)

USE REAR OF THIS FORM FOR ADDITIONAL INFORMATION

000196

FORM 14207 6/81

Figure G-4

HEALTH-ENVIRONMENTAL ADVERSE REACTION REPORT

Rohm and Haas Company

mical Name (Product, Raw Material, etc.)

Product Code

Incident Reported to Rohm and Haas by

NAME

ADDRESS

TELEPHONE NUMBER

Company or Organization Represented

NAME

ADDRESS

TELEPHONE NUMBER

Date of Incident	Day of Week	Time	Quantity of Chemical Directly Involved in Incident
		_____ A.M. _____ P.M.	

Cause of Incident

☐ SOLID CHEMICAL ☐ LIQUID CHEMICAL ☐ CHEMICAL VAPOR/GAS ☐ CHEMICAL FIRE/SMOKE ☐ CHEMICAL EXPLOSION ☐ OTHER _____

Personal Injury

☐ SKIN ☐ EYE ☐ DIGESTIVE TRACT ☐ RESPIRATORY SYSTEM ☐ OTHER _____

Damage to

☐ ATMOSPHERE ☐ WATER ☐ WILDLIFE ☐ OTHER _____

Exact Location Where Incident Occurred

Symptoms and Duration of Exposure

Identification of Person(s) Exposed

NAME	SOC. SEC. NO.	ADDRESS	TELEPHONE	AGE	MALE/ FEMALE	R&H EMPLOYEE YES OR NO

Remarks: Describe incident, nature of exposure, and the alleged effect upon health and/or environment. Attach all available news articles, citations, copies of letters, etc. which relate to allegation or complaint. Describe actions taken. (Use extra pages if necessary.)

:son Submitting Report

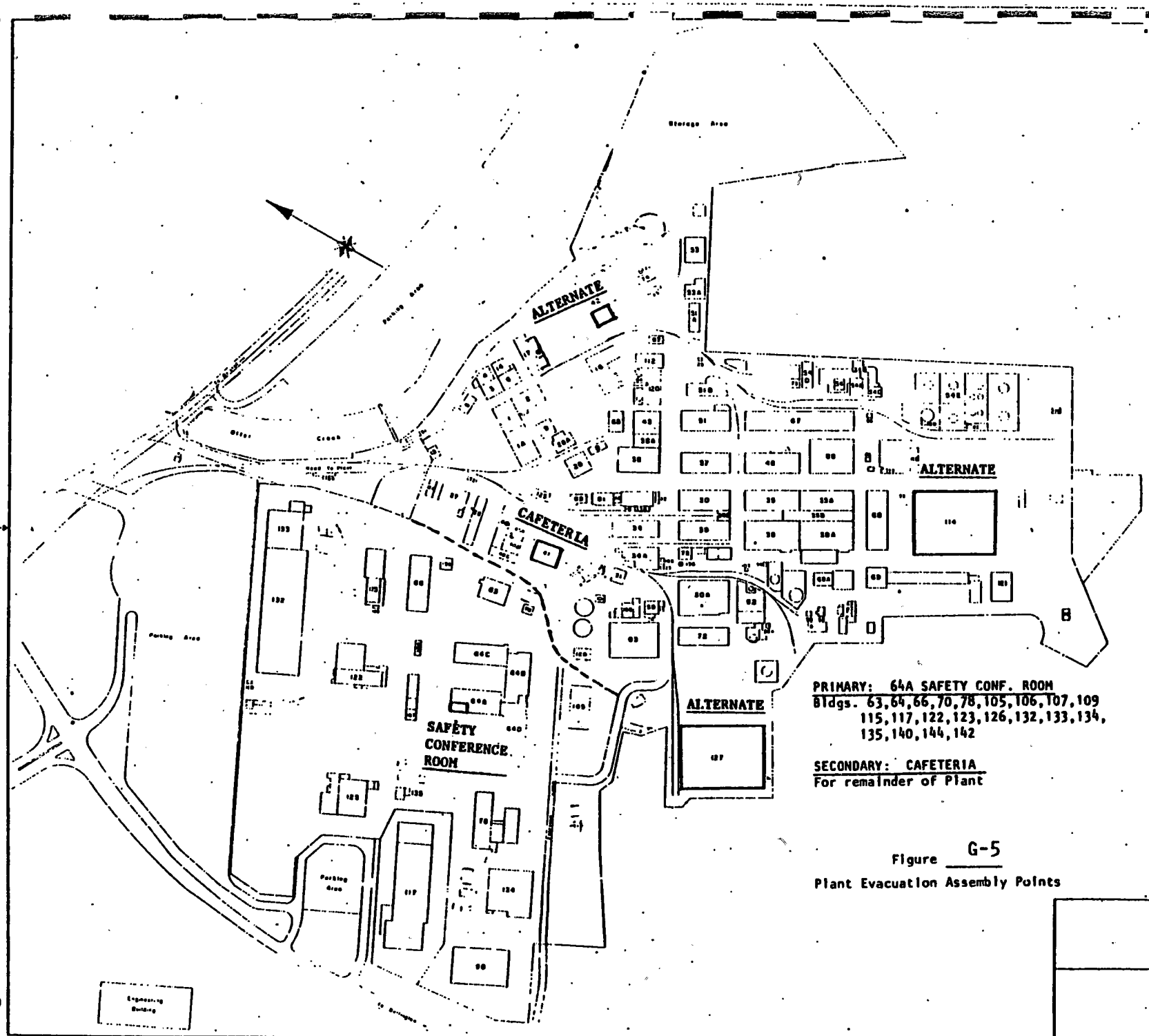
(PRINT NAME)

Rohm and Haas Company
Govt. & Reg. Affairs
Independence Mall West
Philadelphia, Pa. 19105

DISTRIBUTION:

WHITE & YELLOW – GOVT. & REG. AFFAIRS DEPT.
PINK – SUPERVISOR COPY
GOLD – EMPLOYEE COPY

FORM 13269



PRIMARY: 64A SAFETY CONF. ROOM
Bldgs. 63,64,66,70,78,105,106,107,109
115,117,122,123,126,132,133,134,
135,140,144,142

SECONDARY: CAFETERIA
For remainder of Plant

Figure G-5
Plant Evacuation Assembly Points

PLANT MAP

ROHM HAAS

1"=300'

DRAWING NUMBER
B100

000198

Figure G-6

REPORTING FORM FOR EMERGENCY EVENTS*

_____
Name, address, and telephone number of facility

_____
Name and telephone number of facility contact

_____
Date, time, and type of incident (e.g. fire, explosion, etc.)

_____
Name, hazard rating, and quantity of material(s) involved

_____
Extent of injury (if any)

_____
Assessment of actual or potential hazards to health or the environment

_____
Estimated quantity and dispostion of material recovered from the incident

*NOTE: This report to be completed for any emergency event that requires implementing the Bristol Plant Contingency Plan and must be submitted within 15 days to:

U. S. EPA, Region III
Regional Administrator
6th and Walnut Streets
Philadelphia, PA 19106

RCRA.7

Figure G-7

SUPERVISOR'S INCIDENT REPORT

INCIDENT NO.	AREA	BUILDING NUMBER	FLOOR	TIME	MONTH	DAY	YEAI

SOURCE OF ALARM:

- PLANT ALARM SYSTEM ☐
- TELEPHONE ☐
- DELAYED NOTIFICATION ☐
- OTHER _____

ALARM SIGNAL

TYPE OF SITUATION FOUND:

- FIRE ☐
- EXPLOSION ☐
- CHEMICAL REACTION ☐
- MEDICAL ☐
- SPILL ☐
- OTHER ☐

TYPE OF ACTION TAKEN:

- EXTINGUISHMENT ☐
- SERVICE EQUIPMENT ☐
- REMOVE HAZARD ☐
- MEDICAL AID ☐
- EVACUATION ☐
- CLEANUP ☐
- OTHER ☐

EQUIPMENT INVOLVED:

- PROCESS ☐
- TRANSPORTATION ☐
- ELECTRICAL ☐
- WASTE HANDLING ☐
- STORAGE ☐
- OTHER _____

SOURCE OF IGNITION:

ESTIMATED COST:

- MECHANICAL _____
- DOWN TIME _____
- FINAL COST _____

METHOD OF EXTINGUISHMENT:

FOAM _____

H_2O _____ CO_2 _____ DC _____

SPECIAL EQUIPMENT USED:

EMERGENCY APPARATUS ON SCENE:

BRIGADE RESPONSE NO.	DATE ISSUED	DATE RETURNED	PREPARED BY:

REMARKS: BRIEF DESCRIPTION OF INCIDENT

ABOVE TO BE FILLED OUT BY SAFETY DEPARTMENT (EXCEPT COST)

WHAT ACTION MIGHT HAVE PREVENTED THE INCIDENT:

PLEASE INITIAL AND FORWARD TO:		INITIAL	DATE:	COMMENTS:
_____	DAY FOREMAN	_____	_____	_____
_____	AREA MANAGER	_____	_____	_____
_____	PLANT MANAGER	_____	_____	_____
_____	SAFETY DIRECTOR	_____	_____	_____
_____	CHIEF FIRE MARSHAL	_____	_____	_____

Figure G-8

TO ASSURE LEGIBILITY OF COPIES – PRESS HARD.

OCCUPATIONAL INJURY AND ILLNESS REPORT

ROHM AND HAAS COMPANY

LOCATION

SERIAL NUMBER 41031

EMPLOYEE'S NAME | EMPLOYEE OR CLOCK NO. | SOCIAL SECURITY NO. | DATE OF REPORT | TIME OF REPORT

HOME ADDRESS | AGE | SEX ☐ MALE ☐ FEMALE | YRS. OF SERVICE | YRS. ON JOB

JOB CLASSIFICATION – CODE NO. | GROUP | SHIFT | DEPT. MGR. CODE – FOREMAN | DEPARTMENT

LOCATION WHERE INJURY OCCURRED (GIVE ADDRESS) | LOC. CODE | CO. PROPERTY ☐ YES ☐ NO | DATE OF INCIDENT | DAY OF WEEK | TIME AM PM

EMPLOYEE'S DESCRIPTION OF HOW INJURY OCCURRED OR IF ILLNESS, DESCRIBE EXPOSURE (CHEMICALS, ETC.)

EMPLOYEE SIGNATURE (OPTIONAL)

DO YOU HAVE PREVIOUS OR EXISTING MEDICAL HISTORY ON THE INJURED PART OF THE BODY ☐ YES ☐ NO ☐ DON'T KNOW

DO YOU BELIEVE THIS TO BE WORK RELATED? ☐ YES ☐ NO ☐ DON'T KNOW

FINAL DISPOSITION ☐ NON-WORK RELATED ☐ WORK RELATED

NATURE OF INJURY/ILLNESS (DIAGNOSIS)

TREATMENT GIVEN (INCLUDE FOLLOW-UP TREATMENT)

IS FURTHER TREATMENT REQUIRED? ☐ YES ☐ NO | IF YES, TO RETURN ON | ☐ USUAL WORK ☐ LIMITED DUTY ☐ REASSIGNED | WILL INJURY/ILLNESS CAUSE LOSS OF TIME? ☐ YES ☐ NO | ESTIMATED TIME LOST

SEVERITY CODE:

☐ 1. SIMPLE TREATMENT - INCLUDING FOLLOW-UP EXAMINATION

☐ 2. SIMPLE TREATMENT - BUT REQUIRING ADDITIONAL MEDICAL CARE

☐ 3. SLOW HEALING BURNS, SUTURES, ETC., AMBULATORY FRACTURES OF A MINOR NATURE

☐ 4. SERIOUS INJURY - LOST TIME

☐ 5. DEATH

IS OUTSIDE DOCTOR OR HOSPITAL TREATMENT REQUIRED ☐ YES ☐ NO

IF YES, WHERE?

TREATMENT BY | DATE

THE INFORMATION BELOW IS TO BE FILLED OUT BY A DEPARTMENT MGR. OR FOREMAN.

NATURE OF WORK

DESCRIBE INCIDENT COMPLETELY: INCLUDE ALL UNSAFE ACTS OR CONDITIONS WHICH CONTRIBUTED TO INJURY/ILLNESS. (ATTACH REPORT IF NEEDED)

WITNESSES:

DESCRIBE PROTECTIVE EQUIPMENT USED

WAS EMPLOYEE INSTRUCTED BEFORE BEGINNING HIS WORK? ☐ YES ☐ NO

HOW COULD SITUATION HAVE BEEN PREVENTED? (USE BACK OF SHEET OR ATTACH REPORT, IF NEEDED)

CLASSIFICATION CODE *

1. _____
2. _____
3. _____
4. _____
5. _____

WHAT IS BEING DONE TO PREVENT A SIMILAR SITUATION? (USE BACK OF SHEET OR ATTACH REPORT, IF NEEDED)

CORRECTIVE ACTION

INVESTIGATED BY | DATE | DEPARTMENT HEAD OR FOREMAN

AREA MGR. (OR PRODUCTION SUPT.) | EMPLOYEE'S SIGNATURE

000201

Normally coded by Safety Dept.

DISTRIBUTION:
WHITE – DISPENSARY
GREEN – SAFETY DEPT.
YELLOW – DEPT. HEAD
PINK – SUPERVISOR (RETURN TO SAFETY DEPT)
GOLD – EMPLOYEE

FORM 907 REV. 5/78

Figure G-9

Area Manager
Dept. Supervisor
Safety Department

NEAR-ACCIDENT REPORT

(NOTE: This report covers an abnormal situation which occurs without injury to personnel but is potentially a hazardous situation to be corrected. To be prepared and distributed as indicated above.)

Building _____ Date _____ Day _____ Time _____

Description of Abnormal Situation:

Potential Hazard:

Corrective Action Recommended:

Corrective Action Taken:

Reported By _____ Checked by Foreman _____

FORM 1887 REV. 3/76

Bristol Plant
January 31, 1983

To: Dr. P. D. Rosenstock

From: D. K. Eads

Subject: Bristol Plant Spill Prevention and Countermeasure Procedure Revision of 1/24/83; 9pp.

References:
1) Bristol Environmental Manual, SPCC, Most Recent Two Revisions 2/22/82, 11/15/82
2) Minutes EMP Meeting #5, 3/1/82
3) Eads to Rosenstock, 4/12/82

I have reviewed the "Bristol Plant Spill Prevention and Countermeasure Procedure" of January 24, 1983, and find that it is satisfactory. It is an updated version of an earlier plan, Ref (1) and (2) above, that I examined April 1, 1982, Ref (3).

D. K. Eads
P.E. #014073 E

BRISTOL PLANT SPILL PREVENTION AND COUNTERMEASURE PROCEDURE

I. Immediate Actions:

When a spill is discovered and flow is continuing, whoever is able to should STOP FLOW CAUSING SPILL AT ONCE. Then proceed as follows:

1. If safe to do so, CONTAIN SPILLAGE TO PROTECT CLEAN WATER SEWER AND RIVER. Use sand or other means to dike up spillage. (Call 8173 for sand if none is handy.) Seal off any green sewer or manholes (clean water sewers) with plastic drum discs, sand, etc., to prevent spillage from entering. The Development and Environmental Control Department or Night Superintendent* should call out the Emergency Response team if extra help is required.

2. If material cannot be safely diked, DIRECT SPILL TO CHEMICAL (YELLOW) SEWER. As a second choice, DIRECT SPILL TO SANITARY (unpainted) sewer. DO NOT ALLOW material to enter clean water sewers and waterways.

3. If material has reached the CLEAN WATER (GREEN) SEWER, or Otter Creek or if there is a possibility that it may, the Development and Environmental Control Department or the Night Superintendent* will immediately call out the Emergency Response Team to erect booms on Otter Creek from the permanent boom anchor sites below the Maple Beach Road Bridge (see Step IV-3 for details).

4. Call for assistance and direction if spills exceed these limits:

If spill is contained by diking and:	If a spill reaches a Chemical Sewer and involves:	If spill of any amount of any chemical reaches waterway or clean water sewer or has the potential of reaching the lakes: (See Steps IV-5 and IV-6 for Spills to Lakes)
Material is toxic, very odorous or flammable, OR volume exceeds 500 lbs. Follow Step B	over 0.6 lbs. Kathon 886 over 1 lb. Mercaptan over 1 lb. Bactericide over 500 lbs. Formaldehyde over 100 lbs. AN or NaCN over 500 lbs. of any other chemical Follow Steps A and C	Follow Step C
STEP A	**STEP B**	**STEP C**
(1) Call Gatehouse (8081) have valve No. 4 opened for control of spill at trickle filters. (2) One hour after spillage to sewer stops, call Gatehouse (8081) and have valve No. 4 closed. (3) Notify DEC representative.	DAYS: Call DEC (8470 or 8219) OFF-HOURS: Call Night Superintendent* (8116) who will assess the spill containment and clean-up requirements and will contact the people required.	DAYS: Call DEC (8470 or 8219) who will follow Action I-3 immediately. OFF-HOURS: Call Night Superintendent* (8116) who will immediately follow Action I-3 and call in DEC and Day Supervisors.

SPECIAL PROCEDURE: Immediately contain any amount of Polychlorinated Biphenyls (PCB's) spilled anywhere and call the Development and Environmental Control Department.

Jerry C. Brock
J. C. Brock

Paul D. Rosenstock
P. D. Rosenstock

*On Saturday and holiday shifts, call the Mechanical Department Supervisor (8116).

BRISTOL PLANT SPILL PREVENTION AND COUNTERMEASURE PROCEDURE

II. GENERAL COMMENTS

1. Spillage of chemicals to the Delaware Estuary and our lake system can affect fish life and the water supplies of Bristol, Levittown, and Philadelphia. All supervision must be familiar with drainage systems in their area as snow, dirt or the wearing off of paint may make it difficult to immediately identify the manholes and inlets of these sewers. Plant Map B-100-285 - Underground Mains - identifies all of the Clean Water Sewers (green manhole covers), Chemical Sewers (yellow manhole covers) and Sanitary Sewers (unpainted manhole covers). An updated copy of this map is posted on the wall of the Shop Foreman's Office (Building 36, 1st Floor). Greater detail can be obtained by referring to the designated B-100- Series Area Map (see Plant Map - Area Map Index B-100-505) which are carried in the Safety Response van.

2. In addition to unfavorable publicity and civil liabilities, environmental laws include fines for discharge of chemicals to public waterways.

3. Federal law requires that systems and alarms intended to prevent or control spillage must be operational and must be inspected **at least quarterly** and records made of inspection and maintenance on such devices. This is a **departmental** responsibility.

4. Under no circumstances will **any accumulated or new chemical waste** be discharged to any sewer system without the **specific** written approval of one of the following:

   Development and Environmental Control Manager
   Assistant Environmental Control Manager
   Plant Manager

5. Spills must be cleaned up for safety reasons and to prevent flow of diked up chemicals to sewers during run-off of rain and snow.

6. Always refer to the MATERIAL SAFETY DATA SHEETS (MSDS) and assess the specific safety, health and environmental problems of the material you are dealing with. Follow the **Spill or Leak Procedure** in Section VI of the MSDS.

7. All losses of material must be investigated by the Department Foreman and the results of this investigation must be reported on the **FOREMAN'S INVESTIGATION OF CHEMICAL SPILL** (Form 10208, Revised July 1981). This form must be completed by the Foreman within twenty-four hours of the spill. This includes consulation of the attached Superfund Spill Procedure and Hazardous Waste Emergency Coordinator Procedure (Section A-3 of this Manual) to determine if the material spilled is covered by these regulations.

III. COORDINATION OF SPILL CLEAN-UP

1. The Development and Environmental Control Manager or Assistant Environmental Manager must immediately be notified of spills.

2. The Area Manager and Day Foreman are responsible for spill containment and clean up in their buildings and outside their buildings.

3. The Development and Environmental Control Department is responsible for containment and clean-up of spills outside the fence line and/or in the sewers.

4. During off-hours, the Night Superintendent is responsible for coordination of all containment and clean-up efforts until day supervision and/or Development and Environmental Control arrive. He should take aggressive actions to contain spills and should call on all resources available to the Plant.

   NOTE: On Saturday and holiday day shifts, call the Mechanical Department Supervisor (8116).

5. Requirements for personnel from the labor pool must be made through the Material Handling Foreman.

6. Requirements for Shop craft personnel, including call-ins, must be made through the General Foreman or Construction Supervisor. Requirements for outside contractor services must be made through the Contractor Foreman. In an off-hours situation, any one of these foremen can handle any of these items.

7. All persons involved in the spill containment and clean-up should anticipate their needs on subsequent shifts and notify the appropriate persons of these requirements with as much advance notice as possible.

IV. SPECIFIC ACTIONS

1. The first priority must be to stop the flow which is causing the spill and to protect the clean water sewers and river.

2. The coordinator must evaluate fire and toxicity hazards arising from spills which may have been diked up inside either permanent or emergency dikes. All or part of the Fire Brigade/Emergency Response Team may be used. Sound the fire alarm if necessary.

   Options available include:

   a. Obtaining permission from DEC Manager or Assistant DEC Manager to flush the material to the chemical sewer.

   b. Blanketing the area with foam (use Fire Brigade).

   c. Evacuating area and/or using respiratory protection (for toxicity).

   d. Eliminating vehicle traffic in surrounding area (ignition danger).

   e. Pumping spill to drums for later disposal (unless approved by Safety, do not use any gasoline-driven pump).

3. If material has gotten into the clean water (green) sewer or Otter Creek, or if there is a possibility it may, or if material has gotten into Lake Ideline, the Emergency Response Team should be called to immediately erect booms on Otter Creek from the permanent boom anchor sites below the Maple Beach Road Bridge. Erect two 3M booms first and then a canvas boom east of these.

4. If material has gotten into the Schmidt's Lake, isolate the lake by closing the valves in the dike between Schmidt's Lake and Lake Ideline.

5. If material has gotten into Lake Ideline:

   a. Do Step IV-3.

   b. Have the Gatehouse announce that a Plant Water Emergency Situation exists and that all operations using Plant water <u>must</u> be shut down as rapidly as possible. This includes immediately stopping the feeds on all kettle proccesses and cooling the batches.

   c. When the Emergency Coordinator (DEC, Safety Shift Supervisor or Night Superintendent) has ascertained that all operations are safely shut down, the Lake Ideline pumps should be shut down.

IV. SPECIFIC ACTIONS (cont'd)

6. Chemical neutralization/clean-up strategies for specific materials are listed below. (Location and procurement of neutralizing and absorbing materials are listed in Item 9.)

   a. Acid, including GMAA and AA - Soda Ash (8-2067) neutralizes concentrated acids on roughly a pound-for-pound basis. A strong reaction will occur if added to a concentrated pool. Only under the direction of the DEC Department may Liquid Caustic (8-0066) be used to handle large pools of spilled acids.

      SAFETY: **Wear acid goggles, acid suit, rubber gloves and acid boots for this operation.**

   b. Caustic - Follow instructions as in "a." above, except use Alum (aluminum sulfate, 8-0605). Approximately 1.5 pounds of Alum will be needed to neutralize each pound of Liquid Caustic (50% NaOH). Only under the direction of the DEC Department may Sulfuric Acid be used to neutralize large pools of spilled caustic.

      SAFETY: **Wear acid goggles, acid suit, rubber gloves and acid boots for this operation.**

   c. Cyanide - Lethal Hydrogen Cyanide gas is released with Sodium Cyanide (8-0086) or AN (Acrylonitrile, 8-0222) are acidified (pH below 7). Soda Ash (8-2067) must be used to bring the pH to 8-10 in any sewer to which either of these materials has spilled or been added and to any spill pool area from which they must be removed.

      SAFETY: a. **Wear respirator only in open air. Wear self-contained breathing apparatus in all other situations.**

      b. **Immediately remove clothing contaminated with AN and discard all contaminated leather (shoes, belts and gloves).**

   d. Isocyanate - Desmodur W (8-1188) and its analogs are skin sensitizers. Use Oil-Dry and Isocyanate Decontamination Solution (9-3060) in accordance with instructions on MSDS to clean up spills. The Isocyanate Decontamination Solution is available in the Acryloid Coatings Department, Building 30.

      SAFETY: **Wear rubber gloves with gauntlets, acid suit, acid type splash goggles and butyl rubber boots when cleaning all spills.**

IV. SPECIFIC ACTIONS (cont'd)

6. e. Monomers - Quickly add odor counteractant (Rhodia Alamask 500 AX) by spreading one to five gallons per 1,000 pounds of monomer and checking odor downward. Absorb materials that are not recoverable with wood flour, Oil-Dry or Dica-Sorb and place in containers for disposal.

SAFETY: **WEAR ACID GOGGLES AND RUBBER GLOVES.**

f. Oil and Odorous Materials - Oil-Dry, wood flour, and Dica-Sorb are suitable absorbents for many liquids, including DNCP and Pesticides.

g. Mercaptans - The skunk and rotten cabbage odors of mercaptans are offensive. A great deal of public alarm can be caused, even when diluted to low concentrations (rotten egg odor), because these materials are used as tracers in propane and natural gases. Departments using mercaptans are responsible for having procedure and materials for handling mercaptans. Briefly, procedure is to absorb mercaptan, add DILUTE (5-1/4% active Chlorine), Sodium Hypochlorite (household bleach), add odor counteractant (Alpine ALDOR 1052), and scoop up for disposal in closed top drums.

SAFETY: **The reaction of mercaptan and sodium hypochlorite may be very violent. Wear rubber gloves, acid suit and acid goggles.**

h. Emulsions - Can be absorbed with sand/wood flour for clean-up and disposal.

i. PCB - See **Interim PCB Procedure** (Section A-4 of this Manual).

j. Underground Fuel Tanks - **Daily inventory will be monitored and logs will be kept by the Shop.**

7. Location and procurement of neutralizing and absorbing materials:

a. Emergency Diking Sand Stations Locations:

(1) Southwest corner of Building 36
(2) Northeast corner of Building 35
(3) West of Building 38
(4) North of Building 75
(5) Northwest corner of Building 115
(6) Behind Building 105 at gas pumps

If sand is not readily available, call Services (Ext. 8172/8173) or have Gatehouse (Ext. 8081) contact General Services Foreman.

IV. SPECIFIC ACTIONS (cont'd)

7. b. Alum (Aluminum Sulfate) (8-0605) - Is available in bags at Building 16. If not readily available, call Services (Ext. 8172/ 8173) or have Gatehouse (Ext. 8081) contact General Services Foreman.

c. Soda Ash (Sodium Carbonate) (8-2067) - Is available in bags at Building 16. If not readily available, call Services (Ext. 8172/ 8173) or have Gatehouse (Ext. 8081) contact him.

d. Oil-Dry and Wood Flour - Call General Services Foreman (Ext. 8153) or have Gatehouse (Ext. 8081) contact him.

e. Dica-Sorb - Light weight bags available for pick-up at Building 4.

f. Odor Counteractants - Available in small containers for pick-up from the DEC Department at Buidling 4.

g. Household Bleach (Clorox) - Available in small containers for pick-up from the DEC Department at Building 4.

8. Trailer Number 935, located at the Plant Dump, contains emergency items for use in the event spilled material reaches a waterway and floats on the surface. The trailer contains the following:

- o 3M lightweight, T-280 double booms ---------- 700 ft.
- o Grefco canvas booms ---------- 600 ft.
- o Absorbent pads ---------- 10 bales
- o Absorbent rolls ---------- 2 - 100 ft. rolls
- o Sand ---------- 20 bags
- o Odor counteractant ---------- 2 - 5 gal. cans
- o Rope ---------- 100 ft.
- o Surface skimmer (skimmer, hose, and gasoline driven pump*)

Also availabe for use at the emergency site is the Safety Department's Emergency Response vehicle containing tools, lights, safety equipment, etc.

*SAFETY: **Use gasoline pumps for very flammable material only after obtaining approval from the Safety Department.**

SPILL PREVENTION AND COUNTERMEASURE PROCEDURE

LISTING OF FUEL OIL AND GASOLINE TANKS AT BRISTOL

FUEL NAME	PERMIT NUMBER(1)	TANK SIZE (GALLONS)	TANK LOCATION(2)	COMMENTS
#2 Oil	169,814 (11/20/70)	30,000	East Side B-42	3
#2 Oil	192,021 (7/17/80)	1 X 660	Building 45	4,6
#2 Oil	192,021 (7/17/80)	1 X 350	North Side B-118	4,5,6
#2 Oil	----	1 X 200	Inside B-101	---
#2	----	1 X 275	Under B-99	4,5
#4 Oil	191,253 (2/25/80)	2 X 8000	East and West Side of B-111	3,5
#6 Oil	169,985 (12/29/70)	1,300,000	South of B-42	4,6
Unleaded Gasoline	191,253 (2/25/80)	2 X 8000	West of B-83	3

(1) Pennsylvania State Police, Fire Marshal Division, Harrisburg, PA
(2) B = Building
(3) Underground Tank
(4) Above Ground Tank
(5) Outside Bristol Plant Fence Line
(6) Tank is in Dike

V. SPILL NOTIFICATION PROCEDURE

Spills to the Delaware River Estuary will be reported by the Plant Manager or at his direction or in his absence, by Dr. P. Rosenstock, or in his absence, Mr. R. O'Larnic. The report will include the time of spill, the amount (approximate if not known immediately), the type or name of material spilled and the approximate pollutional characteristics (toxic, taste or odor potential, dissolved oxygen consuming (BOD), acid or caustic, and oily or floating, including fire potential). The telephone numbers of the agencies to notify are listed in Section F-3 of this Manual. Call sequences are as follows:

For any spill which can affect the quality of drinking water in the Estuary	For a SUPERFUND reportable spill which will not affect the quality of drinking water in the Estuary	For any oil spills to the ground or surface waters
1. Bristol Borough	4. U.S. Coast Guard	4. U.S. Coast Guard
2. Lower Bucks Municipal Authority	5. National Response Center	5. National Response Center
3. Philadelphia Torresdale Water Filtration Plant	6a. Bucks County Board of Health	6a. Bucks County Board of Health
4. U.S. Coast Guard	1. Bristol Borough	1. Bristol Borough
5. National Response Center		
6a. Bucks County Department of Health		
6b. PA DER		
7. DRBC		
8. EPA		

PDR:clk/dpmg:1/26/83
W/T.1(a)

FOREMAN'S INVESTIGATION OF CHEMICAL SPILL

AREA _____ DEPARTMENT _____ BUILDING _____

DATE & TIME OF SPILL _____ OPERATOR _____

QUANTITY & CHEMICAL SPILLED _____ TO:

_____ CHEMICAL SEWER _____ CLEAN WATER SEWER

_____ SANITARY SEWER _____ OTHER (IDENTIFY)

WAS SPILLAGE PROCEDURE FOLLOWED? _____ PERSON NOTIFIED _____

DESCRIPTION OF SPILL:

ARE PRESENT FACILITIES AND PROCEDURES ADEQUATE TO PREVENT A RECURRENCE? _____

IF NOT, EXPLAIN:

WHAT ACTION HAS BEEN TAKEN TO PREVENT A RECURRENCE?

WHAT QUANTITY WOULD HAVE BEEN LOST HAD THE SPILL NOT BEEN DETECTED? _____

INVESTIGATED BY: _____ DATE: _____

(FOREMAN OR NIGHT SUPERINTENDENT)

PLEASE INITIAL AND FORWARD TO:	INITIAL & DATE		COMMENTS
1. DAY FOREMAN			
2. AREA MANAGER			
3. PLANT MANAGER			
4. DEV. & ENV. CONTROL MANAGER			
5. ASST. ENV. CONTROL MANAGER			

THIS INVESTIGATION FORM TO COMPLETED WITHIN 24 HOURS OF THE SPILL.

FORM 14225 7/91

BRISTOL PLANT CONTACT LIST

Names	Title	Home	Office (215) 785-	Beeper
Jerry C. Brock	Plant Manager	(609) 953-0842	8336	350
John W. Cherry	Contractor Foreman	(609) 461-2706	8348	123
Robert A. Derr	Material Handling Foreman	(215) 968-9308	8173	Radio
David K. Eads	Process and Project Engineering Manager	(215) 949-3078	8441	220
William J. Ferry	Area A Manager	(215) 968-9414	8407	330
Roy T. Funk	General Foreman	(215) 946-6285	8382	115
Alan A. Kober	Area C Manager	(215) 628-2426	8384	340
Guy C. Murdoch	Group Leader, DEC	(215) 598-3346	8475	162
Robert J. O'Larnic	Assistant Environmental Control Manager	(215) 949-2730	8219	340
J. David Particelli	Personnel Director	(609) 654-7405	8154	---
Rafael A. Rosario	Assistant Utilities Manager	(609) 261-0213	8349	185
Paul D. Rosenstock	Development, Environmental and Utilities Manager	(215) 757-8623	8470	380
Harold W. Saxton	Construction Supervisor	(215) 788-2393	8333	105
William C. Scott	General Services Manager	(215) 659-1874	8168	320
Henry C. Sullivan	Health and Safety Director	(215) 825-0233	8663	590
Calvin S. Tobias	Chief Fire Marshall	(609) 877-5388	8664	520
Fran V. Villani	Maintenance and Stores	(609) 778-1311	8336	340

GOVERNMENT AGENCY TELEPHONE NUMBERS*

AGENCY	TELEPHONE
1. BRISTOL BOROUGH	
Plant Superintendent	(9) 785-4202
Borough Engineer	(9) 638-1130
Borough Manager	(9) 788-3828
2. LOWER BUCKS MUNICIPAL AUTHORITY (LEVITTOWN)	
Plant Superintendent (Water Plant)	(9) 945-1170
Plant Superintendent	(9) 945-1170
Authority Manager	(9) 945-7400
3. PHILADELPHIA TORRESDALE WATER FILTRATION PLANT	
Superintendent	(73) 335-8091
Off-Hours, Call Filtration Plant	(73) 355-8055
4. U.S. COAST GUARD, GLOUCHESTER CITY, NJ	
Water Pollution Officer (Port of Philadelphia Area)	(73) 923-4320
Duty Officer, 24-Hour Number	(73) 923-4320
5. NATIONAL RESPONSE CENTER*	
*If spill quanities warrant notification:	(9)-(1)-(800) 424-8802
6. PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES	
A. Bucks County Department of Health	
Chief Environmental Engineer	(72) 1-343-2800
Off-hours contact Department of Health through the Bucks County Police Radio	(9) 945-3100
B. DER, Regional Office	
Regional Engineer	(73) 631-2404
Chief of Operations	(73) 631-2405
Nightime	(73) 631-2400
7. DELAWARE RIVER BASIS COMMISSION	(72) 1-(609) 883-9500
8. ENVIRONMENTAL PROTECTION AGENCY	
Chief Oil and Hazard Material - or Assistant -	(73) 597-9898
24-Hour Number	(73) 597-9898

CALL SEQUENCES:

A. For any spill which can affect the quality of drinking water in the estuary: 1, 2, 3, 4, 5, 6A, 7, 8, 6B.

B. For a SUPERFUND reportable spill which will not affect the quality of drinking water in the estuary: 4, 5, 6A, 1.

C. For any oil spills to ground or surface waters: 4, 5, 6A, 1.

SECTION H

PERSONNEL TRAINING

The information presented in this section outlines the personnel training program for the Bristol Plant of Rohm and Haas Delaware Valley Inc. as required in 40 CFR 122.25(a)(12) and 264.16.

