



HALIFAX COUNTY SOLID WASTE DEPARTMENT

P. O. BOX 327
HALIFAX, N. C. 27839
919-586-4748

JERRY N. WILLIAMS
DIRECTOR



State of North Carolina
Department of Environment, Health, and
Natural Resources
Division of Solid Waste Management
P. O. Box 27687
Raleigh, NC 27611

Please find enclosed the Solid Waste Permit, #42-04,
to construct a Coal Ash Monofill for Halifax County Sanitary
Landfill.

CERTIFIED COPY OF SOLID WASTE PERMIT



I do hereby certify that the attached PERMIT is an exact and true copy of Permit No. 42-04.

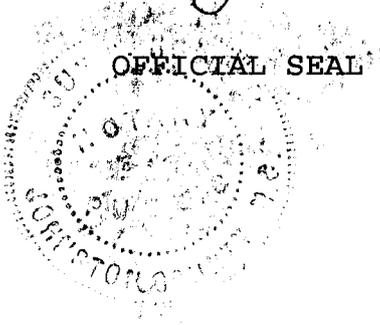
James C. Coffey
James C. Coffey, Supervisor
Permitting Branch
Solid Waste Section

North Carolina

Johnston County

I, Sue S. Hodge, a Notary Public for said County and State, do hereby certify that James C. Coffey, Solid Waste Section personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 12th day of May, 1993.



Sue S. Hodge
NOTARY PUBLIC

My commission expires October 21, 1995.

North Carolina, Halifax County
The foregoing certificate of

Sue S. Hodge
a Notary Public of Johnston
County is certified to be
correct. This 17 day of September
1993 Recorded 3:35 P.M.
Book 1581 Page 374
Travis S. Uzzell By: Judy J. Evans, Asst.
Register of Deeds Halifax Co.

AMENDMENT TO PERMIT NO. 42-04
PART 1: PERMIT TO CONSTRUCT
DATE ISSUED 05-12-93

STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENT, HEALTH, AND NATURAL RESOURCES
DIVISION OF SOLID WASTE MANAGEMENT
P.O. BOX 27687 RALEIGH, NC 27611

SOLID WASTE PERMIT

Halifax County

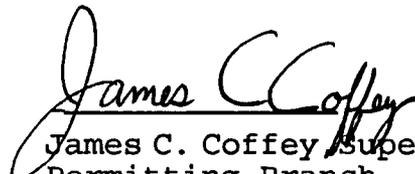
is hereby issued a permit to construct a
Coal Ash Monofill
located at the

HALIFAX COUNTY SANITARY LANDFILL

accessed

via SR 1417,
approximately 2 miles North of Aurelian Springs, Halifax County,
North Carolina

in accordance with Article 9, Chapter 130A, of the General Statutes
of North Carolina and all rules promulgated thereunder and subject
to the conditions set forth in this permit. The facility is
located and described by the legal description of the site on the
attached sheet.


James C. Coffey, Supervisor
Permitting Branch
Solid Waste Section

SOLID WASTE PERMIT
Part 1: Permit to Construct
Coal Ash Monofill
Halifax County Sanitary Landfill

CONDITIONS OF PERMIT:

GENERAL

1. This permit shall not be effective unless the certified copy is filed in the Register of Deeds Office, in the grantor index under the name of the owner of the land in the county or counties in which the land is located. After recordation, the certified copy shall be returned to the Solid Waste Section and shall have indicated on it the page and book number, date of recordation, and Register's seal.
2. When this property is sold, leased, conveyed or transferred, the deed or other instrument of transfer shall contain in the description section in no smaller type than that used in the body of the deed or instrument a statement that the property has been used as a sanitary landfill.
3. This permit will be subject to review every five years as per 15A NCAC 13B .0201(c), according to the issuance date of the Permit to Operate. Modifications, where necessary, shall be required in accordance with rules in effect at the time of review.
4. The approved plan is described by Attachment 1, "List of Documents for Approved Plan". Where discrepancies may exist, the most recent submittal and the Conditions of Permit shall govern. Some components of the approved plan are reiterated in the Conditions of Permit.
5. Halifax County (the permittee) shall notify the Division of Solid Waste Management (DSWM), Solid Waste Section (SWS) and conduct a pre-construction meeting on-site prior to initiating construction activities. If construction does not commence within 18 months from the issuance date of this permit, then the permittee shall obtain written approval from the SWS prior to construction and comply with any conditions of said approval.
6. Prior to receiving waste at this facility, a Permit to Operate must be obtained. The requirements for this part of the Solid Waste Permit are described in the following section (Construction), Condition 3. The Conditions of Permit issued herein shall also be incorporated in the Permit to Operate.

