

5101Permit2001 - Batch No. ____

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North Carolina
Department of Environment and Natural Resources

Division of Waste Management

Michael F. Easley, Governor
William G. Ross Jr., Secretary
Dexter R. Matthews, Interim Director



October 30, 2001

Mr. Haywood Phthisic
Director of Public Utilities
Johnston County
P.O. Box 2263
Smithfield, NC 27577

Re: Irrigation of Reclaimed Wastewater at the Johnston County Municipal Solid Waste Landfills, Modification to Permits 51-01 and 51-02

Dear Mr. Phthisic:

The Solid Waste Section (Section) has completed its review of the proposed modification to the permits for the referenced facilities. In accordance with the Solid Waste Management Rules and Condition 9, Appendix 4, Permit to Operate Number 51-02, the Section hereby approves the modification which allows the irrigation of reclaimed wastewater consistent with the Operations Manual dated October 2001, submitted on behalf of Johnston County by G. N. Richardson & Associates. The modification will be incorporated into the permit for the new MSWLF facility, which combines both existing landfills into one permitted facility.

The following document will be included, by reference, in the list of approved documents for Permits 51-02 and 51-01, and any new permit prepared by the Section. The document is referenced as:

Operations Manual- Addendum. (Irrigation of Reclaimed Wastewater). Johnston County MSW Landfill. Johnston County, North Carolina. Prepared for: Johnston County Department of Public Utilities. Prepared by: G. N. Richardson & Associates, Inc. Raleigh, NC. August 2001. Revised October 2001.

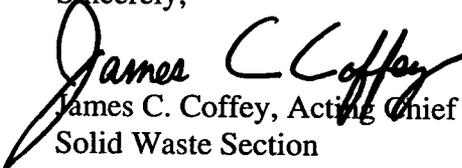
The county has prepared, and submitted to the Division of Water Quality, drawings and details of elements of the irrigation system that will be installed at the two landfill facilities, i.e. pump stations and force mains. The proposed location and construction details of permanent systems must be included with the facility drawings that are being prepared for the permitting process currently under review by the Section. In addition, any construction activities that are completed before issuance of a permit to construct by the Section for Phase 4A, must be documented with as-built drawings, submitted to the Section. This will be a requirement of any Solid Waste permit issued by the Division of Waste Management.

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It should be understood by the County that the irrigation activities proposed in the modification could affect the development of future municipal solid waste landfill units within the facility and could result in a reduction in total landfill disposal capacity.

If you have any further questions, please do not hesitate to contact me at (919) 733-0692, extension 256. Specific questions about permitting and the current status of the permit application can be directed to Ed Mussler, the permitting engineer.

Sincerely,


James C. Coffey, Acting Chief
Solid Waste Section

cc: Ed Mussler, DWM
Mark Fry, DWM
Robert Hearn, DWM
Jim Barber, DWM
Kenneth Pohlig, DWQ
Greg Richardson, GNRA

North Carolina
Department of Environment and Natural Resources



Division of Waste Management

Michael F. Easley, Governor
William G. Ross Jr., Secretary
Dexter R. Matthews, Interim Director
October 2, 2001

Mr. Haywood Phthisic
Public Utilities Director
Johnston County Department of Public Utilities
P.O. Box 2263
Smithfield, NC 27577

Re: Johnston County Landfill, Cell 4A, Site Study Process, New Facility Designation,
Permits 5101 and 5102

Dear Mr. Phthisic,

The Solid Waste Section (Section) of the Division of Waste Management is conducting a permit review of the Cell 4A proposal at the Johnston County Landfill. As was previously stated in a letter to the county manager, dated June 15, 2001, the proposed development of Cell 4A qualifies the existing facilities (5101 and 5102) as a new facility. Rule .1603(a)(1)(E) defines a new facility as one that has a substantial change to the waste stream defined in the effective permit.

Your consultant, G.N. Richardson and Associates, Inc., of Raleigh, NC, has filed a permit to construct application for Cell 4A with the Section. Included in this permit application are demonstrations to update the existing site study of the landfill locale. A detailed site study was performed in 1995 for facility 5102 which is adjacent to the original landfill, 5101. Documentation presented by your consultant indicates that there have not been significant changes in the study area.

The Section is performing a technical review on the permit application that has been submitted. The following items need to be addressed to complete the site study portion of the application.

1. Vol. 2- Section 3.1-Airport Safety- The airports, State and Federal FAA need to be notified in accordance with Rule .1622 (1)(b). Please verify that the smaller airport does not meet the definition as supplied in .1622 (1)(d)(i). The airports are within the six mile limit of the new FAA regulations. Please discuss.
2. Vol. 2- Section 3.3- Wetlands- The wetlands need to be addressed in accordance with Rule .1622 (3)(a)(i)-(v). Some of this information may have been submitted to the Division of Water Quality or the Army Corps of Engineers, but should be summarized in the solid waste permit.
3. A facility plan revision needs to be supplied. This plan should include the capacity of the

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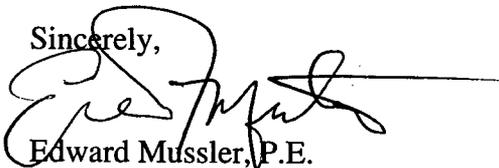
entire proposed facility (i.e, Cells 4A, 5-8), the phase capacity and remaining capacity. An expression of the monthly disposal rate is needed. Johnston County has substantial growth projections. A rate expression, for permitting purposes, is needed. A growth factor or standard deviation could be employed.

