STATE OF NEVADA
Department of Conservation & Natural Resources
DIVISION OF ENVIRONMENTAL PROTECTION
Jim Gibbons, Governor
Allen Biaggi, Director
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NEVADA DIVISION OF ENVIRONMENTAL PROTECTION
protecting the future for generations

February 28, 2010

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Mr. Brian Spiller
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Wilmington, DE 19850-6438

Mr. Craig Wilkinson
Titanium Metals Corp.
PO Box 2128
Henderson, NV 89009

Re. **BMI Plant Sites and Common Areas Projects, Henderson, Nevada**
Water Level Electronic Data Deliverable (EDD) Format

Dear Sirs and Madam:

All of the parties listed above shall be referred to as "the Companies" for the purposes of this letter. Attachments A, B and C to this letter provide the finalized format for the water level EDD and responses to the questions and comments raised on the draft format.

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

Sincerely,

Brian A Rakvica, P.E.
Supervisor, Special Projects Branch
Bureau of Corrective Actions
Fax: (702) 486-5733

BAR:s

CC: Jim Najima, NDEP, BCA, Carson City
Shannon Harbour, NDEP, BCA, Las Vegas
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Brenda Pohlmann, City of Henderson, PO Box 95050, Henderson, NV 89009

Mitch Kaplan, U.S. Environmental Protection Agency, Region 9, mail code: WST-5, 75 Hawthorne Street, San Francisco, CA 94105-3901
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Teri Copeland, 5737 Kanan Rd., #182, Agoura Hills, CA 91301
Paul Hackenberry, Hackenberry Associates, 550 West Plumb Lane, B425, Reno, NV, 89509

Attachment A

Responses to Comments Raised on Draft Unified Groundwater Level EDD Format

Comment 1, EDD Data Fields, **detect_flag_ra** and **detect_flag_fod** – we wanted to confirm that the only difference we saw was for radionuclides and other non censored values: they will always by "T" for **detect_flag_ra** but could be either "T" or "F" for **detect_flag_fod**.

NDEP Response: *Montrose is correct that the only difference between these fields is in the case of radionuclides and other non-censored values: these values will always by "T" for* ***detect_flag_ra*** *but could be either "T" or "F"* ***for detect_flag_fod*** *(depending on whether the value is greater or less than the sql).*

Comment 2, location_id, the previous guidance said "This identifier will be considered to be Company-specific, as part of the development of the regional database, a location table will be developed which will allow locations to be uniquely identified across companies." The new version has not deleted any text and added the following text which appears inconsistent with previous statement "In the case of wells, the identifier should match the appropriate well name in the All Wells Database currently maintained by BRC". The identifiers we have developed are company-specific but they do not necessarily match the All Wells Database maintained by BRC. In particular, the extraction well names do not match. Our identifier for extraction well A, "WELL A", is just "A" in the BRC database To comply with your request, we request that Montrose be provided an opportunity to edit the All Wells Database for wells in our program to match the identifiers used in our database.

NDEP Response: *The guidance will be edited to indicate that while soil location identifiers may continue to be company-specific, well location identifiers should match the All Wells database. Furthermore, the Companies are welcome to edit the All Wells database to ensure that identifiers match their current usage. Edits are to be submitted to the NDEP and BRC in the form of a spreadsheet containing the most recent version of the database, with all changes highlighted. These changes should be submitted* ***by March 26, 2010****.*

Comment 3, Appendix I: CAS IDs/Analyte Codes, We recommend that NDEP post the most recent copy of the CAS IDs lookup table (and indeed all lookup tables) on its website so that at the time that a DVSR EDD is being prepared it will be easier to comply with lookup table coding.

NDEP Response: *NDEP will post the latest version of the CAS ID Table on the NDEP's website at http://ndep.nv.gov/bmi/technical.htm and on the web site which hosts the regional database (http://ndep.gisdt.org).*

Comment 4, Lastly, we ask if the NDEP could provide a list of changes to each version of the EDD format document similar to the list provided when the BCLs are updated. This list of changes should also include changes in lookup codes.

NDEP Response: *NDEP will provide a list of changes to each version of the EDD format document similar to the list provided when the BCLs are updated. This list of changes will include changes in lookup codes.*

Comment 5, WATER LEVEL ELECTRONIC DATA FORMAT, We have the same comment regarding location_ids as described above for the water quality EDD format. We request that we edit the All Wells Database for wells in our monitoring program to match the identifiers used in our database.

