JOSH STEIN
Governor
D. REID WILSON
Secretary
MICHAEL SCOTT
Director

NORTH CAROLINA
Environmental Quality

July 16, 2026

Durable Wood Preservers, Inc.
7601 Pence Rd.
Charlotte, NC 28229
NCD003173358

RE: Permit Modification for Risk-Based Remediation and No Further Action

To Whom it May Concern:

Durable Wood Preservers, Inc. has requested a Class III permit modification to terminate corrective action and be granted No Further Action at the Facility through risk-based environmental remediation. The request for No Further Action is supported by the finding contained in the Proposed Risk Based Remedial Action Plan – Revision 1 dated June 30, 2025 (Proposed RAP) submitted by Durable Wood Preservers, Inc. in accordance with N.C.G.S § 130A-310.65 through 310.77. The Proposed RAP was prepared for remediation of the Facility in general accordance with North Carolina General Statutes (N.C.G.S) Chapter 130A, Article 9, Part 8. The final remedy presented in the Proposed RAP includes implementation of engineered controls and land use restrictions to eliminate or reduce to protective levels potential risks posed to human health and the environment by pentachlorophenol, chromium, and arsenic in soil and groundwater present in environmental media at the Facility from former wood treatment operations. The engineered controls and land use restrictions will continue to be monitored and verified after closure of the Permit.

The modified draft permit shall be amended to include the following in the I.1. Remedy Approval and Permit Modification Section:

1. The Permittee shall implement and maintain those engineered controls and land use restrictions listed in the Facility's *Remedial Action Plan* (dated June 30, 2025). The facility shall comply with the approved schedules and procedures for repair, maintenance, inspection, and certification of Corrective Action systems and controls as described in the Facility's June 30, 2025, Remedial Action Plan.

2. If the Permittee determines that a change in approved Corrective Action system or control is necessary to satisfy the requirement of 40 CFR 264.101, as adopted in 15A NCAC 13A .0109, the permittee shall request a modification under 40 CFR 270.42, as adopted in 15A NCAC 13A .0113.

Anyone desiring additional information may contact Rebecca Funderburg at (919) 707-8257 or Rebecca.funderburg@deq.nc.gov or at:

Division of Waste Management, NCDEQ
MSC 1646
Raleigh, NC 276991646

Sincerely,

Rebecca Funderburg

Rebecca Funderburg
Environmental Program Consultant, Hazardous Waste Section
North Carolina Department of Environmental Quality

FACILITY MAILING LIST
DURABLE WOOD PRESERVERS, INC.
EPA ID# NCD 003 173 358
July 16, 2026

Leah H. Davis
RCRA Programs and Permitting Section
Land, Chemicals and Redevelopment Division
US EPA Region 4—Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW
Mail Code: 9T25
Atlanta, GA 30303-8960
Davis.leah@epa.gov

Heather Standish
Hazardous Waste Section Chief
North Carolina Department of Environmental Quality
1646 Mail Service Center
Raleigh, NC 27699-1646

Marcus D. Jones
Charlotte City Manager
600 E. 4th Street (11th Floor)
Charlotte, NC 28202-2853

Mike Bryant
Mecklenburg County Manager
600 E. 4th Street
Charlotte, NC 28202

Kimberly Scott
Mecklenburg County Public Health
249 Billingsley Road
Charlotte, NC 28211

Andrew Martin
Environmental Specialist, Hazardous Waste Section
North Carolina Department of Environmental Quality
PO Box 276
Huntersville, NC 28078

Shawn McGuire
Facilities Management Branch Head, Hazardous Waste Section
North Carolina Department of Environmental Quality
1646 Mail Service Center
Raleigh, NC 27699-1646

Rebecca Funderburg
Project Manager, Hazardous Waste Section
North Carolina Department of Environmental Quality
1646 Mail Service Center
Raleigh, NC 27699-1646

Clyde Buchanan
Director of Compliance Assistance
Novesis, Inc.
203 West Main Street, Suite E-6
Lexington, SC 29072

FILE: P

NCDENR

North Carolina Department of Environment and Natural Resources

Dexter R. Matthews, Director | **Division of Waste Management** | Michael F. Easley, Governor
William G. Ross Jr., Secretary

November 24, 2003

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. B. E. Barksdale, III
Durable Wood Preservers, Inc.
Post Office Box 25825
Charlotte, North Carolina 28229-5825

Re: Hazardous Waste Management Permit
Issuance of Final Permit
EPA ID# NCD 003 173 358

Dear Mr. Barksdale:

This is notification of the decision to issue the hazardous waste management permit under the Resource, Conservation and Recovery Act (RCRA) for Durable Wood Preservers, Inc. This permit identifies specific wastes and associated management practices that may be handled in accordance with the North Carolina Hazardous Waste Management Rules. The enclosed permit will constitute the RCRA permit for Durable Wood Preservers, Inc.

The public comment period for the Draft Permit ended on November 3, 2003. No comments were received, therefore the permit will be effective on the issue date, November 24, 2003.

If you have any questions, please contact Mark Wilkins at (919) 733-2178 extension 225.

Sincerely,

Jill Pafford, Chief
Hazardous Waste Section

Enclosures

cc: Narindar Kumar, US EPA, Region 4
Alan Klimek, DWQ
Mark Burnette
Harry Jones, Sr., Mecklenburg County Manager
Pamela Syfert, Charlotte City Manager
Peter Safir, Director, Mecklenburg County Health Services
Mark Wilkins

Liz Cannon
Bob Glaser
Bud McCarty

c:/me/maw/finalissuance.doc

1646 Mail Service Center, Raleigh, North Carolina 27699-1646
Phone 919-733-4996 \ FAX 919-715-3605 \ Internet http://wastenotnc.org

NOTICE OF FINAL RCRA PERMIT DECISION

FACILITY NAME: Durable Wood Preservers, Inc.

EPA ID Number: NCD 003 173 358

Location: 7901 Pence Road
Charlotte, North Carolina 28215

Facility Operator: Durable Wood Preservers, Inc.
Facility Owner: Durable Wood Preservers, Inc.

After due consideration of the facts applicable to the above named facility as they appear in the Administrative Record and the requirements and policies expressed in the Resource Conservation and Recovery Act (RCRA) and applicable state regulations (15A NCAC 13A), the Department has determined that the permit should be issued.

In accordance with 40 CFR 124.15 as adopted in 15A NCAC 13A .0105, the permit issuance will become effective on November 24, 2003. Since no comments were received during the public comment period and no changes have been made to the Draft Permit, there are no appeal rights under 40 CFR 124.19 as adopted in 15A NCAC 13A .0105.

The Administrative Record, with respect to this determination, is maintained at the Department's offices, 401 Oberlin Road, Suite 150, Raleigh, North Carolina 27605, and is available for public inspection between the hours of 9:00 a.m. and 4:00 p.m. Monday through Friday. For further information on this permit action or file room appointments, contact the File Room at (919) 733-2178 extension 311.

Jill B. Pafford

Jill Pafford, Chief
Hazardous Waste Section

11/24/03
Date

FACILITY MAILING LIST
DURABLE WOOD PRESERVERS, INC.
EPA ID# NCD 003 173 358
November 24, 2003

Mr. Narindar Kumar, Chief
RCRA Programs Branch
Waste Management Division
US EPA, Region 4
61 Forsyth Street SW
Atlanta, GA 30303

Mr. Alan Klimek, Director
Division of Water Quality
512 N. Salisbury Street
Archdale Building
Raleigh, North Carolina 27604

Ms. Pamela Syfert
Charlotte City Manager
600 East Fourth Street
Charlotte, North Carolina 28202-2853

Mr. Harry Jones, Sr.
Mecklenburg County Manager
600 East Fourth Street
Charlotte, North Carolina 28202-2853

Mr. Peter Safir, Director
Mecklenburg County Health Services
600 East Fourth Street
Charlotte, North Carolina 28202-2853

Mr. Mark Burnette
Waste Mangement Specialist
North Carolina Hazardous Waste Section
919 Main Street
Mooresville, North Carolina 28115

I.D. NUMBER NCD 003 173 358 DATE ISSUED November 24, 2003
PERMIT NO. NCD 003 173 358-R1

Hazardous Waste Management Permit

Permittee and Owner: Durable Wood Preservers, Inc.
7901 Pence Road
Charlotte, North Carolina

Pursuant to the 15A NCAC 13A North Carolina Hazardous Waste Management Rules, a post-closure permit is issued to the Durable Wood Preservers, Inc. hazardous waste facility located in the Yadkin-Peedee River Basin, Charlotte, Mecklenburg County on Pence Road at latitude 35° 23' 16" and longitude 80° 41' 55".

The Permittee must comply with all terms and conditions of the permit. This permit consists of the conditions discussed in Parts I, II, III, IV, V, VI, VII, VIII and IX; the applicable regulations contained in 15A NCAC 13A including the applicable provisions of 40 CFR Parts 260 through 264, 266, 268, 270 and 124; statutory requirements of N.C.G.S. 130A -Article 9 (Solid Waste Management Act as amended) and the attached application.

Applicable regulations are those which are in effect on the date of issuance of this permit [40 CFR 270.32(c) as adopted in 15A NCAC 13A .0113] and are attached.

This permit is based on the assumption that the information submitted in the permit application and as modified by subsequent amendments (hereafter referred to as the Application) is accurate and that the facility will be operated as specified in the Application. Any inaccuracies found in this information could lead to the termination or modification of this permit and potential enforcement action [40 CFR 270.41, 270.42, and 270.43 as adopted in 15A NCAC 13A .0113]. The Permittee shall inform the North Carolina Department of Environment and Natural Resources (NCDENR) of any deviation from or changes in the information in the Application which would affect the Permittee's ability to comply with the applicable regulations or permit conditions.

This permit is effective as of November 24, 2003 and shall remain in effect for ten (10) years until November 24, 2013, [40 CFR 270.50 as adopted in 15A NCAC 13A .0113] unless revoked and reissued, terminated or continued in accordance with 40 CFR 270.51 as adopted in 15A NCAC 13A .0113.

Jill B. Pafford, Chief
Hazardous Waste Section

November 24, 2003
Date

The State of North Carolina
Department of Environment and Natural Resources
Division of Waste Management
Hazardous Waste Section

NCDENR
North Carolina Department of Environment and Natural Resources

TABLE OF CONTENTS

ATTACHMENTS

DURABLE WOOD PRESERVERS, INC. POST-CLOSURE PART B APPLICATION

REGULATIONS

PART I - STANDARD CONDITIONS

A. EFFECT OF PERMIT

The Permittee is allowed to conduct post-closure care and corrective action requirements in accordance with the conditions of this permit. Compliance with this permit constitutes compliance, for purposes of enforcement, with the N.C. Hazardous Waste Management Rules (15A NCAC 13A) and N.C.G.S. 130A-Article 9 (Solid Waste Management Act as amended). 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, any invasion of other private rights, or any infringement of State or local law or regulations. Compliance with the terms of this permit does not constitute a defense to any action brought under any law governing protection of public health or the environment for any imminent and substantial endangerment to human health or the environment.

B. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated for cause as specified in 40 CFR 270.41, 270.42, and 270.43 as adopted in 15A NCAC 13A .0113. 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.

C. 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.

D. 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 issued under 40 CFR 270.61 as adopted in 15A NCAC 13A .0113. Any permit noncompliance constitutes a violation of N. C. Hazardous Waste Management Rules and N.C.G.S. 130A-Article 9 (Solid Waste Management Act as amended) and is grounds for enforcement action, permit termination, revocation and, reissuance, modification, or for denial of a permit renewal application.

2. Duty to Reapply. If the Permittee will continue an activity allowed or required by this permit after the expiration date of this permit, the Permittee shall submit a complete application for a new permit at least 180 days before this permit expires. The Permittee must

continue post-closure monitoring and corrective action after the expiration date of this Permit unless permission to cease such activity has been granted by the Department.

3. Permit Review Period. This permit shall be reviewed by the Secretary of the Department of Environment and Natural Resources or his designee (hereafter referred to as Department) five (5) years after the date of issuance and modified as necessary as required under 40 CFR 270.50(d) as adopted in 15A NCAC 13A .0113.

4. Permit Expiration. This permit and all conditions therein will remain in effect beyond the permit's expiration date and until a decision is made concerning issuance of a new permit if the Permittee has submitted a timely, complete application (see 40 CFR 270.10-270.29 and 270.10 as adopted in 15A NCAC 13A .0113) and through no fault of the Permittee, the Department has not issued a new permit as set forth in 40 CFR 124.15 as adopted in 15A NCAC 13A .0105.

5. Need to Halt or Reduce Activity Not a Defense. It shall not be a defense for a 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.

6. Duty to Mitigate. The Permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.

7. Proper Operation and Maintenance. The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) 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 facility or similar systems only when necessary to achieve compliance with the conditions of the permit.

8. Duty to Provide Information. The Permittee shall furnish to the Department, within a reasonable time, any relevant information which the Department requests 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 Department, upon request, copies of records required to be kept by this permit.

9. Inspection and Entry. The Permittee shall allow the Department, 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 purposes of assuring permit compliance or as otherwise authorized by the N.C. Hazardous Waste Management Rules, any substances or parameters at any location.

10. Monitoring and Records.

a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the ground water to be analyzed must be the appropriate method from Appendix III of 40 CFR Part 261 as adopted in 15A NCAC 13A .0106 and as stated in the ground-water sampling and analysis plan located in Volume 1, Section 3 of the Application. Laboratory methods must be those specified in Appendix A of this permit.

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, 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 or record. These periods may be extended by request of the Department at any time and are automatically extended during the course of any unresolved enforcement action regarding this facility.

c. Records of monitoring information shall include:

i. The date, exact place, and time of sampling or measurements;
ii. The individual(s) who performed the sampling or measurements;
iii. The date(s) analyses were performed;
iv. The individual(s) who performed the analyses;
v. The analytical techniques or methods used; and
vi. The results of such analyses.

11. Reporting Planned Changes. The Permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions which may impact any Hazardous Waste Management Units (HWMUs), Solid Waste Management Units (SWMUs), Areas of Concern (AOCs), or the areas contaminated by them, including voluntary corrective measures to the SWMUs or AOCs referenced in Appendix D at the permitted facility as defined in 40 CFR 270.2 as adopted in 15A NCAC 13A .0113.

12. Anticipated Noncompliance. The Permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with the requirements of this permit.

13. Transfer of Permits. This permit may be transferred to a new owner or operator only if it is modified or revoked and reissued pursuant to 40 CFR 270.40, 270.41 and 270.42 as adopted in 15A NCAC 13A .0113. Before 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 264 as adopted in 15A NCAC 13A .0109 and 40 CFR 270 as adopted in 15A NCAC 13A .0113.

14. Compliance Schedules. 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.

15. Twenty-four Hour Reporting. The Permittee shall report to the Department any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Permittee becomes aware of the circumstances. The following shall be included as information which must be reported orally within 24 hours:

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

    b. Any information of a release or discharge of hazardous waste, 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:

        i. Name, address, and telephone number of the owner or operator;
        ii. Name, address, and telephone number of the facility;
        iii. Date, time, and type of incident;
        iv. Name and quantity of material(s) involved;
        v. The extent of injuries, if any;

vi. An assessment of actual or potential hazard to the environment and human health outside the facility, where this is applicable; and

vii. Estimated quantity and disposition of recovered material that resulted from the incident.

A written submission shall also be provided 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 periods 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-day written notice requirement if the Department, waives that requirement and the Permittee submits a written report within fifteen (15) days of the time the Permittee becomes aware of the circumstances.

16. Other Noncompliance. The Permittee shall report all other instances of noncompliance not otherwise required to be reported at the time monitoring reports are submitted. The reports shall contain the information listed in Condition I.D.15.

17. Other Information. When the Permittee becomes aware that he failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Department, the Permittee shall promptly submit such facts or information.

E. SIGNATORY REQUIREMENTS

All reports or other information requested by the Department shall be signed and certified according to 40 CFR 270.11 as adopted in 15A NCAC 13A .0113.

F. DOCUMENTS TO BE MAINTAINED AT FACILITY SITE

The Permittee shall maintain at the facility, until post-closure activities are completed and certified by an independent registered professional engineer, the following documents and amendments, revisions and modifications to these documents:

1. Cost estimate for post-closure care submitted in accordance with 40 CFR 264.144 as adopted in 15A NCAC 13A .0109 and Volume 2, Section V.C.5., pages 1-4 of the Application;

2. Operating record required by 40 CFR 264.73 as adopted in 15A NCAC 13A .0109, and Conditions I.D.10., III.G., and IV.I. of this permit;

3. The ground-water sampling and analysis plan (Volume 1, Section III) and Post-Closure Plan (Volume 2, Section IV.D.) of the Application and Condition III.G. and IV.H. of the permit;

4. Inspection schedules developed in accordance with 40 CFR 264.15(b) as adopted in 15A NCAC 13A .0109 and Volume 1, Section II.A. of the Application;

5. Ground-water monitoring records necessary to develop reports required by 40 CFR 264.100 as adopted in 15A NCAC 13A .0109 and this permit;

6. Documentation of compliance with 40 CFR 264.116, 264.119, and 264.120 as adopted in 15A NCAC 13A .0109 and this permit;

7. A survey plat and record of the type, location and quantity of hazardous waste or hazardous constituents disposed of within the closed former surface impoundment as required by 40 CFR 264.119 as adopted in 15A NCAC 13A .0109 and this permit; and

8. All reports and documentation of compliance with the post-closure plan as specified in 40 CFR 264.118(b)(1) and (2) as adopted in 15A NCAC 13A .0109 and this permit during the post-closure period.

All amendments, revisions and modifications to any plan or cost estimates required by this permit shall be submitted to the Department for approval and/or permit modification.

G. BIENNIAL REPORT

The Permittee shall prepare and submit a biennial report by March 1 of each even numbered year. The report shall include, in accordance with 40 CFR 264.75 as adopted in 15A NCAC 13A .0109, the following information for facility activities during the previous two calendar years:

1. The EPA identification number, name, and address of the facility;

2. The calendar years covered by the report;

3. The most recent post-closure cost estimate under 40 CFR 264.144 as adopted in 15A NCAC 13A .0109; and

4. The certification signed by the owner or operator of the facility or his authorized representative.

H. DOCUMENTS TO BE SUBMITTED

The Permittee shall submit three (3) copies of any documents described below:

1. If the Permittee chooses to perform the statistical evaluation as described in Condition IV.F.9., the Permittee shall submit the statistical evaluation not later than sixty (60) days after completion of the sampling.

2. The Permittee shall submit semi-annually sampling analysis results no later than sixty (60) days after the sampling has been completed.

3. The Permittee shall submit a verification that monitoring wells have been installed no later than 45 days after approval of the well design described in Condition IV.E.3.

I. DEFINITIONS

For purposes of this permit, terms used herein shall have the same meaning as those in the North Carolina Hazardous Waste Management Rules and Solid Waste Management Law unless this permit specifically provides otherwise; where terms are not defined in 15A NCAC 13A, G.S. 130A-Article 9, the permit, or EPA guidance documents or publications, the meaning associated with such terms shall be defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term.

J. CONFIDENTIAL INFORMATION

The Permittee may claim confidential any information required to be submitted by this permit in accordance with 40 CFR 270.12 as adopted in 15A NCAC 13A .0113.

K. APPROVAL/DISAPPROVAL OF SUBMITTALS

The Department will review the work plans, reports, schedules, and other documents ("submittals") that require the Department's approval in accordance with the conditions of this permit. The Department will notify the Permittee in writing of any submittal that is disapproved, and the basis thereof. Condition I.L. shall apply only to submittals that have been disapproved and revised by the Department, or have been disapproved by the Department, then revised and resubmitted by the Permittee, and again disapproved by the Department.

L. DISPUTE RESOLUTION

Notwithstanding any other provisions in this permit, in the event the Permittee disagrees, in whole or in part, with the Department's revision of a submittal or disapproval of any revised submittal required by the permit, the following may, at the Permittee's discretion, apply:

1. In the event that the Permittee chooses to invoke the provisions of this section, the Permittee shall notify the Department in writing within thirty (30) days of receipt of the Department's revision of a

submittal or disapproval of a revised submittal. Such notice shall set forth the specific matters in dispute, the position the Permittee asserts should be adopted as consistent with the requirements of the permit, the basis for the Permittee's position, and any matters considered necessary for the Department's determination.

2. The Department and the Permittee shall have an additional thirty (30) days from the Department's receipt of the notification provided in accordance with Condition I.L.1. to meet or confer to resolve any disagreement.

3. In the event an agreement is reached, the Permittee shall submit the revised submittal and implement the same in accordance with and within the time frame specified in such agreement.

4. If agreement is not reached within the thirty (30) day period, the Department will notify the Permittee in writing of his/her decision on the dispute, and the Permittee shall comply with the terms and conditions of the Department's decision in the dispute. For purposes of this provision in this permit, the responsibility for making this decision shall not be delegated below the Chief of the Hazardous Waste Section.

   Invoking any of the dispute resolution procedures of this section does not preclude the Permittee from exercising any of its other rights to petition for a contested case hearing or appeal in accordance with N.C. General Statute 150B. Nor does invoking any of the dispute resolution procedures of this section extend or delay the time periods in which the Permittee must exercise any of those other rights to petition or appeal.

5. With the exception of those conditions under dispute, the Permittee shall proceed to take any action required by those portions of the submission and of the permit that the Department determines are not affected by the dispute.

PART II - GENERAL FACILITY CONDITIONS

A. AUTHORIZED WASTE

The Permittee is authorized to monitor and treat ground water and implement post-closure care of the closed former surface impoundment in accordance with the conditions specified in this permit.

B. DESIGN AND OPERATION OF FACILITY

The Permittee shall maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or nonsudden release of hazardous constituents to air, soil or surface water which could threaten human health or the environment.

C. SECURITY

The Permittee shall comply with the security provisions of 40 CFR 264.14(b) and (c) as adopted in 15A NCAC 13A .0109 and Volume 2, Section V.D.1. of the Application.

D. GENERAL INSPECTION REQUIREMENTS

The Permittee shall follow the inspection schedule as described in Volume 1, Section II.A. of the Application and shall comply with 40 CFR 264.15(c) and (d) as adopted in 15A NCAC 13A .0109.

E. RECORD KEEPING AND REPORTING

1. Operating Record. The Permittee shall maintain a written operating record at the facility in accordance with 40 CFR 264.73(a), and (b)(2, 3, 5, 6, 8, 9, and 17) as adopted in 15A NCAC 13A .0109, and as described in the ground-water sampling and analysis plan.

