

May 7, 2012

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DEPT OF ECOLOGY

Ms. Georgia Baxter
J H Baxter & Co
PO Box 5902
San Mateo CA 94402-0902

Subject: Proposal for Reduction in Groundwater Sampling at:
JH Baxter North Woodwaste Landfill, 19600 67th Avenue NE, Arlington, Washington and
JH Baxter South Woodwaste Landfill, 6520 188th Street NE, Arlington, Washington

Dear Ms. Baxter:

This letter will acknowledge receipt of your proposal for reduction in groundwater sampling including proposed changes to analytical parameters, sampling point modification, and frequency. In reviewing your request; the Annual Reports for the J. H. Baxter North and South Woodwaste Landfills, the *Groundwater and Soils Investigation* on the Baxter North Woodwaste Landfill (Landau Associates 12/17/2009), historical data and technical assistance from the Washington State Dept. of Ecology were utilized to evaluate your proposal for reduction in sampling.

It is acknowledged that groundwater has been monitored at both landfills for twenty years. WAC 173-304-407(6) **Minimum Functional Standards for Solid Waste Handling** (MFS) states: "Post-closure performance standard requires: *Each owner or operator shall provide post closure activities.....as long as necessary for the facility to stabilize and protect human health and the environment.*" Therefore, it will be necessary to demonstrate that each landfill has stabilized before revising or ending post-closure activities. Snohomish Health District (SHD) does not concur with your statement of "all groundwater parameters are stable" Please refer to the new 2011 Washington State's document *Preparing for Termination of Post-Closure Activities at Landfills Closed Under Chapter 173-304* for information about landfill stability (copy enclosed).

Per the MFS, Local Health Jurisdictions may only specify fewer constituents when considering a proposed sampling modification: WAC 173-304-490(2)(d)(ii). Therefore, Snohomish Health District cannot approve a reduction in the number of wells sampled at the landfill until the landfill is designated stable per the guideline above. Please see WAC 173-304-700 **Variances** for proposed sampling point reduction.

The following comments are offered regarding the submitted *Proposal for Reduction in Groundwater Sampling at J.H. Baxter & Co. North & South Woodwaste Landfills, Arlington, WA*:

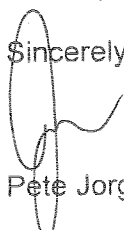
1. Further proposals for reduction in groundwater sampling activities should present defensible rationale which is supported by the historical groundwater quality data and statistical testing.
2. The groundwater monitoring results should be compared to values listed in WAC 173-200 **Water Quality Standards for Groundwater's of the State of Washington** as required by the MFS WAC 173-304-9901, not just MCL values.

2. The groundwater monitoring results should be compared to values listed in WAC 173-200 *Water Quality Standards for Groundwater's of the State of Washington* as required by the MFS WAC 173-304-9901 not just MCL values.
3. Please include a histogram and table that shows the frequency of the specific chemical parameter detected, number of times standards were exceeded for each parameter, and significant trends detected.
4. The upgradient wells on both landfill properties should be investigated as to trend, seasonality and potential contamination and if possible, background water quality data should be compared with other wells in the vicinity.
5. Please demonstrate the data results of methane monitoring are valid given well screen location relative to existing groundwater elevation at the time of sampling. For example, if the full length of the screen is submerged, the methane will not be detected and therefore cannot be considered synonymous with an absence of methane in the landfill.
6. Data results in the *Groundwater and Soil/Solids Investigation* by Landau and Associates in September 2009, showed a detection of Pentachlorophenol in BXN-3, which may indicate a more significant groundwater impact. Additionally, BXN-3 is considered one of only 3 "down gradient" wells at the landfill therefore, the SHD does not consider suspension of sampling at BXN-3 a viable option and a variance per WAC 173-304-700 would be required for this consideration. If this current sampling point is no longer usable, the SHD is requesting a proposal for decommissioning the present well and the drilling of a replacement well per WAC 173-160. Sampling should continue at Baxter North Landfill BXN-3 for current parameters and Pentachlorophenol with a statistical analysis submitted for further evaluation.
7. Pentachlorophenol was shown to be initially present in groundwater sampled from BXS-1 at the South Landfill at 53 micrograms/Liter in the April 2008, indicating instability in the groundwater at the South Landfill.
8. SHD has no objection to the proposed removal of laboratory pH and conductivity provided this data is collected in the field using a calibrated water quality meter and standard methods.

Given the demonstration of groundwater impacts by many chemical parameters at these landfills, the current proposal for reduction in groundwater sampling activities at both Baxter North and Baxter South Woodwaste Landfills cannot be approved with the exception of utilization of a calibrated water quality meter in the field for obtaining pH and conductivity data. However, SHD acknowledges considerable resources have been utilized to monitor the ground water and hope this data is used in future proposals.

Thank you for your time and consideration regarding this matter.

Sincerely,



Pete Jorgenson, R.S.

PJ:jg

cc: Krystyna Kowalik, Washington State Department of Ecology