7. This permit is not transferable.

BOOK 1581 PAGE 377

CONSTRUCTION

1. This construction permit is for development of Cell One of the Coal Ash Monofill located at Halifax County Sanitary Landfill and the on-site environmental management facilities, in accordance with the approved plan and as specified herein. Development of subsequent phases will require Halifax County to notify the DSWM 180 days prior to the scheduled date of construction, and receive written approval from DSWM regarding said notification.
 - a. The components of the engineered systems shall be specified and constructed to meet the performance requirements established by the facility design.
 - b. Relative to the established performance requirements, design revisions and/or requests for variance, will be reviewed by the agency and accepted or rejected.
 - c. Construction Quality Assurance (CQA) activities shall be documented and summarized in a CQA report and illustrated with as-built drawings. The CQA Report and Document Drawings shall bear an imprint of the registration seal of the engineer licensed to practice in the State of North Carolina.
 - d. The CQA report will include the following at a minimum:
 - (1) A summary of the methodology, modifications, and construction quality control measures necessary to demonstrate that the facilities were constructed in accordance with the approved plans and as specified herein;
 - (2) A summary of the actual materials and methodology implemented to construct and test any compacted soil liner; and
 - (3) Documentation of the thickness (using survey data) of any soil liner, drainage layer, and protective cover; constructed grades (for HDPE liner), and location and grades for all LCRS piping.
2. All sedimentation/erosion control activities will be conducted in accordance with the Sedimentation Control Act codified at 15 NCAC 4. Native vegetation shall be established on the completed landfill.
3. The following pre-operative requirements shall be met to obtain a PERMIT TO OPERATE this facility:
 - a. Site preparation shall be in accordance with the construction plan, and the conditions specified herein.
 - b. Site inspection shall be made by a representative of the Division of Solid Waste Management (DSWM).

- c. The permit number and the words "NO HAZARDOUS, OR LIQUID WASTE ACCEPTED" shall be posted on an entrance sign.
- d. Upon completion of construction, the permittee will submit the CQA report and document drawings to DSWM; the agency will review the submittal and issue its concurrence that the facility was constructed as specified herein.
- e. Surface water monitoring locations shall be established and groundwater monitoring wells shall be installed (see Monitoring and Reporting Requirements) and a baseline sampling performed.
- f. A Final Water Quality Monitoring Plan shall be submitted to the SWS Hydrogeologist for review and approval. The plan shall incorporate the Monitoring and Reporting Conditions described in this permit.
- g. Stream sediment sampling locations (see Monitoring and Reporting Requirements) shall be established and a baseline sampling(s) performed. A settlement basin effluent and stream sediment monitoring plan shall be prepared and submitted to the Solid Waste Section for review and approval. The plan shall incorporate the Monitoring and Reporting Conditions described in this permit, as well as contingency plans in the case of contamination in excess of the NC Groundwater Standards.

OPERATION

1. This Coal Ash Monofill Area is permitted to receive only coal combustion by-products in accordance with the approved plan. Municipal solid waste, construction/demolition wastes, land-clearing and inert debris, hazardous waste, special wastes, and liquid waste are prohibited from disposal in the coal ash monofill.
 - a. Acceptance of additional wastes are subject to prior written approval by the Division and subject to the Division's "Procedure and Criteria for Waste Determination" in accordance with 15A NCAC 13B .0103 (d).
2. The landfill unit shall conform to all operating procedures described in the approved plan, in accordance with Rule .0505 of 15A NCAC 13B, and as specified herein.
 - a. All pertinent landfill operating personnel will receive training and supervision necessary to properly operate this landfill. Specifically, training must be provided in operational procedures that will prevent damage to the liner and leachate collection and removal systems.
 - b. Ash which has been placed to final elevations around the perimeter of the facility shall be covered with a minimum of 12 inches of soil prior to the end of daily

- operations. Final cover and seeding shall be implemented within 30 days of reaching final grade.
- c. All operations shall be conducted in a manner sufficient to prevent releases of ash materials from the monofill unit or secondary settling basin.
3. Ground water quality at this facility is subject to the classification and remedial action provisions referenced in Rule .0503 (2) (d) of 15A NCAC 13B.
 4. A closure and post-closure plan must be submitted for approval at least 90 days prior to closure or partial closure of any landfill unit. The plan must include all steps and measures necessary to close and maintain the facility in accordance with all rules in effect at that time. At a minimum, the plan shall address the following:
 - a. Design of a final cover system which minimizes infiltration into the waste and supports vegetation;
 - b. Construction and maintenance/operation of the final cover system, erosion control structures, and leachate management system; and
 - c. Surface water, ground water, and effluent monitoring.

