



# GRANVILLE COUNTY ENVIRONMENTAL PROGRAMS

141 WILLIAMSBORO STREET, POST OFFICE BOX 906, OXFORD, NORTH CAROLINA 27565-0906

Office (919) 603-1354  
Fax (919) 690-8610

Email: [jason.falls@granvillecounty.org](mailto:jason.falls@granvillecounty.org)



January 28, 2011

Ms. Ellen Lorscheider  
Planning and Programs Branch Head  
1646 Mail Service Center  
Raleigh, NC 27699-1646

Re: Proposed Changes to Solid Waste Management Rules

Dear Ellen,

As a client of Joyce Engineering in addition to being the Landfill Supervisor for the Northern Granville Construction and Demolition Landfill in Oxford (Permit #39-01), I endorse the recommendations by Joyce Engineering which are attached.

Please enter this letter along with these comments that you have already received into your official record of consideration before the changes are finalized.

Sincerely,

Jason Falls  
Dir. of Env. Programs

xc: File



Waste Industry Experts

Joyce Engineering, Inc.  
2211 West Meadowview Rd  
Suite 101  
Greensboro, NC 27407

tel: 336/323-0092  
fax: 336/323-0093

www.JoyceEngineering.com

January 25, 2011



Ms. Ellen Lorscheider  
Planning and Programs Branch Head  
1646 Mail Service Center  
Raleigh, NC 27699-1646

**RE: Proposed Changes to Solid Waste Management Rules**

Dear Ellen:

On behalf of Joyce Engineering, Inc. (JEI) and for the general benefit of our clients and the solid waste community, I wish to present the following comments on the proposed changes to the NC Solid Waste Regulations (NCSWMR) as presented in the North Carolina Register Volume 25, Issue 04, Pages 465-482 on August 16 2010. Please enter these comments into your official record for consideration before the changes are finalized.

**§.0101(Definitions) & §.0563 (LCID Landfills)**

The proposed changes would remove "untreated wood" from allowable waste for a LCID Landfill. JEI offers the following comments:

- JEI understands that the proposed changes to these sections have been put on "hold" by the DENR and will not be further considered at this time. JEI fully supports this decision.

**LEACHATE RULES**

**§.1604(Gen. Req. for MSW LF's) & §.1626 (Op. Req. for MSW LF's)**

Under the proposed changes, any release of leachate from the facility's containment system, including the liner system, collection system, and/or storage system, will constitute a leachate release whether or not the leachate leaves or has any impact outside of the facility boundary. JEI offers the following comments:

**§. 1604 (L)(iii):** The proposed rule change states:

*The permittee shall report orally within 24 hours from the time the permittee becomes aware of the circumstances of any ~~release, discharge,~~ release or discharge outside the liner, collection system or other containment component, any fire or explosion from the permitted landfill facility. Such reports shall be made to the Division representative at the appropriate regional office of the Department of Environment, Health, and Natural Resources.*

- The proposed change creates the potential for extremely costly fines and penalties and unwarranted remediation requirements to be imposed for minor incidental releases that have no impact outside of the regulated facility or on the groundwater or surface water and which can be easily and effectively remedied through routine operational maintenance and house-cleaning activities.
- As proposed, the language leaves no flexibility for an inspector or regulator to consider the site-specific and incident-specific details of a minor release, even if the facility acts immediately to effectively prevent or remediate any impact from the release.
- The proposed language should be clarified and should include steps to be taken by the facility in the event of release or discharge to determine the actual impact and remediate it.

**Recommendation:** We recommend the following changes to the proposed language:

*The permittee shall report orally within 24 hours from the time the permittee becomes aware of the circumstances of 1) any leachate release or discharge outside the liner, collection system or other containment component (except for de minimis amounts); or 2) any fire or explosion from the permitted landfill facility. Such reports shall be made to the Division representative at the appropriate regional office of the Department of Environment, Health and Natural Resources. Upon reporting a release or discharge outside the liner, collection system or other containment component the following processes shall be initiated as required:*

- (i) Identify the extent of impact;*
- (ii) Prepare and implement a plan to measure, control, and remediate any impact; and*
- (iii) Prepare a report which summarizes the actions and results from the items listed in i and ii above.*

**§.1626 (8)(d) :** The proposed rule change states:

*Leachate shall be contained ~~on-site or~~ within a lined disposal cell or within a leachate collection and storage system. All leachate shall be properly treated prior to discharge. An NPDES permit may be required prior to the discharge of leachate to surface waters.*

- Large rain events (such as hurricanes) can generate large quantities of rain over small periods of time, which might create leachate seeps in spite good design and best-management practices. We are concerned that such releases would be enforced as a violation of the Rule. NCDENR representatives have indicated that storm events that are larger than the “design storm” will not be considered for enforcement action.
- The proposed Rule change should make provisions for small releases that are captured and remediated quickly by operators, similar to spill response measures under other regulatory jurisdictions.
- JEI encourages additional changes to the Rules in order to present options for leachate release enforcement and management other than the automatic issuance of a Notice of Violation (NOV), such as the use of an Administrative Order on Consent. The rules should also allow consideration of extenuating circumstances by DENR staff when considering enforcement action. Without such changes, the threat of an

automatic NOV may discourage some operators from self-reporting releases.