4. The decision to locate a solid waste management facility is the responsibility of the unit of local government having jurisdiction over the proposed site. Johnston County needs to provide a resolution/vote on motion, of the county commissioners, in accordance with Rule .1618(c)(5)(A). The Section advises that the resolution/motion be clear as to its intent. The proposed facility plan's requirements are specified in Rule .1618(c)(6), and specifically the requirements of Rule .1619(e)(1) and (2) provide guidance for the elements that the commissioners need to be cognizant of.
5. The Section Hydrogeologist has made previous comments on the site study documentation that has been submitted. The Section has been supplied a response which is under review. Johnston County will be supplied additional comments, if necessary, under separate cover from the Section Hydrogeologist.

The above comments are intended to expedite the Section's review of the submitted application. They in no way limit the Section from requesting additional information, should it be deemed necessary. Please include a header or footer showing the revision and date of revision for any pages of the application that are amended.

If there are any questions, please do not hesitate to contact the Section. Our phone number is 919.733.0692. My extension is 343.

Sincerely,



Edward Mussler, P.E.
Environmental Engineer
Solid Waste Section.

cc: Pieter Scheer, P.E., GNRA
Mark Fry, DWM
Jim Barber, DWM
Robert Hearn DWM

North Carolina
Department of Environment and Natural Resources



Division of Waste Management

Michael F. Easley, Governor
William G. Ross Jr., Secretary
Dexter R. Matthews, Interim Director

September 24, 2001

Mr. Timothy G. Broome, P.E.
Department of Public Utilities
Johnston County
P.O. Box 2263
Smithfield, NC 27577

RE: Permit 51-01, Johnston County Landfill- Letter of Approval for Site Maintenance and Grading Activities

Dear Mr. Broome,

Johnston County has a permitted municipal solid waste (msw) landfill, Permit number 51-01. This landfill has closed municipal solid waste landfill units, and is currently permitted to accept construction and demolition debris on top of a closed msw unit.

Johnston County has approached the Section for approval to conduct earthmoving activities at the landfill, primarily in the area between closed msw units 3 and 4. The purpose of this activity is to improve site drainage, install new sedimentation and erosion control devices and otherwise improve site handling of stormwater and surface water drainage.

The area between the closed units has evolved, over time, into a low quality wetlands, as determined by the Division of Water Quality. This area was not a wetland at initial site operation, but gradually evolved as site operations altered the surface water drain pattern. The site also has groundwater contamination, common to unlined landfills in the state, that may be improved by better management of water at the site.

Approval is granted to conduct the site maintenance and grading activities, in accordance with the plan prepared by your consultant, G.N.Richardson & Associates, of Raleigh NC.

Johnston County has also filed a permit application for a new lined unit at the landfill. The unit, Cell 4A, is a unique one in that it is to be constructed in a "piggy back" fashion, between existing units 3 and 4 of the facility. This first-of-its-kind design, in North Carolina, is currently under review by the Section. The Section feels that any issues pertaining to the permit can be adequately addressed to ensure that the design and operation of the new unit will be in accordance with North Carolina regulations.

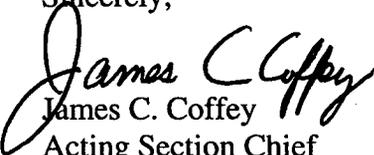
North Carolina Solid Waste Management Rules do not allow beginning construction for a solid waste management facility until a construction permit has been issued. In this case,

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Johnston County has a valid permit (51-01) for a solid waste management facility. Approval of the grading and site maintenance plan does not constitute an approval of the pending permit application. By performing these activities the overall site performance and protection of the environment will be enhanced, including improvement of the existing groundwater under the facility.

If there are any further questions please contact the Section at 919.733-0692. The Section staff are reviewing the pending permit application and should have technical reviews for the county in the near future.

Sincerely,


James C. Coffey
Acting Section Chief
Solid Waste Section

cc: Haywood Phystic, Johnston County
Pieter Scheer, GNRA
Ed Mussler, DWM
Bobby Lutfy, DWM
Mark Fry, DWM
Jim Barber, DWM

North Carolina
Department of Environment and Natural Resources



Division of Waste Management

Michael F. Easley, Governor
William G. Ross Jr., Secretary
Dexter R. Matthews, Interim Director

September 19, 2001

Mr. Tim Broome
Director of Infrastructure and Engineering
Johnston County
P.O. Box 2263
Smithfield, N.C. 27577

Re: Environmental Assessment at the Johnston County Municipal Solid Waste Landfill
(Permit #51-01).