MONITORING AND REPORTING REQUIREMENTS

1. Ground water monitoring wells and monitoring requirements for the landfill unit:
 - a. Monitoring well design and construction shall conform to the specifications outlined in Attachment 2, "North Carolina Water Quality Monitoring Guidance Document for Solid Waste Facilities". The monitoring plan shall be modified as required by the SWS Hydrogeologist.
 - b. A total of five monitoring wells shall be established to monitor the landfill unit. In addition, two monitoring wells shall be established immediately downgradient of the active cell and relocated as necessary, during site development.
 - c. A geologist shall be in the field to supervise well installation. The exact locations, screened intervals, and nesting of the wells shall be established after consultation with the SWS Hydrogeologist at the time of well installation.
 - d. For each monitoring well constructed, a well completion record shall be submitted to DSWM within 30 days upon completion.
 - e. Prior to the acceptance of any waste at the facility, a baseline sampling event shall be completed. This event shall include all groundwater monitoring wells and shall

- be consistent with the above-referenced guidance document, (Attachment 2).
- f. Sampling parameters, equipment and procedures shall conform to specifications outlined in the above-referenced guidance document, (Attachment 2), or the current guidelines established by DSWM at the time of sampling.
 - g. The permittee shall sample the monitoring wells semi-annually or as directed by the SWS Hydrogeologist.
 - h. A readily accessible unobstructed path shall be initially cleared and maintained so that four-wheel drive vehicles may access the monitoring wells at all times.
2. The permittee shall establish two (2) locations for surface water sampling as described in the approved plan and as specified herein. Samples shall be collected from approved locations and analyzed semi-annually according to the protocol and parameters required by the SWS Hydrogeologist.
 3. The permittee shall monitor effluent from the secondary settlement basin in accordance with the following requirements:
 - a. Semi-annual sampling shall be performed to analyze effluent from the secondary settlement basin for the water quality monitoring parameters referenced in Condition 1.f. of this section.
 - b. If analyses indicate a statistically significant increase over background for one or more constituents, the permittee shall notify the Section within 14 days. Exceedances in excess of the North Carolina Groundwater Standards shall require the permittee to submit plans for adequate treatment of collected stormwater or to develop alternative stormwater management plans. Additional permits may be required.
 - c. Prior to the acceptance of any waste at the facility, a baseline sampling event shall be completed. This event shall include all water quality monitoring parameters referenced in Condition 1.f. of this Section.
 4. The permittee shall monitor stream sediments as follows:
 - a. Semi-annual sampling shall be performed to analyze sediments for the parameters (metals only) referenced in Condition 1.f. of this section, by the Toxicity Characteristics Leaching Procedure as specified in USEPA Manual SW-846. A visual inspection shall be made as well to evaluate potential ash migration.
 - b. If analyses indicate a statistically significant increase over background for one or more constituents, the permittee shall notify the Section within 14 days. Exceedances in excess of the North Carolina Groundwater

Standards shall require the permittee to submit plans for adequate treatment of collected stormwater or to develop alternative stormwater management plans. Additional permits may be required.

- c. Prior to the acceptance of any waste at the facility, a baseline sampling event shall be completed. This event shall include all water quality monitoring parameters referenced in Condition 1.f. of this Section.
5. The permittee shall maintain a record of all monitoring events and analytical data. Reports of the analytical data for baseline samplings and each water quality monitoring and sediment sampling events (1.g., 2., 3.a. & 4.a.) are to be submitted to DSWM in a timely manner.
6. The permittee shall maintain a record of the amount of solid waste received at the facility, compiled on a monthly basis. Scales shall be used to weigh the amount of waste received.
7. On or before 01 Dec 93, and each year thereafter, the permittee shall report the amount of waste received (in tons) at this facility and disposed of in the landfill to the Solid Waste Section, on forms prescribed by the Section. This report shall include the following information:
 - a. The reporting period shall be for the previous year, beginning 01 July and ending on 30 June;
 - b. The amount of waste received and landfilled in tons, compiled on a monthly basis, according to Condition 6 described above; and
 - c. The report shall be signed by the Halifax County Manager.
8. All records shall be maintained on-site and made available to the SWS upon request.

