UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REVISED DRAFT PERMIT

FOR CORRECTIVE ACTION

UNDER THE HAZARDOUS AND SOLID WASTE AMENDMENTS OF 1984

Permittee: E. I. du Pont de Nemours & Company

Permit Number: WVD 04 587 5291

Facility: E. I. du Pont de Nemours & Company
Parkersburg, West Virginia

This permit is issued by the United States Environmental Protection Agency (EPA) under authority of the Solid Waste Disposal Act, commonly referred to as the Resource Conservation and Recovery Act of 1976,(RCRA) as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA) 42 U.S.C. §6901 et. seq. and EPA regulations, to E. I. du Pont de Nemours & Company (hereafter called the Permittee), to operate a hazardous waste management facility located on DuPont Road in Parkersburg, West Virginia, at latitude 39° 16' 12" North and longitude 81° 40' 09" West.

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein (Parts I, II, III and attachments), and the applicable regulations contained in 40 CFR Parts 124, 260 through 264, 268, and 270 as specified in the permit. Applicable provisions include those which are in effect on the date of issuance of this permit (see 40 CFR §270.32(c)).

This permit is based on the assumption that the information provided by the Permittee is accurate. Further, this permit is based in part on the provisions of Sections 206, 212, and 224 of HSWA which amend Sections 3004 and 3005 of RCRA. In particular, Section 206 requires corrective action for all releases of hazardous waste or hazardous constituents from any solid waste management unit at a treatment, storage, or disposal facility seeking a permit, regardless of the time at which waste was placed in such unit. Section 212 provides authority to review and amend the permit at any time. Any inaccuracies found in the submitted information may be grounds for the termination, modifcation or the revocation and reissuance of this permit (see 40 CFR §270.41, §270.42, 53 Federal Register 37912, 37936-37942 (September 28, 1988), and §270.43) and enforcement action. The Permittee must inform EPA of any deviation from or changes in the submitted information which would affect the Permittee's ability to comply with the applicable statutes, regulations, or permit conditions.

This permit is effective as of _____, and shall remain in effect until _____, unless revoked and reissued, terminated or modified in accordance with 40 CFR §270.41, §270.42, 53 Federal Register 37912, 37936 - 37942 (September 28, 1988), or §270.43, or continued in accordance with 40 CFR §270.51(a).

PART I - STANDARD CONDITIONS

A. EFFECT OF PERMIT

This permit authorizes only the management of hazardous waste expressly described in this permit and does not authorize any other management of hazardous waste.

The full RCRA permit is comprised of EPA's portion, which addresses the provisions of the Hazardous and Solid Waste Amendments of 1984, and the West Virginia Department of Natural Resources' portion, which addresses the provisions of RCRA for which the State of West Virginia is authorized. The State of West Virginia is authorized to administer and enforce its program corresponding to any Federal self-implementing statutory provisions that were in effect on October 29, 1984, and the Federal regulatory program promulgated up to October 29, 1984, as well as the technical amendment issued on November 21, 1984 (49 FR 46094), and the amended interim status standards for landfills issued on April 23, 1985 (50 FR 16044-48). This portion of the permit, which addresses the Hazardous and Solid Waste Amendments of 1984, will be enforced by EPA. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, or invasion of other private rights, or any infringement of State or local laws or regulations (40 CFR §§270.30(g) and 270.4(b) and (c)). Compliance with the terms of this permit does not constitute a defense to any action brought under Section 7003 of RCRA (42 USC §6973), Section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, (42 USC §9606(a)) (commonly known as CERCLA), or any other law governing protection of public health or the environment.

Nothing contained herein shall in any way be deemed to waive the Permittee's obligation to comply with 40 CFR Part 270, Subpart C, and applicable regulations set forth at 40 CFR Part 124.

B. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated for cause as specified in 40 CFR §§270.41, 270.42, 53 Federal Register 37912, 37936 - 37942 (September 28, 1988), and 270.43. The filing of a request for a permit modification, revocation and reissuance, or termination or the notification of planned changes or anticipated noncompliance on the part of the Permittee, does not stay the applicability or enforceability of any permit condition (40 CFR §270.30(f)). Review of any application for a permit renewal shall consider improvements in the state of control and measurement technology, as well as changes in applicable regulations and laws.

C. PERMIT CONDITIONS

Pursuant to Section 3005(c)(3) of RCRA, this permit contains those terms and conditions determined necessary to protect human health and the environment (40 CFR §270.32(b)(2)).

D. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby (40 CFR §124.16(a)(2)).

E. DEFINITIONS

For the purpose of this permit, terms used herein shall have the same meaning as those set forth in Title 40 of the Code of Federal Regulations (40 CFR Parts 260 through 264, 268 and 270), unless this permit specifically states otherwise. Where terms are not otherwise defined, the meaning associated with such terms shall be as defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the terms. The following definitions also apply to this permit.

1. Regional Administrator - Regional Administrator of the United States Environmental Protection Agency for the Mid-Atlantic Region (Region III), his designee or authorized representative.

2. Director - Director of the West Virginia Department of Natural Resources, Division of Waste Management, his/her designee or authorized representative.

3. Release - any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment.

4. Solid Waste Management Unit - any discernible unit at a facility seeking a RCRA permit from which hazardous waste or hazardous constituents might migrate, irrespective of whether the unit was intended for the management of solid and/or hazardous waste.

5. Facility - all contiguous property under the control of the owner or operator at which the units subject to permitting are located (except for permit condition I.I. where the definition of "facility" in 40 CFR §260.10 shall apply).

F. REPORTS, NOTIFICATIONS AND SUBMISSIONS TO THE REGIONAL ADMINISTRATOR

All reports, notifications or other submissions which are required by this permit to be sent or given to the Regional Administrator or EPA should be sent Certified Mail or given to:

RCRA Programs Branch (3HW50)
EPA Region III
841 Chestnut Building
Philadelphia, Pennsylvania 19107

G. SIGNATORY REQUIREMENTS

All reports or other information submitted to the Regional Administrator or Director shall be signed and certified as required by 40 CFR §§270.11(b) and 270.30(k).

H. DOCUMENTS TO BE MAINTAINED AT THE FACILITY SITE

The Permittee shall maintain at the facility all documents required by this permit and amendments, revisions and modifications to these documents. The Permittee shall maintain at the facility a written operating record that complies with all the requirements of 40 CFR §264.73.

I. DUTIES AND REQUIREMENTS

1. Duty to Comply. The Permittee shall comply with all conditions of this permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit. Any other permit noncompliance constitutes a violation of RCRA and is grounds for enforcement action, permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application. (40 CFR §270.30(a))

2. Duty to Reapply. If the Permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the Permittee must submit a complete application for a new permit at least 180 days before this permit expires. (40 CFR §§270.10(h) and 270.30(b))

3. Permit Expiration and Continuation. Pursuant to 40 CFR §270.50, this permit shall be effective for a fixed term not to exceed ten years. Pursuant to 40 CFR §270.51, this permit and all conditions herein will remain in effect beyond the permit's expiration date if the Permittee has submitted a timely and complete application (see 40 CFR §270.10 and §§270.14 - 270.29) and through no fault of the Permittee, the Regional Administrator or Director has not issued a new permit under 40 CFR §124.15.

4. Need to Halt or Reduce Activity Not a Defense. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (40 CFR §270.30(c))

5. Duty to Mitigate. In the event of noncompliance with this permit, the Permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment. (40 CFR §270.30(d))

6. Proper Operation and Maintenance. The Permittee shall at all times properly operate and maintain all facilities and systems of treatment, monitoring, and control (and related appurtenances) which are installed

or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems when necesary to maintain compliance with the conditions of the permit. (40 CFR §270.30(e))

7. Duty to Provide Information. The Permittee shall furnish, within the specified time, any relevant information which the Regional Administrator or Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Regional Administrator or Director, upon request, copies of records required to be kept by this permit. (40 CFR §§270.30(h) and 264.74(a))

8. Inspection and Entry. Pursuant to 40 CFR §270.30(i), the Permittee shall allow the Regional Administrator or Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

   a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

   b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

   c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

   d. Sample or monitor, at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by RCRA, any substances or parameters at any location.

9. Monitoring and Records. Pursuant to 40 CFR §270.30(j), the Permittee shall comply with the following requirements.

   a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. All sampling and analysis shall be of adequate quality, scientifically valid, of known precision and accuracy, and of acceptable completeness, representativeness and comparability. Laboratory analysis of samples must be performed using an appropriate method for testing the parameter(s) of interest taking into account the samples' matrix. Use of the test methods found in the Agency publication, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, (SW-846), shall be used for: the EP toxicity test and the analytical methods used to determine the EP toxicity test analytes (40 CFR

§261.24); the Free Liquids Test (Method 9095) used to determine if free liquid is a component of a waste as a specific requirement for bulk and containerized wastes (40 CFR §264.213 and §265.213(d)); and the chemical analysis of wastes for hazardous waste incineration permits (40 CFR §270.62(b)(2)(i)(C)).

b. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by this permit, the certification required by §264.73(b)(9) of this chapter, and records of all data used to complete the application for this permit for a period of at least three (3) years from the date of the sample, measurement, report, certification or application. These periods may be extended by request of the Regional Administrator or Director at any time and are automatically extended during the course of any unresolved enforcement action regarding this facility. The Permittee shall maintain records from all ground-water monitoring wells and associated ground-water surface elevations, for the active life of the facility, and for disposal facilities for the post-closure care period as well.

c. Records of monitoring information shall specify:

(1) The date, exact place, and time of sampling or measurements;

(2) The individual(s) who performed the sampling or measurements;

(3) The date(s) analyses were performed;

(4) The individual(s) who performed the analyses;

(5) The analytical techniques or methods used; and

(6) The results of such analyses.

10. Reporting Planned Changes and Anticipated Noncompliance. The Permittee shall give notice to the Regional Administrator and Director, at least 30 days prior to any planned physical alterations or additions to the permitted facility. The Permittee shall give the Regional Administrator and Director at least 45 days advance notice of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. (40 CFR §§270.30(l)(1) and (2))

11. Transfer of Permit. In accordance with 40 CFR §270.30(l)(3), this permit is not transferable to any person, except after notice to the Regional Administrator and Director. The Regional Administrator or Director may require modification or revocation and reissuance of the permit to identify the new Permittee and incorporate such other requirements as may be necessary under RCRA (40 CFR §270.40).