H-1 Outline of Training Program
[40 CFR 122.25(a)(12)]

H-1(a) Job Titles and Duties
[40 CFR 264.16(d)(1) and (2)]

The hazardous waste management system of the Bristol Plant is administered by the Environmental Manager with the manifest records and shipping handled by the General Services Manager. The Environmental Department, which is included in the Development Environmental and Utilities Department, has a full time Environmental Engineer, an Environmental Technician and an Environmental Laboratory Technician. A half-time Environmental Chemist and Assistant Environmental Engineer are also assigned. These people work with Production and General Services personnel and establish procedures to assure the proper handling and movement of hazardous wastes throughout the facility. Job descriptions for these positions are contained on the following pages.

General job descriptions for the Chemical, Utility and General Services operators have also been included. Note that all hourly personnel will be fully trained in all aspects of hazardous waste handling required for safe fulfillment of their job duties(1). In addition, all new hourly personnel will receive the training as part of their new employee indoctrination. Names, job titles and addresses of all hourly employees are on file in the Personnel Department.

An organization chart for the Bristol Plant is shown in Figure H-2.

(1) Training as per outline in Figure H-1 will start by June, 1983 and be completed by October 31, 1983.

POSITION TITLE: Environmental Department Manager

NAME OF EMPLOYEE: Paul D. Rosenstock

Position Responsibilities and Duties

Manage Environmental Control Department for the Bristol Plant of Rohm and Haas Delaware Valley Inc.

Evaluates local, state and federal legislation for applicability to the Bristol, Pennsylvania Plant of Rohm and Haas Delaware Valley Inc., advises Management of impact on the Company, and makes and carries out plans to ensure Company compliance within the allowed schedule.

Serves as the Emergency Response Coordinator for the Bristol Plant of Rohm and Haas Delaware Valley, Inc. associated with on-site spills or loss of lading in transportation accidents. Recommends actions for containment, cleanup and disposal of materials and for safe guarding human health and the environment.

Approves policy and procedures for the handling and control of materials discharged into the environment.

Develops appropriate training programs for presentation to employees involved in environmental related plant operations. Assists in the development and coordination of the hazardous waste training program.

Approves the disposition of solid wastes for reuse, recycle or disposal.

Serves as liaison with state, local and federal regulatory officials and frequently corresponds by phone and by letter.

Comments on and approves and designs equipment and processes for the control of air, water and solid waste pollution.

Experience and Qualifications

B.S. in Chemistry or in Chemical, Environmental or Mechanical Engineering with at least seven years of industrial plant and/or research experience.

Demonstrated communication and logic skills.

POSITION TITLE: General Services Area Manager

NAME OF EMPLOYEE: William C. Scott

Position Responsibilities and Duties

To manage a wide variety of centralized services for the Bristol Plant of Rohm and Haas Delaware Valley Inc., including procurement, storage, distribution, housekeeping and certain office functions.

1. Manage storage and distribution of general plant raw materials, containers and other manufacturing materials. Operations include in-plant warehousing, forklift and truck movements, and a variety of manual materials handling services.

2. Manage storage and shipment of most plant packaged products and hazardous wastes.

3. Manage a local private trucking fleet for delivery of bulk and packaged products to customers and other locations within about 125 miles of the Plant.

4. Order and maintain inventories of raw materials, containers (including those for hazardous wastes), and certain supply items.

5. Manage general plant housekeeping operations including janitorial and gardening services, waste disposal, etc.

Experience and Qualifications

B.S. degree in Chemistry or Chemical or Mechanical Engineering.

At least five years management experience in production operations.

POSITION TITLE: Environmental Engineer; Assistant Environmental Control Manager

NAME OF EMPLOYEE: Robert J. O'Larnic

Position Responsibilities and Duties

Responsible for maintaining the overall ongoing environmental programs for air, water (including The Biological Treatment Plant) and solid waste for the Bristol, Pennsylvania Plant of Rohm and Haas Delaware Valley, Inc.

a. Keeping permits current,

b. Monitoring control equipment for operation and performance,

c. Keep all records required or needed, and

d. File reports as required.

Evaluates local, state and federal legislation for applicability to the Bristol, Pennsylvania Plant of Rohm and Haas Delaware Valley, Inc., advises Management of impact on the Company, and makes and carries out plans to ensure Company compliance within the allowed schedule.

Serves as the Emergency Response Coordinator for the Bristol Plant of Rohm and Haas Delaware Valley, Inc. associated with on-site spills or loss of lading in transportation accidents. Recommends actions for containment, cleanup and disposal of materials and for safe guarding human health and the environment.

Develops policy and procedures for the handling and control of materials discharged into the environment.

Develops appropriate training programs for presentation to employees involved in environmental related plant operations. Assists in development and coordination of hazardous waste training program.

Serves as liaison with state, local, and federal regulatory officials and frequently corresponds by phone and by letter.

Comments on and approves designs equipment and processes for the control of air, water and solid waste pollution.

Supervises Environmental Technican and Assistant Environmental Engineer.

Experience and Qualifications:

B.S. in Chemical, Environmental, or Mechanical Engineering from accredited university and at least 5 years industrial plant experience. B.S. in Chemistry is also acceptable.

One year of experience with federal air, water and solid waste regulations.

Demonstrated communication skills.

POSITION TITLE: Environmental Chemist

NAME OF EMPLOYEE: Guy C. Murdoch
James J. Bagnell

Position Responsibilities and Duties

Responsible for maintaining the ongoing chemical aspects of progress for air, water and solid waste analysis, hazardous waste classification and training for the Bristol Plant of Rohm and Haas Delaware Valley, Inc., including:

a. Manage Environmental Control Laboratory,

b. Keep all records required or needed,

c. File reports as required, and

d. Analyze and classify all Bristol solid wastes which are destined for reuse, recycle or disposal.

Evaluate local, state and federal regulations, along with the Environmental Control Engineer for applicability to the Bristol Plant of Rohm and Haas Delaware Valley, Inc.

Serves as alternate coordinator for Emergency Response Team of the Bristol Plant of Rohm and Haas Delaware Valley, Inc. associated with on-site spills or loss of lading in transportation accidents. Recommend actions for containment, cleanup and disposal of materials and for safe guarding human health and the environment.

Develop appropriate training programs for presentation to employees involved in environmental related plant operations. Develop and coordinate hazardous waste training program.

Experience and Qualifications

B.S. in Chemistry or equivalent training and experience, including at least seven years of industrial plant and/or research experience.

Demonstrated communication and logic skills.

POSITION TITLE: Assistant Environmental Engineer

NAME OF EMPLOYEE: Diane F. Fratini

Position Responsibilities and Duties:

Under limited supervision, administer the environmental program(s) for air and/or water and/or solid waste for the Bristol Plant of Rohm and Haas Delaware Valley Inc. including:

a. Keeping permits current,

b. Monitoring control equipment for operations and performance,

c. Keeping all records required or needed,

d. Generating reports as required, and

e. Training Plant personnel.

Evaluate relevant local, state and federal legislation for applicability to the Bristol Plant of Rohm and Haas Delaware Valley, Inc. and recommend plans or procedures to ensure company compliance.

Serves as alternate Emergency Response Coordinator for the Bristol Plant of Rohm and Haas Delaware Valley Inc. associated with on-site spills or loss of lading in transportation accidents. Recommends actions for safe-guarding human health and environment for containment, cleanup and disposal of materials.

Drafts policy, procedure and training documents relevant to environmental control with limited guidance from the plant Environmental Control Engineer and/or Environmental Chemist.

Serves as liaison with local, state and federal regulatory personnel and frequently corresponds by phone and letter.

Carries out technical studies as requested to define equipment, procedures, or processes for pollution control.

Keeps fully informed on developments in assigned areas of responsibility.

Experience and Qualifications

B.S. in Chemical, Environmental, Mechanical or Civil Engineering from an accredited university. B.S. in Chemistry also acceptable.

Experience and Qualifications (cont'd)

One or more years of experience in chemical processing plant and/or in administering federal or state air, water, or solid waste regulations. Demonstrable communications skills.

POSITION TITLE: Environmental Technician

NAME OF EMPLOYEE: R. Tyler

Position Responsibilities and Duties

Routinely monitors plant emissions control equipment. This includes storm and chemical sewers, hydrocarbon and particulate control systems, Biological Treatment Plant Operation, hazardous waste storage facility and waste shipments.

Maintains environmental sampling equipment. Collects, analyzes (or has analyzed), collates and reduces sampling data, using mathematical equations, to substantiate emission control performance.

Performs specialized environmental tests as required by government regulations. Performs environmental process development laboratory and pilot scale testing with general guidance of Environmental Control Engineer or Environmental Chemist.

Under general supervision, acts as field coordinator for in-plant spill episodes to ensure containment. Can involve working with several plant departments and outside contractors.

Locates equipment or operation malfunctions and arranges correction with Production Supervision.

Maintains records of all environmental inspections, tests and monitoring results and report findings to the Environmental Engineer and/or Environmental Chemist.

Experience and Qualifications

Two years of college credit in a laboratory science field or a high school diploma plus a minimum of 5 years experience in chemical laboratory work.

POSITION TITLE: Environmental Laboratory Technician

NAME OF EMPLOYEE: R. W. Haschert (J. W. Coleman and R. Trice are backups)

Position Responsibilities and Duties

Responsible for analysis of all water samples and selected solid and air samples collected by the Environmental Control Department.

Serve as vacation relief for water pollution control functions of the Environmental Technician.

Experience and Qualifications

Three years or more experience in chemical laboratory work.

Position Title: Chemical Operator (V/VI)

Function

A Level V/VI Chemical Operator is fully responsible for the correct start-up, operation, and shutdown of one or more complex chemical processes. Such a process normally consists of a series of inter-related units through which a batch, semi-continuous, or continuous sequence of chemical or physical reactions takes place to manufacture intermediate or finished products.

Major Duties

1. Assume responsibility for overall operation of the process and its related operations (i.e., inspection, sampling, recording, cleaning, etc.).
2. Charge raw materials to process vessels.
3. Maintain proper batch records on the batch cards.
4. Take all in-process and final samples, as required.
5. Transfer product from process to proper shipping container.
6. If applicable, transfer hazardous wastes generated in the process to proper containers and maintain records on batch cards.
7. Inspect hazardous waste containers in the process area for problems.
8. Direct Level III Utility Operator as required.
9. Perform other duties as required or requested by supervision.

Experience

All hourly hires must pass company standards in reading, math, task performance and physical fitness. Also, employees must be capable of being on-the-job trained in 30 to 90 days.

Position Title: Level IV Chemical Operator

Function

The Level IV Chemical Operator is responsible for the correct start-up, operation and shutdown of a less complex process or the specific operation of certain equipment in a highly complex process. Such equipment will be in a process which will normally consist of a series of inter-related units through which a batch, semi-continuous, or continuous sequence of chemical or physical reactions takes place to manufacture intermediate or finished products.

Major Duties

1. Assume responsibility for overall operation of the process and its related operations (i.e., inspection, sampling, recording, cleaning, etc.).
2. Charge raw materials to process vessels.
3. Maintain proper batch records on the batch cards.
4. Take all in-process and final samples, as required.
5. Transfer product from process to proper shipping container.
6. If applicable, transfer hazardous wastes generated in the process to proper containers and maintain records on batch cards.
7. Inspect hazardous waste containers in the process area for problems.
8. Direct Level III Utility Operator as required.
9. Perform other duties as required or requested by supervision.

Experience

All hourly hires must pass company standards in reading, math, task performance and physical fitness. Also, employees must be capable of being on-the-job trained in 30 to 90 days.

Position Title: Level III Utility Operator

Function

The Level III Utility Operator is responsible for performing or assisting in the performance of, a variety of basic mechanical and chemical type operations involved in the production of intermediate or finished products, and the handling of wastes. Also, in the inspection, packaging, and loading of the same for in-process use or for shipment to a customer.

Major Duties

1. Transfer of raw material drums in process building.
2. Charge raw materials to process vessel and take samples as required.
3. Maintain proper transfer records on weigh sheets and/or batch cards.
4. Transfer finished product from process vessels to proper container and take samples required.
5. If applicable, transfer hazardous wastes generated in the process to the proper container and maintain records of transfer on batch card.
6. Inspect hazardous waste containers in the process area for problems.
7. Perform other duties as required or requested by supervision.

Experience and Qualifications

All hourly hires must pass company standards in reading, math, task performance and physical fitness. Also, employees must be capable of being on-the-job trained in 30 to 90 days.

Position Title: General Services Operator

Function

Operates a forklift, stand-up unit, or worksaver to receive/ship and store various containers and materials in/from Plant Process buildings, warehouses, trucks and/or railcars. Operates a front-end loader as directed by supervision.

Major Duties

1. Must be capable of operating a forklift, stand-up unit, or worksaver safely and efficiently.

2. Transport hazardous wastes from process buildings to the hazardous waste pad and load shipments of hazardous wastes on trucks for transport to disposal sites.

3. Performs safety and maintenance checks on equipment before operating.

4. Stores materials and maintains warehouse or outside storage area in orderly condition. Operator assigned to drummed hazardous waste storage area is responsible to inspect containers and record results of inspection per procedure.

5. Must have knowledge of paperwork pertaining to receiving/shipping of various materials, containers, etc. from trucks/railcars.

6. Directs other employees in various material handling tasks.

7. Must have knowledge of regulations pertaining to labeling and packaging of hazardous materials, including wastes.

8. Must be capable of performing duties assigned to the Utility Operator and Materials Handler classifications.

Experience and Qualifications

All hourly hires must pass company standards in reading, math, task performance and physical fitness. Also, employees must be capable of being on-the-job trained in 30 to 90 days.

PDR:dpmg
RCRA.3

H-1(b) Training Content, Schedules, and Techniques
[40 CFR 264.16(c) and 264.16(d)(3)]

The Bristol manufacturing plant handles hundreds of chemicals every day in quantities ranging from ounces to hundreds of thousands of pounds. Spilled material from many of these chemicals would be, by definition, a "hazardous waste". The safe and proper handling of all chemicals, which would of course include hazardous wastes, and the proper responses to emergencies, e.g. spills, fires, explosions, etc., have been recognized for many years as a primary responsibility of Bristol Plant management to its employees, to the environment, and to the community. To carry out this responsibility, management positions were established in both health and safety (Safety Department founded in 1943) and the environment (Environmental Department founded in the 1940's). These departments provide expert guidance to the manufacturing departments through a variety of techniques including, but not limited to, procedures, films, lectures, and hands-on training.

All new employees receive a full day of general safety indoctrination, new foremen receive three days of safety indoctrination. The contents and schedules of this introductory safety training is given in Figure H-3. A safety refresher is given to all employees called back from layoff.

In addition to the introductory training given to each new employee, each employee receives annual training in areas specifically related to his or her job duties. These courses and the department responsible for instruction are given below:

Training	Course Given By:
Acrylontrile	Department Foreman
Asbestos	Department Foreman
Evacuation Drills	Department Foreman
Eye Protection	Department Foreman
Fire Extinguishers	Safety
Forklift/Worksaver	Department Foreman
MSDS (see Comment on Figure H-3)	Department Foreman
New Employees	Health and Safety and Personnel Departments
Noise/Hearing Protection	Department Foreman
Permits	
Welding	Department Foreman
Pipe Opening	Department Foreman
Electrical Lockout	Department Foreman
Tank Entry/Rescue	Safety

H-1(b) Training Content, Schedules, and Techniques (cont'd)
[40 CFR 264.16(c) and 264.16(d)(3)]

Training	Course Given By:
Peroxides	Department Foreman
Respirator (field trial)	Safety
Respirator (classroom)	Safety
Transportation Regulations	General Services
Respirator (slides)	Department Foreman
Vinyl Chloride	Department Foreman
Formaldehyde	Employee Health
Operator Process Review	Department Foreman
OSHA Injury	Recorded by Safety
First Aid Cases	Recorded by Safety

As employees change assignments, specific training requirements may change. A record of job assignments and training requirements is kept and updated for each employee by the Personnel Department (see Section H-2).

Personnel responsible for handling hazardous waste at the Bristol Plant have received annual training pertinent to their responsibilities. This training has been in place since 1980. The training consists of the following elements:

Training By Department Supervision

1. Presentation of a slide and tape show, "Resource Convservation and Recovery Act of 1976". This presentation need only be shown once to each employee.

2. Location of nearby fire alarm boxes and telephones and how to use them to report fires, explosions, medical emergencies, etc. Review annually.

3. Shutdown and evacuation procedures (Emergency Procedure E-1). Review annually.

4. Spill prevention and control procedures (Emergency Procedure S-1). Review annually.

5. On-the-job training in operation of equipment, inspection procedures, maintenance of logs, inspection and use of monitoring and safety equipment. Review annually.

H-1(b) Training Content, Schedules, and Techniques (cont'd)
[40 CFR 264.16(c) and 264.16(d)(3)]

Training By Safety Department

1. Demonstration and practice in use of fire extinguishers. Presented annually by the Safety Department.

The Emergency Procedures E-1 and S-1 on shutdown and evacuation (Item 3 above) and spill prevention and control (Item 4 above), respectively, are contained in the Bristol Plant Emergency Procedures Manual. The Manual is distributed to all department managers and production supervisors. The table of contents is shown in Figure H-4. For more details, see Section G, Contingency Plan.

Employees that haul hazardous wastes for off-site disposal are trained annually in the following subjects:

Training Session for Truck Drivers - Hauling of Hazardous Wastes

Subject	Instructor
MSDS, Emergency Incident Report (see Comments, Figure H-3)	Health and Safety
Placarding	General Services
Respirator Training (self-contained) with acid gear - smoke shed	Health and Safety
Use of Recovery Drum - hands on trial	Health and Safety
Patching drums (wooden plugs, duct tape, epoxy, SS patch, rubber patch with strap)	Health and Safety
Diking (sand, dirt)	Health and Safety
Basic First Aid Course	Health and Safety

Beginning in June 1983, all hourly employees will be trained annually in all aspects of hazardous waste handling required for safe execution of their job duties. The training program will be completed by October 31, 1983. An outline of this hazardous waste training program is given in Figure H-1.

H-1(b) Training Content, Schedules, and Techniques (cont'd)
[40 CFR 264.16(c) and 264.16(d)(3)]

Training By Safety Department (cont'd)

Specific procedures that are currently in place are covered by the Bristol Plant Environmental Manual and the Bristol Plant Best Management Practice Manual as well as the Emergency Procedures Manual. These manuals will be used as a basis to train personnel in such areas as spill prevention and control, monitoring equipment, waste disposal, reporting requirements, inspection, security and training. The tables of contents of these manuals are given as Figures H-5 and H-6. The Bristol Spill Prevention and Countermeasure Procedure (see Section G) is a part of the Bristol Plant Environmental Manual.

Training techniques will include lectures, films and hands-on experience.

The Bristol Plant staff have viewed two slide-tape programs dealing with RCRA training: "RCRA II Management Overview" and "RCRA Facility Personnel Training", prepared by the Environmental Affairs/Energy Conservation Department of Sun Company, Inc. located in Philadelphia, Pennsylvania. The "RCRA II Management Overview" is a general presentation of RCRA requirements. "RCRA Facility Personnel Training" is oriented toward personnel specifically involved in hazardous waste management and handling.

H-1(c) Training Director
[40 CFR Section 264.16(a)(2)]

The hazardous waste management training program is directed by Mr. Guy C. Murdoch (Environmental Chemist). Mr. Murdoch received his B.S. in Chemistry from Haverford College in 1952. He has been with Rohm and Haas for thirty years. Mr. Murdoch has had experience in the Research Division and the Bristol Plant. As a Group Leader in the Development, Environmental and Utilities Department, he has provided technical support for the Plant's solid waste management programs for five years.

H-1(d) Relevance of Training to Job Position
[40 CFR Section 264.16(a)(2)]

Figure H-7 shows that the training program includes instruction on hazardous waste management procedures relevant to the positions held by personnel. For example, supervisory personnel require broad training in all aspects of hazardous waste management, whereas operators require more specific training in their area of responsibility.

H-1(e) Training for Emergency Response
[40 CFR Section 264.16(a)(3]

The training program has been designed to ensure that facility personnel are able to respond effectively to emergency situations.

The training elements specifically addressing emergency situations, such as unscheduled shutdowns due to storms, power outages, fires, explosion or spills, include:

- The Contingency Plan
- Emergency response to fires and explosions
- Spill prevention and control procedures
- Emergency communication procedures and alarm systems
- Shutdown of operations and evacuation procedures
- Procedures for locating, using, inspection, repairing and replacing facility emergency and monitoring equipment

In addition to those trained in hazardous waste management, the Bristol Plant Fire Brigade is on standby for emergency response. Currently, there are 60 fire brigade members that are given both classroom training and fire drills once per month, and annual American Red Cross and CPR training. Training records are kept by the Health and Safety Department. The table of contents of the Bristol Plant Fire Brigade Manual and the Fire Brigade Training Schedule are included in Appendix H.

H-2 Implementation of Training Program
[40 CFR Sections 264.16(d)(4) and 264.16(b)]

The director of the training program and all current waste-handling personnel needing in-depth training, are fully trained. All new employees will complete this organized broad/limited knowledge-need training program within six months of their date of employment. No new employee will work in an unsupervised position until he/she has satisfactorily completed the training requirements. A refresher will be given to employees called back from lay-off. An annual review and update of the training program is attended by each employee.

Employees intimately connected with hazardous waste management and handling will meet annually for review and update of this training program and to discuss the following subjects:

1. All hazardous wastes currently being handled at the facility, noting any changes in waste type, volume, source, characteristics or location that have occurred during the past year.

H-2 Implementation of Training Program (cont'd)
[40 CFR Sections 264.16(d)(4) and 264.16(b)]

2. The status of storage, operating conditions and procedures, noting any areas where there are problems or potential for problems. Employees will participate in developing effective solutions.

3. The requirements contained in our RCRA permit, noting any changes that have occurred during the past year. Areas where maintenance of compliance is a problem are identified and discussed and effective solutions developed.

4. Incidents that have occurred in the past year that warranted use of contingency plans and/or emergency action. This review will focus on (a) the cause of the incident, (b) identification of steps to be taken for prevention, and (c) better handling of such events in the future.

The annual review will utilize our annual report to EPA as a working document.

Records documenting all training for each employee are kept by the Personnel Department with the use of the Employee Training and Safety Record (see Appendix H). The training records, including training in Hazardous Waste (book), on current personnel will be kept until closure of the facility. Records for former employees will be kept for three years after termination.

FIGURE H-1

HAZARDOUS WASTE TRAINING PROGRAM

I. Training For Personnel Safety

Chemistry of Hazardous Materials and Wastes

- Basic concepts of the chemistry of hazardous materials and wastes
- Classification of hazardous materials
- Physical and chemical properties for general hazard classes
- Chemical aspects of handling, storage, treatment and disposal of hazardous wastes
- Acquisition and utilitization of chemical data

Effects on Humans

- Basic concepts of toxicology
- Information concerning the fate of chemicals in biological systems
- Carcinogenicity, mutagenicity, teratogenicity
- Toxicity testing
- Health effects aspects of exposure to frequently encountered hazardous materials and wastes
- Acquisition and utilization of additional toxicological and health effects information

Personal Safety

- Protective clothing
- Respiratory protective devices
- Communication and alarm systems
- Evacuation

II. Release Prevention and Response

- Regulatory aspects, notification
- Planning for emergencies
- Preparation of an acceptable contingency plan
- Relation to the spill prevention and control procedure (Bristol Plant Environmental Manual)
- Emergency equipment
- Duties of the facility emergency coordinator

III. Decontamination Procedures

- Personal hygiene
- Location of lunchrooms
- Laundry
- Personnel decontamination
- Waste-specific procedures
- Spill cleanup procedures
- Decontamination treatment capability and capacity

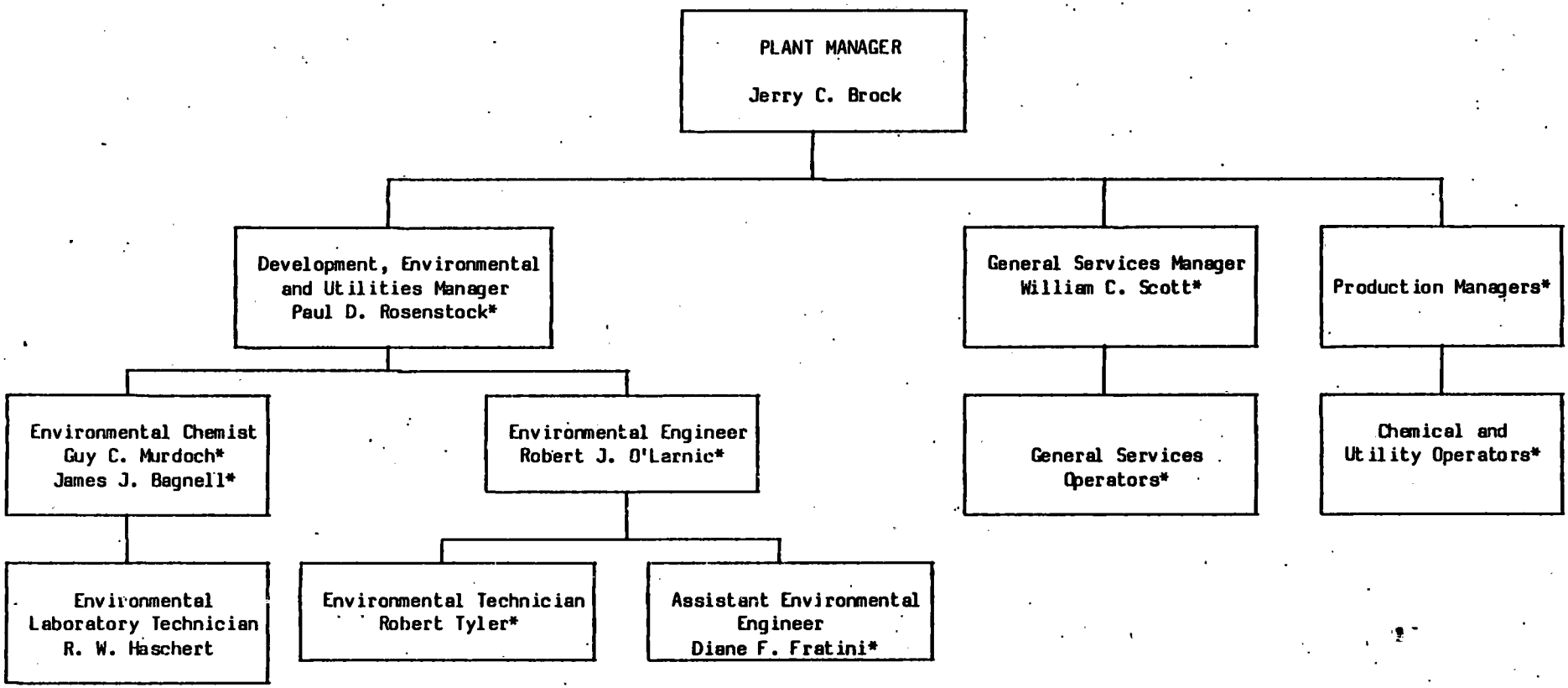
IV. Hazardous Waste Handling Procedures

- Process description
- Waste acceptance procedures
- Process operation and controls
- Maintenance
- Equipment safety
- Explosion and fire hazards: Emergency Response (see Section H-1(e))
- Materials handling
- Recommended safety equipment
- Communication and alarm systems
- Emergency and monitoring equipment
- Shutdown and evacuation

V. Record Keeping

- Use of the manifest system
- Labeling and placarding
- Incident reporting
- Maintaining training records
- Contingency plan records
- Inspection
- Logs

Figure H-2: Organization Chart: Rohm and Haas Delaware Valley Inc., Bristol Plant



*Indicates those personnel directly involved with hazardous waste activities.

RCRA.3

FIGURE H-3

NEW EMPLOYEES AND FOREMEN'S INDOCTRINATION

8:00 a.m.	Video tape/President's message in Bristol Plant Safety Manual
8:30	Protective Equipment - slide show
9:00	Introduction To Industrial Health - test
10:15	Break
10:45	Ladder Safety - film - discussion on key points stressed
11:15	Practical demonstration on ladder handling
11:30	Eye Wash/Safety Shower - slide show - discussion
11:45	Guard Your Sight - slide show
12:05	Discussion of eye and face protection policy
12:15	Lunch break
1:00	Guard Your Hands - slide show
1:15	Hand Tool Safety - slide show
1:30	Discuss hand tool injuries occurring in the Plant
1:40	Manual Lifting - film
2:00	Discussion on proper lifting techniques
2:15	Break
2:30	Respirators - Something In The Air - slide show, discussion on various types of respirators
2:50	Workmen's Compensation
3:00	MSDS Sheets - slide show - discuss use - test Comment: This MSDS training includes chemical and chemical waste identification, physical properties, handling and safety, and spill cleanup.
3:45	Hearing Protection - film - ear muff demonstration, etc.
4:10	Safety Attitudes - slide show
4:20	Closing remarks - end of indoctrination
4:30	END

FOR FOREMEN'S INDOCTRINATION ONLY

2nd Day

8:00 a.m. Intensive review of all permit procedures: welding and burning, pipe opening, confined space entry, tank rescue kit, etc.

3rd Day

8:00 a.m. Plant Tour - hands-on with Safety Shift Supervisor approving permits.

FIGURE H-4

BRISTOL PLANT EMERGENCY PROCEDURES MANUAL

INDEX

Section	
E-1	Emergency Procedure Major Plant Other Than Major Plant Police Investigations Sabotage Shutdown - Evacuation News and Press
E-2	Emergency - Electrical
E-3	Emergency - Injuries
E-4	Emergency - Steam
E-5	Emergency - Plant Water
E-6	Emergency - Company-Wide Reporting of Incidents
E-7	Emergency - Outside Assistance in Case of Fire
E-8	Emergency - Removal of Drums Under Pressure
E-9	Emergency - Transportation
E-10	Emergency - Fire
E-11	Emergency - Request for Mutual Aid
E-12	Emergency - Building 144 - Ethylene, Vinyl Acetate High Pressure Lab
M	Monomer Stability Procedure
O-1	Odor Complaints
O-2	OSHA Inspection Procedure
R-1	Emergency Radio System
S-1	Spillage or Discharge of Chemicals
S-2	Mercaptan Spills
T-1	Telephone - Emergency
T-2	Telephone Service - Emergencies
T-3	Telephones - Home Numbers

BRISTOL PLANT ENVIRONMENTAL MANUAL

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SPILL PREVENTION AND CONTROL PROCEDURE		
I. Immediate Action	A-1	1
II. General Notes	A-2	2
III. Coordination of Spill Clean-Up	A-2	3
IV. Specific Actions	A-2	4-7
V. Spill Notification Procedure	A-2	8
Addendum I: List of Gasoline and Fuel Oil Tanks	A-1/A-2	
Handling Hazardous Substance Release Reporting Requirements - SUPERFUND and PA-DER	A-3	---
PCB Spill Prevention and Control Procedure	A-4	---
B. MONITORING SOPS		
pH Check at Trickling Filter	B-1	---
Pressure Test of Croydon Transfer Line	B-2	---
Monitoring of Underground Fuel Tanks	B-3	---
C. AIR POLLUTION		
General Comments	C-1	---
Air Pollution Abatement Devices		
Under Permit	C-2	1-5
Table of Items	C-2	2-5
PEDS Sheet Schematics	C-3	1-20
BRISTOL PLANT AIR POLLUTION INCIDENT RESPONSE PROCEDURE		
I. Procedure Outline	C-4	1
II. General	C-4	2
III. Air Pollution Complaint - Outside The Plant	C-4	3-4
IV. Air Pollution Complaint	C-4	5
V. Noification Procedure	C-4	6

Figure H-5

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	SECTION NUMBER	PAGE(S)
D. WATER POLLUTION		
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General Comments	D-1	---
Water Balance	D-2	1-6
E. WASTE DISPOSAL		
General Comments	E-1	1
Solid and Liquid Chemical Disposal Flow Diagram	E-1	2
Hazardous Wastes	E-1	3,4
Waste Disposal Form	E-2	---
Bulk Polymerization - Waste Monomer Disposal	E-3	---
Drummed Waste Monomer Disposal	E-4	---
Building 123 Waste Monomer Disposal	E-5	---
Laboratory Wastes - Disposal Procedures	E-6	---
Pesticide/Solvent Wastes from Spring House Laboratories for Burning	E-7	---
Discharge of LSPP Aqueous Wastes to the Waste Treatment Plant	E-8	---
Protocol for Discharge of LSPP Waste Holding Tank to the Chemical Sewer	E-9	---
WARNING - Drummed Wastes Which Must Be Solid (No Liquid)	E-10	---
Prevention of Environmental Accidents Involving Drummed Wastes in Storage and Transit	E-11	---
Proper Labeling of Brown-Band Chemical Waste Drums	E-12	---
Lab Pack Procedure	E-13	
F. TELEPHONE LISTS		
Bristol Plant Contact List	F-1	1
Home Office Personnel Telephone Numbers	F-2	1
Government Agency Telephone Numbers	F-3	1

Figure H-5

ROHM AND HAAS DELAWARE VALLEY INC. - BRISTOL PLANT

PREPAREDNESS, PREVENTION AND CONTINGENCY PLAN

BEST MANAGEMENT PRACTICE MANUAL

TABLE OF CONTENTS

Section	
A-1	Name and Location
A-2	BMP Policy
B-1	BMP Committee
B-2	Risk Identification and Assessment
B-3	Reporting
	i. Contingency Plan for the Bristol Plant
	ii. Bristol Plant's Spill Prevention/Control Procedure
	iii. Notes on Handling Spills
	iv. Spill Notification Procedure
	v. Investigation Reports of Plant Spills During 1981 (Examples)
	vi. Last Spill to Estuary
	vii. Pollution Incident Prevention Program (PIPP)
	viii. Sanitary Water Board Industrial Wastes Permit No. 76216
	a) Order Modifying Permit
	b) Permit
	c) Summary Report to Accompany Application for Permit
	Section I: Relevant Background Information
	Section II: General Conditions - Items 1-7
	Section III: Program of Pollution Abatement and Treatment - Items 1-13
	x. U.S.G.S. Map (Bristol & Beverly Quadrangles) Locating the Bristol Plant
	xi. Bristol Plant Map
	xii. Pollution Abatement and Treatment Flow Chart
	xiii. Waste Treatment System - Trickling Filtration, Lagooning
	xiv. Sources of Waste
	xv. Protection Against Spillage
	xvi. Spillage Protection Devices
	xvii. Typical Manufacturing Building Cross Section Showing Three Sewer Systems
B-4	Materials Compatibility
B-5	Housekeeping
B-6/B-7	PM/Inspection and Records
B-8	Security
B-9	Employee Training

000246

FIGURE H-7 - LEVEL OF TRAINING FOR HAZARDOUS WASTE PERSONNEL

Section H
Date: 2/11/83
Revision No.: 0

DEGREE OF TRAINING*

Position	Personal Safety	Release Prevention & Response	Contingency Plan	Emergency Procedures	Record Keeping	Hazardous Waste Handling Procedures	Hazardous Waste Management
Environmental Engineer	B	B	B	B	B	B	B
Environmental Chemist	B	B	B	B	B	B	B
Asst. Environmental Engineer	B	B	B	B	B	B	B
Environmental Technician	B	B	B	B	L	B	L
Env. Laboratory Technician	B	L	L	L	L	L	L
Production Supervisor	B	B	B	B	B	B	B
Production Day Foreman	B	B	B	B	B	B	B
Chemical and Utility Operators	B	B	L	B	L	B	L
General Services Supervisor	B	B	B	B	B	B	B
General Services Foreman	B	B	B	B	B	B	B
General Services Operators	B	B	L	B	B	B	L
Plant Manager	B	B	B	B	B	B	B
Safety Manager	B	B	B	B	B	B	B
Security Guard	L	L	L	L	L	L	L

*B - Broad
L - Limited

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SECTION I

CLOSURE PLAN, POST CLOSURE PLAN AND FINANCIAL REQUIREMENTS

The information contained in this section is submitted in accordance with the requirements of 40 CFR Sections 122.25(a)(13), 264.111 through .115 and 264.178. The Bristol Plant's closure plan contained in this section details all the actions necessary to close the facility and the estimated time and costs to complete these actions. The Bristol Plant will maintain a copy of the closure plan on site at all times. The Regional Administrator will be notified at least 180 days prior to the start of closure and following completion will be given a certification by the Bristol Plant and an independent registered professional engineer that the facility was closed in accordance with the closure plan.