Mr. Broome,

The Solid Waste Section is in receipt of the groundwater assessment/geophysical survey report dated July 18, 2001, submitted on behalf of Johnston County by G.N. Richardson and Associates. Included in the report was a proposal to install three additional wells in subsurface features identified by the geophysical survey. The purpose of the proposed wells is to provide further information on the extent of the affected ground water detected in monitoring wells closer to the waste fill. Approval is granted to install three additional monitoring wells, as proposed. Any revision of the well locations must have prior approval from the Section.

Please proceed to implement the approved proposal and submit an assessment report within 90 days. Please feel free to contact me at 919-733-0692, extension 261, if you have any questions or comments.

Sincerely,

Mark Poindexter
Environmental Compliance Unit
Solid Waste Section

c: Philip Prete
Mark Fry
Robert Hearn
central file

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Division of Waste Management

Michael F. Easley, Governor
William G. Ross Jr., Secretary
William L. Meyer, Director

June 15, 2001

Mr. Rick J. Hester
County Manager
Johnston County
PO Box 1049
Smithfield, NC 27577

Re: Permitting for Johnston County Landfill, Cell 4A and C&D, Permits 5101 and 5102

Dear Mr. Hester:

The Solid Waste Section (Section) of the Division of Waste Management is in receipt of your letter of June 11, 2001. Johnston County has two municipal solid waste landfill facility (MSWLF) permits, 5101 and 5102. The first is for the original, unlined landfill and current C&D operations and the second is for the currently active lined landfill unit, Cell 5.

The County's request for a permit to construct Cell 4A is unique in North Carolina. As such there has been extensive review of the regulatory and policy implications of such an approach. Section Staff have evaluated the proposal and worked with your consultant, G. N. Richardson & Associates, to formulate an approach to this proposed project. All involved are confident that there are no technical obstacles to the plan.

The proposal does, however, have requirements that are procedural in nature. You have a current permit, 5102, for a lined MSWLF. Continued operation and construction at this facility would be under the auspices of the Solid Waste Management Rules 15A NCAC 13B .1600. The proposed development of Cell 4A qualifies facility permit 5101 as a new facility, under the requirements of Rule .1603(a)(1)(E), a substantial change to the waste stream defined in the effective permit.

As a result, the requirements for a new facility (see Rule .1617) must be met by the County. This requires a Site Study. The technical requirements of the site study have largely been met by the county, during previous permitting actions. The Section will let the County know of any minor additions that may need to be updated. The County will need to meet the requirements of Rule .1618 (c)(5), Local government approvals for municipal solid waste landfills. At this time it is also recommended that the county merge the two permitted properties into one facility. Section staff will be available to work closely with your consultant and staff to ensure that the proper steps are presented to your commissioners for action.

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Mr. Rick J. Hester
Permitting for Johnston County
June 15, 2001
Page 2

While the county fulfills its legal obligation under Rule .1618 (c)(5), Section staff will be evaluating the current application with respect to the technical aspects, to ensure that sufficient time will be available for construction of a new cell.

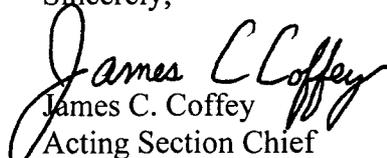
Johnston County has also approached the Section about expanding C&D operations over the closed portion of Cells 1 and 2 at facility 5101. Cells 1 and 2 at this facility ceased accepting waste prior to October 9, 1993, and were closed with a two foot dirt cover. They were not subject to regulation under Subtitle D and the new state landfill rules. Unlined landfill units which accepted waste after October 9, 1993 are subject to the federal Subtitle D rules as well as the current Section .1600 rules of the state. The more stringent rules require minimum specification closure caps, as well as upgraded groundwater monitoring wells and financial assurance for closure and post-closure costs. The Section has considered and approved some placement of C&D materials on these units which fall under the .1600 rules. Currently the cutoff date for this activity is January 1, 2003.

The Section has not permitted expansion or placement of C& D on top of old MSW units, which are not subject to the new rules. The subject is on our list of objectives to study this year. Working in conjunction with the local SWANA group, we will be evaluating the current practice and its effects on groundwater, as well as whether the practice should be expanded or stopped all together, and if it should, or could legally, be expanded to non-1600 rule MSW units.

Consequently the county and its consultant should make other arrangements for future C&D disposal capacity. It is unlikely that the Section can complete its review in time for Johnston County to make appropriate plans. The Section Staff will work closely with county staff and your consultant to evaluate your options.

If you have any further questions, please do not hesitate to contact me. Specific questions about permitting and the current status of the permit application can be directed by your staff or consultant to Ed Mussler , the permitting engineer.

Sincerely,


James C. Coffey
Acting Section Chief
Solid Waste Section

cc; Ed Mussler, DWM
Mark Fry, DWM
Pieter Scheer, GNRA