ATTACHMENT 1

List of Documents for the Approved Plan

The following documents are incorporated as the approved plan for Permit No. 42-04.

1. Site Suitability Study, submitted March 26, 1991.
2. Site Suitability for landfill expansion issued June 5, 1991.
3. Construction Plan incorporating the following components:
 - a. Operations Manual submitted April 27, 1992;
 - b. CQA Plan submitted April 27, 1992;
 - c. Contract Specifications submitted April 27, 1992;
 - d. Revised text for Design Report submitted May 11, 1993;
 - e. Appendices for Design Report submitted April 27, 1992;
and
 - f. Plan Drawings submitted April 27, 1992.



42-04
Halifax

State of North Carolina
Department of Environment, Health, and Natural Resources
512 North Salisbury Street • Raleigh, North Carolina 27604

James B. Hunt, Jr., Governor

DIVISION OF SOLID WASTE MANAGEMENT
TELEPHONE: (919) 733-0692

Jonathan B. Howes, Secretary

May 12, 1993

Mr. Neal C. Phillips, Manager
Halifax County
P. O. Box 38
Halifax, North Carolina 27839

RE: Amendment to Solid Waste Permit No. 42-04
Halifax County Sanitary Landfill
Part 1: Permit to Construct a Coal Ash Monofill

Dear Mr. Phillips:

The referenced permit is issued in accordance with N.C.G.S. 130A-294 and the NC Solid Waste Management Rules, 15A NCAC 13B. Please review the **GENERAL** Conditions of this permit which describes recordation procedures, definition of the approved plan, and general terms of the permit to construct. Also, please note the **CONSTRUCTION** Conditions which describe the pre-operational conditions which must be satisfied to qualify for a Permit to Operate.

Please review the Conditions of Permit thoroughly and contact me at (919) 733-0692, if you have any questions or if you require further clarification. Mr. Bob Harding is the Section's Waste Management Specialist for this area and can be contacted at DEHNR Raleigh Regional Office, 3800 Barrett Drive, Raleigh, NC 27609, or by phone at (919) 571-4700.

Sincerely,

Sherri C. Hoyt
Environmental Engineer
Solid Waste Section

enclosure

cc: Bob Harding
Terry Dover
Jim Coffey
Greg Richardson, Hazen and Sawyer

P.O. Box 27687, Raleigh, North Carolina 27611-7687 Telephone 919-733-4984 Fax # 919-733-0513

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AMENDMENT TO PERMIT NO. 42-04
PART 1: PERMIT TO CONSTRUCT
DATE ISSUED 05-12-93

STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENT, HEALTH, AND NATURAL RESOURCES
DIVISION OF SOLID WASTE MANAGEMENT
P.O. BOX 27687 RALEIGH, NC 27611

SOLID WASTE PERMIT

Halifax County

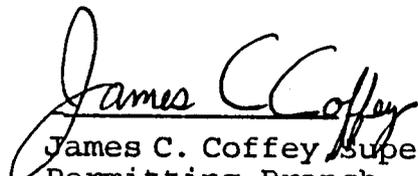
is hereby issued a permit to construct a
Coal Ash Monofill
located at the

HALIFAX COUNTY SANITARY LANDFILL

accessed

via SR 1417,
approximately 2 miles North of Aurelian Springs, Halifax County,
North Carolina

in accordance with Article 9, Chapter 130A, of the General Statutes
of North Carolina and all rules promulgated thereunder and subject
to the conditions set forth in this permit. The facility is
located and described by the legal description of the site on the
attached sheet.