- The stated intent of this rule change is the protection of the environment. The rules for protection of groundwater and surface water include the use of buffers and the definition of a relevant point of compliance (§1631.2.a). The use of the relevant point of compliance for groundwater allows impacted groundwater on the landfill site up to a distance of 250 feet from the landfill cell boundary or 50 feet from the property boundary, whichever is closer to the waste unit. JEI recommends that the same principal be applied to leachate releases.

**Recommendation:** We recommend the following text changes for consideration:

*Leachate shall be contained within the relevant point of compliance as defined in 15A NCAC 13B.1631(2)(a). All leachate shall be properly treated prior to discharge. An NPDES permit may be required prior to the discharge of leachate to surface waters.*

#### §.1626 (12)(e):

This portion of the rule did not have proposed changes; however, the proposed changes to 13B.1626 (8)(d) would be inconsistent with implementation of Rules in other Divisions of DENR where releases, spills, etc., require a contingency plan (i.e. SP3, SPCC, etc.). The preparation of a contingency plan for leachate releases is needed to minimize the impacts and hasten the remediation of impacts from such releases, which would increase protection of the environment. We recommend the following revision to this section of the rule:

*(e) A contingency plan for leachate releases and extreme operational conditions.*

## GROUNDWATER RULES

### §.1632-.1635 & .1637 (GW Monitoring at MSW LF's)

The proposed changes would remove statistical analyses as the initial method for analyzing groundwater sampling results to determine whether or not a release has occurred from a MSW landfill. Statements made by the DENR representative indicated that the intent of the proposed changes was not to eliminate the use of statistics to determine whether or not an apparent GWPS exceedance was significant, but to eliminate the requirement of doing statistics as screening criteria for every constituent for every event. Nonetheless, JEI had several reservations about the proposed changes.

On December 3, 2010, JEI participated in a meeting between the DENR and a workgroup composed of representatives of the solid waste industry, local governments, and consultants concerning the proposed rule changes, especially the changes affecting the use of statistics in groundwater monitoring. The workgroup submitted a letter based on that meeting recommending several revisions to the proposed rule changes. In January, the DENR sent out revised proposed changes incorporating many of the workgroup's suggestions. JEI strongly supports these revised changes. The primary revisions included the following:

**§.1632(e):**

The group recommended that this paragraph be used to clarify that the Department would approve background levels for a site established using statistical analyses that are described in sections (f) through (j). The proposed text removal is to clarify that the use of intrawell statistics to determine background levels that would be well-specific and not a function of upgradient or background wells is an acceptable option. Upgradient or background wells are part of the interwell statistical method. By referencing sections (f) through (h), the text accounts for both intrawell and interwell statistics to derive background values. Added reference to Rule .1631(a)(1) is added because it discusses establishing background utilizing wells that have not been affected by the landfill unit.

**Recommendation:** The following text is proposed: “The owner or operator shall establish *Division approved background groundwater quality in accordance with Rule .1631(a)(1) and Rule .1632(f) through (h)* ~~in hydraulically upgradient or background wells~~ for each of the monitoring parameters or constituents required in the particular groundwater monitoring program that applies to the MSWLF unit.”

**§.1632(f) though (h):**

The group discussed this change in the meeting and requested that these sections be retained so that there is clear guidance on which statistical methods are acceptable.

**Recommendation:** The group requested that the regulations remain as written, except as discussed below.

**§.1632(g):**

The group discussed whether statistics should be required or optional to evaluate groundwater monitoring data. The proposed text is to clarify that that statistics are optional to evaluate groundwater monitoring data but required for determining background.

**Recommendation:** The group proposed the following text, “~~The owner or operator~~ *Should the owner/operator choose to perform statistical analysis of groundwater quality data, whether for purposes of establishing background concentrations or to determine if there is an exceedance of the groundwater protection standard as defined in Paragraph (g) and (h) of Rule.1634, the owner or operator shall select one of the following statistical methods to be used in evaluating ground water monitoring data for each hazardous constituent. The statistical test chosen shall be conducted separately for each hazardous constituent in each well.*

**§.1632(i):**

The group discussed language to use to enforce that statistical analyses are optional (e.g., in determining an exceedance at the point of compliance).