A post-closure plan is not applicable because this is a storage facility only and all wastes will be removed when the facility is closed. Following removal of all containers the storage pad will be decontaminated using a suitable solvent wash. Any run-off from the decontamination process will be contained for secondary treatment.

I-1 Closure Plan
[40 CFR Section 122.25(a)(13)]

I-1a Closure Performance Standard
[40 CFR Section 264.111]

The Bristol Plant's closure plan was developed to eliminate the need for any post-closure maintenance. It was designed to ensure that the facility will not require further maintenance and controls, minimizes or eliminates threats to human health and the environment, and avoids escape of hazardous waste, hazardous waste constituents, leachate, contaminated rainfall, or waste decomposition products to the ground or surface wastes or to the atmosphere. If there is evidence of any spill or leaks, samples will be taken and analyzed to determine the extent of contamination in the soil and if necessary, in groundwater. Any contaminated soil will be excavated, removed, and disposed of at a proper disposal facility. Any contaminated groundwater will be remedied. If necessary, the facility site will be regraded subsequent to closure to prevent erosion. The following sections discuss in detail the efforts to be made at the Bristol Plant to satisfy the closure performance standard.

I-1b Partial and Final Closure Activities
[40 CFR Section 264.122(a)(1)]

The Bristol Plant does not have any plans for partial closure of the container storage pad. In the event that future circumstances or decisions force us to discontinue our hazardous waste storage pad, Section I-1d of the closure plan presents our procedure for final closure of the storage area. Final closure is estimated to take place in the year 2200. It is anticipated that 100% of the container storage pad will remain open and functional during the life of the facility.

I-1c Maximum Waste Inventory
[40 CFR Section 264.112(a)(2)]

The normal operating inventory of hazardous waste containers (55 gallon drums) is not expected to exceed 300 drums. The following table is an example of the normal operating inventory of container wastes:

Containers:

Code	Name	Quantity
9-3495G	Polymer/Thick Drain	4,000 gallons
9-3343G	Alcohol Types	3,000 gallons
9-3070G	Absorbed Spill	2,500 gallons
9-3018G	Meth. Dist. Res.	2,500 gallons
9-3483G	Pigmented Plastic	35,000 pounds

I-1d Inventory Removal and Disposal or Decontamination of Equipment
[40 CFR Section 264.112(a)(3)]

At the time of closure, the entire inventory of hazardous waste containers will be removed from the facility and transported by an EPA licensed transporter to an EPA permitted hazardous waste disposal facility for disposal, e.g. Chemical Waste Management, Inc. (EPA ID No. ALD000622464) in Emelle, Alabama. Any remaining solid residues in the storage area will be removed (by scraping, if necessary, with non-sparking tools) and placed into containers. These containers will be handled as hazardous wastes and will be disposed of as above. The storage area will be decontaminated using a suitable solvent wash, or if this is not practical, any contaminated sections will be broken, placed into containers, handled as hazardous wastes, and disposed of as above. All in-place storage facility

I-1d Inventory Removal and Disposal or Decontamination of Equipment (cont'd)
[40 CFR Section 264.112(a)(3)]

equipment such as pumps, hoses, etc. and all equipment/tools used during closure operations, e.g. solvent spreaders, scrapers, jack-hammers, etc. will be solvent decontaminated. All solvent decontamination residues will be handled as hazardous wastes and disposed of as above.

Soils in the facility are not expected to be contaminated by the waste storage at the Bristol Plant. However, following decontamination activities the soils around the storage facility will be inspected for evidence of soil contamination. If no evidence is found at least one soil sample will be taken from the area of potential contamination and analyzed to document the absence of contamination. If contamination is evident, soil samples will be taken and wells sunk to determine the extent of possible soil/ground-water contamination. Remedial action will be taken to correct any contamination found.

During the decontaminating activities personnel will be equipped with all the safety equipment necessary to properly handle hazardous wastes, e.g. solvent-resistant disposable gloves, boots, goggles, head protection, rubber suits, breathing apparatus, etc., as per safety equipment listed in Sections F and G. Contaminated safety items will be solvent cleaned, as above, or disposed of as a hazardous waste, as above. All decontamination activities will continue until a visual inspection of the storage pad (if it is solvent cleaned rather than broken up) and the decontamination tools and safety equipment shows these items to be free of contamination and an analysis of the decontamination solution shows no contamination. It is anticipated that no more than 800 gallons of decontamination residues will result from the container storage area decontamination process. All work will be supervised and performed by qualified Bristol Plant employees.

Following the decontamination process, the storage site will be regraded, if necessary, to prevent erosion.

Closure certifications will be submitted to the Regional Administrator, as per Section I-1e.

I-1e Schedule for Closure
[40 CFR Section 264.112(a)(4)]

There is no plan now or in the forseeable future to close this facility. However, the year 2200 has been selected as the expected closure date. The Regional Administrator will be notified by the Bristol plant within 180 days of the start of closure. The schedule for closure is shown in Figure I-1. Final closure will be supervised by the Bristol Plant personnel. When closure has been completed, both a Bristol Plant and an independent registered professional engineer will submit to the Regional Administrator certifications that the facility was closed in accordance with the approved closure plan.

I-1f Extensions for Closure Time
[40 CFR Sections 264.113(a) and 264.113(b)]

The Bristol Plant will not require an extension for closure time.

I-2 Post-Closure Plans
[40 CFR Section 122.25(a)(13)]

No post-closure plan is required for this facility since the Bristol Plant is not a disposal facility.

I-3 Notice in Deed and Notice to Local Land Authority
[40 CFR Section 122.25(a)(14)]

The Bristol Plant is only a hazardous waste storage facility and not a disposal facility; therefore, notification is not required (a) in the deed informing potential purchasers and (b) to local land authorities of restrictions associated with a disposal site, as required by 40 CFR Section 264.120.

I-4 Closure Cost Estimate
[40 CFR Sections 122.25(a)(15) and 264.142]

The closure cost information presented is submitted in accordance with the requirements of 40 CFR Sections 122.25(a)(15), 264.142 and 264.143.

An estimated $118,000 (re-estimated in 1983 dollars) has been allocated to close the Bristol Plant hazardous waste storage facility. The closure costs are presented by activity in Table I-1.

I-4 Closure Cost Estimate (cont'd)
[40 CFR Sections 122.25(a)(15) and 264.142]

The assumptions made in the cost estimate are as follows:

A. Removal of final waste inventory - The waste volume to be handled is the maximum normal operating inventory of 300 drums (16,500 gallons total). Disposal costs are based on land disposal of the drums.

B. Contingency for any abnormal surge of wastes - It is projected that if the plant were to shut down there would be a generation of more wastes causing the maximum normal operating level of drums to increase. This increase was estimated to be an additional 900 drums (49,500 gallons). Disposal costs are based on land disposal of the drums.

C. Decontamination of storage pad and equipment - The hazardous solvent/pad break-up wastes is estimated at 15 drums (825 gallons).

D. Soil sampling - It is estimated that only one soil sample will be taken and analyzed to verify that the soil is not contaminated.

E. Contingency for soil/groundwater contamination - No contaminated soil or groundwater is expected. However, in the event some contamination has occurred, especially in the decontamination process, a $10,000 contingency is included. This contingency would be used for additional sampling, soil excavation, groundwater remedial actions, and transportation and disposal of additional hazardous wastes.

F. Closure certification - The cost of certification of closure by an independent professional engineer is estimated on the basis of 5 days at a labor rate of $80 per hour ($640 per day) and $160 per day travel and other expenses.

G. Subtotal - To the subtotal costs of $90,700 it is estimated that (1) administrative costs and (2) supplies and other contingencies will each add an additional 15%.

I-5 Financial Assurance Mechanism for Closure
[40 CFR Sections 122.25(a)(1), 264.143 and 264.150]

I-5e Financial Test and Corporate Guarantee for Closure
[40 CFR Sections 264.143(f) and 264.151(f) and (h)]

The Bristol Plant has selected the financial test and corporate guarantee as its financial assurance mechanism. Original signed duplicates of the corporate test documents have been sent to the Regional Administrator. Copies of these documents have been included in Appendix I.

I-6 Post-Closure Cost Estimate
[40 CFR Sections 122.25(a)(16) and 264.144]

Since all wastes will be disposed of off-site, there will be no post-closure activities or costs.

I-7 Financial Assurance Mechanism for Post-Closure
[40 CFR Sections 122.25(a)(16) and 264.145]

Since all wastes will be disposed of off-site, there will be no post-closure activities or costs.

I-8 Liability Insurance
[40 CFR Sections 122.25(a)(17) and 264.147]

I-8a Sudden Insurance
[40 CFR Sections 264.147(a), 264.151(i) and 264.151(j)]

The Bristol Plant has obtained liability insurance covering bodily injury and property damage for sudden and accidental occurrences in the amount of $1.5 million per occurrence with an annual aggregate of $4.0 million exclusive of legal defense costs. An originally signed certificate of liability insurance has been sent to the Regional Administrator. A copy of this document has been included in Appendix I. The certificate is worded as specified in 40 CFR Section 264.151(j). The due date is March 1, 1983.

I-8b Nonsudden Insurance
[40 CFR Sections 264.147(b), 264.151(i) and 264.151(j)]

The Bristol Plant owns and operates a storage facility only; therefore, no liability insurance is required for nonsudden accidental occurrences.

I-8c Financial Test
[40 CFR Sections 264.147(f) and 264.151(j)]

The Bristol Plant has an insurance policy for sudden and accidental occurrences; therefore, the financial test is not necessary.

I-8d Variance Procedures
[40 CFR Section 264.147(c)]

The Bristol Plant will not request the Regional Administrator for a reduction of liabilty amounts.

I-8e Adjustment Procedures
[40 CFR Section 264.147(d)]

If the Regional Administrator adjusts the level of financial responsibility required, the Bristol Plant will seek an adjustment to the insurance policy discussed above.

I-9 State Assumption of Responsibility
[40 CFR Section 264.150]

The Bristol Plant will not request state assumption of the legal or financial responsibilities.

PDR:dpmg/2/7/83
Disk: RCRA.1

ACTIVITY

1. Receipt of final volume of hazardous waste.
2. Removal/disposal of final waste inventory.
3. Storage pad decontamination.
4. Storage equipment decontamination.
5. Removal/disposal of decontamination wastes.
6. Soil sampling and analysis.
7. Contingency for removal of any contaminated soil and/or ground water remedial action.
8. Regrade facility site, if necessary, to prevent erosion.
9. Completion of closure and certification submittal to EPA.

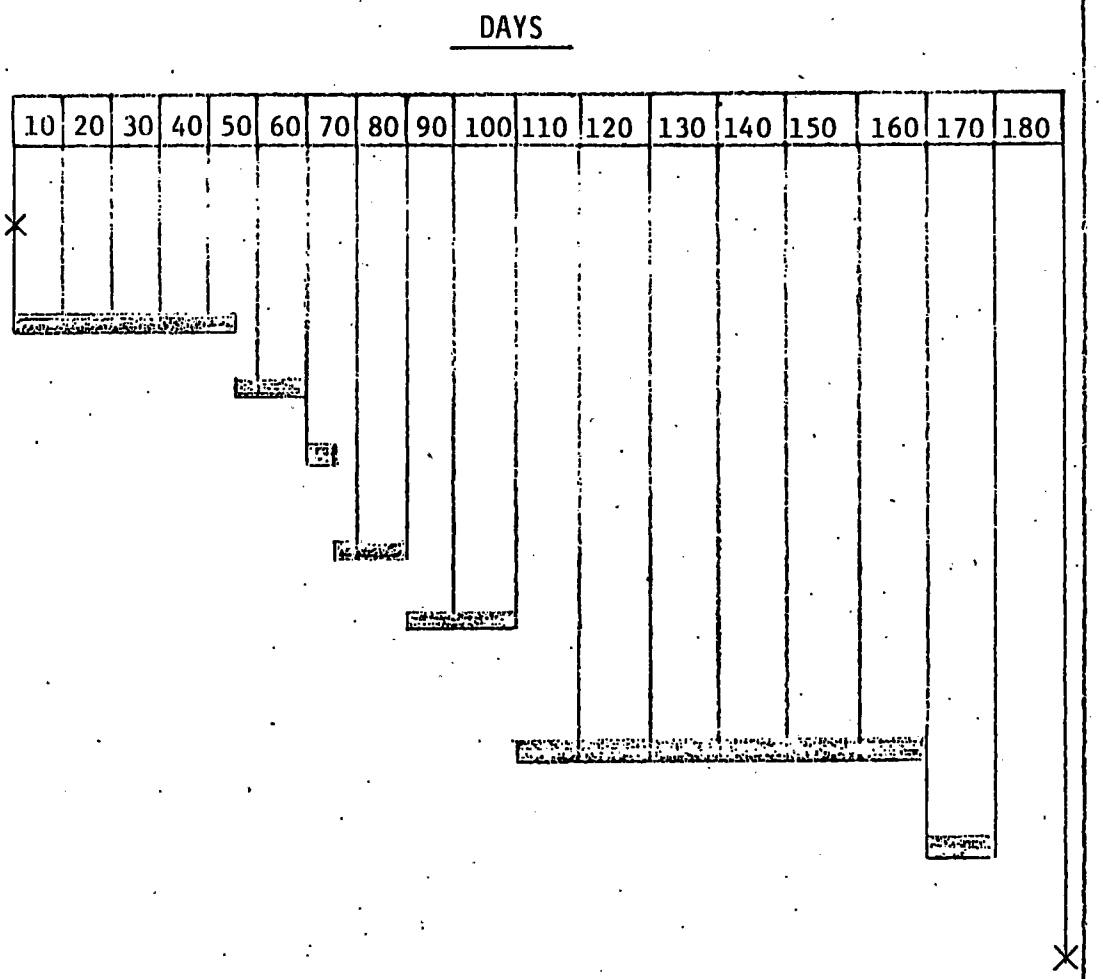


FIGURE I-1 CLOSURE SCHEDULE

000256

TABLE I-1

HAZARDOUS WASTE STORAGE CLOSURE COST ESTIMATE*

A.	Removal Of Final Waste Inventory	
	1. Disposal cost (300 drums at $40.00/drum)	$ 12,000
	2. Transportation cost (300 drums at $20.00/drum)	6,000
	3. Plant labor (16 hours at $25.00/hour)	400
B.	Contingency For Any Abnormal Surge Of Waste Inventory Because Of Plant Shutdown	
	1. Disposal cost (900 drums at $40.00/drum)	36,000
	2. Transportation (900 drums at $20.00/drum)	18,000
	3. Plant labor (48 hours at $25.00/hour)	1,200
C.	Decontamination Of Storage Pad And Equipment	
	1. Solvent cleaning/pad break-up (48 hours at $25.00/hour)	1,200
	2. Transportation disposal of contaminated solvent cleaning wastes (15 drums at $60.00/drum)	900
D.	Soil Sampling	
	Soil sampling and analysis	1,000
E.	Contingency For Soil/Groundwater Contamination	
	1. Sampling and analysis	2,000
	2. Excavate contaminated soil/remedy groundwork	4,000
	3. Transportation and disposal of contaminated soil/remedy groundwater	4,000
F.	Closure Certification	
	Labor, expenses and transportation (5 days at $800/day)	4,000
G.	Subtotal	$ 90,700
	1. Plus 15% administration	13,600
	2. Plus 15% supplies, possible site regrading and other contingencies	13,600
H.	Total Closure Costs	$118,000

*1983 dollars

SECTION J

OTHER FEDERAL LAWS

Information will be provided in accordance with the requirements of 40CFR Part 122.25(a)20 at the request of the EPA Region III office. The Bristol plant believes it is presently in compliance with the following Federal laws; Wild and Scenic Rivers Acts, National Historic Preservation Act of 1966, Endangered Species Act, Coastal Zone Mangement Act, and the Fish and Wildlife Coordination Act, Clean Water Act, Safe Drinking Water Act, Clean Air Act, Atomic Energy Act, and Marine Protection, Research, and Sanctuary Act.

SECTION K

CERTIFICATION

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

Date: 2/17/83

Signature: Jerry C. Brock

Jerry C. Brock, Vice President/
Plant Manager

APPENDIX

A

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

Form Approved OMB No. 158-R0175

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 P A D 0 0 2 2 9 2 0 6 8

LABEL ITEMS

I. EPA I.D. NUMBER: PAD002292068

II. FACILITY NAME: ~~ROHM AND HAAS COMPANY~~

V. FACILITY MAILING ADDRESS: ~~BRISTOL PIKE~~ BRISTOL, PA 19007

VI. FACILITY LOCATION: ~~BRISTOL PIKE~~ BRISTOL, PA 19007

GENERAL INSTRUCTIONS

If a preprinted label has been provided, a it in the designated space. Review the info ation carefully; if any of it is incorrect, cr through it and enter the correct data in appropriate fill-in area below. Also, if any the preprinted data is absent *(the area to left of the label space lists the informat that should appear)*, please provide it in proper fill-in area*(s)* below. If the label complete and correct, you need not compl Items I, III, V, and VI *(except VI-B wh must be completed regardless)*. Complete items if no label has been provided. Refer the instructions for detailed item desc tions and for the legal authorizations un 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	MARK 'X' NO	MARK 'X' FORM ATTACHED
A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A)		X	
B. Does or will this facility *(either existing or proposed)* include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S.? (FORM 2B)		X	
C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)	X		
D. Is this a proposed facility *(other than those described in A or B above)* which will result in a discharge to waters of the U.S.? (FORM 2D)		X	
E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)	X		X
F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)		X	
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)		X	
H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)		X	
I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X	
J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X	

III. NAME OF FACILITY

1 SKIP ROHM AND HAAS DEL. VAL. INC. BRISTOL PLANT

IV. FACILITY CONTACT

A. NAME & TITLE *(last, first, & title)*	B. PHONE *(area code & no.)*
2 CARR, WILLIAM PLANT MANAGER	215 785 8110

V. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX: 3 P.O. BOX 219

B. CITY OR TOWN	C. STATE	D. ZIP CODE
4 BRISTOL	PA	19007

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER: 5 RT 413 AND OLD RT 413

B. COUNTY NAME: BUCKS

C. CITY OR TOWN	D. STATE	E. ZIP CODE	F. COUNTY CODE *(if known)*
6 BRISTOL TWP.	PA	19007	

CONTINUED FROM THE FRONT

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

A. FIRST	B. SECOND
7821 (specify) Plastics & Synthetic Resins	7869 (specify) Industrial Organic Chemicals
C. THIRD	**D. FOURTH**
079 (specify) Misc. Plastic Products	7879 (specify) Pesticides & Agricultural Chem.

VIII. OPERATOR INFORMATION

A. NAME: ROHM AND HAAS DELAWARE VALLEY INC.

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)
Answer: P (specify)

D. PHONE (area code & no.): A 215 785 8000

E. STREET OR P.O. BOX: P.O. BOX 219

F. CITY OR TOWN: BRISTOL

G. STATE: PA

H. ZIP CODE: 19007

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 PA0012769	**D. PSD** (Air Emissions from Proposed Sources): 9 P
B. UIC (Underground Injection of Fluids): 9 U	**E. OTHER** (specify): 9 (specify) See Attachment
C. RCRA (Hazardous Wastes)	**E. OTHER** (specify): 9 (specify)

XI. MAP

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

XII. NATURE OF BUSINESS (provide a brief description)

Manufacture of acrylic polymers and resins, purification of acrylic monomers and acids, manufacture of plastic sheet products, enzymes and pesticides.

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
William D. Carr Vice President Rohm and Haas Del.Val.Inc.	W D Carr	10/31/80

COMMENTS FOR OFFICIAL USE ONLY

C

Attachment to Form 3510-1
EPA I.D. No. PAD002292068

1. Commonwealth of Pennsylvania
   Sanitary Water Board
   Industrial Wastes Permit No. 76216

2. Delaware River Basin Commission
   Certificate of Entitlement #249

3. Pennsylvania Department of
   Environmental Resources

#9-313-003 - Bldg. 66 Water Scrubbers
9-313-006 - EA Closed Circuit System
9-313-007 - BA & MA Closed Circuit System
9-313-009 - Bldg. 133 Venturi Scrubber
9-313-020 - Continuous Pellet Molding Powder Process
9-313-022 - Mix Tank Vent Scrubber, Bldg. 66
9-313-026 - Belt Sander, Bldg. 38
9-313-027 - Planer & Saw, Bldg. 68
9-313-031 - Kydex Dust Collector
9-313-038 - Pellet Blending, PM Plant
9-313-040 - Polykettle Vent Scrubbers, Bldg. 51

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

Form Approved OMB No. 158-S80004

FORM 3 RCRA

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

HAZARDOUS WASTE PERMIT APPLICATION

Consolidated Permits Program

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

I. EPA I.D. NUMBER

F P A D 0 0 2 2 9 2 0 6 8

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 revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

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

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

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

C	YR.	MO.	DAY
8	1 7		

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

YR.	MO.	DAY

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

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

[ ] 1. FACILITY HAS INTERIM STATUS

[ ] 2. FACILITY HAS A RCRA PERMIT

III. PROCESSES — CODES AND DESIGN CAPACITIES

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

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

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

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

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

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

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

C DUP 1

LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY	LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT	B. 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
X-1	S 0 2	600	G		5				
X-2	T 0 3	20	E		6				
1	S 0 1	468,000	G		7				
2	S 0 2	14,700	G		8				
3	T 0 1	8,600	U		9				
4					10				

Continued from the front.

III. PROCESSES *(continued)*

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

IV. DESCRIPTION OF HAZARDOUS WASTES

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

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

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

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

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

D. PROCESSES

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

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

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

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

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

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

CONTINUE ON PAGE 3

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

Form Approved OMB No. 158-S80004

EPA I.D. NUMBER (enter from page 1)	FOR OFFICIAL USE ONLY
W P A D 0 0 2 2 9 2 0 6 8	W DUP 2 DUP

V. DESCRIPTION OF HAZARDOUS WASTES (continued)

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)				D. PROCESSES 2. PROCESS DESCRIPTION (If a code is not entered in D(1))
1	F 0 0 2	20,000	P	S 0 1				See Note (1) on Page 4
2	D 0 0 1	300,000	P	S 0 1				" "
3	D 0 0 2	400,000	P	S 0 1				" "
4	D 0 0 2	2,000,000	P	S 0 2				
5	D 0 0 2	350,000	P	S 0 1	T 0 1			
6	D 0 0 2	5,000,000	P	T 0 1				
7	D 0 0 1	50,000	P	S 0 1				See Note (2) on Page 4
8	D 0 0 2							Included with above
9	D 0 0 3							" " "
10	D 0 0 1	25,000	P	S 0 1				See Note (1) on Page 4
11	D 0 0 2							Included with above
[illegible]	D 0 0 5	250,000	P	S 0 1				See Note (1) on Page 4
13	D 0 0 6							Included with above
14	P 0 0 3	1,000	P	S 0 1				See Note (3) on Page 4
15	P 0 2 4	1,000	P	S 0 1				" "
16	P 0 5 3	1,000	P	S 0 1				" "
17	P 1 0 6	1,000	P	S 0 1				" "
18	U 0 0 2	1,000	P	S 0 1				" "
19	U 0 0 4	1,000	P	S 0 1				" "
20	U 0 0 7	1,000	P	S 0 1				" "
21	U 0 0 8	1,000	P	S 0 1				" "
22	U 0 0 9	1,000	P	S 0 1				" "
23	U 0 1 3	10,000	P	S 0 1				See Note (1) on Page 4
[illegible]	J 0 3 1	1,000	P	S 0 1				See Note (3) on Page 4
[illegible]	U 0 5 4	1,000	P	S 0 1				" "
26	U 0 5 6	1,000	P	S 0 1				" "

EPA Form 3510-3 (6-80)

CONTINUE ON REVERSE

000269

Continued from page 2.

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

Form Approved OMB No. 158-S80004

EPA I.D. NUMBER (enter from page 1)	FOR OFFICIAL USE ONLY
W P A D 0 0 2 2 9 2 0 6 8 — T/A C: 1	W DUP — T/A C: 2 DUP

IV. DESCRIPTION OF HAZARDOUS WASTES (continued)

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
1	U057	1,000	P	S01	See Note (3) on Page 4
2	U102	1,000	P	S01	"
3	U112	1,000	P	S01	"
4	U113	1,000	P	S01	"
5	U114	1,000	P	S01	"
6	U118	1,000	P	S01	"
7	U122	1,000	P	S01	"
8	U133	1,000	P	S01	"
9	U140	1,000	P	S01	"
10	U147	1,000	P	S01	"
11	U151	1,000	P	S01	"
12	U154	1,000	P	S01	"
13	U159	1,000	P	S01	"
14	U161	1,000	P	S01	"
15	U162	1,000	P	S01	"
16	U188	1,000	P	S01	"
17	U197	1,000	P	S01	"
18	U201	1,000	P	S01	"
19	U210	1,000	P	S01	"
20	U220	1,000	P	S01	"
21	U223	1,000	P	S01	"
22	U228	1,000	P	S01	"
23	U239	1,000	P	S01	"
24					
25					
26					

Continued from the front.

IV. DESCRIPTION OF HAZARDOUS WASTES *(continued)*

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

NOTES:

1. These hazardous wastes are disposed of off-site at permitted (or interim status) commercial disposal facilities.
2. This hazardous waste consists of small containers of chemicals from Research activities. In addition to the characteristics listed these chemicals may occasionally exhibit any of the EP toxicity characteristics.
3. These hazardous wastes are commercial chemical products used as raw materials in manufacturing processes at this facility. While such materials are seldom discarded, it may be necessary to do so occasionally.

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

F P A D 0 0 2 2 9 2 0 6 8 6

V. FACILITY DRAWING

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

VI. PHOTOGRAPHS

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

. FACILITY GEOGRAPHIC LOCATION

LATITUDE *(degrees, minutes, & seconds)*	LONGITUDE *(degrees, minutes, & seconds)*
40 05 36	74 52 06

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
William D. Carr	W D Carr	10/31/80

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.

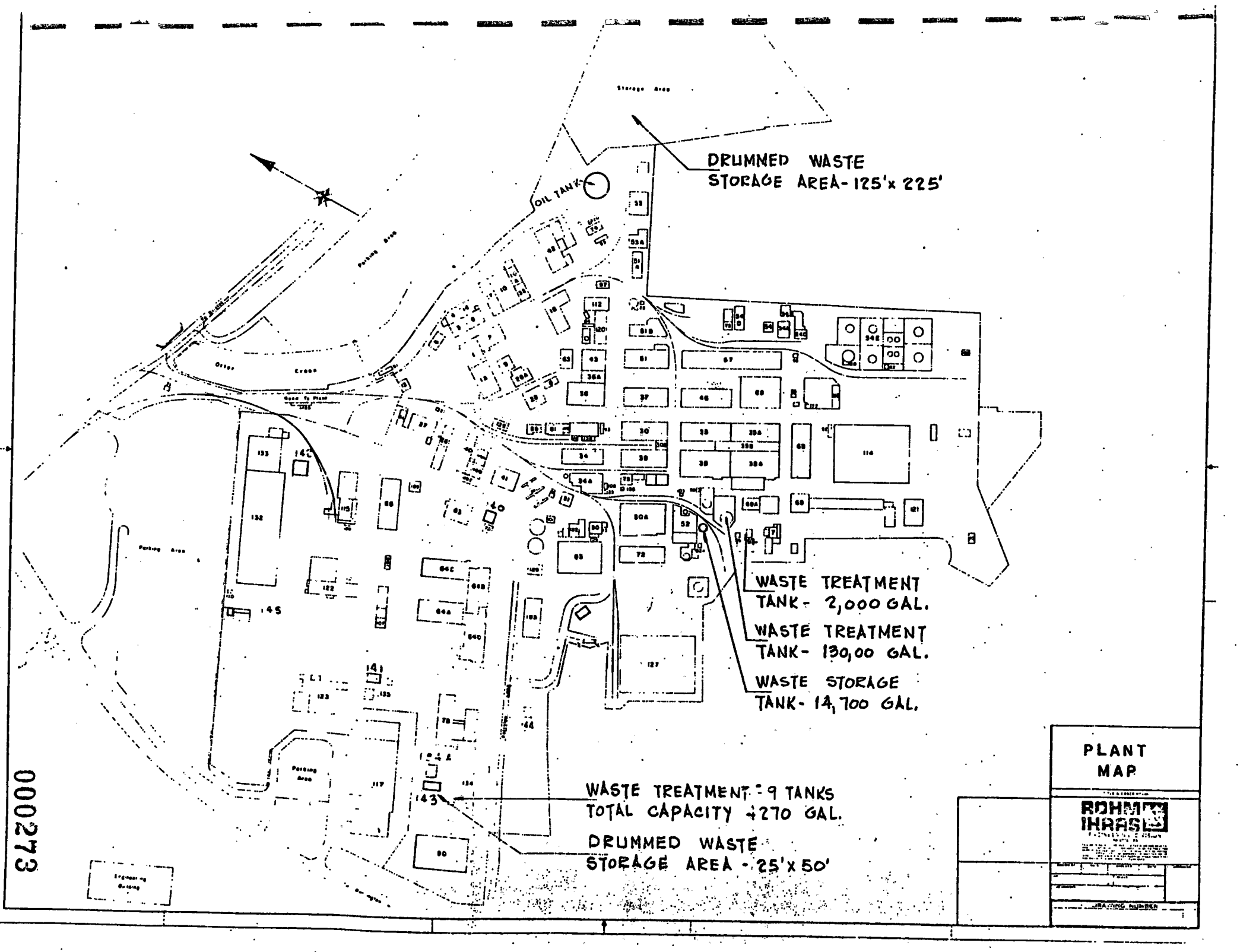
A. NAME *(print or type)*	B. SIGNATURE	C. DATE SIGNED
William D. Carr	W D Carr	10/31/80

Attachment to Form 3510-3
EPA I.D. No. PAD002292068

The Bristol, PA, plant of Rohm and Haas Delaware Valley Inc. owns and operates a biological waste treatment plant for all chemically contaminated aqueous wastes. This plant consists of a trickling filtration system followed by a lagoon system with a permitted point-source discharge. The trickling filtration system consists of two trickling filters and associated clarifiers, sludge thickener and dewatering plant. The lagoon system consists of four large lagoons totaling approximately 57 acres.

This waste water treatment plant has not been designated as a hazardous waste treatment facility in this permit application because the untreated aqueous waste entering the system does not meet the definition of a hazardous waste under normal plant operating conditions. The untreated waste water does not contain any of the wastes listed in Part 261, Subpart D (261.31 and 261.32), nor does it exhibit any of the characteristics of Part 261, Subpart C. Because of the low level of contaminants in the untreated waste water it does not have a measurable flash point or reactivity characteristic. The pH of daily composite samples is consistently greater than 2.0 and less than 12.5 and, in fact, is normally within the range of 6.0-8.5 without addition of reagents. Such a range is necessary to maintain biological activity in the trickling filtration system. Heavy metals content is substantially below the limits set for the EP toxicity test and none of the pesticides listed in this test is used or produced at this facility.