At least 30 days prior to transferring ownership or operation of the facility during its operating life, the Permittee shall notify the new owner or operator in writing of the requirements of 40 CFR Parts 264 and 270, and at the same time shall send a copy of such notice to the Regional Administrator and Director.

12. Twenty-four Hour Reporting. Pursuant to 40 CFR §270.30(1)(6), the Permittee shall report to the the Regional Administrator and Director any noncompliance which may endanger health or the environment. Information shall be provided orally as soon as possible, but no later than twenty-four (24) hours from the time the Permittee becomes aware of the circumstances. This report shall include the following:

    a. Information concerning release of any hazardous waste or hazardous constituent that may cause an endangerment to public drinking water supplies.

    b. Any information of a release or discharge of hazardous waste, hazardous constituent or of a fire or explosion from the facility, which could threaten the environment or human health outside the facility. The description of the occurrence and its cause shall include:

        (1) Name, address, and telephone number of the owner or operator;

        (2) Name, address, and telephone number of the facility;

        (3) Date, time, and type of incident;

        (4) Name and quantity of material(s) involved;

        (5) The extent of injuries, if any;

        (6) An assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and

        (7) Estimated quantity and disposition of recovered material that resulted from the incident.

    c. A written submission shall also be provided to the Regional Administrator and Director within five (5) days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The Permittee need not comply with the five (5) day written notice requirement if the Regional Administrator and Director waive that requirement and the Permittee submits a written report within fifteen (15) days of the time the Permittee becomes aware of the circumstances.

13. Immediate Reporting of Releases. In accordance with the requirements of 40 CFR §264.56(d)(1) and (2), if the facility's emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human health, or the environment, outside the facility, he must report his findings as follows:

    a. If his assessment indicates that evacuation of local areas may be advisable, he must immediately notify appropriate local authorities. He must be available to help appropriate officials decide whether local areas should be evacuated; and

    b. He must immediately notify either the government official designated as the on-scene coordinator for that geographical area, (in the applicable regional contingency plan under 40 CFR Part 1510) or the National Response Center (800/424-8802). The report must contain the information required under 40 CFR §264.56(d)(2)(i) through (vi).

14. Other Noncompliance. The Permittee shall report all other instances of noncompliance not otherwise required to be reported above, at the time monitoring reports are submitted. The reports shall contain the information listed in permit condition I.I.12. (40 CFR §270.30(1)(10))

15. Other Information. Whenever the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Regional Administrator or Director, the Permittee shall notify the Regional Administrator or Director of such failure within 7 days. The Permittee shall submit the correct or additional information to the Regional Administrator or Director no later than 14 days of becoming aware of the deficiency. (40 CFR §270.30(1)(11))

16. Compliance Schedule. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date. (40 CFR §270.30(1)(5))

17. Biennial Report. Pursuant to 40 CFR §270.30(1)(9), a report must be submitted to the Regional Administrator or Director, as appropriate, covering facility activities by March 1 of odd numbered calendar years. The report shall contain the information required in 40 CFR §264.75.

18. Land Disposal Restriction. All activities of the Permittee which involve the land disposal of hazardous waste are subject to the Land Disposal Restriction (RCRA Sections 3004 (b)-(m)).

PART II

SPECIFIC CONDITIONS

A. CORRECTIVE ACTION FOR CONTINUING RELEASES

Section 3004(u) of RCRA (Section 206 of HSWA) and regulations promulgated as 40 CFR §264.101, require corrective action as necessary to protect human health and the environment for all releases of hazardous waste or hazardous constituents from any solid waste management unit, regardless of when wastes were placed in the unit, for all permits issued after November 8, 1984.

This permit requires the Permittee to conduct a Verification Investigation (VI) and, if necessary, a RCRA Facility Investigation (RFI) for suspected releases from specific solid waste management units (SWMUs) at the facility, and a Corrective Measure Study.

The Permittee may, at any stage of the investigation, propose corrective measures for the remediation of releases of hazardous waste or hazardous constituents. The Permittee must show to EPA's satisfaction that the subsurface conditions and contaminant plume have been adequately characterized and the proposed corrective measures will adequately remove, contain, or treat the released hazardous waste or hazardous constituents. Initiation or pursuit of such a demonstration by the Permittee shall not postpone or stay the requirements of this permit. Approval of such a demonstration by EPA shall allow the Permittee to dispense with certain stages of the investigation, as identified in EPA's approval of the demonstration. The permit shall be modified according to permit condition II.F. prior to implementation of corrective measures.

This permit requires the Permittee to conduct a VI for six solid waste management units (SWMUs): DuPont Road Landfill (unit A-1), River Bank Landfill (unit A-3), Anaerobic Digestion Ponds (Unit B-4), Polyacetal Products Incinerator (unit C-6), Injection Wells (unit F-11), and Burning Ground (unit H-13). The VI plan must be capable of enabling DuPont to determine if a release of hazardous waste or hazardous constituents has occurred or is likely to occur from these units. The VI plan must also provide sufficient information for EPA to determine if a RCRA Facility Investigation (RFI) is warranted. In addition, this permit provides for additional investigation and the selection of corrective action measures, should they be required.

Failure to submit the required information or falsification of any submitted information is grounds for termination of this permit (40 CFR §270.43). All information submitted must be certified as required by 40 CFR §270.11(d).

If EPA finds that further studies and/or corrective action measures are warranted beyond what is specified herein, EPA will propose a major permit modification and follow appropriate procedures required under RCRA which include a public comment period and a public hearing, if requested.

B. VERIFICATION INVESTIGATION (VI)

1. Within 45 calendar days of the effective date of this permit, the Permittee shall submit to EPA and the West Virginia Department of Natural Resources (WVDNR) a VI Work Plan. The VI Work Plan shall include the following information:

   a. The VI Work Plan shall be designed to accomplish the following objectives.

      (1) Investigate the release of hazardous waste or hazardous constituents from all SWMUs. The investigation shall include units A-1, A-3, B-4, C-6, F-11, H-13 (Burning Grounds) and any other SWMU known or suspected by the Permittee to be releasing hazardous waste or hazardous constituents. SWMU identifications are those used in the Permittee's June 5, 1985 SWMU information submittal.

      (2) Characterize the combustion products released during burning of polyacetal products in unit C-6.

      (3) Determine the need for further investigation and/or implementation of interim measures at the facility.

   b. VI Sampling Plan

      (1) The Permittee shall submit a VI Sampling Plan that includes, as a minimum, the following sampling and analysis work:

         (a) For Units A-1 (DuPont Road Landfill) and A-3 (River Bank Landfill):

            (i) Soil and ground-water samples are to be obtained from areas downgradient of or through the units where contamination is most likely to be detected. Upgradient or background samples should also be obtained.

            (ii) All surface seepage/leachate flows shall be analyzed. If surface seepage/leachate cannot be detected, subsurface leachate shall be collected from several locations within each landfill.

            (iii) Existing monitoring wells shall be evaluated to determine their capability to adequately represent releases from the landfills. A summary of available monitoring data shall be presented.

         (b) For Unit B-4 (Anaerobic Digestion Ponds):

            (i) Soil and ground-water samples are to be obtained from areas downgradient of the unit where contamination is most likely to be detected. Upgradient or background samples should also be obtained.

The sampling analysis should be coordinated/incorporated with the analysis of Unit A-3 (River Bank Landfill), due to the close proximity of the unit.

(c) For Unit C-6 (Polyacetal Product Incinerator):

Characterize the air emissions released from the incinerator process to identify any hazardous constituents.

(d) For Unit F-11 (Injection Wells):

(i) A description shall be provided of the nature of the problems encountered with injection well #1 and the reworking that was performed.

(ii) Existing monitoring wells shall be evaluated to determine their capability to adequately represent releases from the injection wells. A summary of available monitoring data shall be presented.

(e) For Unit H-13 (Burning Grounds):

Ground-water samples are to be obtained from the perimeter of the building constructed over the former Burning Grounds from areas most likely to detect contamination.

(2) The VI Sampling Plan shall provide for the analyses identified in Attachment 1 and any other hazardous constituent that is known or suspected to have been released from the unit.

(3) The VI Sampling Plan shall include the following information.

(a) Background - The Permittee shall identify current and historical site information which might have a bearing on the proposed sampling and data collection effort.

(b) Maps - The Permittee shall include all pertinent locations on maps and shall locate all sampling points.

(c) Rationale for sample locations and number of samples. The Permittee shall:

(i) Identify the specific sampling points for each SWMU for each potentially affected envrionmental media.

(ii) Identify the population of possible sampling locations and explain how these were narrowed down to specific sampling points.

(d) Unit-specific downgradient ground-water sampling points must be identified for each SWMU. These may be existing monitoring wells, new monitoring wells installed

specifically downgradient to the unit, or a method appropriate for one-time sampling of the groundwater. The Permittee may elect to replace the groundwater investigation with a soil gas investigation if the hazardous constituents of concern can be readily detected by soil gas analysis techniques.

(e) Soil sampling points - Soil samples shall be obtained from the path of the seepage/leachate flow and from any other area likely to show contamination from releases.

c. Quality Assurance/Quality Control

The Permittee shall submit a Quality Assurance Plan, Sample Collection Methods and Procedures Plan, to describe the sampling and the analytical protocols which will be used. They should be based on the EPA guidance listed in Attachment 2.

d. Community Relations Plan

Prepare a fact sheet describing the scope and objectives of the field activities. This fact sheet shall be mailed to all persons on the facility mailing list to be supplied by EPA and to the appropriate units of State and local governments at least ten business days prior to commencement of the field activities.

e. Safety Plan

The Permittee shall prepare a safety plan for each sampling activity. The Permittee shall consult appropriate guidance such as Standard Operating Safety Guides, USEPA, July 1988 (SOSG) and OSHA regulations at 29 CFR 1910 that explains how to develop a proper site safety plan.

While EPA may comment on the safety plan, EPA will not approve or disapprove the plan.

