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September 10, 2015

Sent VIA E-MAIL AND OVERNIGHT DELIVERY

Mr. Scott Anderson
Director of Waste Management and Radiation Control
State of Utah Department of Environmental Quality
195 North 1950 West
P.O. Box 144880
Salt Lake City, UT 84114-4880

Re: **Transmittal of Plan and Time Schedule under Utah Ground Water Discharge Permit UGW370004 Part I.G.4 (d) White Mesa Mill (the "Mill")**

Dear Mr. Anderson:

This letter transmits Energy Fuels Resources (USA) Inc.'s ("EFRI's") Plan and Time Schedule pursuant to State of Utah Groundwater Discharge Permit UGW370004 (the "Permit") Part I.G.4(d) for Violations of Part I.G.2 of the Permit. Part I.G.2 of the Permit provides that out-of-compliance ("OOC") status exists when the concentration of a pollutant in two consecutive samples from a compliance monitoring point exceeds a groundwater compliance limit ("GWCL").

On August 14, 2015, EFRI submitted a letter to the Director under Part I.G.1(a) of the Permit providing notice that the concentrations of specific constituents in groundwater monitoring wells at the Mill exceeded their respective GWCL's for the 2nd quarter of 2015 and indicating which of those constituents had two consecutive exceedances during that quarter. This Plan and Time Schedule addresses constituents requiring a Plan and Time Schedule for the 2nd quarter of 2015.

Please contact me if you have any questions or require any further information.

Yours very truly,
ENERGY FUELS RESOURCES (USA) INC.

A handwritten signature in blue ink that reads 'Kathy Weinel'.

Kathy Weinel
Quality Assurance Manager

cc: David C. Frydenlund
Harold R. Roberts
David E. Turk
Scott Bakken
Logan Shumway

WHITE MESA MILL

State of Utah Ground Water Discharge Permit UGW370004

Plan and Time Schedule

Under Part I.G.4 (c)

For

Exceedances in MW-3 in the Second Quarter of 2015

Energy Fuels Resources (USA) Inc.

225 Union Boulevard, Suite 600

Lakewood, CO 80228

September 10, 2015

1. INTRODUCTION

Energy Fuels Resources (USA) Inc. (“EFRI”) operates the White Mesa Uranium Mill (the “Mill”), located near Blanding Utah, under State of Utah Ground Water Discharge Permit UGW370004 (the “Permit”).

This is the plan and time schedule (the “Plan”) required under Part I.G.4(c) of the Permit relating to violations of Part I.G.2 of the Permit for the MW-3 for the second quarter of 2015. Part I.G.2 of the Permit provides that out-of-compliance status exists when the concentration of a pollutant in two consecutive samples from a compliance monitoring point exceeds a groundwater compliance limit (“GWCL”) in Table 2 of the Permit. While consecutive exceedance have been noted in MW-3 and other wells at the site, a plan and time schedule and Source Assessment Report (“SAR”) have not been required or appropriate in light of other actions currently being undertaken by EFRI or in light of other reports submitted by EFRI, and as determined by Division of Waste Management and Radiation Control (“DWMRC”) Staff. Specifically, consecutive exceedances which occurred in previous reporting periods are discussed in the SARs submitted to DWMRC October 10, 2012, May 8, 2013, August 30, 2013, December 17, 2013, January 13, 2014, March 19, 2014, and the Plan and Time Schedules submitted December 4, 2014 and May 19, 2015. Additionally, pH was addressed in reports dated November 9, 2012 and December 7, 2012. A description of the other actions and reports which have affected the requirement to submit a plan and time schedule are as follows:

