



# STATE OF NEVADA

Department of Conservation & Natural Resources

DIVISION OF ENVIRONMENTAL PROTECTION

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April 29, 2009

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PO Box 2128  
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Re. **BMI Plant Sites and Common Areas Projects, Henderson, Nevada**  
*Supplement to the Guidance for Evaluating Radionuclide Data for the BMI Plant Sites and Common Areas Projects dated February 6, 2009*

Dear Sirs and Madam:

All of the parties listed above shall be referred to as "the Companies" for the purposes of this letter.

This guidance provides supplemental information associated with the use of preparation methods for radium analysis. On February 6, 2009 NDEP provided the *Guidance for Evaluating Radionuclide Data for the BMI Plant Sites and Common Areas Projects*. Table 4 of that document indicated the Recommended Preparation Methods for Radium-226 and Radium-228 were under further investigation. After additional review of historic data sets and discussions with the laboratories associated with those data it is recommended that all future preparation methods for these two analytes include hydrofluoric acid (complete dissolution). This recommendation is based on the appearance that the majority of the historic data is based on use of these complete dissolution steps for preparation of soil samples for these analytes. In addition, it is believed that this is a conservative recommendation (in that it avoids low bias in the analyses). In particular, both the 2005 Basic Remediation Company and Titanium Metals Corporation Shallow Background Study (analyses completed by STL-St. Louis) and the 2008 Supplemental Background Study (analyses completed by GEL) appear to have used hydrofluoric acid (HF) for preparing samples for Radium-226 and Radium-228 analysis. The 2008 Deep Background study (analyses completed by STL-Richland) apparently did not include HF, but use of the Figure 1 flowchart in the *Guidance for Evaluating Radionuclide Data for the BMI Plant Sites and Common Areas Projects* provides a pathway for comparing data to this historic background dataset.



Please contact me with any questions (tel: 702-486-2850 x247; e-mail: [brakvica@ndep.nv.gov](mailto:brakvica@ndep.nv.gov)).

Sincerely,



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