Accidental chemical spills occur infrequently within the plant. Areas with clear potentials for spillage, such as tank truck loading/unloading stations and tank farms, are protected with dikes or other collection systems. In other instances, absorbent diking materials are used to contain and collect spilled materials. However, it is obviously impossible to contain every accidental spillage. Therefore, occasionally some chemical spillage reaches the waste water collection system, and may cause it to become hazardous with respect to either pH or flammability for periods of time up to a few hours. We do not believe that such accidental, infrequent, short-duration events require permitting of a waste water treatment facility any more than a spill during transportation requires permitting of the spill site.


DRUMMED WASTE
STORAGE AREA- 125'x 225'
OIL TANK
WASTE TREATMENT
TANK- 2,000 GAL.
WASTE TREATMENT
TANK- 130,00 GAL.
WASTE STORAGE
TANK- 14,700 GAL.
WASTE TREATMENT - 9 TANKS
TOTAL CAPACITY - 270 GAL.
DRUMMED WASTE
STORAGE AREA - 25'x 50'
PLANT
MAP
ROHM
HAAS

000273

B

1.0 SCOPE OF WORK

1.1 All paving work shall be in accordance with the Pennsylvania Department of Highways Specifications, as published in its Form 408, 1970. This specification shall be referred to as simply the Highway Specs. throughout this standard.

2.0 MATERIALS

2.1 Base Course

2.1.1 Alternate #1 - Crushed Aggregate Base Course, Section 310 of the Highway Specs.

2.1.1.1 Coarse Aggregate

Coarse aggregate shall be crushed stone meeting the quality requirements for type "B" (Section 703.3(b) of Highway Specs.) or better and conform to grading requirements for #4 coarse aggregate as specified in Section 703.3(d) of the Highway Specs.

2.1.1.2 Fine Aggregate

Fine aggregate shall be type "B" or better, and conform to grading requirements for #1 aggregate as specified in Highway Specs. Section 703.3(d).

2.1.2 Alternate #2 - Hot Mix Black Base Asphalt Concrete, Section 305 of the Highway Specs.

2.1.2.1 Bituminous materials shall be as specified in Section 305.2(a), 85-100 penetration.

2.1.2.2 Aggregate shall be as specified in Sections 305.2(b) and 305.2(d) 2, Table B. 100% of the coarse aggregate shall pass the 2 inch sieve.

2.2 Hot Laid Surface Courses - Binder and Wearing

2.2.1 Composition of Mixture

The asphalt cement, coarse aggregate, fine aggregate and filler shall be combined in such proportions that will result in the total aggregate meeting the compositions by weight as given in the Highway Specs. for type ID-2A, Section 420.

2.2.1.1 The aggregate for the binder course shall be Type A stone having a minimum of 26% passing the #8 sieve and 60% passing the 1/2" sieve.

2.2.1.2 The aggregate for the wearing course shall be Type A stone having a minimum of 50% passing the #8 sieve and 10% passing the #200 sieve with a maximum aggregate of 3/8".

2.2.1.3 The asphalt cement shall meet the requirements of Class AC-1 and shall have a penetration range of 85 to 100.

2.3 Prime and Tack Coats

2.3.1 A prime coat of MC30 or MC70 asphalt cut-back shall be sprayed on the crushed aggregate base course at the rate of .3 gallons per sq. yd. prior to the placing of the binder course. The prime coat shall be placed in accordance with Section 461 of the Highway Specs. and shall be allowed to cure for a minimum of 24 hours before the binder course is placed.

2.3.2 A tack coat shall be applied between an asphaltic concrete base course and wearing course and between binder course and wearing course when there has been some delay between installation of the two courses causing the first course to be used for construction or other traffic. This tack coat shall be an emulsified asphalt of Class E-1 applied in accordance with Section 460 of the Highway Specs. The rate of application shall be .05 to .07 gallons per sq. yd.

3.0 SEQUENCE OF CONSTRUCTION

3.1 Crushed aggregate Base Course - Alternate #1

3.1.1 The subgrade shall be prepared for a minimum of 6 inches below the base course in accordance with Rohm and Haas Company Standard No. 15-105. If replacement of subgrade should be necessary, use Highway Specs. Section 350 for #2a subbase. (See Section 3.4 of Standard No. 15-105.)

3.1.2 The crushed aggregate base course shall be installed to the specified thickness in accordance with this specification and Section 310 of the Highway Specs.

3.1.3 A prime coat shall be placed in accordance with Section 2.3.1 of this standard.

3.1.4 A 1-1/2 or 2 inch (see drawings) thick binder course shall be installed in accordance with this standard and Sections 401 and 420 of the Highway Specs.

3.1.5 A tack coat may be required as per Section 2.3.2 of this specification.

3.1.6 A 1-inch wearing course shall be installed in accordance with this standard and Sections 401 and 420 of the Highway Specs.

3.2 Black Base - Alternate #2

3.2.1 Provide 6 inches of subgrade preparation as per Rohm and Haas Company Standard 15-105.

3.2.2 Provide asphaltic concrete base course to the required thickness as per this standard and Sections 401 and 305 of the Highway Specs.

3.2.3 Provide a tack coat, if required, as per Section 2.3.2 of this standard.

3.2.4 Provide a 1-inch wearing course as per this standard and Sections 401 and 420 of the Highway Specs.

4.0 REQUIRED THICKNESS - GENERAL

4.1 The required thicknesses for roads, parking, and warehouse floors shall be as specified in the job specification for each project and as shown on the drawings, and will supersede the indicated thicknesses shown herein.

5.0 CONSTRUCTION PROCEDURES

5.1 Crushed Aggregate Base Course (PDH-310)

5.1.1 A 1-inch layer of fine aggregate material will first be spread over the approved subgrade in a uniform manner.

5.1.2 The coarse materials shall then be spread uniformly by mechanical spreader or other approved means in such quantity as to provide the required depth when compacted. The maximum compacted depth for one lift shall be 8 inches. When two lifts are required, the depth of each shall be half the required depth.

The base course material shall be compacted with approved vibrating equipment until the aggregate is keyed sufficiently to permit the operation of a three-wheel ten-ton roller without undue displacement of the aggregate. The layer shall then be rolled in accordance with the Highway Specs. Section 310.3(b)(2).

5.1.3 After the coarse material has been set and keyed by vibratory roller, dry fine material in an amount approximately equal to 50 percent shall be spread uniformly over the surface. The vibrator shall then be operated over the surface to cause the fines to settle into the voids.

This shall be followed by a second application of fines consisting of approximately 25 percent of the total required and by a single pass of the vibrator over the entire area. The remaining 25 percent of required fines shall then be applied and followed by a single pass of the vibrator over the entire area, however, the quantity of fines used and the operation of filling shall not cause floating of the coarse aggregate. Areas not completely filled in the foregoing operations shall be filled by hand methods. These areas need not be further vibrated. The engineer reserves the right during construction to adjust the percentages of fines to be applied in the three applications, however, no more than three applications will be required provided the voids of the coarse material are satisfactorily filled.

After completion of the application and vibrating of dry fines, the surface of single layer construction or the surface of each layer of two or more layer construction shall be sprinkled with water and rolled as specified in Section 310.3(b) (4) of the Highway Specs.

5.1.4 Prior to placing the surface courses on the base, it shall be straight-edged and any surface irregularities greater than 1/2 inch shall be corrected and the base restored in a satisfactory condition.

5.1.5 The base shall be checked for thickness by digging test holes. One test hole for each 300 square yards of base shall be dug to verify the conformance to the designed thickness. Where measurements are taken which indicate a deficiency in specified compressed depth, corrections shall be made, at the Contractor's expense, to result in the specified thickness.

6.0 APPLICABLE SECTIONS OF HIGHWAY SPECS.

The following sections of the Highway Specs. shall govern the quality of the work unless directly contradicted by this standard:

6.1 Section 108.5 - Character of Workmen, Methods and Equipment

6.2 Section 210 - Subgrade

6.3 Section 305 - Bituminous Concrete Base Course

6.4 Section 310 - Crushed Aggregate Base Course

6.5 Section 350 - Subbase

6.6 Section 401 - Plant Mix Pavement - General

6.7 Section 420 - Bituminous Surface Course ID-2A

6.8 Section 460 - Bituminous Tack Coat

6.9 Section 461 - Bituminous Prime Coat

6.10 Section 703 - Aggregates

Vehicle Weight Limits

WEIGHT LIMITS		NEW YORK	NORTH CAROLINA	NORTH DAKOTA	OHIO	OKLAHOMA	OREGON	PENNSYLVANIA	RHODE ISLAND	SOUTH CAROLINA	SOUTH DAKOTA	TENNESSEE	TEXAS	UTAH	VERMONT
Per In. Tire Width (lb)		800	600	550	550	650	550	800	NS	NS	600	NS	650	NS	800
Per Single Axle (1000 lb)		22.4	19	20	20	20	20	22.4	22.4	20	20	18	20	20	22.4
Per Tandem Axle—48-in. Spacing (1000 lb)		36	36	34	34	34	34	36	36	36	34	32	34	34	36
Practical Gross	Per Vehicle (1000 lb)														
	2 Axle Single Unit	34.4	31	31	32	32	31	34.4	36	35	32	30	32	31.4	34.4
	3 Axle Single Unit	48	49.8	45	46	46	46	48	44	46	46	44	46	4[illegible]	48
	4 Axle Single Unit	59	67.2	58.5	60	54.5	55.2	66	44	69.8	54	NS	64	61.5	55
	2 Axle Tractor, 1 Axle Trailer	56.8	49.8	51	52	52	51	56.8	56.8	50	52	48	50	51.6	56.8
	2 Axle Tractor, 2 Axle Trailer	70.4	67.2	65	66	66	65	70.4	67.4	65	66	62	66	65.8	70.4
Maximum Gross	3 Axle Tractor, 2 Axle Trailer	80	79.8	80	80	85.5	80	80	80	80	80	73.2	80	80	80
	3 Axle Truck, 2 Axle Trailer	80	79.8	80	80	85.5	80	73.2	80	80	85.5	53.5	80	80	80
	Tractor, Semi & Trailer 5 Axle (Doubles)	80	NP	80	80	85.5	80	NP	NP	NP	85.5	NP	80	80	NP
	Other Combinations	80	NP	80	80	90	80	NP	88	NP	95	73.2	80	80	80
Vehicle & Combination Gross Weight Basis		B	T,V	B	T	T	A	V	V	V	T	V	B,T	A	T

ILLINOIS
18,000-lb single axle permitted on designated highways only. Otherwise limit is 16,000 lb.

INDIANA
1000-lb overloads allowed on both single and tandem axles. On designated "heavy duty" highways, single axles permitted 22,400 lb; tandems, 36,000 lb; and gross weights increased accordingly—but not over 73,280 lb.

IOWA
5% tolerance on license weight; 25% tolerance on livestock and agricultural license weight.

KANSAS
85,500-lb maximum shown is for other than Interstate highways. Maximum allowed on Interstates is 80,000 lb.

KENTUCKY
Weight limits shown are for Class AAA highways. Lower limits on other highways. Doubles may operate only in Interstate highways or by permit for other roads. 5% tolerance allowed on axle weights, but total GCW must not exceed 80,000 lb.

LOUISIANA
Axle and GV/GCW limits shown apply to Interstate highways. Lower limits apply to state roads.

MAINE
Tandem axles allowed 38,000 lb. on non-Interstate roads; 22,000-lb. limit on any one axle of a tandem.

MARYLAND
Tandem axles spaced less than 48 in. limited to 36,000 lb.

MASSACHUSETTS
18,000-lb limit on axles less than 6 ft apart.

MICHIGAN
34,000-lb tandem axles limited to 17,000 lb on any one axle and permitted on designated highways only. Otherwise tandem axle limit is 26,000 lb with 13,000 lb on any one axle. No more than one 32,000-lb tandem allowed on combinations except two

000278

VIRGINIA	WASHINGTON	WEST VIRGINIA	WISCONSIN	WYOMING
650	550	NS	NS	NS
20	20	20	20	20
34	34	34	34	36
32	32	32	32	32
46	40	46	46	48
58.5	40	63	60	54.5
52	60	52	52	52
66	74	66	66	68
79.8	80	80	80	80
79.8	80	80	80	80
NP	80	NP	80	80
79.8	80	80	NP	101
T	T,V	T	T	T

permitted on 5-axle tractor-semi-trailer rigs if GCW does not exceed 73,280 lb. 148,000-lb GCW requires 11 axles (highest number permitted). During March, April and May, maximum axle loads reduced 25% on concrete and 35% on all other types of roads.

MINNESOTA
Axle weights shown are for Interstate and designated highways, otherwise limits are 18,000 lb per single axle and 32,000 lb per tandem. 80,000-lb gross weight is for interstate and designated highways; 73,280-lb all others.

MISSISSIPPI
A table graduated by tire size governs single- and dual-tired axle weight limits. Tandem axle, vehicle and combination gross weights shown apply to designated highways only.

MISSOURI
Lower weight limits apply to local and Supplementary System bridges except those approved for weight limits shown. 22,000-lb single axles allowed within and up to two miles outside cities of 75,000 or more population.

MONTANA
Department of Highways may permit 20,000-lb single axle, 34,000-lb tandem and up to 105,500-lb GCW on 7- to 9-axle combinations.

NEBRASKA
Individual axles allowed 5% weight tolerance; tolerance for total gross is 3%. On Interstate System, single axle limit is 18,000 lb; tandem axles, 32,000 lb and gross, 73,280 lb. Maximum GCW of 95,000 lb on designated highways requires 7 axles and permit.

NEVADA
Combinations with higher gross weights require special permit.

NEW HAMPSHIRE
Practical gross weights shown in table for 3- and 4-axle single units are maximums for Interstate highways and require two driving rear axles. On State highways, these vehicles are allowed 55,000-lb and 60,000-lb maximum gross, respectively. 3- or 4-axle single units with only one rear drive axle are limited to 40,000-lb GVW.

NEW JERSEY
5% tolerance allowed on axle weights.

NORTH CAROLINA
1000-lb tolerance allowed each axle. 79,800-lb maximum includes tolerance. 2-axle buses limited to 23,625-lb empty weight; 3-axle buses limited to 31,000-lb empty.

NORTH DAKOTA
80,000-lb maximum GVW shown in table is for Interstate highways. On designated highways, up to 105,500 lb may be allowed with 9 axles.

OHIO
Tandem axles allowed 1000 lb additional per ft (or fractional ft) over 4-ft spacing up to a maximum of 40,000 lb. Axle loadings allow 3% tolerance.

OKLAHOMA
GCW limited to 80,000 lb on Interstate System.

OREGON
Truck and combination weights shown are for designated highways.

PENNSYLVANIA
3% tolerance on axle weights with no tolerance on gross weights or on interstates.

RHODE ISLAND
80,000-lb maximum GCW allowed on Interstate system only; otherwise maximum is 73,280 lb.

SOUTH CAROLINA
Tandem axles limited to 35,200 lb on Interstate System. Maximum gross limited to 73,280 on roads other than Interstate System. 10% tolerance allowed on other than Interstate highways.

SOUTH DAKOTA
Weight limits reduced 25% on concrete highways and 35% on other highways between March 1 and April 30 except on designated highways.

TENNESSEE
Buses limited to 42,000-lb GVW. Full trailers limited to 3500-lb GVW. Tractor front axles limited to 12,000 lb.

UTAH
Single axles allowed 20,000 lb and tandems allowed 36,000 lb with permit.

VIRGINIA
79,800-lb maximum GCW includes tolerance. Statutory maximum is 76,000 lb.

VERMONT
Axle weight tolerance of 5% allowed on state highways. 3-axle single unit allowed 55,000 lb on state highways.
4-axle single unit allowed 60,000 lb on state highways.

WASHINGTON
Single unit and combination weights specified by the chart may be exceeded with purchase of additional tonnage permit. Excess weights are determined by internal and overall wheelbase spacing.

WEST VIRGINIA
Axle weights allowed 5% tolerance. 80,000-lb GCW allowed on designated highways only.

WISCONSIN
Weight limits shown are for Class A highways. For Class B highways, all weight limits are 60% of those for Class A roads, except for approved local deliveries.

WYOMING
Maximum single-axle load of 20,000 lb requires 50-ft overall wheelbase. 101,000-lb GCW allowed with 7 axles and 70-ft wheelbase. On Interstate System maximum GCW is 80,000 lb.

000279

C

006280

Fig. 1 HAZARDOUS WASTE COMPATIBILITY CHART

REACTIVITY GROUP NO.	REACTIVITY GROUP NAME	1	2	3	4	5	6	7	8	9	10	11	12	13
1	Acids, Mineral, Non-oxidizing													
2	Acids, Mineral, Oxidizing													
3	Acids, Organic		G H											
4	Alcohols and Glycols	H	H F	H P										
5	Aldehydes	H P	H F	H P										
6	Amides	H	H GT											
7	Amines, Aliphatic and Aromatic	H	H GT	H		H								
8	Azo Compounds, Diazo Compounds, and Hydrazines	H G	H GT	H G	H G	H								
9	Carbamates	H G	H GT						G H					
10	Caustics	H	H	H		H				H G				
11	Cyanides	GT GF	GT GF	GT GF					G					
12	Dithiocarbamates	H GF	H GF	H GF GT		GF GT		U	H G					
13	Esters	H	H F						H G		H			
14	Ethers	H	H F											
15	Fluorides, Inorganic	GT	GT	GT										
16	Hydrocarbons, Aromatic		H F											
17	Halogenated Organics	H GT	H F GT					H GT	H G		H GF	H		
18	Isocyanates	H G	H F GT	H G	H P			H P	H G		H G	H G	U	
19	Ketones	H	H F						H G		H	H		
20	Mercaptans and Other Organic Sulfides	GT GF	H F GT						H G					
21	Metals, Alkali and Alkaline Earth, Elemental	GF H F	GF H F	GF H F	GF H F	GF H F	GF H	GF H	GF H	GF H	GF H	GF H	GF H GT	GF H
22	Metals, Other Elemental & Alloys as Powders, Vapors, or Sponges	GF H F	GF H F	GF					H F GT	U	GF H			
23	Metals, Other Elemental & Alloys as Sheets, Rods, Drops, Moldings, etc.	GF H F	GF H F						H F G					
24	Metals and Metal Compounds, Toxic	S	S	S			S	S			S			
25	Nitrides	GF H F	H F E	H GF	GF H E	GF H			U	H G	U	GF H	GF H	GF H
26	Nitriles	H GT GF	H F GT	H							U			
27	Nitro Compounds, Organic		H F GT			H					H E			
28	Hydrocarbons, Aliphatic, Unsaturated	H	H F			H								
29	Hydrocarbons, Aliphatic, Saturated		H F											
30	Peroxides and Hydroperoxides, Organic	H G	H E		H F	H G		H GT	H F E	H F GT		H E GT	H F GT	
31	Phenols and Cresols	H	H F						H G					
32	Organophosphates, Phosphothioates, Phosphodithioates	H GT	H GT						U		H E			
33	Sulfides, Inorganic	GT GF	HF GT	GT		H			E					
34	Epoxides	H P	H P	H P	H P	U		H P	H P		H P	H P	U	
101	Combustible and Flammable Materials, Miscellaneous	H G	H F GT											
102	Explosives	H E	H E	H E					H E		H E			H E
103	Polymerizable Compounds	P H	P H	P H					P H		P H	P H	U	
104	Oxidizing Agents, Strong	H GT		H GT	H F	H F	H F GT	H F GT	H E	H F GT		H E GT	H F GT	H F
105	Reducing Agents, Strong	H GF	H F GT	H GF	H GF	GF H F	GF H	H GF	H G				H GT	H F
106	Water and Mixtures Containing Water	H	H						G					
107	Water Reactive Substances	→ EXTREMELY REACTIVE!												

000281

HAZARDOUS WASTE COMPATIBILITY CHART (Continued)

Reactivity Code	Consequences
H	Heat generation
F	Fire
G	Innocuous and non-flammable gas generation
GT	Toxic gas generation
GF	Flammable gas generation
E	Explosion
P	Violent polymerization
S	Solubilization of toxic substances
U	May be hazardous but unknown

Example:

$H_{F_{GT}}$ Heat generation, fire, and toxic gas generation

	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	101	102	103	104	105	106	107
14																												
15																												
16																												
17																												
18																												
19																												
20				H	H	H																						
21				H_E	GF_H	GF_H	GF_H																					
22				H E	GF_H		H_{GF_F}																					
23				H_F																								
24																												
25				GF_H	U	GF_H	GF_H	E																				
26								H_P			S	GF_H																
27								H_{GF_E}				H_{GF_F}																
28									H_E																			
29																												
30				H_E	H	E	$H_{F_{GT}}$	H_E	H_G		H_G	H_{GF_F}	$H_{P_{GT}}$		H_P													
31					H_P			GF_H				GF_H					H											
32								H									U											
33					H												H_{GT}											
34							H_P	H_P	H_P		H_P	H_P					H_P	H_P	U	H_P								
101								H_{G_F}				H_{GF_F}					$H_{F_{GT}}$											
102								H_E	H_E	H_E	E	E					H_E	H_E		H_E	H_E	H_E						
103								P_H	P_H	P_H	P_H	P_H					P_H	P_H		P_H			H_E					
104	H_F		H_F	H_{GT}	$H_{F_{GT}}$	H_F	$H_{F_{GT}}$	H_{F_E}	H_{F_E}	H_F		H_{F_E}	$H_{F_{GT}}$	H_E	H_F	H_F	H_G	H_F	$H_{F_{GT}}$	$H_{F_{GT}}$	H_{F_G}	H_{F_G}	H_E	$H_{F_{GT}}$					
105				H_E	GF_H	GF_H	GF_H						H_{GF}	H_E			H_E	GF_H	GT_{GF_H}	H	GF_H	H_E	$H_{P_{GF}}$	H_{F_E}				
106					H_G			GF_H	GF_H		S	GF_H							GT_{GF}						GF_{GT}			
107	DO NOT MIX WITH ANY CHEMICAL OR WASTE MATERIAL! EXTREMELY REACTIVE! →																											

000282

ROHM AND HAAS DELAWARE VALLEY INC.
BRISTOL PLANT

WASTE DESCRIPTION REPORT

Waste Code: _____ Building: _____ Date: _____

Waste Name: _____

RCRA HAZARD CLASSIFICATION: EPA NUMBER

Non-Specific Sources List (Section 261.31)	Yes ☐	No ☐	_____
Specific Sources List (Section 261.32)	Yes ☐	No ☐	_____
Acute Hazardous Waste List (Section 261.33e)	Yes ☐	No ☐	_____
Toxic Wastes List (Section 261.33f)	Yes ☐	No ☐	_____
Ignitability (Section 261.21) - FLASH POINT _____ °F	Yes ☐	No ☐	_____
Corrosivity (Section 261.22)			
pH - _____	Yes ☐	No ☐	_____
Corrosion Rate - _____ inches/year	Yes ☐	No ☐	_____
Reactivity (Section 261.23) - _____	Yes ☐	No ☐	_____
Eptoxicity (Section 261.24)			
Arsenic _____ mg/L Lead _____ mg/L	Yes ☐	No ☐	_____
Barium _____ mg/L Mercury _____ mg/L	Yes ☐	No ☐	_____
Cadmium _____ mg/L Selenium _____ mg/L	Yes ☐	No ☐	_____
Chromium _____ mg/L Silver _____ mg/L	Yes ☐	No ☐	_____

Properties (Appearance/General Description) _____

Liquid ☐	Solid ☐	Wet Cake/Paste ☐	Gas ☐	Single-Phase ☐	Multi-phase ☐
Viscosity (like):		Water ☐	Thin Syrup ☐	Thick Syrup ☐	Jelly/Paste ☐
Density (like):		Water ☐	Lighter Than ☐	Heavier Than ☐	
Water Solubility:		Negligible ☐	Partly ☐	Completely ☐	

TYPICAL COMPOSITION (List Components) Composition Range (%)

_____

_____

_____

_____

_____

_____

WASTE DISPOSAL FORM

Rohm and Haas Delaware Valley Inc.
BRISTOL PLANT

Plant Development Use Only:
Waste Code: 5- -
Date:
Waste is Hazardous (yes/no)
DOT-
RCRA-

REQUEST SECTION

Department	Bldg.	Charge No.	Date of Request	Requested By	Waste Code No. *5-

Unique Waste Name
* Waste

Drum Code	Drum Band Color	Waste is From
*	*	☐ Spill Clean-up ☐ Process Stream

DISTRIBUTION:
Area _____
General Service (3)
Plant Development Dept. (2)
Waste Treatment Dept.
Maintenance, Utilities, Store
Plant Safety
Corporate Health & Safety
Purchasing
Distribution Administration
Gov't. & Reg. Aff.

Source (if process stream) _____

☐ Recurring _____ pounds/month ☐ Continuous ☐ Off-and-on

☐ Non-recurring _____ containers and _____ total pounds.

Typical Properties (appearance/general description) _____

☐ Liquid ☐ Solid ☐ Wet Cake/Paste ☐ Gas ☐ Single-phase ☐ Multi-phase

Viscosity (like): ☐ Water ☐ Thin Syrup ☐ Thick Syrup ☐ Jelly/Paste

Density (like): ☐ Water ☐ Lighter Than ☐ Heavier Than

Water Solubility: ☐ Negligible ☐ Partly ☐ Completely

TYPICAL COMPOSITION (list components) **Composition Range (%)**

Known Practical Hazards — Risks of handling, landfilling, incineration

To Personnel: _____

To Environment: _____

To Equipment: _____

000286

Waste Code: 5-

Date:

ANALYSIS/CLASSIFICATION SECTION

LABORATORY ANALYSIS

Flash Point (liquids) _____ °F.

pH _____

Corrosion (steel) _____ in./yr.

Reactive (yes/no) _____

EP Toxicity _____ mg/L

_____ mg/L

Heat Value _____ BTU/lb.

Sodium _____ ppm

Total Halogen (Cl, Br, F) _____ %

BOD _____ ppm

COD _____ ppm

EPA (RCRA) CLASSIFICATION (if hazardous)

A. Identification by characteristic(s) – Part 261, Subpart C
Applicable EPA Code(s) and characteristic(s) (I,C,R,E)

_____ _____ _____ _____ _____ _____

B. Identified by listing – Part 261, Subpart D (I,C,R,E,H,T)
EPA Code and Waste Name

_____ _____

_____

CLEAN WATER ACT

A. Toxic Pollutants – Section 307 (a) (List Items)

_____

_____

B. Hazardous Substance – Section 311. List Name, Approximate Concentration and Hazard Category (X,A,B,C,D)

_____

_____

PACKAGING/LABELING/SHIPPING

For DOT Hazardous Materials:

Proper Shipping Name _____

_____

Classification _____

UN or NA Identification No. _____

DOT Label _____

Other Labels _____

000287

Drum Code _____

Waste Code: 5-

Date:

DISPOSAL METHOD AND PROCEDURE SECTION

☐ Process Recycle ☐ Power House Fuel ☐ Chemical Sewer

☐ Commercial Disposer ☐ Other _____

Description of Procedure _____

AUTHORIZED COMMERCIAL DISPOSER	Disposer's EPA Identification No.	Authorized Method
____ GROWS, Morrisville, PA	PAD 000429589	Sanitary Landfill
____ Chem. Waste Mgt., Emelle, AL	ALT 000622464	Secure Landfill
____ U.S. Ecology, Sheffield, IL	ILD 01109503	Secure Landfill
____ Cecos, OH	OHD 087433744	Secure Landfill
____ Cecos, NY	NYD 8033624	Secure Landfill
____ ABCO, SC	SCD 003360393	Incinerate
____ Rollins, NJ	NJD 053288239	Incinerate
____ _____	_____	_____

APPROVAL SECTION

_____ _____

Investigated by (Plant Development) Date

_____ _____

Approved for Powerhouse Burning (Utilities Supervisor) Date

_____ _____

Approved for Chemical Sewer or Commercial Waste Disposal (Waste Treatment Manager) Date

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INSTRUCTIONS

Production:

1. Call Plant Development to obtain Waste Code Number, Waste Name, Drum Code and Drum Band Color. Fill in the indicated (*) spaces with this information.

2. Fill in the balance of the Request Section (page 1 of this form). Obtain help from Plant Development Contact Person, if necessary.

3. Deliver a 32-ounce, composite, representative sample of waste, together with this form to Plant Development Department.

4. Transfer the waste in proper drums (code/color) with stencilled legend (below) to the Plant Dump.

Waste Code No.
Waste Name
Building No.

Plant Development:

5. Investigate the waste disposal problem and develop a plan of action for disposal. Fill in the Instruction Section of this form and, if necessary, obtain the indicated signature(s) in the Approval Section.

6. Return a copy of this completed form to those on the distribution list.

General Services:

7. Affix DOT label(s), if necessary.

8. Coordinate shipping/disposal of the waste.

000289

D

SHIP TO:

ROHM AND HAAS DELAWARE VALLEY, INC.
BRISTOL PLANT
BRISTOL, PA. 19007

Container Code: 0014
Date: 11/21/80
Rev : 4

CONTAINER PURCHASE SPECIFICATION

Molding Powder Fines, Kydex Fines, General Trash

Type:	Metal Drum - Open Head - used.
Capacity:	40 Gallon Minimum - 50 Gallon Maximum
Height:	33 inches minimum
Construction:	May vary between 18 and 24 gauge
Interior:	Must be cleaned to remove all foreign product
Exterior:	~~No exterior markings on drum~~
Locking Ring:	Any type closure acceptable
REMARKS:	This drum is used as a throw-away container for fines and trash being disposed of in bulk trash containers.
Supplier:	State Steel, Southwark, Don Kelley (Huntingdon Valley)
Note:	Suppliers must submit samples for approval to the Bristol Material Handling Group.
Revisions:	2. Changed capacity from 55 gallon nominal to 40 gallon minimum; changed from level closure to any type and added State Steel and Southwark to approved suppliers.
	3. Changed size from 40 to 40 to 50 gallons. Changed gauge from light to 18 to 24 gauge. Added minimum height.
	4. All exterior markings must be eliminated. Markings may be spray painted or brush painted.

HIP TO:

:CHM AND HAAS COMPANY
NDEPENDENCE MALL WEST
ladelphia, PA 19105

CONTAINER CODE: 1546
REVISION: #6-82/09/07

CONTAINER PURCHASE SPECIFICATION

DATE: 77/12/07

Product: For Regulated Flammable and Other Wastes

TYPE: Reconditioned Metal Drum, Tight Head, DOT-17E

Deminsions:	Diameter (inside) 22½" - Height (overall) - 34-3/4" (±1/8")
Capacity:	Rated 55 gal.; minimum 57.2 gal.; maximum 57.75 gal.
Avg. Tare Wt.:	38 lbs. (17 Kgs.).

MATERIALS:

Top Head:	Convex - 3/8" min. Cold rolled low carbon steel - U.S. Gauge 18
Bottom:	Convex - 3/8" min. Cold rolled low carbon steel - U.S. Gauge 18
Body:	Straight side Cold rolled low carbon steel - U.S. Gauge 20
Rolling Hoop:	Two

CONSTRUCTION:

Chime:	Double seam; caulked
Side Seam:	Welded
Openings:	3/4" and 2" Openings in head
Fittings:	Rieke, Trisure or Allan Stevens

FINISH:

Interior:	None
Exterior:	Brown - GCMI #50; quality suitable for six months outside storage with dark brown center panel.
Gaskets:	Buna Synthetic Rubber
Embossings:	In accordance with reference specifications.
Markings:	1546 stencilled in 3/4" numerals in waterproof white or yellow ink on side opposite welded side seam and 5" up from and parallel to bottom chime. Test date and DOT reference number must be marked in waterproof ink as per reference specifications.

REMARKS:

1. Drum interior must be free of rust, scale, dirt, lubricant, water and other foreign matter.
2. Fillet at periphery of bottom head - min. 3/16" radius - max. 1/4" radius.
3. Bungs must be wrench tight.
4. Must be tested in accordance with reference specifications by the drum reconditioer.

REASON FOR REVISION:

3. Added ICC-17E to spec.
. Added testing by drum reconditioner
5. Added Allan Stevens as fitting supplier and specified reconditioner must show test date and his DOT Reference Number.
6. Add brown band in center panel.

SHIP TO:

ROHM AND HAAS COMPANY
BRISTOL PLANT
BRISTOL, PA 19007

CONTAINER CODE: #1538 A
DATE: July 5, 1979
REVISION: 2

CONTAINER PURCHASE SPECIFICATION

TYPE: Metal Drum

CUBE: 10/9 (10.715)

STYLE: Tight Head

REFERENCE SPECIFICATION: DOT-17E

CAPACITY: Rated - 55 gallons
Mimimum - 57.2 gallons
Maximum - 57.75 gallons

AVERAGE TARE WT: 40 lbs.

DIMENSIONS: Diameter (Inside) 22-1/2"
Height (Overall) 34-3/4" ± 1/8"

MATERIALS	STYLE	TYPE	U.S. GAUG
Top Head	Convex - 3/8" min.	Cold rolled, low carbon steel	18
Cover			
Bottom	Convex - 3/8" min. Modified Contour (Annular Ring or Drop Bottom). Center Line of ring embossment to be not more than two (2) inches from knuckle radius.	Cold rolled, low carbon steel	18
Body	Straight Side	Cold rolled, low carbon steel	20
Rolling Hoop	Two	Expanded	
Locking Ring			

CONSTRUCTION:

Chime	Double seam - caulked
Side Seam	Welded
Opening	3/4" and 2" openings diametrically opposite in top head. 2" head fitting to be in line with welded side seam.

FITTINGS: Rieke Black Steel

FINISH: **INTERIOR:** (Phosphatized)

EXTERIOR: Black drum enamel overall. Exteri finish quality suitable for six month outside storage.

GASKETS: Ethylene Propylene Terpolymer

MARKINGS: Rohm and Haas container code stencilled in 3/4" numberals in waterproof whit or yellow ink on the side of the drum, 5" up from and parallel to the bottom chime diametrically opposite welded side seam.

EMBOSSING: In accordance with reference specification.

REMARKS:
(1) Drum interior must be free of rust, scale, dirt, lubricant, water or other foreign matter.
(2) Bungs must be wrench tight.
(3) Fillet at periphery of bottom section - Min. 3/16" - Max. 1/4" radius.
(4) Chime to be touched up after double seaming.