2. Biennial Report. The Permittee shall comply with the biennial report requirements of 40 CFR 264.75 as adopted in 15A NCAC 13A .0109 and 15A NCAC 13A .0101.

3. Post-Closure Cost Estimate. The most recent post-closure cost estimate under 40 CFR 264.144 as adopted in 15A NCAC 13A .0109, must be submitted each year in accordance with 40 CFR 264.145 as adopted in 15A NCAC 13A .0109.

F. POST-CLOSURE

The Permittee shall monitor, maintain, and perform post-closure care of the facility as described in Volume I, Section III.B. and Volume II, Section V.A. and D. of the Application, and as required under 40 CFR 264.117 and 264.310 as adopted in 15A NCAC 13A .0109.

G. COST ESTIMATE FOR POST-CLOSURE

The Permittee's current post-closure cost estimate, prepared in accordance with 40 CFR 264.144(a) as adopted in 15A NCAC 13A .0109, is specified in Volume II, Section V.E. of the Application.

1. The Permittee must annually adjust the post-closure cost estimate for inflation by February 26 of each year required by 40 CFR 264.144(b) as adopted in 15A NCAC 13A .0109.

2. The Permittee must revise the post-closure cost estimate whenever there is a change in the facility's Post-Closure Plan as required by 40 CFR 264.144(c) as adopted in 15A NCAC 13A .0109.

3. The Permittee must keep at the facility the latest post-closure cost estimate as required by 40 CFR 264.144(d) as adopted in 15A NCAC 13A .0109.

4. The Permittee shall amend the cost estimate to include cost of operation and maintenance of any ground-water monitoring or corrective action programs that may be implemented in the future in lieu of the monitoring requirements in this permit.

H. FINANCIAL ASSURANCE FOR FACILITY POST-CLOSURE

1. The Permittee shall demonstrate continuous compliance with 15A NCAC 13A .0109(i) and 40 CFR 264.145 as adopted in 15A NCAC 13A .0109, or where applicable with 40 CFR 264.146, 264.149, 264.150, and 264.151 as adopted in 15A NCAC 13A .0109 and State Rule .0109(i) by providing documentation of financial assurance in at least the amount of the cost estimates required by Condition II.G. and Volume II, Section V.E. of the Application.

2. The financial mechanism used shall be that instrument specified in Volume II, Section V.E. of the Application. The Permittee may propose using a different mechanism by submitting a new financial instrument to the Department for approval. The Permittee must submit this documentation no later than sixty (60) days prior to the effective date of the proposed change. The existing financial mechanism shall remain in force until the change is approved.

I. COST ESTIMATE FOR COMPLETION OF CORRECTIVE ACTION

1. The Permittee shall prepare a cost estimate for the completion of any corrective action required under this permit for solid waste management units and regulated units in order to provide financial assurance for completion of corrective action as required under 40 CFR 264.90(a)(2) and 264.101(b) as adopted in 15A NCAC 13A .0109. Such cost estimate will be based upon the cost of operation, inspection, monitoring, and maintenance of the corrective action

system to meet the requirements of 40 CFR 264.100 and 264.101 as adopted in 15A NCAC 13A .0109 and this permit to include any treatment system necessary for contaminated ground water.

2. The Permittee shall submit the cost estimate for completion of corrective action required under 40 CFR 264.90(a)(2) and 264.101 as adopted in 15A NCAC 13A .0109 and this permit within thirty (30) days of approval of the corrective action plan by the Department.

3. The Permittee shall revise the cost estimate for corrective action within thirty (30) days after changing the corrective action plan for any reason.

J. FINANCIAL ASSURANCE FOR CORRECTIVE ACTION

1. The Permittee shall demonstrate continuous compliance with 40 CFR 264.90(a)(2) and 264.101 as adopted in 15A NCAC 13A .0109 by providing documentation of financial assurance using a mechanism specified in 40 CFR 264.151 and 264.145 as adopted in 15A NCAC 13A .0109 or 15A NCAC 13A .0109(i) in at least the amount of the cost estimate required under Condition II.I. The words "completion of corrective action" shall be substituted for "closure and/or post-closure" as appropriate in the financial mechanism.

2. The Permittee shall submit financial assurance for completion of corrective action as required under 40 CFR 264.90(a)(2) and 264.101 as adopted in 15A NCAC 13A .0109 no later than thirty (30) days prior to implementing the approved corrective action.

K. INCAPACITY OF OWNERS OR OPERATORS, GUARANTORS, OR FINANCIAL INSTITUTIONS

The Permittee shall comply with 40 CFR 264.148 as adopted in 15A NCAC 13A .0109 whenever necessary.

L. SPECIAL CONDITIONS

1. When a discrepancy exists between the wording of an item in the Application and this permit, the permit requirements take precedence over the Application.

2. When a discrepancy exists between the RCRA Facility Assessment (RFA) report (attached as part of the permit) and this permit as to the future requirements to be taken at the facility, the permit requirements take precedence over the requirements proposed in the report.

3. Unless an alternative amount is approved by the NCDENR, the Permittee shall maintain financial assurance, as required in Condition II.H., at a sufficient amount to provide for eighteen (18)

years of post-closure care and groundwater monitoring as required in Conditions II.F and II.G.

13. SUBMITTALS

All submittals shall be sent to:

Ms. Jill B. Pafford, Chief
North Carolina Hazardous Waste Section
MSC 1646
401 Oberlin Rd. Suite 150
Raleigh, NC 27699-1646

PART III - POST-CLOSURE CARE

A. APPLICABILITY

The conditions of this Part apply to the closed former surface impoundment described in Volume I, Section II. And Volume II, Section V. of the Application and as specified in 40 CFR 264.110(b)(2) as adopted in 15A NCAC 13A .0109.

B. POST-CLOSURE CARE PERIOD

Post-closure care procedures as described in Volume I, Section III.B and Volume II, Section V.A. and D. of the Application and Part IV of this permit shall continue throughout the effective period of this permit as specified in 40 CFR 264.117(a)(1) as adopted in 15A NCAC 13A .0109, unless otherwise modified under 40 CFR 264.117(a)(2) as adopted in 15A NCAC 13A .0109.

C. GROUND-WATER MONITORING AND CORRECTIVE ACTION

During the post-closure period the Permittee shall comply with the requirements of 40 CFR 264.91 through 264.100 as adopted in 15A NCAC 13A .0109 as specified under Part IV of this permit for purposes of detecting, characterizing, and responding to releases of hazardous constituents to the uppermost aquifer for the closed areas as described in Volume I, Section III of the Application and in Appendices A and B of this permit.

D. POST-CLOSURE CARE

1. The Permittee shall monitor and maintain the area that closed pursuant to 40 CFR Subpart G after January 26, 1983, for a minimum of thirty (30) years in accordance with Condition II.F. and as required under 40 CFR 264.117-120, 264.228, and 264.310 as adopted in 15A NCAC 13A .0109 and as described in the post-closure plan located in Volume I, Section III.B. and Volume II, Section V.A. and D. of the Application.

2. The Permittee shall provide and maintain the items required by Conditions IV.G.7. and IV.G.8. of this permit as to the operation and maintenance of the remedial action system.

E. FINANCIAL ASSURANCE FOR POST-CLOSURE

The Permittee shall maintain compliance with Conditions II.G. and II.I. in the event of any revisions to the post-closure cost estimate due to additional post-closure care requirements.

F. FINANCIAL ASSURANCE FOR CORRECTIVE ACTION

The Permittee shall provide financial assurance for completion of corrective action for all regulated land disposal units that received hazardous waste after July 26, 1982, and for Solid Waste Management Units as specified in Condition II.J.

G. REPORTING, RECORD KEEPING, AND RESPONSE

The Permittee shall enter all monitoring, testing, analytical data, inspection, and maintenance reports obtained pursuant to Condition IV.I. in the operating record, as required by 40 CFR 264.73(b)(6) as adopted in 15A NCAC 13A .0109.

Background shall be established by analyzing quarterly samples for one (1) year, four replicates per sample, for each constituent in order to establish background mean and variance beginning within ninety (90) days after installation of well A.

4. Alternatively, the Permittee may accept as the ground-water protection standard the NC 2L Groundwater Quality Standard or interim maximum allowable concentration as established in 15A NCAC 2L .0202 or an alternate concentration level established or approved by the Department for the constituents contained in Table IV-1 of this Permit. To demonstrate the effectiveness of the corrective action program, the Permittee shall monitor those wells listed in IV.F.2, which are permanent monitoring wells as described in Condition IV.E. and specified in Appendices A and B. The Permittee shall comply with any additional monitoring specified by the Department as required by 40 CFR 264.100(d) as adopted in 15A NCAC 13A .0109.

5. The Permittee shall record the water level in all site monitoring wells before the groundwater is sampled in accordance with Conditions IV.F.2. and IV.F.3.

6. The Permittee shall determine the groundwater flow rate and direction in the uppermost aquifer at least annually as required under 40 CFR 264.99(e) as adopted in 15A NCAC 13A .0109; beginning one (1) year from the effective date of the permit. This information shall be submitted in the form of a groundwater potentiometric map, and groundwater velocity calculations, along with all the data used to make these determinations.

7. The Permittee shall analyze samples from the point of compliance well, specified under Condition IV.C., for all constituents in 40 CFR 264 Appendix IX as adopted in 15A NCAC 13A .0109 and any other constituents specified by the Department every five years from the effective date of the permit to determine whether additional hazardous constituents are present in the uppermost aquifer. The Appendix IX analyses must be submitted within 120 days of sampling. If the Permittee finds additional constituents present (one not listed in Condition IV.B.), he or she may re-sample within one (1) month and repeat the Appendix IX analysis. If the second analysis confirms the presence of new constituents their concentrations shall be reported to the Department within seven (7) days after completion of the analyses.

8. The Permittee shall analyze samples semi-annually from all monitoring wells specified under Condition IV.F.2. for the parameters listed in Table IV-I and the following field measurements:
pH, Conductivity, Temperature.

9. The Permittee shall determine whether there is a statistically significant increase, for each parameter identified in Condition IV.B., over the concentration limit for that parameter each time the concentration of hazardous constituents is monitored in groundwater pursuant to Condition IV.F.2. In determining whether such an increase has occurred, the Permittee must compare the groundwater quality at each monitoring well specified in Condition IV.F.2. in accordance with the procedures specified in Condition IV.F.3 or IV.F.4. When evaluating the monitoring results the Permittee shall use a statistical procedure in accordance with 40 CFR 264.97(h)(1) as adopted in 15A NCAC 13A .0109

   NOTE: If inspection of the data clearly shows that hazardous constituent levels are above the concentration limits specified in Table IV-I, the Permittee may elect not to perform statistics.

10. If the Permittee chooses to perform a statistical evaluation, the Permittee shall perform the statistical evaluation required by Condition IV.F.9. within sixty (60) days after completion of sampling.

11. If analysis of samples taken in accordance with Conditions IV.F.7. and IV.F.8. are below the ground-water standard as specified under Condition IV.B. at the point of compliance for three (3) consecutive years after the compliance period or corrective action period, whichever is greater, then the Permittee may submit an application for a permit modification pursuant to 40 CFR 270.42 as adopted in 15A NCAC 13A .0109 to establish an alternate groundwater monitoring program.

12. The Permittee must collect and analyze ground-water samples semi-annually from all monitoring wells specified in Condition IV.F.2. for the parameters listed in Table IV-I, and the parameters listed in Condition IV.F.8.

G. CORRECTIVE ACTION PROGRAM

1. The Permittee shall initiate corrective action as required by Appendix C and described in Volume 1, Section III.E. of the Application as stipulated by 40 CFR 264.100(c) as adopted in 15A NCAC 13A .0109.

2. The Permittee shall conduct a corrective action program to remove or treat in place any hazardous constituents under 40 CFR 264.93 as adopted in 15A NCAC 13A .0109 (Condition IV.B.) that exceed the concentration limit under 40 CFR 264.94 as adopted in 15A NCAC 13A .0109 in groundwater between the compliance point under 40 CFR 264.95 as adopted in 15A NCAC 13A .0109 (Condition IV.C.) and the downgradient facility property line; and beyond the facility boundary as required under 3004(v) of RCRA, as amended, and 40 CFR

264.101(c) as adopted in 15A NCAC 13A .0109, unless the Permittee can demonstrate to the satisfaction of the Department that despite the Permittee's best efforts, the Permittee was unable to obtain the necessary permission to undertake such action, or such action is not necessary to protect public health or the environment.

3. The corrective action program is as described in the plans and specifications in Volume I, Section III.E. of the Application and as required by 40 CFR 264.100(e) as adopted in 15A NCAC 13A .0109. The equipment used for the corrective action program shall be known as the remedial action system.

4. The influence of the remedial action system shall, at a minimum, extend beyond the boundaries of the plume as identified in Volume I, Section III. of the Application. Plans for the remedial action system described under Condition IV.G.3. shall be modified if the system does not meet this requirement.

5. The Permittee shall submit a revised post-closure cost estimate as required by Conditions II.G. and II.H. for all additional corrective action and monitoring required by Part IV of this permit and Appendices A, B, and C. The Permittee shall submit this revised cost estimate within thirty (30) days of the remedial action system design final approval.

6. The Permittee shall treat, store, and dispose of all contaminated groundwater in accordance with all applicable federal, state and local laws. At a minimum, the Permittee shall obtain the required NPDES or POTW approval from the appropriate authority.

7. The Permittee shall keep on site, documentation of the following items as discussed in Appendix C with respect to the operation and maintenance of the remedial action system, prior to the beginning of the corrective action program:

   a. Personnel Training - The Permittee shall prepare and implement a personnel training plan sufficient to train any personnel associated with the remedial action system.

   b. Contingency Plan - The Permittee shall prepare and implement, if necessary, a plan to be followed if there is a release from the remedial action system.

   c. Required Equipment - The Permittee shall include in a plan and provide, at all times, the necessary equipment to carry out the required contingency plan. The plan should also include the required testing and maintenance of equipment.

d. Abandonment Plan - The Permittee shall include an abandonment plan for implementation following the completion of corrective action for the remedial action system.

e. Cost Estimates for Abandonment - An estimate of abandoning the remedial action system should be provided for as a portion of the revised post-closure cost estimate required by Condition II.G.

8. The Permittee shall test and maintain the remedial action system as required in Appendix C of this permit.

H. SAMPLING AND ANALYSIS PROCEDURES

The Permittee shall use the following techniques and procedures when obtaining samples and analyzing samples from the groundwater monitoring wells described in Condition IV.E.:

1. Samples shall be collected by the techniques described on pages C-6A through C-53 of the groundwater sampling and analysis plan found in Volume I, Section III. of the Application and Appendix A of this permit.

2. Samples shall be preserved and shipped (when shipped off-site for analysis) in accordance with the procedures specified on pages C-7A through C-8A of the groundwater sampling and analysis plan found in Volume I, Section III. of the Application.

3. Samples shall be analyzed according to the procedures specified in Appendix A of this permit or an equivalent method or by any subsequent procedure specified by the Department.

4. Samples shall be tracked and controlled using the chain of custody procedures specified on page C-8A of the groundwater sampling and analysis plan found in Volume I, Section III. of the Application.

5. Samples shall be obtained using bailers or pumps and other sampling equipment that will not significantly interfere with the analysis.

6. The sampling and analysis plan shall be updated to reflect any changes approved or required by the Department.

I. REPORTING, RECORD KEEPING, AND RESPONSE

1. The Permittee shall enter all monitoring, testing, and analytical data obtained pursuant to Condition IV.H. in the operating record, as required by 40 CFR 264.73(b)(6) as adopted in 15A NCAC 13A .0109.

2. The Permittee must report in writing semi-annually to the Department on the effectiveness of the corrective action program, as required

by 40 CFR 264.100(g) as adopted in 15A NCAC 13A .0109. This report shall also be made part of the operating record and shall include all monitoring, testing, and analytical data obtained under Conditions IV.F., IV.G., and IV.H. This report shall also include proposals for improvements of the corrective action system in order to maintain compliance with Conditions IV.E. and IV.G.

3. The Permittee shall report concentrations of any additional Appendix IX constituents (identified pursuant to Condition IV.F.7. and not listed in Table IV-I) to the Department, and within seven (7) days after completion of analysis, as specified in 40 CFR 264.99(g) as adopted in 15A NCAC 13A .0109.

4. Semi-annually, the Permittee shall report concentration levels for those constituents identified in Table IV-1 to the Department and within sixty (60) days after completion of the ground-water sampling event.

J. PERMIT MODIFICATION

1. If the Permittee determines that the corrective action program, required by this permit, no longer satisfies the requirements of the regulations, an application for a permit modification must be submitted within ninety (90) days to make any appropriate changes to the program, which will satisfy the regulations.

2. The Permittee must request a permit modification as described under Condition IV.F.11. if it is desired to make a change in the groundwater monitoring program following the completion of the necessary requirements.

3. If the Permittee determines that the compliance/corrective action monitoring program, required by this permit, no longer satisfies the requirements of the regulations, an application for a permit modification must be submitted within ninety (90) days to make any appropriate changes to the program, which will satisfy the regulations.

4. The Permittee must request a permit modification to include the termination of the corrective action system following the completion of the actions required under Condition IV.G. and Appendix C of this permit.

K. DUTY OF PERMITTEE

The Permittee must assure that monitoring and corrective action measures necessary to achieve compliance with the groundwater protection standard under 40 CFR 264.92 as adopted in 15A NCAC 13A .0109 are taken during the term of the permit.

PART V - CORRECTIVE ACTION FOR SOLID WASTE MANAGEMENT UNITS (SWMUs) AND AREAS OF CONCERN (AOCs)

A. APPLICABILITY

The Conditions of this Part apply to:

1. The solid waste management units (SWMUs) and areas of concern (AOCs) identified in Appendix D of the permit, which require further investigation.

2. The SWMUs identified in Appendix D which require no further investigation at this time or are addressed under the permit.

3. The SWMUs identified in Appendix D which require confirmatory sampling. There are currently no SWMUs that require confirmatory sampling.

4. Any additional SWMUs or AOCs discovered during the course of groundwater monitoring, field investigations, environmental audits, or other means.

5. Corrective action beyond the facility boundary, if applicable. The Permittee shall implement corrective actions beyond the facility boundary where necessary to protect human health and the environment, unless the Permittee demonstrates to the satisfaction of the Department that, despite the Permittee's best efforts, as determined by the Department, the Permittee was unable to obtain the necessary permission to undertake such actions. The Permittee is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where off-site access is denied. On-site measures to address such releases will be determined on a case-by-case basis. Assurances of financial responsibility for completion of such off-site action will be required.

B. DEFINITIONS

For purposes of this Part, the following definitions shall be applicable:

1. The term "area of concern" (AOC) includes any area having a probable release of a hazardous waste or hazardous constituent which is not from a solid waste management unit and is determined by the Department to pose a current or potential threat to human health or the environment. Such areas of concern may require investigations and remedial action as required under section 3005 (c)(3) of the Resource Conservation and Recovery Act and 40 CFR 270.32 (b)(2) as adopted in 15A NCAC 13A .0113 in order to insure adequate protection of human health and the environment.

2. A "Corrective Action Management Unit" (CAMU) includes any area within a facility that is designated by the Department under part 264 Subpart S, for the purpose of implementing corrective action requirements under 40 CFR 264.101 as adopted in 15A NCAC 13A .0109 and RCRA section 3008(h). A CAMU shall only be used for the management of remediation wastes pursuant to implementing such corrective action requirements at the facility.

3. "Corrective measures" include all corrective action necessary to protect human health and the environment for all releases of hazardous waste or hazardous constituents from any area of concern or solid waste management unit at the facility, regardless of the time at which waste was placed in the unit, as required under 40 CFR 264.101 as adopted by 15A NCAC 13A .0109. Corrective measures may address releases to air, soils, surface water or ground water.

4. "Extent of contamination" is defined as the horizontal and vertical area in which the concentrations of the hazardous constituents in the environmental media are above detection limits or background concentrations indicative of the region, whichever is appropriate as determined by the Department.

5. "Facility" includes all contiguous land, and structures, other appurtenances, and improvements on the land, used for treating, storing, or disposing of hazardous waste. A facility may consist of several treatment, storage, or disposal operational units (e.g. one or more landfills, surface impoundments, or combination of them). For the purposes of implementing corrective action under 40 CFR 264.101 as adopted in 15A NCAC 13A .0109, a facility includes all contiguous property under the control of the owner or operator seeking a permit under Subtitle C of RCRA.

6. A "hazardous constituent" for the purposes of this part are those substances listed in 40 CFR Part 261 Appendix VIII as adopted in 15A NCAC 13A .0106 or 40 CFR 264 Appendix IX as adopted in 15A NCAC 13A .0109.

7. "Interim Measures" are actions necessary to minimize or prevent the further migration of contaminants and limit actual or potential human and environmental exposure to contaminants while long-term corrective action remedies are evaluated and, if necessary, implemented.

8. The term "land disposal" means placement in or on the land except for a CAMU and includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, underground mine or cave, or concrete vault or bunker intended for disposal purposes.

9. "Landfill" includes any disposal facility or part of a facility where waste is placed in or on the land and which is not a pile, a land treatment facility, a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground mine, a cave, or a corrective action management unit.

10. A "release" for purposes of this part includes any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment of any hazardous waste or hazardous constituents.

11. "Remediation waste" includes all solid and hazardous wastes, and all media (including ground water, surface water, soils, and sediments) and debris, which contain listed hazardous wastes or which themselves exhibit a hazardous waste characteristic, that are managed for the purpose of implementing corrective action requirements under 40 CFR 264.101 as adopted in 15A NCAC 13A .0109 and RCRA section 3008 (h). For a given facility, remediation wastes originate only from within the facility boundary, but may include waste managed in implementing RCRA sections 3004 (v) or 3008 (h) for releases beyond the facility boundary.

12. The term "solid waste" means any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, commercial, mining and agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges that are point sources subject to permits under section 402 of the Federal Water Pollution Control Act, as amended (86 Stat. 880), or source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923).

13. A "solid waste management unit" (SWMU) for the purposes of this part includes any unit which has been used for the treatment, storage, or disposal of solid waste at any time, irrespective of whether the unit is or ever was intended for management of solid waste. RCRA regulated hazardous waste management units are also solid waste management units. Solid Waste Management Units include areas which have become contaminated by routine and systematic releases of hazardous waste or hazardous constituents, excluding one-time accidental spills that are immediately remediated and cannot be linked to solid waste management activities (e.g., product or process spills).