1. Nitrate + nitrite and chloride in monitoring wells at the site have been the subject of ongoing investigations at the Mill. Based on the results of the previous investigations, EFRI and the Director of Waste Management and Radiation Control (the “Director”) acknowledge that it has not been possible to date to determine the source(s), cause(s), attribution, magnitudes of contribution, and proportion(s) of the local nitrate + nitrite and chloride in groundwater. EFRI submitted a Corrective Action Plan (“CAP”) in February 2012 for nitrate + nitrite and chloride in groundwater. The CAP was approved on December 12, 2012 and the activities associated with the CAP are on-going. Based on information provided by DWMRC in teleconferences on April 27, and May 2, 2011, due to the ongoing activities and actions, the 30-day plan and schedule for assessment is not required for nitrate + nitrite and chloride exceedances at this time.
2. As discussed in previous quarterly groundwater sampling reports, the background levels and GWCLs for pH were established based on eight or more quarters of laboratory data, which are historically higher than field data. EFRI’s letter to the Director dated January 31, 2011 proposed the recalculation of the GWCLs for field pH. Following the statistical evaluation of pH data by EFRI’s geochemical consultant, INTERA, Inc., EFRI compared the Mill’s groundwater pH data from Q2 2011 and noted that all of the June 2011 groundwater results, and many of the other results from Q2 2011, were already outside the revised GWCLs that were to be proposed in the June 30, 2011 letter. Pursuant to teleconferences with DWMRC on December 5, and December 19, 2011, EFRI submitted a Work Plan and Schedule on January 20, 2012 and a revised plan based on DWMRC comments on April 13, 2012. Based on the approved Work Plan and Time Schedule, EFRI and DWMRC entered into a Stipulated Consent Agreement (“SCA”) dated July 12,

2012. The SCA required the completion of the pH Report and the Pyrite Investigation and associated report. The pH Report and Pyrite Investigation Report were submitted November 9, 2012 and December 7, 2012 respectively. By letter dated April 25, 2013, DWMRC accepted the conclusions that the out-of-compliance results for pH are due to background effects within the aquifer matrix and are not caused by Mill activities. DWMRC also approved the recalculation of the GWCLs. As a result, the 30-day plan and schedule for assessment is not required for field pH exceedances.

3. A Plan and Time Schedule will not be prepared for monitoring wells with two successive exceedances in if successive exceedances were reported in a previous quarter and were included in the Source Assessment Reports (“SARs”), submitted October 10, 2012, May 8, 2013, August 30, 2013, December 17, 2013, January 13, 2014, and March 19, 2014. A Plan and Time Schedule will not be submitted for those constituents covered by the previously mentioned SARs, because the conclusions and actions delineated in those reports were either accepted by DWMRC as documented in DWMRC correspondence dated April 25, 2013, July 23, 2013, September 17, 2013 January 7, 2014, March 10, 2014, and June 5, 2014 respectively.

Chloroform and methylene chloride are the subject of the ongoing chloroform pumping program and are covered by State of Utah Notice of Violation (“NOV”) and Groundwater Corrective Action Order (“CAO”) State of Utah Department of Environmental Quality (“UDEQ”) Docket No. UGW-20-01. As a result, the 30-day plan and schedule for assessment of chloroform and methylene chloride exceedances is not required.

The Permit was originally issued in March 2005, at which time GWCLs were set on an interim basis, based on fractions of State Ground Water Quality Standards or the equivalent, without reference to natural background at the Mill site. The Permit also required that EFRI prepare a background groundwater quality report to evaluate all historic data for the purposes of establishing background groundwater quality at the site and developing GWCLs under the Permit.

As required by then Part I.H.3 of the Permit, EFRI submitted the following to the Director:

- *A Revised Background Groundwater Quality Report: Existing Wells For Denison Mines (USA) Corp.’s Mill Site, San Juan County, Utah*, October 2007, prepared by INTERA, Inc. (the “Existing Wells Background Report”);
- *A Revised Addendum: -- Evaluation of Available Pre-Operational and Regional Background Data, Background Groundwater Quality Report: Existing Wells For Denison Mines (USA) Corp.’s Mill Site, San Juan County, Utah*, November 16, 2007, prepared by INTERA, Inc. (the “Regional Background Report”); and
- *A Revised Addendum: -- Background Groundwater Quality Report: New Wells For Denison Mines (USA) Corp.’s Mill Site, San Juan County, Utah*, April 30, 2008, prepared by INTERA, Inc. (the “New Wells Background Report, and together with the Existing

Wells Background Report and the Regional Background Report, the “Background Reports”).

Based on a review of the Background Reports and other information and analyses the Director re-opened the Permit and modified the GWCLs to be equal to the mean concentration of background for each constituent on an intrawell basis plus two standard deviations or the equivalent. The modified GWCLs became effective on January 20, 2010.

