Utah Division of Radiation Control
Ground Water Quality Discharge Permit

Statement of Basis

For a
Uranium Milling Facility
South of Blanding, Utah

Owned and Operated by
Denison Mines (USA) Corp.
Independence Plaza, Suite 950
1050 17th Street
Denver, Colorado 80265

October 24, 2007

PURPOSE

The purpose of this Statement of Basis (SOB) is to describe the technical and regulatory basis to proposed modifications to permit requirements found in a Ground Water Quality Discharge Permit No. UGW370004, (hereafter Permit) for the Denison Mines (USA) Corp. uranium mill facility located about six miles south of Blanding, Utah in Sections 28, 29, 32, and 33, Township 37 South, Range 22 East, Salt Lake Baseline and Meridian, San Juan County, Utah.

PERMIT MODIFICATIONS

Change in Permittee Name (Permit Title Page)

In a letter dated October 20, 2006 the International Uranium (USA) Corporation (hereafter IUC) informed the Utah Water Quality Board that they will change their name to Denison Mines (USA) Corp. (hereafter DUSA) as a result of a merger between its parent company, International Uranium Corporation and Denison Mines Inc. Therefore, because of this name change the Permittee name on the Permit will be changed to Denison Mines (USA) Corp.

Groundwater Quality Standard (GWQS) and Groundwater Quality Limits (GWCL) for Tin (Part I.C.1 and Table 2)

Table 2 of the Permit is modified to show a new GWQS for tin of 17,000 µg/L and the GWCL of 4,250 µg/L for Class II water and 8,500 µg/L for Class III water. Tin was not originally a required groundwater monitoring parameter in the Permit, and was omitted from the original Permit due to non-detectable concentrations reported by IUC in three tailings leachate samples (see 12/1/04 DRC Statement of Basis, Table 5). With the addition of the alternate feed material from Fansteel Inc, tin will experience an estimated increase in the tailing inventory from 9 to 248 tons (IUSA, March 2005, Attachment 5). With an estimated Kd of 2.5 to 5 (Ohio EPA, 2005) tin is not as mobile in the groundwater environment as other metals; however, with the high acid conditions in the tailings wastewater, tin could stay in solution and not partition on aquifer materials.

Toxic levels of tin can pose a human health risk to the kidney and liver (Minnesota Department of Health, 2005). With the help of EPA Region 8 toxicology staff DRC will adopt an ad hoc groundwater quality standard for tin of 17,000 ug/L (See 10/27/05 EPA memorandum).

Groundwater Quality Standard (GWQS) for 2-Butanone [MEK] (Part I.C.1 and Table 2)

There was a typographical error in Table 2 in the Permit for the GWQS for MEK of 4µg/L and for the GWCL of 1.0 µg/L for Class II water and 2.0 µg/L for Class III water. This error was identified by DRC in a letter of October 20, 2006. Table 2 of the Permit is now modified to show the correct GWQS for MEK of 4,000 µg/L and the correct GWCL of 1,000 µg/L for Class II water and 2,000 µg/L for Class III water.

Groundwater Quality Limits (GWCL) for Xylenes (Part I.C.1 and Table 2)

There was a typographical error in Table 2 in the Permit for the GWCL for xylene of 2.5 µg/L for Class II water and 5.0 µg/L for Class III water. Table 2 of the Permit is now modified to show the correct GWCL for xylene of 2,500 µg/L for Class II water and 5,000 µg/L for Class III water.

Addition of Tailings Cell No. 4A Relining Project (Parts I.D.5, Table 5, I.D.6, I.E.4, I.E.7 I.F.2, I.F.4, I.G.3, I.G.4, and I.H.19)

As described in the DRC Design Approval letter for the project dated June 25, 2007, this project is for relining former existing tailings Cell No. 4A, at the White Mesa Uranium Mill. The newly relined cell is to receive processed mill tailings from the White Mesa Uranium Mill. The DRC approved design drawings and specifications were added to Part I.D.5 and Table 5 of the Permit

The primary design criteria for this project is *Utah Administrative Code,* Rule R313-24, titled *Uranium Mills and Source Material Mill Tailings Disposal Facility Requirements,* which includes by reference appropriate sections of 10 CFR 40, titled, *Domestic Licensing of Source Material,* and 10 CFR 40 Appendix A titled, *Criteria Relating to the Operation of Uranium Mills and the Disposition of Tailings or Wastes Produced by the Extraction or Concentration of Source Material from Ores Processed Primarily for their Source Material Content*.