14. A "Temporary Unit" (TU) includes any temporary tanks and/or container storage areas used solely for treatment or storage of

hazardous remediation wastes during specific remediation activities. Designated by the Department, such units must conform to specific standards, and may only be in operation for a period of time as specified in this permit.

15. A "unit" for the purposes of this part includes, but is not limited to, any landfill, surface impoundment, waste pile, land treatment unit, incinerator, injection well, tank, container storage area, septic tank, drain field, waste water treatment unit, elementary neutralization unit, transfer station, or recycling unit.

C. NOTIFICATION AND ASSESSMENT REQUIREMENTS FOR NEWLY IDENTIFIED SWMUs AND AOCs

1. The Permittee shall notify the Department in writing, within fifteen (15) calendar days of discovery, of any additional SWMUs as discovered under Condition V.A.4. The notification shall include, at a minimum, the location of the SWMU and all available information pertaining to the nature of the release (e.g., media affected, hazardous constituents released, magnitude of release, etc.). If the Department determines that further investigation of the SWMU is required, the Permittee shall be required to prepare a plan for such investigations as outlined in Condition V.E.1. or Condition V.F.1.

2. The Permittee shall notify the Department in writing, within fifteen (15) calendar days of discovery, of any AOCs as discovered under Condition V.A.4. The notification shall include, at a minimum, the location of the AOC and all available information pertaining to the nature of the release (e.g., media affected, hazardous constituents released, magnitude of release, etc.). If the Department determines that further investigation of the AOC is required, the Permittee shall be required to prepare a plan for such investigations as outlined in Condition V.E.1. or Condition V.F.1.

3. The Permittee shall prepare and submit to the Department, within ninety (90) calendar days of notification, a SWMU Assessment Report (SAR) for each SWMU identified under Condition V.C.1. At a minimum, the SAR shall provide the following information:

   a. Location of unit(s) on a topographic map of appropriate scale such as required under 40 CFR 270.14(b)(19) as adopted in 15A NCAC 13A .0113.

   b. Designation of type and function of unit(s).

   c. General dimensions, capacities and structural description of unit(s) (supply any available plans/drawings).

   d. Dates that the unit(s) was operated.

e. Specification of all wastes that have been managed at/in the unit(s) to the extent available. Include any available data on hazardous constituents in the wastes.

f. All available information pertaining to any release of hazardous waste or hazardous constituents from such unit(s) (to include ground-water data, soil analyses, air, and/or surface water data).

4. Based on the results for the SAR, the Department shall determine the need for further investigations at the SWMUs covered in the SAR. If the Department determines that such investigations are needed, the Permittee shall be required to prepare a plan for such investigations as outlined in Condition V.F.1.b.

D. NOTIFICATION REQUIREMENTS FOR NEWLY DISCOVERED RELEASES AT PREVIOUSLY IDENTIFIED SWMUs and AOCs

1. The Permittee shall notify the Department in writing of any newly discovered release(s) of hazardous waste or hazardous constituents discovered during the course of ground-water monitoring, field investigations, environmental audits, or other means, within fifteen (15) calendar days of discovery. Such newly discovered releases may be from SWMUs or AOCs identified in Condition V.A.2. or SWMUs or AOCs identified in Condition V.A.4. for which further investigation under Condition V.C.4. was not required.

2. If the Department determines that further investigation of the SWMUs and AOCs is needed, the Permittee shall be required to prepare a plan for such investigations as outlined in Condition V.F.1.b.

E. CONFIRMATORY SAMPLING (CS)

1. The Permittee shall prepare and submit to the Department, within forty five (45) calendar days of notification by the Department for a newly identified SWMU, a Confirmatory Sampling (CS) Work Plan to determine any release from SWMUs and AOCs identified in V.A.3. and Appendix D. The CS Work Plan shall include schedules of implementation and completion of specific actions necessary to determine a release. It should also address applicable requirements and affected media.

2. The CS Work Plan must be approved by the Department, in writing, prior to implementation. The Department shall specify the start date of the CS Work Plan schedule in the letter approving the CS Work Plan. If the Department disapproves the CS Work Plan, the Department shall either (1) notify the Permittee in writing of the CS Work Plan's deficiencies and specify a due date for submission of a revised CS Work Plan, (2) revise the CS Work Plan and notify the Permittee of the revisions, or (3) conditionally approve the CS Work Plan and notify the Permittee of the conditions.

3. The Permittee shall implement the confirmatory sampling in accordance with the approved CS Work Plan.

4. The Permittee shall prepare and submit to the Department in accordance with the approved schedule, a CS Report, within sixty (60) calendar days after approval of the CS Work Plan, identifying those SWMUs and AOCs listed in Condition V.A.3. that have released hazardous waste or hazardous constituents into the environment. The CS Report shall include all data, including raw data, and a summary and analysis of the data, that supports the above determination.

5. Based on the results of the CS Report, the Department shall determine the need for further investigations at the SWMUs and AOCs covered in the CS Report. If the Department determines that such investigations are needed, the Permittee shall be required to prepare a plan for such investigations as outlined in Condition V.F.1.b. The Department will notify the Permittee of any "no further action" decision.

F. RCRA FACILITY INVESTIGATION (RFI)

1. RFI Work Plan(s)

a. The Permittee shall prepare and submit to the Department, within ninety (90) calendar days of the approval of the Confirmatory Sampling Report, a RFI Work Plan for those units identified in Condition V.A.1. This Work Plan shall be developed to meet the requirements of Condition V.F.1.c.

b. The Permittee shall prepare and submit to the Department, within ninety (90) calendar days of notification by the Department, an RFI Work Plan for those units identified under Condition V.C.4., Condition V.D.2. or Condition V.E.5. This RFI Work Plan(s) shall be developed to meet the requirements of Condition V.F.1.c.

c. The RFI Work Plan(s) shall meet the requirements of Appendix E at a minimum. The Work Plan(s) shall include schedules of implementation and completion of specific actions necessary to determine the nature and extent of releases and the potential pathways of contaminant releases to the air, land, surface water, and ground water. The Permittee must provide sufficient justification and/or documentation that a release is not probable if a unit or a media/pathway associated with a unit (ground water, surface water, soil, subsurface gas, or air) is not included in the RFI Work Plan(s). Such deletions of a unit, media or pathway from the RFI(s) are subject to the approval of the Department. The Permittee shall provide sufficient written justification for any omissions or

deviations from the minimum requirements of Appendix E. + Such omissions or deviations are subject to the approval of the Department. The RFI Work Plan may be phased to allow for subsequent investigatory activity to be contingent upon the initial phase finding. If the scope of the Work Plan(s) is designed to be an initial phase, the initial phase must summarize all potential final phase activities needed to meet the requirements of this condition. In addition, the scope of the RFI Work Plan(s) shall include all investigations necessary to ensure compliance with 40 CFR 264.101(c) as adopted in 15A NCAC 13A .0109.

d. The RFI Work Plan(s) must be approved by the Department, in writing, prior to implementation. The Department shall specify the start date of the RFI Work Plan schedule in the letter approving the RFI Work Plan(s). If the Department disapproves the RFI Work Plan(s), the Department shall either (1) notify the Permittee in writing of the RFI Work Plan's deficiencies and specify a due date for submission of a revised RFI Work Plan, (2) revise the RFI Work Plan and notify the Permittee of the revisions and the start date of the schedule within the approved RFI Work Plan, or (3) conditionally approve the RFI Work Plan and notify the Permittee of the conditions.

2. RFI Implementation

The Permittee shall implement the RFI(s) in accordance with the approved RFI Work Plan(s) and Appendix E. The Permittee shall notify the Department twenty (20) days prior to any sampling activity.

3. RFI Reports

a. If the time required to conduct the RFI(s) is greater than one hundred eighty (180) calendar days, the Permittee shall provide the Department with quarterly RFI Progress Reports (90 day intervals) beginning ninety (90) calendar days from the start date specified by the Department in the RFI Work Plan approval letter. The Progress Reports shall contain the following information at a minimum:

i. A description of the portion of the RFI completed;
ii. Summaries of finding;
iii. Summaries of <u>any</u> deviations from the approved RFI Work Plan during the reporting period;
iv. Summaries of all contacts with local community public interest groups or State government;
v. Summaries of <u>any</u> problems or potential problems encountered during the reporting period;
vi. Actions taken to rectify problems;

vii. Changes in relevant personnel;
viii. Projected work for the next reporting period.

b. The Permittee shall prepare and submit to the Department Draft and Final RFI Report(s) for the investigations conducted pursuant to the Work Plan(s) submitted under Condition V.F.1. The Draft RFI Report(s) shall be submitted to the Department for review in accordance with the schedule in the approved RFI Work Plan(s). The Final RFI Report(s) shall be submitted to the Department within thirty (30) calendar days of receipt of the Department's comments on the Draft RFI Report. The RFI Report(s) shall include an analysis and summary of all required investigations of SWMUs and AOCs and their results. The summary shall describe the type and extent of contamination at the facility, including sources and migration pathways, and a description of actual or potential receptors. The Report(s) shall also describe the extent of contamination (qualitative/ quantitative) in relation to background levels indicative of the area. If the Draft RFI Report is a summary of the initial phase investigatory work, the report shall include a Work Plan for the final phase investigatory actions required based on the initial findings. Approval of the final phase Work Plan shall be carried out in accordance with Condition V.F.1.d. The objective of this task shall be to ensure that the investigation data are sufficient in quality (e.g., quality assurance procedures have been followed) and quantity to describe the nature and extent of contamination, potential threat to human health and/or the environment, and to support a Corrective Measures Study (CMS), if necessary.

c. The Department will review the Final RFI Report(s) and notify the Permittee of the need for further investigative action and/or the need for a CMS to meet the requirements of V.H., Appendix G and 40 CFR 264.101 as adopted in 15A NCAC 13A .0109. The Department will notify the Permittee of any "no further action" decision. Any further investigative action required by the Department shall be prepared and submitted in accordance with a schedule specified by the Department and approved in accordance with Condition V.F.1.d.

G. INTERIM MEASURES (IM)

1. IM Work Plan

a. Upon notification by the Department, the Permittee shall prepare and submit an Interim Measures (IM) Work Plan for any SWMU or AOC which the Department determines is necessary. IM are necessary in order to minimize or prevent the further migration of contaminants and limit human and environmental exposure to contaminants while long-term corrective action

remedies are evaluated and, if necessary, implemented. The IM Work Plan shall be submitted within thirty (30) calendar days of such notification and shall include the elements listed in V.G.1.b. Such interim measures may be conducted concurrently with investigations required under the terms of this permit. The Permittee may initiate interim measures by submitting an IM Work Plan for approving implementation with reporting in accordance with the requirements under Condition V.G.

b. The IM Work Plan shall ensure that the interim measures are designed to mitigate any current or potential threat(s) to human health or the environment and to be consistent with and integrated into any long-term solution at the facility. The IM Work Plan shall include: the interim measures objectives, procedures for implementation (including any designs, plans, or specifications), and schedules for implementation.

c. The IM Work Plan must be approved by the Department, in writing, prior to implementation. The Department shall specify the start date of the IM Work Plan schedule in the letter approving the IM Work Plan. If the Department disapproves the IM Work Plan, the Department shall either (1) notify the Permittee in writing of the IM Work Plan's deficiencies and specify a due date for submission of a revised IM Work Plan, (2) revise the IM Work Plan and notify the Permittee of the revisions and the start date of the schedule within the approved IM Work Plan, or (3) conditionally approve the IM Work Plan and notify the Permittee of the conditions.

2. IM Implementation

a. The Permittee shall implement the interim measures in accordance with the approved IM Work Plan.

b. The Permittee shall give notice to the Department as soon as possible of any planned changes, reductions, or additions to the IM Work Plan.

c. Final approval of corrective action required under 40 CFR 264.101 as adopted in 15A NCAC 13A .0109 which is achieved through interim measures shall be in accordance with 40 CFR 270.41 as adopted in 15A NCAC 13A .0113 and Condition V.I. as a permit modification.

3. IM Reports

a. If the time required for completion of interim measures is greater than one (1) year, the Permittee shall provide the Department with progress reports at intervals specified in the

approved IM Work Plan. The Progress Reports shall contain the following information at a minimum:

i. A description of the portion of the interim measures completed;
ii. Summaries of any deviations from the IM Work Plan during the reporting period;
iii. Summaries of any problems or potential problems encountered during the reporting period;
iv. Projected work for the next reporting period; and
v. Copies of laboratory/monitoring data.

b. The Permittee shall prepare and submit to the Department, within ninety (90) calendar days of completion of interim measures conducted under Condition V.G., an IM Report. The IM Report shall contain the following information at a minimum:

i. A description of interim measures implemented:
ii. Summaries of results;
iii. Summaries of any problems encountered;
iv. Summaries of accomplishments and/or effectiveness of interim measures; and
v. Copies of all relevant laboratory/monitoring data, etc. in accordance with Condition I.D.10.

H. CORRECTIVE MEASURES STUDY

1. Corrective Measures Study (CMS) Work Plan

a. The Permittee shall prepare and submit a CMS Work Plan for those units requiring a CMS within ninety (90) calendar days of notification by the Department that a CMS is required. This CMS Work Plan shall be developed to meet the requirements of Condition V.H.1.b.

b. The CMS Work Plan shall meet the requirements of Appendix G. The CMS Work Plan shall include schedules of implementation and completion of specific actions necessary to complete a CMS. The Permittee must provide sufficient justification and/or documentation for any unit identified in accordance with Condition V.H.1.a. which is deleted from the CMS Work Plan. Such deletion of a unit is subject to the approval of the Department. The CMS shall be conducted in accordance with the approved CMS Work Plan. The Permittee shall provide sufficient written justification for any omissions or deviations from the minimum requirements of Appendix G. Such omissions or deviations are subject to the approval of the Department. The scope of the CMS Work Plan shall include all investigations necessary to ensure compliance with 3005(c)(3), 40 CFR 264.101, 264.552 as adopted in 15A NCAC 13A .0109, and 270.32(b)(2) as

adopted in 15A NCAC 13A .0113. The Permittee shall implement corrective actions beyond the facility boundary as set forth in Condition V.A.5.

c. The Department shall either approve or disapprove, in writing, the CMS plan. If the Department disapproves the CMS Work Plan, the Department shall either (1) notify the Permittee in writing of the CMS Work Plan's deficiencies and specify a due date for submittal of a revised CMS Work Plan, (2) revise the CMS Work Plan and notify the Permittee of the revisions, or (3) conditionally approve the CMS Work Plan and notify the Permittee of the conditions. This modified CMS Work Plan becomes the approved CMS Work Plan.

2. CMS Implementation

The Permittee shall begin to implement the CMS according to the schedules specified in the CMS Work Plan, no later than fifteen (15) calendar days after the Permittee has received written approval from the Department for the CMS Work Plan. The CMS shall be conducted in accordance with the approved CMS Work Plan approved in accordance with Condition V.H.1.c.

3. CMS Report

a. The Permittee shall prepare and submit to the Department a draft and final CMS Report for the study conducted pursuant to the approved CMS Work Plan. The draft CMS Report shall be submitted to the Department in accordance with the schedule in the approved CMS Work Plan. The final CMS Report shall be submitted to the Department within thirty (30) calendar days of receipt of the Department's comments on the draft CMS Report. The CMS Report shall summarize any bench-scale or pilot tests conducted. The CMS Report must include an evaluation of each remedial alternative If a remedial alternative requires the use of a CAMU, the CMS Report shall include all information necessary to establish and implement the CAMU. The CMS Report shall present all information gathered under the approved CMS Work Plan. The CMS Final Report must contain adequate information to support the Department's decision on the recommended remedy, described under Condition V.I.

b. If the Department determines that the CMS Final Report does not fully satisfy the information requirements specified under Permit Condition V.H.3.a., the Department may disapprove the CMS Final Report. If the Department disapproves the CMS Final Report, the Department shall notify the Permittee in writing of deficiencies in the CMS Final Report and specify a due date for submittal of a revised CMS Final Report. The Department will notify the Permittee of any no further action decision.

c. As specified under Condition V.H.3.a., based on preliminary results and the CMS Final Report, the Department may require the Permittee to evaluate additional remedies or particular elements of one or more proposed remedies.

I. REMEDY APPROVAL AND PERMIT MODIFICATION

1. A remedy shall be selected by the Department from the remedial alternatives evaluated in the CMS. The remedy will be based at a minimum on protection of human health and the environment, as per specific site conditions, existing regulations, and guidance.

2. Pursuant to 40 CFR 270.41 as adopted in 15A NCAC 13A .0113, a permit modification will be initiated by the Department upon concurrence of a remedy selected in accordance with Condition V.I.1. This modification will serve to incorporate a final remedy, including a CAMU if necessary, into the permit.

3. Within one hundred and twenty (120) calendar days after this Permit has been modified, the Permittee shall demonstrate financial assurance for completing the approved remedy.

J. MODIFICATION OF THE CORRECTIVE ACTION SCHEDULE OF COMPLIANCE

1. If at any time the Department determines that modification of the Corrective Action Schedule of Compliance is necessary, the Department may initiate a modification to the Schedule of Compliance, Appendix F.

2. Modifications that are initiated and finalized by the Department will be in accordance with the applicable provisions of 40 CFR Part 270 as adopted in 15A NCAC 13A .0113. The Permittee may also request a permit modification in accordance with 40 CFR 270 to change the schedule of compliance.

K. IMMINENT HAZARDS

1. The Permittee shall report to the Department any imminent or existing hazard to public health or the environment from any release of hazardous waste or hazardous constituents. Such information shall be reported orally within 24 hours from such time the Permittee becomes aware of the circumstances. This report shall include the information specified under Condition I.D.15.

2. A written report shall also be provided to the Department within fifteen (15) calendar days of the time the Permittee becomes aware of the circumstances. The written report shall contain the information specified under Condition I.D.15. and; a description of the release and its cause; the period of the release; whether the

release has been stopped; and if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the release.

K. WORK PLAN AND REPORT REQUIREMENTS

1. All plans and schedules shall be subject to approval by the Department prior to implementation to assure that such work plans and schedules are consistent with the requirements of this Permit and with applicable regulations and guidance. The Permittee shall revise all submittals and schedules as specified by the Department. Upon approval, the Permittee shall implement all plans and schedules as written.

2. All work plans and reports shall be submitted in accordance with the approved schedule. Extensions of the due date for submittals may be granted by the Department based on the Permittee's demonstration that sufficient justification for the extension exists.

3. If the Permittee at any time determines that the SAR information required under Condition V.C., or RFI Work Plan(s) required under Condition V.F., no longer satisfies the requirements of 40 CFR 264.101 as adopted in 15A NCAC 13A .0109 or this permit for prior or continuing releases of hazardous waste or hazardous constituents from solid waste management units and/or areas of concern, the Permittee shall submit an amended RFI Work Plan(s) to the Department within ninety (90) calendar days of such determination.

4. All reports shall be signed and certified in accordance with 40 CFR 270.11 as adopted in 15A NCAC 13A .0113.

5. Two (2) electronic copies and one (1) paper copy of all reports and plans shall be provided by the Permittee to the Department at the following address:

Ms. Jill Pafford, Chief
Hazardous Waste Section
Waste Management Division
1646 Mail Service Center
Raleigh, North Carolina 27699-1646

Electronic reports shall be in MS Word or a common text format. Electronic data shall be in MS Access or a comma delimited format. Data files shall also include a meta data file describing the fields in the data file. Plans shall be electronic to the most reasonable extent possible.

PART VI - WASTE MINIMIZATION

A. GENERAL REQUIREMENTS

In the event that the Permittee treats, stores, or disposes of hazardous wastes on-site where such wastes were generated, then the Permittee must comply with 40 CFR 264.73(b)(9) as adopted in 15A NCAC 13A 0009, and section 3005(h) of RCRA, 42 U.S.C. 6925(h). The Permittee must certify, no less often than annually that:

1. The Permittee has a program in place to reduce the volume and toxicity of hazardous waste to the degree determined by the Permittee to be economically practicable; and

2. The proposed method of treatment, storage or disposal is the most practicable method available to the Permittee which minimizes the present and future threat to human health and the environment.

B. WASTE MINIMIZATION RECORD KEEPING

The Permittee shall maintain copies of the certification in the facility operating record as required by 40 CFR 264.73(b)(9) as adopted in 15A NCAC 13A .0109.

C. WASTE MINIMIZATION PROGRAM OBJECTIVES

If Condition VI.A. is applicable, then the Waste Minimization program required under VI.A. above should address the objectives listed in Appendix H.

PART VII - LAND DISPOSAL RESTRICTIONS

A. GENERAL RESTRICTIONS

40 CFR Part 268 as adopted in 15A NCAC 13A .0112 identifies hazardous wastes that are restricted from land disposal and defines those limited circumstances which an otherwise prohibited waste may continue to be placed on or in a land treatment, storage or disposal unit. The Permittee shall maintain compliance with the requirements of 40 CFR 268 as adopted in 15A NCAC 13A .0112. Where the Permittee has applied for an extension, waiver or variance under 40 CFR 268 as adopted in 15A NCAC 13A .0112 the Permittee shall comply with all restrictions on land disposal under this Part once the effective date for the waste has been reached pending final approval of such application.

B. LAND DISPOSAL PROHIBITIONS AND TREATMENT STANDARDS

1. A restricted waste identified in 40 CFR Part 268 Subpart C as adopted in 15A NCAC 13A .0112 may not be placed in a land disposal unit without further treatment unless the requirements of 40 CFR Part 268 Subparts C and/or D as adopted in 15A NCAC 13A .0112 are met.

2. The storage of hazardous wastes restricted from land disposal under 40 CFR Part 268 as adopted in 15A NCAC 13A .0112 is prohibited unless the requirements of 40 CFR 268 Subpart E as adopted in 15A NCAC 13A .0112 are met.

C. DEFINITIONS

For the purposes of 40 CFR Part 268 as adopted in 15A NCAC 13A .0112, "Land Disposal" means placement in or on the land and includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, underground mine or cave, or concrete vault or bunker intended for disposal purposes.