Part I.G.4 c) of the GWDP states, with respect to exceedances of GWCLs, “that the Permittee shall prepare and submit within 30 calendar days to the Executive Secretary a plan and a time schedule for assessment of the sources, extent and potential dispersion of the contamination, and an evaluation of potential remedial action to restore and maintain groundwater quality to insure that Permit limits will not be exceeded at the compliance monitoring point and that DMT or BAT will be reestablished.” Pursuant to this requirement, EFRI has submitted nine Plans and Time Schedules and eight associated SARs to address previous dual exceedances (as required in light of other actions currently being undertaken by EFRI and as determined by DWMRC Staff and stated in teleconferences with EFRI on April 27 and May 2, 2011).

This Plan covers the constituents (cadmium and zinc) that were identified as being in violation of Part I.G.2 of the Permit, in the Second Quarter 2015 Exceedance Notice, dated August 14, 2015. In addition, two other constituents (beryllium and nickel), which have not been identified as being in violation, are addressed voluntarily in this Plan. These two additional constituents have either exceeded the GWCL once, as in the case of beryllium, or have reported results approaching the GWCL, as in the case of nickel. For the purposes of completeness, this Plan will include the required constituents of cadmium and zinc and the voluntary constituents of beryllium and nickel.

2. CONSTITUENTS AND WELLS SUBJECT TO THIS PLAN

The following constituents are covered by this Plan:

Table 1
Constituent and Well Subject to this Plan

Constituent	POC Well	Current GWCL (ug/L)	Q2 2015 Results* (ug/L)
Cadmium	MW-3	4.67	5.03, 14.2
Zinc	MW-3	173.19	238, 373
Beryllium	MW-3	2	1.44, 2.08
Nickel	MW-3	100	39.4, 96.2

* MW-3 was resampled during the second quarter 2015. Both second quarter 2015 sample results are shown above.

It should be noted that the Second Quarter 2015 Exceedance Notice identifies a number of wells, with consecutive exceedances of other constituents. None of those constituents are included in

this Plan, for the reasons stated in Section 1 above and in the *Q2 2015 Exceedance Notice*. This Plan is being submitted to DWMRC by EFRI to address exceedances in MW-3. As noted above, this Plan covers the constituents (cadmium and zinc) that were identified as being in violation of Part I.G.2 of the Permit, in the *Q2 2015 Exceedance Notice*, dated August 14, 2015. In addition, two other constituents (beryllium and nickel), which have not been identified as being in violation, are to be addressed voluntarily. As stated above, for the purposes of completeness, this Plan will include the required constituents cadmium and zinc and the voluntary constituents beryllium and nickel.

With respect to pH (and as stated previously), EFRI and DWMRC entered into a Stipulated Consent Agreement (“SCA”) dated July 12, 2012. The SCA required the completion of the pH Report and the Pyrite Investigation and associated report. The pH Report and Pyrite Investigation Report were submitted November 9, 2012 and December 7, 2012 respectively. By letter dated April 25, 2013, DWMRC accepted the conclusions that the out-of-compliance results and site-wide decrease in pH are due to background effects within the aquifer matrix and are not caused by Mill activities. The site-wide decrease in pH due to background effects within the aquifer matrix has continued.

3. CATEGORIES FOR ANALYSIS

Previously EFRI has categorized wells and constituents in several categories as follows:

- Constituents Potentially Impacted by Decreasing pH Trends Across the Site
- Newly Installed Wells with Interim GWCLs
- Constituents in Wells with Previously Identified Rising Trends
- Pumping Wells
- Other Constituents

Cadmium, zinc, beryllium and nickel in MW-3 fall within the first category: Constituents potentially impacted by decreasing pH trends across the site. However, assessment of the well construction for MW-3 has raised issues regarding the data collected in MW-3. In 2004, DWMRC noted several well construction issues that they felt had a direct bearing on the quality of data collected from MW-3. To address the construction issues and assess the effects on the data quality potentially resulting from well construction, assessment of these constituents in MW-3 will follow the process noted below.

