Permit No. **UGW170003**

STATE OF UTAH DIVISION OF
WATER QUALITY
DEPARTMENT OF ENVIRONMENTAL QUALITY
P.O. BOX 16690
SALT LAKE CITY, UTAH 84116-0690

Ground Water Quality Discharge Permit

In compliance with the provisions of the Utah Water Pollution Control Act, Title 19, Chapter 5, Utah Code Annotated 1953, as amended,

Anfield Resources Holding, Corp.
P.O. Box 901537
Sandy, Utah 84090

is granted a Ground Water Quality Discharge Permit for the **Shootaring Canyon Uranium Facility** located at latitude 37° 42' 30" North, longitude 110° 41' 30" West in accordance with conditions set forth herein.

This modified Ground Water Quality Discharge Permit amends and supersedes all other Ground Water Discharge permits for this facility issued previously.

This Permit shall become effective January 29, 2016.
This Permit shall expire January 14, 2009 (This Permit is in Timely Renewal)
Application for Permit Renewal was received June 3, 2013.

Signed this 29th day of January 2016

Scott T. Anderson, Director
Division of Waste Management and Radiation Control

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I. SPECIFIC CONDITIONS

A. Ground Water Classification

In accordance with UAC R317-6-3, ground water at the existing monitoring wells is classified as Class IA, Pristine Ground Water, based upon the ground water standards as defined in UAC R317-6-2.

B. Background Ground Water Quality

1. Background Quality from Existing Monitoring Wells. Based on ground water quality samples collected through October 2002, background quality for Class IA water is defined as the mean concentration of any contaminant in any individual well as determined by the Director.

2. Determination and Revision of Background Ground Water Quality. After submittal of additional ground water quality data, background ground water quality values may be revised by the Director.

C. Ground Water Compliance Limits

As stipulated in UAC R317-6-4, Class IA ground water will be protected to the maximum extent feasible from degradation by facilities that discharge or would probably discharge to ground water such as the tailings cell at the Shootaring Canyon Uranium Mill. During reclamation activities, the site-wide ground water compliance limits in Table 1 will apply to all compliance monitoring wells. After reclamation activities have been completed, well-specific compliance limits will be established for the wells and parameters in Table 2, which will replace and supersede Table 1.

1. Ground Water Compliance Limits (GWCLs) for Compliance Monitoring Wells. Ground water quality at compliance monitoring wells shall not exceed the GWCLs provided in Table 1 during reclamation and Table 2 after reclamation. The GWCLs in Table 2 apply to Class IA ground water and are defined as follows:

   a. Total dissolved solids or any specific contaminant present in a detectable amount as a background concentration may not exceed the greater of 1.1 times the background (mean) concentration, or the mean concentration plus the second standard deviation, or 0.1 times the value of the ground water quality standard as specified in Table 1;

   b. A contaminant not present in a detectable amount as a background concentration may not exceed the greater of 0.1 times the value of the ground water quality standard, or the limit of detection.

Table 1

Site-Wide Groundwater Compliance Monitoring Well Background Levels and Compliance Limits During Reclamation and the Accelerated Background Monitoring Program

Water Quality Data		Site-Wide		
		Ground Water Background Level (mg/l)		Ground Water Compliance Limit (mg/l)
Parameters	Ground Water Quality Standard (mg/l)	Mean	Standard Deviation	
Arsenic	0.05	0.005	0.015	0.006[a]
Barium	2.0	0.28	0.28	0.31[a]
Cadmium	0.005	0.001	0.002	0.0014[a]
Chromium	0.1	0.006	0.010	0.010[b]
Copper	1.3	0.006	0.005	0.130[b]
Lead	0.015	0.002	0.004	0.003[a]
Mercury	0.002	0.0013	0.0048	0.0014[a]
Molybdenum	0.040 [c]	0.03	0.04	0.04[a]
Selenium	0.05	0.003	0.005	0.005[b]
Silver	0.1	0.001	0.002	0.010[b]
Zinc	5.0	0.04	0.07	0.50[b]
Ammonia as N	30.0	ID	ID	3.0[b]
Chloride	250[d]	7.4	4.0	25.0[b]
Fluoride	4.0	0.24	0.15	0.40[b]
Nitrate+Nitrite (as N)	10.0	ID	ID	1.0[b]
Sulfate	500[e]	22.3	30.3	50.0[b]
TDS	500	237	128	261[a]
pH (units)	6.5-8.5	8.03	0.60	6.5-8.5
Radionuclides				
Radium-226 D	5.0 pCi/l	1.01	4.10	NA
Uranium D	0.030 mg/l[f]	2.81	3.90	NA