**Recommendation:** The group proposed the following text, “The owner or operator shall ~~may~~ determine whether or not there is a statistically significant increase over background values for each parameter or constituent required in the particular ground water monitoring program that applies to the MSWLF unit. (1) ~~If in~~ determining whether or not a statistically significant increase has occurred, the owner or operator shall compare the ground water quality of each parameter or constituent at each monitoring well designated to monitor the quality of ground water passing the relative point of compliance to the background value of that constituent, according to the statistical procedures and performance standards specified in this Rule.” (2) Request to delete.

**§.1632(j):**

The group discussed language to use to enforce that statistical analyses are optional (e.g., in determining an exceedance at the point of compliance).

**Recommendation:** The group proposed the following text, “~~Within 14 days of completing the statistical analysis for the analytical data from ground water samples,~~ *Within a reasonable period of time not to exceed 120 days from the date of sampling or as specified in the facility permit,* the owner or operator shall submit to the Division a report that includes all of the information from the sampling event; including field observations relating to the condition of the monitoring wells, field data, laboratory data, statistical analyses (*if utilized*), sampling methodologies, quality assurance and quality control data, information on ground water flow direction, calculations of ground water flow rate, for each well any constituents that exceed ground water standards as defined in 13B.1634.g-h ~~or show a statistically significant increase over background levels,~~ and any other pertinent information related to the sampling event.”

**§.1634 (old f):**

The group discussed this proposed deletion at length and agreed to keep this section out.

**Recommendation:** The group requested that the proposed deletion remain.

**§.1634 (f)(2):**

The group discussed this section and requested a text change regarding the approval of an ASD and return to detection monitoring. This proposed change deletes the last part of the 5<sup>th</sup> sentence of this section.

**Recommendation:** The group proposed the following text, “...If a successful demonstration is made and approval is given by the Division, the owner or operator may discontinue assessment monitoring and return to detection monitoring. *if the Appendix II constituents are at or below background.*”

**§.1634 (g):**

The group discussed text changes for this paragraph to clarify how a background concentration that is above the MCL or water quality standard is utilized within the groundwater monitoring program.

**Recommendation:** The following text change is proposed, “The owner or operator shall obtain a determination from the Division on establishing a groundwater protection standard for each Appendix II constituent detected in groundwater. The groundwater protection standard *shall be the most protective of subparts (1) through (4), or subpart (5) if the Division approved background water quality standard is higher than concentrations listed in subparts (1) through (3).*”

**§.1634 (g)(4):**

The group discussed text changes for this paragraph to clarify how background concentrations are used as the groundwater protection standard where there is not a published state or federal standard. The proposed text adds a reference to statistics section because statistics are required to establish background values.

**Recommendation:** The following text change is proposed, “For constituents for which MCLs or water quality standards have not been promulgated, the background concentration for the constituent established from wells in accordance with Rule .1631(a)(1) *and Rule .1632 of this section.*”

**§.1634 (g)(5):**

The group discussed text changes for this paragraph to clarify how background concentrations are used as the groundwater protection standard where the background level is above the most protective standard listed in subparts 1 through 3. The proposed text adds a reference to statistics section because statistics are required to establish background values. The deleted text clears up confusion referencing MCL and water quality standard in the same sentence.

**Recommendation:** The following text change is proposed, “For constituents for which the *Division approved background level established in accordance with Rule .1631(a)(1) and Rule .1632 is higher than the MCL or water quality standard* most protective concentration in Rule .1632(g)(1) through Rule .1632(g)(4) or health based levels identified under Paragraph (h) of this Rule, the background concentration.”

**§.1635 (a):**

The group discussed the proposed new timeframe of 90 days within this section and the difficulty associated with meeting the timeframe at all sites because of the multitude of

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issues that can arise to delay the ACM process. The group proposed revised text for this rule to allow the division to establish an alternate schedule

**Recommendation:** The following text change is proposed, "Within 90 days of the finding that any of the constituents listed in Appendix II exceeded the groundwater protection standards, the owner or operator shall initiate assessment of corrective action measures. Such an assessment must be completed *within 120 days of the finding or an alternative schedule approved by the Division.*

If the suggested revisions of the proposed changes to the NCSWMR are promulgated, We believe the changes would be a significant improvement to the way ground-water monitoring is conducted at MSW landfills as well as providing clearer operational guidance for landfill owners. Thank you for consideration of these comments.

Respectfully,  
JOYCE ENGINEERING, INC.



Evan Andrews, PE  
Regional Manager



Van Burbach, Ph.D., P.G.  
Technical Consultant