REASON FOR REVISION:

(1) Change fittings from Tri-sure to Rieke and gasket to Ethylene Propylene Terpolymer.

SHIP TO:

ROHM AND HAAS DELAWARE VALLEY, INC.
BRISTOL PLANT
RISTOL, PA. 19007

CONTAINER CODE:1519
DATE: 6-26-80
REVISION: 3

CONTAINER PURCHASE SPECIFICATION

Export Acrylic Emulsions
Plain Drum
Cube 11/8

TYPE:	Metal Drum - Full open head - NMFC #A5, Rule 5 - UFC #5, Rule 40
Dimension:	Diameter (inside) 22½" - Height (overall) 35-1/16" ± 1/8"
Capacity:	Rated 55 gallons - minimum 57.2 gallons - maximum 57.75 gallons
Avg. Tare Wt.:	38#

MATERIALS

Cover	Convex - 3/8" min. - hot rolled low carbon steel - U.S. Gauge 20
Bottom	Convex - 3/8" min. - hot rolled low carbon steel - U.S. Gauge 20
Body	Straight side - not rolled low carbon steel - U.S. Gauge 20
Rolling Hoops	Two - expanded
Locking Ring	Lever Lok - 16 gauge
Gaskets	3/8" diameter round sponge rubber cemented entire perimeter of cover - no spot gluing.

CONSTRUCTION

Chime	Double seam, caulked bottom - ½" false wire roll at open end of body.
Side Seam	Welded
Openings	None
Fittings	None
Bottom Head Only	Modified contour (annular ring or drop bottom). Center line of annular ring embossment to be not more than 2" in from knuckle radius.

FINISH

Interior	Single coat clear lacquer - Inland IC-25 or Vorliner 1184 - Vorliner 11E Thickness range - 0.5 to 0.8 mils/coat.
Exterior	Black - exterior finish quality suitable for six months outside storage.
Emobssing	In accordance with reference specifications.
Markings	Rohm and Haas container code stencilled in 3/4" numerals in waterproof white or yellow ink on the side of the drum 5" up from and parallel to the bottom chime diametrically opposite welded side seam.

REMARKS

1. Drum interior must be free of rust, scale, dirt, lubricant, water, or other foreign matter.
2. Interior coating substitution permitted only on the approval of Rohm and Haas Purchasing Agent and Packaging Engineer, Bristol Plant.
3. Metal to be scrubbed, blasted, or otherwise thoroughly cleaned prior to coating application.
4. Use with polyethylene liner - code 8844 and polyethylene sealing disc code 8826.
5. Fillet at periphery of bottom section - min. 3/16" - max. 1/4" radius.

REASON FOR REVISION

1. Revised bottom head construction.
2. Reduced drum construction to all 20 gauge metal.
3. Change from Power to Lever Lok ring.

FORM 4308

SHIP TO:

ROHM AND HAAS COMPANY
BRISTOL PLANT
BRISTOL, PA. 19007

CONTAINER CODE: I542A
DATE: 3/4/80
REVISION: 6

CONTAINER PURCHASE SPECIFICATION

Cube: 10.715
Usage: Insecticides
petroleum Acryloid products
coating Acryloid products

TYPE: Metal Drum - Tight Head - DOT 17E

Dimensions: Diameter (inside) 22½" ± 1/16" - Height (overall) 35" ± 1/8".
Diameter - Shell (inside) 22-5/16"
Diameter - Hoops (overall) 23-7/16"

Capacity: Rated 55 gallons - minimum 57.2 gallons - maximum 57.75 gallons.

Avg. Tare Wt.: 42 pounds.

MATERIALS:

Top Head: Convex - 3/8" min. - hot rolled low carbon steel - U.S. Gage 18.
Bottom: Convex - 3/8" min. - hot rolled low carbon steel - U.S. Gage 18.
Body: Straight side - cold rolled low carbon steel - U.S. Gage 20.
Rolling Hoops: Two - expanded
Gaskets: Irradiated Polyethylene

CONSTRUCTION: In accordance with special approved practice (24" HG min. measured vacuum).

Chime: Double seam, caulked bottom.
Side Seam: Welded.
Openings: 3/4" and 2" openings diametrically opposite in top head. Two inch head fitting to be in line with welded side seam.
Fittings: Tri-Sure bungs and flanges - steel zinc coated.

Bottom Head Only: Modified contour (annular ring or drop bottom). Center line of annular ring embossment to be not more than 2" in from knuckle radius.

FINISH:

Interior: None - phosphatized in and out.
Exterior: Black including exterior of bungs. Exterior finish quality (particularly top) suitable for six months outside storage.
Embossing: In accordance with reference specifications.
Markings: Rohm and Haas container code stencilled in 3/4" numerals in waterproof white or yellow ink on the side of the drum 5" up from and parallel to the bottom chime diametrically opposite welded side seam.

REMARKS:

1. Interior must be free of rust, scale, dirt, lubricant, water, or other foreign matter.
2. Bungs must be wrench tight.
3. Fillet at periphery of bottom section min. 3/16" - max. 1/4" radius.

REASON FOR REVISION:

1. Revised bottom head construction.
2. Added cap-seal to 2" bung.
3. Eliminated cap seals on bungs.
4. Gasket formerly buna rubber. Suffix A added to code number.
5. Required black cap seal on 3/4" bung to be installed by manufacturer.
6. Remove black cap seal on 3/4" bung to be installed by manufacturer.

RDK/dc - 3/4/80

FORM 4308 REV. 1/78

SHIP TO:

Rohm & Haas Company
Bristol Plant
Bristol, Pa.

ROHM & HAAS
PHILADELPHIA 5, PA.

CONTAINER CODE: 1528

DATE: 8/25/64

REVISION: 4

CONTAINER PURCHASE SPECIFICATION

Cube 10/9
Product - Petroleum Acryl

TYPE Metal Drum - Tight Head - ICC 17E

Dimensions: Diameter (inside) 22 1/2" - Height (overall) 34 3/4" ± 1/8"

Capacity: Rated 55 gallons - Minimum 57.2 gallons - Maximum 57.75 gallons

Average Tare Weight: 48#

MATERIALS

Top Head	- Convex - 3/8" Min. - hot rolled low carbon steel - U.S. Gauge 18
Bottom	- Convex - 3/8" Min. - hot rolled low carbon steel - U.S. Gauge 18
Body	- Straight side - cold rolled low carbon steel - U.S. Gauge 18
Rolling Hoops	- Two - expanded
Gaskets	- Buna Synthetic Rubber

CONSTRUCTION

Chime	- Double seam, caulked bottom
Side Seam	- Welded
Openings	- 3/4" and 2" openings diametrically opposite in top head. Welded side seam diametrically opposite 2" bung.
Fittings	- Tri-sure bungs and flanges - steel electro tinned

FINISH

Interior	- None - phosphatized in and out
Exterior	- Black, including exteriors of bungs - exterior finish quality suitable for six months outside storage.
Embossing	- In accordance with reference specification.
Markings	- Rohm & Haas container code stencilled in 3/4" numerals in waterproof white or yellow ink on the side of the drum 5" up from and parallel to the bottom chime diametrically opposite welded side seam.

REMARKS

1. Drum interior must be free of rust, scale, dirt, lubricant, water or other foreign matter.
2. Bungs will be wrench tight.
3. Fillet at periphery of bottom section Min. 3/16" - Max. 1/4" radius.
4. Lithographed or silk screened on side in accordance with latest approved Rohm & Haas design - D1. Design to be centered on sidewall under 2" bung.

REASON FOR REVISION

1. Designate location of welded side seam and lithography.
2. Added export cube.
3. Changed drum color.
4. Added quality specification to black paint.

ROHM AND HAAS COMPANY
BRISTOL PLANT
Bristol, Penna. 19007

Container Code: 1558
Date: 3/4/80
Revision: 4

CONTAINER PURCHASE SPECIFICATION

Cube: 10/9
Usage: coating Acryloid products

TYPE Metal Drum - tight head, reference specification DOT 17E

Dimensions: Diameter (inside) heads 22½" ± 1/16"
(inside) shell 22-5/16" ± 1/16"
(overall) hoops 23-7/16"
Height (overall) 35" ± 1/8"

Capacity: Rated 55 gallons - minimum 57.2 gallons, maximum 57.75 gallons

Avg. Tare Wt.: 47 pounds

MATERIALS

Top Head: Convex 3/8" minimum hot rolled low carbon steel - U.S. Gage 18
Bottom: Convex 3/8" minimum hot rolled low carbon steel - U.S. Gage 18
Body: Straight side, hot rolled low carbon steel - U.S. Gage 18
Rolling Hoop: Two - expanded
Gasket: Polyethylene

CONSTRUCTION In accordance with special approved practice (24" HG min. measured vacuu

Chime: Double seamed - caulked bottom
Side Seam: Welded
Openings: 3/4" x 2" openings diametrically opposite in top head. Welded side seam diametrically opposite 2" bung.

Bottom Head Only: Modified contour (annular ring or drop bottom). Center line of annular ring embossment to be not more than 2" in from knuckle radius.

Fittings: Tri-Sure bungs and flanges, steel zinc coated.

FINISH

Interior: None - Phosphatized in and out.
Exterior: Black - exterior finish quality suitable for six months outside storage.
Embossing: In accordance with reference specification.
Markings: Rohm and Haas container code stencilled in 3/4" numerals in waterproof white or yellow ink on the side of the drum 5" up from and parallel to bottom chime diametrically opposite welded side seam.

REMARKS

1. Drum interior must be free of rust, scale, dirt, lubricant, water, or other foreign matter.
2. Bungs to be wrench tight.
3. Fillet at periphery of bottom section - minimum 3/16" - maximum 1/4" radius.

REASON FOR REVISION

1. Revised bottom head construction.
2. Eliminated printing and cap seals on bungs.
3. Required black cap seal on 3/4" bung to be installed by manufacturer.
4. Removal of black cap seal on 3/4" bung to be installed by manufacturer.

RDE/dc - 3/4/80

ROHM AND HAAS COMPANY
PHILADELPHIA PLANT
5000 RICHMOND STREET, PHILADELPHIA, PA. 19137

CONTAINER PURCHASE SPECIFICATION

DATE: 12/10/64 REVISION: #5 - 5/28/74 CONTAINER CODE: #1552

TYPE: Metal Drum

CUBE: 10/9

STYLE: Tight Head

REFERENCE SPECIFICATION: DOT-17E

CAPACITY: Rated - 55 gallons
Minimum - 57.2 gallons
Maximum - 57.75 gallons

AVERAGE TARE WT: 50 lbs.

DIMENSION: Diameter (Inside) 22-1/2"
Height (Overall) 34-3/4" ± 1

MATERIALS	STYLE	TYPE	U.S. G
Top Head	- Convex - 3/8" min.	Hot or cold rolled, low carbon steel	18
Cover	-		
Bottom	- Convex - 3/8" min. Modified Contour (Annular Ring). Center line of ring embossment to be not more than two (2) inches in from knuckle radius.	Hot or cold rolled, low carbon steel	18
Body	- Straight Side	Hot or cold rolled, low carbon steel	18
Rolling Hoop	- Two	Expanded	

CONSTRUCTION
Chime - Double seam - caulked
Side Seam - Welded
Openings - 1/2" and 2" openings, diametrically opposite in top head. 2" fitting to be in line with side seam.

FITTINGS: Tri-Sure "Poly-Clad" polyethylene plugs.

FINISH: INTERIOR: Fusioncote

Interior Film Thickness Range
20 mil average

EXTERIOR: Black drum enamel overall. Exte finish quality suitable for six months outside storage.

GASKETS: None

MARKINGS: Rohm and Haas container code stencilled in 3/4" numerals in waterproof white or yellow ink on the side of the drum 5" up from and parallel to the bottom chime diametrically opposite welded side seam.

EMBOSSING: In accordance with reference specification.

REMARKS:
(1) Drum interior to be free of scale, dirt, lubricant, water or other foreign matter.
(2) Fillet at periphery of bottom section - Min. 3/16" - Max. 1/4" radius
(3) Chime to be touched up after double seaming.

REASON FOR REVISION: (1) Change Size of opening.

000298

ROHM AND HAAS COMPANY
BRISTOL PLANT
BRISTOL, PA. 19007

Container Code: 1568
Date: 11/12/74
Revision: 2

CONTAINER PURCHASE SPECIFICATION

Cube 10/9
Product - TBAE MA, DMAE, MA, X-970

TYPE Metal Drum - Tight Head - DOT 17E

Dimensions: Diameter (inside) 22-1/2" - Height (overall) 34-3/4" ± 1/8"
Capacity: Rated 55 gallons - minimum 57.2 gallons - maximum 57.75 gallons
Avg. Tare Wt.: 40#

MATERIALS

Top: Convex - 3/8" min. - hot rolled low carbon steel - U.S. Gauge 18
Bottom: Conves - 3/8" min. - hot rolled low carbon steel - U.S. Gauge 18
Body: Straight side - hot rolled low carbon steel - U.S. Gauge 20
Rolling Hoop: Two - expanded
Gaskets: Polyethylene

CONSTRUCTION

Chime: Double seam, caulked bottom
Side Seam: Welded
Opening: 3/4" and 2" opening in head diametrically opposite. Welded side seam diametrically opposite 2" bung.
Fittings: Tri-Sure bungs and flanges - steel zinc coated.

Bottom Head Only: Modified contour (annular ring or drop bottom). Center line of annular ring embossment to be not more than 2" in from knuckle radius.

FINISH

Interior: Two coats Unichrom 124.17B - Thickness range 0.5 - 0.8 mils/coat
Exterior: Black - exterior finish quality suitable for six months outside storage.
Embossing: In accordance with reference specifications.
Markings: Rohm and Haas container code stencilled in 3/4" numerals in waterproof white or yellow ink on the side of the drum 5" up from and parallel to tht bottom chime diametrically opposite welded side seam.

REMARKS

1. Drum interior must be free of rust, scale, dirt, lubricant, water, or other foreign matter.
2. Interior coating substitution permited only on approval of Rohm and Haas Purchasing Agent and Packaging Engineer, Bristol Plant.
3. Metal to be scrubbed, blasted, or otherwise thoroughly cleaned prior to coating application.
4. Bungs to be wrenched tight.
5. Fillet at periphery of bottom section min. 3/16" - max. 1/4" radius.

REASON FOR REVISION

1. Revised bottom head construction.
2. Eliminated printing and cap seals on bungs.

FORM 2398 REV. 5/67

OHM AND HAAS COMPANY
INDEPENDENCE MALL WEST
Philadelphia, PA 19105

CONTAINER CODE: 1535
REVISION: #1-82/09/07

CONTAINER PURCHASE SPECIFICATION

DATE: 77/10/25

Product: For Regulated Flammable and Corrosive Residues and Other Wastes

TYPE: Reconditioned Metal Drum, Full Open-Head, DOT-17H

Dimensions: Diameter (inside) 22½" - Height (overall) - 34-13/16 $\pm$ 5/16 / 0

Capacity: Rated 55 gal.; minimum 57.2 gal.; maximum 57.75 gal.

Average Tare Wt.: 52 lbs. (23.5 Kgs.).

MATERIALS:

Cover: Convex - 3/8" min. Cold rolled low carbon steel - U.S. Gauge 16
Bottom: Convex - 3/8" min. Cold rolled low carbon steel - U.S. Gauge 18
Body: Straight side Cold rolled low carbon steel - U.S. Gauge 18
Rolling Hoop: Three - expanded
Locking Ring: Extra heavy - 12 gauge - bolt locking ring with drop forged lugs and one 5/8" diameter threaded bolt with locking nut.
Gaskets: Polyethylene covered - either 3/8" cellulose or 7/16" diameter sponge rubber.

CONSTRUCTION:

Chime: Double seam; caulked bottom - ½" false wire roll at open end of body.
Side Seam: Welded - cover to have full radius curl.

FINISH:

Interior: None
Exterior: Brown, GCMI #50; quality suitable for six months outside storage with dark brown center panel.
Embossing: In accordance with reference specifications.
Markings: 1535 stencilled in 3/4" numerals in waterproof white or yellow ink on side opposite welded side seam and 5" up from and parallel to bottom chime.
Test date and DOT reference number must be marked in waterproof ink as per reference specifications.

REMARKS:

1. Drum interior must be free of rust, scale, dirt, lubricant, water and other foreign matter.
2. Fillet at periphery of bottom head - min. 3/16" radius - max. 1/4" radius.
3. Locking ring bolts must be tightened "liquid tight".
4. Must be tested in accordance with reference specifications.

REASON FOR REVISION:

1. Add brown band in center panel.

SHIP TO:
ROHM AND HAAS DELAWARE VALLEY, INC.

BRISTOL PLANT
BRISTOL, PA 19007

CONTAINER CODE: 1565
DATE: 1/9/80
REVISION: #6

CONTAINER PURCHASE SPECIFICATION

Cube 12/2
Product - Special Container for Coating Acryloid Products

TYPE: Metal drum - full open head - DOT 17H

Dimensions: Diameter (inside) 22½" - Height (overall) 35" ± 1/8"
Capacity: Rated 55 gallons - minimum 57.2 gallons - maximum 57.75 gallons
Avg. Tare Wt.: 52#

MATERIALS:

Cover: Convex - 3/8" min. - hot rolled low carbon steel - U.S. Gauge 16
Bottom: Convex - 3/8" min. - hot rolled low carbon steel - U.S. Gauge 18
Body: Straight side - hot rolled low carbon steel - U.S. Gauge 18
Rolling Hoop: Three - expanded
Locking Ring: Extra heavy bolt locking ring with drop forged lugs and one 5/8" diameter threaded bolt.
Gaskets: 7/16" diameter, sponge rubber, encased in polyethylene.

CONSTRUCTION:

Chime: Double seam, caulked bottom - 1/2" false wire roll at open end of body.
Side Seam: Welded - cover to have full radius curl.
Openings: 3/4" and 2" openings in head.
Fittings: Tri-Sure bungs (with PE gaskets) and flanges - steel zinc coated.
Bottom Head Only: Modified contour (annular ring or drop bottom). Center line of annular ring embossment to be not more than 2" in from knuckle radius.

FINISH:

Interior: Rust inhibitor
Exterior: Black - exterior finish quality suitable for six months outside storage.
Embossing: In accordance with reference specification.
Markings: Rohm and Haas material code stencilled in 3/4" numerals in waterproof white or yellow ink on the side of the drum 5" up from and parallel to the bottom chime diametrically opposite welded side seam.

REMARKS:

1. Drum interior must be free of rust, scale, dirt, lubricant, water, or other foreign matter.
2. Bung to be wrench tight.
3. Fillet at periphery of bottom section - min. 3/16" - max. 1/4" radius.
4. Locking ring bolts must be tightened "liquid tight".

REASON FOR REVISION

1. Revised bottom head construction.
2. Changed gasket and added 3/4" bung in lid.
3. Eliminated printing and cap seals on bungs.
4. Specified tightening of locking ring bolt.
5. Specified PE Gasket on bungs.
6. Added rust inhibitor.

SHIP TO:

ROHM AND HAAS COMPANY
TOL PLANT
BRISTOL, PA. 19007

CONTAINER CODE: 1586
DATE: 1/23/76
REVISION: 5

CONTAINER PURCHASE SPECIFICATION

Product GMAA
Cube 10/9

TYPE

Metal drum - tight end drum with molded polyethylene insert
ICC-37M(drum) - 2SL (polyethylene insert)

Dimensions - Diameter (inside) 22-1/2" - Height (overall) 35½ ± 1/8" 22-3/4" O.D.
- Steel - rated 55 gallons - min. 57.2 gallons - max. 57.75 gallons
Polyethylene liner - rated 55.0 gallons

Avg.Tare Wt. - 31#

MATERIALS

Cover - Flat - 3/8" min. - hot rolled low carbon steel - U.S. Gauge 24
Bottom - Flat - 3/8" min. - hot rolled low carbon steel - U.S. Gauge 22
Body - Straight side - hot rolled low carbon steel - U.S. Gauge 24
Rolling Hoop - Four - expanded
Locking Ring - None
Gaskets - None

CONSTRUCTION

Chime - Double seam, caulked bottom
Side Seam - Welded
Opening - 3/4" and 2" openings in head of polyethylene insert - diametrically opposit
Fittings - Tri-Sure bungs - 3/4" cap sealed - 2" shipped separate.
on Back of trailer
In A Box

FINISH

Interior - None
Exterior - Black exterior - finish quality suitable for six months outside storage
Embossing - In accordance with reference specifications
Markings - Rohm and Haas container code stencilled in 3/4" numerals in waterproof white or yellow ink on the side of the drum 5" up from and parallel to the bottom chime diametrically opposite welded side seam.

REMARKS

1. Fillet at periphery of bottom section min. 3/16" - max. 1/4" radius.

REASON FOR REVISION

1. Increased capacity of polyethylene insert to full 55 gallons.
2. Revised tare weight.
3. Printing repositioned under 2" bung.
4. Removed printing from drum sidewall.
5. Increased height by ½".

TO: NORTH AMERICAN LOCATIONS

ROHM AND HAAS COMPANY
INDEPENDENCE MALL WEST
PHILADELPHIA, PA 19105

CONTAINER CODE: 8954
DATE : 11/26/79
REVISION #1 : 1/13/82

CONTAINER PURCHASE SPECIFICATION

DATE: 11/26/79 REVISION: #1-1/13/82 CONTAINER CODE: 8954

TYPE : Polyethylene Drum (DOT Exemption 7035)

Dimensions OD-24" Max.

STYLE : Tight Head

O/A HT - 35-3/4" ± 1/8"

CAPACITY : Nominal 55 Gallon

Cube: 12.000

Avg. Tare Wt: 25 Lbs.

MATERIALS : Body, Head, Bottom - HMW Black Polyethylene

Gage: 0.125" Min. Throughout

CONSTRUCTION : Openings - Two 2" in Top head diametrically opposite

Fittings - Rieke Black Polyethylene- one 2" NPT; one 2" Buttress plug w/3/4" NPT Reducer Plug in center.

Grip Ring - HMW Black Polyethylene - of approved design to facilitate use with Fork Truck Lift-O-Matic attachment or with hand truck.

FINISH : Exterior - Black overall including grip ring

Embossing - In accordance with reference specification

Marking - Rohm and Haas container code #8954 stencilled in 3/4" numerals in waterproof white or yellow ink 5" up from and parallel to bottom end.

REMARKS :

(1) Drum interior to be free of water, dirt, lubricant or other foreign matter.

(2) Drum and fittings to be liquid tight

(3) Black colorant in the #8954 drum is not FDA approved status.

REASON FOR REVISION :

(1) Change O/A height

(2) Include high molecular weight polyethylene in materials construction.

(3) Change grip ring from metal to polyethylene.

SHIP TO:

ROHM AND HAAS DELAWARE VALLEY, INC.
BRISTOL PLANT
BRISTOL, PA. 19007

CONTAINER CODE: #8959
DATE: 12/15/80

CONTAINER PURCHASE SPECIFICATION

PRODUCT: Waste Drum
CUBE: 11.4

TYPE: Reconditioned reusable polyethylene drum - tight end - DOT 34

DIMENSIONS: Outside: Diameter 24" (max.)
Height 36-3/8" ± 1/8"

CAPACITY: Nominal 55 gallon

AVERAGE TARE WEIGHT: 25 lbs.

MATERIALS: Body, Head and Bottom: 0.125" (min.) black polyethylene
Melt Index 1.2 max. - ASTM D1338 (62T)
Density 0.941-0.965 - ASTM D1505 (63T)
Tensile Strength 3000 psi min. - ASTM D638 (61T)
Elongation 75% minimum - ASTM D638 (61T)

CONSTRUCTION: Openings - Two 2" openings - diametrically opposite in top head
New Fittings and Gaskets - To be supplied by the drum reconditioner one bung with NPT threads, other bung with buttress threads and 3/4" NPT opening in center
Grip Ring - Ring attached to top head of approved design to facilitat handling with fork truck lift-o-mat attachment or with hand truck.

FINISH: Exterior - Suitable for three years outdoor storage
Embossing - In accordance with reference specifications.
Marking - Rohm and Haas Container Code must be stencilled in 3/4" numerals in waterproof white or yellow ink on side of drum 3"to 8" up from and parallel to bottom head. A brown band should be painted around the circumference of the drum (minimum 3" wide) between the two molded rolling hoops.

REMARKS:

1. Drum interior to be free of water, dirt, lubricant or other foreign matter.
2. Drum and new fittings must be liquid tight.
3. All previous test markings, commodity identification markings, and labels must be removed.
4. Drums to be tested and DOT labeled by Reconditioner.

FORM 4308

C00304

CODE: 1002 DATE: REVISION: 80/08/0

TYPE: 125-STEEL PAIL STYLE: OH PE LINER CODE:

USING PLANTS: 2,9 UNIT CODE: PRINT SPEC:

CAPACITY - RATED: 5 GAL MIN: 5.2 GAL MAX: 5.45 GAL

PRODUCTS: MISC

FINISH - INTERIOR: 2 COATS UNICHROME B-124-19
COMPOSITION: FILM THICKNESS: 0.5 - 0.8 MILS/CO
EXTERIOR: WHITE ENAMEL OVERALL

LINING OR BARRIER:

NET WT LIMIT: SIDEWALL TEST:

REGULATORY SPEC
DOT: 37A UFC: NMFC:

AVE TARE: 6 LB. CUBE: EXPORT:

DIAMETER - ID: 11-1/4" OD: O/A HT: 13-1/4"+/-

MATERIALS	STYLE	TYPE	U.S.
TOP HEAD			
COVER	FLAT	COLD ROLLED LOW CARBON STEEL	
BOTTOM	FLAT	COLD ROLLED LOW CARBON STEEL	
BODY	STRAIGHT SIDE	COLD ROLLED LOW CARBON STEEL	
ROLLING HOOP	SINGLE BEAD REINFORCING CORRUGATION NEAR TOP		
LOCKING RING	BOLT TYPE	COLD ROLLED LOW CARBON STEEL	
HANDLE	STEEL WIRE WITH PLASTIC GRIP - EARS RIVETED TO SIDEWAL		
SEALING DISC			
CLOSURE			

CONSTRUCTION
CHIME: DOUBLE SEAM, CAULKED, BTM TO BE REDUCED DIAMETER 11" OUTSIDE TC STACKING.
SIDE SEAM: WELDED
OPENINGS: 63MM IN COVER

FITTINGS: RIEKE FS-10-4 FLEXSPOUT INSTALLED

GASKETS: COVER - WHITE TUBULAR

COMPLIANCE - IN ACCORDANCE WITH THIS AND NOTED REFERENCED SPECIFICATION.

MARKINGS - CONTAINER CODE: 1002 STENCILLED IN: 1/2" NUMERALS IN WATERPRO BLACK INK ON SIDE OF DRUM: 2" UP FROM AND PARALLEL TO THE BOTT DIAMETRICALLY OPPOSITE WELDED SIDE SEAM. YOUR COMPANY'S TWO DIGIT IDENT TION CODE PRIOR TO CONTAINER CODE AND MECHANICAL REVISION NUMBER AFTER: e.g., XX-1002-02.

REMARKS: CODE 1002 CONTINUED
1. PAIL INTERIORS MUST BE FREE OF RUST, SCALE, DIRT, LUBRICANT, WATER OR FOREIGN MATTER.
2. INTERIOR COATING SUBSTITUTION PERMITTED ONLY ON APPROVAL OF ROHM AND H PURCHASING AGENT AND PACKAGING ENGINEER.
3. CHIMES TO BE TOUCHED UP AFTER DOUBLE SEAMING.
4. RINGS, NUTS AND BOLTS SHIPPED SEPARATELY.
5. PAILS SHIPPED 48 TO A PALLET AND METAL STRAPPED.

REASON FOR REVISION:
1. CHANGE FROM BLACK EXTERIOR ENAMEL TO WHITE EXTERIOR ENAMEL PER SPRING REQUEST BY J. PAWLIKOWSKI.

HIP TO:

[redacted] AND HAAS COMPANY
[redacted]
[redacted] PA. 19007

Container Code: 1006
Date: 11/3/71
Revision: 5

CONTAINER PURCHASE SPECIFICATION

Cube 1/1
Product: Monomer, Insecticides

TYPE: Metal Pail - Tight Head - ICC-17E

Dimensions: Diameter (inside) 11-1/4" - Height (overall) 13-9/16"± 1/16"
Capacity: Rated 5 gallons - Minimum 5.2 gallons, Maximum 5.45 gallons
Average Tare Wgt.: 5#

MATERIALS:

Top Head: Flat - cold rolled low carbon steel - U.S. Gauge 24
Bottom: Flat - Cold rolled low carbon steel - U.S. Gauge 24
Body: Straight side - cold rolled low carbon steel - U.S. Gauge 24
Handle: Steel wire, with saddle riveted in head -#5 BWG
Gaskets: None

CONSTRUCTION:

Chime: Double seam, caulked bottom - top chime to be reduced diameter (11" outside) to permit stacking.
[redacted] Welded
[redacted]: 2-3/8" (ID) opening in head for Rieke Flex Spout. Dot embossed vent in top diametrically opposite Flex spout opening.

FINISH:

Interior: None
Exterior: SSC1 - Black #57 - exterior finish quality suitable for six months of outside storage.
Embossing: In accordance with reference specification.
Markings: Rohm and Haas container code stencilled in 1/2" numerals in waterproof white or yellow ink on ths side of the pail, 2" up from and parallel to bottom chime diametrically opposite welded side seam.

REMARKS:

1. Pail interiors must be free of rust, scale, dirt, lubricant, water, or other foreign matter.
2. Opening to be covered with dust cap when received.
3. Chimes to be touched up after double seaming.
4. Pails to be palletized - metal strapped.
5. Eliminated request to furnish Rieke Flex spouts as separate item.

obsolete when stock depleted 6/12/79

Kloomp —

SH TO: Get from Phila plant

HM AND HAAS COMPANY PLANT RI... PA. 19007	CONTAINER CODE: 1053 DATE: 1-12-72 REVISION: 5	CONTAINER PURCHASE SPECIFICATION

TYPE Metal Pail - Full Open Head - ICC-37A

Dimensions:	Diameter (Inside) 11-1/4"; Height (Overall) 13-1/4" ± 1/16"
Capacity:	Rated 5 gallons - Minimum 5.2 gallons, Maximum 5.45 gallons
Average Tare Wgt.:	5-1/2#

MATERIALS

Top Head:	Flat - cold rolled low carbon steel - U.S. Gauge 24
Cover:	Flat - cold rolled low carbon steel - U.S. Gauge 24
Bottom:	Flat - cold rolled low carbon steel - U.S. Gauge 24
Body:	Straight side - cold rolled low carbon steel - U.S. Gauge 24
Rolling Hoop:	Single bead reinforcing corrugation near top
Locking Ring:	Lever locking
Bail:	Steel wire bail with wooden grip - ears riveted to sidewall #8 BWG

CONSTRUCTION

me:	Double seam, caulked, bottom chime to be reduced diameter (11" outside) to permit stacking.
Side Seam:	Welded
Openings:	45 mm in cover
Fittings:	Upressit cap and seal

FINISH

Interior:	Two coats Inland IC-25 or approved equivalent.
Exterior:	Black drum enamel overall. Locking Ring - Aluminum top coat. Exterior finish quality suitable for six months outside storage.
Gaskets:	Cover - Flowed in latex gasket. Opening - Pulp/vinylite cap liner.
Markings:	Rohm and Haas container code stencilled in 1/2" numerals in waterproof white or yellow ink on the side of the pail 2" up from and parallel to the bottom chime diametrically opposite welded side seam.
Embossing:	For 60# gross weight - In accordance with reference specification.

REMARKS

1. Pail interiors must be free of rust, scale, dirt, lubricant, water, or other foreign matter.
2. Cap and seal crimped in place as received.
3. Interior coating substitution permitted only on approval of Rohm and Haas Purchasing Agent and Packaging Engineer, Bristol Plant.

SON FOR REVISION

1. Exterior Finish.

000310

ROHM AND HAAS COMPANY
BRISTOL PLANT
BRISTOL, PA. 19007

Container Code: 1060
Date: 3/26/69
Revision:

CONTAINER PURCHASE SPECIFICATION

Cube 1/1
Product: Air Shipments
Coating Acryloid

TYPE: Metal Pail - Tight Head - ICC-17E

Dimensions: Diameter (inside) 11-1/4" - Height (overall) 13-9/16" ± 1/16"
Capacity: Rated 5 gallons - Minimum 5.2 gallons, Maximum 5.45 gallons
Average Tare Wgt: 5#

MATERIALS:

Cover: Flat - cold rolled low carbon steel - U.S. Gauge 24
Bottom: Flat - cold rolled low carbon steel - U.S. Gauge 24
Body: Straight side - cold rolled low carbon steel - U.S. Gauge 24
Gaskets: Polyethylene

CONSTRUCTION:

Chime: Double seam, caulked bottom - top chime to be reduced diameter (11" outside) to permit stacking.
Side Seam: Welded
Openings: 2" bung in head
Fittings: Tri-sure bung and flange - interior of bung and flange lacquered.

FINISH:

Interior: One coat IC-25 lacquer, Interchemical 1457, Vorliner 66S, Rheems 941 - thickness range 0.5 - 0.8 mils
Exterior: Black - exterior finish quality suitable for six months of outside storage.
Embossing: In accordance with reference specification
Markings: Rohm and Haas container code stencilled in 1/2" numerals in waterproof white or yellow ink on the side of the pail 2" up form and parallel to bottom chime diametrically opposite welded side seam.

REMARKS:

1. Pail interior must be free of rust, scale, dirt, lubricant, water, or other foreign matter.
2. Interior coating substitution permitted only on approval of Rohm and Haas Purchasing Agent and Packaging Engineer Bristol Plant.
3. Metal to be scrubbed, blasted or otherwise thoroughly cleaned prior to coating application.
4. Chimes to be touched up after double seaming.
5. For air freight shipments of Coating Acryloid.
6. Pails to be palletized - metal strapped.