(a) Protection Level based on 1.1 times the mean background concentration.
(b) Protection Level based on 0.1 times the Ground Water Quality Standard.
(c) Ad hoc GWQS for ammonia (as N) and molybdenum based on EPA drinking water lifetime health advisories.
(d) Final EPA Secondary Drinking Water maximum contaminant level (MCL).
(e) Proposed EPA Drinking Water maximum contaminant level (MCL).
(f) Ad hoc GWQS for uranium based on final EPA drinking water maximum concentration limit (MCL).
ID Insufficient data
NA Not applicable

Table 2. Post-Reclamation Groundwater Compliance Parameters, Wells, and Limits

Ground Water Compliance Parameters	Ground Water Quality Standard	COMPLIANCE MONITORING WELLS				
		RM2R	RM7	RM14	RM18	RM19
		GWCL	GWCL	GWCL	GWCL	GWCL
Nutrients (mg/l)						
Ammonia (as N)	25 [2]	TBD [8]	TBD [8]	TBD [8]	TBD [8]	TBD [8]
Nitrate + Nitrite (as N)	10	TBD [8]	TBD [8]	TBD [8]	TBD [8]	TBD [8]
Heavy Metals (mg/l)						
Arsenic	0.050	TBD [8]	TBD [8]	TBD [8]	TBD [8]	TBD [8]
Barium	2.0	TBD [8]	TBD [8]	TBD [8]	TBD [8]	TBD [8]
Cadmium	0.005	TBD [8]	TBD [8]	TBD [8]	TBD [8]	TBD [8]
Chromium	0.100	TBD [8]	TBD [8]	TBD [8]	TBD [8]	TBD [8]
Copper	1.3	TBD [8]	TBD [8]	TBD [8]	TBD [8]	TBD [8]
Lead	0.015	TBD [8]	TBD [8]	TBD [8]	TBD [8]	TBD [8]
Mercury	0.002	TBD [8]	TBD [8]	TBD [8]	TBD [8]	TBD [8]
Molybdenum	0.040 [2]	TBD [8]	TBD [8]	TBD [8]	TBD [8]	TBD [8]
Selenium	0.050	TBD [8]	TBD [8]	TBD [8]	TBD [8]	TBD [8]
Silver	0.100	TBD [8]	TBD [8]	TBD [8]	TBD [8]	TBD [8]
Uranium	0.030 [3]	TBD [8]	TBD [8]	TBD [8]	TBD [8]	TBD [8]
Zinc	5.0	TBD [8]	TBD [8]	TBD [8]	TBD [8]	TBD [8]
Others						
Gross Alpha (pCi/l)	15.0	TBD [8]	TBD [8]	TBD [8]	TBD [8]	TBD [8]
Field pH (S.U.)	6.5-8.5	TBD [8]	TBD [8]	TBD [8]	TBD [8]	TBD [8]
Chloride (mg/l)	250 [4]	TBD [8]	TBD [8]	TBD [8]	TBD [8]	TBD [8]
Fluoride (mg/l)	4.0	TBD [8]	TBD [8]	TBD [8]	TBD [8]	TBD [8]
Sulfate (mg/l)	250 [4]	TBD [8]	TBD [8]	TBD [8]	TBD [8]	TBD [8]
TDS (mg/l)	500	TBD [8]	TBD [8]	TBD [8]	TBD [8]	TBD [8]

1. Utah Ground Water Quality Standards (GWQS) as defined in UAC R317-6, Table 2. Ad hoc GWQS also provided herein, as noted, and as allowed by UAC R317-6-2.2.
2. Ad hoc GWQS for ammonia (as N) and molybdenum based on EPA drinking water lifetime health advisories.
3. Ad hoc GWQS for uranium based on final EPA drinking water maximum concentration limit (MCL).
4. Ad hoc GWQS for chloride and sulfate based on EPA secondary drinking water regulations.
5. Ground water compliance limit (GWCL) based on 0.1 times the GWQS.
6. GWCL based on the limit of detection.
7. GWCL based on the mean concentration plus two standard deviations ($X+2\sigma$).
8. TBD = to be determined when sufficient background monitoring data are available.