Detailed review of the various items in the above design criteria can be found in the electronic record of exchanges of interrogatories, comments and responses between the Division and DUSA. Some of this criteria specifically addressed in the exchanges above include the cell's protection from precipitation, floods, wind, and earthquake stability.

1. With the reconstruction of Tailing Cell 4A, best available technology (BAT) is now required as mandated in Part I.D.4 of the Permit and as stipulated by the Utah Ground Water Quality Protection (GWQP) Regulations [UAC R317-6-6.4(A)]. Because Tailing Cells 1, 2, and 3 were constructed more than 23 years ago and after review of the existing design and construction the Executive Secretary determined that Discharge Minimization Technology (DMT) rather than BAT is required under the GWQP Rules [UAC R317-6-6.4(C)(3)] for Cells 1, 2, and 3. With BAT for Tailing Cell 4A there are new performance standards that require daily leak detection system monitoring, weekly wastewater level monitoring, and slimes drain recovery head monitoring. The BAT monitoring results are required to be reported and summarized in the Routine DMT and BAT Performance Standard Monitoring Reports.
2. Cell 4A Engineering Design Standards and Specifications (Part I.D.5) - the cell has dikes above existing adjacent exterior ground on all four sides, and is roughly 46-feet in depth from the top of the dike to the lowest point on the cell bottom. The bottom of the cell varies in depth below the existing grade between roughly 25 and 35 feet, and is about 40 acres in area. The cell is shaped at the top and bottom as nearly concentric quadrilaterals of varying side dimensions. According to company estimates, the capacity of the new

cell is roughly 1.6 million cubic yards for tailings disposal with a 3-foot freeboard. The bottom of the cell is graded to the southwest, which is the lowest point in the cell.

In ascending order, the cell lining system consists of:

a) a compacted soil cover over existing subgrade soils or bedrock,

b) a manufactured geosynthetic clay liner (GCL) which is 0.2-inch bentonite soil centered and stitched between two geotextile layers. The GCL has a hydraulic conductivity of 1 X 10^{-9} cm/second and is routinely estimated at 10-foot depth of water head to be equivalent in hydraulic performance to 2-feet of compacted clay liner at 1 X 10^{-7} cm/second. Based on post design-approval lab testing, the project specification were revised concerning the moisture content requirements for the GCL. The original specifications required the GCL to be wetted to a minimum moisture content of 140% prior to operation of Cell 4A. During the early post design-approval period, field and lab testing revealed that such moisture content could not be attained without GCL pressurization. Testing showed if the GCL was moistened to 75% during liner construction, an optimum low permeability was obtained. Similar results were also obtained at a moisture content of 50%.

   The specifications were revised to require a target moisture content of 75%, and a minimum moisture content of 50% for the GCL during construction. Thus, also moisture contents above 75% would be deemed acceptable, as pressurization of any higher moisture content GCLs during tailings loading operations, would tend to reduce higher moisture contents and permeabilities of such further.

   As provided in Part I.D.5(d)(4), DUSA may not begin the use of the cell until the new liner GCL moisture content is at a minimum of 50 percent.

c) the GCL is covered by a 60-mil smooth HDPE liner or secondary flexible membrane liner (FML).

d) Above the secondary FML there will be a geonet grid layer, and

e) Finally, the geonet is covered by another 60-mil smooth HDPE liner or primary FML.

A leak detection system (LDS) is incorporated into this design by use of a geonet. The geonet layer will be contiguous throughout the entire cell and anchorage trench. The geonet allows any leakage through the uppermost liner a flow path to drain down to a sump and leakage monitoring and observation structure in the southwest corner of the cell.

The slimes drain (SD) collection system is then placed on the top liner or primary FML. It consists of a pipe-like collection system for conveying drainage from the tailings and is to be laid out in a herringbone design on the cell bottom. SD laterals will connect to a SD 4-inch diameter PVC diagonal header that will run from the northeast to southwest corners of the cell. The SD laterals are to be installed at 50-foot centers throughout the cell bottom. These laterals are specified to be "Multi-Flow Drainage Systems strip-drains." The strip-drains are a prefabricated two-part geo-composite drain with a polymer drainage strip core surrounded by non-woven filter fabric. These type drains are used for subsurface water collection. These drains will be ballasted from movement, and

protected from fines plugging by sandbags covering them continuously along the length of the SD laterals. The sand specified for the bags is specifically designed to filter out fine particles from plugging the strip drain fabric.