REASON FOR REVISION:

C00311

CORROSION LABORATORY REPORT

To:	Copies:	Report No. CL-60-17 File A Tank Coatings
Mr. B. P. Dahlstrom	Corrosion Lab. (2)	Date February 4, 1960 B File 10
Department:	Mr. J. A. Sawyer Mr. E. K. Nicholson Mr. E. H. Riddle	Project 65205; 65227 C File 11
Sales Department	Mr. H. R. Moody (2)	Test No. 1504 D
From:		Subject:
L. H. Finkel		TANK COATINGS FOR ETHYL ACRYLATE AND METHYL METHACRYLATE
Phone: Bridesburg Ext. 402		References: C. L. Logbook #3972

RECOMMENDATIONS:

The following recommendations apply to the storage of ethyl acrylate (0.1% HQ) and of methyl methacrylate (0.006% HQ) at 100°F.

Satisfactory	Unsuitable
Uncoated Mild Steel	LC-34 Clear
Heresite Industrial	

SUMMARY:

A request was issued by the Sales Department to have commercial tank coatings evaluated for the storage of methyl methacrylate and ethyl acrylate. The Corrosion Laborato tested the coatings Heresite Industrial (baked pigmented phenolic) and Lithcote LC-34 clear (baked epoxy-modified phenolic) by semi-immersing coated panels in sample of the Bristol plant product.

The "as received" panels were evaluated in triplicate. An intentionally scratched specimen was also exposed in each case. All tests were ended after better than three months

Mild steel and Heresite performed satisfactorily. LC-34 clear exhibited softening and lifting. The monomer appearance was not affected in any of the exposures. As a result of this investigation, the test materials qualify as follows in this application.

Storage Material	Recommendation
LC-34 Clear	NG
Heresite Industrial	Suitable
Uncoated (1010) Steel	Suitable

RESULTS AND DISCUSSION:

The results of this study appear in Table I.

TABLE I

A. Basis:

Test Location:	100°F oven (Bldg. 60)
Corrodent:	a. MMA (0.006% HQ) b. EA (0.1% HQ)
Temperature:	100°F
Conditions:	Static
Exposure:	Semi-immersion; coated panels: a. 3 as received b. 1 purposely scratched
Duration:	98 - 111 days
Materials:	a. Mild (1010) Steel b. Lithcote LC-34 clear c. Heresite Industrial

B. Data:

1. Ethyl Acrylate

SPECIMEN	PREPARATION	IPY	34X EXAMINATION
Mild Steel	-	nil	No visible corrosion
Heresite Industrial	as received	-	No apparent attack
	scratched	-	No lifting
LC-34 Clear	as received	-	Softening and blisterin
	scratched	-	Softening, blistering and lifting.

2. Methyl Methacrylate

Mild Steel	-	nil	No visible corrosion
Heresite Industrial	as received	-	No apparent attack
	scratched	-	No lifting
LC-34 clear	as received	-	Softening and blisterin
	scratched	-	Softening, blistering, and lifting

Uncoated mild steel has evidently qualified as a suitable storage material for the two monomers at the conditions of testing. In the application of tank coatings for this purpose Heresite Industrial is suitable, while LC-34 clear is entirely unsatisfactory.

L. H. Finkel

L. H. Finkel

:gs

W Bauer	TE Lesko
DJ Belonger	RA Mottram
MC Bode	JW Nemec
AM Dowell	LC Newman
DR Hoffer	PJ Schmeidler
LS Kirch	DM Wingfield

Spring House, May 15, 1979

33-79-138

MEMORANDUM - To: G. W. Harmon

From: J. G. Morrison

Subject: STEEL DRUM WITH POLYETHYLENE INSERT - STORAGE OF (1) GAA AND (2) GMAA

Code #1586 drums are used for containment of (1) GAA and (2) GMAA. Code #1586 is a steel drum with 40 mil polyethylene insert.

In the opinion of the writer, both GAA and GMAA can be satisfactorily (a) contained in Code #1586 and (b) stored at 104°F (40°C) for at least one year duration. No migration or penetration of acid vapors through the liner should be expected.

J. Morrison

J. G. Morrison

dbw

CORROSION LABORATORY REPORT

To: Mr. J. A. Sawyer (2) Department: Engineering, Bldg. 64 Bristol From: J. Morrison Phone: Bridesburg Ext. 402	Copies: Mr. E.K.Nicholson Dr. L. U. Spence Mr. H.R.Moody (2) Corrosion Lab. (2)	Report No. CL-60-44 File A. Tank Coatings Date June 29, 1960 B. File #10 Project Various C. D. Test No. 1439; 1478; 1546; 1603; 1631; 1632 Subject: TANK COATINGS FOR VARIOUS ACRYLOID PRODUCTS References: (1) Report CL-59-39 (2) CLL 3828

RECOMMENDATIONS:

The following showed suitable performance against the specific Acryloids tested:

		Type
(1)	Heresite P-403 Coating	Baked Phenolic
(2)	Lithcote LC-19 Coating	Baked Phenolic
(3)	Uncoated mild steel	----

DISCUSSION:

This report is concerned with the search for a material or a coating suitable for handling various Acryloid products.

Seven "as shipped" Acryloid products (A-21, A-101, AT-50, B-66, B-72, B-82, and K-15330) were submitted by Mr. J. Sawyer. Small-scale tests were run by the Corrosion Laboratory. Four coated steel panels (two in the "as received" condition; two, "purposely scratched") of each coating (except Amercoat 75--see Note 7, Table A, Appendix) were tested in each corrodent. All "as received" coated panels except LC-19 (see Note 2, Table A, Appendix) successfully passed a 1,000 volt spark test prior to exposure to corrodent.

The results of these tests indicate suitable performance (basis: chemical resistance of coating and color stability of product) of the following against all seven Acryloid products submitted:

		Type
(1)	Heresite P-403 Coating	Baked Phenolic
(2)	Lithcote LC-19 Coating	Baked Phenolic
(3)	Uncoated mild steel	----

All other coatings evaluated, namely, LC-34 Clear, LC-34 Green, Amercoat 75, Glidden Cream, and Heresite Industrial, showed failure against at least one of the Acryloids tested.

Turbidity analyses at end of test were run by Mr. W. E. Armstrong, Laboratory 44, Bristol, per request of Mr. Sawyer. We have been informed that there are no specifications pertaining to these as-shipped Acryloids. We have included herein the turbidity analyses obtained at end of test per agreement with Mr. Sawyer; we shall leave interpretation of the turbidity results to the Bristol Development Engineering Group.

RESULTS AND DISCUSSION

The results of tests are condensed in Table I below; complete details are listed in Table A, Appendix.

TABLE I

Basis: Test Location: Corrosion Laboratory
Temperature: 100°F
Conditions: Static
Exposure: Partial immersion

From Coating Performance and Color Stability Standpoints

Coating Designation	Coating Type	B-82	K-15330	B-72	A-21	A-101	B-66	AT-50
Heresite P-403	Phenolic	OK	OK	OK	OK	OK	OK	OK
Heresite Indust.	"	NG	NG	NG	NG	NG	NG	NG
LC-19	"	OK	OK	OK	OK	OK	OK	OK
Amercoat 75	Epoxyphenolic	--	NG	NG	NG	--	NG	--
Glidden Cream	" "	NG	NG	NG	NG	NG	NG	NG
LC-34 Clear	" "	NG	NG	NG	NG	NG	NG	NG
LC-34 Green	" "	NG	--	NG	--	--	NG	--
Uncoated Steel	---	OK	OK	OK	OK	OK	OK	OK

J. Morrison
J. Morrison

/dp

~~SHIP TO:~~

ROHM AND HAAS COMPANY
BRISTOL PLANT
BRISTOL, PA. 19007

PALLET CODE: 2707
DATE: 2/28/78

CONTAINER PURCHASE SPECIFICATION

TYPE: Wooden Pallet (Warehouse Type)

STYLE: Two-Way Entry; closed deck drum pallet

DIMENSIONS: 48" x 48" overall; approximate weight 110 lbs.

LUMBER: All seasoned lumber - sound, square edge Group IV Mixed hardwood only, including white ash, beech, rock elm, hickory, hard maple and red and white oak.

STRINGERS: Three boards 2" x 4" x 48"

TOP DECK: End boards 1" thick x 6" to 8" wide x 48" long.
All other boards 1" thick x 4" to 8" wide x 48" long.
All top deck boards to be butted.

BOTTOM DECK: Six boards. End boards 1" thick x 6" wide x 48" long. Boards butted against either end board 1" thick x 4" wide x 48" long as shown. Two boards butted together at center 1" thick x 6" wide x 48" long.

CORNERS: All four corners of top and bottom decks to be cut 1½" in at a 45° angle (see sketch)

OVERHANG: Top and bottom deck boards to extend 2" beyond stringers on the closed sides of the pallets.

NAILS: Number 6 cement coated screw drive nails (2½" long).

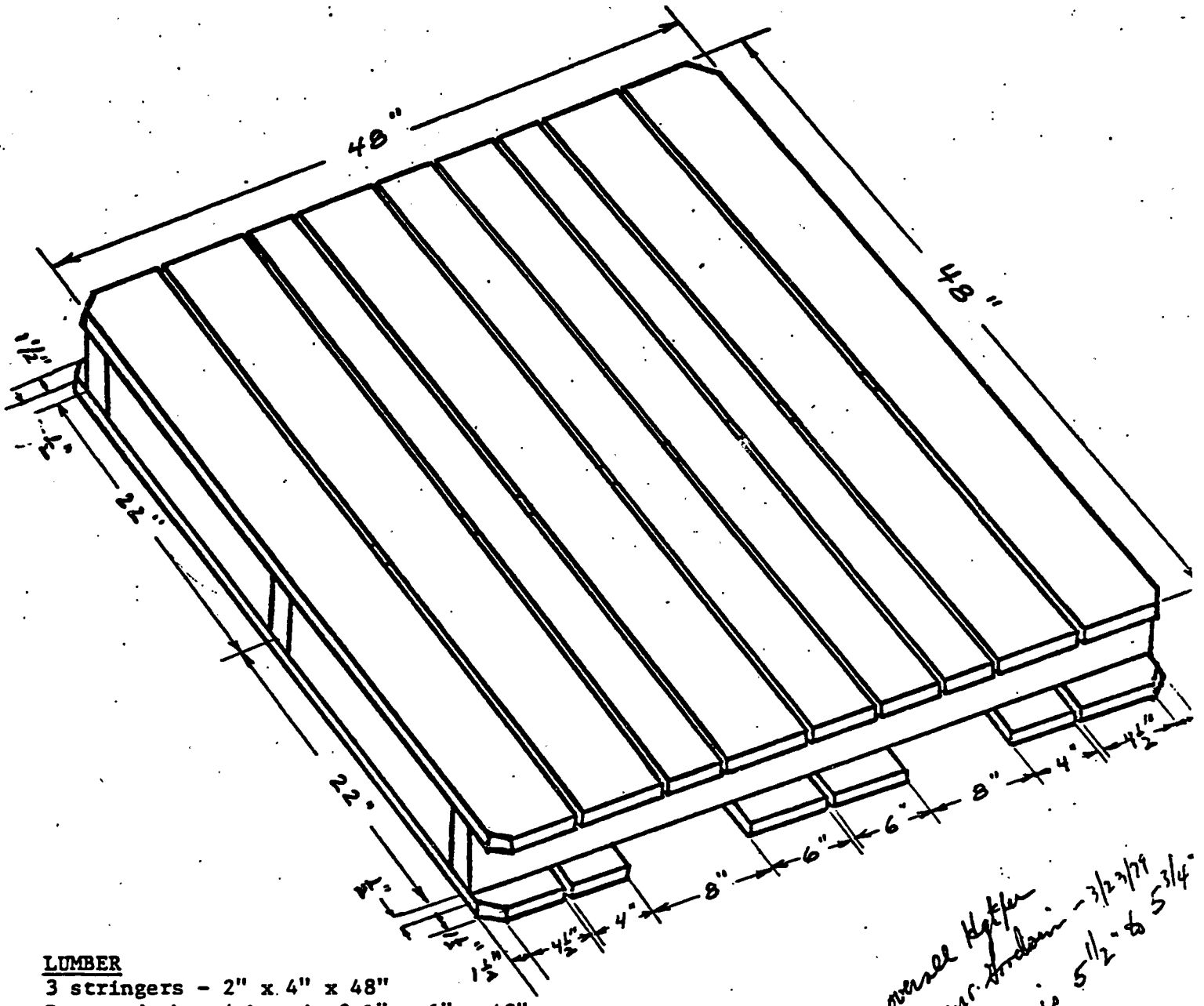
MARKINGS: Each pallet to be stencilled on both open faces of the stringers with the code number R&H2707- Bristol Plant

COMPLIANCE: Must comply with this and all applicable NWPCA specifications.

REMARKS: (1) Boards and stringers must not be broken, cracked or split.
(2) All nail heads must be flush with the deck boards.

REASON FOR REVISION:

48" x 48" Hardwood Plant Pallet
2-Way Entry

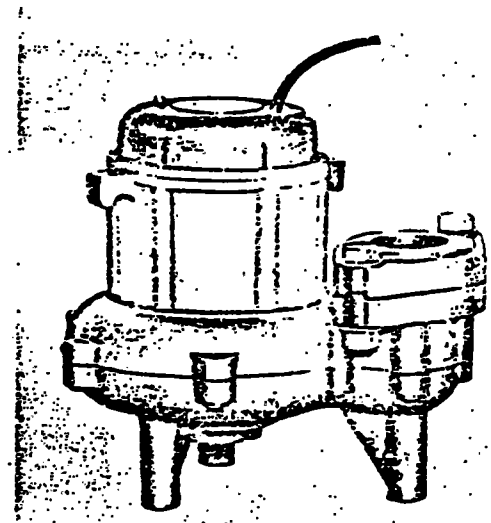


overall Height
mr. Anderson - 3/23/79
is 5½" to 5¾"

LUMBER

3 stringers - 2" x 4" x 48"
Bottom deck - 4 boards @ 1" x 6" x 48"
(as shown) 2 boards @ 1" x 4" x 48"
Top Deck - 2 end boards @ 1" x 6" to 8" x 48"
other boards @ 1" x 4" to 8½" x 48"

SUBMERSIBLE NON-CLOG PUMP
[redacted] 300 SERIES



FEATURES & ADVANTAGES

[redacted]s – 2 inch discharge unit will pass 1½ inch solids.

300 Series – 3 inch discharge unit will pass 2 inch solids.

Each pump has an extra large lower bearing designed to carry more than maximum pump load.

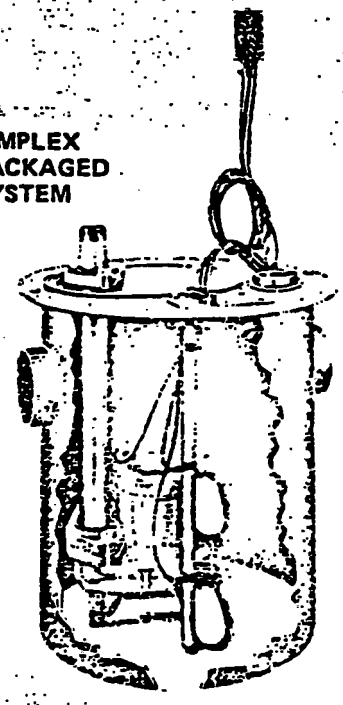
Single phase motors have automatic thermal overload protection.

Available voltages: 115, 208 and 230 single phase or 208, 230 and 460 three phase, 60 cycle.

Special voltages and 50 cycle available on request.

Maintenance cost is saved because motor is completely sealed against dirt, moisture and water and the bearings are lubricated for the life of the pump. No bushings or sleeve bearings to worry about.

Enpo-Cornell has more than 28 years experience in manufacturing and testing submersible pumps.



SIMPLEX PACKAGED SYSTEM

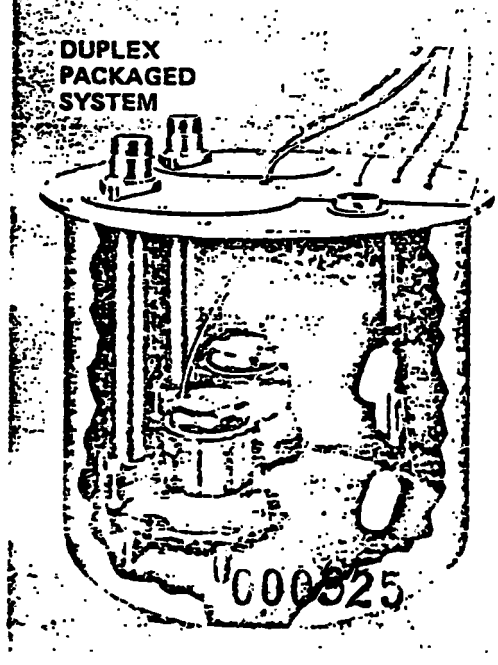
CONSTRUCTION

½ HP, 1750 RPM motor in cast iron housings; air filled, built for continuous duty submerged.

A single large stainless steel shaft is used on all units to carry the impeller and rotor.

The impeller is enclosed single port cast iron.

Heavy close grain cast iron castings with adequate support legs and all volutes have compression flange type discharge connection for schedule 40 pipe. Flanges for cast iron pipe are available.



DUPLEX PACKAGED SYSTEM

APPLICATION

The 200 Series is recommended for pumping sewage or waste water from single fixture applications. This pump will operate in liquids up to 100° F. with units available for liquids up to 200° F.

The 300 Series is recommended for pumping sewage or waste water for entire single family homes. This pump will operate in liquids up to 100° F. with units available for liquids up to 200° F.

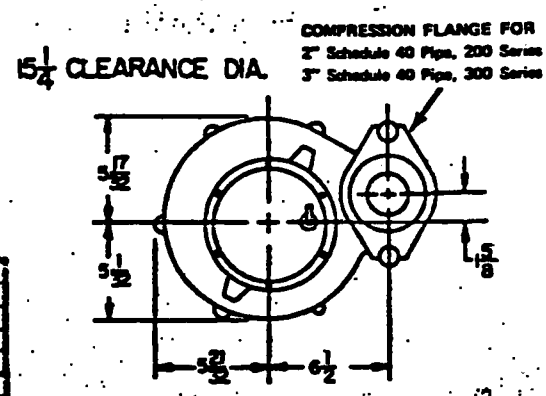
PACKAGED SYSTEMS

Complete assembled package lift stations using single pump or duplex pumps are available using the 200 or 300 Series pumps. At the right is pictured representative single and duplex pump packaged systems. Consult your Enpo-Cornell sales representative or distributor for packaged systems.

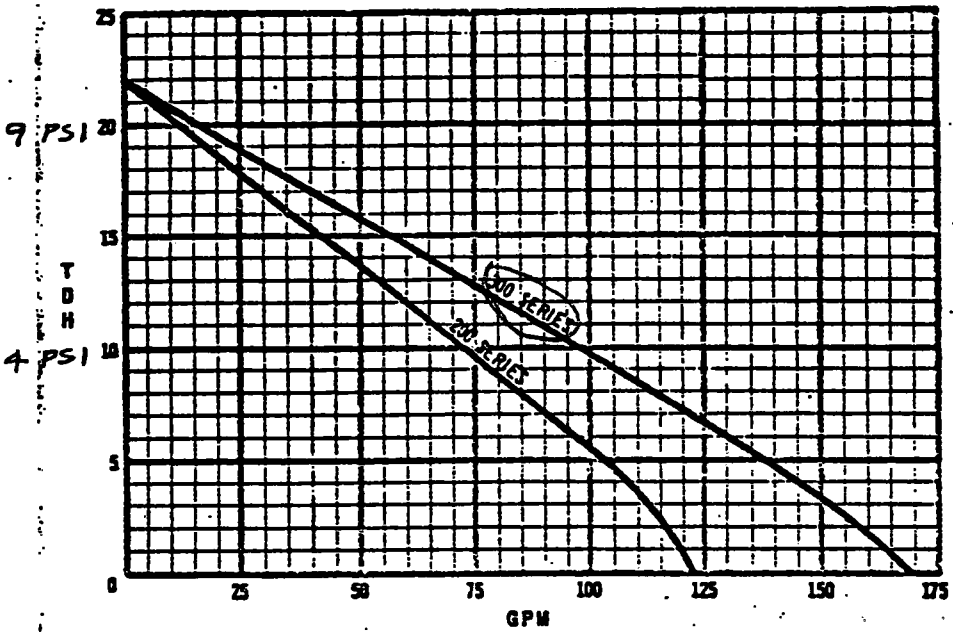
000325

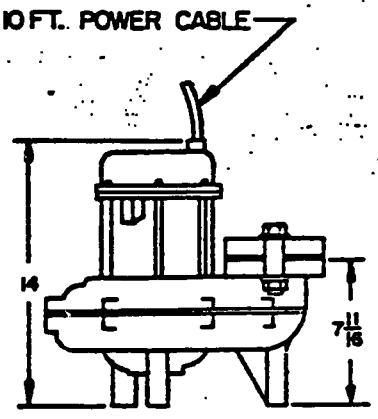
200 & 300 SERIES SUBMERSIBLES
HORSE POWER – ½
SPEED – 1750 RPM
IMPELLER – SINGLE PORT NON-CLOG
MAX. DIA. SOLIDS – 200 = 1¼", 300 = 2"
DISCHARGE SIZE – 200 = 2", 300 = 3"

DIMENSION DATA

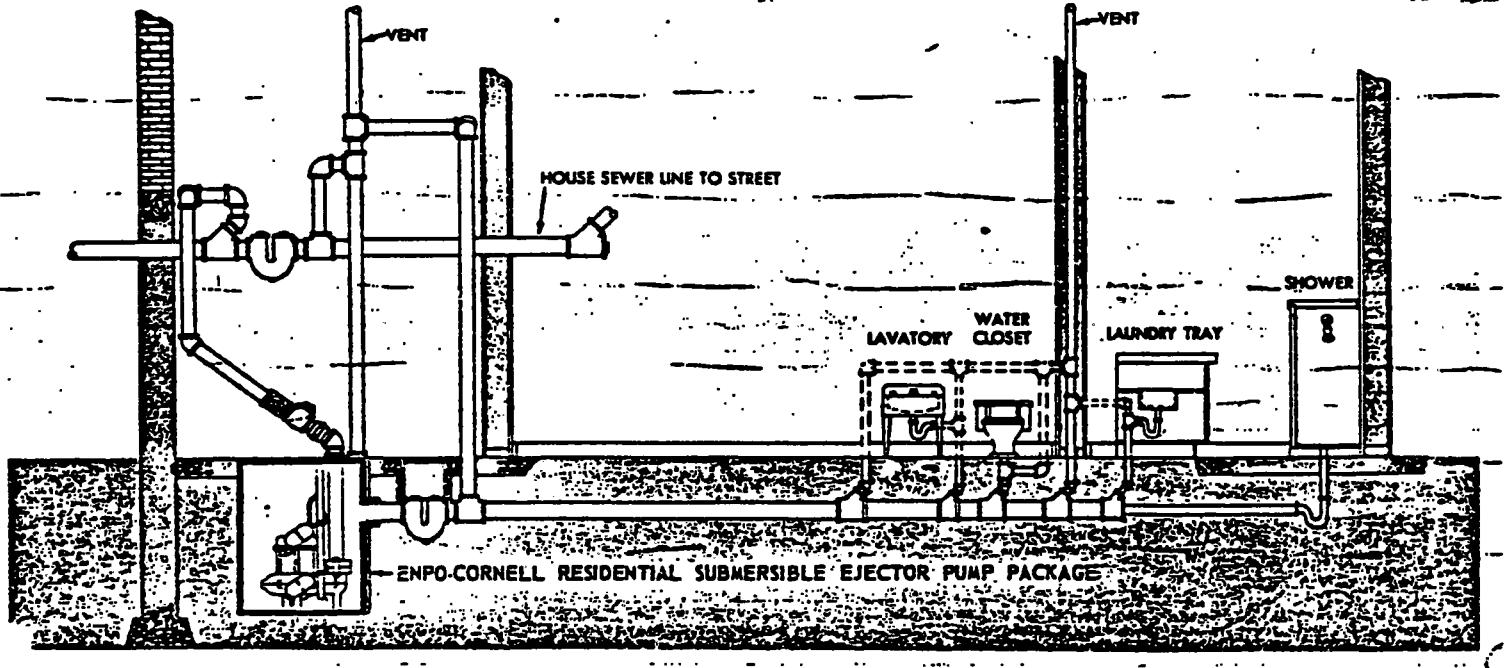


PUMP CAPACITY CURVE





TYPICAL INSTALLATION APPLICATION OF SUBMERSIBLE EJECTOR PUMP PACKAGE



Enpo-Cornell Pump Company A DIVISION OF
Roper Industries, Inc. (Ohio) 420 EAST THIRD STREET, PIQUA, OHIO 45356

2/74 Printed in U.S.A.

FILE UNDER 36-418-810 Class 34

ROHM AND HAAS COMPANY

BRISTOL PLANT

PLANT ENGINEERING

STOCK ADDITIONS AND DELETIONS

Date 2/18/70

Special Distributi

A. Kentzler

C. Klein

K. McLaurin

V. Turner

J. Westenbur

(B) Rec'd 4/21

☒ Add ☐ Delete

☒ Standard ☐ Special

SPECIFICATIONS

PART #	DESCRIPTION	INVENTORY MIN	INVENTORY MAX
1-36418-810	Hose, 3" I.D., 50 psi, Uniroyal Style P-5194, lightweight tank truck hose, plain ends, wire reinforced. M.W.P. = 50 psi. Mark each length with a metal tag, "50 psi M.W.P. - Emulsions"	RAU	1
		RAU	1

30 FT LG THD

Supplier: D.P. Brown Co.
2051 Byberry Road
Philadelphia, Pa.

NIL 31
S6-22-1
6/18/70

REV. SENT AREA SUPER 3-2

REV. RETURNED

AR000328

Where Used: Bldg 39, 34, 30 Dept and Item # 2046,7240, Gen

Reason for Revision These hoses originally were on stock and deleted 9-23-67 for Standardization program. Program has not been approved. These hoses are being ordered individually.

Total Cost: $ 340.00

APPROVAL Requested By: D. Gimbroni

1. Maintenance Supervisor
2. Area Supervisor 11 Dec 7
3. Plant Engineer
4. Stores Control

APPENDIX E

No Entry

C00330

CONTAINER STORAGE AREA INSPECTION LOG SHEET

Inspector's Name: _____ Date of Inspection (mo/day/yr): _____

Title/Clock No.: _____ Time of Inspection: _____

Item	Types Of Problems	Status		Observation	Date And Nature Of Repairs/Remedial Action
		Accept-able	Unaccept-able		
Wheeled 150 pound dry chemical extinguishers	Seal secure, area clear of obstructions, damaged				
Fire hydrant	Area clear of obstructions				
Rate of rise heat detectors	Secure				
Safety shower	Water pressure, area clear of obstructions				
Telephone	Power failure				
Container placement and stacking	Aisle space, height of stack				
Sealing of containers	Open lids				
Labeling of containers	Improper identification, date missing				
Containers	Corrosion, leakage, damage				
Segregation of incompatible wastes	Stored in incorrect section of facility				
Pallets	Damaged				
Foundation	Cracks, uneven settling, wet spots, erosion				
Dikes	Cracks, deterioration				

006331

CONTAINER STORAGE AREA INSPECTION LOG SHEET

Inspector's Name: _____ Date of Inspection (mo/day/yr): _____

Title/Clock No.: _____ Time of Inspection: _____

Item	Types Of Problems	Status		Observation	Date And Nature Of Repairs/Remedial Action
		Accept-able	Unaccept-able		
Sump area	Cracks, uneven settling, wet spots, gratings clean				
Sump pump	Setting adjustment power, clogging				
Debris, refuse	Clog pump, possible mixing with wastes				
Ramp	Cracks, uneven settlement				
Warning signs/segregated cell identifications	Damaged, missing, obscured				
Hand held two-way radio T/R	Operable				

00032

Environmental Response Trailer

8. Trailer Number 935, located at the Plant Dump, contains emergency items for use in the event spilled material reaches a waterway and floats on the surface. The trailer contains the following:

- o 3M lightweight, T-280 double booms ---------- 700 ft.
- o Grefco canvas booms ---------- 600 ft.
- o Absorbent pads ---------- 10 bales
- o Absorbent rolls ---------- 2 - 100 ft. rolls
- o Sand ---------- 20 bags
- o Odor counteractant ---------- 2 - 5 gal. cans
- o Rope ---------- 100 ft.
- o Surface skimmer (skimmer, hose, and gasoline driven pump*)

Also availabe for use at the emergency site is the Safety Department's Emergency Response vehicle containing tools, lights, safety equipment, etc.

*<u>SAFETY</u>: **Use gasoline pumps for very flammable material only after obtaining approval from the Safety Department.**

Boyertown

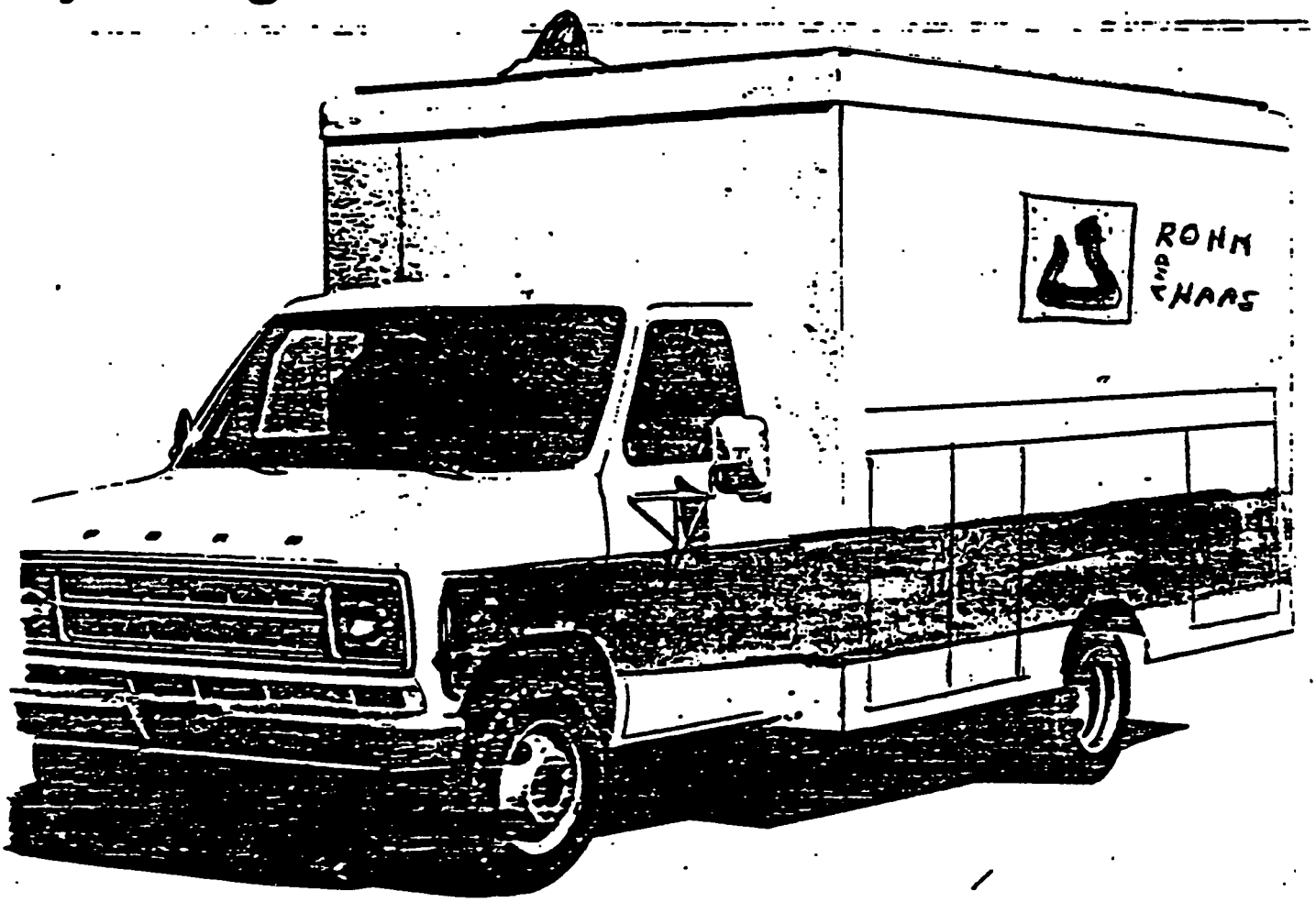
RECOGNIZED FOR QUALITY & ACCEPTED FOR VALU

VBC

Multalloy Models

VAN BACK OF CUTAWAY

th convenient access from the cab
sy loading from the rear.



ultalloy makes it tougher... Boyertown makes it better.