2. Compliance Determination Method. Compliance with ground water compliance limits shall be accomplished using compliance monitoring wells. If future monitoring data indicate an exceedance of compliance limits, the compliance status will be determined in accordance with Part II.F, below, and if necessary, reference to the methods described in the EPA Interim Final Guidance Document titled *Statistical Analysis of Ground Water Monitoring Data at RCRA Facilities* (February 1989). Subsequent updates of this document shall be utilized after the Director's approval.

D. Discharge Minimization Technology

1. Discharge Minimization Design Standards. The design of the tailings cell shall incorporate discharge minimization technology through the use of earthen materials in both the bottom liner and cover system. The tailings cell shall be constructed in accordance with the approved Tailings Reclamation and Decommissioning Plan for the Shootaring Canyon Uranium Project (SUA-1371 Docket No. 40-8698).

   The tailings cell design shall include, but is not limited to, the following elements:

   a) Cover System. The cover system shall be constructed of the following materials, as described from the top down:

      1) Erosion Barrier. The erosion barrier shall consist of a rock mulch layer with a riprap rock apron at the downstream edge of rock mulch areas.

         i) Rock Mulch Layer. The rock mulch layer shall be at least 8 inches thick with a minimum D_{50} of 2 inches.

         ii) Intermediate RipRap. A 12-inch thick rock layer with a minimum D_{50} of 6 inches shall be placed at the downstream edge of rock mulch areas and in the upstream section of the primary channel inside the tailings cell as indicated by Figures 6-2 and 6-6 of the approved Reclamation Plan.

         Slopes will vary from 2% and 20% as indicated in Figures 6-2 and 6-6 of the approved Reclamation Plan.

      2) Freeze-Thaw Barrier. The Freeze-Thaw Barrier (rocky soil layer) shall consist of a 24-inch layer of sand, silt and rock.

      3) Radon Barrier. The Radon Barrier shall consist of an 18-inch compacted clay layer with a maximum permeability of 1.0E-7 cm/sec.

      4) Interim Waste Cover. The Interim Waste Cover shall consist of a 12-inch layer of sand, clay, or mixed clay with a minimum moisture content of 10 percent for sandy material and 15 percent for material with greater than 20 percent fines passing #200 sieve.

5) Waste. The Waste Layer shall consist of an approximate thickness of 18 feet of existing tailings material overlain by an approximate thickness of 12 feet of ore material.

6) Bottom Clay Liner. The Bottom Clay Liner shall consist of 24 inches of compacted clay with a maximum field hydraulic conductivity of 1.0E-7 cm/sec.

b) Conveyance Channel Bedding. Channel beds of drainage conveyances shall be constructed of the following materials:

1) Upstream Section of Primary Channel consisting of the following riprap layer and underlying filter layer:

i. A 12-inch thick riprap rock layer with a minimum D_{50} of six inches

ii. An 8-inch thick layer of quarry area material that is unsorted with the exception of the removal of the +9-inch fraction.

2) Primary Channel consisting of the following two-layer, 40-inch riprap configuration and underlying two-layer, 16-inch filter system:

i. Upper RipRap layer with a minimum thickness of 30 inches and a minimum D_{50} of 20 inches.

ii. Lower RipRap layer with a minimum thickness of 10 inches and a minimum D_{50} of six inches.

iii. Upper Filter Layer with an 8-inch rock mulch layer with a minimum D_{50} of two inches.

iv. Lower Filter Layer with an 8-inch thick layer of quarry area material that is unsorted with the exception of the removal of the +9-inch fraction.

3) Porous Rock Ledge structure constructed in the transition zone between the upstream section of the primary channel and the primary channel. This structure shall be constructed of the following materials as shown in Figure 6-8 of the approved PRL Reclamation Plan:

i. Upper RipRap layer four feet thick with a minimum D_{50} of 24 inches.

ii. Middle RipRap layer 12 inches thick with a minimum D_{50} of six inches.

iii. Lower RipRap Layer 12 inches thick with a minimum D_{50} of six inches.

iv. Filter Layer eight inches thick of quarry area material that is unsorted with the exception of the removal of the +9-inch fraction.

4) Channel Toe Protection at least four feet thick with a minimum D_{50} of 24 inches and extending a distance of 30 feet from the terminus of the primary channel as indicated in Figure 6-7 of the approved PRL Reclamation Plan.