The strip-drains manifold into a central SD header, as the spine of the herringbone design. The header system consists of a geotextile as a cushion placed on the upper FML liner then a 4-inch PVC header pipe surrounded by drain gravel in a triangular window, 2-feet deep and 2-feet wide. The gravel will be covered by a woven geotextile. The upper geotextile will be ballasted by gravel bags at 10-feet on-center, both sides.

Both the LDS and SD systems are to convey drainage to a dual, but separate sump system at the southwest corner of the pond. Each system will have an 18-inch perforated pipe placed horizontally at the bottom of each sump, surrounded by drainage gravel. Both systems will have an 18-inch observation pipe or port, rising from the sump pipes at the slope of the embankment to above the top of the dike in the southwest corner of the cell. The SD sump will have the top of gravel covered by geo-textile, and the complete lining system below it, whereas the LDS sump will have the GCL and the lower HDPE below the pipe, and the primary FML liner enclosed above the sump.

Three 20-foot wide splash pads will be constructed on the north dike, to allow filling of the cell with tailings in slurry, without damaging the uppermost HDPE membrane. These pads will consist of an additional layer of 60-mil HDPE membrane to be installed over the primary FML. The pads will extend from the top of the dike, under the inlet pipe along the top, down the embankment, then five-feet beyond the toe of the slope over the upper geomembrane. These splash pads are to protect the upper geomembrane from scouring by inflowing tailings.

An emergency spillway is to be constructed between cells 3 and 4A. The spillway will be constructed of 6-inch thick reinforced concrete slabs. The spillway will be a 4-foot deep trapezoidal channel, with 32-foot tapering length on each side of a 20-foot center section. The spillway is designed to carry the Probable Maximum Precipitation related flood event. The spillway is to protect cell 3 from overtopping during a maximum flood event. Prevention of overflow of Cell 4A will be addressed in the Operation and Maintenance manual required by Part I.H.20 of the permit, and is required to be approved by DRC before the operation of Cell 4A.

3. BAT Performance Standards for Tailing Cell 4A (Part I.D.6) - with the new construction of Tailing Cell 4A the Executive Secretary determined it necessary to impose certain operational, monitoring, and reporting requirements. The purpose for these requirements is to protect public health, and environment and local ground water resources from fluids and contaminants from Tailing Cell 4A. Therefore, Part I.D.6 was added with the following performance standards:

   a) Maximum Allowable Daily Head on the Secondary Flexible Membrane Liner – a maximum allowable daily head must be established. Should this maximum head be exceeded it will be an indicator of possible failure of the primary flexible liner.
   b) Maximum Allowable Daily Leak Detection System Flow Rate - a maximum allowable daily flow rate must be established. Should this maximum flow rate be exceeded it will be an indicator of possible failure of the primary flexible liner.

c) Slimes Drain Monthly and Annual Average Recovery Head Criteria – a monthly and annual average recovery head criteria must be established. Should there be an increase in recovery head it will be an indicator of possible failure of the primary flexible liner.
d) Maximum Daily Wastewater Level – to ensure that wastewater does not overtop Tailing Cell 4A a minimum freeboard limit must be established.

4. BAT Performance Standard Monitoring (Part I.E.7) – before Tailing Cell 4A is operational the Executive Secretary determined it necessary to impose performance standard monitoring requirements to help protect public health, and environment and local ground water resources from fluids and contaminants from Tailing Cell 4A. Therefore, Part I.E.7 was added with the following minimum BAT monitoring requirements:

   a) Daily leak detection monitoring
   b) Weekly wastewater level monitoring
   c) slimes drain recovery head monitoring

5. Cell 4A BAT Reporting (Part I.F.2 and 4) – existing section Part I.F.2 was expanded to include routine reporting for both DMT and BAT performance monitoring. The Permittee submitted the first draft of DMT monitoring plan for Tailing Cells 2 and 3 in June 2005. On May 8, 2007 the Executive Secretary approved the DMT monitoring plan with conditions that are incorporated in Part I.E.6 and 7. Therefore, requirements of subparagraphs in Part I.F.2(a) and (b) were removed from the Permit. The BAT monitoring plan for Tailing Cell 4A is required to be submitted for Executive Secretary review and approval as required in Part I.H.19 of the Permit. After the Executive Secretary approval, the BAT monitoring plan will be enforceable as per Part I.F.2. The existing requirements in Part I.F.4 were also expanded to also require BAT upset reports.