PART VIII - ORGANIC AIR EMISSIONS REQUIREMENTS FOR PROCESS VENTS AND EQUIPMENT LEAKS

A. GENERAL INTRODUCTION

In the June 21, 1990, Federal Register, EPA published the final rule for Phase I Organic Air Emission Standards (40 CFR Parts 264 and 265, Subparts AA and BB) for hazardous waste treatment, storage, and disposal facilities. Subpart AA contains emission standards for process vents associated with distillation fractionation, thin-film evaporation, solvent extraction, and air or steam stripping operations that process hazardous waste with an annual average total organic concentration of at least ten (10) parts per million (ppm) by weight. SUBPART AA DOES NOT APPLY TO AIR STRIPPING OPERATIONS USED FOR CORRECTIVE ACTION PURPOSES. Subpart BB contains emission standards that address leaks from specific equipment (i.e. pumps, valves, compressors, etc.) that contains or contacts hazardous waste that has an organic concentration of at least ten (10) percent by weight.

B. ORGANIC AIR EMISSION STANDARDS

The Permittee has no units at the present time to which the Organic Air Emissions Requirements of 40 CFR 264, Subpart AA (for process vents), and/or Subpart BB (for equipment leaks) as adopted in 15A NCAC 13A .0113 applies. If the Permittee should change, modify or otherwise identify any unit that is or has become subject to these regulations, the Permittee is required to comply with all 40 CFR 264 as adopted in 15A NCAC 13A .0109, Subpart AA and Subpart BB regulations and is required to submit all 40 CFR 270.24 and 270.25 as adopted in 15A NCAC 13A .0113 informational requirements within thirty (30) calendar days after implementation of the unit's modification.

PART IX - RCRA ORGANIC AIR EMISSION REQUIREMENTS

A. APPLICABILITY

1. Subpart CC applies to all tanks, containers, surface impoundments and/or miscellaneous units, identified in Condition VIII.A., except as provided for in 40 CFR 264.1 and 264.1080(b) as adopted in 15A NCAC 13A .0109. The facility currently has no tanks, containers, surface impoundments, and/or miscellaneous units identified in Condition VIII.A.

APPENDIX C

CORRECTIVE ACTION PROGRAM DESIGN OF REMEDIAL ACTION SYSTEM

The Permittee shall submit corrective action construction design plans and data, blueprints and a construction schedule for the remedial action system including recovery wells, pumps, piping, tanks, stripping towers and all associated equipment within ninety (90) days after the effective date of the permit. Construction shall be complete within 180 days of design approval by all applicable parties including the North Carolina Hazardous Waste Section and the North Carolina Division of Water Quality. The remedial action system design plans shall also include the following items:

1. Locations of the extraction and designated observation wells;

2. Specifications (pumping rates, diameter, screened intervals, etc.) of the extraction wells;

3. Projected horizontal and vertical influence of the ground-water extraction system, and all calculations used to make these projections.

INSPECTIONS

The Permittee shall submit a general inspection schedule as required by 264.15(b) with the remedial action system design plans within ninety (90) days after the effective date of the permit.

GENERAL INSPECTION REQUIREMENTS

A description of the inspection schedule for the following equipment must be provided.

1. Monitoring equipment

2. Emergency and safety equipment

3. Operating and structural equipment

4. Communication or alarm systems and decontamination equipment

The schedule must identify the types of problems to look for during inspections (e.g., leaks, deterioration, missing items or materials, inoperative equipment, etc.).

FREQUENCY OF INSPECTIONS

A description of the frequency of inspections must be provided for items on the schedule. The following items shall be inspected weekly: security fencing, landfill cap, and extraction system plumbing and wiring.

The remedial action system shall be inspected daily for: leaks and spills.

REMEDIAL ACTION SYSTEM MAINTENANCE

The Permittee shall submit a maintenance schedule for the remedial action system within thirty (30) days of remedial action system design final approval. Procedures and frequency of maintenance shall be included.

REPORTING REQUIREMENTS

The following outlines the items required under Condition IV.I. during the start-up phase of the remedial action system. Upon initiation of the corrective action program, and one (1) month thereafter, the Permittee shall provide ground-water level data from the designated observation wells as required for a standard pump test. This data, along with the pumping rates, shall be used to demonstrate the effectiveness of the ground-water extraction system during the start-up phase. Also include on/off frequencies for cyclic pumping and influences that may result from pumping. This data shall be included in the operating record and the semi-annual report on the effectiveness of the corrective action system.

PERSONNEL TRAINING

The Permittee shall conduct introductory and continuing personnel training programs for each employee involved with ground-water sampling or the remedial action equipment. The training shall include instruction for emergency response, contingency plan implementation and explicit sampling, operation and maintenance procedures. The Permittee shall maintain training documents and records. An outline of the training programs shall be submitted to this office within thirty (30) days of final remedial action system design approval.

CONTINGENCY PLAN FOR REMEDIAL ACTION SYSTEM

The Permittee shall have a contingency plan for the remedial action system for response to spills, bursting or clogging of pipes, failure of equipment, or any other unplanned sudden or non-sudden release of hazardous waste constituents to air, soil or surface water at the facility. A contingency plan shall be submitted to this office within thirty (30) days of final remedial action system design approval.

ABANDONMENT

The Permittee shall submit an abandonment plan for the remedial action system within thirty (30) days of final remedial action system design approval. The Permittee shall at a minimum abandon the remedial action system in a manner that:

APPENDIX D

SOLID WASTE MANAGEMENT UNITS AND AREAS OF CONCERN SUMMARY

List of Solid Waste Management Units and Areas of Concern requiring an RFI:

SWMU/AOC Number	Description*
1	Water Dispersal PCP Storage Tank (1)
2	CCA Treatment Cylinder Sump (7)
3	PCP Treatment Cylinder Sump (8)
4	PCP Treatment Cylinder Sump (9)
5	PCP Treatment Cylinder Track Bed (10)
6	CCA Treatment Cylinder Track Bed (11)
7	CCA Treatment Cylinder Track Bed (12)
8	Vacuum Tank (15)
9	Oil/Water Separation Pit (16)
10	Lagoon Effluent Water Tank (17)
11	Lagoon Effluent Water Tank (18)
12	Lagoon Effluent Water Tank (19)
13	PCP Drip Pad (21)
14	CCA Drip Pad (22)
15	CCA Waste Collection Pit (23)
16	Transfer Tank (24)
17	Sawdust Pile (25)
18	Sawdust Land Spreading Area (26)
19	North Run-off Lagoon (28)
20	East Run-off Lagoon (29)
21	Treated Wood Storage Areas

* Number in parenthesis corresponds to SWMU number in January 1987 RFA Report.

List of Solid Waste Management Units and Areas of Concern that require no further action at this time:

SWMU/AOC Number	Description*
22	Steam Condensate Filter (13)
23	PCP Sludge Filter (14)
24	Inactive Storage Tank (20)
25	Container Storage Area (30)

* Number in parenthesis corresponds to SWMU number in January 1987 RFA Report.

List of Solid Waste Management Units and Areas of Concern regulated by the RCRA Permit:

SWMU/AOC Number	Description*
26	Closed Effluent Lagoon (27)

* Number in parenthesis corresponds to SWMU number in January 1987 RFA Report.

APPENDIX E

RCRA FACILITY INVESTIGATION (RFI) WORK PLAN OUTLINE

I. RFI WORK PLAN REQUIREMENTS

The Permittee shall prepare a RCRA Facility Investigation (RFI) Work Plan that meets the requirements of Part V of this document and the RFI Guidance, EPA-530/SW-89-031. This Work Plan shall also include the development of the following plans, which shall be prepared concurrently:

A. Project Management Plan

Permittee shall prepare a Project Management Plan which will include a discussion of the technical approach, schedules and personnel. The Project Management Plan will also include a description of qualifications of personnel performing or directing the RFI, including contractor personnel. This plan shall also document the overall management approach to the RCRA Facility Investigation.

B. Sampling and Analysis Plan(s)

The Permittee shall prepare a plan to document all monitoring procedures: field sampling, sampling procedures and sample analysis performed during the investigation to characterize the environmental setting, source, and releases of hazardous constituents, so as to ensure that all information and data are valid and properly documented. The Sampling Strategy and Procedures shall be in accordance with Characterization of Hazardous Waste Sites A Methods Manual: Volume II., Available Sampling Methods, EPA-600/4-84-076, or EPA Region IV Engineering Compliance Branch's Standard Operating Procedure and Quality Assurance Manual (SOP). Any deviations from these references must be requested by the applicant and approved by the Department. The Sampling and Analysis Plan must specifically discuss the following unless the EPA-600/4-84-076 or SOP procedures are specifically referenced.

1. Sampling Strategy

a. Selecting appropriate sampling locations, depths, etc.;

b. Obtaining all necessary ancillary data;

c. Determining conditions under which sampling should be conducted;

d. Determining which media are to be sampled (e.g., ground water, air, soil, sediment, subsurface gas);

e. Determining which parameters are to be measured and where;

f. Selecting the frequency of sampling and length of sampling period;

g. Selecting the types of samples (e.g., composites vs. grabs) and number of samples to be collected.

2. Sampling Procedures

a. Documenting field sampling operations and procedures, including;

i. Documentation of procedures for preparation of reagents or supplies which become an integral part of the sample (e.g., filters, preservatives, and absorbing reagents);
ii. Procedures and forms for recording the exact location and specific considerations associated with sample acquisition;
iii. Documentation of specific sample preservation method;
iv. Calibration of field instruments;
v. Submission of field-biased blanks, where appropriate;
vi. Potential interferences present at the facility;
vii. Construction materials and techniques, associated with monitoring wells and piezometers;
viii. Field equipment listing and sampling containers;
ix. Sampling order; and
x. Decontamination procedures.

b. Selecting appropriate sample containers;

c. Sampling preservation; and

d. Chain-of-custody, including:

i. Standardized field tracking reporting forms to establish sample custody in the field prior to shipment; and
ii. Pre-prepared sample labels containing all information necessary for effective sample tracking.

3. Sample Analysis

Sample analysis shall be conducted in accordance with SW-846: "Test Methods for Evaluating Solid Waste-Physical/Chemical Methods" (third edition). The sample analysis section of the Sampling and Analysis Plan shall specify the following:

a. Chain-of-custody procedures, including:

   i. Identification of a responsible party to act as sampling custodian at the laboratory facility authorized to sign for incoming field samples, obtain documents of shipments, and verify the data entered onto the sample custody records;
   ii. Provision for a laboratory sample custody log consisting of serially numbered standard lab-tracking report sheets; and
   iii. Specification of laboratory sample custody procedures for sample handling, storage, and dispersion for analysis.

b. Sample storage;

c. Sample preparation methods;

d. Analytical procedures, including:

   i. Scope and application of the procedure;
   ii. Sample matrix;
   iii. Potential interferences;
   iv. Precision and accuracy of the methodology; and
   v. Method detection limits.

e. Calibration procedures and frequency;

f. Data reduction, validation and reporting;

g. Internal quality control checks, laboratory performance and systems audits and frequency, including:

   i. Method blank(s);
   ii. Laboratory control sample(s);
   iii. Calibration check sample(s);
   iv. Replicate sample(s);
   v. Matrix-spiked sample(s);
   vi. Control charts;
   vii. Surrogate samples;

viii. Zero and span gases; and
ix. Reagent quality control checks.

h. Preventative maintenance procedures and schedules;

i. Corrective action (for laboratory problems); and

j. Turnaround time.

C. Data Management Plan

The Permittee shall develop and initiate a Data Management Plan to document and track investigation data and results. This plan shall identify and set up data documentation materials and procedures, project file requirements, and project-related progress reporting procedures and documents. The plan shall also provide the format to be used to present the raw data and conclusions of the investigation.

1. Data Record

The data record shall include the following:

a. Unique sample or field measurement code;

b. Sampling or field measurement location and sample or measurement type;

c. Sampling or field measurement raw data;

d. Laboratory analysis ID number;

e. Property or component measures; and

f. Result of analysis (e.g., concentration).

2. Tabular Displays

The following data shall be presented in tabular displays:

a. Unsorted (raw) data;

b. Results for each medium, or for each constituent monitored;

c. Data reduction for statistical analysis, as appropriate;

d. Sorting of data by potential stratification factors (e.g., location, soil layer, topography); and

e. Summary data.

3. Graphical Displays

The following data shall be presented in graphical formats (e.g., bar graphs, line graphs, area or plan maps, isopleth plots, cross-sectional plots or transits, three dimensional graphs, etc.):

a. Display sampling location and sampling grid;

b. Indicate boundaries of sampling area, and area where more data are required;

c. Display geographical extent of contamination;

d. Illustrate changes in concentration in relation to distances from the source, time, depth or other parameters; and

e. Indicate features affecting inter-media transport and show potential receptors.

II. RCRA FACILITY INVESTIGATION (RFI) REQUIREMENTS

A. RCRA Facility Investigation:

The Permittee shall conduct those investigations necessary to: characterize the facility (Environmental Setting); define the source (Source Characterization); define the degree and extent of release of hazardous constituents (Contamination Characterization); and identify actual or potential receptors.

The investigations should result in data of adequate technical content and quality to support the development and evaluation of the corrective action plan if necessary. The information contained in a RCRA Part B permit application and/or RCRA section 3019 Exposure Information Report may be referenced as appropriate, but must be summarized in both the RFI Work Plan and RFI Report.

All sampling and analyses shall be conducted in accordance with the Sampling and Analysis Plan. All sampling locations shall be documented in a log and identified on a detailed site map.

B. Environmental Setting

The Permittee shall collect information to supplement and/or verify Part B information on the environmental setting at the

facility. The Permittee shall characterize the following as they relate to identified sources, pathways and areas of releases of hazardous constituents from Solid Waste Management Units.

1. Hydrogeology

The Permittee shall conduct a program to evaluate hydrogeologic conditions at the facility. This program shall provide the following information:

a. A description of the regional and facility specific geologic and hydrogeologic characteristics affecting ground-water flow beneath the facility, including:

i. Regional and facility specific stratigraphy: description of strata including strike and dip, identification of stratigraphic contacts;
ii. Structural geology: description of local and regional structural features (e.g., folding, faulting, tilting, jointing, etc.);
iii. Depositional history;
iv. Regional and facility specific ground-water flow patterns; and
v. Identification and characterization of areas and amounts of recharge and discharge.

b. An analysis of any topographic features that might influence the ground-water flow system.

c. Based on field data, tests, and cores, a representative and accurate classification and description of the hydrogeologic units which may be part of the migration pathways at the facility (i.e., the aquifers and any intervening saturated and unsaturated units), including:

i. Hydraulic conductivity and porosity (total and effective);
ii. Lithology, grain size, sorting, degree of cementation;
iii. An interpretation of hydraulic interconnections between saturated zones; and
iv. The attenuation capacity and mechanisms of the natural earth materials (e.g., ion exchange capacity, organic carbon content, mineral content, etc.).

d. Based on data obtained from ground-water monitoring wells and piezometers installed upgradient and downgradient of the potential contaminant source, a

representative description of water level or fluid pressure monitoring including:

i. Water-level contour and/or potentiometric maps;
ii. Hydrogeologic cross-sections showing vertical gradients;
iii. The flow system, including the vertical and horizontal components of flow; and
iv. Any temporal changes in hydraulic gradients, for example, due to tidal or seasonal influences.

e. A description of man-made influences that may affect the hydrology of the site, identifying:

i. Local water-supply and production wells with an approximate schedule of pumping; and
ii. Man-made hydraulic structures (pipelines, trench drains, ditches, etc.)

2. Soils

The Permittee shall conduct a program to characterize the soil and rock units above the water table in the vicinity of contaminant release(s). Such characterization may include, but not be limited to, the following types of information as appropriate:

a. Surface soil distribution;

b. Soil profile, including ASTM classification of soil;

c Transepts of soil stratigraphy;

d. Hydraulic conductivity (saturated and unsaturated);

e. Relative permeability;

f. Bulk density;

g. Porosity;

h. Soil sorption capacity;

i. Cation exchange capacity (CEC);

j. Soil organic content;

k. Soil pH;

l. Particle size distribution;

m. Depth of water table;

n. Moisture content;

o. Effect of stratification on unsaturated flow;

p. Infiltration;

q. Evapotranspiration;

r. Storage capacity;

s. Vertical flow rate; and

t. Mineral content.

3. Surface Water and Sediment

The Permittee shall conduct a program to characterize the surface water bodies in the vicinity of the facility. Such characterizations may include, but not be limited to, the following activities and information:

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

i. For lakes and estuaries: location, elevation, surface area, inflow, outflow, depth, temperature stratification, and volume;
ii. For impoundments: location, elevation, surface area, depth, volume, freeboard, and construction and purpose;
iii. For streams, ditches, and channels: location, elevation, flow, velocity, depth, width, seasonal fluctuations, flooding tendencies (i.e., 100 year event), discharge point(s), and general contents.
iv. Drainage patterns; and
v. Evapotranspiration.

b. Description of the chemistry of the natural surface water and sediments. This includes determining the pH, total dissolved solids, total suspended solids, biological oxygen demand, alkalinity, conductivity, oxygen demand, total organic carbon, specific contaminant concentrations, etc.

c. Description of sediment characteristics including:

i. Deposition area;

ii. Thickness profile; and
iii. Physical and chemical parameters (e.g., grain size, density, organic carbon content, ion exchange capacity, pH, etc.)

4. Air

The Permittee shall provide information characterizing the climate in the vicinity of the facility. Such information may include, but not be limited to:

a. A description of the following parameter:

i. Annual and monthly rainfall averages;
ii. Monthly temperature averages and extremes;
iii. Wind speed and direction;
iv. Relative humidity/dew point;
v. Atmospheric pressure;
vi. Evaporation data;
vii. Development of inversions; and
viii. Climate extremes that have been known to occur in the vicinity of the facility, including frequency of occurrence (i.e., Hurricanes).

b. A description of topographic and man-made features which affect air flow and emission patterns, including:

i. Ridges, hills or mountain area;
ii. Canyons or valleys;
iii. Surface water bodies (e.g., rivers, lakes, bays, etc.); and
iv. Buildings.

C. Source Characterization

For those sources from which releases of hazardous constituents have been detected the Permittee shall collect analytical data to completely characterize the wastes and the areas where wastes have been placed, to the degree that is possible without undue safety risks, including: type; quantity; physical form; disposition (containment or nature of deposits); and facility characteristics affecting release (e.g., facility security, and engineering barriers). This shall include quantifying of the following specific characteristics, at each source area:

1. Unit/Disposal Area Characteristics

a. Location of unit/disposal area;

b. Type of unit/disposal area;

c. Design features;

d. Operating practices (past and present);

e. Period of operation;

f. Age of unit/disposal area;

g. General physical conditions; and

h. Method used to close the unit/disposal area.

2. Waste Characteristics:

a. Type of wastes placed in the unit;

i. Hazardous classification (e.g., flammable, reactive, corrosive, oxidizing or reducing agent);
ii. Quantity; and
iii. Chemical composition.

b. Physical and chemical characteristics such as;

i. Physical form (solid, liquid, gas);
ii. Physical description (e.g., powder, oily sludge);
iii. Temperature;
iv. pH;
v. General chemical class (e.g., acid, base, solvent);
vi. Molecular weight;
vii. Density;
viii. Boiling point;
ix. Viscosity;
x. Solubility in water;
xi. Cohesiveness of the waste; and
xii. Vapor pressure.

c. Migration and dispersal characteristics of the waste such as:

i. Sorption capability;
ii. Biodegradation, bioconcentration, biotransformation;
iii. Photodegradation rates;
iv. Hydrolysis rates; and
v. Chemical transformations.

The Permittee shall document the procedures used in making the above determinations.

D. Characterization of Releases of Hazardous Constituents

The Permittee shall collect analytical data on ground water, soils, surface water, sediment, and subsurface gas contamination in the vicinity of the facility in accordance with the sampling and analysis plan as required above. These data shall be sufficient to define the extent, origin, direction, and rate of movement of contamination. Data shall include time and location of sampling, media sampled, concentrations found, conditions during sampling, and the identity of the individuals performing the sampling and analysis. The Permittee shall address the following types of contamination at the facility:

1. Ground-Water Contamination

The Permittee shall conduct a ground-water investigation to characterize any plumes of contamination detected at the facility. This investigation shall at a minimum provide the following information:

a. A description of the horizontal and vertical extent of any plume(s) of hazardous constituents originating from or within the facility;

b. The horizontal and vertical direction of contamination movement;

c. The velocity of contaminant movement;

d. The horizontal and vertical concentration profiles of hazardous constituents in the plume(s);

e. An evaluation of factors influencing the plume movement; and

f. An extrapolation of future contaminant movement.

The Permittee shall document the procedures used in making the above determinations (e.g., well design, well construction, geophysics, modeling, etc.).

2. Soil Contamination

The Permittee shall conduct an investigation to characterize the contamination of the soil and rock units above the

saturated zone in the vicinity of any contaminant release. The investigation may include the following information:

a. A description of the vertical and horizontal extent of contamination;

b. A description of appropriate contaminant and soil chemical properties within the contaminant source area and plume. This may include contaminant solubility, speciation, absorption, leachability, exchange capacity, biodegradation, hydrolysis, photolysis, oxidation and other factors that might affect contaminant migration and transformation;

c. Specific contaminant concentrations;

d. The velocity and direction of contaminant movement; and

e. An extrapolation of future contaminant movement.

The Permittee shall document the procedures used in making the above determinations.

3. Surface Water and Sediment Contamination

The Permittee shall conduct a surface water investigation to characterize contamination in surface water bodies resulting from releases of hazardous constituents at the facility. The investigation may include, but not be limited to the following information:

a. A description of the horizontal and vertical extent of any plume(s) originating from the facility, and the extent of contamination in underlying sediments;

b. The horizontal and vertical direction of contaminant movement;

c. The contaminant velocity;

d. An evaluation of the physical, biological and chemical factors influencing contaminant movement;

e. An extrapolation of future contaminant movement; and

f. A description of the chemistry of the contaminated surface waters and sediments. This includes the pH, total dissolved solids, specific contaminant concentrations, etc.

4. Air Contamination

The Permittee shall conduct an investigation to characterize gaseous releases of hazardous constituents into the atmosphere or any structures or buildings. This investigation may provide the following information:

a. A description of the horizontal and vertical direction and velocity of contaminant movement;

b. The rate and amount of the release; and

c. The chemical and physical composition of the contaminant(s) released, including horizontal and vertical concentration profiles.

The Permittee shall document the procedures used in making the above determinations.