James C. Coffey, Supervisor
Permitting Branch
Solid Waste Section

That certain tract or parcel of land lying and being situate in Butterwood Township, Halifax County, North Carolina, more particularly described as follows: Beginning at an iron rod located in the Southern right-of-way of N.C. State Road 1417; thence along the Ruth Warren property line S. 5° 55' E. 1037.52 feet to an existing iron pipe; thence N. 85° 31' E. 586.25 feet to an existing iron pipe; thence S. 6° 22' 46" W. 890.09 feet to an existing iron pipe; thence N. 86° 23' 37" W. 613.62 feet to an existing iron pipe; thence along an old wire fence S. 3° 37' 32" W. 595.29 feet to an iron pipe; thence S. 0° 31' 26" W. 316.13 feet to an existing iron pipe; thence N. 86° 00' W. 1031.8 feet to an existing iron pipe; thence S. 1° 30' W. 1725 feet to a concrete monument on the North side of a branch; thence running generally up the branch N. 75° 30' W. 205 feet to a point; thence N. 65° W. 165 feet to a point; thence N. 28° 30' W. 482 feet to a point; thence N. 55° 15' W. 415 feet to a point; thence S. 84° 20' W. 427 feet to a point; thence leaving said branch and running S. 74° 41' W. 195 feet to a point; thence N. 70° 18' W. 270 feet to a point; thence N. 74° 08' W. 144 feet to an iron axle; thence running along the Edward Butts property N. 6° 17' E. 202 feet to a point; thence N. 6° 33' E. 219 feet to a point; thence N. 6° 02' E. 178 feet to a point; thence N. 5° 38' E. 164 feet to a point; thence N. 6° 04' E. 232 feet to a point; thence N. 5° 36' E. 204 feet to a point; thence along a fence line N. 6° 17' E. 293 feet to a point; thence N. 6° 11' E. 685 feet to the centerline of N.C. State Road 1417; thence along said centerline the following courses and distances, N. 58° 50' E. 247.4 feet; N. 62° 50' E. 300 feet; N. 72° 05' E. 300 feet; N. 75° 45' E. 300 feet; N. 78° 40' E. 543 feet; thence S. 8° 38' W. approximately 30 feet to the Southern right-of-way of said State Road 1417; thence along said right-of-way in a Easterly direction approximately 510 feet to a point on an old road; thence N. 0° 53' 47" E. 1228.28 feet to a large rock; thence S. 32° 00' 18" E. 1280.76 feet to the point of beginning. This property is shown on that certain map entitled "Plat Showing Property Belonging to Halifax County 'Landfill Area'", prepared by Cyril C. Waters, Registered Surveyor, under date of April 11, 1992; reference to said map being hereby made for greater certainty of description.

SOLID WASTE PERMIT
Part 1: Permit to Construct
Coal Ash Monofill
Halifax County Sanitary Landfill

CONDITIONS OF PERMIT:

GENERAL

- ① This permit shall not be effective unless the certified copy is filed in the Register of Deeds Office, in the grantor index under the name of the owner of the land in the county or counties in which the land is located. After recordation, the certified copy shall be returned to the Solid Waste Section and shall have indicated on it the page and book number, date of recordation, and Register's seal.
2. When this property is sold, leased, conveyed or transferred, the deed or other instrument of transfer shall contain in the description section in no smaller type than that used in the body of the deed or instrument a statement that the property has been used as a sanitary landfill.
3. This permit will be subject to review every five years as per 15A NCAC 13B .0201(c), according to the issuance date of the Permit to Operate. Modifications, where necessary, shall be required in accordance with rules in effect at the time of review.
4. The approved plan is described by Attachment 1, "List of Documents for Approved Plan". Where discrepancies may exist, the most recent submittal and the Conditions of Permit shall govern. Some components of the approved plan are reiterated in the Conditions of Permit.
5. Halifax County (the permittee) shall notify the Division of Solid Waste Management (DSWM), Solid Waste Section (SWS) and conduct a pre-construction meeting on-site prior to initiating construction activities. If construction does not commence within 18 months from the issuance date of this permit, then the permittee shall obtain written approval from the SWS prior to construction and comply with any conditions of said approval.
- ⑥ Prior to receiving waste at this facility, a Permit to Operate must be obtained. The requirements for this part of the Solid Waste Permit are described in the following section (Construction), Condition 3. The Conditions of Permit issued herein shall also be incorporated in the Permit to Operate.

