

From: [Mark A. Shumpert](#)
To: [Murray, John](#)
Subject: OmniSource Kernersville
Date: Friday, August 29, 2014 8:59:54 AM

John,

In response to your comments issued August 18th for the application to renew the permit-to-operate for OmniSource SE in Kernersville, we have the following questions, requests for clarification, and updates. We look forward to hearing back from you, and please don't hesitate to call me with any questions.

Comment #1:

OmniSource Southeast, LLC is the owner and operator. The County tax records are not up-to-date and are currently being addressed by OmniSource's corporate tax department.

Comment #2:

The proposed soil cap section was discussed with DENR and seemingly approved by you if the Owner did not elect to install a engineered cap at this time. Determination of the subgrade permeability and elevation has not been determined. We can estimate the elevation and determine the permeability of surrounding in-situ soils if necessary. In accordance with .0505(3)(c), "the area shall be covered with at least two feet of suitable compacted earth."

Comment #3:

Halting operations to have a surveyor mobilize to the site to survey a location is not economically or logistically feasible and could create a significant safety issue. Obtaining such data on a 50-foot grid would be next to impossible. We propose submitting the best available data on pre-waste topography as the estimated base grades. It is our understanding that there was no excavation prior to the placement of waste, so the pre-waste topography should reflect actual base grades.

There are only four existing monitoring wells at the site, one approximately 500' southwest (upgradient) of the waste unit boundary, one about 200' east of the waste unit, and two about 500-600' north (downgradient) of the waste unit. We have prepared a groundwater potentiometric surface map based on water levels in these four wells as measured on April 24, 2014, and using existing topography and the locations of creeks as additional control. This is the best estimation of the groundwater surface beneath the waste that is practically feasible given available data; however, in the area directly beneath waste, the groundwater contours may be off by as much as $\pm 5-10'$. Also, any estimate of the original base grades based on existing data is likely to have similar error limits. This means that it will not be possible to document a 4-foot separation with statistical certainty. There are not, and have never been any, wells within the waste footprint. It is not only economically and technically unfeasible to install wells within the footprint, it would also create an unnecessary environmental risk by potentially creating a conduit for waste constituents to impact the groundwater.

During excavation of the fluff, when the excavators think they have reached native soil, they

typically dig a few feet deeper to be certain. They have not encountered groundwater in any of these instances, so there is good reason to believe that there exists adequate separation between the waste and groundwater. Also, since there was no excavation prior to the placement of waste, the base grade would have been well above the existing water table at that time. Furthermore, the landfill was first constructed before the 15 A NCAC 13B rules were promulgated, when there were no requirements for such separation.

Comment #4:

All previously approved plans were submitted in 2001 and should be on file at DENR. We do not have access to these documents any longer.

Comment #5:

We propose to determine edge of waste as reclamation progresses. Using approximate EOW for the permit renewal was discussed with DENR and we understood that this approach was acceptable.

Comment #6:

There have been no changes to the site since the 2001 survey other than grading changes on the landfill, and these change daily. We see no need for an updated survey. Please clarify why an updated survey is requested.

Comment #7:

We will include copies of the current NPDES permit and SWPPP for the facility.

Comment #8:

Please clarify what is needed for these existing features.

Comment #9:

We did a slope stability analysis of the closure cap slopes. What berm are you referring to?

Comment #10:

We will include the certified property survey for the facility.

Comment #11:

We will include a summary of information on the UST incident.

Comment #12:

Please clarify which sections of .0503 and .0504 you are referring to that apply to a reclamation project. Since we are not permitting a new landfill or expanding the landfill, we believe that most of section .0504 and some parts of section .0503 do not apply.

Comments #13-17:

We will make the suggested changes and provide the requested information.

Comment # 18:

Stormwater will not be diverted away from the working face, but will rather infiltrate the porous fluff material. Areas that have been brought to final grade will be covered with intermediate soil cover to prevent waste from getting into the stormwater. Small amounts of fluff from the landfill edges may reach the sediment pond north of the landfill when grading operations are underway. This fluff will be controlled by booms in the sediment pond and by periodically cleaning out accumulated fluff in the pond. Will this be acceptable?

Comment #19:

Please clarify what you mean by 15 months may not be sufficient.

Comments #20-21:

The requested changes will be made.

Comment #22:

For the cross-sections, we will use the April 2014 groundwater surface map and the best estimated base grades we can obtain from existing data, as discussed above. We have no data regarding depth to bedrock. Please clarify what structural fill and proposed/existing cells you are referring to.

Thank you,

M.A. "Mark" Shumpert, P.E. | *Technical Consultant* |

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