E. Potential Receptors

The Permittee shall collect data describing the human populations and environmental systems that are susceptible to contaminant exposure from the facility. Chemical analysis of biological samples and/or data on observable effects in ecosystems may also be obtained as appropriate. The following characteristics shall be identified:

1. Current local uses and planned future uses of ground water:

a. Type of use (e.g., drinking water source: municipal or residential, agricultural, domestic/non-potable, and industrial); and

b. Location of ground-water users, to include withdrawal and discharge wells, within one mile of the impacted area.

The above information should also indicate the aquifer or hydrogeologic unit used and/or impacted for each item.

2. Current local uses and planned future uses of surface waters directly impacted by the facility:

a. Domestic and municipal (e.g., potable and lawn/gardening watering);

b. Recreational (e.g., swimming, fishing);

c. Agricultural;

d. Industrial; and

e. Environmental (e.g., fish and wildlife propagation).

3. Human use of or access to the facility and adjacent lands, including but not limited to:

a. Recreation;

b. Hunting;

c. Residential;

d. Commercial; and

e. Relationship between population locations and prevailing wind direction.

4. A general description of the biota in surface water on, adjacent to, or affected by the facility.

5. A general description of the ecology within the area adjacent to the facility.

6. A general demographic profile of the people who use or have access to the facility and adjacent land, including, but not limited to: age; sex; and sensitive subgroups.

7. A description of any known or documented endangered or threatened species near the facility.

APPENDIX F

SCHEDULE OF COMPLIANCE

SCHEDULE OF COMPLIANCE	DUE DATE
Notification of Newly Identified SWMUs and AOCs Condition V.C.1 and Condition V.C.2	Within fifteen (15) calendar days of discovery
SWMU Assessment Report, Condition V.C.3	Within ninety (90) calendar days of notification
Notification for Newly Discovered Releases at Previously Identified SWMUs and AOCs, Condition V.D.1	Within fifteen (15) calendar days after discovery
Confirmatory Sampling Work Plan for SWMUs identified in Appendix D, Condition V.E.1.	Within forty five (45) calendar days after notification by the Department.
Confirmatory Sampling Report, Condition V.E.4.	In accordance with the approved CS Work Plan
RFI Work Plan for SWMU(s) Identified in Appendix D Condition V.F.1.a.	Within ninety (90) calendar days after notification by the Department.
RFI Work Plan for SWMU(s) and AOC(s) under Condition V.C.4., Condition V.D.2., Condition V.E.5., and Condition V.F.1.b.	Within ninety (90) calendar days after receipt of notification by the Department which SWMUs or AOCs require an RFI
RFI Progress Reports, Condition V.F.3.a.	Quarterly, beginning ninety (90) calendar days from the start date specified by the Department *
Draft RFI Report, Condition V.F.3.b.	In accordance with the approved RFI Work Plan
Final RFI Report, Condition V.F.3.b.	Within thirty (30) calendar days after receipt of the Department's comments on the Draft RFI Report
Interim Measures Work Plan, Condition V.G.1.a.	Within thirty (30) calendar days of notification by the Department
Interim Measures Progress Reports Condition V.G.3.a.	In accordance with the approved IM Work Plan **
Interim Measure Report, Condition V.G.3.b.	Within ninety (90) calendar days of completion of interim measures

SCHEDULE OF COMPLIANCE	DUE DATE
CMS Work Plan, Condition V.H.1.a.	Within ninety (90) calendar days of notification by the Department that a CMS is required
Implementation of CMS Work Plan Condition V.H.2.	Within fifteen (15) calendar days after receipt of Department's approval of plan
Draft CMS Report, Condition V.H.3.a.	In accordance with the approved CMS Work Plan
Final CMS Report, Condition V.H.3.a.	Within thirty (30) calendar days of the Department's comments on draft CMS Report
Demonstration of Financial Insurance Condition V.I.3.	Within one hundred and twenty (120) calendar days after permit modification for remedy
Imminent Hazard Report, Condition V.K.1. and V.K.2.	Oral within 24 hours; written within fifteen (15) calendar days of the time the Permittee becomes aware of the circumstances
Waste Minimization Certification, Condition VI.	If Condition VI.A. is applicable, annually from the effective date of permit
Organic Air Emissions Report, Condition VIII.	Within thirty (30) calendar days after implementation of the unit's modification that renders Subpart AA and/or Subpart BB applicable

The above reports must be signed and certified in accordance with 40 CFR 270.11 as adopted by 15A NCAC 13A .0113.

* This applies to Work Plan execution that requires more than one hundred and eighty (180) calendar days.

** This applies to Work Plan execution that requires more than one year.

APPENDIX G

CORRECTIVE MEASURES STUDY (CMS) PLAN OUTLINE

I .Identification and Development of the Corrective Measure Alternatives

- A. Description of Current Situation
- B. Establishment of Corrective Action Objectives
- C. Screening of Corrective Measures Technologies
- D. Identification of the Corrective Measure Alternatives

II. Evaluation of the Corrective Measure Alternatives

- A. Technical/Environmental/Human Health/Institutional
- B. Cost Estimate

III. Justification and Recommendation of the Corrective Measure or Measures

- A. Technical
- B. Environmental
- C. Human Health

IV. Reports

- A. Draft
- B. Final
- C. Public Review and Final Selection of Corrective Measure

I. IDENTIFICATION AND DEVELOPMENT OF THE CORRECTIVE MEASURES ALTERNATIVES

Based on the results of the RFI and consideration of the identified potential corrective measure technologies, the Permittee shall identify, screen and develop the alternatives for removal, containment, treatment and/or other remediation of the contamination based on the objectives established for the corrective action.

A. Description of Current Situation

The Permittee shall submit an update to the information describing the current situation at the facility and the known nature and extent of the contamination as documented by the RFI Report. The Permittee shall provide an update to information presented in the RFI regarding previous response activities and interim measures which have been or are being implemented at the facility. The Permittee shall also make a facility-specific statement of the purpose for the response, based on the results of the RFI. The statement of purpose should identify the actual or potential exposure pathways that should be addressed by corrective measures.

B. Establishment of Corrective Action Objectives

The Permittee shall propose facility-specific objectives for the corrective action. These objectives shall be based on public health and environmental criteria, information gathered during the RFI, EPA guidance, and the requirements of any applicable Federal statutes. At a minimum, all corrective actions concerning ground-water releases from regulated units must be consistent with, and as stringent as, those required under 40 CFR 264.100 as adopted in 15A NCAC 13A .0109.

C. Screening of Corrective Measure Technologies

The Permittee shall review the results of the RFI and assess the technologies which are applicable at the facility. The Permittee shall screen the corrective measure technologies to eliminate those that may prove infeasible to implement, that rely on technologies unlikely to perform satisfactorily or reliably, or that do not achieve the corrective measure objective within a reasonable time period. This screening process focuses on eliminating those technologies which have severe limitations for a given set of waste and site-specific conditions. The screening step may also eliminate technologies based on inherent technology limitations.

Site, waste, and technology characteristics which are used to screen inapplicable technologies are described in more detail below:

1. Site Characteristics

Site data should be reviewed to identify conditions that may limit or promote the use of certain technologies. Technologies whose use is clearly precluded by site characteristics should be eliminated from further consideration.

2. Waste Characteristics

Identification of waste characteristics that limit the effectiveness or feasibility of technologies is an important part of the screening process. Technologies clearly limited by these characteristics should be eliminated from consideration. Waste characteristics particularly affect the feasibility of in-situ methods, direct treatment methods, and land disposal (on/off-site).

3. Technology Limitations

During the screening process, the level of technology development, performance record, and inherent construction, operation, and maintenance problems should be identified for each technology considered. Technologies that are unreliable, perform poorly, or are not fully demonstrated may be eliminated in the screening process. For example, certain treatment methods have been developed to a point where they can be implemented in the field without extensive technology transfer or development.

D. Identification of the Corrective Measure Alternatives

The Permittee shall develop the Corrective Measure Alternatives based on the corrective action objectives and analysis of potential corrective measure technologies. The Permittee shall rely on engineering practice to determine which of the previously identified technologies appear most suitable for the site. Technologies can be combined to form the overall corrective action alternatives. The alternatives developed should represent a workable number of option(s) that each appear to adequately address all site problems and corrective action objectives. Each alternative may consist of an individual technology or a combination of technologies. The Permittee shall document the reasons for excluding technologies.

II. EVALUATION OF THE CORRECTIVE MEASURE ALTERNATIVES

The Permittee shall describe each corrective measure alternative that passes through the initial screening and evaluate each corrective

measure alternative and its components. The evaluation shall be based on technical, environmental, human health and institutional concerns. The Permittee shall also develop cost estimates of each corrective measure.

A. Technical/Environmental/Human Health/Institutional

The Permittee shall provide a description of each corrective measure alternative which includes but is not limited to the following: preliminary process flow sheets; preliminary sizing and type of construction for buildings and structures; and rough quantities of utilities required. The Permittee shall evaluate each alternative in the four following areas:

1. Technical;

a. The Permittee shall evaluate each corrective measure alternative based on performance, reliability, implementability and safety.

i. Effectiveness shall be evaluated in terms of the ability to perform intended functions, such as containment, diversion, removal, destruction, or treatment. The effectiveness of each corrective measure shall be determined either through design specifications or by performance evaluation. Any specific waste or site characteristics which could potentially impede effectiveness shall be considered. The evaluation should also consider the effectiveness of combinations of technologies; and,

ii. Useful life is defined as the length of time the level of desired effectiveness can be maintained. Most corrective measure technologies, with the exception of destruction, deteriorate with time. Often, deterioration can be slowed through proper system operation and maintenance, but the technology eventually may require replacement. Each corrective measure shall be evaluated in terms of the projected service lives of its component technologies. Resource availability in the future life of the technology, as well as appropriateness of the technologies, must be considered in estimating the useful life of the project.

b. The Permittee shall provide information on the reliability of each corrective measure including their

operation and maintenance requirements and their demonstrated reliability:

i. Operation and maintenance requirements include the frequency and complexity of necessary operation and maintenance. Technologies requiring frequent or complex operation and maintenance activities should be regarded as less reliable than technologies requiring little or straightforward operation and maintenance. The availability of labor and materials to meet these requirements shall also be considered; and

ii. Demonstrated and expected reliability is a way of measuring the risk and effect of failure. The Respondent should evaluate whether the technologies have been used effectively under analogous conditions; whether the combination of technologies have been used together effectively; whether failure of any one technology has an immediate impact on receptors; and whether the corrective measure has the flexibility to deal with uncontrollable changes at the site.

c. The Permittee shall describe the implementability of each corrective measure including the relative ease of installation (constructability) and the time required to achieve a given level of response:

i. Constructability is determined by conditions both internal and external to the facility conditions and include such items as location of underground utilities, depth to water table, heterogeneity of subsurface materials, and location of the facility (i.e., remote location vs. a congested urban area). The Permittee shall evaluate what measures can be taken to facilitate construction under these conditions. External factors which affect implementation include the need for special permits or agreements, equipment availability, and the location of suitable off-site treatment or disposal facilities; and

ii. Time has two components that shall be addressed: the time it takes to implement a corrective measure and the time it takes to actually see beneficial results. Beneficial results are defined as the reduction of contaminants to some acceptable, pre-established level.

d. The Permittee shall evaluate each corrective measure alternative with regard to safety. This evaluation shall include threats to the safety of nearby communities and environments as well as those to workers during implementation. Factors to consider are fire, explosion, and exposure to hazardous substances.

2. Environmental;

The Permittee shall perform an Environmental Assessment for each alternative. The Environmental Assessment shall focus on the facility conditions and pathways of contamination actually addressed by each alternative. The Environmental Assessment for each alternative will include, at a minimum, an evaluation of: the short- and long-term beneficial and adverse effects of the response alternative; and adverse effects on environmentally sensitive areas; and an analysis of measures to mitigate adverse effects.

3. Human Health;

The Permittee shall assess each alternative in terms of the extent to which it mitigates short- and long-term potential exposure to any residual contamination and protects human health both during and after implementation of the corrective measure. The assessment will describe the concentrations and characteristics of the contaminants on-site, potential exposure routes, and potentially affected population. Each alternative will be evaluated to determine the level of exposure to contaminants and the reduction over time for management of mitigation measures, the relative levels of each alternative with existing criteria, standards, or guidelines acceptable to EPA.

4. Institutional

The Permittee shall assess relevant institutional needs for each alternative. Specifically, the effects of Federal, state and local environmental and public health standards, regulations, guidance, advisories, ordinances, or community relations on the design, operation, and timing of each alternative. If the selected remedy is capping and closure in place, a notation must be made in the land deed.

B. Cost Estimate

The Permittee shall develop an estimate of the cost of each corrective measure alternative (and for each phase or segment of

the alternative). The cost estimate shall include both capital and operation and maintenance costs.

1. Capital costs consist of direct (construction) and indirect (non-construction and overhead) costs.

   a. Direct capital costs include:

      i. Construction costs: Costs of materials, labor (including fringe benefits and worker's compensation), and equipment required to install the corrective measure.
      ii. Equipment costs: Costs of treatment, containment, disposal and/or service equipment necessary to implement the action; these materials remain until the corrective action is complete;
      iii. Land and site-development costs: Expenses associated with purchase of land and development of existing property; and
      iv. Buildings and services costs: Costs of process and non-process buildings, utility connections, purchased services, and disposal costs.

   b. Indirect capital costs include:

      i. Engineering expenses: Cost of administration, design, construction supervision, drafting, and testing of corrective measure alternatives;
      ii. Legal fees, license, or permit costs: Administrative and technical costs necessary to obtain licenses and permits for installation and operation;
      iii. Start-up and shakedown costs: Costs incurred during corrective measure start-up; and
      iv. Contingency allowances: Funds to cover costs resulting from unforeseen circumstances, such as inadequate facility characterization.

2. Operation and maintenance costs are post-construction costs necessary to ensure continued effectiveness of a corrective measure. The Permittee shall consider the following operation and maintenance cost components:

   a. Operating labor costs: Wages, salaries, training, overhead, and fringe benefits associated with the labor needed for post-construction operations;

b. Maintenance materials and labor costs: Costs for labor, parts, and other resources required for routine maintenance of facilities and equipment;

c. Auxiliary materials and energy: Costs of such items as chemicals and electricity for treatment plant operations, water and sewer service, and fuel;

d. Purchased services: Sampling costs, laboratory fees, and professional fees for which the need can be predicted;

e. Disposal and treatment costs: Costs of transporting, treating, and disposing of waste materials, such as treatment plant residues, generated during operations;

f. Administrative costs: Costs associated with administration of corrective measure operation and maintenance not included under other categories;

g. Insurance, taxes, and licensing costs: Costs of such items as liability and sudden accident insurance; real estate taxes on purchased land or right-of-way; licensing fees for certain technologies; and permit renewal and reporting costs;

h. Maintenance reserve and contingency funds: Annual payments into escrow funds to cover (1) costs of anticipated replacement or rebuilding of equipment and (2) any large unanticipated operation and maintenance costs; and

i. Other costs: Items that do not fit any of the above categories.

III. JUSTIFICATION AND RECOMMENDATION OF THE CORRECTIVE MEASURE OR MEASURES

The Permittee shall justify and recommend a corrective measure alternative using technical, human health, and environmental criteria. This recommendation shall include summary tables which allow the alternative or alternatives to be understood easily. Trade-offs among health risks, environmental effects, and other pertinent factors shall be highlighted. The Department will select the corrective measure alternative or alternatives to be implemented based on the results obtained from work completed under Section II and III. At a minimum, the following criteria will be used to justify the final corrective measure or measures.

A. Technical

1. Performance - corrective measure or measures which are most effective at performing their intended functions and maintaining the performance over extended periods of time will be given preference;

2. Reliability - corrective measure or measures which do not require frequent or complex operation and maintenance activities and that have proved effective under similar waste and facility conditions will be given preference;

3. Implementability - corrective measure or measures which can be constructed and operated to reduce levels of contamination to attain or exceed applicable standards in the shortest period of time will be preferred; and

4. Safety - corrective measure or measures least threatening to safety of nearby residents and environments as well as workers during implementation will be preferred.

B. Human Health

The corrective measure(s) must comply with existing U.S. EPA criteria, standards, or guidelines for the protection of human health. Corrective measures which provide the minimum level of exposure to contaminants and the maximum reduction in exposure with time are preferred.

C. Environmental

The corrective measure(s) posing the least adverse impact (or greatest improvement) over the shortest period of time on the environment will be favored.

IV. REPORTS

The Permittee shall prepare a Corrective Measure Study Report presenting the results obtained from Sections I through III and recommending a corrective measure alternative. Copies of the preliminary report shall be provided by the Permittee to the Department for review and approval.

A. Draft

The Report shall at a minimum include:

1. A description of the facility including a site topographic map and preliminary layouts.

2. A description of the corrective measure(s) and rationale for selection including;

a. Performance expectations;

b. Preliminary design criteria and rationale;

c. General operation and maintenance requirements; and

d. Long-term monitoring requirements.

3. A summary of the RFI and impact on the selected corrective measure or measures;
   a. Field studies (ground water, surface water, soil, air); and

   b. Laboratory studies (bench scale, pick scale).

4. Design and Implementation Precautions;

   a. Special technical problems;

   b. Additional engineering data required;

   c. Permits and regulatory requirements;

   d. Access, easements, right-of-way;

   e. Health and safety requirements; and

   f. Community relations activities.

5. Cost Estimates and Schedules;

   a. Capital cost estimate;

   b. Operation and maintenance cost estimate; and

   c. Project schedule design, construction, and operation.

Copies of the draft shall be provided by the Permittee to the Department.

B. Final

The Permittee shall finalize the Corrective Measure Study Report incorporating comments received from the Department on the Draft Corrective Measure Study Report. The report shall become final upon approval by the Department.

C. Public Review and Final Selection of Corrective Measures

Upon receipt of the Final Corrective Measure Study Report, the Department shall announce its availability to the public for review and comment. At the end of the comment period, the Department shall review the comments and then inform the Permittee of the final decision as to the approved Corrective Measures to be implemented.

APPENDIX H

WASTE MINIMIZATION CERTIFICATION OBJECTIVES

The Waste Minimization Program should include the following elements:

A. Top Management Support

1. Dated and signed policy describing management support for waste minimization and for implementation of a waste minimization plan.

2. Description of employee awareness and training programs designed to involve employees in waste minimization planning and implementation to the maximum extent feasible.

3. Description of how a waste minimization plan has been incorporated into management practices so as to ensure ongoing efforts with respect to product design, capital planning, production operations, and maintenance.

B. Characterization of Waste Generation

1. Identification of types, amounts, and hazardous constituents of waste streams.

2. source and date of generation.

C. Periodic Waste Minimization Assessments

1. Identification of all points in a process where materials can be prevented from becoming a waste, or can be recycled.

2. Identification of potential waste reduction and recycling techniques applicable to each waste, with a cost estimate for capital investment and implementation.

3. Description of technically and economically practical waste reduction/recycling options to be implemented, and a planned schedule for implementation.

4. Specific performance goals, preferably quantitative, for the source reduction of waste by stream. Whenever possible, goals should be stated as weight of waste generated per standard unit of production, as defined by the generator.

D. Cost Allocation System

1. Identification of waste management costs for each waste, factoring in liability, transportation, record keeping, personnel, pollution

control, treatment, disposal, compliance and oversight costs to the extent feasible.

2. Description of how departments are held accountable for the wastes they generate.

3. Comparison of waste management costs with costs of potential reduction and recycling techniques applicable to each waste.

E. Technology Transfer

1. Description of efforts to seek and exchange technical information on waste minimization from other parts of the company, other firms, trade associations, technical assistance programs, and professional consultants.

F. Program Evaluation

1. Description of types and amounts of hazardous waste reduced or recycled.

2. Analysis and quantifying of progress made relative to each performance goal established and each reduction technique to be implemented.

3. Amendments to waste minimization plan and explanation.

4. Explanation and documentation of reduction efforts completed or in progress before development of the waste minimization plan.

5. Explanation and documentation regarding impediments to hazardous waste reduction specific to the individual facility.

References: "Draft Guidance to Hazardous Waste Generators on the Elements of a Waste Minimization Program", 54 CFR 25056, June 12, 1989.

"Waste Minimization Opportunity Assessment Manual", EPA/625/788/003, July 1988.

State of North Carolina
Office of Administrative Hearings

Certification

I hereby certify the attached 20 sheets to be a true copy of

15A NCAC 13A

The original of which is filed in this office in conformance with Chapter 150B of the General Statutes of the State of North Carolina.

In witness whereof, I authorize this certification and affix the official seal of the North Carolina Office of Administrative Hearings at Raleigh, this 14th day of April, 2003

Julian Mann, III
Chief Administrative Law Judge, Director

By: Ruby B. Creech

Ruby B. Creech

SUBCHAPTER 13A – HAZARDOUS WASTE MANAGEMENT

SECTION .0100 – HAZARDOUS WASTE

15A NCAC 13A .0101 GENERAL

(a) The Hazardous Waste Section of the Division of Waste Management shall administer the hazardous waste management program for the State of North Carolina.

(b) In applying the federal requirements incorporated by reference throughout this Subchapter, the following substitutions or exceptions shall apply:

(1) "Department of Environment and Natural Resources" shall be substituted for "Environmental Protection Agency" except in 40 CFR 262.51 through 262.54, 262.56, 262.57, and Part 124 where references to the Environmental Protection Agency shall remain without substitution;

(2) "Secretary of the Department of Environment and Natural Resources" shall be substituted for "Administrator," "Regional Administrator," "Assistant Administrator" and "Director" except for 40 CFR 262.55 through 262.57, 264.12(a), 268.5, 268.6, 268.42(b), 268.44, and Part 124 where the references to the Administrator, Regional Administrator, "Assistant Administrator" and Director shall remain without substitution.

(c) In the event that there are inconsistencies or duplications in the requirements of those Federal rules incorporated by reference throughout this Subchapter and the State rules set out in this Subchapter, the provisions incorporated by reference shall prevail except where the State rules are more stringent.

(d) 40 CFR 260.1 through 260.3 (Subpart A), "General," are incorporated by reference including subsequent amendments and editions.

(e) 40 CFR 260.11, "References", is incorporated by reference including subsequent amendments and editions.