2. Verification Investigation (VI) Report

a. The Report is to contain all data organized in a logical sequence and include summaries of all findings, problems encountered during the investigation, actions taken to correct the problems, and copies of daily reports, inspections reports, laboratory/ monitoring data, etc. The report shall contain conclusions and recommendations. The selected recommendations shall be adequately justified. Possible recommendations include but are not limited to:

(1) No further action required,

(2) Continue monitoring where analytical results indicate that a threat may exist in the future;

(3) Conduct a RFI to characterize the rate and extent of releases; and

(4) Plan and implement interim measures at the facility. See permit condition II.C.

b. The criteria to be used to determine the need for further action shall be described.

3. Within 180 calendar days of EPA's approval of the VI Work Plan, the Permittee shall execute the Plan and submit the VI Report for EPA's approval. The Permittee shall also submit the VI Report to WVDNR.

4. Within 45 calendar days of the effective date of this permit, the Permittee shall submit to EPA and WVDNR the following available information for existing ground-water monitoring wells:

a. A description, map, and sampling schedule of all existing well locations, including a survey of each well's surface reference point and the elevation of the casing top;

b. Size and depth of wells;

c. Description of well intake design, including screen slot size and length, filter pack materials and method of filter-pack emplacement;

d. Type of well casing and screen materials.

e. Methods used to seal the well from the surface and prevent downward migration of contaminants through the well annulus;

f. Description of the methods or procedures used to develop the wells; and

g. Ground-water elevation in each well.

C. INTERIM MEASURES

1. If, at any time during the term of this permit, the Permittee discovers that releases of hazardous waste or hazardous constituents are affecting or will affect target populations or sensitive environments the Permittee shall:

a. Submit the following information concerning the release:

(1) Source(s), amount(s) and location(s);

(2) The concentration(s) of hazardous waste or hazardous constituents and, if known, the background level of each hazardous waste or hazardous constituent;

(3) The known or expected pathway through which the contamination is migrating or may migrate; and the extent, rate, and direction of contamination; and estimated quantities and/or volumes released; and

(4) The projected fate and transport, to the extent known.

b. Without doing either a risk assessment or an endangerment assessment, identify the following:

(1) the current and potential exposure pathway(s) (e.g., air, fire/explosion, groundwater, surface water, contact, ingestion);

(2) the location and demographics of populations potentially at risk from exposure;

(3) the potential effects of human exposure (short-and long-term effects);

(4) the nature of past and potential human exposure.

c. Identify potential environmental exposure and threats as:

(1) the media that have been and may be contaminated (e.g., groundwater, air, surface water);

(2) the likely short-term and long-term threats and effects on the environment.

d. An outline of proposed interim measures to temporarily or permanently arrest the release and which would expected to be a necessary component of the final remedy.

2. If EPA determines that a high priority release from a SWMU posing a threat to human health or the environment has occurred or is imminent, the Permittee may be required to implement interim measures. Such a requirement may result in a permit modification.

D. RCRA FACILITY INVESTIGATION (RFI)

1. Within 90 calendar days of receipt of EPA's approval of a Verification Investigation Report recommending a RCRA Facility Investigation (RFI), the Permittee shall submit to EPA and WVDNR, for EPA approval, a RFI Work Plan for the identified solid waste management units. The Permittee may perform the RFI in stages if the Permittee requests permission to do so and demonstrates to EPA's satisfaction that conducting the RFI in stages will expedite the process or otherwise augment protection of human health and the environment. The plan must be approved by EPA in accordance with condition II.E. of this permit. This plan shall meet the objectives and requirements specified in II.D.2 below.

2. The specifications for any RFI Plan required by this permit are the following:

   a. The RFI objectives:

      (1) Characterize the nature, extent, and rate of migration of releases from the SWMU(s) into ground water, soil or any other media identified;

      (2) Determine the criteria for and scope of corrective measures; and

      (3) Provide a detailed geologic and hydrogeologic characterization of the area surrounding and underlying the SWMU(s).

   b. RFI Work Plan provisions:

      (1) The RFI Work Plan shall identify the corrective measure(s) expected to be appropriate.

      (2) The RFI Work Plan shall include provisions for obtaining the following:

         (a) Local geologic characteristics for the area surrounding the unit which adequately describe the local subsurface geologic conditions, including stratigraphy (soil and unconsolidated sediment cover, bedrock, structural features, and formation's origins) and surficial geology (undifferentiated alluvial deposits);

         (b) A description of the regional hydrogeologic characteristics in the vicinity, including:
         - regional hydrogeologic flow patterns; and
         - areas of recharge and discharge;

         (c) An analysis of any topographic or geomorphic feature that might influence the ground-water flow system;

(d) Classification and description of the hydrogeologic properties of all the hydrogeologic units found at the facility (i.e., the aquifers and any intervening saturated and unsaturated units), including:
- hydraulic conductivity, porosity;
- texture, uniformity, lithology; and
- an interpretation of hydraulic interconnections between saturated zones;

(e) Using a topographic map as a base, and at least two perpendicular geologic cross sections for the unit and the surrounding area to describe the extent (depth, thickness, lateral extent) of all hydrogeologic units, an identification of:
- sand and gravel deposits in unconsolidated deposits;
- zones of significant fracturing or channeling in consolidated deposits;
- zones of higher or lower permeability that might direct or restrict the flow of contaminants;
- perched aquifers; and
- the uppermost aquifer and aquifers hydraulically interconnected beneath the unit;

(f) A description of water level or fluid pressure monitoring including:
- water level contour maps and vertical gradient sections;
- water level contour map using data from all ground-water monitoring wells at the facility;
- well or piezometer hydrographs;
- an interpretation of the flow system, including the vertical and horizontal components of flow; and
- an interpretation of any change in hydraulic gradients;

(g) A description of manmade influences that may affect the hydrogeology of the site, identifying:
- local water supply and production wells with an approximate schedule of pumping; and
- manmade hydraulic structures (e.g., pipelines, french drains, ditches);

(h) A summary of all surface water hydrology (water quality data, classification, commercial and/or recreational use); and

(i) A Health Assessment containing the following:
- identification of the potential health effects (toxic, carcinogenic, mutagenic, or teratogenic effects) of known contaminants from the solid waste management unit; and
- identification of any potential environmental effects of known contaminant(s) from the solid waste management unit.

(3) the RFI Work Plan shall also include a Sampling and Analysis Plan for each unit(s) to meet the requirements of this permit (see permit conditions II.D.3, II.D.4, and II.D.5.). EPA and DNR reserve the right to require that split or duplicate samples be taken. Where such split or duplicate samples are taken and analyzed, EPA and WVDNR will provide the results to the Permittee for evaluation in the RFI.

(4) the RFI Work Plan shall identify the criteria to be used to determine if further action is necessary to protect human health and the environment. Options include but are not necessarily limited to:

(a) Continued monitoring;

(b) Corrective Measures Study; or

(c) No further action required.

(5) When developing RFI Plans and Reports the Permittee shall consider the RCRA guidance documents in effect at the time the plans and reports are prepared and shall consult with EPA to determine the appropriate sections of the guidance to be used.

(6) When releases from more than one SWMU may overlap, the individual SWMUs may be combined into a study area. The RFI investigation then may be conducted for the study area provided that the scope of the investigation is adequate to evaluate the extent of contamination of all hazardous waste and hazardous constituents identified in the verification sampling for all SWMUs in the group.

3. Ground-Water Monitoring Requirements - the Permittee shall submit a monitoring plan consisting of the following:

a. A ground-water monitoring well network which shall meet the following requirements:

(1) The downgradient wells must be capable of immediately detecting any statistically significant amounts of hazardous waste or hazardous constituents that might migrate from each solid waste management unit into the ground water;

(2) The monitoring system must be designed to operate for a period of 30 years;

(3) Downgradient wells must monitor both the perched water zone and the water table aquifer due to the probable hydraulic connection between the zones; and

(4) The plan shall provide a description of the monitoring wells. When developing this information, the Permittee shall refer to the Technical Enforcement Guidance Document (EPA), September 1986, to determine methods and materials that are acceptable to EPA. The information provided shall include:

(a) Description and map of well locations, a proposal for a survey of each well's surface reference point and the elevation of the top of its casing;

(b) Size and estimated depth of each well;

(c) Description of well intake design, including screen-slot size and length, filter pack materials, and method of filter pack emplacement;

(d) Type of well casing and screen materials. The selection of well materials shall be made in light of the parameters to be monitored and the nature of the leachate that could potentially migrate from the unit. The well materials selected shall minimize the potential of absorption and desorption of constituents from/into the samples; and shall maintain their integrity for the expected life of the system;

(e) Description of methods used to seal the well from the surface and prevent downward migration of contaminants through the well annulus; and

(f) Description of the methods and procedures used to develop the well.

b. The Permittee shall select a Sampling Program and conduct sampling and analysis activities capable of yielding representative samples of ground water. The Sampling Program shall include a list of parameters capable of detecting leakage of hazardous waste or hazardous constituents into ground water. The parameters shall be representative of hazardous constituents at least as mobile as the most mobile hazardous constituents that could reasonably be derived from the waste, and should be chosen after considering:

(1) The types, quantities, and concentrations of hazardous constituents in waste managed at the SWMU and hazardous constituents which may be released to the ground water from process areas located immediately adjacent to SWMUs;

(2) The mobility, stability, and persistence of hazardous constituents or their reaction products in the unsaturated zone beneath the waste management area;

(3) The concentration of and the natural variation, known or suspected, of the proposed monitoring parameters in background media; and

The list must include the basis for selecting each proposed indicator parameter, including any analysis or calculations performed. The basis for selection shall, where possible, include chemical analysis of the unit's waste and/or leachate as appropriate. The list shall also include parameters to characterize the specific chemistry of ground water at the site including, but not limited to, the major anions and cations that make up the bulk of dissolved solids in water (i.e., chloride, iron, manganese, sodium, sulfate, calcium, magnesium, potassium, nitrate, phosphate, silicate and ammonia).

c. The Permittee shall submit a Sampling and Analysis Plan which includes the following:

(1) Field Sampling Procedures including the following:

(a) Well evacuation procedures including volume to be evacuated prior to sampling and handling procedures for purged well water;

(b) Sample withdrawal techniques (Sampling equipment and materials (tubing, rope, pumps, etc.) shall be selected to yield representative samples in light of parameters being monitored. The sampling protocol will include field measurement of pH and temperature for each sample);

(c) Sample handling and preservation techniques;

(d) Procedures for decontaminating sampling equipment between sampling events including disposal of decontamination wastes;

(e) Chain of custody procedures to be used for all phases of sample management;

(f) Conditions under which sampling should/should not occur, e.g, weather; and

(g) Documentation to include sampling date and time, location and description of site, sampling location and depth, sampling conditions, weather conditions, ambient and sample temperature, sample appearance, decontamination procedures, sample preservation procedure, equipment calibration, etc.