E. Compliance Monitoring Requirements

1. Ground Water Monitoring Requirements.

a) Ground-Water Monitoring Quality Assurance Plan. All water quality monitoring to be conducted under this permit shall be conducted in accordance with the general requirements hereunder, and the specific requirements of the Shootaring Canyon Uranium Mill Ground-Water Monitoring Quality Assurance Plan most recently approved by the Director.

b) Compliance Monitoring Points. For the purposes of this permit, the permittee shall monitor the following wells identified below.

i. Water Level Measurements: wells RM1, RM2R, RM7, RM8, RM12, RM14, RM18, RM19 and RM20.

ii. Water Quality Samples: wells RM1, RM2R, RM7, RM12, RM14, RM18, and RM19.

c) Protection of Monitoring Well Network. All compliance monitoring wells shall be protected from damage due to surface vehicular traffic or contamination due to surface spills. The wells shall be maintained in full operational condition for the life of this Permit. Any well that becomes damaged beyond repair or is rendered unusable for any reason shall be replaced by the permittee within 90 days or as directed by the Director.

d) Ground Water Monitoring\Frequency Requirements.

i. Ground Water Level Measurements. Ground water levels shall be measured quarterly during the accelerated background monitoring program for all existing monitoring wells specified in Part I.E.1.b.i. After the accelerated background monitoring program has been completed and approved by the Director, ground water levels shall be measured semi-annually in conjunction with the compliance monitoring program. Measurements made in conjunction with quarterly or semi-annual ground water sampling shall be made prior to any collection of ground water samples. These measurements shall be made from a permanent single reference point clearly demarcated on the top of the well or surface casing. Measurements shall be made to the nearest 0.01 feet.

Ground water level measurements for all nested well pairs such as RM8/RM20 shall be used to define the vertical hydraulic gradient.

ii. Ground Water Quality Sampling. The permittee shall conduct ground water quality sampling for all compliance monitoring wells in accordance with the most recent Ground-Water Monitoring Quality Assurance Plan that has been approved by the Director.

A) Background Monitoring Program. The permittee shall implement an accelerated quarterly background ground water monitoring program for all monitoring wells and parameters to determine ground water compliance limits for these wells during the post closure compliance monitoring program.

B) Compliance Monitoring Program. After completion of accelerated quarterly background monitoring program and subsequent approval by the Director, the permittee shall begin compliance ground water quality sampling.

e) Ground Water Analysis Requirements.

i. Analysis by Certified Laboratories. Analysis of any ground water sample shall be performed by laboratories certified by the Utah State Health Laboratory.

ii. Ground Water Analytical Methods. Methods used to analyze ground water samples shall comply with the following:

A) Method references cited in UAC R317-6-6.3.L; and

B) Detection limits which are less than or equal to the ground water compliance limits shown in Table 1 of this permit.

iii. Analysis Parameters. The following shall be collected:

A) Field Parameters: pH, temperature, and specific conductance;

B) Laboratory Parameters:

1) Background Monitoring Program. During the accelerated quarterly background monitoring program, grab samples shall be collected from each compliance monitoring well and analyzed for all of the water quality parameters listed in Table 2 of this permit.

In addition, samples shall be analyzed for the following six major ions: bicarbonate, carbonate, calcium, magnesium, potassium, and sodium.

2) Compliance Monitoring Program. During the post-reclamation semi-annual compliance monitoring program, grab samples shall be collected from each compliance monitoring well and analyzed for the following parameters:

- Ammonia as nitrogen,
- Chloride,
- Molybdenum,
- Nitrate + Nitrite as nitrogen,
- Sulfate,
- Total dissolved solids (TDS) and
- Total uranium

2. Hydrogeologic Monitoring Requirements. The permittee shall prepare and submit an annual update of the *Ground-Water Hydrology of the Shootaring Canyon Tailings Site* report (Hydro-Engineering, LLC, 1998) for the Director's approval. The update report shall be submitted according to the schedule and reporting requirements of Part I.G.4 below. The purpose of the annual ground-water hydrology report is to update the physical and chemical hydrogeologic conditions of the Entrada aquifer beneath the site to determine if any changes have occurred since the last report submittal. Of particular interest is the lateral extent of the ground water mound in the Upper Low-Permeability Entrada, the horizontal head gradient of the Entrada aquifer and vertical head gradients in the Entrada aquifer, Carmel aquitard and Navajo aquifer. The annual report shall also include an evaluation of the updated background database to determine if GWPLs should be adjusted.