(f) Copies of all materials in this Subchapter may be inspected or obtained as follows:

(1) Persons interested in receiving rule-making notices concerning the North Carolina Hazardous Waste Management Rules must submit a written request to the Hazardous Waste Section, PO Box 29603, Raleigh, N.C. 27611-9603. A check in the amount of fifteen dollars ($15.00) made payable to The Hazardous Waste Section must be enclosed with each request. Upon receipt of each request, individuals will be placed on a mailing list to receive notices for one year.

(2) Material incorporated by reference in the Federal Register may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 at a cost of five hundred and forty four dollars ($544.00) per year. Federal Register materials are codified once a year in the Code of Federal Regulations and may be obtained at the above address for a cost of: 40 CFR 1-51 forty dollars ($40.00), 40 CFR 260-299 forty dollars ($40.00) and 40 CFR 87-149, forty one dollars ($41.00), total one hundred twenty one dollars ($121.00).

(3) The North Carolina Hazardous Waste Management Rules, including the incorporated by reference materials, may be obtained from the Hazardous Waste Section at a cost of twenty five dollars ($25.00).

(4) All material is available for inspection at the Department of Environment and Natural Resources, Hazardous Waste Section, 401 Oberlin Road, Raleigh, NC.

History Note: *Authority G.S. 130A-294(c); 150B-21.6;*
Eff. September 1, 1979;
Amended Eff. June 1, 1989; June 1, 1988; August 1, 1987; May 1, 1987;
Transferred and Recodified from 10 NCAC 10F .0001 Eff. April 4, 1990;
Amended Eff. October 1, 1993; April 1, 1993; October 1, 1992; December 1, 1991;
Recodified from 15A NCAC 13A .0001 Eff. December 20, 1996;
Amended Eff. August 1, 2000; August 1, 1998; August 1, 1997.

15A NCAC 13A .0102 DEFINITIONS

(a) The definitions contained in G.S. 130A-290 apply to this Subchapter.

(b) 40 CFR 260.10 (Subpart B), Definitions, is incorporated by reference, including subsequent amendments and editions except that the Definitions for "Disposal", "Landfill", "Management or hazardous waste management", "Person", "Sludge", "Storage", and "Treatment" are defined by G.S. 130A-290 and are not incorporated by reference.

(c) The following additional definitions shall apply throughout this Subchapter:

(1) "Section" means the Hazardous Waste Section, in the Division of Waste Management, Department of Environment and Natural Resources.
(2) The "Department" means the Department of Environment and Natural Resources (DENR).
(3) "Division" means the Division of Waste Management (DWM).
(4) "Long Term Storage" means the containment of hazardous waste for an indefinite period of time in a facility designed to be closed with the hazardous waste in place.
(5) "Off-site Recycling Facility" means any facility that receives shipments of hazardous waste from off-site to be recycled or processed for recycling through any process conducted at the facility, but does not include any facility owned or operated by a generator of hazardous waste solely to recycle their own waste.

History Note: *Authority G.S. 130A-294(c); 150B-21.6;*
Eff. September 1, 1979;
Amended Eff. June 1, 1989; June 1, 1988; February 1, 1987; October 1, 1986;
Transferred and Recodified from 10 NCAC 10F .0002 Eff. April 4, 1990;
Amended Eff. April 1, 1993; October 1, 1990; August 1, 1990;
Recodified from 15A NCAC 13A .0002 Eff. December 20, 1996;
Amended Eff. August 1, 2000.

15A NCAC 13A .0103 PETITIONS - PART 260

(a) All rulemaking petitions for changes in this Subchapter shall be made in accordance with 15A NCAC 24B .0101.
(b) In applying the federal requirements incorporated by reference in this Rule, "15A NCAC 24B .0101" shall be substituted for references to 40 CFR 260.20.
(c) 40 CFR 260.21 through 260.41 (Subpart C), "Rulemaking Petitions," are incorporated by reference including subsequent amendments and editions.

History Note: *Authority G.S. 130A-294(c); 150B-21.6;*
Eff. November 19, 1980;
Amended Eff. June 1, 1988; May 1, 1987; January 1, 1986; October 1, 1985;
Transferred and Recodified from 10 NCAC 10F .0028 Eff. April 4, 1990;
Amended Eff. April 1, 1993; November 1, 1991; October 1, 1990;
Recodified from 15A NCAC 13A .0003 Eff. December 20, 1996;
Amended Eff. August 1, 2000.

15A NCAC 13A .0104 PUBLIC INFORMATION - PART 2

(a) The provisions concerning requests for information in 40 CFR 2.100 to 2.121 (Subpart A) are incorporated by reference including subsequent amendments and editions, except that 40 CFR 2.106(b), 2.112(f), and 2.120 are not incorporated by reference.
(b) The following address for the Headquarters Freedom of Information Operations (1105) is substituted for the address 1200 Pennsylvania Ave., N.W., Washington, DC 20460 in 40 CFR 2.106(a) and 2.213(a): Division of Waste Management, 1646 Mail Service Center, Raleigh, NC 27699-1646.
(c) The provisions concerning confidentiality of business information in 40 CFR 2.201 to 2.311 (Subpart B) are incorporated by reference including subsequent amendments and editions, except that 40 CFR 2.209 (b) and (c), 2.301, 2.302, 2.303, 2.304, 2.306, 2.307, 2.308, 2.309, 2.310 and 2.311 are not incorporated by reference.

History Note: *Authority G.S. 130A-294(c); 150B-21.6;*
Eff. January 1, 1986;
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Transferred and Recodified from 10 NCAC 10F .0040 Eff. April 4, 1990;
Amended Eff. August 1, 1990;
Recodified from 15A NCAC 13A .0005 Eff. August 30, 1990;
Amended Eff. April 1, 1993; October 1, 1990;
Recodified from 15A NCAC 13A .0004 Eff. December 20, 1996;
Amended Eff. May 1, 2002; August 1, 2000.

15A NCAC 13A .0105 GENERAL PROGRAM REQUIREMENTS - PART 124

(a) 40 CFR 124.1 through 124.21 (Subpart A), "General Program Requirements", are incorporated by reference including subsequent amendments and editions, except that 40 CFR 124.2(c) is not incorporated by reference.

(b) 40 CFR 124.31 through 124.33 (Subpart B), "Specific Procedures Applicable to RCRA Permits", are incorporated by reference including subsequent amendments and editions, except that 40 CFR 124.31(a), 124.32(a) and 124.33(a) are not incorporated by reference.

(1) The following shall be substituted for the provisions of 40 CFR 124.31(a) which are not incorporated by reference:

(A) Applicability. The requirements of this section shall apply to all RCRA part B applications seeking initial permits for hazardous waste management units and shall also apply to RCRA part B applications seeking renewal of permits for such units, where the renewal application is proposing a significant change in facility operations. For the purposes of this Section, a "significant change" is any change that would qualify as a class 3 permit modification under 40 CFR 270.42.

(B) The requirements of this Section do not apply to permit modifications under 40 CFR 270.42 or to applications that are submitted for the sole purpose of conducting post-closure activities or post-closure activities and corrective action at a facility.

(2) The following shall be substituted for the provisions of 40 CFR 124.32(a) which are not incorporated by reference:

(A) Applicability. The requirements of this Section shall apply to all RCRA part B applications seeking initial permits for hazardous waste management units.

(B) The requirements of this Section shall apply to RCRA part B applications seeking renewal of permits for such units under 40 CFR 270.51.

(C) The requirements of this Section do not apply to permit modifications under 40 CFR 270.42 or permit applications submitted for the sole purpose of conducting post-closure activities or post-closure activities and corrective action at a facility.

(3) The following shall be substituted for the provisions of 40 CFR 124.33(a) which are not incorporated by reference: Applicability. The requirements of this Section apply to all applications seeking RCRA permits for hazardous waste management units.

History Note: *Authority G.S. 130A-294(c); 150B-21.6;*
Eff. November 19,1980;
Amended Eff. February 1, 1988; October 1, 1986; July 1, 1986; July 1, 1985;
Transferred and Recodified from 10 NCAC 10F .0035 Eff. April 4, 1990;
Recodified from 15A NCAC 13A .0006 Eff. August 30, 1990;
Amended Eff. April 1, 1993; October 1, 1990;
Recodified from 15A NCAC 13A .0005 Eff. December 20, 1996;
Amended Eff. August 1, 1998.

15A NCAC 13A .0106 IDENTIFICATION AND LISTING OF HAZARDOUS WASTES - PART 261

(a) 40 CFR 261.1 through 261.9 (Subpart A), "General", are incorporated by reference including subsequent amendments and editions.

(b) 40 CFR 261.10 through 261.11 (Subpart B), "Criteria for Identifying the Characteristics of Hazardous Waste and for Listing Hazardous Waste", are incorporated by reference including subsequent amendments and editions.

(c) 40 CFR 261.20 through 261.24 (Subpart C), "Characteristics of Hazardous Waste" are incorporated by reference including subsequent amendments and editions.

(d) 40 CFR 261.30 through 261.38 (Subpart D), "Lists of Hazardous Wastes" are incorporated by reference including subsequent amendments and editions.

(e) The Appendices to 40 CFR Part 261 are incorporated by reference including subsequent amendments and editions.

History Note: *Authority G.S. 130A-294(c); 150B-21.6;*
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Recodified from 15A NCAC 13A .0007 Eff. August 30, 1990;

Amended Eff. January 1, 1996; April 1, 1993; February 1, 1992; December 1, 1990;
Recodified from 15A NCAC 13A .0006 Eff. December 20, 1996;
Amended Eff. August 1, 2000.

15A NCAC 13A .0107 STDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE - PART 262

(a) 40 CFR 262.10 through 262.12 (Subpart A), "General", are incorporated by reference including subsequent amendments and editions.

(b) 40 CFR 262.20 through 262.23 (Subpart B), "The Manifest", are incorporated by reference including subsequent amendments and editions.

(c) 40 CFR 262.30 through 262.34 (Subpart C), "Pre-Transport Requirements", are incorporated by reference including subsequent amendments and editions.

(d) 40 CFR 262.40 through 262.44 (Subpart D), "Recordkeeping and Reporting", are incorporated by reference including subsequent amendments and editions. In addition, a generator shall keep records of inspections and results of inspections required by Section 262.34 for at least three years from the date of the inspection.

(e) 40 CFR 262.50 through 262.58 (Subpart E), "Exports of Hazardous Waste", are incorporated by reference including subsequent amendments and editions.

(f) 40 CFR 262.60 (Subpart F), "Imports of Hazardous Waste", is incorporated by reference including subsequent amendments and editions.

(g) 40 CFR 262.70 (Subpart G), "Farmers" is incorporated by reference including subsequent amendments and editions.

(h) 40 CFR 262.80 through 262.89 (Subpart H), "Transfrontier Shipments of Hazardous Waste for Recovery within the OECD", are incorporated by reference including subsequent amendments and editions, except that 40 CFR 262.89(e) is not incorporated by reference.

(i) The appendix to 40 CFR Part 262 is incorporated by reference including subsequent amendments and editions; however, a contact telephone number for each transporter and the destination facility is required on the manifest. All applicable EPA Hazardous Waste Codes shall also be included on the manifest.

History Note: *Authority G.S. 130A-294(c); 150B-21.6;*
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Recodified from 15A NCAC 13A .0008 Eff. August 30, 1990;
Amended Eff. April 1, 1993; October 1, 1990;
Recodified from 15A NCAC 13A .0007 Eff. December 20, 1996;
Amended Eff. April 1, 2001; August 1, 1998.

15A NCAC 13A .0108 STDS APPLICABLE TO TRANSPORTERS OF HAZARDOUS WASTE - PART 263

(a) 40 CFR 263.10 through 263.12 (Subpart A), "General", are incorporated by reference including subsequent amendments and editions.

(b) 40 CFR 263.20 through 263.22 (Subpart B), "Compliance With the Manifest System and Record keeping", are incorporated by reference including subsequent amendments and editions.

(c) Upon discovering a significant manifest discrepancy, the transporter must attempt to reconcile the discrepancy with the waste generator (e.g. with telephone conversations). If the discrepancy is not resolved within 15 days after receiving the waste, the transporter must immediately submit to the Department a letter describing the discrepancy and attempts to reconcile it with a copy of the manifest or shipping paper at issue.

(d) Manifest discrepancies are differences between the quantity or type of hazardous waste designated on the manifest or shipping paper, and the quantity or type of hazardous waste a transporter actually transports. Significant discrepancies in quantity are: for bulk waste, variations greater than 10 percent in weight; and, for batch waste, any variation in piece count (e.g. a discrepancy of one drum in a truckload). Significant discrepancies in type are obvious differences which can be discovered by inspection or waste analysis (e.g. waste solvent substituted for waste acid, or toxic constituents not reported on the manifest or shipping paper).

(e) 40 CFR 263.30 through 263.31 (Subpart C), "Hazardous Waste Discharges", are incorporated by reference including subsequent amendments and editions.

History Note: *Authority G.S. 130A-294(c); 150B-21.6;*
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Amended Eff. April 1, 1993; October 1, 1990;
Recodified from 15A NCAC 13A .0008 Eff. December 20, 1996;
Amended Eff. August 1, 2000.

15A NCAC 13A .0109 STANDARDS FOR OWNERS/OPERATORS OF HWTSD FACILITIES - PART 264

(a) Any person who treats, stores or disposes of hazardous waste shall comply with the requirements set forth in this Section. The treatment, storage or disposal of hazardous waste is prohibited except as provided in this Section.
(b) 40 CFR 264.1 through 264.4 (Subpart A), "General", are incorporated by reference including subsequent amendments and editions.
(c) 40 CFR 264.10 through 264.19 (Subpart B), "General Facility Standards", are incorporated by reference including subsequent amendments and editions.
(d) 40 CFR 264.30 through 264.37 (Subpart C), "Preparedness and Prevention", are incorporated by reference including subsequent amendments and editions.
(e) 40 CFR 264.50 through 264.56 (Subpart D), "Contingency Plan and Emergency Procedures", are incorporated by reference including subsequent amendments and editions.
(f) 40 CFR 264.70 through 264.77 (Subpart E), "Manifest System, Recordkeeping, and Reporting", are incorporated by reference including subsequent amendments and editions.
(g) 40 CFR 264.90 through 264.101 (Subpart F), "Releases From Solid Waste Management Units", are incorporated by reference including subsequent amendments and editions. For the purpose of this incorporation by reference, "January 26, 1983" shall be substituted for "July 26, 1982" contained in 40 CFR 264.90(a)(2).
(h) 40 CFR 264.110 through 264.120 (Subpart G), "Closure and Post-Closure", are incorporated by reference including subsequent amendments and editions.
(i) 40 CFR 264.140 through 264.151 (Subpart H), "Financial Requirements", are incorporated by reference including subsequent amendments and editions, except that 40 CFR 264.143(a)(3), (a)(4), (a)(5), (a)(6), 40 CFR 264.145(a)(3), (a)(4), (a)(5), and 40 CFR 264.151(a)(1), Section 15 are not incorporated by reference.

(1) The following shall be substituted for the provisions of 40 CFR 264.143(a)(3) which were not incorporated by reference:
The owner or operator shall deposit the full amount of the closure cost estimate at the time the fund is established. Within 1 year of the effective date of these Rules, an owner or operator using a closure trust fund established prior to the effective date of these Rules shall deposit an amount into the fund so that its value after this deposit at least equals the amount of the current closure cost estimate, or shall obtain other financial assurance as specified in this Section.

(2) The following shall be substituted for the provisions of 40 CFR 264.143(a)(6) which were not incorporated by reference:
After the trust fund is established, whenever the current closure cost estimate changes, the owner or operator shall compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new estimate, the owner or operator within 60 days after the change in the cost estimate, shall either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current closure cost estimate, or obtain other financial assurance as specified in this section to cover the difference.

(3) The following shall be substituted for the provisions of 40 CFR 264.145(a)(3) which were not incorporated by reference:

(A) Except as otherwise provided in Part (i)(3)(B) of this Rule, the owner or operator shall deposit the full amount of the post-closure cost estimate at the time the fund is established.

(B) If the Department finds that the owner or operator of an inactive hazardous waste disposal unit cannot provide financial assurance for post-closure through any other option (e.g. surety bond, letter of credit, or corporate guarantee), a plan for annual payments to the trust fund over the term of the RCRA post-closure permit may be established by the Department as a permit condition.

(4) The following additional requirement shall apply:
The trustee shall notify the Department of payment to the trust fund, by certified mail within 10 days following said payment to the trust fund. The notice shall contain the name of the Grantor, the date of payment, the amount of payment, and the current value of the trust fund.

(j) 40 CFR 264.170 through 264.179 (Subpart I), "Use and Management of Containers", are incorporated by reference including subsequent amendments and editions.

(k) 40 CFR 264.190 through 264.200 (Subpart J), "Tank Systems", are incorporated by reference including subsequent amendments and editions.

(l) The following are requirements for Surface Impoundments:

(1) 40 CFR 264.220 through 264.232 (Subpart K), "Surface Impoundments", are incorporated by reference including subsequent amendments and editions.

(2) The following are additional standards for surface impoundments:

(A) The liner system shall consist of at least two liners;

(B) Artificial liners shall be equal to or greater than 30 mils in thickness;

(C) Clayey liners shall be equal to or greater than five feet in thickness and have a maximum permeability of 1.0×10^{-7} cm/sec;

(D) Clayey liner soils shall have the same characteristics as described in Subparts (r)(4)(B)(ii), (iii), (iv), (vi) and (vii) of this Rule;

(E) A leachate collection system shall be constructed between the upper liner and the bottom liner;

(F) A leachate detection system shall be constructed below the bottom liner; and

(G) Surface impoundments shall be constructed in such a manner to prevent landsliding, slippage or slumping.

(m) 40 CFR 264.250 through 264.259 (Subpart L), "Waste Piles", are incorporated by reference including subsequent amendments and editions.

(n) 40 CFR 264.270 through 264.283 (Subpart M), "Land Treatment", are incorporated by reference including subsequent amendments and editions.

(o) 40 CFR 264.300 through 264.317 (Subpart N), "Landfills", are incorporated by reference including subsequent amendments and editions.

(p) A long-term storage facility shall meet groundwater protection, closure and post-closure, and financial requirements for disposal facilities as specified in Paragraphs (g), (h), and (i) of this Rule.

(q) 40 CFR 264.340 through 264.351 (Subpart O), "Incinerators", are incorporated by reference including subsequent amendments and editions.

(r) The following are additional location standards for facilities:

(1) In addition to the location standards set forth in 15A NCAC 13A .0109(c), the Department, in determining whether to issue a permit for a hazardous waste management facility, shall consider the risks posed by the proximity of the facility to water table levels, flood plains, water supplies, public water supply watersheds, mines, natural resources such as wetlands, endangered species habitats, parks, forests, wilderness areas, and historical sites, and population centers and shall consider whether provision has been made for adequate buffer zones. The Department shall also consider ground water travel time, soil pH, soil cation exchange capacity, soil composition and permeability, slope, climate, local land use, transportation factors such as proximity to waste generators, route, route safety, and method of transportation, aesthetic factors such as the visibility, appearance, and noise level of the facility; potential impact on air quality, existence of seismic activity and cavernous bedrock.

(2) The following minimum separation distances shall be required of all hazardous waste management facilities except that existing facilities shall be required to meet these minimum separation distances to the maximum extent feasible:

(A) All hazardous waste management facilities shall be located at least 0.25 miles from institutions including but not limited to schools, health care facilities and prisons, unless the owner or operator can demonstrate that no unreasonable risks shall be posed by the proximity of the facility.

(B) All hazardous waste treatment and storage facilities shall comply with the following separation distances: all hazardous waste shall be treated and stored a minimum of 50 feet from the property line of the facility; except that all hazardous waste with ignitable, incompatible or reactive characteristics shall be treated and stored a minimum of 200 feet

from the property line of the facility if the area adjacent to the facility is zoned for any use other than industrial or is not zoned.

(C) All hazardous waste landfills, long-term storage facilities, land treatment facilities and surface impoundments, shall comply with the following separation distances:

(i) All hazardous waste shall be located a minimum of 200 feet from the property line of the facility;

(ii) Each hazardous waste landfill, long-term storage or surface impoundment facility shall be constructed so that the bottom of the facility is 10 feet or more above the historical high ground water level. The historical high ground water level shall be determined by measuring the seasonal high ground water levels and predicting the long-term maximum high ground water level from published data on similar North Carolina topographic positions, elevations, geology, and climate; and

(iii) All hazardous waste shall be located a minimum of 1,000 feet from the zone of influence of any existing off-site ground water well used for drinking water, and outside the zone of influence of any existing or planned on-site drinking water well.

(D) Hazardous waste storage and treatment facilities for liquid waste that is classified as TC toxic, toxic, or acutely toxic and is stored or treated in tanks or containers shall not be located:

(i) in the recharge area of an aquifer which is designated as an existing sole drinking water source as defined in the Safe Drinking Water Act, Section .1424(e) [42 U.S.C. 300h-3(e)] unless an adequate secondary containment system is constructed, and after consideration of applicable factors in Subparagraph (r)(3) of this Rule, the owner or operator can demonstrate no unreasonable risk to public health;

(ii) within 200 feet of surface water impoundments or surface water stream with continuous flow as defined by the United States Geological Survey;

(iii) in an area that will allow direct surface or subsurface discharge to WS-I, WS-II or SA waters or a Class III Reservoir as defined in 15A NCAC 2B .0200 and 15A NCAC 18C .0102;

(iv) in an area that will allow direct surface or subsurface discharge to the watershed for a Class I or II Reservoir as defined in 15A NCAC 18C .0102;

(v) within 200 feet horizontally of a 100-year floodplain elevation;

(vi) within 200 feet of a seismically active area as defined in Paragraph (c) of this Rule; and

(vii) within 200 feet of a mine, cave, or cavernous bedrock.