000336

EMERGENCY RESPONS. HICLE EQUIPMENT
Check st

Place date on top
Use (✓) for each pc. of equipment

No. ach	Equipment
	RADIO EQUIPMENT
1	Portable transceiver 153.2 Freq. KBO 221
1	Mobile Unit 151.715 Freq. KET 816
1	CB 23 Channel Unit KQT 3412
1	Federal PA & Siren Combination
	CAB #1
2	Pressure demand 30 min. self-contained units
4	Wool Blankets
2	Mask cleaner
	CAB #2
6	Disposable paper suits
6 pr.	Leather palm gloves
0 pr.	Cotton gloves
8 pr.	Leather gauntlet gloves
1 pr.	Asbestos gauntlet gloves
2 pr.	Welder's gauntlet gloves
pr.	Chemical resistant, thermal lined gloves
pr.	PVC chemical gloves
	25' nylon lanyard

900337

EMERGENCY RESPON. VEHICLE EQUIPMENT
Chec. List

Place date on top
Use (✓) for each pc. of equipment

No. Each	Equipment																	
1	NFPA Fire Protection Guide on Hazardous Materials																	
10	Willson 12 21 10 respirators																	
1 bx	(6 units) Willson R21 cartridges																	
1	Emergency Action Guide for Selected Hazardous Materials - 1978																	
1	GATX Tank Car Manual - Second edition																	
1	Emergency Procedure for Chemical Incidents in Transit																	
1	Chem-Card Manual (MCA)																	
1	Hazardous Waste Management Facilities in the United States - 1977																	
1	Emergency evacuation procedure																	
6	sets PVE Uniroyal "Web-Dri" protective suits																	
1	pr. Neo/Nyl waterproof pants																	
1	Weather shield suit																	

000338

Place date on top
Use (✓) for each pc. of equipment

No. Each	Equipment
	CAB #3
3	3 qt. pail - steel
2	5 qt. bucket - galv.
2	Rubber fiber buckets
3	pks paper towels
1 gal	green soap
1 gal	WD-40 - penetrating oil
2 cans	Go-Jo Hand cleaner
5 gal	Masking agent - 500AX
	CAB #4
	5 ton hydraulic jack
1 roll	polyurethane sleeve.
1	Mechanical jack

000398

EMERGENCY RESC : VEHICLE EQUIPMENT
Cr : List

Place date on top
Use (✓) for each pc. of equipment

No. Each	Equipment
1 pk.	Various sized polyurethane bags
	CAB #5
1	ball Mason cord
1	Expoxylite midget kit
1	box Paint stick marker
2	Thermometers - Mercury - F
1	Thermometer - pocket - F
2	Magnetic dial thermometers - F
2	rolls electric tape
1	roll tire tape
3	rolls Teflon tape
1	packet Emery cloth
3	rolls stainless steel tape

000340

Cl. List

Place date on top
Use (✓) for each pc. of equipment

No. Each	Equipment
1	25' Nylon lanyard
1	1/4" rubber gasket material
2	4' pry bar
1	Entrenching tool
2	Nut cracker
1	Drum opener
various	spanner wrenches
1	engineers' hammer
1	18" pry bar
2	32 oz. ballpeen hammer
1	Flat chisel
1	Combination plier-wire cutter
1	drum key
4	Hack saw blades
1	1-1/4" open end wrench
various	common screw drivers
1	set 7/16 to 7/8 combination open end box wrenches
various	Bung wrenches
1	set 3/4 drive sockets 3/4" to 2-3/8" with rachet and various extensions

00341

EMERGENCY RESP VEHICLE EQUIPMENT
CL. List

Place date on top
Use (✓) for each pc. of equipment

No. Each	Equipment																	
1	set 1/4" to 13/;6" box wrenches																	
1	12 lb. sledge hammer																	
1	24" bolt cutters																	
1	12" channel lock pliers																	
1	14" pipe wrench																	
2	self-spanding emergency flags																	
1	12" hacksaw																	
1	Hydrant wrench																	
1	0 to 100 lb. scale																	
1	dust brush																	
2	2" crows foot																	
1	15" wooden ruler																	
1	box various sprinkler heads																	
1	pk. #5 lead wool																	
Various	Wooden plugs																	
2	rolls 1/2" stainless steel bandit																	
1	box 1/2" stainless steel bandit buckles																	
1	bandit machine																	
2	rolls bailing wire																	

EMERGENCY RESPONSE VEHICLE EQUIPMENT
Ch List

Place date on top
Use (✓) for each pc. of equipment

No. Each	Equipment
Various	Airplane clamps - hose
Various	Pipe Plugs
1	Safety belt - climbing
1	1-1/4" screw jack
	NON-SPARKING TOOLS CABINET #5
1	wire brush
1	hatchet
1	12" adjustable wrench
1	24" pipe wrench
1	24" crow bar
1	36" pipe wrench

C00343

Place date on top
Use (✓) for each pc. of equipment

No. Each	Equipment
	CAB #6
3	rolls yellow & black marking tape
2	boxes banner guard
2	Command hand lights
2	Spare batteries for above
1	Everready safety lantern
6	Spare batteries for above - one set
4	boxes (3 each box) cyajums light sticks
4	rolls emergency flags
6pr.	PVC overshoes
1 pr.	PVC overshoes (low quarter)
1	Asbestos blanket
1.	Spray bottle (WD-40)
1	Spray bottle fantastic cleaner
5 qt.	Motor Oil
1 ea.	Metal chock

000544

EMERGENCY RESPO. VEHICLE EQUIPMENT
Ch . List

Place date on top
Use (✓) for each pc. of equipment

No. Each	Equipment
2	1-1/4" chemical hose with chem-lock fittings 10'
1	Stretcher
1	1-1/2" glob valve with chemlock fitting one end threaded fitting the other
1	Drum soda ash
1	Drum oil-dri
1	Container rags & chlorex - 3 gallons
1	box large polyethylene liners
1	recovery drum
1	Portable eye wash fountain
various	flags and vests
various	placards
3	flashlights
1	fire blanket
2	Grounding cables (50')
5	bottles lens cleaner
1	Dust brush
1	Drum blanket for hot drum
2	PVC Uniroyal Protective suits
1	First aid kit

000345

EMERGENCY RESPONSE VEHICLE EQUIPMENT
Ch List

Place date on top
Use (✓) for each pc. of equipment

No. Each	Equipment																	
1	Inflatable life raft																	
1	Suction pump																	
1	5# ABC fire extinguisher																	
1 set	fence keys																	

000340

ROHM AND HAAS COMPANY
EMPLOYEE HEALTH AND SAFETY
INDEPENDENCE MALL WEST
PHILADELPHIA, PA. 19105

EMERGENCY PHONE
215-592-3000 (ROHM AND HAAS)
800-424-9300 (CHEMTREC)

HAZARD RATING:
4 = EXTREME
3 = HIGH
2 = MODERATE
1 = SLIGHT
0 = INSIGNIFICANT
* = CHRONIC HEALTH HAZARD – SEE SECTION IV

Fire 3 · Reactivity 0 · Health 2 · Special

MATERIAL SAFETY DATA SHEET

MATERIAL	CODE	FREIGHT CLASSIFICATION
COATINGS DRAININGS	9-3495	FLAMMABLE LIQUID

FORMULA	CHEMICAL NAME AND SYNONYMS
	Acrylic/Styrene polymer in mixed solvents.

I. HAZARDOUS INFORMATION

SUMMARY	WEIGHT %	TWA/TLV
Acrylic-Styrene Polymer	30-60	
Mixed Solvents, (toluene, xylene, MEK, methanol and sometimes EDC)	40-70	100 PPM (OSHA) (measured as toluene)

II. PHYSICAL DATA

APPEARANCE – ODOR – PH.			VISCOSITY
Nonhomogeneous mixture of solution polymers and gum			Varied within drum
MELTING OR FREEZING POINT	BOILING POINT	VAPOR PRESSURE (MM HG)	VAPOR DENSITY (AIR = 1)
No data	80-130°C	96 (methanol)	heavier than air
SOLUBILITY IN WATER	PERCENT VOLATILE (BY WT.)	SPECIFIC GRAVITY (WATER = 1)	EVAPORATION RATE (BUTYL ACETATE = 1)
Slight	40-70	0.9-1.1	faster than butyl acetate

III. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT	AUTO IGNITION TEMPERATURE	LOWER EXPLOSION LIMIT	UPPER EXPLOSION LIMIT
< 100°F	725 methanol	1.2 (estimated from mixed solvents)	36.0 %

EXTINGUISHING MEDIA
[X] FOAM [ ] "ALCOHOL" FOAM [X] CO_2 [X] DRY CHEMICAL [ ] WATER FOG [X] OTHER Water Spray

SPECIAL FIRE FIGHTING PROCEDURES
Wear MESA/NIOSH approved self contained breathing apparatus (Schedule 13).
Use water spray to cool fire exposed containers.

UNUSUAL FIRE AND EXPLOSION HAZARDS
Vapors are heavier than air and may travel to a source of ignition and flash back.

IV. HEALTH HAZARD DATA

RECOMMENDED ROHM AND HAAS HEALTH GUIDE TWA (MAXIMUM TIME WEIGHTED AVERAGE CONCENTRATION FOR AN 8-HOUR WORK PERIOD)

EFFECTS OF OVEREXPOSURE
High vapor concentrations may cause irritation of the mucous membranes, some fatique, weakness, and confusion with increased accident proneness. Methanol vapors may cause injury to the retina and optic nerve causing blindness on repeated exposures in excess of the TLV.
Liquid contact with the eyes will cause an irritation and prolonged and repeated skin contact may cause dermatitis. The liquid can be absorbed through the intact skin in harmful amounts.

EMERGENCY AND FIRST AID PROCEDURES

INHALATION
Move subject to fresh air. Give oxygen if breathing is difficult, artificial respiration if breathing has stopped.

EYE AND SKIN CONTACT
Flush eyes with plenty of water for at least 15 minutes and get prompt medical attention; wash skin thoroughly with soap and water; remove and wash clothing before reuse.

INGESTION
Induce vomiting by immediately giving two glasses of water to drink and sticking finger in throat. Call a physician. Never give anything by mouth to an unconscious person.

V. REACTIVITY DATA

STABILITY	CONDITIONS TO AVOID
[X] STABLE [ ] UNSTABLE	Ignition sources

HAZARDOUS DECOMPOSITION PRODUCTS

Thermal decomposition may yield oxides of carbon.

HAZARDOUS POLYMERIZATION	CONDITIONS TO AVOID
[ ] MAY OCCUR [X] WILL NOT OCCUR	

COMPATIBILITY (MATERIALS TO AVOID)

[ ] WATER [ ] OTHER

VI. SPILL OR LEAK PROCEDURE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Eliminate ignition sources. Evacuate the spill area and wear MESA/NIOSH approved respirator suitable for vapor concentration encountered. Dike the spill with inert material (sand, earth, fuller's earth, etc.) and if appropriate transfer the liquid and solid diking material to separate containers for recovery or disposal. Remove contaminated clothing promptly and wash affected skin areas with soap and water. Wash clothing before reuse. Keep spill out of all sewers and open bodies of water.

WASTE DISPOSAL METHODS Incinerate liquid in approved equipment. Landfill contaminated diking material according to current local, state and federal regulations, taking precautions because of the low flashpoint of the solvent content. Label containers, "mainly dirt with some low flash point solvent."

VII. SPECIAL PROTECTION INFORMATION

TYPE VENTILATION

Explosion-proof exhaust ventilation at point of contaminant release.

RESPIRATORY PROTECTION

None required if good ventilation is maintained. Otherwise wear MESA/NIOSH approved respirator where vapor concentrations are encountered.

PROTECTIVE GLOVES	EYE PROTECTION
Impervious	Splashproof goggles (ANSI Z87.1, 1968)

OTHER PROTECTIVE EQUIPMENT

Impervious apron, eyewash facility, emergency shower

VIII. STORAGE AND LABELING

STORAGE TEMPERATURE	INDOOR	HEATED	REFRIGERATED	OUTDOOR
MAX ambient MIN.	yes	no	no	yes

COMMENTS

Indoor storage of flammable liquids should be limited to approved areas containing overhead sprinklers. Ground all containers when pouring.

IX. TOXICITY INFORMATION

X. MISCELLANEOUS INFORMATION

= NOT APPLICABLE
= CEILING VALUE

CODE 9-3495

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.
VENDOR ASSUMES NO RESPONSIBILITY FOR INJURY TO VENDEE OR THIRD PERSON PROXIMATELY CAUSED BY THE MATERIAL IF REASONABLE SAFETY PROCEDURES ARE NOT ADHERED TO AS STIPULATED IN THE DATA SHEET. ADDITIONALLY, VENDOR ASSUMES NO RESPONSIBILITY FOR INJURY TO VENDEE OR THIRD PERSONS PROXIMATELY CAUSED BY ABNORMAL USE OF THE MATERIAL EVEN IF REASONABLE SAFETY PROCEDURES ARE FOLLOWED. FURTHER MORE, VENDEE ASSUMES THE RISK IN HIS USE OF THE MATERIAL.

DATE OF ISSUE	SUPERSEDES
6/78	NEW

PREPARED BY D.R. Hoffer

FORM 920 REV. 4/78 (BACK)

000349

*S01: Container Storage

CONTAINER STORAGE (S01)* AREA - OPERATING LOG

Date In Operator	Manifest No.	Date Out Operator	Manifest # Or Burning	Hazardous Waste Numbers	DOT Hazard Class	Bristol HW Code	Band Color	Common Name	Physical Form (S,L,G)	Location of Origin	Burnable Y/N	Waste Analysis Y/N Reference	Quantity (Table 1)	Cell Color	Pallet Position	T/B	Drum Position

RCRA

000351

L00352

I. SUPERFUND AND PA DER HAZARDOUS WASTE PROCEDURES

SUPERFUND

The "SUPERFUND" legislation was signed into law on December 11, 1980. This law requires that we now report releases[1] of hazardous substances[2], other than those covered by a permit, to the federal government by notifying the National Response Center (1-800-424-8802). The "reportable quantities" is established under Section 311 of the Federal Water Pollution Control Act or is ONE POUND if the hazardous substances is not in List 311. Attached Tables I (alphabetical) and II (by code) list the Bristol Plant[3] raw materials, intermediates and wastes, some finished products and substances described by specifications which are covered by the SUPERFUND.

All known or suspected releases of materials listed, except "routine" releases, must be reported immediately to the Development and Environmental Control (DEC) Department during normal working hours or to the Night Superintendent at all other times. The Night Superintendent should verify the release and then immediately institute the normal Spill Procedure. The first priority is to take all measures necessary to protect the environment. He should then call one of the members of the Development and Environmental Control Department listed in Table II as soon as possible, but no later than one hour of his notification of the spill. The DEC member contacted will confirm the release and determine if a reportable spill has occured, including an estimate of the quanitity released. If necessary, the release will then be reported to the National Response Center as soon as is practicable, but within twenty-four hours of the release. Whenever possible, the DEC will review the circumstances of the release with the Home Office Environmental Control personnel (Table I) before reporting the release. Failure to report promptly is punishable by a $10,000 fine and/or one year imprisonment.

The following definitions are included in Paragraph 101 of the Clean Water Act, and apply to our operations.

For our purposes REPORTABLE QUANTITY is:

The quantity of ONE POUND, or for those hazardous substances for which reportable quantities have been established under paragraph 311(b)(4)[4] of the Federal Water Pollution Control Act, that reportable quantity.

---

1 Definitions on next page.
2 See Tables II and III.
3 Excluding some LSPP materials, but including Croydon raw materials and intermediates.
4 The columns in Tables II and III titled "Section 311".

HAZARDOUS SUBSTANCE

1. Any substance designated under paragraph 311(b)(2)(a) of the Federal Water Pollution Control Act (Hazardous Substances Discharge Regulations).

2. Any element, compound, mixture, solution, or substance designated under this Act.

3. Any hazardous waste having the characteristics identified under or listed pursuant to paragraph 3001 of the Solid Waste Disposal Act (formerly Resource Conservation and Recovery Act).

4. Any toxic pollutant listed under paragraph 307(a) of the Federal Pollution Control Act.

5. Any hazardous air pollutant listed under paragraph 112 of the Clean Air Act.

6. Any imminently hazardous chemical to which the EPA Administrator has taken action under the Toxic Substances Control Act.

RELEASE

Any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment, excluding: (1) releases which result to exposures of persons, solely within a workplace, (2) emissions from the engine exhaust of a motor vehicle or vessel, (3) releases from nuclear incidents, (4) normal application of fertilizer. Excluded also are "federally permitted releases", i.e., releases in compliance with existing permits.

ENVIRONMENT

1. The navigable waters.

2. Any other surface water, groundwater, drinking water supply, land surface or sub-surface station, or ambient air within the United States or under the jurisdiction of the United States. This is interpreted to mean that spills of non-volatile substances to paved areas with good surface integrity are not reportable if they are immediately cleaned. Spills to the chemical sewer and/or paved areas will be covered if the material is volatile enough to release a reportable quantity of material to the atmosphere. Also included are abnormal discharges to the atmosphere of substances listed in the Tables, regardless of source.

II. PENNSYLVANIA DEPARTMENTAL RESOURCES EMERGENCIES

The Pennsylvania Department of Environmental Resources (PA DER) has specific regulations which cover release of hazardous wastes to the environment.

1. If the Plant has an emission, discharge, fire or explosion involving hazardous wastes[4], which could threaten human health or the environment. In the event of an incident, the DEC representative at the scene or, in the absence of a DEC representative, the person in charge of the clean up (Night Superintendent, Safety Representative, etc.) must[5]:

   a. Immediately notify the appropriate local authorities[6] if evacuation of nearby areas is advisable;

   b. Immediately notify the PA DER and the National Response Center.[6]

2. If the Plant has a spill or discharge involving hazardous wastes[5], the incident must be reported[7]:

   a. If any amount enters surface or ground water;

   b. If the spill or discharge is contained, it must be reported if the amount equals or exceeds the reportable quantity listed in Tables II or III in the column titled "PA DER/RCRA".

The reporting procedure in either of the above cases is as follows:

a. Immediate notification of the PA DER by telephone.[6]

b. A written report to the PA DER within 15 days of the incident.

W/T.2
(Superfund.2)

[4] Wastes Listed in Tables II and III in the column titled "PA DER/RCRA".
[5] Pennsylvania Bulletin, Volume 12, Number 36, 9/4/82, p. 3032.
[6] The names and telephone numbers of persons to contact are listed in the SPILL NOTIFICATION PROCEDURE of the Bristol Spill Prevention Procedure. DER Harrisburg Number is 717-787-4343.
[7] Pennsylvania Bulletin, Volume 12, Number 36, 9/4/82, p. 3022.

SEE SECTION F OF THIS MANUAL FOR THE TELEPHONE LISTS

TABLE II

Alphabetical Listing Of Hazardous Substances Handled At Bristol (5)-(6)

Reportable Quantities
- SUPERFUND: One Pound Of Any Material In Table Or Amount Equal To Or In Excess Of Quantity Listed In "Section 311" Column
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Code	Name (Description)	RCRA (*) Hazard	PA DER/RCRA Liquid (Gallons)	PA DER/RCRA Solid (Pounds)	Federal Clean Water Act Section 311 (Pounds)	Federal Clean Water Act Section 307(a) (Pounds)
8-0324	Acetic Acid	I	10	-	1000	-
8-0375	Acetic Anhydride	I	10	-	1000	-
8-0320	Acetone	T	5	-	-	-
8-0265	Acetyl Peroxide (25%)	R	10	-	-	-
8-1266	Acrolein	H	5	-	1	1
8-0961	Acrylamide	T	-	100	-	-
6-5290	Acrylic Acid (200 ppm)	C	10	-	-	-
Various	Acrylic and Methacrylic Esters	I	10	-	-	-
Various	Acryloid Coatings (Experimental Resin)	I	10	-	-	-
8-0222	Acrylonitrile	T	5	-	100	-
8-1197	Aerote XM3	No MSDS Available				
8-1192	Allyl Methacrylate	I	10	-	-	-
8-0605	Aluminum Sulfate	-	-	-	5000	-
8-0850	Ammonia, Aqua	C	10	-	100	-
8-1143	Ammonium Carbonate	-	-	-	5000	-
8-0061	Ammonium Persulfate	I	-	1000	-	-
8-0948	n-Amyl Mercaptan	I	10	-	-	-
8-4155	Aqua Hue Blue	No MSDS Available				
8-0708	Aromatic 100	I	10	-	1000 (1)	-
8-0702	Aromatic 150 (3)-(4)	-	-	-	1000	-
9-3408	Asbestos Waste	T	5	100	-	-

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Code	Name (Description)	RCRA (*) Hazard	PA DER/RCRA Liquid (Gallons)	PA DER/RCRA Solid (Pounds)	Federal Clean Water Act Section 311 (Pounds)	Federal Clean Water Act Section 307(a) (Pounds)
9-3343	BDMA Methanol Residue	I	10	-	-	-
8-0907	Benzoyl Peroxide (Wet)	R	-	1000	-	-
8-1002	Benzyl Chloride	H	5	-	100	-
6-5731	Benzyl Dimethylamine	I	10	-	-	-
8-0966	Brown No. 6 Shepherd	E	-	1000	-	-
9-3746	Building 69 Sump Monomers	I	10	-	-	-
8-0259	Butadiene	I	10	-	-	-
8-1219	Butyl Acetate	I	10	-	5000	-
6-5499	Butyl Acrylate	I	10	-	-	-
8-1544	n-Butyl Alcohol	T	5	-	-	-
8-1297	s-Butyl Alcohol	I	10	-	-	-
8-1000	t-Butyl Alcohol	I	10	-	-	-
8-1235	t-Butyl Hydroperoxide	I	10	-	-	-
8-0855	t-Butyl Hydroperoxide	I	10	-	-	-
7-5345	Butyl Methacrylate	I	10	-	-	-
8-1472	t-Butyl Perbenzoate	R	10	-	-	-
8-0326	t-Butyl Peroctoate	R	10	-	-	-
8-1933	Cadmium Dark Yellow	E	-	1000	-	-
8-8593	Cadmium Red	E	-	1000	-	-
8-8618	Cadmium Red	E	-	1000	-	-
8-1887	Cadmium Selenide Maroon	E	-	1000	-	-
8-1806	Cadmium Selenide Orange	E	-	1000	-	-
8-1807	Cadmium Selenide Red	E	-	1000	-	-

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Code	Name (Description)	RCRA (*) Hazard	PA DER/RCRA Liquid (Gallons)	PA DER/RCRA Solid (Pounds)	Federal Clean Water Act Section 311 (Pounds)	Federal Clean Water Act Section 307(a) (Pounds)
8-1809	Cadmium Selenide Red	E	-	1000	-	-
8-1886	Cadmium Selenide Red	E	-	1000	-	-
8-1810	Cadmium Selenide Yellow	E	-	1000	-	-
8-8571	Cadmium Yellow	E	-	1000	-	-
8-8573	Cadmium Yellow	E	-	1000	-	-
8-8616	Cadmium Yellow	E	-	1000	-	-
8-1815	Cadmium Yellow Primrose	E	-	1000	-	-
Various	Cadmium (Total)	-	-	-	-	1
8-1238	Cadox 40E (BPO In Dibutylphthalate)	R	10	-	-	-
8-8574	Cadsal Orange	E	-	1000	-	-
8-0066	Caustic Soda, Liquid 50%	C	10	-	1000	-
8-0370	Cellosolve	I	10	-	-	-
8-1033	Cellosolve Acetate	I	10	-	-	-
7-1537	Chlorex	-	-	-	-	1
8-0133	Chlorine	R	10	-	10	-
8-9411	p-Chloroaniline	H	10	-	-	-
8-0229	Chlorobenzene	I	10	-	100	-
8-1816	Chromium Oxide	E	-	1000	-	-
8-1903	Chromium Oxide	E	-	1000	-	-
Various	Chromium (Total)	-	-	-	-	1
9-3495	Coatings Drainings	I	10	-	-	-
9-3327	Coatings Overflow Tank	I	10	-	-	-
8-1193	Complemix 50	I	10	-	-	-

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- PA DER Regulations: Amount Equal To Or In Excess Of The Quantity Of Hazardous Waste Listed In "PA/RCRA" Column

* I = Ignitable, C = Corrosive, R = Reactive, EP = Extraction Procedure, H = Acute Hazardous, T = Toxic

Code	Name (Description)	RCRA (*) Hazard	PA DER/RCRA Liquid (Gallons)	PA DER/RCRA Solid (Pounds)	Federal Clean Water Act Section 311 (Pounds)	Federal Clean Water Act Section 307(a) (Pounds)
8-4024	Conofac 690	No MSDS Available				
8-0224	Copper Nitrate	R	-	1000	100	-
8-0409	Copper Sulfate	-	-	-	10	1
Various	Copper (Total)	-	-	-	-	1
8-0013	Cresylic Acid	T	5	-	-	-
7-2909	Crotonyl Chloride	R	10	-	-	-
8-1884	Cryptone 500	R	-	1000	-	-
8-0847	Cumene Hydroperoxide	R	10	-	-	-(2)
8-1107	Cupric Chloride	-	-	-	-	1
Various	Cyanide (Total)	-	-	-	-	1
8-0763	Decalin	I	10	-	-	-
8-0389	Defoamer	No MSDS Available				
8-4151	Defoamer L-108	No MSDS Available				
8-0752	Diacetone Alcohol	I	10	-	-	-
8-0577	Dicumyl Peroxide	R	-	1000	-	-
8-4077	2-Diethylaminoethyl Methacrylate	I	10	-	-	-
8-0876	Diisopropylbenzene Hydroperoxide	R	10	-	-	-
8-1042	Dimethyl Amine	T	5	-	1000	-
8-0925	Dimethyl Phthalate	-	-	-	-	1
8-0143	Dimethylaminoethanol	I	10	-	-	-
9-3227	Diphenyl Ether-Aqueous	T	5	100	-	-
9-3226	Diphenylether-Organic	T	5	100	-	-
8-0571	Di-t-butyl Peroxide	I	10	-	-	-

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Code	Name (Description)	RCRA (*) Hazard	PA DER/RCRA Liquid (Gallons)	PA DER/RCRA Solid (Pounds)	Federal Clean Water Act Section 311 (Pounds)	Federal Clean Water Act Section 307(a) (Pounds)
8-1018	Ethyl Acetate	I	10	-	-	-
6-6178	Ethyl Acrylate	I	10	-	-	-
6-5466	Ethyl Methacrylate	I	10	-	-	-
8-0650	Ethylene Diamine	I	10	-	1000	-
8-1269	Ferric Chloride	-	-	-	1000	-
8-4053	Ferro 5590	E	-	1000	-	1
8-0856	Ferrous Sulfate	-	-	-	1000	-
8-1233	Formaldehyde	T	5	-	1000	-
8-0146	Formic Acid	T	5	-	5000	-
8-8690	Gafac RS-410	No MSDS Available				
9-3401	GMAA Residue	C	10	-	-	-
8-0873	Halane	I	10	-	-	-
8-4038	n-Hexyl NND	No MSDS Available				
8-4064	High Flash Naphtha	I	10	-	-	-
8-0488	Hydrazine	T	5	-	-	-
8-0243	Hydrogen Peroxide (35%)	R	10	-	-	-
7-6424	Hydroxy Ethyl Methacrylate	I	10	-	-	-
7-5266	IBMA	I	10	-	-	-
8-0378	Isobutyl Acetate	I	10	-	-	-
6-6103	Isobutyl Acrylate	I	10	-	-	-
8-1333	Isobutyl Isobutyrate	I	10	-	-	-

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8-4078	Isopar E	I	10	-	-	-
8-0191	Isopropanol	I	10	-	-	-
9-3403	Junk Caustic	C	10	-	1000	-
6-2905	Karathane LC	I	10	-	-	-
9-3049	Kathon Lab Samples	-	5	10	-	-
7-2318	Kathon 886	-	5	10	-	-
6-2368	Kathon 886 All	T	5	-	-	-
6-2541	Kelthane	-	-	-	5000	-
Various	Kelthane Grades	-	-	-	-	-
8-0969	Kemamine BQ-9742C	I	10	-	-	-
8-1076	Kerosene	I	10	-	-	-
8-4058	Kleistase M-30	E	-	1000	-	-
9-3483	Kydex Dust	E	-	1000	-	-
9-3659	Lab Jars Coatings and Petroleum Acryloid Samples	I	10	1000	-	-
9-3216	Lab Pack-Corrosive NOS	C	10	1000	-	-
9-3215	Lab Pack-Flammable NOS	I	10	1000	-	-
9-3217	Lab Pack-Irritant NOS	T	5	100	-	-
9-3354	Lab Pack-Poison	H	5	10	-	-
9-3505	Lab Waste Bottles (Vials)	I	10	1000	-	-
8-0685	Laktane	I	10	-	-	-
8-1992	Lancer Dispersion 4059	E	-	1000	-	-
8-1991	Lancer Dispersion 4161	E	-	1000	-	-

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8-0167	Lauroyl Peroxide	R	-	1000	-	-
Various	Lead (Total)	-	-	-	-	1
7-2019	Lethane Concentrate	I	10	-	-	-
Various	Lethane Grades	I	10	-	-	-
8-1478	Luazo 79	R	10	-	-	-
8-1483	Luazo 82	R	10	-	-	-
8-1270	Lupersol PMS	I	10	-	-	-
8-0353	Lupersol 11	R	10	-	-	-
8-1416	Lupersol 225 x 30	I	10	-	-	-
8-1267	Lupersol 70	R	10	-	-	-
6-1408	Lykopon SF	R	-	1000	-	-
7-5214	MAA Crude	C	10	-	-	-
8-1203	Magnesium Methylate	I	10	-	-	-
8-0213	Magnesium Perchlorate	R	-	1000	-	-
8-0440	Maleic Anhydride	T	10	1000	5000	-
9-3018	Me OH Dist. Residue	T	5	100	-	-
8-1811	Mercadium Red	E	-	1000	-	-
8-3507	3-Mercaptoproponic Acid	C	10	-	-	-
Various	Mercury (Total)	-	-	-	-	1
8-1846	Meteor Yellow Buff	E	-	1000	-	-
7-5446	Methacrylic Acid	C	10	-	-	-
6-5246	Methacrylic Acid (250 ppm)	C	10	-	-	-

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8-1313	Methane Sulfonic Acid	C	10	-	-	-
7-0022	Methanol	I	10	-	-	-
9-3122	Methanol Rundown Tank	I	10	-	-	-
6-6188	Methyl Acrylate	I	10	-	-	-
8-1422	Methyl Amyl Ketone	I	10	-	-	-
8-0435	Methyl Cellosolve	I	10	-	-	-
8-1529	Methyl Ethyl Ketone	T	5	-	-	-
8-0845	Methyl Formcel	I	10	-	-	-
6-5201	Methyl Methacrylate	T	5	-	5000	-
6-5486	Methyl Methacrylate	I	10	-	5000	-
8-0062	Methylene Chloride	T	5	-	-	-
8-0076	Mineral Spirits/Safety Solvent	I	10	-	-	-
9-3506	Misc. Ag. Chemicals (Bottles)	I	10	1000	-	-
9-3677	Misc. Karathane/Lethane/DNCP Lab Waste (Aqueous)	C	10	-	-	-
9-3676	Misc. Karathane/Lethane/DNCP Lab Waste (Organic)	I	10	-	-	-
7-5238	MMA	I	10	-	5000	-
8-1935	Monarch Chrome Green	E	-	1000	-	-
9-3502	Monomer Filters	I	10	1000	-	-
6-6211	Monomethylamine	I	10	-	1000	-
6-6219	Monomethylamine	I	10	-	1000	-
8-0729	Muriatic Acid	C	10	-	5000	-

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8-0096	Naphtha V. M. & P.	I	10	-	-	-
8-4147	Neodol 23-3N	No MSDS Available				
8-0088	Neutroleum Alpha	I	10	-	-	-
Various	Nickel (Total)	-	-	-	-	1
8-4063	Nitric Acid (98%)	C	10	-	1000	-
7-6612	No Description	No MSDS Available				
6-2290	No Description	No MSDS Available				
8-6008	No Description	No MSDS Available				
Various	Non-Recurring Waste	Various	5	10	-	-
8-0815	Odorless Mineral Spirits	I	10	-	-	-
9-3109	PCE Distillate	T	5	-	-	-
8-9413	Percadox 16W70	I	-	1000	-	-
8-0144	Perchloroethylene	T	5	-	-	-
9-3073	Pesticide Spills, Filters, Jars	I	10	1000	-	-
7-5530	Phenol	T	5	-	1000	-
8-0878	Phenol	T	5	100	1000	-
8-0029	Phosphoric Acid	C	10	-	5000	-
8-0528	Phosphoric Acid	C	10	-	5000	-
8-0051	Phosphorous Trichloride	R	10	-	5000	-
8-8652	Picconel A-40	No MSDS Available				
5-9854	Polychlorinated Biphenyl	-	5	-	10	1
8-4154	Polystep A-18	No MSDS Available				
8-0770	Potassium Hydroxide (45%)	C	10	-	1000	-

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8-4140	Prococtol 180LV	No MSDS Available				
8-4023	Propasol P	I	10	-	-	-
8-0858	Propionic Acid	C	10	-	5000	-
8-1271	Proxel CRL	T	5	-	-	-
7-6438	QM-663	I	10	-	-	-
7-6613	QM-767	I	10	-	-	-
7-6453	QM-801	C	10	-	-	-
9-7375	QM-833	No MSDS Available				
9-7479	QM-866	No MSDS Available				
7-7675	QR-410	I	10	-	-	-
8-4054	QR-418 (7-7677)	I	10	-	-	-
7-7677	QR-418 (8-4054)	I	10	-	-	-
7-6642	QR-866	No MSDS Available				
7-2587	RH-41,833	-	5	10	-	-
7-2619	RH-45147	-	5	10	-	-
9-3684	RH-45147 Wash Water	-	5	10	-	-
7-2590	RH-5781	-	5	10	-	-
7-2591	RH-6201	-	5	10	-	-
6-5223	Rocryl 300 (EMA)	I	10	-	-	-
6-1653	Rocryl 400 (HEMA)	I	10	-	-	-
6-6158	Rocryl 405 (HEMA)	I	10	-	-	-
6-1654	Rocryl 410 (HPMA)	I	10	-	-	-

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6-1650	Rocryl 420 (HEA)	I	10	-	-	-
6-5425	Rocryl 700 (DMAEMA)	-	-	-	-	-
6-5424	Rocryl 710 (TBAEMA)	-	-	-	-	-
6-5305	Rocryl 970 (X-970)	I	10	-	-	-
6-6424	Rocryl 980 (X-980)	I	10	-	-	-
9-3070	Sand/Monomer/Solvent Clean-Up	I	10	1000	-	-
8-0086	Sodium Cyanide	H	-	10	10	-
8-0806	Sodium Hydroxide (50%)	C	10	-	-	-
8-1353	Sodium Hypochlorite	I	10	-	100	-
8-0839	Sodium Methylate (25%)	I	10	-	1000	-
8-0619	Sodium Nitrate	R	-	1000	-	-
8-0636	Sodium Nitrate	R	-	1000	-	-
8-0875	Sodium Persulfate	I	-	1000	-	-
9-3222-4	Solidified Oil Waste	I	10	1000	-	-
9-3222-1	Solidified Waste Monomer	I	10	1000	-	-
8-4055	Solusol 75	I	10	-	-	-
9-3315	Solvent Drainings	I	10	-	-	-
8-1247	901 Solvent (EtoH)	I	10	-	-	-
9-3383	Solvent/Water/Caustic Cleaner	I	10	-	-	-
9-3307	Spent Sulfuric Acid	C	10	-	1000	-
8-0044	Styrene	I	10	-	1000	-
6-6001	Sulfuric Acid	C	10	-	1000	-

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Reportable Quantities
- SUPERFUND: One Pound Of Any Material In Table Or Amount Equal To Or In Excess Of Quantity Listed In "Section 311" Column
- PA DER Regulations: Amount Equal To Or In Excess Of The Quantity Of Hazardous Waste Listed In "PA/RCRA" Column

* I = Ignitable, C = Corrosive, R = Reactive, EP = Extraction Procedure, H = Acute Hazardous, T = Toxic

Code	Name (Description)	RCRA (*) Hazard	PA DER/RCRA Liquid (Gallons)	PA DER/RCRA Solid (Pounds)	Federal Clean Water Act Section 311 (Pounds)	Federal Clean Water Act Section 307(a) (Pounds)
7-6014	Sulfuric Acid	C	10	-	1000	-
8-0555	Sulfuric Acid	C	10	-	-	-
8-8699	Synpron 1563	E	-	1000	-	1
9-3412	TBAEMA Foreruns	I	10	-	-	-
8-1432	Tenneco 500	I	10	-	-	-
8-0666	Terpinolene	I	10	-	-	-
8-8677	Therm Check 6124	E	-	1000	-	1
8-0846	Thioglycolic Acid (72%)	C	10	-	-	-
9-3448	Third Stage Bottoms (Cresols)	I	10	-	1000	-
8-0315	Toluene	T	5	-	1000	1000
8-0372	Tolusol 15	I	10	-	-	-
8-0137	Trichloroethylene	T	5	-	1000	-
8-0583	Triethyl Amine	I	10	-	5000	-
8-8601	Triethyl Orthoformate	I	10	-	-	-
6-1872	Triton GR-SM	I	10	-	-	-
9-3419	Used Acetone (TBAEMA)	T	5	-	-	-
8-0136	Vinyl Acetate	I	10	-	1000	-
Various	Vinyl Chloride (3)-(4)	-	-	-	-	-
8-0333	Vinyl Toluene	I	10	-	-	-

00368

TABLE II

Alphabetical Listing Of Hazardous Substances Handled At Bristol (5)-(6)

Reportable Quantities
SUPERFUND: One Pound Of Any Material In Table Or Amount Equal To Or In Excess Of Quantity Listed In "Section 311" Column
PA DER Regulations: Amount Equal To Or In Excess Of The Quantity Of Hazardous Waste Listed In "PA/RCRA" Column

* I = Ignitable, C = Corrosive, R = Reactive, EP = Extraction Procedure, H = Acute Hazardous, T = Toxic

Code	Name (Description)	RCRA (*) Hazard	PA DER/RCRA Liquid (Gallons)	PA DER/RCRA Solid (Pounds)	Federal Clean Water Act Section 311 (Pounds)	Federal Clean Water Act Section 307(a) (Pounds)
9-3456	Waste Blend Tank Filters	I	5	10	-	-
9-3679	Waste MDC	T	5	-	-	-
9-3942	Waste Solvents - Lab	I	10	-	-	-
9-3284	Waste Solvents - LSPP	I	10	-	-	-
8-1005	Xylene	I	10	-	1000	-
8-1873	Yellow Pigment	E	-	1000	-	-
8-0347	Zinc Octoate (18%)	I	10	-	-	-
7-5532	ZM-120	I	10	-	-	-
7-5550	ZM-179	I	10	-	-	-

PDR/GM/dpmg:11/17/82
Disk: W/T.1

000369

July 24, 1981
Bristol, Pa.