(2) Standard Operating Procedures include the following:

(a) Procedures for replicate sampling and trip blanks; and

(b) Chain of custody forms, shipment, security, etc.

(3) Quality Assurance Plan, Sample Collection Methods and Procedures Plan, to describe the sampling and the analytical protocols which will be used (based on the EPA guidance listed in Attachment 2);

(4) Procedures for performing a comparison of upgradient and downgradient ground water to determine whether contamination has occurred. The procedures should include:

(a) A proposed method (statistical or otherwise) to compare upgradient and downgradient well water that provides a reasonable balance between the probability of falsely identifying and failing to identify contamination;

(b) Background to be determined at each sampling event consistent with applicable requirements contained in the West Virginia Hazardous Waste Management Regulations; and

(c) A proposed method of data organization and presentation.

d. The Permittee shall submit a time schedule in accordance with which the Permittee shall install the ground-water monitoring well network, take the first round of samples, and submit a report.

4. Soil Sampling Requirements - Any soil sampling plan shall include a description of the procedures the Permittee proposes to use to gather data sufficient to characterize the vertical and horizontal nature, rate of movement, and extent of releases of hazardous waste or hazardous constituents into the soil. At a minimum, this description shall include the following:

a. The proposed number and locations of borings and/or other soil sampling techniques to obtain background soil quality, and a justification showing how the network will give representative indications of background soil characteristics;

b. The proposed number and location of borings and/or other soil sampling techniques in relation to each SWMU, and a justification showing how the proposed network will produce data which is adequate to give a reliable indication of soil characteristics;

c. The proposed depth for each boring and/or other soil sampling technique and a justification for choosing the depth;

d. The proposed procedures for conducting each boring and/or other soil sampling techniques and a justification showing how the proposed procedures will provide a representative sample of soil, based on available information on the geologic characteristics of the site and the parameters for which each sample is to be analyzed;

e. The proposed sampling frequency and a justification for the frequency proposed;

f. The proposed sampling plan shall include, at a minimum, procedures for the following:

   (1) sample collection;

   (2) sample collection frequency;

   (3) sample preservation and shipment (i.e., sample containers, sample preservation);

   (4) analytical procedures (i.e., analytical methods, laboratory selection);

   (5) chain of custody; and

   (6) field and laboratory quality assurance/quality control protocols which shall conform to EPA approved practices;

g. Proposed laboratory analytical techniques and chain of custody procedures which shall conform to EPA approved methods; and

h. Proposed procedures for providing split or duplicate samples to the EPA.

5. Surface Water Sampling Requirements - Any surface water sampling plan shall include an evaluation of the surface water bodies in the vicinity of the facility that could potentially be affected by releases from the SWMUs being investigated. At a minimum, the Permittee shall provide the following information:

   a. Description of the temporal and permanent surface water bodies including:

      (1) For lakes and estuaries: location, elevation, surface area, inflow, outflow, depth, temperature stratification, and volume;

      (2) For impoundments: location, elevation, surface area, inflow, depth, volume, freeboard, construction, and purpose;

      (3) For streams, ditches, and channels: location, elevation, flow, velocity, depth, width, seasonal fluctuations, and flooding tendencies (i.e., 100-year storm event); and

      (4) Drainage patterns.

   b. Description of the chemistry of the background surface water and sediments. This includes but is not limited to determining the pH, total dissolved solids, total suspended solids, biochemical oxygen demand, alkalinity, total organic halogen, conductivity, dissolved oxygen profiles, nutrients (calcium, magnesium, potassium, chloride, sulfate, ammonia, nitrate, nitrite, phosphate), chemical oxygen demand, total organic carbon, specific contaminant concentrations, etc.

   c. Description of sediment characteristics including:

      (1) Deposition area;

      (2) Thickness profile; and

      (3) Physical and chemical parameters (e.g., grain size, density, organic carbon content, ion exchange capacity, pH, etc.).

   d. Characterization of the contamination in surface water bodies and sediment that result from contaminant releases. At a minimum, the Permittee shall provide the following information:

      (1) A description of the horizontal and vertical extent of any immiscible or dissolved contamination by hazardous waste or hazardous constituents originating from the SWMUs, and the extent of contamination in underlying sediments;

(2) The horizontal and vertical direction of contaminant movement;

(3) The contaminant velocity;

(4) An evaluation of the physical, biological and chemical factors influencing contaminant movement;

(5) An extrapolation of future contaminant movement; and

(6) A description of the chemistry of the contaminated surface waters and sediments. This includes determining the pH, total dissolved solids, and specific contaminant concentrations, as identified in previous investigations.

e. A description of the procedures the Permittee proposes to use to gather data sufficient to characterize the vertical and horizontal nature, rate and extent of releases of hazardous waste or hazardous constituents released from SWMUs into surface water bodies and associated sediments. At a minimum, this description shall include the following:

(1) The proposed number and location of surface water transects and sediment sampling points, and a justification showing how the proposed network will produce data which is adequate to determine surface water and sediment quality;

(2) The proposed depth of sediment sampling points and a justification for choosing the depth;

(3) The proposed design for each surface water transect and a justification showing how the proposed design will provide a representative sample of surface water based on the hydraulic characteristics of the surface water body and the parameters being analyzed;

(4) The proposed sampling frequency and the length of the sampling period and a justification for them;

(5) Proposed laboratory analytical techniques and chain of custody procedures which conform to EPA approved methods;

(6) A description of the sampling procedures including:

aa) sample collection;

bb) sample collection frequency;

cc) sample preservation and shipment (i.e., sample containers, sample preservation);

dd) analytical procedures (i.e., analytical methods, laboratory selection);

ee) chain of custody; and

ff) field and laboratory quality assurance/quality control protocols which shall conform with EPA approved practices.

(7) Proposed procedures for providing split samples to the EPA and WVDNR; and

(8) Proposed field screening techniques for volatiles (OVA and/or HNu) or metals (portable XRF).

6. Within 180 calendar days of receipt of EPA's approval of the RFI Work Plan, the Permittee shall implement the plan and submit a RFI Report to EPA for approval. The implementation time may extend beyond 180 days if a staged RFI is approved by EPA, in which case, the RFI shall be implemented in accordance with a schedule approved by EPA. If a Corrective Measures Study is recommended, the permittee shall include in the RFI Report a detailed study plan and a time schedule for completing the study. The Corrective Measure Study is intended to identify, screen and develop the alternative(s) for removal, containment, treatment and/or other remediation of the hazardous waste or hazardous constituent release(s) from a SWMU(s).

7. Corrective Measures Study Report - upon receipt of EPA's approval of a RFI Report recommending a Corrective Measures Study, the Permittee shall submit a Corrective Measures Study Report to EPA and WVDNR according to the approved schedule. Upon EPA's approval of the Corrective Measures Study Report, the permit shall be modified according to permit condition II.F. for the selected corrective measure alternative.

E. SUBMISSIONS TO AGENCY AND DISPUTE RESOLUTION

1. The Permittee shall submit to the Regional Administrator at least three copies of any submittal required by EPA's portion of this permit. All submittals shall be signed and certified pursuant to 40 CFR §§270.30(k) and 270.11.

2. All plans, reports, schedules, and other submissions required by the terms of EPA's portion of this permit are, upon approval by the Regional Administrator, incorporated into this permit. Any noncompliance with such approved studies, schedules, plans, reports, or other submissions shall be deemed noncompliance with this permit. In the event of unforeseen circumstances beyond the control of the Permittee which could not be overcome by due diligence, the Permittee may request a change, subject to Regional Administrator approval, in the previously approved plans, reports, schedules or other submissions. This request may result in a modification of the permit.

3. In the event of EPA disapproval in whole or in part of any plan, schedule, report or other submission required by this permit, the Regional Administrator shall specify any deficiencies in writing. The Permittee shall modify the plan, schedule, report or other submission to correct the deficiencies within thirty (30) days from receipt of disapproval by the Regional Administrator. The modified plan, schedule, report or other submission shall be submitted to EPA in writing for review. Should the Permittee take exception to all or part of EPA's disapproval, the Permittee shall submit to the Regional Administrator a written statement of grounds for the exception within fifteen (15) days from receipt of EPA's disapproval. Representatives of EPA and the Permittee may confer in person or by telephone in an attempt to resolve any disagreement. In the event that resolution is not reached within forty-five (45) days from receipt of disapproval by the Regional Administrator, the Permittee shall revise the plan, schedule, report or other submission as required by EPA and resubmit the revised plan, schedule, report or other submission by the date required by EPA. The Permittee, upon submission of the revised plan, report, schedule or other submission shall state whether or not it agrees in whole or in part with the revised plan, schedule, report or other submission. In the event of any disagreement, the permit shall be modified in accordance with 40 CFR §270.41.

F. PERMIT MODIFICATION

The Regional Administrator will modify the permit in accordance with 40 CFR §270.41 and Section 3005(c) of RCRA in the event that investigations required in this permit, or any other information available to the Regional Administrator, identify solid waste management units that require corrective measures. Financial assurance by the Permittee is required if corrective measures are necessary (40 CFR §264.101(b). This paragraph does not limit the Regional Administrator's authority to otherwise modify this permit in accordance with 40 CFR Part 270, Subpart D.

G. CERTIFICATION of WASTE MINIMIZATION

The Permittee shall maintain a certification at the facility containing the information required by 40 CFR §264.73(b)(9).

H. RECORDKEEPING AND REPORTING

The Permittee shall maintain a written operating record at the facility in accordance with 40 CFR Part 264, Subpart E.

