



Waste Industry Experts

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February 1, 2010

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Ms. Jaclynne Drummond  
Dept. of Environmental and Natural Resources  
Solid Waste Section  
1646 Mail Service Center  
Raleigh, North Carolina 27699-1646



**RE: Request to Eliminate Surface Water Sampling Point SW-1  
Piedmont Landfill and Recycling Center  
Permit No. 34-06  
JEI Project No. 392.0900.12, Task No. 88**

Dear Jackie:

On behalf of Waste Management, Joyce Engineering, Inc. requests removal of surface water monitoring point SW-1 from the water quality monitoring requirements for the Piedmont Landfill and Recycling Center (Permit No. 34-06). Currently, there are five surface water sampling points that are sampled semiannually at the Piedmont Landfill in conjunction with groundwater monitoring. The locations of these five points are shown on the attached figure, and are described below.

Sampling Point	Description
SW-1	Creek on south side of Piedmont Landfill: Upstream of the Piedmont Landfill but downstream of the old Kernersville Landfill, upstream of SW-5.
SW-2	Creek on south side of Piedmont Landfill: Downstream of the Piedmont Landfill.
SW-3	Creek on north side of Piedmont Landfill: Upstream of the Piedmont Landfill.
SW-4	Creek on north side of Piedmont Landfill: Downstream of the Piedmont Landfill.
SW-5	Creek on south side of Piedmont Landfill: Upstream of the Piedmont Landfill, downstream of SW-1.

SW-1 is located down-gradient of the closed City of Kernersville Landfill and upstream of the Piedmont Landfill, so any contamination detected in SW-1 will most likely be from the Kernersville Landfill. SW-5 is also located upstream of the Piedmont Landfill and downstream of the Kernersville Landfill, but it is downstream of SW-1 and closer to the

Piedmont facility boundary. SW-5 is adequate to give the upstream data for the Piedmont Landfill for comparison to the downstream data to determine whether the Piedmont landfill is impacting that creek. SW-1 is unnecessary and redundant.

We request that sampling of SW-1 at the Piedmont Landfill be discontinued starting with the next semiannual sampling event, currently scheduled for March 2010. If you have any questions or wish to discuss this request, please call Steve Cowie or me at (336) 323-0092.

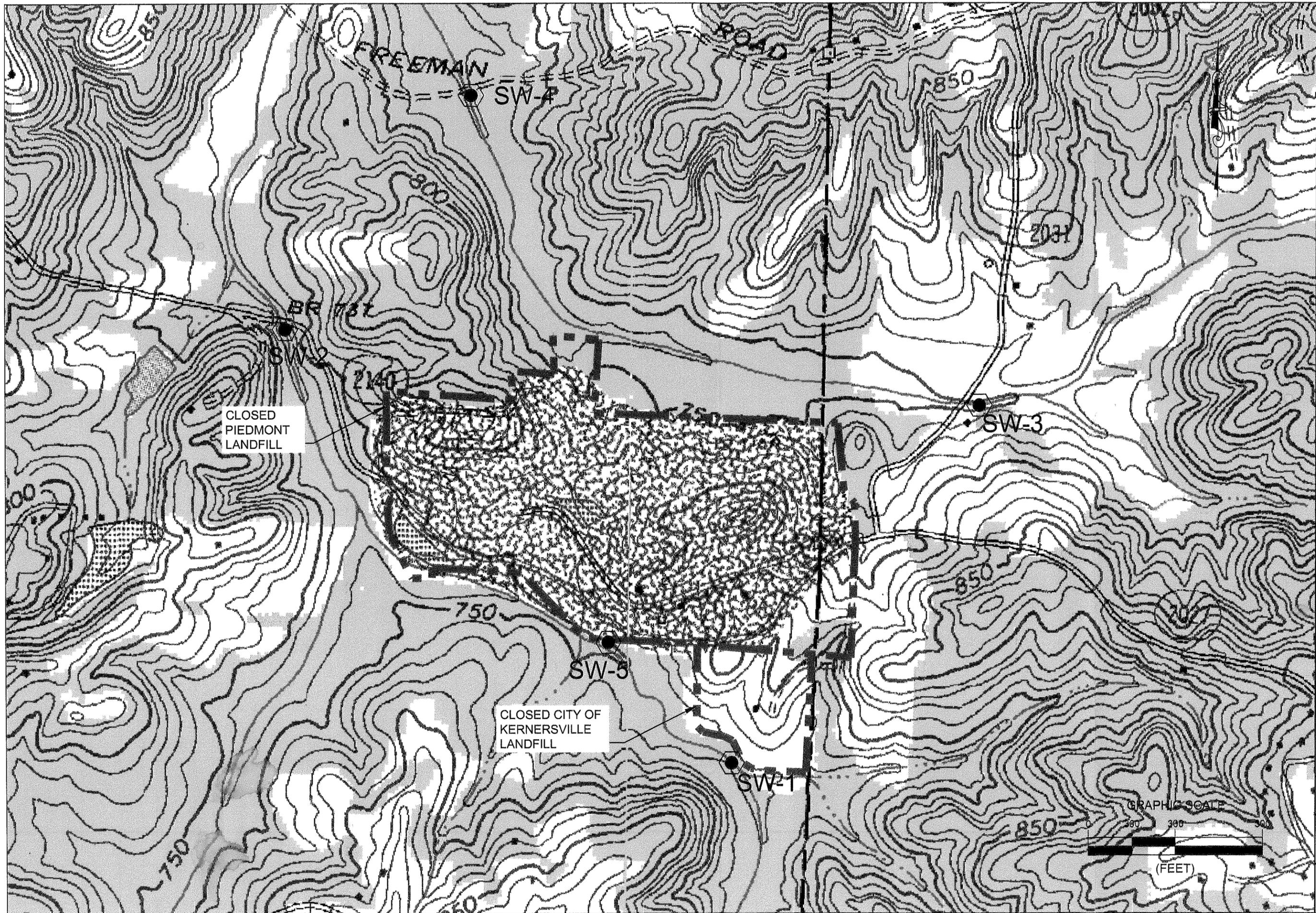
Sincerely,  
**JOYCE ENGINEERING, INC.**