6. Cell 4A BAT Monitoring, Operations and Maintenance Plan (Part I.H.19) – new, requirements of the operation and maintenance manual for the new facilities at Cell 4A were added at Part I.E.7 and include, but are not limited to:
   a. Essential operation and maintenance procedures for the new facilities. This shall include, e.g. important operational sequences, transporting methods, equipment operation, maintenance, safety, and emergency procedures.
   b. The proper operation, monitoring, and evaluation of:
      (1). the leak detection system,
      (2). the slimes drainage system, and
      (3). the freeboard limits on the dikes.
   c. Actions for successful prevention of pond overflow. Planned effort must be made to properly manage and apply volume inventory controls to prevent overflow events from occurring.

7. Failure to Maintain DMT or BAT Required By Permit (Part I.G.3) and Facility Out of Compliance Status (Part I.G.4) – with the new construction of Tailing Cell 4A and the BAT operational, monitoring, and reporting requirements the Executive Secretary determined it necessary broaden Part I.G.3 and 4 to require the Permittee to report BAT failures and resolve BAT out of compliance issues.

Discharge Minimization Technology (DMT) Requirements for Feedstock Materials Stored Outside the Ore Feedstock Storage Area (Parts I.D.3(d), I.D.11), and Part H.21

On May 9, 2007, DRC and Nuclear Regulatory Commission (NRC) staff performed an inspection at the Mill site. During the inspection DRC staff found several hundred 55 gallon drums containing alternate feed stock material. Observations made during the DRC inspection found some drums that were bent, dented, and rusting at the perimeter of the drum pile. None were found to be leaking. However, the drums are triple stacked at least ten deep, in a configuration with less than 3 inch spacing between rows of drums. This drum spacing made it impossible to visually inspect the physical condition of each of the drums.

Therefore, DRC added a new DMT requirement for feedstock materials stored outside the ore feedstock storage area in Part I.D.11 of the Permit. This new DMT requirement will require the Permittee to submit a management plan for Executive Secretary approval to manage feedstock materials stored outside the ore feedstock storage area. Management options could include but are not limited to:

1. Store the drums on a harden surface such as asphalt or concrete.
2. Store the drums inside a building.
3. Treat feedstock materials in the drums as a potential groundwater contaminant source area and install a monitor well network for this area.
4. An inspection program where by the drums are inspected on arrival at the facility. Drums found to be in acceptable water-tight conditions may only stay in the storage area for a set amount of time before they must be processed. If drums are found to be in not a water-tight condition, then they would be stored in overpack containers.

Ground Water Monitoring Quality Assurance Plan [QAP] (Part I.E.1(a) and (e), and Part I.F.1(e))

The requirement for all ground water monitoring and analysis to be performed under the QAP was relocated from Part I.E.4(b) to Part I.E.1(a).

In the currently approved QAP the DUSA neglected to specify a schedule to complete all corrective action for non-conformance with QAP requirements for a given quarterly ground water monitoring period. Therefore, an opportunity for improvement exists, and two changes were made to the Permit as follows: 1) a performance standard added to Part I.E.1(a) to require the Permittee to resolve and rectify any non-conformance with the QAP that accrued within a quarterly ground water monitoring period by the next quarterly monitoring report submittal date, and 2) reporting requirements in Part I.F.1(e) were changed to mandate the Permittee to document in the quarterly monitoring reports all non-conformance with the currently approved QAP and all corrective actions taken to demonstrate compliance with Part I.E.1(a).

Addition of Monitor Wells MW-20 and MW-22 to the Quarterly Groundwater Monitoring Schedule [Part I.E.2]

Monitor wells MW-20 and MW-22 were installed in 1994 and are located at a distance downgradient (south) of the tailings cells. However, no groundwater quality data has been provided by the Permittee to date. The Executive Secretary has determined starting with the1st quarter 2008 groundwater monitoring event the Permittee shall implement a quarterly

groundwater sampling program. After completion of eight (8) consecutive quarters of groundwater sampling and analysis of MW-20 and MW-22, the Permittee shall submit a report that will include: 1) the background groundwater quality, and 2) estimated groundwater velocities in the vicinity of MW-20 and MW-22 to determine future groundwater monitoring frequency.