7. This permit is not transferable.

CONSTRUCTION

1. This construction permit is for development of Cell One of the Coal Ash Monofill located at Halifax County Sanitary Landfill and the on-site environmental management facilities, in accordance with the approved plan and as specified herein. Development of subsequent phases will require Halifax County to notify the DSWM 180 days prior to the scheduled date of construction, and receive written approval from DSWM regarding said notification.

a. The components of the engineered systems shall be specified and constructed to meet the performance requirements established by the facility design.

b. Relative to the established performance requirements, design revisions and/or requests for variance, will be reviewed by the agency and accepted or rejected.

c. Construction Quality Assurance (CQA) activities shall be documented and summarized in a CQA report and illustrated with as-built drawings. The CQA Report and Document Drawings shall bear an imprint of the registration seal of the engineer licensed to practice in the State of North Carolina.

d. The CQA report will include the following at a minimum:

- (1) A summary of the methodology, modifications, and construction quality control measures necessary to demonstrate that the facilities were constructed in accordance with the approved plans and as specified herein;
- (2) A summary of the actual materials and methodology implemented to construct and test any compacted soil liner; and
- (3) Documentation of the thickness (using survey data) of any soil liner, drainage layer, and protective cover; constructed grades (for HDPE liner), and location and grades for all LCRS piping.

2. All sedimentation/erosion control activities will be conducted in accordance with the Sedimentation Control Act codified at 15 NCAC 4. Native vegetation shall be established on the completed landfill.

3. The following pre-operative requirements shall be met to obtain a PERMIT TO OPERATE this facility:

a. Site preparation shall be in accordance with the construction plan, and the conditions specified herein.

b. Site inspection shall be made by a representative of the Division of Solid Waste Management (DSWM).

- c. The permit number and the words "NO HAZARDOUS, OR LIQUID WASTE ACCEPTED" shall be posted on an entrance sign.
- d. Upon completion of construction, the permittee will submit the CQA report and document drawings to DSWM; the agency will review the submittal and issue its concurrence that the facility was constructed as specified herein.
- e. Surface water monitoring locations shall be established and groundwater monitoring wells shall be installed (see Monitoring and Reporting Requirements) and a baseline sampling performed.
- f. A Final Water Quality Monitoring Plan shall be submitted to the SWS Hydrogeologist for review and approval. The plan shall incorporate the Monitoring and Reporting Conditions described in this permit.
- g. Stream sediment sampling locations (see Monitoring and Reporting Requirements) shall be established and a baseline sampling(s) performed. A settlement basin effluent and stream sediment monitoring plan shall be prepared and submitted to the Solid Waste Section for review and approval. The plan shall incorporate the Monitoring and Reporting Conditions described in this permit, as well as contingency plans in the case of contamination in excess of the NC Groundwater Standards.

OPERATION

1. This Coal Ash Monofill Area is permitted to receive only coal combustion by-products in accordance with the approved plan. Municipal solid waste, construction/demolition wastes, land-clearing and inert debris, hazardous waste, special wastes, and liquid waste are prohibited from disposal in the coal ash monofill.
 - a. Acceptance of additional wastes are subject to prior written approval by the Division and subject to the Division's "Procedure and Criteria for Waste Determination" in accordance with 15A NCAC 13B .0103 (d).
2. The landfill unit shall conform to all operating procedures described in the approved plan, in accordance with Rule .0505 of 15A NCAC 13B, and as specified herein.
 - a. All pertinent landfill operating personnel will receive training and supervision necessary to properly operate this landfill. Specifically, training must be provided in operational procedures that will prevent damage to the liner and leachate collection and removal systems.
 - b. Ash which has been placed to final elevations around the perimeter of the facility shall be covered with a minimum of 12 inches of soil prior to the end of daily

operations. Final cover and seeding shall be implemented within 30 days of reaching final grade.

- c. All operations shall be conducted in a manner sufficient to prevent releases of ash materials from the monofill unit or secondary settling basin.
3. Ground water quality at this facility is subject to the classification and remedial action provisions referenced in Rule .0503 (2) (d) of 15A NCAC 13B.
4. A closure and post-closure plan must be submitted for approval at least 90 days prior to closure or partial closure of any landfill unit. The plan must include all steps and measures necessary to close and maintain the facility in accordance with all rules in effect at that time. At a minimum, the plan shall address the following:
 - a. Design of a final cover system which minimizes infiltration into the waste and supports vegetation;
 - b. Construction and maintenance/operation of the final cover system, erosion control structures, and leachate management system; and
 - c. Surface water, ground water, and effluent monitoring.