I. CLOSURE AND NOTIFICATION REQUIREMENTS

1. Closure

a. When the Permittee plans to replace or eliminate solid waste management units currently in use identified in Attachment 1, the subject units shall be closed in a manner that:

(1) Minimizes the need for further maintenance; and

(2) Eliminates post-closure escape of hazardous waste or hazardous constituents.

b. Upon completion of such closure, the Permittee shall maintain a record of the closure activity in the facility operating record.

2. Required Notices

a. One year after the effective date of this permit and annually thereafter, the Permittee shall place in the facility operating record a description of all releases of hazardous waste or hazardous constituents from any solid waste management units. All such releases shall be reported to EPA on a quarterly basis, initiating with the effective date of this permit.

PART III - INCINERATOR OPERATIONS

1. The Permittee shall control the total feed of hazardous metals to the hazardous waste incinerator as specified below. The allowable feed rates apply to the combined total of all incinerator feeds, regardless of whether they are specifically regulated as RCRA hazardous wastes, and to all chemical forms of the listed metals.

Metal	Maximum Feed Rate (pounds per hour)
Antimony	0.031
Barium	5.2
Lead	0.0094
Mercury	0.031
Silver	0.31
Thallium	0.031

2. For the following metals only, the maximum feed rate of all four metals shall be set such that:

$$\sum_{i=1}^{n} \frac{w_i}{A_i} \leq 1.0$$

where: w_i = the actual feed rate of the ith metal constituent

A_i = the allowable feed rate of the ith constituent (specified below)

n = the number of these metals present in the total incinerator feed

Metal	Maximum Feed Rate (pounds per hour)
Arsenic	0.00024
Beryllium	0.00044
Cadmium	0.00058
Chromium	0.000087

3. The total feed rate to the incinerator of chlorine in any chemical form shall not exceed 0.26 pounds per hour.

4. Within 60 days after the effective date of this permit, the Permittee shall submit to EPA for approval a detailed waste management plan that is sufficient to ensure compliance with the feed limitations specified above. This plan shall include, but is not limited to:

   a. waste sampling and analysis techniques and frequencies,

   b. management procedures, including quality control methods, to ensure that constituent feed rates listed above will not be exceeded at any time, and

   c. record keeping practices.

DATE SIGNED

STEPHEN R. WASSERSUG, DIRECTOR
HAZARDOUS WASTE MANAGEMENT DIVISION

ATTACHMENT 1

ANALYTICAL REQUIREMENTS FOR VERIFICATION INVESTIGATION

ANALYTICAL REQUIREMENTS FOR UNITS A-1, A-3, B-4, H,13

INORGANICS , VOLATILES & SEMIVOLATILES

INORGANICS

HAZARDOUS CONSTITUENT	CAS NO.	PQL* SOIL mg/kg	PQL WATER mg/l	SUGGESTED METHOD
Antimony	7440-36-0	2E+1	3E-2	6010(s) 7041 (w)
Arsenic	7440-38-2	3E+1	1E-2	6010(s) 7060(w)
Barium	7440-39-3	1E0	2E-2	6010
Cadmium	7440-43-9	2E0	1E-3	6010(s) 7131(w)
Chromium	7440-47-3	4E0	1E-2	6010(s) 7191(w)
Lead	7439-92-1	2E0	1E-2	6010(s) 7421(w)
Mercury	7439-97-6	1E-1	2E-3	7470
Nickel	7440-02-0	3E0	5E-2	6010
Selenium	7782-49-2	4E+1	2E-2	6010(s) 7740(w)
Silver	7440-22-4	4E0	2E-3	6010(s) 7761(w)
Cyanide (amenable)		4E-2	4E-2	9010

* Pratical Quantitation Limits

VOLATILES & SEMIVOLATILES

HAZARDOUS CONSTITUENT	CAS NO.	PQL SOIL mg/kg	PQL WATER mg/l	SUGGESTED METHOD
Acetone	67-64-1	1E-1	1E-1	8240
Acrolein	107-02-8	5E-3	5E-3	8240
Acrylonitrile	107-13-1	5E-3	5E-3	8240
Anthracene	120-12-7	3E-1	1E-2	8270
Benzene	71-43-2	5E-3	5E-3	8260 (8240)
Benzo[a]anthracene	56-55-3	3E-1	1E-2	8270
Benzo[b]fluoranthene	205-99-2	3E-1	1E-2	8270
Benzo[k]fluoranthene	207-08-9	3E-1	1E-2	8270
Benzo[a]pyrene	50-32-8	3E-1	1E-2	8270
Bis(2-chloroethoxy) methane *syn.* Dichloromethoxy ethane	111-91-1	3E-1	1E-2	8270
Bis(2-chloroethyl) ether *syn.* Dichloroethyl ether	111-44-4	3E-1	1E-2	8270
Bis(2-chloroisopropyl) ether *syn.* Dichloroisopropyl ether	108-60-1	3E-1	1E-2	8270
Bis(2-ethylhexyl) phthalate *syn.* Diethylhexyl phthalate	117-81-7	3E-1	1E-2	8270
Bromodichloromethane	75-27-4	5E-3	5E-3	8260 (8240)
Bromoform *syn.* Tribromomethane	75-25-2	5E-3	5E-3	8260 (8240)
4-Bromophenyl phenyl ether	101-55-3	3E-1	1E-2	8270
Butyl benzyl phthalate	85-68-7	3E-1	1E-2	8270
Carbon disulfide	75-15-0	5E-3	5E-3	8240
Carbon tetrachloride	56-23-5	5E-3	5E-3	8240
p-Chloroaniline	106-47-8	3E-1	1E-2	8270
Chlorobenzene	108-90-7	5E-3	5E-3	8260 (8240)
p-Chloro-m-cresol	59-50-7	3E-1	1E-2	8270
Chloroethane *syn.* Ethyl chloride	75-00-3	1E-2	1E-2	8240
Chlorodifluoromethane	74-97-5	5E-3	5E-3	8260 (8240)
Chloroform	67-66-3	5E-3	5E-3	8260
2-Chloronaphthalene	91-58-7	3E-1	1E-2	8270
2-Chlorophenol	95-57-8	3E-1	1E-2	8270
Chrysene	218-01-9	3E-1	1E-2	8270
m-Cresol	108-39-4	3E-1	1E-2	8270
o-Cresol	95-48-7	3E-1	1E-2	8270
p-Cresol	106-44-5	3E-1	1E-2	8270
Dibenz[a,h]anthracene	53-70-3	3E-1	1E-2	8270
Di-n-butyl phthalate	84-74-2	3E-1	1E-2	8270
o-Dichlorobenzene	95-50-1	1E-2	1E-2	8260 (8270)
m-Dichlorobenzene	541-73-1	5E-3	5E-3	8260 (8270)
p-Dichlorobenzene	106-46-7	5E-3	5E-3	8260 (8270)
3,3'-Dichlorobenzidine	91-94-1	1E0	2E-2	8270
Dichlorodifluoromethane	75-71-8	5E-3	5E-3	8260 (8240)
1,1-Dichloroethane	75-34-3	5E-3	5E-3	8260 (8240)
1,2-Dichloroethane *syn* Ethylene dichloride	107-06-2	5E-3	5E-3	8260 (8240)
1,1-Dichloroethylene	75-35-4	5E-3	5E-3	8260 (8240)
trans-1,2-Dichloroethylene	156-60-5	5E-3	5E-3	8260 (8240)
2,4-Dichlorophenol	120-83-2	3E-1	1E-2	8270
1,2-Dichloropropane	78-87-5	5E-3	5E-3	8260 (8240)
cis-1,3-Dichloropropene	10061-01-5	1E-2	1E-2	8240
trans-1,3-Dichloropropene	10061-02-6	1E-2	1E-2	8240
Diethyl phthalate	84-66-2	3E-1	1E-2	8270
2,4-Dimethylphenol	105-67-9	3E-1	1E-2	8270
Dimethyl phthalate	131-11-3	3E-1	1E-2	8270

VOLATILES & SEMIVOLATILES

HAZARDOUS CONSTITUENT	CAS NO.	PQL SOIL mg/kg	PQL WATER mg/l	SUGGESTED METHOD
4,6-Dinitro-o-cresol	534-52-1	5E0	5E-2	8270
2,4-Dinitrophenol	51-28-5	2E0	5E-2	8270
2,4-Dinitrotoluene	121-14-2	3E-1	1E-2	8270
2,6-Dinitrotoluene	606-20-2	3E-1	1E-2	8270
Di-n-octyl phthalate	117-84-0	3E-1	1E-2	8270
Ethylbenzene	100-41-4	5E-3	5E-3	8260 (8240)
Fluoranthene	206-44-0	3E-1	1E-2	8270
Formaldehyde	50-00-0	5E-1	1E-2	8315
Formic acid	64-18-6	2E-1	2E-1	8015
Hexachlorobenzene	118-74-1	3E-1	1E-2	8270
Hexachlorobutadiene	87-68-3	5E-3	5E-3	8260 (8120)
Hexachlorocyclopentadiene	77-47-4	3E-1	1E-2	8270
Hexachloroethane	67-72-1	3E-1	1E-2	8270
Indeno(1,2,3-cd)pyrene	193-39-5	3E-1	1E-2	8270
Methyl bromide *syn.* Bromomethane	74-83-9	1E-2	1E-2	8260 (8240)
Methyl chloride *syn.* Chloromethane	74-87-3	1E-2	1E-2	8260 (8240)
Methylene chloride *syn.* Dichloromethane	75-09-2	5E-3	5E-3	8240
Methyl ethyl ketone *syn.* 2-Butanone	78-93-3	1E-1	1E-1	8240
Methyl isobutyl ketone *syn.* 4-Methyl-2-pentanone	108-10-1	1E-1	1E-1	8240
Methyl methacrylate	80-62-6	3E-2	3E-2	8240
Methylene chloride *syn* Dichloromethane	75-09-2	5E-3	5E-3	8240
Naphthalene	91-20-3	3E-1	1E-2	8270
o-Nitroaniline	100-01-6	1E0	2E-2	8270
Nitrobenzene	98-95-3	3E-1	1E-2	8270
o-Nitrophenol	100-02-7	3E0	5E-2	8270
N-Nitrosodiphenylamine	86-30-6	3E-1	1E-2	8270
N-Nitrosodi-n-propylamine	621-64-7	3E-1	1E-2	8270
Pentachlorophenol	87-86-5	2E0	5E-2	8270
Phenanthrene	85-01-8	3E-1	1E-2	8270
Phenol	108-95-2	3E-1	1E-2	8270
Pyrene	129-00-0	3E-1	1E-2	8270
1,1,1,2-Tetrachloroethane	630-20-6	5E-3	5E-3	8260 (8240)
1,1,2,2-Tetrachloroethane	79-34-5	5E-3	5E-3	8260 (8240)
Tetrachloroethylene	127-18-4	5E-3	5E-3	8260 (8240)
Toluene	108-88-3	5E-3	5E-3	8260 (8240)
1,2,4-Trichlorobenzene	120-82-1	1E-2	1E-2	8260 (8270)
1,1,1-Trichloroethane	71-55-6	5E-3	5E-3	8260 (8240)
1,1,2-Trichloroethane	79-00-5	5E-3	5E-3	8260 (8240)
Trichloroethylene	79-01-6	5E-3	5E-3	8260 (8240)
Trichlorofluoromethane	75-69-4	5E-3	5E-3	8260 (8240)
Trichloronaphthalene	1321-65-9	3E-1	1E-2	8270
2,4,5-Trichlorophenol	95-95-4	2E0	5E-2	8270
2,4,6-Trichlorophenol	88-06-2	6E-1	1E-2	8270
Vinyl chloride	75-01-4	1E-2	1E-2	8240