The monitoring for contaminants listed in Table 2 of the Permit for MW-20 and MW-22 will provide valuable data to help understand the water quality of the perched aquifer in the Burro Canyon Formation. This information may also be valuable future interpretation of background ground water quality conditions.

Modification of the QAP (new Parts I.E.1(e)(4) and I.H.20)

In the currently approved QAP the DRC neglected to specify that the purging and sampling equipment must be made of inert materials. In the *RCRA Ground Water Monitoring: Draft Technical Guidance (EPA 1992) section 7.3 Ground Water Sampling Equipment Selection and Use,* states that "Sampling equipment should be constructed of inert material". Therefore, an opportunity for improvement exists, and the QAP must be modified to specify that all purging and sampling equipment used for groundwater monitoring must be made of inert materials.

Ground Water Monitoring Modifications (Part I.E.11)

During the ground water sampling for University of Utah hydrogeologic study on July 16 through 27, 2007, the DRC staff confirmed that dedicated bladder pumps had been installed in all ground water monitor wells at the Uranium Milling Facility for purging and sampling (DRC July 27, 2007 memorandum). The DRC recognizes that the dedicated pumps are an improvement over the previous purging and sampling methods. Even though the language in the Groundwater Monitoring Quality Assurance Plan is generic enough to allow the installation of such pumps, the Executive Secretary was not formally notified of this modification to the ground water sampling methods and equipment prior to the actual installation of the pumps. Therefore, Part I.E.11 of the Permit was added to insure that before any modification of ground water monitoring or analysis procedures, methods or equipment, the Permittee must obtain prior written approval from the Executive Secretary.

Annual Slimes Drain Recovery Head Report (Part I.D.1(b), I.E.7(b), and I.F.11)

On June 20, 2005 IUC submitted a Draft Tailings Systems and Discharge Minimization Technology (DMT) Monitoring Plan. On February 21, 2006 DRC sent a letter for a request for additional information (RFI) on the DMT Monitoring Plan. On July 10, 2006 DRC sent a confirmatory action letter (CAL) that summarized a conference call between DRC and IUC held on July 5, 2007. On August 3, 2006 IUC responded to the February 21, 2006 RFI and July 10, 2006 CAL. On September 26, 2006 DRC sent an RFI on the DMT Monitoring Plan. On November 9, 2006 IUC responded to DRC September 26, 2006 RFI. On January 24, 2007 DRC sent an RFI on the DMT Monitoring Plan. On March 14, 2007 DUSA [IUC change their name to Denison Mines (USA) Corp.(DUSA) as explained above] responded to DRC January 24, 2007 RFI. After reviewing DUSA response, DRC could not come to an agreement on demonstrating pumping efficiency from Cell 2 slimes drain access pipe. Therefore, on May 9, 2007 the Executive Secretary issued a conditional approval on the DMT Monitoring Plan to impose certain operational, monitoring, and reporting requirements. The purpose of these new requirements is to: 1) accelerate the dewatering of the tailing cells during post operations, and 2) minimize the accumulation and storage of fluids and contaminants in the tailing cells, in order to protect public health, and the environment, and local ground water resources. To this end, a new

performance standard was added to Part I.D.3(b)(1) to require that compliance at the Cell 2 and 3 slimes drain is defined as continuously declining waste water head, as determined on a rolling three-year average basis. Conversely, an increase in the three-year average slimes head, over the previous three-year period will be considered non- compliant with the Permit. We have determined that a rolling three-year average is appropriate, in order to account for fluctuating precipitation, evaporation rates etc. from year to year.

DUSA submitted a 2nd condition/equation to be used in conjunction with the 1st equation to the DRC in an e-mail of October 30, 2007. After review of the proposal the Executive Secretary decided that the 2nd equation would not be considered at this time, but could be reviewed after DUSA submitted a Slimes Drain Pumping Efficiency Evaluation Report. If this report is submitted and found satisfactory the Permit may be reopened and a 2nd Equation added to Part I.D.3(b).

To standardize slimes drain monitoring at cells 2 and 3, additional requirements were added to Part I.E.7(b). These changes include monitoring in accordance with the currently approved DMT Monitoring Plan, which in turn calls for a monthly slimes drain recovery head test of 90 hours.