MONITORING AND REPORTING REQUIREMENTS

- ①. Ground water monitoring wells and monitoring requirements for the landfill unit:
 - a. Monitoring well design and construction shall conform to the specifications outlined in Attachment 2, "North Carolina Water Quality Monitoring Guidance Document for Solid Waste Facilities". The monitoring plan shall be modified as required by the SWS Hydrogeologist.
 - b. A total of five monitoring wells shall be established to monitor the landfill unit. In addition, two monitoring wells shall be established immediately downgradient of the active cell and relocated as necessary, during site development.
 - c. A geologist shall be in the field to supervise well installation. The exact locations, screened intervals, and nesting of the wells shall be established after consultation with the SWS Hydrogeologist at the time of well installation.
 - d. For each monitoring well constructed, a well completion record shall be submitted to DSWM within 30 days upon completion.
 - e. Prior to the acceptance of any waste at the facility, a baseline sampling event shall be completed. This event shall include all groundwater monitoring wells and shall

be consistent with the above-referenced guidance document, (Attachment 2).

- f. Sampling parameters, equipment and procedures shall conform to specifications outlined in the above-referenced guidance document, (Attachment 2), or the current guidelines established by DSWM at the time of sampling.
- g. The permittee shall sample the monitoring wells semi-annually or as directed by the SWS Hydrogeologist.
- h. A readily accessible unobstructed path shall be initially cleared and maintained so that four-wheel drive vehicles may access the monitoring wells at all times.

2. The permittee shall establish two (2) locations for surface water sampling as described in the approved plan and as specified herein. Samples shall be collected from approved locations and analyzed semi-annually according to the protocol and parameters required by the SWS Hydrogeologist.

3. The permittee shall monitor effluent from the secondary settlement basin in accordance with the following requirements:

- a. Semi-annual sampling shall be performed to analyze effluent from the secondary settlement basin for the water quality monitoring parameters referenced in Condition 1.f. of this section.
- b. If analyses indicate a statistically significant increase over background for one or more constituents, the permittee shall notify the Section within 14 days. Exceedances in excess of the North Carolina Groundwater Standards shall require the permittee to submit plans for adequate treatment of collected stormwater or to develop alternative stormwater management plans. Additional permits may be required.
- c. Prior to the acceptance of any waste at the facility, a baseline sampling event shall be completed. This event shall include all water quality monitoring parameters referenced in Condition 1.f. of this Section.

4. The permittee shall monitor stream sediments as follows:

- a. Semi-annual sampling shall be performed to analyze sediments for the parameters (metals only) referenced in Condition 1.f. of this section, by the Toxicity Characteristics Leaching Procedure as specified in USEPA Manual SW-846. A visual inspection shall be made as well to evaluate potential ash migration.
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Standards shall require the permittee to submit plans for adequate treatment of collected stormwater or to develop alternative stormwater management plans. Additional permits may be required.

- c. Prior to the acceptance of any waste at the facility, a baseline sampling event shall be completed. This event shall include all water quality monitoring parameters referenced in Condition 1.f. of this Section.
5. The permittee shall maintain a record of all monitoring events and analytical data. Reports of the analytical data for baseline samplings and each water quality monitoring and sediment sampling events (1.g., 2., 3.a. & 4.a.) are to be submitted to DSWM in a timely manner.
6. The permittee shall maintain a record of the amount of solid waste received at the facility, compiled on a monthly basis. Scales shall be used to weigh the amount of waste received.
7. On or before 01 Dec 93, and each year thereafter, the permittee shall report the amount of waste received (in tons) at this facility and disposed of in the landfill to the Solid Waste Section, on forms prescribed by the Section. This report shall include the following information:
 - a. The reporting period shall be for the previous year, beginning 01 July and ending on 30 June;
 - b. The amount of waste received and landfilled in tons, compiled on a monthly basis, according to Condition 6 described above; and
 - c. The report shall be signed by the Halifax County Manager.
8. All records shall be maintained on-site and made available to the SWS upon request.

ATTACHMENT 1

List of Documents for the Approved Plan

The following documents are incorporated as the approved plan for Permit No. 42-04.

1. Site Suitability Study, submitted March 26, 1991.
2. Site Suitability for landfill expansion issued June 5, 1991.
3. Construction Plan incorporating the following components:
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 - b. CQA Plan submitted April 27, 1992;
 - c. Contract Specifications submitted April 27, 1992;
 - d. Revised text for Design Report submitted May 11, 1993;
 - e. Appendices for Design Report submitted April 27, 1992;
and
 - f. Plan Drawings submitted April 27, 1992.