F. Non-Compliance Status

1. Probable Out-of-Compliance Based on Exceedance of Ground Water Compliance Limits.

Upon determination by the permittee that the data indicate a GWCL may have been exceeded at any compliance monitoring well, the permittee shall:

a) Immediately resample the monitoring well(s) found to be in probable out-of-compliance for the parameters that have been exceeded; submit the analytical results therefrom, and notify the Director of the probable out-of-compliance status within 30 days of the initial detection.

b) Immediately implement an accelerated schedule of quarterly ground water sampling and analysis of parameters that exceeded the GWCLs, consistent with the requirements of Part I.E.1, above. This quarterly accelerated compliance sampling shall continue for two quarters or until the compliance status can be determined by the Director. Reports of the results of this sampling shall be submitted to the Director as soon as they are available, but not later than 30 days from the date the analytical data is received by the permittee.

2. Out-of-Compliance Status Based on Confirmed Exceedance of Permit Ground Water Compliance Limits.

a) Out of Compliance Status shall be defined as follows:

1) For parameters that have been defined as detectable in the background and for which compliance limits have been established based on 1.1 times the mean background concentration or 0.1 times the groundwater quality standard, out-of-compliance shall be defined as two consecutive samples that:

(i) exceed the GWCL; and

(ii) exceed the mean background concentration plus two standard deviations.

b) Notification and Accelerated Compliance Monitoring. Upon determination by the permittee or the Director, in accordance with UAC R317-6-6.17, that an out-of-compliance status exists, the permittee shall:

1) Verbally notify the Director of the out-of-compliance status or acknowledge the Director's notice that such a status exists within 24 hours of receipt of data; and

2) Provide written notice within 5 days of the determination; and

3) Continue an accelerated schedule of ground water monitoring for the parameters that exceeded GWCLs for at least two quarters or until compliance is achieved.

c) Source and Contamination Assessment Study Plan. Within 30 days of the written notice to the Director required in Condition I.F.2.b, above, the permittee shall submit an assessment study plan and compliance schedule for:

1) Assessing the source or cause of the contamination, and determining the steps necessary to correct the source.

2) Assessing the extent of the ground water contamination. At a minimum, this assessment shall include: (a) conducting groundwater flow modeling and a well-spacing evaluation to determine appropriate locations, horizontal well spacing, and vertical screened intervals for additional monitoring wells and nested piezometers; (b) installing additional monitoring wells and nested piezometers to better define vertical and horizontal head gradients in the Entrada aquifer; and (c) expanding the analyte list to include additional chemical constituents contained in the tailings leachate in addition to those listed in Condition I.E.1.e.iii.B of this permit.

3) Evaluating potential remedial actions to restore and maintain ground water quality, and ensure that permit limits will not be exceeded at the compliance monitoring wells.

G. Reporting Requirements

1. Ground-Water Monitoring Report. The Permittee shall submit a groundwater monitoring report that includes the following:

a) A schedule for semi-annual sampling and analysis required in Condition I.E.1, above, as follows:

Half	Report Due On
1st (January through June)	August 30
2nd (July through December)	February 28*

* This report can be combined with the annual hydrogeologic update report required in Condition I.G.2.

b) A Sampling and Analysis Report that includes:

1) Field data sheets, or copies thereof, including the field measurements, required in Condition I.E.1.e.iii.A above, and other pertinent field data, such as well name/number, date and time of sample collection, names of sampling crew, sampling method and type of sampling pump or bail, measured casing volume and volume of water purged before sampling.

2) Laboratory reports and tabulated results of groundwater analyses including date sampled, date received by the certified lab, ion balance, and the analytical results for each parameter, including: value or concentration, units of measurement, minimum detection limit, analytical method, and the date of the analysis.

3) Quality assurance evaluation and data validation including a written description and findings of all quality assurance and data validation efforts conducted by the permittee in compliance with the currently approved Groundwater Monitoring Quality Assurance Plan. The report shall verify the accuracy and reliability of the groundwater quality compliance data after evaluation of sample collection techniques and equipment, sample handling and preservation and analytical methods used.

3) Uranium data in addition to the analytes required by this permit. The permittee shall also report uranium ground water data acquired and submitted semi-annually to the Nuclear Regulatory Commission.

4) Groundwater level measurements from ground-water monitoring wells reported in both measured depth to ground water and ground water elevation above mean sea level.