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

Attachment: Surface Water Monitoring Points Map

Copy: Al Lacsamana, Waste Management  
JEI File



DESIGNED	VB
DRAWN	RWH
CHECKED	VB
APPROVED	VB
DATE	02/02/10

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**PIEDMONT LANDFILL  
 KERNERSVILLE, NORTH CAROLINA**

**SURFACE WATER MONITORING POINTS**

<b>PROJECT NO.</b>	392.0900.12
<b>SCALE</b>	AS NOTED
<b>DRAWING NO.</b>	SMP-1

REVISIONS AND RECORD OF ISSUE

NO.	BY	CHK	APP	DATE

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**From:** [Van Burbach](#)  
**To:** [Drummond, Jaclynne](#);  
**cc:** [Steve Cowie](#); [Al Lacsamana](#);  
**Subject:** RE: Piedmont LF Surface Water Request  
**Date:** Friday, May 07, 2010 11:44:33 AM

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Jackie –

In answer to your questions about surface water monitoring point SW-1 (also known as SO-1) at the Piedmont Landfill:

- 1) JEI was not involved in the original establishment of the surface water monitoring points; however, I believe the reason for SW-1 being located where it is was to document whether there was stream impact from the old Kernersville Landfill before the stream could be impacted by the Piedmont Landfill.
- 2) SW-1 is more than 750 feet from the Piedmont Landfill edge of waste in a cross-gradient direction relative to documented groundwater flow paths; whereas, SW-1 is less than 50 feet from the Kernersville Landfill edge of waste. Furthermore, for impacted groundwater from the Piedmont Landfill to reach SW-1, it would have to flow under the Kernersville Landfill. It seems pretty clear that the estimated VOC detections at SW-1 are much more likely to be coming from the Kernersville Landfill than the Piedmont Landfill.
- 3) I believe the surface water points were first established in the Water Quality Monitoring Plan prepared by Rust Environment & Infrastructure in 1993. SW-1 has been sampled since at least 1994. JEI does not have records before that.

I hope this helps. Let me know if you have any other questions.

- Van

**Van Burbach, Ph.D., P.G.**  
***Technical Consultant***  
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**From:** Drummond, Jaclynne [mailto:[jaclynne.drummond@ncdenr.gov](mailto:jaclynne.drummond@ncdenr.gov)]  
**Sent:** Thursday, May 06, 2010 1:26 PM  
**To:** Van Burbach  
**Subject:** FW: Piedmont LF Surface Water Request

Per our conversation this morning...

**Jaclyne Drummond**

Compliance Hydrogeologist  
NC Department of Environment and Natural Resources  
Division of Waste Management – Solid Waste Section  
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E-mail correspondence to and from this address may be subject to the North Carolina Public Records Law and may be disclosed to third parties.  
New email address is [jaclyne.drummond@ncdenr.gov](mailto:jaclyne.drummond@ncdenr.gov)

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**From:** Drummond, Jaclyne  
**Sent:** Monday, March 22, 2010 12:37 PM  
**To:** 'Van Burbach'  
**Subject:** Piedmont LF Surface Water Request

I am in the process of reviewing your request for the Piedmont Landfill in regards to the removal of SW-1. Based upon my file review, samples collected from SW-1 have indicated detections of several VOCs over the years including 1,1-dichloroethane, cis,-1,2-dichloroethene, vinyl chloride, and acetone. To date, all of the concentrations have been “J” flagged and are detected below the NC Groundwater and Surface Water Standards. Based upon the maps located within the files, groundwater monitoring wells MW-01 and MW-06 are the closest wells to the SW-1 location, and both wells do not indicate detections of VOCs at this time. The closest groundwater monitoring wells to the SW-5 location are MW-12 and MW-12D. However, there is not a groundwater monitoring well located between MW-1 and MW-12/12D. As a result of the file review, I have three questions: (1) what is/was the technical reason for the location of SW-1, (2) how can it be determined if the VOC detections are from the Piedmont LF and/or from Kernersville LF, and (3) when was SW-1 placed within the Water Quality Monitoring Plan (how long has SW-1 been sampled)?

Thanks,  
Jackie

**Jaclyne Drummond**

Compliance Hydrogeologist  
NC Department of Environment and Natural Resources  
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New email address is [jaclynne.drummond@ncdenr.gov](mailto:jaclynne.drummond@ncdenr.gov)

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