ANALYTICAL REQUIREMENTS FOR UNIT C-6

VOLATILES & SEMIVOLATILES

HAZARDOUS CONSTITUENT	CAS NO.
Acrolein	107-02-8
Acrylonitrile	107-13-1
Benzene	71-43-2
Bis(2-ethylhexyl) phthalate *syn.* Diethylhexyl phthalate	117-81-7
m-Cresol	108-39-4
o-Cresol	95-48-7
p-Cresol	106-44-5
Diethyl phthalate	84-66-2
2,4-Dinitrotoluene	121-14-2
Ethylbenzene	100-41-4
Methyl ethyl ketone *syn.* 2-Butanone	78-93-3
Naphthalene	91-20-3
p-Nitrophenol	100-02-7
Phenol	108-95-2
Toluene	108-88-3
Xylene (total)	1330-20-7

ATTACHMENT 2

QA / QC GUIDANCE

Attachment 2

U.S. EPA, September, 1986. Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods 3rd Edition. Office of Solid Waste. EPA/SW-846. GPO No. 955-001-00000-1 Washington, D.C. 20460.

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FACT SHEET
FOR HAZARDOUS WASTE MANAGEMENT FACILITY PERMIT
E. I. du Pont de Nemours & Company - Parkersburg Plant
WVD 04 587 5291

This fact sheet has been developed for EPA's portion of the draft Resource Conservation and Recovery Act (RCRA) permit which EPA and the State of West Virginia intend to issue to E. I. du Pont de Nemours & Company (Permittee), Parkersburg plant, for its hazardous waste management facility located on DuPont Road in Parkersburg, West Virginia 26102. The full RCRA permit is comprised of EPA's permit, which addresses the provisions of the Hazardous and Solid Waste Amendments of 1984 (HSWA), and the State of West Virginia's permit, which addresses that portion of RCRA for which the State of West Virginia is authorized. This fact sheet was prepared in accordance with the requirements of 40 CFR §124.8.

The draft permit for which comments are now being solicited is a revised draft permit. The original draft permit was proposed by public notice on November 20, 1985, in anticipation of the issuance of a RCRA operating permit by the State of West Virginia. The state permit was delayed; therefore, EPA did not issue a final permit at that time. The draft permit has been revised to incorporate more specific and directed investigation requirements, additional information provided by the permittee regarding the solid waste management units, and limits on the emission of certain metals and hydrogen chloride from the hazardous waste incinerator.

A. PURPOSE OF THE PERMITTING PROCESS

The purpose of the permitting process is to afford the Environmental Protection Agency (EPA), other governmental agencies, and interested citizens the opportunity to evaluate the ability of the Permittee to comply with the applicable hazardous waste management requirements promulgated under the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA), 42 U.S.C. §§6901-6987. EPA is required to prepare a draft permit which sets forth in one concise document all the applicable requirements with which the Agency intends to require the Permittee to comply during the ten-year duration of the permit. The public is given forty-five (45) days to review and comment on the draft permit conditions prior to EPA taking any final action on EPA's draft permit.

B. PROCEDURES FOR REACHING A FINAL DECISION

Section 7004(b) of RCRA and 40 CFR §124.10 require that the public be given forty-five (45) days to comment on each draft permit prepared under the Resource Conservation and Recovery Act. The comment period will begin on August 18, 1989 and will end on October 2, 1989. Any person interested in commenting on this draft permit must do so within this forty-five (45) day comment period.

A public hearing has been tentatively scheduled for 6 PM on October 5, 1989 at the City of Parkersburg Municipal Building, City Council Chambers, 2nd Floor, Second and Avery Streets, Parkersburg, West Virginia. This hearing will be held if, and only if, a hearing is requested in writing by October 2, 1989. EPA will determine by October 2, 1989 if a public hearing will be held. After October 2, 1989, any interested party may contact Ms. Maureen Essenthier at the EPA address below or call (215) 597-9287 to find out if a public hearing will be held as tentatively scheduled.

All persons wishing to comment on any of the permit conditions should submit their comments in writing to the Environmental Protection Agency (EPA), Region III, 841 Chestnut Building, Philadelphia, Pennsylvania 19107, Attention: Ms. Maureen Essenthier, General States Permits Section (3HW52). Comments must include all reasonably available references, factual grounds and supporting material.

When making a determination regarding the issuance of this draft permit to the E. I. du Pont de Nemours & Company, EPA will consider all written comments received during the comment period, oral and written statements received during the public hearing (if held), the requirements of the applicable hazardous waste regulations of 40 CFR Parts 124, 260-264, 268, and 270, the Agency's permitting policies, and HSWA.

When EPA makes a final permit decision to issue, deny or modify this draft permit, notice will be given to the applicant and each person who submitted written comments or requested notice of the final decision. The final permit decision shall become effective thirty (30) days after the service of notice of the decision unless a later date is specified or review is requested under 40 CFR §124.19. If no comments request a change in this draft permit, the final permit shall become effective immediately upon issuance.

Contact person for the E. I. du Pont de Nemours & Company Parkersburg Plant draft permit is:

Ms. Maureen Essenthier (3HW52)
U.S. Environmental Protection Agency
Region III
841 Chestnut Building
Philadelphia, Pennsylvania 19107
215-597-9287

C. HAZARDOUS AND SOLID WASTE AMENDMENTS

Continuing Releases at Permitted Facilities

Background

As part of the RCRA permit, EPA regulates solid waste management units (SWMUs) subject to the corrective action provision of HSWA. The State of West Virginia has not been delegated authority under HSWA to regulate these units. A solid waste management unit is any active or inactive unit at the facility from which hazardous waste

or hazardous constituents might migrate, irrespective of when waste was placed in the unit or whether the unit was intended for the management of solid and/or hazardous waste.

One of the most important provisions of the Hazardous and Solid Waste Amendments of 1984 (HSWA) is the requirement for corrective action for continuing releases. This provision is established in Section 3004(u) of RCRA (Section 206 of HSWA) implemented as regulation 40 CFR §264.101, 50 Fed. Reg. 28747 (July 15, 1985). Section 3004(u) provides as follows:

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

The intent of Congress in establishing this permit requirement was to correct a perceived shortcoming in the existing statute and RCRA regulations, which allowed permits to be issued to facilities at which environmental contamination was occurring or had occurred, without the permit addressing that contamination. All permit applicants must now (a) identify all solid waste management units (SWMUs) at the facility, (b) identify any releases that have occurred or are occurring from those units, (c) take appropriate corrective action to cleanup those releases, and (d) demonstrate financial assurance for those corrective actions. The provision on continuing releases was effective on the date of enactment of HSWA (November 8, 1984). Thus, a permit issued after that date must address this provision.

The basic standard for imposing corrective action at the DuPont-Parkersburg plant is protection of human health and the environment. The permit will address corrective action when there is or has been a probable release at the facility that poses a threat to human health and the environment. A substantial threat to human health and the environment is assumed if there is a release or likelihood of a release from a solid waste management unit at the DuPont-Parkersburg plant into the air, surface water, ground water, or soil.

Implementation

The process of implementing Section 3004(u) of RCRA takes place in three stages, with each stage consisting of several specific steps, as follows:

1. RCRA Facility Assessment.

   a. Submission of solid waste management unit information by applicant.

   b. Evaluation of solid waste management unit information submitted by applicant to determine the possibility or extent of releases.

   c. Performance of Site Investigation.

2. RCRA Facility Investigation and Corrective Measures Study.

   a. Limited investigation by owner/operator to identify or verify releases.

   b. RCRA Facility Investigation, if necessary, by owner/operator to characterize nature, extent, and rate of migration of the release.

   c. Development of a proposed program of corrective measures, if necessary.

3. Corrective Measures Implementation.

   a. Establishing the program for corrective measures.

   b. Demonstration of financial assurance.

   c. Conducting corrective measures.

The RCRA Facility Assessment has been completed. Solid waste management unit information was developed through DuPont's permit applications and information submitted regarding solid waste management units at the facility. A site inspection was conducted by EPA representatives on August 30, 1985. The revised draft permit contains conditions requiring DuPont to perform further investigations at several SWMUs. As these activities are completed, EPA will evaluate the results and determine if further action is warranted. If corrective measures are warranted, EPA will propose a major permit modification and follow appropriate procedures, which include a public notice period and, possibly, a public hearing.

Other Provisions

A number of other provisions in HSWA became effective November 8, 1984. Provisions concerning the standards for owners and operators of hazardous waste management facilities and provisions concerning general permit conditions were promulgated as final regulations on July 15, 1985 (50 Fed. Reg. 28742). Two provisions, in addition to that pertaining to corrective action for continuing releases, apply to this draft permit.

The provision in Section 3005(c)(3) of RCRA (Section 212 of HSWA), implemented at 40 CFR §270.32(b)(2), authorizes EPA or the State to establish any term or condition in the permit determined necessary to protect human health and the environment (see Permit Condition I.C.). In conjunction with that requirement, emission limits for certain metals have been established for the facility's hazardous waste incinerator (see Permit Condition III.).