5) A potentiometric map illustrating the ground-water elevation of the uppermost aquifer beneath the tailings facility for the semi-annual sampling month. The map shall be superimposed on a topographic base map of at least 1:2400 (1inch equals 200 feet) or other scale approved by the Director and shall be inclusive of the entire processing site. Known contours shall be distinguished from estimated or inferred contours. Other pertinent geologic, hydrologic, or man-made features, including wells, shall be displayed.

6) The vertical hydraulic gradient as determined from nested well pair RM8/RM20.

c) Electronic Filing Requirements. In addition to submittal of the hard copy data, above, the permittee will electronically submit the required ground water monitoring data including ground water quality and head data in Excel spreadsheet format. The data may be sent by e-mail, floppy disc, modem or other approved transmittal mechanism.

2. Hydrogeologic Report.

a) The permittee shall submit an annual update of the *Ground-Water Hydrology of the Shootaring Canyon Tailings Site* (Hydro-Engineering, LLC, 1998) by February 28 of each year. The permittee shall revise and resubmit the report within 60 days of receipt of written notice from the Director of any deficiencies or omissions.

H. Compliance Schedule

1. Background Ground Water Monitoring Report. The permittee shall submit a groundwater monitoring report for the Director's approval 60 days after the accelerated quarterly background monitoring program has been completed. Ground water quality samples for the background monitoring program shall be collected in accordance with the following requirements:

a) At least eight (8) samples shall be collected for each of the compliance monitoring wells and parameter over a two-year period at a quarterly sampling frequency utilizing the procedures outlined in the currently approved Ground-Water Monitoring Quality Assurance Plan.

b) Each sampling event or episode shall include independent grab samples for each of the compliance monitoring wells.

c) Sampling parameters shall include all parameters listed in Table 2 of this permit plus the following major ions: bicarbonate, carbonate, calcium, magnesium, potassium and sodium.

d) After the Director's approval of the background monitoring report, sampling shall continue at a semi-annual frequency for the abbreviated compliance parameter list specified in Condition I.E.1.e.iii.B.2 of this permit.

II. MONITORING, RECORDING AND REPORTING REQUIREMENTS

A. Representative Sampling. Samples taken in compliance with the monitoring requirements established under Section I shall be representative of the monitored activity.

B. Analytical Procedures. Water sample analysis shall be conducted according to test procedures specified under UAC R317-6-6.3.L, unless other test procedures have been specified in this permit.

C. Penalties for Tampering. The Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six months per violation, or by both.

D. Reporting of Monitoring Results. Monitoring results obtained during each reporting period specified in the permit, shall be submitted to the Director, Utah Division of Water Quality at the following address no later than the 30th day of the month following the completed reporting period:

State of Utah
Department of Environmental Quality
Division of Waste Management and Radiation Control
Salt Lake City, Utah 84114-4810
Attention: Ground Water Protection Section

E. Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any Compliance Schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Additional Monitoring by the Permittee. If the permittee monitors any pollutant more frequently than required by this permit, using approved test procedures as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted. Such increased frequency shall also be indicated.

G. Records Contents. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements:
2. The individual(s) who performed the sampling or measurements;
3. The date(s) and time(s) analyses were performed;
4. The individual(s) who performed the analyses;
5. The analytical techniques or methods used; and,
6. The results of such analyses.

H. Retention of Records. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and copies of all reports required by

this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.

I. Twenty-four Hour Notice of Noncompliance Reporting.

1. The permittee shall verbally report any noncompliance with permit conditions or limits as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of the circumstances. The report shall be made to the Utah Department of Environmental Quality 24 hour number, (801) 536-4123, or to the Division of Waste Management and Radiation Control at (801) 536-0200, during normal business hours from 8:00 AM - 5:00 PM Mountain Time.

2. A written submission of any noncompliance with permit conditions or limits shall be provided to the Director within five days of the time that the permittee becomes aware of the circumstances. The written submission shall contain:

   a. A description of the noncompliance and its cause;
   b. The period of noncompliance, including exact dates and times;
   c. The estimated time noncompliance is expected to continue if it has not been corrected;
   d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
   e. When applicable, either an estimation of the quantity of material discharged or an estimation of the quantity of material released outside containment structures.