NDEP Response: *See NDEP response above.*

ATTACHMENT B

Unified Groundwater Level EDD Format

The objective of this guidance is to specify the design of the format for the submission of electronic groundwater level monitoring data from the Companies to NDEP. The goal is to streamline the uploading of the Companies' electronic data into the regional database maintained by the NDEP and to facilitate sharing of data amongst the Companies. This task requires defining each element of the EDD(s) so that they are provided in a consistent format. Provided below are the required elements of the EDD groundwater level format and descriptions of the elements. Required formats and codes are provided in the Appendices. Due to the resources required to modify the EDD for each Company, it is the desire of the NDEP to modify this EDD as infrequently as possible.

The groundwater level EDD should be delivered as a Microsoft Access database (file format Access 2000 or later) containing a single table. It is understood that not all fields will contain a value. Empty fields will be represented as "NULLs" in the Microsoft Access database.

Calculating Groundwater Elevation in the Presence of LNAPL

In the presence of light non-aqueous phase liquid (LNAPL), groundwater elevation (gw_elevation) must be calculated using the thickness and specific weight of the LNAPL product, in addition to the top-of-casing elevation (point_elevation) and depth to water (depth). For instance, a one foot thick layer of pure benzene on top of an aquifer, with a specific weight of 0.88, would add 0.88 feet to the potentiometric pressure that was calculated using top of casing and depth to water measurements. If LNAPL corrections are made to groundwater elevation calculations, details regarding LNAPL thickness and density must be summarized in the comment field.

Lookup Tables

The latest version of all lookup tables which are attached as appendices to this document will also be made available online as downloadable MS Excel files from the website which hosts the regional database (http://ndep.gisdt.org) as well as on the NDEP's website at http://ndep.nv.gov/bmi/technical.htm.

EDD Data Fields

Short Description	Field Name	Detailed Description
Company doing the measuring	company	The name of the company taking the groundwater level measurement.
Well Owner	well_owner	Company that owns the well.
Well ID	well	A unique identifier for the well. Well identifiers must match the identifiers listed in the All Wells Database currently maintained by BRC. Companies are welcome to edit the All Wells database to ensure that identifiers for their wells match their current usage.
Northing Coordinate	northing	Northing coordinate of the well in NAD 1983 State Plane Nevada East feet
Easting Coordinate	easting	Easting coordinate of the well in NAD 1983 State Plane Nevada East feet
Monitoring Date	date	Date of measurement
Monitoring Time	time	Time of measurement
Measuring Point Elevation	point_elevation	The elevation of the measuring point (well top of casing). This field is included to allow for new survey data (i.e. well modifications which could change top-of-casing elevation)
Measurement Value	depth	Value of depth measurement

Short Description	Field Name	Detailed Description
Non-aqueous Phase Liquid	napl	Field indicating the presence of non-aqueous phase liquid. Possible values are listed in Appendix A. If the value in this field is LNAPL, groundwater elevation must be calculated according to the guidance in the section *Calculating Groundwater Elevation in the Presence of LNAPL*
Groundwater Elevation	gw_elevation	Groundwater elevation, calculated by subtracting depth from point_elevation., or, in the presence of LNAPL, by following the guidance in the section *Calculating Groundwater Elevation in the Presence of LNAPL*
Parameter Unit	unit	Units of both the measurement value and the groundwater elevation (typically feet)
Monitoring Qualifier	qualifier	A short code describing well conditions (dry, obstructed, pumping, static, etc.) which prevent accurate measurement. A list of codes is provided in Appendix B. If this field contains a value, the measurement value and groundwater elevation fields should be left blank (NULL)
Measurement Comment	comment	Any comments elaborating on the monitoring qualifier field, or any other observations relevant to the measurement event
Recorded By	recorded_by	Name of the person who took the measurement

Appendix A: NAPL Types

Qualifier	Description
DNAPL	Dense non-aqueous phase liquid
LNAPL	Light non-aqueous phase liquid
NONE	Non-aqueous phase liquid not present.

Appendix B: Monitoring Qualifiers

Qualifier	Description
DRY	Well dry
OBSTRUCTED	Well obstructed
OTHER	Other condition (e.g. pumping, static, etc.) preventing accurate groundwater level measurement

Appendix C: Annotation of Updates to the Unified Chemical EDD Format Document

February, 2010

1. Added the section “Lookup Tables.”
2. Clarified description of Well ID field.
3. Added this appendix.