Section 3005(h) of RCRA (Section 224 of HSWA) requires that, as of September 1, 1985, permittees of hazardous waste management facilities located on the premises of the generator must certify that certain waste minimization practices have been established. This requirement has been incorporated into the regulation concerning the Operating Record of the facility (40 CFR §264.73(b)(9). Regulation 40 CFR § 270.30(j)(2) was revised to clarify that this operating standard must be a condition of the permit. (see Permit Condition II.H.)

D. FACILITY DESCRIPTION

1. General

The DuPont facility is located in Wood County, five miles west of Parkersburg, West Virginia. The facility has been operating since 1948. The site consists of approximately 700 acres of bottom land located on the West Virginia side of the Ohio River. The Ohio River forms the north and west boundaries. The DuPont facility is a polymer products manufacturing facility involved in the production of nylon, polyvinyl butyral, acrylic resins, fluoropolymers, and polyacetals.

The West Virginia Department of Natural Resources (DNR) issued a permit to du Pont on January 5, 1987 for the management of hazardous waste. This permit is for the operation of one container storage area and two storage tanks. The West Virginia Air Pollution Control Commission issued a permit for the operation of the polyacetal organics incinerator on September 30, 1988.

2. Solid Waste Management Units

EPA Region III's portion of the permit will regulate solid waste management units subject to corrective action. The State of West Virginia has not been delegated authority to regulate these units under HSWA. These solid waste management units are active and inactive units at the facility from which hazardous waste or hazardous constituents might migrate, irrespective of when waste was placed in the unit or whether the unit was intended for the management of solid or hazardous waste.

EPA, Region III, has completed a preliminary evaluation based on: (1) information supplied by the applicant in its correspondence dated June 5, 1985, and August 30, 1985, (2) RCRA permit application and related correspondence, (3) site visit conducted August 30, 1985, (4) site visit report and assessment report prepared by

A. T. Kearney Management Consultants, and (5) July 6, 1985 meeting between representatives of du Pont and EPA. Sixteen solid waste management units were identified at the facility (see figure 1), six of which will require investigations for possible releases of hazardous waste or hazardous constituents

(a) Units Requiring Verification Investigation with Sampling

Based on available information, EPA has determined that releases have or may have occurred from six solid waste management units.

A-1 - DuPont Road Landfill: This active landfill has been the principal disposal site for non-hazardous solid wastes generated at the facility since its development in 1964. DuPont has indicated that small quantities of ash resulting from the incineration of plastics with barium, cadmium, selenium and chromium containing pigments were disposed until 1980, when the EP toxicity test indicated that the wastes were hazardous. The landfill is unlined. EPA is requiring that DuPont conduct additional investigations of this unit.

A-3 - River Bank Landfill: This inactive landfill was the principal land disposal site for solid wastes generated by the plant during its first fifteen years of operation. According to information submitted by DuPont, the waste disposed in the unit included powerhouse wastes, plastics and rubble. Because this unit was operated during the period before any wastewater treatment, incineration, or other modern disposal facilities were installed on site, it is possible that unknown quantities of manufacturing wastes were disposed in this unit; including raw materials, intermediates, products or wastes associated with the manufacture of nylon, acrylic resin, acetal resin, tetraflouroethylene, or polyvinyl butyral sheeting. The unlined landfill is located on the bank of the Ohio River. EPA is requiring that DuPont conduct additional investigations of the unit.

B-4 - Anaerobic Digestion Ponds: These closed units consisted of three surface impoundments that received an aqueous waste stream from the tetraflouroethylene manufacturing process. The waste stream contained trace amounts of hazardous constituents. The unit experienced subsurface releases, prior to installation of clay and bentonite liners. EPA is requiring that Du Pont conduct additional investigations of this unit since subsurface releases have been experienced in the past and degradation of the bentonite liner was possible from the surfactants treated in the unit. The investigations should be conducted in conjunction with the River Bank Landfill (Unit A-3) due to the close proximity of the units.

C-6 - Polyacetal Products Incinerator: This active unit consists of two open firebrick-lined pits, in which polyacetal polymer is burned. No analysis has been provided on the combustion products. EPA has determined that additional information is needed to characterize the products of the open burning process.

F-11 - Injection Wells No. 1 & 2: Two deep injection wells were used for the disposal of plant hydrochloric acid wastes. Well No. 1 started operating in 1969 and was plugged in 1976. Well No. 2 started operating in 1972 and was plugged in 1980. Operation of the wells pre-dated the Underground Injection Control program under the Safe Drinking Water Act, although the wells had state permits. Information submitted by DuPont indicates that Well No. 1 experienced problems which required reworking the casings. No information was provided indicating the possibility of releases above the injection zone resulting from this problem. EPA is requiring additional information for both wells.

H-13 - Burning Grounds: Prior to 1965, open burning of plant trash and organic liquids was conducted in this area. The liquid wastes included acrylic monomer slurries, ink slurries, tetraflouroethylene high boilers, as well as other solvents used at the plant during that period. A building has been constructed over the site. Open burning created the potential for contamination of aquifers. No gross contamination has been reported by DuPont, but no monitoring has been conducted. EPA is requiring additional investigation of this unit in conjunction with other units in the area.

(b) Units Not Requiring Remedial Investigation

A-2 - Construction Landfill: This active landfill is used for the disposal of soil from excavation work, and brick and concrete from demolished buildings and broken pavement. DuPont representatives have indicated that no paint, solvents or asbestos-containing wastes have ever been disposed in the unit. Since there is no indication that hazardous wastes or wastes with hazardous constituents are or have ever been disposed there, EPA has determined that a remedial investigation is not needed for this unit.

C-5 - Polyacetal Organics Incinerators: This unit consisted of two incinerators. One incinerator still exists and is in use. The Permittee has received an operating permit from the West Virginia Air Pollution Control Commission for this unit. The second incinerator, which was dismantled in 1984, was used to back up the active incinerator. The dismantled incinerator was rarely used, and DuPont has indicated that no spills or releases occurred when it was in operation. The feed tanks were the same as those included in DuPont's RCRA Part B permit application. EPA has determined that a remedial investigation is not needed for this unit.

C-7 - Incinerators No. 1 & 2: These two active units are used for the incineration of plant trash and waste plastics. The incinerators are operated under a West Virginia Air Pollution Control Permit. These incinerators are both high temperature processes (approximately 1400°F) and the combustion products are expected to be primarily carbon dioxide and water. EPA has determined that a remedial investigation is not required.

D-8 - Wastewater Treatment Plant: This is a 3 million gallon per day activated sludge waste water treatment facility. Waste streams are pumped to the unit via overhead lines. All tanks in the unit are steel and are above ground. The site inspection found that all tanks were in good condition and appeared to be well maintained. With the exception of the clarifiers, all tanks are equipped with leak detection wells. EPA has determined that a remedial investigation is not needed for the units.

E-9 - Elementary Neutralization/Waste Acid and Calcium Chloride: This unit consists of two wood and rubber-lined steel tanks for the neutralization of waste hydrochloric acid with limestone, two plastic-lined cement clarification tanks, and associated piping. The pH of the waste is adjusted in the unit, and neutralized wastes are discharged to an NPDES - permitted outfall. The tanks are in good condition. Spillage from overfilling is monitored by an audible alarm system. The neutralization of hydrochloric acid produces carbon dioxide gas, which is vented in the neutralization tank through the open top. Volatile organics that accompany the waste stream may be emitted, but have not been confirmed. EPA has determined that a remedial investigation is not needed for this unit.

F-10 - Elementary Neutralization/Ion Exchange Units: This unit neutralizes an acid stream produced by the generation of the plant's powerhouse ion exchange unit. The streams are collected in an acid-proof brick-lined sump which is covered by a metal plate. The equalization tank is open-topped and constructed of stainless steel, and sits on a concrete foundation with open space under the tank for leak detection. The equalization tank is equipped with an audible alarm system to protect against overflow. The waste stream then goes to a pH adjustment tank made of fibercast. After pH adjustment, the waste is discharged to an NPDES-permitted outfall. All tanks and plumbing are at ground level and appear to be in good condition. EPA has determined that a remedial investigation is not needed for this unit.

G-12 - Hazardous Waste Storage: This unit was included in the RCRA Part B application. It is, therefore, a regulated unit, and is included in the RCRA operating permit.

H-13 - Darco Basin: This inactive unit is located on the river bank and was used from 1954 to 1973 to dispose of hexamethylene diamine/ carbon black slurry from cleaning filters in nylon production. Dimethylformamide-based ink was also poured into a trench to the east of this unit and allowed to biodegrade. The unit is completely covered and vegetated. Based on the wastes in the unit, reported by Du Pont, EPA has determined that a remedial investigation is not needed for this unit.

3. Incinerator Conditions

Section 3005(c)(3) of the Resource Conservation and Recovery Act ("RCRA" or "the Act"), as amended, 42 U.S.C. 6925, charges EPA with a statutory obligation to ensure that all RCRA permits contain conditions that are sufficient to protect human health and the environment. This "omnibus" authority is codified at 40 CFR 270.32(b)(2).

EPA is currently developing risk-based regulations for the control of ten toxic metals and hydrogen chloride (HCl). This action was prompted by studies which indicate that, in some instances, existing RCRA performance standards for hazardous waste incinerators are not fully protective of human health with respect to metals and HCl. In support of the regulations, EPA has developed a draft technical manual titled "Guidance on Metals and Hydrogen Chloride Controls for Hazardous Waste Incinerators" (EPA, Office of Solid Waste, March 1989). This document provides the permit writer with a simplified methodology for determining acceptable waste constituent feed rates. Using the Tier I screening procedure contained in that document, and conservative air pollution control efficiency estimates, EPA has determined waste feed concentrations for each metal and HCl which would ensure protection of human health. The assumptions used to obtain these values are documented in the administrative record.