(3) The Department may require any hazardous waste management facility to comply with greater separation distances or other protective measures necessary to avoid unreasonable risks posed by the proximity of the facility to water table levels, flood plains, water supplies, public water supply watersheds, mines, natural resources such as wetlands, endangered species habitats, parks, forests, wilderness areas, and historical sites, and population centers or to provide an adequate buffer zone. The Department may also require protective measures necessary to avoid unreasonable risks posed by the soil pH, soil cation exchange capacity, soil composition and permeability, climate, transportation factors such as proximity to waste generators, route, route safety, and method of transportation, aesthetic factors such as the visibility, appearance, and noise level of the facility, potential impact on air quality, and the existence of seismic activity and cavernous bedrock. In determining whether to require greater separation distances or other protective measures, the Department shall consider the following factors:

(A) All proposed hazardous waste activities and procedures to be associated with the transfer, storage, treatment or disposal of hazardous waste at the facility;

(B) The type of hazardous waste to be treated, stored, or disposed of at the facility;

(C) The volume of waste to be treated, stored, or disposed of at the facility;

(D) Land use issues including the number of permanent residents in proximity to the facility and their distance from the facility;

(E) The adequacy of facility design and plans for containment and control of sudden and non-sudden accidental events in combination with adequate off-site evacuation of potentially adversely impacted populations;

(F) Other land use issues including the number of institutional and commercial structures such as airports and schools in proximity to the facility, their distance from the facility, and the particular nature of the activities that take place in those structures;

(G) The lateral distance and slope from the facility to surface water supplies or to watersheds draining directly into surface water supplies;

(H) The vertical distance, and type of soils and geologic conditions separating the facility from the water table;

(I) The direction and rate of flow of ground water from the sites and the extent and reliability of on-site and nearby data concerning seasonal and long-term groundwater level fluctuations;

(J) Potential air emissions including rate, direction of movement, dispersion and exposure, whether from planned or accidental, uncontrolled releases; and

(K) Any other relevant factors.

(4) The following are additional location standards for landfills, long-term storage facilities and hazardous waste surface impoundments:

(A) A hazardous waste landfill, long-term storage, or a surface impoundment facility shall not be located:

(i) In the recharge area of an aquifer which is an existing sole drinking water source;

(ii) Within 200 feet of a surface water stream with continuous flow as defined by the United States Geological Survey;

(iii) In an area that will allow direct surface or subsurface discharge to WS-I, WS-II or SA waters or a Class III Reservoir as defined in 15A NCAC 2B .0200 and 15A NCAC 18C .0102;

(iv) In an area that will allow direct surface or subsurface discharge to a watershed for a Class I or II Reservoir as defined in 15A NCAC 18C .0102;

(v) Within 200 feet horizontally of a 100-year flood hazard elevation;

(vi) Within 200 feet of a seismically active area as defined in Paragraph (c) of this Rule; and

(vii) Within 200 feet of a mine, cave or cavernous bedrock.

(B) A hazardous waste landfill or long-term storage facility shall be located in highly weathered, relatively impermeable clayey formations with the following soil characteristics:

(i) The depth of the unconsolidated soil materials shall be equal to or greater than 20 feet;

(ii) The percentage of fine-grained soil material shall be equal to or greater than 30 percent passing through a number 200 sieve;

(iii) Soil liquid limit shall be equal to or greater than 30;

(iv) Soil plasticity index shall be equal to or greater than 15;

(v) Soil compacted hydraulic conductivity shall be a maximum of 1.0×10^{-7} cm/sec;

(vi) Soil Cation Exchange Capacity shall be equal to or greater than 5 milliequivalents per 100 grams;

(vii) Soil Potential Volume Change Index shall be equal to or less than 4; and

(viii) Soils shall be underlain by a competent geologic formation having a rock quality designation equal to or greater than 75 percent unless other geological conditions afford adequate protection of public health and the environment.

(C) A hazardous waste landfill or long-term storage facility shall be located in areas of low to moderate relief to the extent necessary to prevent landsliding or slippage and slumping. The site may be graded to comply with this standard.

(5) All new hazardous waste impoundments that close with hazardous waste residues left in place shall comply with the standards for hazardous waste landfills in Subparagraph (r)(4) of this Rule unless the applicant can demonstrate that equivalent protection of public health and environment is afforded by some other standard.

(6) The owners and operators of all new hazardous waste management facilities shall construct and maintain a minimum of two observation wells, one upgradient and one downgradient of the proposed facility; and shall establish background groundwater concentrations and monitor annually for all hazardous wastes that the owner or operator proposes to store, treat, or dispose at the facility.

(7) The owners and operators of all new hazardous waste facilities shall demonstrate that the community has had an opportunity to participate in the siting process by complying with the following:

(A) The owners and operators shall hold at least one public meeting in the county in which the facility is to be located to inform the community of all hazardous waste management activities including but not limited to: the hazardous properties of the waste to be managed; the type of management proposed for the wastes; the mass and volume of the wastes; and the source of the wastes; and to allow the community to identify specific health, safety and environmental concerns or problems expressed by the community related to the hazardous waste activities associated with the facility. The owners and operators shall provide a public notice of this meeting at least 30 days prior to the meeting. Public notice shall be documented in the facility permit application. The owners and operators shall submit as part of the permit application a complete written transcript of the meeting, all written material submitted that represents community concerns, and all other relevant written material distributed or used at the meeting. The written transcript and other written material submitted or used at the meeting shall be submitted to the local public library closest to and in the county of the proposed site with a request that the information be made available to the public.

(B) For the purposes of this Rule, public notice shall include: notification of the boards of county commissioners of the county where the proposed site is to be located and all contiguous counties in North Carolina; a legal advertisement placed in a newspaper or newspapers serving those counties; and provision of a news release to at least one newspaper, one radio station, and one TV station serving these counties. Public notice shall include the time, place, and purpose of the meetings required by this Rule.

(C) No less than 30 days after the first public meeting transcript is available at the local public library, the owners and operators shall hold at least one additional public meeting in order to attempt to resolve community concerns. The owners and operators shall provide public notice of this meeting at least 30 days prior to the meeting. Public notice shall be documented in the facility permit application. The owners and operators shall submit as part of the permit application a complete written transcript of the meeting, all written material submitted that represents community concerns, and all other relevant written material distributed or used at the meeting.

(D) The application, written transcripts of all public meetings and any additional material submitted or used at the meetings, and any additions or corrections to the application, including any responses to notices of deficiencies shall be submitted to the local library closest to and in the county of the proposed site, with a request that the information be made available to the public until the permit decision is made.

(E) The Department shall consider unresolved community concerns in the permit review process and impose final permit conditions based on sound scientific, health, safety, and environmental principles as authorized by applicable laws or rules.

(s) 40 CFR 264.552 through 264.554 (Subpart S), "Corrective Action for Solid Waste Management Units", are incorporated by reference including subsequent amendments and editions.

(t) 40 CFR 264.570 through 264.575 (Subpart W), "Drip Pads", are incorporated by reference including subsequent amendments and editions.

(u) 40 CFR 264.600 through 264.603 (Subpart X), "Miscellaneous Units", are incorporated by reference including subsequent amendments and editions.

(v) 40 CFR 264.1030 through 264.1049 (Subpart AA), "Air Emission Standards for Process Vents", are incorporated by reference including subsequent amendments and editions.

(w) 40 CFR 264.1050 through 264.1079 (Subpart BB), "Air Emission Standards for Equipment Leaks", are incorporated by reference including subsequent amendments and editions.

(x) 40 CFR 264.1080 through 264.1091 (Subpart CC), "Air Emission Standards for Tanks, Surface Impoundments, and Containers", are incorporated by reference including subsequent amendments and editions.

(y) 40 CFR 264.1100 through 264.1102 (Subpart DD), "Containment Buildings", are incorporated by reference including subsequent amendments and editions.

(z) 40 CFR 264.1200 through 264.1202 (Subpart EE), "Hazardous Waste Munitions and Explosives Storage", are incorporated by reference including subsequent amendments and editions.

(aa) Appendices to 40 CFR Part 264 are incorporated by reference including subsequent amendments and editions.

History Note: *Authority G.S. 130A-294(c); 150B-21.6;*
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Transferred and Recodified from 10 NCAC 10F .0032 Eff. April 4, 1990;
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Recodified from 15A NCAC 13A .0010 Eff. August 30, 1990;
Amended Eff. July 1, 1995; October 1, 1993; April 1, 1993; October 1, 1992;
Recodified from 15A NCAC 13A .0009 Eff. December 20, 1996;
Amended Eff. April 1, 2001; April 1, 1999.

15A NCAC 13A .0110 INTERIM STATUS STDS FOR OWNERS-OP OF HWTSD FACILITIES - PART 265

(a) 40 CFR 265.1 through 265.4 (Subpart A), "General", are incorporated by reference including subsequent amendments and editions.
(b) 40 CFR 265.10 through 265.19 (Subpart B), "General Facility Standards", are incorporated by reference including subsequent amendments and editions.
(c) 40 CFR 265.30 through 265.37 (Subpart C), "Preparedness and Prevention", are incorporated by reference including subsequent amendments and editions.
(d) 40 CFR 265.50 through 265.56 (Subpart D), "Contingency Plan and Emergency Procedures", are incorporated by reference including subsequent amendments and editions.
(e) 40 CFR 265.70 through 265.77 (Subpart E), "Manifest System, Recordkeeping, and Reporting", are incorporated by reference including subsequent amendments and editions.
(f) 40 CFR 265.90 through 265.94 (Subpart F), "Ground-Water Monitoring", are incorporated by reference including subsequent amendments and editions.
(g) 40 CFR 265.110 through 265.121 (Subpart G), "Closure and Post-Closure", are incorporated by reference including subsequent amendments and editions.
(h) 40 CFR 265.140 through 265.151 (Subpart H), "Financial Requirements", are incorporated by reference including subsequent amendments and editions, except that 40 CFR 265.143(a)(3), (a)(4), (a)(5), (a)(6), and 40 CFR 265.145(a)(3), (a)(4), (a)(5), are not incorporated by reference:

(1) The following shall be substituted for the provisions of 40 CFR 265.143(a)(3) which were not incorporated by reference: The owner or operator shall deposit the full amount of the closure cost estimate at the time the fund is established. Within one year of the effective date of these Rules, an owner or operator using a closure trust fund established prior to the effective date of these Rules shall deposit an amount into the fund so that its value after this deposit at least equals the amount of the current closure cost estimate, or shall obtain other financial assurance as specified in this Section;

(2) The following shall be substituted for the provisions of 40 CFR 265.143(a)(6) which were not incorporated by reference: After the trust fund is established, whenever the current closure cost estimate changes, the owner or operator shall compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new estimate, the owner or operator within 60 days after the change in the cost estimate, shall either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current closure cost estimate, or obtain other financial assurance as specified in this Section to cover the difference; and

(3) The following shall be substituted for the provisions of 40 CFR 265.145(a)(3) which were not incorporated by reference:

(A) Except as otherwise provided in Part (h)(3)(B) of this Rule, the owner or operator shall deposit the full amount of the post-closure cost estimate at the time the fund is established.

(B) If the Department finds that the owner or operator of an inactive hazardous waste disposal unit cannot provide financial assurance for post-closure through any other option (e.g. surety bond, letter of credit, or corporate guarantee), a plan for annual payments to the trust fund during the interim status period may be established by the Department by use of an Administrative Order.

(i) 40 CFR 265.170 through 265.178 (Subpart I), "Use and Management of Containers", are incorporated by reference including subsequent amendments and editions. Additionally, the owner or operator shall keep records and results of required inspections for at least three years from the date of the inspection.
(j) 40 CFR 265.190 through 265.202 (Subpart J), "Tank Systems", are incorporated by reference including subsequent amendments and editions.
(k) 40 CFR 265.220 through 265.231 (Subpart K), "Surface Impoundments", are incorporated by reference including subsequent amendments and editions.
(l) 40 CFR 265.250 through 265.260 (Subpart L), "Waste Piles", are incorporated by reference including subsequent amendments and editions.
(m) 40 CFR 265.270 through 265.282 (Subpart M), "Land Treatment", are incorporated by reference including subsequent amendments and editions.
(n) 40 CFR 265.300 through 265.316 (Subpart N), "Landfills", are incorporated by reference including subsequent amendments and editions.
(o) 40 CFR 265.340 through 265.352 (Subpart O), "Incinerators", are incorporated by reference including subsequent amendments and editions.
(p) 40 CFR 265.370 through 265.383 (Subpart P), "Thermal Treatment", are incorporated by reference including subsequent amendments and editions.
(q) 40 CFR 265.400 through 265.406 (Subpart Q), "Chemical, Physical, and Biological Treatment", are incorporated by reference including subsequent amendments and editions.
(r) 40 CFR 265.440 through 265.445 (Subpart W), "Drip Pads", are incorporated by reference including subsequent amendments and editions.
(s) 40 CFR 265.1030 through 265.1049 (Subpart AA), "Air Emission Standards for Process Vents", are incorporated by reference including subsequent amendments and editions.
(t) 40 CFR 265.1050 through 265.1079 (Subpart BB), "Air Emission Standards for Equipment Leaks", are incorporated by reference including subsequent amendments and editions.
(u) 40 CFR 265.1080 through 265.1091 (Subpart CC), "Air Emission Standards for Tanks, Surface Impoundments, and Containers", are incorporated by reference including subsequent amendments and editions.
(v) 40 CFR 265.1100 through 265.1102 (Subpart DD), "Containment Buildings", are incorporated by reference including subsequent amendments and editions.
(w) 40 CFR 265.1200 through 265.1202 (Subpart EE), "Hazardous Waste Munitions and Explosives Storage", are incorporated by reference including subsequent amendments and editions.
(x) Appendices to 40 CFR Part 265 are incorporated by reference including subsequent amendments and editions.

History Note: *Authority G.S. 130A-294(c); 150B-21.6;*
Eff. November 19, 1980;
Amended Eff. June 1, 1989; December 1, 1988; June 1, 1988; February 1, 1988;
Transferred and Recodified from 10 NCAC 10F .0033 Eff. April 4, 1990;
Recodified from 15A NCAC 13A .0011 Eff. August 30, 1990;
Amended Eff. July 1, 1995; April 1, 1993; October 1, 1992; February 1, 1992;
Recodified from 15A NCAC 13A .0010 Eff. December 20, 1996;
Amended Eff. August 1, 2000; April 1, 1999.

15A NCAC 13A .0111 STDS FOR THE MGMT OF SPECIFIC HW/TYPES HWM FACILITIES - PART 266

(a) 40 CFR 266.20 through 266.23 (Subpart C), "Recyclable Materials Used in a Manner Constituting Disposal", are incorporated by reference including subsequent amendments and editions.
(b) 40 CFR 266.70 (Subpart F), "Recyclable Materials Utilized for Precious Metal Recovery", is incorporated by reference including subsequent amendments and editions.
(c) 40 CFR 266.80 (Subpart G), "Spent Lead-Acid Batteries Being Reclaimed", is incorporated by reference including subsequent amendments and editions.
(d) 40 CFR 266.100 through 266.112 (Subpart H), "Hazardous Waste Burned in Boilers and Industrial Furnaces", are incorporated by reference including subsequent amendments and editions.
(e) 40 CFR 266.200 through 266.206 (Subpart M), "Military Munitions", are incorporated by reference including subsequent amendments and editions.

(f) 40 CFR 266.210 through 266.360 (Subpart N), "Conditional Exemption for Low-Level Mixed Waste Storage, Treatment, Transportation and Disposal", are incorporated by reference including subsequent amendments and editions.
(g) Appendices to 40 CFR Part 266 are incorporated by reference including subsequent amendments and editions.

History Note: *Authority G.S. 130A-294(c); 150B-21.6;*
Eff. July 1, 1985;
Amended Eff. June 1, 1990; June 1, 1988; February 1, 1988; December 1, 1987;
Transferred and Recodified from 10 NCAC 10F .0039 Eff. April 4, 1990;
Recodified from 15A NCAC 13A .0012 Eff. August 30, 1990;
Amended Eff. January 1, 1995; April 1, 1993; August 1, 1991; October 1, 1990;
Recodified from 15A NCAC 13A .0111 Eff. December 20, 1996;
Amended Eff. April 1, 2003; April 1, 1999; August 1, 1998.

15A NCAC 13A .0112 LAND DISPOSAL RESTRICTIONS - PART 268

(a) 40 CFR 268.1 through 268.14 (Subpart A), "General", are incorporated by reference including subsequent amendments and editions.
(b) 40 CFR 268.30 through 268.39 (Subpart C), "Prohibitions on Land Disposal", are incorporated by reference including subsequent amendments and editions.
(c) 40 CFR 268.40 through 268.49 (Subpart D), "Treatment Standards", are incorporated by reference including subsequent amendments and editions.
(d) 40 CFR 268.50 (Subpart E), "Prohibitions on Storage", is incorporated by reference including subsequent amendments and editions.
(e) Appendices to 40 CFR Part 268 are incorporated by reference including subsequent amendments and editions.

History Note: *Authority G.S. 130A-294(c); 150B-21.6;*
Eff. August 1, 1987;
Amended Eff. June 1, 1990; June 1, 1989; June 1, 1988; February 1, 1988;
Transferred and Recodified from 10 NCAC 10F .0042 Eff. April 4, 1990;
Recodified from 15A NCAC 13A .0013 Eff. August 30, 1990;
Amended Eff. April 1, 1995; January 1, 1995; April 1, 1993; February 1, 1991;
Recodified from 15A NCAC 13A .0012 Eff. December 20, 1996;
Amended Eff. August 1, 2000; August 1, 1998.

15A NCAC 13A .0113 THE HAZARDOUS WASTE PERMIT PROGRAM - PART 270

(a) 40 CFR 270.1 through 270.6 (Subpart A), "General Information", are incorporated by reference including subsequent amendments and editions. For the purpose of this incorporation by reference, "January 26, 1983" shall be substituted for "July 26, 1982" contained in 40 CFR 270.1(c).
(b) 40 CFR 270.10 through 270.29 (Subpart B), "Permit Application", are incorporated by reference including subsequent amendments and editions.
(c) The following are additional Part B information requirements for all hazardous waste facilities:

(1) Description and documentation of the public meetings as required in 15A NCAC 13A .0109(r)(7);
(2) A description of the hydrological and geological properties of the site including, at a minimum, flood plains, depth to water table, ground water travel time, seasonal and long-term groundwater level fluctuations, proximity to public water supply watersheds, consolidated rock, soil pH, soil cation exchange capacity, soil characteristics and composition and permeability, existence of cavernous bedrock and seismic activity, slope, mines, climate, location and withdrawal rates of surface water users within the immediate drainage basin and well water users within a one mile radius of the facility; water quality information of both surface and groundwater within 1000 ft. of the facility, and a description of the local air quality;
(3) A description of the facility's proximity to and potential impact on wetlands, endangered species habitats, parks, forests, wilderness areas, historical sites, mines, and air quality;
(4) A description of local land use including residential, industrial, commercial, recreational, agricultural and the proximity to schools and airports;
(5) A description of the proximity of the facility to waste generators and population centers; a description of the method of waste transportation; the comments of the local community and state transportation

authority on the proposed route, and route safety. Comments shall include proposed alternative routes and restrictions necessary to protect the public health;

(6) A description of facility aesthetic factors including visibility, appearance, and noise level; and

(7) A description of any other objective factors that the Department determines are reasonably related and relevant to the proper siting and operation of the facility.

(d) In addition to the specific Part B information requirements for hazardous waste disposal facilities, owners and operators of hazardous waste landfills or longterm storage facilities shall provide the following information:

(1) Design drawings and specifications of the leachate collection and removal system;

(2) Design drawings and specifications of the artificial impervious liner;

(3) Design drawings and specifications of the clay or clay-like liner below the artificial liner, and a description of the permeability of the clay or clay-like liner; and

(4) A description of how hazardous wastes will be treated prior to placement in the facility.

(e) In addition to the specific Part B information requirements for surface impoundments, owners and operators of surface impoundments shall provide the following information:

(1) Design drawings and specifications of the leachate collection and removal system;

(2) Design drawings and specifications of all artificial impervious liners;

(3) Design drawings and specifications of all clay or clay-like liners and a description of the clay or clay-like liner; and

(4) Design drawings and specifications that show that the facility has been constructed in a manner that will prevent landsliding, slippage, or slumping.

(f) 40 CFR 270.30 through 270.33 (Subpart C), "Permit Conditions", are incorporated by reference including subsequent amendments and editions.

(g) 40 CFR 270.40 through 270.43 (Subpart D), "Changes to Permit", are incorporated by reference including subsequent amendments and editions.

(h) 40 CFR 270.50 through 270.51 (Subpart E), "Expiration and Continuation of Permits", are incorporated by reference including subsequent amendments and editions.

(i) 40 CFR 270.60 through. 270.68 (Subpart F), "Special Forms of Permits", are incorporated by reference including subsequent amendments and editions, except that 40 CFR 270.68 is not incorporated by reference.

(j) 40 CFR 270.70 through 270.73 (Subpart G), "Interim Status", are incorporated by reference including subsequent amendments and editions. For the purpose of this incorporation by reference, "January 1, 1986" shall be substituted for "November 8, 1985" contained in 40 CFR 270.73(c).

(k) The following are additional permitting requirements concerning operating record of other facilities.

(1) An applicant applying for a permit for a hazardous waste facility shall submit a disclosure statement to the Department as a part of the application for a permit or any time thereafter specified by the Department. The disclosure statement shall be supported by an affidavit attesting to the truth and completeness of the facts asserted in the statement and shall include:

(A) A brief description of the form of the business (e.g. partnership, sole proprietorship, corporation, association, or other);

(B) The name and address of any hazardous waste facility constructed or operated after October 21, 1976 by the applicant or any parent or subsidiary corporation if the applicant is a corporation; and

(C) A list identifying any legal action taken against any facility identified in Part (k)(1)(B) of this Rule involving:

(i) any administrative ruling or order issued by any state, federal or local authority relating to revocation of any environmental or waste management permit or license, or to a violation of any state or federal statute or local ordinance relating to waste management or environmental protection;

(ii) any judicial determination of liability or conviction under any state or federal law or local ordinance relating to waste management or environmental protection; and

(iii) any pending administrative or judicial proceeding of the type described in this Part.

(D) The identification of each action described in Part (k)(1)(C) of this Rule shall include the name and location of the facility that the action concerns, the agency or court that heard or is hearing the matter, the title, docket or case number, and the status of the proceeding.

(2) In addition to the information set forth in Subparagraph (k)(1) of this Rule, the Department may require from any applicant such additional information as it deems necessary to satisfy the requirements of G.S. 130A-295. Such information may include, but shall not be limited to:

(A) The names, addresses, and titles of all officers, directors, or partners of the applicant and of any parent or subsidiary corporation if the applicant is a corporation;

(B) The name and address of any company in the field of hazardous waste management in which the applicant business or any of its officers, directors, or partners, hold an equity interest and the name of the officer, director, or partner holding such interest; and

(C) A copy of any administrative ruling or order and of any judicial determination of liability or conviction described in Part (k)(1)(C) of this Rule, and a description of any pending administrative or judicial proceeding in that item.