MEMORANDUM

To: Safety Shift Supervisors
~~C.~~ S. Tobias
E. J. Skorpinski

From: H. C. Sullivan

Subject: Request for Mutual Aid

Enclosed is a copy of the latest MUTUAL AID PROCEDURE. These are the rules that are now in effect.

H. C. Sullivan

Enc.

Rohm and Haas Delaware Valley Inc. - Bristol Plant

FIRE MARSHAL - MUTUAL AID PROCEDURE

Action Synopsis

Should you receive a request for Mutual Aid during your shift:

1. CONTACTS AND AUTHORIZATIONS

   A. Get the name, position, department and phone number to call of the person requesting aid. Find out if the caller is authorized by County Communications Center. Call them back on Extension 8667 and record the message.

   B. Determine the type of aid being requested, and assess whether it is available.

   C. Ask if requesting Fire Department can send transportation to pick up equipment, if necessary.

   D. If caller is authorized by County Communications Center and aid is available, obtain permission from one of the following:

	Office	Home
Plant Manager	215-785-8110	215-887-6398
Safety Director	215-785-8663	215-825-0233
Night Superintendent	215-785-8116	---

   E. Then have arrangements made to transfer equipment to requesting Fire Department, but do not release foam truck until backup has arrived.

2. REQUEST FOR "SQUIRT" FOAM TRUCK (In addition to above)

   A. Notify Bristol Township Police to send one pumper from Croydon Fire Company to the Plant Main Gate for standby.

   B. Notify any off-duty Safety Shift Supervisor at home and have one come to the Plant to accompany foam truck. To expedite the delivery, the truck can be released if a qualified driver-operator is available and if the off-duty shift supervisor can meet the truck at the fire more quickly than otherwise.

   C. Notify foreman of the foam truck operator and have operator released to drive foam truck.

   D. Foam truck is not to leave the plant until a standby unit has arrived.

3. SITUATIONS INVOLVING ROHM AND HAAS PRODUCTS (In addition to above)

   Follow "Outside Safety, Medical, or Pollution Emergency Call" Procedure (E-6).

PURPOSE

The purpose of this procedure is to define the various classifications of mutual aid in which we are willing to participate. In general, we will always try to help any County-authorized outside agency that requests assistance, at least to the extent of sharing information. Aid may be in the form of equipment and/or the assessment of dangers involved. Advice must be consistent with and limited to our knowledge of the chemical involved.

WHO CAN REQUEST

All calls for mutual aid are to come through the Bucks County Communications Center. When a message is received, obtain the communicator's name and phone number. Call him back, using Extension 8667, with the recording tape and verify the message.

Obtain the name, position and the department requesting aid and the location where it is needed. Determine the type of aid being requested. See if requestor can supply pickup transportation, if appropriate. Ascertain that caller has been authorized by County Communications Center by having the caller work through the County or by verifying through the County Communicator. All calls are to be recorded.

Permission to release aid is to be given by either the Plant Manager, Safety Director, or Night Superintendent. If none of these is available, the Croydon ant Manager should be notified as to what has transpired.

SITUATIONS - ROHM AND HAAS PRODUCTS

In situations involving Rohm and Haas products, we intend to respond with whatever equipment and personnel are necessary to stabilize a condition, remove and clean up the product from the scene. However, the response is to be determined by the Plant Emergency Coordinator listed on the reverse of the Emergency Coordinator Incident Report. (Form 13984, Procedure E-6).

CHEMICALS - NOT ROHM AND HAAS PRODUCTS

In situations not involving Rohm and Haas products, we will offer our aid, but it must be consistent with our knowledge of the chemicals involved. The main thrust of our aid will be to advise, so that danger to the health and safety of the fire service and the community is minimized. Our advice will be to primarily help to ascertain the dangers involved with the chemical, what agency can be contacted to give aid, and to help contact persons who have the knowledge specific to the chemical in question.

Requests are to come from the County Communications Center.

FOAM TRUCK REQUESTS

situations where the foam truck is required, the truck will be released when a placement unit from the Croydon Fire Department is stationed in the plant. The call for mutual aid is to be from the County Fire Dispatcher, working with the Croydon Fire Company and Rohm and Haas.

FUEL REQUEST

In situations where we are requested to supply fuel, the request is to come through the County Fire Dispatcher. The fuel will be dispatched as soon as personnel are available to transport the truck. Obtain the name of the fuel coordinator on the fire grounds, and he is to determine priorities of who should be fueled and give the driver general directions.

SPECIAL EQUIPMENT REQUEST

In situations requiring use of special equipment, such as our chemical entry suits or other chemical protective equipment, such as respirators, gloves, spill suits, the company will supply the units and a person or persons trained in their use to train and assist outside firemen in the equipment's use.

Other equipment available is:

A quantity of detergent foam concentrate (two 55-gallon drums of Triton)

One oxygen-acetylene burning outfit

One explosion meter

One gas indicator

Any other appropriate equipment that can be useful. Requests are to come through the County Fire Dispatcher.

GENERAL

The Response Team must never enter private property except under the direction of an authorized emergency official (fire chief or police officer). If a representative of the property's owner is at the site, his permission to enter should be asked. If he does not authorize entry, DO NOT ENTER. In NO EVENT SHALL ANY Rohm and Haas employee take charge of an emergency on private property except where Rohm and Haas materials are involved. Otherwise, participation SHALL BE LIMITED TO GIVING ADVICE and OBTAINING INFORMATION. Note that advice must be based on knowledge.

5/12/81
/mpf

ROHM AND HAAS DELAWARE VALLEY INC.
P.O. BOX 219, BRISTOL, PA. 19007
(215) 785-8000

bcc: Mr. W. D. Carr
J [illegible], HO

September 24, 1980

Chief Tom Krzaczyk
Croydon Fire Company
Croydon, Penna. 19020

Dear Tom:

As a result of our meeting of May 5, we have developed the following classification systems for our buildings. A color-coded map is enclosed, and indicates the various building hazard ratings. This letter defines each of these hazards. Essentially, the plant has six classifications that cover our approximate 145 structures we have on the site. The vast majority of these buildings, over 120, are rated normal hazards. Seven are rated high hazard chemicals; nine as high hazard structural and two as evacuation hazards, three are rated as medium hazards, and three others as a structural roof collapse hazard. Hazard definitions:

High Chemical:

This class includes manufacturing facilities, tank farms, drum storages that contain vessels, tanks, and reactors that have flammable, combustible, acid, caustic and/or reactive materials in them. Toxic vapors could be either in a natural state or as a result of pyrolysis. Explosions are possible and self-contained breathing apparatus would be mandatory. Foam would be required for any spilled liquids or fire control. Water flows of from 5,000 - 10,000 gpm could be expected for fire fighting and coverage of surrounding facilities. The Buildings in this classification are: 30, 34, 38, 38A, 39, 69, 133, 54E, 111 Warehouse yard, 30A and 34A tank farms. Hazardous wastes are included in this classification

High Hazard Structural:

This class contains buildings that are either of timber construction or timber-masonry construction. Fire spread would probably be fast and structural collapse probable. Water flows of 5,000 gpm could be expected and buildings involved are: 1, 1A, 2, 5, 3, 4, 6, 17 and 10.

Evacuation Assistance:

This class contains buildings that have, during normal business hours (8:00 a.m.-5:00 p.m., Monday through Friday) a large number of persons in individual cubicals or offices, multi-storied building, maximum three stories. Self-contained breathing apparatus would be required, as well as men required for search and rescue and first aid. The buildings involved are 64 Complex, a three-storied, four-winged building of 124,000 square feet containing approximately 350 people and the Engineering Division building, located at Route 413 and State Road. This two-storied, two-section building complex contains approximately 370 people.

Medium Hazard:

This class contains processes that have a limited amount of flammable liquids, but contains combustible materials such as oils or powders. In the case of one building, 115, fires would be mostly of a residual powder material, and an automatic system shuts its feed down in the event of a fire. Foam would be required for spilled materials; self-contained breathing apparatus would be required and water flows would be in the 5,000 gmp rate. Buildings in this class are 51, 66 and 115.

Structural Collapse Hazard:

This class of structures has long span steel truss roof construction that in moderate fire heat could cause the roof truss to twist and the roof to collapse. Buildings in this class are: 111 State Road Warehouse, Building 114 and Building 127, and Building 132 in the Bristol Plant.

Normal Hazard:

Buildings with limited storage of flammable or combustible materials that contain offices, shops or warehouse material. Most are sprinklered. Water flows would be 5,000 gpm range. Some people may be required. The buildings involved are the rest of the plant.

Protection - Detection:

Approximately 54 buildings are sprinklered and have either sprinkler monitors or other forms of detection that are tied into our ADT alarm system, located at the Gatehouse. The plant has two separate water supply systems. One has 1.3 million gallons of stored water, which has two automatic-start 2,000 gal/min. pumps. These start on low pressure. This system is fed from the Borough water supply system by one 12 inch main and several smaller feed mains. This water supply feeds the sprinkler systems and the "red" top hydrants. Under normal conditions, these hydrants would not be used.

The other water system is plant water fed by six 5,000 gal/min. pumps from our two ponds that contain approximately 30 million gallons of water. This is raw river water and feeds our 31 white top hydrants. These normally would be used in a fire. As a precaution against a complete power outage, equipment would have to be deployed for drafting; minimum: three 1,000 gallon pumps per minute.

The fire control center would be the Gatehouse. This contains radio, phone communications and video monitors that cover a large part of the plant. Fire Police will be required to control traffic through our parking lot and into the plant Gatehouse. In addition, they will be needed to park incoming cars of volunteer firemen.

I look forward to further discussion of this plan as this is meant as a basis for developing more comprehensive response in the event that outside aid would be required.

Sincerely

H. C. Sullivan, P.E.
Health & Safety Director

Enc .

H

APPENDIX H

BRISTOL FIRE BRIGADE MANUAL

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/dpmg:2/2/83
RCRA.4

August 5, 1981
Bristol, Pa.

EMORANDUM

cc: H. C. Sullivan

To: Safety Shift Supervisors

From: C. S. Tobias

Subject: Fire Brigade Training Schedule

The following schedule is to be followed by all brigades. We are required by law to have all members trained, and the only way to obtain this is to have a training schedule and to follow it.

AUGUST 1981

Pit fire using water and in-line foam pickup. Also use foam truck articulating boom on one fire, pump foam from 55 gal. drum.

SEPTEMBER

Rescue - Part I - rope handling, light rigging, etc.

OCTOBER

Use of rescue equipment - jacks, ropes, Stokes basket (Part 2)

)VEMBER & DECEMBER

Review of CPR - run tape

JANUARY & FEBRUARY 1982

Review First Aid & Rescue

MARCH

Respirator training in the smoke house at fire grounds with a hay fire.

APRIL

Pump operation - boom operation, etc. Set up both pumpers, operate - repack hose beds - test hoses.

MAY

Fire Training - fire grounds - Use Mack - drums truck loading.

JUNE

Interior fire fighting - straw fire in smoke house, use air packs, set up barriers, e factory hoses with city pressure - wheeled extinguishers.

JULY

C00384

Pit Fire - foam use - Pit fire using water and in-line foam pickup. Also use foam truck boom on one fire, pump foam from 55 gal. drum.

AUGUST

ıffled tank fire - use of foam stations. Setup like ones in plant - plant pressure - rubber hose on reel - foam pickup tubes, etc.

SEPTEMBER

Heavy rescue review.

OCTOBER

Review of building protection: Sprinkler systems - how they work - pressure effect on a sprinkler (pumper hooked up to sprinkler at 64 yard). Special system - where they are, etc.

NOVEMBER

Review CPR - tape.

DECEMBER

Review First Aid and Rescue.

It is important that the attendance records are logged in the book in my office.

C. S. Tobias

C. S. Tobias

CST/fb

ock

Date	Job #	Job Name	Foreman

Name
S.S.#
Hired
Birth Date

Training Code	TRAINING	Req'd Trng.	79	80	81	82	83	84	85	86	87
	Acrylonitrile										
	Asbestos										
	Evacuation Drills										
	Eye Protection										
	Fire Extinguishers										
	Forklift/Worksaver										
	MSDS										
	New Employee										
	Noise/Hearing Protect.										
	Permits										
	Welding & Burning										
	Pipe Opening										
	Electr. Lockout										
	Tank Entry/Rescue										
	Peroxides										
	Respirator (field trial)										
	Respirator (classroom)										
	Transportation Regs.										
	Vinyl Chloride										
	Hazardous Waste (B or L)										
	Dept. Training										
	Oper. Process Rev.										
	Oper. Process Rev.										
	Oper. Process Rev.										
	OSHA Injury										
	First Aid Cases										

SPECIAL MEDICAL TESTING
Cadmium (monthly) _____
Cholinesterase
Inhibition (monthly) _____
X-Ray (annual) _____

Medical Restrs.	Part of Body	Rest. Code #	Date

000387

June 25, 1982

Administrator
EPA Region III
Curtis Building
6th and Walnut Streets
Philadelphia, PA 19106
Attn: RCRA Financial Requirements

Dear Sir:

I am the chief financial officer of Rohm and Haas Company, Independence Mall West, Philadelphia, PA 19105. This letter is in support of this firm's use of the financial test to demonstrate financial assurance, as specified in Subpart H of 40 CFR Parts 264 and 265.

1. This firm is the owner or operator of the following facilities for which financial assurance for closure or post-closure care is demonstrated through the financial test specified in Subpart H of 40 CFR Parts 264 and 265. The current closure and/or post-closure cost estimates covered by the test are shown for each facility: None.

2. This firm guarantees, through the corporate guarantee specified in Subpart H of 40 CFR Parts 264 and 265, the closure or post-closure care of the following facilities owned or operated by subsidiaries of this firm. The current cost estimates for the closure or post-closure care so guaranteed are shown for each facility: None.

3. In States where EPA is not administering the financial requirements of Subpart H of 40 CFR Parts 264 or 265, this firm, as owner or operator or guarantor, is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in Subpart H of 40 CFR Parts 264 and 265. The current closure and/or post-closure cost estimates covered by such a test are shown for each facility:

Administrator
EPA Region III

June 25, 1982

Subsidiary	EPA ID No.	Estimated Closure Cost	Estimated Post-Closure Cost
Rohm and Haas Delaware Valley Inc. P. O. Box 302 Bristol, PA 19007			
Bristol Plant	PAD 002292068	$118,000	- 0 -
Philadelphia Plant	PAD 077883346	27,500	- 0 -
Croydon Plant	PAD 087105714	7,000	- 0 -
Rohm and Haas Company Research Laboratories Spring House, PA 19477	PAD 075485995	10,700	- 0 -

4. This firm is the owner or operator of the following hazardous waste management facilities for which financial assurance for closure or, if a disposal facility, post-closure care, is not demonstrated either to EPA or a State through the financial test or any other financial assurance mechanism specified in Subpart H of 40 CFR Parts 264 and 265 or equivalent or substantially equivalent State mechanisms. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility: None.

This firm is required to file a Form 10K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this firm ends on December 31. The figures for the following items marked with an asterisk are derived from this firm's independently audited, year-end financial statements for the latest completed fiscal year, ended December 31, 1981.

ALTERNATIVE I

1. Sum of current closure and post-closure cost estimates ---- $ 163,200

*2. Total liabilities ---------- $588,716,000

*3. Tangible net worth ---------- $742,108,000

*4. Net worth ---------- $759,911,000

*5. Current Assets ---------- $741,154,000

*6. Current Liabilities ---------- $290,728,000

7. Net working capital (line 5 minus line 6) ---------- $450,426,000

*8. The sum of net income plus depreciation, depletion, and amortization ---------- $168,887,000

Administrator
EPA Region III

June 25, 1982

*9. Total assets in U.S. (required only if less than 90% of firm's assets are located in the U.S.) ---------- $963,870,000

	YES	NO
10. Is line 3 at least $10 million?	X	
11. Is line 3 at least 6 times line 1?	X	
12. Is line 7 at least 6 times line 1?	X	
*13. Are at least 90% of firm's assets located in the U.S.? If not, complete line 14		X
14. Is line 9 at least 6 times line 1?	X	
15. Is line 2 divided by line 4 less than 2.0?	X	
16. Is line 8 divided by line 2 greater than 0.1?	X	
17. Is line 5 divided by line 6 greater than 1.5?	X	

I hereby certify that the wording of this letter is identical to the wording specified in 40 CFR 264.151(f) as such regulations were constituted on the date shown immediately below.

F. W. Shaffer
Vice President, Chief Financial Officer
& Controller
June 25, 1982

FWS:mak
1669E/168Z

Peat, Marwick, Mitchell & Co.

Certified Public Accountants

1500 Walnut Street
Philadelphia, Pennsylvania 19102
(215) 735-4600

The Board of Directors
Rohm and Haas Company:

We have examined the consolidated balance sheets of Rohm and Haas Company and consolidated subsidiaries as of December 31, 1981 and 1980, and the related statements of consolidated earnings and changes in financial position for each of the years in the three-year period ended December 31, 1981. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the aforementioned consolidated financial statements present fairly the financial position of Rohm and Haas Company and consolidated subsidiaries at December 31, 1981 and 1980, and the results of their operations and changes in financial position for each of the years in the three-year period ended December 31, 1981, in conformity with generally accepted accounting principles applied on a consistent basis.

With respect to the financial information included in the Company's letters to Regional Administrators of the Environmental Protection Agency (EPA) in regards to the demonstration of financial responsibility for the estimated costs of closure and post-closure care of hazardous waste management facilities, we have performed the procedures enumerated below:

a. We compared Current Assets, Current Liabilities, Total Liabilities and Net Worth as detailed below to the consolidated balance sheet of Rohm and Haas Company at December 31, 1981:

1)	Current Assets	$ 741,154,000
2)	Current Liabilities	$ 290,728,000
3)	Total Liabilities	$ 588,716,000
4)	Total Net Worth	$ 759,911,000

b. We calculated the following utilizing the consolidated financial statements of Rohm and Haas Company as of and for the year ended December 31, 1981 and the underlying accounting records of the Company:

1) Tangible Net Worth (Net worth less goodwill and other intangible assets)	$ 742,108,000
2) Sum of Net Income plus Depreciation, Depletion and Amortization	$ 168,887,000
3) Total Assets in United States	$ 963,870,000

c. We calculated that less than 90% of the Company's consolidated assets were located in the United States at December 31, 1981 based on Total Assets in the United States per b.3) above as a percentage of total assets as reported in the consolidated financial statements at December 31, 1981.

In connection with our examination, nothing came to our attention that caused us to believe that the financial information described above should be adjusted.

Peat, Marwick, Mitchell & Co.

February 26, 1982

CORPORATE GUARANTEE FOR CLOSURE OR POST-CLOSURE CARE

Guarantee made this June 25, 1982 by Rohm and Haas Company, a business corporation organized under the laws of the State of Delaware, herein referred to as guarantor, to the United States Environmental Protection Agency (EPA), obligee, on behalf of our subsidiary Rohm and Haas Delaware Valley Inc. of P. O. Box 219, Bristol, PA 19007.

Recitals

1. Guarantor meets or exceeds the financial test criteria and agrees to comply with the reporting requirements for guarantors as specified in 40 CFR 264.143(f), 264.145(f), 265.143(e), and 265.145(e).

2. Rohm and Haas Delaware Valley Inc. owns or operates the following hazardous waste management facilities covered by this guarantee:

EPA No. PAD 002292068
Bristol Plant
P. O. Box 219
Bristol, PA 19007

EPA No. PAD 077883346
Philadelphia Plant
5000 Richmond Street
Philadelphia, PA 19137

EPA No. PAD 087105714
Croydon Plant
P. O. Box 302
Bristol, PA 19007

Guarantee is for both closure and post-closure care for each facility.

3. "Closure plans" and "post-closure plans" as used below refer to the plans maintained as required by Subpart G of 40 CFR Parts 264 and 265 for the closure and post-closure care of facilities as identified above.

4. For value received from Rohm and Haas Delaware Valley Inc., guarantor guarantees to EPA that in the event that Rohm and Haas Delaware Valley Inc. fails to perform closure and post-closure care of the above facilities in accordance with the closure or post-closure plans and other permit or interim status requirements whenever required to do so, the guarantor shall do so or establish a trust fund as specified in Subpart H of 40 CFR Parts 264 or 265, as applicable, in the name of Rohm and Haas Delaware Valley Inc. in the amount of the current closure or post-closure cost estimates as specified in Subpart H of 40 CFR Parts 264 and 265.

5. Guarantor agrees that if, at the end of any fiscal year before termination of this guarantee, the guarantor fails to meet the financial test criteria, guarantor shall send within 90 days, by certified mail, notice to the EPA Regional Administrator for the Region in which the facilities are located and to Rohm and Haas Delaware Valley Inc. that he intends to provide alternate financial assurance as specified in Subpart H of 40 CFR Parts 264 or 265, as applicable, in the name of Rohm and Haas Delaware Valley Inc.. Within 120 days after the end of such fiscal year, the guarantor shall establish such financial assurance unless Rohm and Haas Delaware Valley Inc. has done so.

6. The guarantor agrees to notify the EPA Regional Administrator by certified mail, of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming guarantor as debtor, within 10 days after commencement of the proceeding.

7. Guarantor agrees that within 30 days after being notified by an EPA Regional Administrator of a determination that guarantor no longer meets the financial test criteria or that he is disallowed from continuing as a guarantor of closure or post-closure care, he shall establish alternate financial assurance as specified in Subpart H of 40 CFR Parts 264 or 265, as applicable, in the name of Rohm and Haas Delaware Valley Inc. unless Rohm and Haas Delaware Valley Inc. has done so.

8. Guarantor agrees to remain bound under this guarantee notwithstanding any or all of the following: amendment or modification of the closure or post-closure plan, amendment or modification of the permit, the extension or reduction of the time of performance of closure or post-closure, or any other modification or alteration of an obligation of the owner or operator pursuant to 40 CFR Parts 264 or 265.

9. Guarantor agrees to remain bound under this guarantee for so long as Rohm and Haas Delaware Valley Inc. must comply with the applicable financial assurance requirements of Subpart H of 40 CFR Parts 264 and 265 for the above listed facilities, except that guarantor may cancel this guarantee by sending notice by certified mail to the EPA Regional Administrator for the Region in which the facilities are located and to Rohm and Haas Delaware Valley Inc., such cancellation to become effective no earlier than 120 days after receipt of such notice by both EPA and Rohm and Haas Delaware Valley Inc., as evidenced by the return receipts.

10. Guarantor agrees that if Rohm and Haas Delaware Valley Inc. fails to provide alternate financial assurance as specified in Subpart H of 40 CFR Parts 264 or 265, as applicable, and obtain written approval of such assurance from the EPA Regional Administrator within 90 days after a notice of cancellation by the guarantor is received by an EPA Regional Administrator from guarantor, guarantor shall provide such alternate financial assurance in the name of Rohm and Haas Delaware Valley Inc.

11. Guarantor expressly waives notice of acceptance of this guarantee by the EPA or by Rohm and Haas Delaware Valley Inc.. Guarantor also expressly waives notice of amendments or modifications of the closure and/or post-closure plan and of amendments or modifications of the facility permit(s).

I hereby certify that the wording of this guarantee is identical to the wording specified in 40 CFR 264.151(h) as such regulations were constituted on the date first above written.

Effective date: June 25, 1982

ROHM AND HAAS COMPANY

F. W. Shaffer
Vice President, Chief Financial Officer & Controller

A. F. Smith
Treasurer

NOTARY

Sworn to and subscribed before me this 25th day of June 1982

Norma Irene Gamble

NORMA IRENE GAMBLE
Notary Public, Philadelphia, Philadelphia Co.
My Commission Expires January 12, 1984

(1670E/97Z)

June 29, 1982

Administrator
EPA Region III
Curtis Building
6th and Walnut Sts.
Philadelphia, PA 19106

Attention: RCRA Financial Requirements

Re: Sudden Occurrence Liability Coverage for Hazardous Waste Facilities

Dear Sir:

In fulfillment of the requirements of 40 CFR Part 265 Subpart H, Rohm and Haas Company and its Subsidiaries have decided to rely on certificates of insurance to demonstrate that liability coverage is in existence for sudden or accidental occurrences at their hazardous waste facilities.

Enclosed with this letter is a certificate of insurance showing that the following named subsidiaries at which hazardous waste facilities are located are insured for sudden accidental occurrences:

Rohm and Haas Delaware Valley, Inc.
Box 219
Bristol, PA 19007
EPA I.D. No. PAD 002292068

Rohm and Haas Delaware Valley, Inc.
5000 Richmond Street
Philadelphia, PA 19137
EPA I.D. No. PAD 077883346

Rohm and Haas Delaware Valley, Inc.
Box 302
Bristol, PA 19007
EPA I.D. No. PAD 087105714

Rohm and Haas Company
Research Laboratories
Spring House, PA 19477
EPA I.D. No. PAD 075485995

I trust the enclosure meets the requirements of sudden occurrence liability coverage as specified in Part 265 Subpart H.

If you have questions, please call me at 215-592-3616.

Very truly yours,

George A. Schnabel
North America Region
Environmental Control Manager

GAS:vk
Enclosure

ACORD

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES LISTED BELOW.

NAME AND ADDRESS OF AGENCY

Fairfield & Ellis, Inc.
2[illegible].5 Franklin Street
[illegible]on, Ma 02110

Appendix I
Date: 2/11/83
Revision: 0

COMPANIES AFFORDING COVERAGES

COMPANY LETTER A Insurance Company of North America

COMPANY LETTER B

COMPANY LETTER C

COMPANY LETTER D

COMPANY LETTER E

NAME AND ADDRESS OF INSURED

Rohm and Haas Company and/or
Financially Controlled and/or Subisidary
Companies
Independence Mall West
Philadelphia, Pa. 19105

This is to certify that policies of insurance listed below have been issued to the insured named above and are in force at this time. Notwithstanding any requirement, term or cond. any contract or other document with respect to which this certificate may be issued or may pertain, the insurance afforded by the policies described herein is subject to all terms, exclusions and conditions of such policies.

COMPANY LETTER	TYPE OF INSURANCE	POLICY NUMBER	POLICY EXPIRATION DATE	Limits of Liability in Thousands (000)	EACH OCCURRENCE	AGGREG
A	GENERAL LIABILITY ☒ COMPREHENSIVE FORM ☐ PREMISES—OPERATIONS ☐ EXPLOSION AND COLLAPSE HAZARD ☐ UNDERGROUND HAZARD ☐ PRODUCTS-COMPLETED OPERATIONS HAZARD ☐ CONTRACTUAL INSURANCE ☐ BROAD FORM PROPERTY DAMAGE ☐ INDEPENDENT CONTRACTORS ☐ PERSONAL INJURY	SCG GO 134139-A	3/1/83	BODILY INJURY	$	$
				PROPERTY DAMAGE	$	$
				BODILY INJURY AND PROPERTY DAMAGE COMBINED	$ 1,500	$4,0[illegible]
				PERSONAL INJURY		$
	AUTOMOBILE LIABILITY ☐ COMPREHENSIVE FORM ☐ OWNED ☐ HIRED ☐ NON-OWNED			BODILY INJURY (EACH PERSON)	$	
				BODILY INJURY (EACH ACCIDENT)	$	
				PROPERTY DAMAGE	$	
				BODILY INJURY AND PROPERTY DAMAGE COMBINED	$	
	EXCESS LIABILITY ☐ UMBRELLA FORM ☐ OTHER THAN UMBRELLA FORM			BODILY INJURY AND PROPERTY DAMAGE COMBINED	$	$
	WORKERS' COMPENSATION and EMPLOYERS' LIABILITY			STATUTORY		
					$	EACH AC
	OTHER					

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES

PER ATTACHED HAZARDOUS WASTE FACILITY CERTIFICATE OF INSURANCE

Cancellation: Should any of the above described policies be cancelled before the expiration date thereof, the issuing company will endeavor to mail 60 days written notice to the below named certificate holder. [illegible]

NAME AND ADDRESS OF CERTIFICATE-HOLDER

Administrator, EPA Region III
Curtis Building
6th and Walnut Streets
Philadelphia, Pa. 19106
ATTN: RCRA Financial Requirements

DATE ISSUED: May 11, 1982

AUTHORIZED REPRESENTATIVE

000402

HAZARDOUS WASTE FACILITY

CERTIFICATE OF INSURANCE

1 The Insurance Company of North America, The Insurer, of Philadelphia, Pa., hereby certifies that is has issued liability insurance covering bodily injury and property damage to Rohm and Haas Company and/or Financially Controlled and/or Subsidiary Companies, of Independence Mall West, Philadelphia, Pa., in connection with the insured's obligation to demonstrate financial responsibility under 40 CFR 264.147 or 265.147. The coverage applies at:

Plant	EPA ID NOS.	NAME OF COMPANY AND ADDRESS
		Rohm and Haas Delaware Valley, Inc.
Bristol	PAD 002292068	Box 219, Bristol, Pa. 19007
Philadelphia	PAD 077883346	5000 Richmond Street, Philadelphia, Pa. 191
Croydon	PAD 087105714	Box 302, Bristol, Pa. 19007
		Rohm and Haas Company
Spring House	PAD 075485995	Research Laboratories, Spring House, Pa. 19

for sudden accidential occurrences. The limit of liability are $1,500,000 each occurrence and $4,000,000 annual aggregate limits of the insurer's liability exclusive of legal defense costs. The coverage is provided under policy number SCG GO 134139-A, issued on March 1, 1982. The effective date of said policy is March 1, 1982.

2. The Insurer further certifies the following with respect to the insurance described in Paragraph 1:

(a) Bankruptcy or insolvency of the insured shall not relieve the insurer of its obligations under the policy.

(b) The Insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the insured for any such payment made by the Insurer. This provision does not apply with respect to that amount of any deductible for which is demonstrated as specified in 40 CFR 264.147 (f) or 265.147 (f).

(c) Whenever requested by the Regional Administrator of the U.S. Environmental Protection Agency (EPA), the Insurer agrees to furnish to the Regional Administrator a signed duplicate original of the policy and all endorsements.

(d) Cancellation of the insurance, whether by the Insurer or the Insured will be effective only upon written notice and only after the expiration of sixty (60) days after a copy of such written notice is received by the Regional Administrator(s) of the EPA Region(s) in which the facility(ies) is (are) located.

(e) Any other termination of the insurance will be effective only upon written notice and only after the expiration of thirty (30) days after a copy of such written notice is received by the Regional Administrator(s) of the EPA Region(s) in which the facility(ies) is (are) located.

HAZARDOUS WASTE FACILITY

CERTIFICATE OF INSURANCE

Page 2

I hereby certify that the wording of this instrument is identical to the wording specified in 40 CFR 264.151(f) as such regulation was constituted on the date first above written, and that the Insurer is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines Insurer, in one or more States.

Authorized Representative of Insurer

Eugene R. Murray
Type Name

Account Manager
Title of Authorized Representative of Insurance Company of North America

60 State Street

Boston, MA 02109
Address of Representative

APPENDIX J

No Entry

000407

APPENDIX K

No Entry