To ensure the monthly and annual average slimes drain head data is provided to the Executive Secretary for approval, a new requirement was added at Part I.F.11 for annual report. In the event that the average annual slimes drain recovery head for a given three-year period is greater than for the previous three-year period [see Part I.D.3(b)] and the Executive Secretary may take enforcement action to re-establish DMT at Cells 2 and 3.

The Permittee is required to: 1) measure individual monthly slimes drain recover head monitoring data [as required in Part I.E.7(b)], 2) calculate the comparative three-year average slimes drain recovery head and, 3) demonstrate compliance status with the requirements of Part I.D.3 and 6 of this Permit for Tailing Cells 3 and 3. This section of the Permit was added to require the Permittee to submit an annual slimes drain recovery head report for Tailing Cells 2 and 3 to summarize the above data.

Compliance Schedule Reset for the Revised Hydrogeologic Report [RHR] (Part I.H.2)

The original compliance date for DUSA to submit the RHR was 60 days after the completion of the new compliance monitoring wells installed as required by Part I.H.1 of the Permit. These wells were completed May 1, 2005 therefore; the RHR was due on July 1, 2005. The RHR was submitted to DRC on August 3, 2005. DRC review is currently in process. If addition information is needed, the Executive Secretary will notify the Permittee in writing and determine an appropriate deadline on a case-by-case basis.

Compliance Schedule Reset for the Background Ground Water Quality Report [BGQR] for Existing Wells (Part I.H.3)

The original compliance date to submit the BGQR was 90 days of the issuance of the original Permit, or June 8, 2005. The BGQR was not submitted until December 29, 2006. DRC review is currently in process. If addition information is needed, the Executive Secretary will notify the Permittee in writing and determine an appropriate deadline on a case-by-case basis.

Compliance Schedule Reset for the Background Ground Water Quality Report for New Monitoring Wells [BGR](Part I.H.4)

The original compliance date to submit the BGR was June 1, 2007. The BGR was dated May 31, 2007 and received by DRC on June 4, 2007. DRC review is currently in process. If addition information is needed, the Executive Secretary will notify the Permittee in writing and determine an appropriate deadline on a case-by-case basis.

Compliance Schedule Reset for the Tailings Cells Wastewater Quality Sampling Plan [WQSP] (Part I.H.5)

The original compliance date to submit the WQSP was 150 days of the issuance of the original Permit, or August 8, 2005. The WQSP was submitted on time on August 4, 2005. DRC review is currently in process. If addition information is needed, the Executive Secretary will notify the Permittee in writing and determine an appropriate deadline on a case-by-case basis.

Compliance Schedule Reset for the Monitoring Well Remedial Construction and Repair Work Plan and Report [WRCR] (Part I.H.6)

The WRCR was required to be submitted to the DRC within 30 days of issuance of the original Permit (April 9, 2005), and was submitted on August 1, 2005. DRC reviewed the submittal and issued an April 26, 2007 Notice of Non-Compliance outlining three non-compliance issues. In order to bring a timely resolution of these issues this section of the Permit has been revised to reflect the current condition, and the compliance schedule reset to submit the report for Executive Secretary approval on or before December 31, 2007.

Compliance Schedule Reset for the Monitoring Well MW-3 Verification, Retrofit, or Reconstruction Report [VRR] (Part I.H.7)

Previously, the Permit required submittal of the VRR within 150 days of original issuance, i.e., August 4, 2005. DUSA submitted the VRR on August 5, 2005. DRC reviewed and responded in a letter dated April 25, 2007. Based on DRC review it was determined that the new well MW-3A, was installed about 10 feet southeast of MW-3. An available geologic well log shows the upper contact of the Brushy Basin Member of the Morrison Formation (UCBM) is at a depth of approximately 92.5 feet bgs. The As-built construction schematic for well MW-3A shows a well screen between 78 – 95 feet bgs. In contrast, the As-built MW-3 construction schematic shows a well screen between 67 – 87 feet bgs. Based on these two well screens depths the well screen for MW-3A (78- 95 feet bgs) is 2.5 feet below and across the UCBM where as, the bottom of the well screen for MW-3 (67 – 87 feet bgs) is 4.5 feet above the UCBM. Therefore, it appears that the former well, MW-3, is a partially penetrating well; whereas new well MW-3A is fully penetrating (DRC April 25, 2007 Request for Information Letter).