3. Written reports shall be submitted to the addresses in Condition II.D, Reporting of Monitoring Results.

J. Other Noncompliance Reporting. Instances of noncompliance not required to be reported within 24 hours, shall be reported at the time that monitoring reports for Condition II. D are submitted.

K. Inspection and Entry. The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and,

4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location.

III. COMPLIANCE RESPONSIBILITIES

A. Duty to Comply. The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

B. Penalties for Violations of Permit Conditions. The Act provides that any person who violates a permit condition implementing provisions of the Act is subject to a civil penalty not to exceed $10,000 per day of such violation. Any person who willfully or negligently violates permit conditions is subject to a fine not exceeding $25,000 per day of violation. Any person convicted under Section 19-5-115(2) of the Act a second time shall be punished by a fine not exceeding $50,000 per day. Nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.

C. Need to Halt or Reduce Activity not a Defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

D. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

E Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with conditions of the permit.

F. Affirmative Defense. In the event that a compliance action is initiated against the permittee for violation of permit conditions relating to discharge minimization technology, the permittee may affirmatively defend against that action by demonstrating the following:

1. The permittee submitted notification according to Conditions I.F., II.I.1 and II.I.2;

2. The failure was not intentional or caused by the permittee's negligence, either in action or in failure to act;

3. The permittee has taken adequate measures to meet permit conditions in a timely manner or has submitted to the Director, for the Director's approval, an adequate plan and schedule for meeting permit conditions; and

4. The provisions of UAC 19-5-107 have not been violated.

IV. GENERAL REQUIREMENTS

A. Planned Changes. The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required when the alteration or addition could significantly change the nature of the facility or increase the quantity of pollutants discharged.

B. Anticipated Noncompliance. The permittee shall give advance notice of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

C. Spill Reporting. The Permittee shall immediately report in accordance with UCA 19-5-114 of the Utah Water Quality Act any spill that comes into contact with the ground surface or ground water that causes pollution or has the potential to cause pollution to waters of the state. This report shall be made to the phone numbers given in Condition II.I.1. A written report will be required within 5 days of the occurrence and should address the requirements of UCA 19-5-114 and Conditions II.I.2 and 3 of this permit.

D. Permit Actions. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

E. Duty to Reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a permit renewal or extension. The application should be submitted at least 180 days before the expiration date of this permit.

F. Duty to Provide Information. The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

G. Other Information. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Director, it shall promptly submit such facts or information.

H. Signatory Requirements. All applications, reports or information submitted to the Director shall be signed and certified.

1. All permit applications shall be signed as follows:

   a. For a corporation: by a responsible corporate officer;

   b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively.

c. For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official.

2. All reports required by the permit and other information requested by the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described above and submitted to the Director, and,

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

3. Changes to Authorization. If an authorization under Condition IV.H.2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Condition V.H.2 shall be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

4. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

I. Penalties for Falsification of Reports. The Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six months per violation, or by both.

J. Availability of Reports. Except for data determined to be confidential by the permittee, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Director. As required by the Act, permit

applications, permits, effluent data, and ground-water quality data shall not be considered confidential.

K. Property Rights. The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

L. Severability. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

M. Transfers. This permit may be automatically transferred to a new permittee if:

1. The current permittee notifies the Director at least 30 days in advance of the proposed transfer date;

2. The notice includes a written agreement between the existing and new permittee containing a specific date for transfer of permit responsibility, coverage, and liability between them; and,

3. The Director does not notify the existing permittee and the proposed new permittee of his or her intent to modify, or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement as described in Condition IV.M.2, above.

N. State Laws. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, penalties established pursuant to any applicable state law or regulation under authority preserved by Section 19-5-117 of the Act.

O. Reopener Provisions. This permit may be reopened and modified pursuant to R317-6-6.6.B or R317-6-6.10.C of the Utah Administrative Code to include the appropriate limitations and compliance schedule, if necessary, if one or more of the following events occurs:

1. If new ground water standards are adopted by the Board, the permit may be reopened and modified to extend the terms of the permit or to include pollutants covered by new standards. The permittee may apply for a variance under the conditions outlined in R317-6-6.4.D.

2. When the Accelerated Background Monitoring Report has been approved by the Director, and if future changes have been determined in background ground water quality.

3. When sufficient data are available and protection levels for the new wells are established.

4. When approval of any Compliance Schedule Item, under Condition I.H, is considered by the Director to be a major modification to the permit.

5. A determination by the Director that changes are necessary in either the permit or the facility to protect human health or the environment.