Because neither existing RCRA performance standards (40 CFR Part 264, Subpart O) nor the state-issued permit designed to meet those standards can ensure compliance with acceptable risk-based constituent waste feed rates for metals and HCl, EPA is establishing acceptable waste feed limitations in this portion of the RCRA permit pursuant to its omnibus authority. The constituent feed rates specified in Part III of this permit were determined using site-specific data and the Tier I screening procedure referenced above. This procedure is know to be conservative (i.e., it may provide an unnecessarily large margin of safety), but EPA believes it is the best one available, given existing information. However, more site-specific information may indicate that higher waste feed concentrations adequately protect human health and the environment. Site-specific information might include actual air pollution control equipment efficiencies, ash partitioning data (i.e., percentage of each metal which leaves the incinerator in the bottom ash versus the fly ash), meteorological data, or refined air dispersion models. If further information becomes available and if it indicates that some adjustments to the proposed feed limits are appropriate, EPA will make those changes in the final permit.

EPA will review any additional information to determine whether operating parameters other than those listed in this permit are capable of meeting the following requirements:

1. For noncarcinogenic metals and HCl, exposure to the most exposed individual (MEI) shall not exceed the Reference Air Concentration (RAC) for any compound. The RAC is the ambient air concentration at which the Agency has determined that no adverse human health effects occur.

2. For carcinogenic metals, exposure to the MEI shall not exceed an incremental lifetime cancer risk of 1×10^{-5} (e.g. 1 in 100,000).

The applicable RACs for noncarcinogens are listed in Appendix I, Table I-3, of the metals guidance document. Incremental lifetime cancer risk is calculated using "unit risk" values (also listed in Appendix I, Table I-2). "Unit risk" is defined as the incremental risk to an individual exposed for a lifetime to ambient air containing one microgram of the compound per cubic meter of air.

This action is consistent with national policy established in a memorandum from Sylvia K. Lowrance, Director, Office of Solid Waste, U. S. EPA to the Hazardous Waste Division Directors in each of the EPA Regional Offices (February 27, 1989). It is also supported by the decision issued in RCRA Appeal No. 87-12 In the Matter of Chemical Waste Management, Inc., RCRA Permit No. ALD 000 622 464. In this decision, the EPA Administrator directed EPA, Region IV, to consider regulating metals emissions under the omnibus provision to protect human health and the environment and to promote uniformity throughout the program. The Order states, in part:

> Of course, permit writers are not required to incorporate all proposed regulations into every permit under the omnibus provision. Reconsideration is warranted here, however, because (1) the Agency recognizes the potential risks posed by PICs and metals emissions; (2) the forthcoming guidance will recommend that permit writers consider including controls for these emissions immediately under EPA's omnibus authority; and (3) the Region's primary reason for refusing to consider imposing the requested standards was the absence of existing regulations (rather than the absence of any risk to public health or the environment)."

Because Region III has determined that metals and HCl emissions, if not properly controlled, pose an unreasonable risk to human health, and that compliance with existing regulatory standards is not sufficient to ensure attainment of constituent-specific risk-based standards, EPA is using its omnibus authority in this portion of the full RCRA permit to ensure protection of human health and the environment.

E. PERMIT ORGANIZATION

The permit is divided into the parts as outlined below.

Part	Topic
I	Standard Conditions
II	Specific Conditions
III	Incinerator Emission Limits

Part I contains general conditions which apply to all hazardous waste facilities. Part II contains conditions which pertain specifically to solid waste management units at the DuPont-Parkersburg facility. Part III contains emission limits for the facility's hazardous waste incinerator.

F. SUMMARY OF THE PERMIT CONDITIONS

This section of the fact sheet provides a summary of the conditions in this draft permit.

PART I

STANDARD CONDITIONS

Part I of the permit sets forth the standard conditions that are applicable to all hazardous waste management facilities. Unless otherwise specified, all citations refer to the regulations as codified in Title 40 of the Code of Federal Regulations (40 CFR).

Permit Condition	Subject	Requirement
I.A	Effect of Permit	§270.4 §270.30(g)
I.B	Permit Actions	§270.30(f) §270.41 §270.42 §270.43
I.C	Permit Conditions	§270.32(b)(2) §212 of HSWA (3005(c)(3) of RCRA
I.D	Severability	§124.16(a)

I.E	Definitions	Parts 260-264 Part 268 Part 270
I.F	Reports, Notifications, and Submissions to the Regional Administrator	
I.G	Signatory Requirements	§270.11 §270.30(k)
I.H	Documents to be Maintained at the Facility Site	§264.73
I.I	Duties and Requirements	
I.I.1	Duty to Comply	§270.30(a)
I.I.2	Duty to Reapply	§270.10(h) §270.30(b)
I.I.3	Permit Expiration and Continuation	§270.51 §270.50
I.I.4	Need to Halt or Reduce Activity Not a Defense	§270.30(c)
I.I.5	Duty to Mitigate	§270.30(d)
I.I.6	Proper Operation and Maintenance	§270.30(e)
I.I.7	Duty to Provide Information	§270.30(h) §264.74(a)
I.I.8	Inspection and Entry	§270.30(i)
I.I.9	Monitoring and Records	§270.30(j)
I.I.10	Reporting Planned Changes and Anticipated Noncompliance	§270.30(l)(1) and (2)
I.I.11	Transfer of Permit	§270.40 §270.30(l)(3)
I.I.12	Twenty-four Hour Reporting	§270.30(l)(6)
I.I.13	Immediate Reporting of Releases	§264.56(d)(1) and (2)

I.I.14	Other Noncompliance	§270.30(1)(10)
I.I.15	Other Information	§270.30(1)(11)
I.I.16	Compliance Schedule	§270.30(1)(5)
I.I.17	Biennial Report	§264.75 §270.30 (1)(9)
I.I.18	Land Disposal Restriction	§3004(b)-(m) of RCRA

PART II

SPECIFIC CONDITIONS

Part II of the permit sets forth the specific conditions with which the Permittee must comply. All provisions required by this part are authorized by Sections 206, 212, and 224 of HSWA, which amends Sections 3004 and 3005 of RCRA, and 40 CFR Section 264.101.

Permit Condition	Subject
II.A	Corrective Action for Continuing Releases
II.B	Verification Investigation
II.C	Interim Measures
II.D	RCRA Facility Investigation
II.E	Submissions to Agency and Dispute Resolutions
II.F	Permit Modification
II.G	Certification of Waste Minimization
II.H	Recordkeeping and Reporting
II.I	Closure and Notification Requirements

PART III
INCINERATOR EMISSION LIMITS

Part III of the permit sets forth conditions for the control of ten toxic metals and hydrogen chloride from the hazardous waste incinerator. These provisions fall within the "omnibus" authority of Section 3005(c)(3) of RCRA.

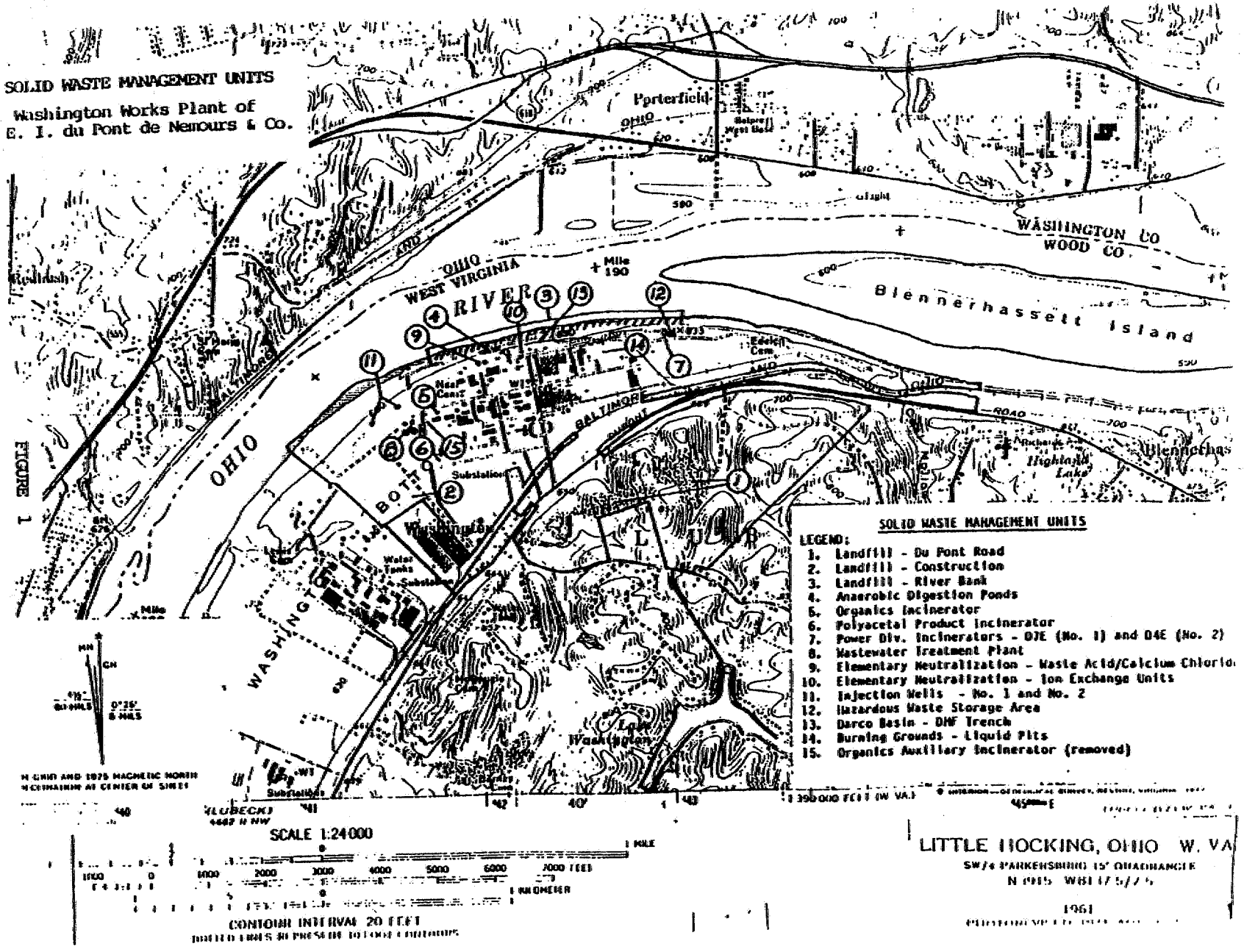

FIGURE 1

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