In addition, there have been seven consecutive sampling events (3rd quarter 2005 to 1st quarter 2007) where the groundwater parameter concentrations for MW-3 and MW-3A are available and can be compared. At this time the concentrations comparisons between the two wells appear inconsistent that makes it difficult to come to any conclusions concerning the data that would help determine which well has the best screen placement for groundwater monitoring purposes. Therefore, quarterly sampling must continue in both wells until sufficient data is available and the DRC can make a conclusion regarding the effects of partial well penetration and screen length (DRC April 25, 2007 Request for Information Letter).

Therefore, the Permittee is required to: 1) Complete well MW-3A with a permanent surface well completion according to EPA RCRA TEGD, and 2) after surface completion, MW-3A will be surveyed by a State of Utah licensed engineer or land surveyor to meet requirements of Part

I.F.5(b)(5) of the Permit, including horizontal coordinates (state plan) and the elevation of both the ground surface and the water level measuring point.

Therefore, Part I.H.7 has been modified such that if the Executive Secretary determines that MW-3 well screen has been inadequately constructed that the Permittee will replace MW-3 within 30 days of written notice.

Compliance Schedule Reset for the White Mesa Seeps and Springs Sampling Work Plan and Report [WPR] (Part I.H.8)

The original compliance date to submit the WPR was 180 days of the issuance of the original Permit, or September 8, 2005. The WPR was submitted on September 7, 2005. DRC review is currently in process. If addition information is needed, the Executive Secretary will notify the Permittee in writing and determine an appropriate deadline on a case-by-case basis.

On-site Chemicals Inventory Report [CIR] (Part I.H.9)

The compliance date to submit the CIR was within 90 days of the issuance of the original Permit, or June 8, 2005. The WPR was submitted on June 7, 2005. On January 30, 2007 the Executive Secretary sent a Close-out letter to DUSA stating the requirement of Part I.H.9 of the Permit had been satisfied. Part 1.H.9 has been modified to require the Permittee at the time of Permit renewal to submit an updated CIR pursuant to Part I.F.8 of the Permit.

Compliance Schedule Reset for the Infiltration and Contaminant Transport Modeling Work Plan and Report [TMPR] (Part I.H.10)

To encourage timely development of the TMPR, on November 3, 2006 DRC sent a letter informing DUSA that a minor modification to the Permit was made to remove the requirement for DUSA to provide a prior work plan and secure Executive Secretary approval. As a result DUSA would be free to prepare a modeling report and submit for DRC review and approval by the deadline of June 1, 2007. On November 21, 2006 DUSA submitted a letter to DRC requesting a change in the deadline for submittal of the TMPR from June 1, 2007 to September 1, 2007. In a letter dated November 27, 2006 DRC approved the submittal date change to September 1, 2007. On August 31, 2007 DUSA sent an e-mail to DRC with an attached letter dated August 31, 2007 requesting an extension in the submittal of the TMPR from September 1, 2007 to October 31, 2007. The August 31, 2007 DUSA later was then received by the DRC on September 10, 2007. Part I.H.10 was modified to reflect this DUSA request. On October 24, 2007 DUSA staff called the DRC to ask for another extension to November 23, 2007. At the time, DRC staff asked that the request be submitted in writing. As of this date no written request has been received. Therefore, the deadline remains as October 31, 2007.

Compliance Schedule Modified for the Plan for Evaluation of Deep Supply Well WW-2 [PDW] (Part I.H.11)

The compliance date to submit the PDW was within 1 year of the issuance of the original Permit, or March 8, 2006. The PDW was submitted on March 7, 2006. Prior to approval of the PDW the Permittee shall resolve all issues within 30 days of written notice from the Executive Secretary. If addition information is needed, the Executive Secretary will notify the Permittee in writing and determine an appropriate deadline on a case-by-case basis.

New Compliance Schedule Item for Liner Maintenance Provisions [LMP] (new Part I.H.12)

In the DUSA 2006 Annual Technical Evaluation Report, the entry for March 24, 2006 refers to tears found in the Cell 1 liner that were repaired and covered. These "dime-sized" defects above the solution level in the Cell 1 FML were apparently caused by exposure to sunlight over time, due to wave action eroding the soil protective cover. A request for information was made by DRC dated May 4, 2007 and a response received from DUSA dated July 13, 2007, wherein the method of discovery and repair described by DUSA seemed reasonable. In their response, DUSA advised that these "tears" were several dime-sized defects on a small section of the liner that were above the solution level in the cell. However, it is apparent there is no formal written and DRC approved LMP being used by DUSA, using current standards. A new compliance schedule has been added at Part I.H.12 to include LMP to the DMT monitoring plan. The LMP will apply to the existing Cells 1, 2 and 3 and the Roberts Pond.