3.1. Constituents Potentially Impacted by Decreasing pH Trends Across the Site

EFRI has observed a decreasing trend in pH in a number of monitoring wells across the Mill site (see the discussions in the SAR dated October 10, 2012, the pH Report dated November 9, 2012 and the Pyrite Investigation Report dated December 7, 2012). Review of the pH time plots included in the pH Report indicates a decreasing trend in pH in most wells across the site. The pH Report specifically noted that wells MW-03, MW-03A, MW-11, MW-12, MW-14, MW-15, MW-17, MW-18, MW-22, MW-24, MW-25, MW-30, MW-32, and MW-37 showed significantly decreasing trends in pH. Since the publication of the pH Report, 2012 and the Pyrite Investigation Report, pH in MW-3 now shows a significantly decreasing trend. By letter

dated April 25, 2013, DWMRC accepted the conclusions that the decreasing trends for pH are due to background effects within the aquifer matrix and are not caused by Mill activities. While, the mobility in groundwater of cadmium, zinc, beryllium and nickel is sensitive to decreases in pH, additional variability of these constituents may be due to the effects of the well construction. Specifically, an unusual well sump and stagnant groundwater which accumulates in the sump may be affecting the analytical results reported for MW-3. The specific actions to assess MW-3 are described below.

4. PLAN

4.1. General

This Plan is a plan and time schedule for assessment of the sources, extent and potential dispersion of the contamination, and an evaluation of potential remedial action to restore and maintain groundwater quality to ensure that Permit limits will not be exceeded at the compliance monitoring point and that, to the extent applicable, discharge minimization technology and best available technology will be reestablished.

Therefore, the first step in the analysis will be to perform an assessment of the potential sources for each exceedance to determine whether the exceedance is due to the previously reported decreasing pH trend or if the exceedances are due to the construction of MW-3 or both. The construction issue will be addressed using the methodology described below.

MW-3 was constructed with a 9 -10 feet of blank casing below the screened interval. This “sump” water becomes stagnant between sampling events. Purging prior to sampling eliminates most of the stagnant water present in the sump, but it is not possible to remove all water within the sump during purging. During sampling, groundwater enters the well through the screen and mixes with the remaining stagnant water in the sump. The mixing of fresh and stagnant water, and/or stirring up any sediment accumulating in the sump, may be affecting the analytical results.

The analysis of the exceedances in MW-3 will be completed by first isolating as much of the MW-3 sump as practical. The sump will be isolated through the installation of an inflatable, inert packer. The packer will be installed below the well screen to prevent any mixing of the stagnant water and/or sediment which accumulates in the sump with the fresh water entering the well through the screen. This approach should allow for the assessment of the influences resulting from the sump and the stagnant water/sediment residing there. Normal purging and sampling procedures will be followed after the placement of the packer.

Full suite samples will be collected for 4 quarters after the installation of the packer. After collection of 4 quarterly samples, EFRI will review the analytical data and discuss the findings with DWMRC to determine a path forward regarding the reporting format for the findings of the study. The format and contents of the final report will be determined by DWMRC and will be submitted in compliance with a schedule to be set by DWMRC after review of the data. In addition, the analytical results will be reported on an interim basis, as they are collected, in the routinely scheduled quarterly groundwater monitoring reports.

5. TIME SCHEDULE

The field installation of the packer will be completed within 90 days after approval of this Plan. The quarterly sampling described above will commence the first quarter following the installation of the packer.

6. CONCLUSION

Given the varied background groundwater quality at the site it cannot be assumed that consecutive exceedances of a constituent in a monitoring well necessarily indicates that contamination has been introduced to groundwater sampled by that well.

With respect to MW-3, preliminary analysis suggests that cadmium, zinc, beryllium and nickel increases represent impacts attributable to a statistically significant decreasing pH. However, construction issues may be affecting the analytical results in MW-3 and causing erroneous exceedances.

The location of MW-3 is important when determining potential sources of contamination. MW-3 is located approximately 2,000 feet downgradient from the Mill's tailings cells, and it is extremely unlikely that any potential tailings cell leakage could reach MW-3 during the 30 years the Mill has been in operation. As indicated in previous reports, travel times in the perched aquifer at the Mill are estimated to be approximately 0.90 feet per year in the area between the Mill's tailings cells and MW-3, resulting in a predicted travel time from the tailings cells to MW-3 of over 2,000 years.