(3) If the Department finds that any part or parts of the disclosure statement is not necessary to satisfy the requirements of G.S. 130A-295, such information shall not be required.

(l) An applicant for a new, or modification to an existing, commercial facility permit, shall provide a description and justification of the need for the facility.

(m) Requirements for Off-site Recycling Facilities.

(1) The permit requirements of this Rule apply to owners and operators of off-site recycling facilities.

(2) The following provisions of 40 CFR Part 264, as incorporated by reference, shall apply to owners and operators of off-site recycling facilities:

(A) Subpart B - General Facility Standards;

(B) Subpart C - Preparedness and Prevention;

(C) Subpart D - Contingency Plan and Emergency Procedures;

(D) Subpart E - Manifest System, Recordkeeping and Reporting;

(E) Subpart G - Closure and Post-closure;

(F) Subpart H - Financial Requirements;

(G) Subpart I - Use and Management of Containers;

(H) Subpart J - Tank Systems;

(I) 264.101 - Corrective Action for Solid Waste Management Units;

(J) Subpart X - Miscellaneous Units; and

(K) Subpart DD - Containment Buildings.

(3) The requirements listed in Subparagraph (m)(2) of this Rule apply to the entire off-site recycling facility, including all recycling units, staging and process areas, and permanent and temporary storage areas for wastes.

(4) The following provisions of 15A NCAC 13A .0109 shall apply to owners and operators of off-site recycling facilities:

(A) The substitute financial requirements of Rule .0109(i)(1), (2) and (4); and

(B) The additional standards of Rule .0109(r)(1), (2), (3), (6) and (7).

(5) The owner or operator of an off-site recycling facility shall keep a written operating record at his facility.

(6) The following information must be recorded, as it becomes available, and maintained in the operating record until closure of the facility:

(A) A description and the quantity of each hazardous waste received, and the method(s) and date(s) of its treatment, storage, or recycling at the facility;

(B) The location of all hazardous waste within the facility and the quantity at each location. This information must include cross-references to specific manifest document numbers if the waste was accompanied by a manifest; and

(C) Documentation of the fate of all hazardous wastes received from off-site or generated on-site. This shall include records of the sale, reuse, off-site transfer, or disposal of all waste materials.

(n) Permit Fees for Commercial Hazardous Waste Facilities.

(1) An applicant for a permit modification for a commercial hazardous waste facility shall pay an application fee as follows:

(A) Class 1 permit modification $100;

(B) Class 2 permit modification $1,000; or

(C) Class 3 permit modification $5,000.

Note: Class 1 permit modifications which do not require prior approval of the Division Director are excluded from the fee requirement.

(2) The application fee for a new permit, permit renewal, or permit modification must accompany the application, and is non-refundable. The application shall be considered incomplete until the fee is paid. Checks shall be made payable to: Division of Waste Management.

History Note: *Authority G.S. 130A-294(c); 130A-294.1; 130A-295(a)(1),(2), (c); 150B-21.6;*
Eff. November 19, 1980;
Amended Eff. November 1, 1989; June 1, 1988; February 1, 1988; December 1, 1987;
Transferred and Recodified from 10 NCAC 10F .0034 April 4, 1990;
Amended Eff. August 1, 1990;
Recodified from 15A NCAC 13A .0014 Eff. August 30, 1990;
Amended Eff. April 1, 1993; August 1, 1991; October 1, 1990;
Recodified from 15A NCAC 13A .0013 Eff. December 20, 1996;
Amended Eff. April 1, 2001; August 1, 2000.

15A NCAC 13A .0114 REQMNTS/AUTHORIZATION OF STATE HAZARDOUS WASTE PROG - PART 271

40 CFR 271.17, "Sharing of information", has been incorporated by reference including subsequent amendments and editions.

History Note: *Authority G.S. 130A-294(c); 150B-21.6;*
Eff. January 1, 1986;
Amended Eff. June 1, 1988; December 1, 1987; August 1, 1987; May 1, 1987;
Transferred and Recodified from 10 NCAC 10F .0041 Eff. April 4, 1990;
Recodified from 15A NCAC 13A .0015 Eff. August 30, 1990;
Amended Eff. April 1, 1993; October 1, 1990;
Recodified from 15A NCAC 13A .0014 Eff. December 20, 1996.

15A NCAC 13A .0115 ANNUAL REPORTS

History Note: *Authority G.S. 130A-294(c);*
Eff. January 1, 1984;
Transferred and Recodified from 10 NCAC 10F .0037 Eff. April 4, 1990;
Recodified from 15A NCAC 13A .0004 Eff. August 30, 1990;
Repealed Eff. May 1, 1991;
Recodified from 15A NCAC 13A .0015 Eff. December 20, 1996.

15A NCAC 13A .0116 SPECIAL PURPOSE COMMERCIAL HAZARDOUS WASTE FACILITY

(a) The Department shall evaluate all commercial hazardous waste facilities to determine a score for each facility in accordance with Paragraph (c) of this Rule.

(b) A commercial hazardous waste facility (other than an incinerator or a land disposal facility) with a volume of waste of 20,000 tons or less per year of hazardous waste and having a total score pursuant to Paragraph (c) of this Rule of less than 33 is designated as a special purpose commercial hazardous waste facility. These facilities shall be classified as follows:

Total Score	Category
1 - 13	1
14 - 22	2
23 - 32	3

(c) A score for each facility shall be determined by adding the total score for Subparagraphs (c)(1) - (c)(7) of this Rule and subtracting the score for Subparagraph (c)(8) of this Rule.

(1) A score shall be assigned for smallness of the facility by adding the applicable score for storage and the applicable score for treatment using Table 1.

TABLE 1

Smallness of Facility	Constructed Capacity	Score
Storage: (gallons)	<10,000	1
	10,000-100,000	2
	>100,000	3
Treatment: (gallons/ per day)	<10,000	1
	10,000-100,000	2
	>100,000	3

(2) A score shall be assigned for type of treatment permitted by adding the score for each type of treatment being performed by the facility using Table 2.

TABLE 2

Type of Treatment Being Performed	Score
Storage Only	1
Solvent Recovery	2
Metal Recovery	2
Energy Recovery	2
Fuel Blending	2
Aqueous Treatment	3
Stabilization	2
Incineration	5
Residuals Management	5
Other Treatment	2

(3) A score shall be assigned for the nature of hazardous waste by adding the score for acute waste, if acute waste totals more than 1,000 pounds, and the score for each other type of hazardous waste that constitutes ten percent or more of the total hazardous waste handled by the facility, using Table 3. However, if the facility is permitted for storage only and no treatment is performed, the score for nature of hazardous waste shall be reduced by one-half for each hazardous waste stream stored only.

TABLE 3

Nature of Hazardous Waste (from Annual Report)	Score
Corrosive	1
Ignitable	2
Reactive	2
Toxicity Characteristic	2
Listed Toxic	2
Acute	3

(4) A score shall be assigned for volume of hazardous waste by using the applicable score in Table 4.

TABLE 4

Volume of Waste (Tons from Annual Report)	Score

< 2,000	1
2,000-10,000	2
10,000-20,000	3

(5) A score shall be assigned for uniformity, similarity and lack of diversity of waste streams by using the applicable score in Table 5.

TABLE 5

Uniformity, Similarity, Lack of Diversity of Waste Streams (EPA Waste Numbers) From Annual Report	Score
<5	1
5-75	2
>75	3

(6) A score shall be assigned for predictability and treatability of site specific waste streams by using the applicable score in Table 6.

TABLE 6

Predictability and Treatability of Waste Streams	Score
Simple Waste Streams and Treatment	1
Complex Waste Streams and Treatment (Incompatibles, highly toxic, or multicoded waste streams)	2

(7) A score shall be assigned for compliance history for the past two years by using the highest applicable score in Table 7.

TABLE 7

Compliance History for Past Two Years	Score
Class II Violations	1
Class I Violations	2
Penalties	3
Injunctions	5

(8) A score shall be assigned for reclamation by using the applicable score in Table 8.

TABLE 8

Reclamation (Credit Given)	Score
Pretreatment for Off-site Reclamation	1
On-site Reclamation	2

(d) The information referred to in Paragraph (c) of this Rule shall be determined based on the facility's permit, the previous year's annual report, and compliance history. If no annual report was submitted, quarterly projections of waste volume shall be submitted to the Department by the facility. Each facility may be re-evaluated at any time new information is received by the Department concerning the factors in Paragraph (c) of this Rule.

(e) The frequency of inspections at special purpose commercial hazardous waste facilities shall be determined by the facility's classification as follows:

Category	Minimum Inspections
1	2 per month
2	4 per month
3	6 per month

History Note: *Filed as a Temporary Adoption Eff. February 15, 1991 for a period of 180 days to expire on August 14, 1991;*
Authority G.S. 130A-295.02(j);
ARRC Objection Lodged February 25, 1991;
ARRC Objection Removed March 21, 1991;
Eff. August 1, 1991;
Amended Eff. April 1, 1994;
Recodified from 15A NCAC 13A .0016 Eff. December 20, 1996.

15A NCAC 13A .0117 FEE SCHEDULES

(a) A commercial hazardous waste storage, treatment, or disposal facility other than a special purpose facility shall pay monthly, in addition to the fees applicable to all hazardous waste storage, treatment, or disposal facilities as required by G.S. 130A-294.1, a charge of forty-one dollars ($41.00) per hour of operation. The fee shall be paid for any time when hazardous waste is managed or during periods of maintenance, repair, testing, or calibration. Each facility shall submit an operational schedule to the Department on a quarterly basis.

(b) A special purpose commercial hazardous waste facility shall pay monthly, in addition to the fees applicable to all hazardous waste treatment, storage or disposal facilities as required by G.S. 130A-294.1, a charge of three dollars ($3.00) per ton of hazardous waste received during the previous month and an additional charge based on the frequency of inspections as follows:

Category	Fee
1	$888.00
2	$1,776.00
3	$2,664.00

History Note: *Authority G.S. 130A-295.02(h);*
Temporary Adoption Eff. February 15, 1991 for a period of 180 days to expire on August 14, 1991;
ARRC Objection Lodged February 25, 1991;
ARRC Objection Lodged March 21, 1991;
Eff. August 1, 1991;
Recodified from 15A NCAC 13A .0017 Eff. December 20, 1996.

15A NCAC 13A .0118 STANDARDS FOR THE MANAGEMENT OF USED OIL

(a) 40 CFR 279.1 (Subpart A), "Definitions", is incorporated by reference including subsequent amendments and editions. except that the Definition for "Used Oil" is defined by G.S. 130A-290(b) and is not incorporated by reference.

(b) 40 CFR 279.10 through 279.12 (Subpart B), "Applicability", are incorporated by reference including subsequent amendments and editions.

(c) 40 CFR 279.20 through 279.24 (Subpart C), "Standards for Used Oil Generators", are incorporated by reference including subsequent amendments and editions.

(d) 40 CFR 279.30 through 279.32 (Subpart D), "Standards for Used Oil Collection Centers and Aggregation Points", are incorporated by reference including subsequent amendments and editions.

(e) 40 CFR 279.40 through 279.47 (Subpart E), "Standards for Used Oil Transporter and Transfer Facilities", are incorporated by reference including subsequent amendments and editions.

(f) 40 CFR 279.50 through 279.59 (Subpart F), "Standards for Used Oil Processors and Re-Refiners", are incorporated by reference including subsequent amendments and editions.

(g) 40 CFR 279.60 through 279.67 (Subpart G), "Standards for Used Oil Burners Who Burn Off-Specification Used Oil for Energy Recovery", are incorporated by reference including subsequent amendments and editions.

(h) 40 CFR 279.70 through 279.75 (Subpart H), "Standards for Used Oil Fuel Marketers", are incorporated by reference including subsequent amendments and editions.
(i) 40 CFR 279.80 through 279.81 (Subpart I), "Standards for Use as a Dust Suppressant and Disposal of Used Oil" are incorporated by reference including subsequent amendments and editions. {Note: 40 CFR 279.82, which addresses used oil as a dust suppressant, is specifically not incorporated by reference. See also G.S. 130A-309.15 for prohibited acts regarding used oil}.
(j) Additional State Requirements:

(1) By July 1 of each year the following persons shall notify the Department by submitting an annual report listing the type and quantity of used oil transported, collected, and recycled during the preceding calendar year, on Department forms:
  (A) Persons transporting more than 500 gallons of used oil per week over public highways;
  (B) Collection facilities that annually receive more than 6,000 gallons of used oil excluding the volume of used oil collected from individuals that change their own personal motor oil;
  (C) Facilities that annually recycle more than 10,000 gallons of used oil; and
  (D) Public used oil collection centers.

(2) The following persons are not required to comply with 15A NCAC 13A .0118(j)(1)
  (A) An electric utility that generates used oil which is reclaimed, recycled, or re-refined on-site for use in its operations; and
  (B) An on-site burner that burns its own on-specification used oil provided that the facility is in compliance with any Air Quality permit requirements established by the Department.

(3) An annual fee of twenty five dollars ($25.00) shall be paid by all persons identified in 15A NCAC 13A .0118(j)(1)(A) through .0118(j)(1)(C) by July 1 of each year.

History Note: *Authority G.S. 130A-294(b),(c); 150B-21.6;*
Eff. October 1, 1993;
Recodified from 15A NCAC 13A .0018 Eff. December 20, 1996;
Amended Eff. August 1, 2000.

15A NCAC 13A .0119 STANDARDS FOR UNIVERSAL WASTE MANAGEMENT - PART 273

(a) 40 CFR 273.1 through 273.9 (Subpart A), "General" are incorporated by reference including subsequent amendments and editions.
(b) 40 CFR 273.10 through 273.20 (Subpart B), "Standards for Small Quantity Handlers of Universal Waste" are incorporated by reference including subsequent amendments and editions.
(c) 40 CFR 273.30 through 273.40 (Subpart C), "Standards for Large Quantity Handlers of Universal Waste" are incorporated by reference including subsequent amendments and editions.
(d) 40 CFR 273.50 through 273.56 (Subpart D), "Standards for Universal Waste Transporters" are incorporated by reference including subsequent amendments and editions.
(e) 40 CFR 273.60 through 273.62 (Subpart E), "Standards for Destination Facilities" are incorporated by reference including subsequent amendments and editions.
(f) 40 CFR 273.70 (Subpart F), "Import Requirements" is incorporated by reference including subsequent amendments and editions.
(g) 40 CFR 273.80 through 273.81 (Subpart G), "Petitions to include Other Wastes Under 40 CFR Part 273" are incorporated by reference including subsequent amendments and editions, except that 40 CFR 273.80(a) and (b), are not incorporated by reference.

(1) The following shall be substituted for the provisions of 40 CFR 273.80(a) which were not incorporated by reference:
  Any person seeking to add a hazardous waste or a category of hazardous waste to this Part may petition for a regulatory amendment under this Subpart and 15A NCAC 24B .0001 and 40 CFR 260.23.

(2) The following shall be substituted for the provisions of 40 CFR 273.80(b) which were not incorporated by reference:
  To be successful, the petitioner must demonstrate to the satisfaction of the Administrator that regulation under the universal waste regulations of 40 CFR Part 273 is:

(A) appropriate for the waste or category of waste; will improve management practices for the waste or category of waste; and will improve implementation of the hazardous waste program;

(B) the petition must include the information required by 15A NCAC 24B .0001; and

(C) the petition shall also address as many of the factors listed in 40 CFR 273.81 as are appropriate for the waste or waste category addressed in the petition.

History Note: *Authority G.S. 130A-294(c); 150B-21.6;*
Eff. January 1, 1996;
Recodified from 15A NCAC 13A .0019 Eff. December 20, 1996;
Amended Eff. April 1, 2001; August 1, 1998.

PART IV - GROUND-WATER PROTECTION

A. APPLICABILITY

The requirements of this part apply to the closed former surface impoundment as described in Volume I, Section II. and Volume II, Section V. of the Application and as specified under 40 CFR 264.90 as adopted in 15A NCAC 13A .0109.

B. GROUNDWATER PROTECTION STANDARD

The groundwater protection standard as required under 40 CFR 264.92 as adopted in 15A NCAC 13A .0109 shall consist of Table IV-I below, which lists the hazardous constituents and their respective concentration limits as required under 40 CFR 264.93, and 264.94, respectively.

TABLE IV-I: GROUNDWATER PROTECTION STANDARDS

Hazardous Constituents	Concentration Limit
Arsenic	10 ug/L
Cobalt	1 ug/L
Manganese	50 ug/L
2-Methyl-Naphthalene	28 ug/L
Naphthalene	21 ug/L
Pentachlorophenol	0.3 ug/L

ug/L = micrograms/liter

C. POINTS OF COMPLIANCE

The point of compliance for the closed area shall be well C as described in Condition IV.E. and Appendix B of this permit and as required by 40 CFR 264.95 and 264.99(a)(3) as adopted in 15A NCAC 13A .0109.

D. COMPLIANCE PERIOD

The compliance period shall be defined to begin with the effective date of the permit and continue for the greater of: thirty-one (31) years; or until the groundwater protection standard, specified in Condition IV.B., has not been exceeded for a period of three (3) consecutive years and the corrective action under 40 CFR 264.100 as adopted in 15A NCAC 13A .0109 has been terminated as specified under Condition IV.J. of this permit.

E. GROUNDWATER MONITORING SYSTEM

The Permittee shall install and maintain a groundwater monitoring system to comply with the requirements of 40 CFR 264.97, 264.99, and 264.100 as adopted in 15A NCAC 13A .0109.

1. The Permittee shall construct and/or maintain groundwater monitoring wells A through N (inclusive) as described in Volume I, Section III of the Application at the locations specified on maps or drawings in Volume I, Sections I and III of the Application.

2. The Permittee shall maintain the monitoring wells identified in Condition IV.E.1. in accordance with the plans and specifications presented in Volume I, Section III of the Application and Appendix B of the permit.

3. The Permittee shall install and maintain any additional groundwater monitoring well(s) as required to determine the effectiveness and progress of the corrective action system as required by 40 CFR 264.100(d) as adopted in 15A NCAC 13A .0109. The plans for the design, location, installation, and development of any additional wells shall be submitted to the Department for approval at least thirty (30) days prior to the desired installation date.

F. MONITORING REQUIREMENTS

The Permittee shall establish and implement a groundwater monitoring program to demonstrate the effectiveness of the corrective action program. Ground-water monitoring shall be conducted in conformance with the requirements for compliance monitoring considering 40 CFR 264.92, 264.99 and 264.100 as adopted in 15A NCAC 13A .0109. The Permittee shall determine ground-water quality as follows:

1. The Permittee shall collect, preserve, and analyze groundwater samples pursuant to Condition IV.H.

2. The Permittee shall determine the concentration of hazardous constituents specified in Condition IV.B., pH, conductivity, temperature, and water level of the groundwater at monitoring wells C, K, M, and L during the first sampling event of the year (spring sampling event) and wells C, F, I, and L during the second sampling event of the year (fall sampling event). These determinationd are required throughout the compliance period including any extension to the compliance period as defined under Condition IV.D. These determinations shall be made semi-annually beginning no later than ninety (90) days after the effective date of this permit.

3. The Permittee shall establish the background groundwater concentration in well A for the following hazardous constituents as identified in Table IV.1.: arsenic, cobalt, and manganese. Background shall be established by analyzing quarterly samples for one (1) year, four replicates per sample, for each constituent in order to establish background mean and variance beginning within ninety (90) days after installation of well A.

4. Alternatively, the Permittee may accept as the ground-water protection standard the NC 2L Groundwater Quality Standard or interim maximum allowable concentration as established in 15A NCAC 2L .0202 or an alternate concentration level established or approved by the Department for the constituents contained in Table IV-1 of this Permit. To demonstrate the effectiveness of the corrective action program, the Permittee shall monitor those wells listed in IV.F.2, which are permanent monitoring wells as described in Condition IV.E. and specified in Appendices A and B. The Permittee shall comply with any additional monitoring specified by the Department as required by 40 CFR 264.100(d) as adopted in 15A NCAC 13A .0109.

5. The Permittee shall record the water level in all site monitoring wells before the groundwater is sampled in accordance with Conditions IV.F.2. and IV.F.3.

APPENDIX A

GROUND-WATER SAMPLING AND ANALYSIS

1. ANNUAL SAMPLING REQUIREMENTS

Semi-annual sampling shall begin no later than one hundred eighty (180) days following the effective date of the permit. Wells C, K, M, and L shall be sampled and analyzed for the parameters listed below during the first sampling event annually (spring sampling event). Wells C, F, I, and L shall be sampled and analyzed for the parameters listed below during the second sampling event annually (fall sampling event). Well C shall be the point of compliance well.

PARAMETER	METHOD*
Arsenic	6010
Cobalt	7201
Manganese	3000/6000/7000 Series
2-Methyl-Naphthalene	8270
Naphthalene	8270
Pentachlorophenol	8270
pH	Field Measurement
Conductivity	Field Measurement
Temperature	Field Measurement
Water level	Field Measurement

2. FIVE YEAR SAMPLING REQUIREMENTS

Well C shall be sampled and analyzed for Appendix IX parameters every five years from the effective date of this permit.

For Appendix IX Analysis: Use method specified in 40 CFR 264, Appendix IX, codified 15A NCAC 13A .0109.

Note: All methods without prefix are from SW 846 Test Methods For Evaluated Solid Waste, 3rd Edition, available from the Government Printing Office, Washington, DC, as publication number 055-002-81001-2.

Note: All standard methods are from Standard Methods for the Examination of Waste and Wastewater, 15th Edition, prepared and published jointly by the American Public Health Association, American Water Works Association, Water Pollution Control Federation.

* Listed method should be used or equivalent. Facility should report all constituents detectable by SW-846 Method 8270 (or its equivalent).

APPENDIX B

PERMANENT MONITORING WELLS

1. The Permittee shall maintain the point of compliance monitoring well C and semi-annual monitoring wells F, I, K, L, M, and N at the locations specified in Figure B-1 of the Application.

2. The Permittee shall not abandon any site monitoring well without approval by the Department.

DURABLE WOOD PRESERVERS POST-CLOSURE PERMIT

NCD 003 173 358

APPENDIX B

PERMANENT MONITORING WELLS

DURABLE WOOD PRESERVERS POST-CLOSURE PERMIT

NCD 003 173 358

APPENDIX C

CORRECTIVE ACTION PROGRAM DESIGN OF REMEDIAL ACTION SYSTEM