DMT Monitoring Plan (former Part I.H.12 and Part I.E.6)

The DMT monitoring plan once required under the compliance schedule at Part I.H.12 was approved by the Executive Secretary on May 9, 2007. This plan was submitted by DUSA under the title of *White Mesa Mill Tailings Management System and Discharge Minimization Technology (DMT) Monitoring Plan.* Therefore, Section I.H.12 of the Permit was replaced with a new requirement, as discussed above, to reflect this approval. To ensure that the approved plan was enforceable under the Permit, Part I.E.6 was modified to reference the currently approved plan.

Tailings Cell 4A Contaminant Removal Schedule and Report (Part I.H.13)

The DRC sent a letter to DUSA dated May 30, 2007 stating that the clean up in Tailing Cell 4A have been resolved. Therefore, this section of the Permit was removed.

Tailing Cell 4A Redesign and Reconstruction (Part I.H.14)

The DRC sent a letter to DUSA dated June 25, 2007 that approved the design of Tailing Cell 4A. Therefore this section of the Permit was removed.

Compliance Schedule Modified for the Contingency Plan [CP](Part I.H.15)

The original compliance date to submit the CP was 180 days of the issuance of the original Permit, or September 8, 2005. The CP was submitted on April 7, 2006. In a September 5, 2007 letter the DRC requested additional information and revision of the CP. If addition information is needed, the Executive Secretary will notify the Permittee in writing and determine an appropriate deadline on a case-by-case basis.

Stormwater Best Management Practices Plan Part [BMP] (Part I.H.16)

The DRC sent a letter to DUSA dated April 23, 2007 that approved the BMP. Therefore this section of the Permit was removed.

Roberts Pond As Built Report (former Part I.H.17)

Originally this report was required to be submitted within 90-days of Permit issuance (June 5, 2005). DUSA submitted it under a letter of June 10, 2005. Later, the report was accepted by the Executive Secretary in a Closeout Letter on November 13, 2006. This plan was submitted by DUSA under the title of *As-Built Report*: Mill Area Retention Basin ("Roberts Pond") White Mesa Mill. Therefore, Section I.H. 17of the Permit was removed.

Compliance Schedule Reset for the Tetrahydrofuran Demonstration Study Work Plan (TDSP) and Report [TSR] (new Part I.H.17)

Previously the Permit called for: 1) submittal of the TDSP within 30 days of issuance of the Permit (April 8, 2005), and 2) completion of certain studies and submittal of the TSR within 90-days of issuance of the original Permit (June 8, 2005). The first TDSP was submitted on April 7, 2005 which was followed by a DRC request for additional information on June 13, 2005. On June 28, 2005 a meeting was held with DRC and DUSA regarding the TDSP. On November 17, 2005 DRC sent a letter to DUSA outlining the agreed upon approach in the meeting for the TDSP. The TDSP was submitted to the DRC on December 15, 2005. On June 26, 2007 the TSR was submitted the DRC and is in the process of review. If addition information is needed, the Executive Secretary will notify the Permittee in writing and determine an appropriate deadline on a case-by-case basis.

Repair of Monitor Well MW-5 (new Part I.H.18)

On January 6, 2006 the DRC staff performed an inspection on the compliance groundwater monitoring wells at the mill facility. During the inspection well MW-5 was found to have a broken PVC surface casing. On November 16, 2006 Mr. Rich Bartlett with DUSA emailed DRC with proposed methods to repair MW-5. On November 27, 2006, by email, the DRC responded to Mr. Bartett' requesting additional information for the repair of MW-5. On April 30, 2007 Steve Landau with DUSA emailed DRC a memorandum from Mr. David Turk with DUSA to Mr. Bartlett outlining how MW-5 will be repaired. On a conference call between DRC and DUSA on October 25, 2007 DUSA said that the repairs to MW-5 has been completed. Unfortunately these repairs were completed before resolution of the November 27, 2006 e-mail request for information. Therefore, a requirement for documentation of the repair of MW-5 was added to the Permit at Part I.H.18. Also a new requirement was added at Part I.E.11 to ensure prior approval from the Executive Secretary of changes to groundwater monitoring.

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