STATE OF UTAH
DIVISION OF WATER QUALITY
UTAH WATER QUALITY BOARD
SALT LAKE CITY, UTAH 84114-4870

GROUND WATER DISCHARGE PERMIT

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

SIMPLOT PHOSPHATES LLC
9401 NORTH HIGHWAY 191
VERNAL, UTAH  84078-7802

is granted a ground water discharge permit for the operation of a tailings storage facility in Uintah County, Utah.

The tailings storage facility is located on the following tracts of land (Salt Lake Base and Meridian):

NE 1/4, SW 1/4, SE 1/4, Sec. 36, T. 2 S., R.21 E.
NW 1/4, NE 1/4, Sec. 1, T. 3 S., R. 21 E.
SE 1/4, SW 1/4, NW 1/4, Sec. 31, T. 2 S., R 22 E.
NE 1/4, NW 1/4, Sec. 6, T. 3 S., R. 22 E.

The permit is based on representations made by the permittee and other information contained in the administrative record. It is the responsibility of the permittee to read and understand all provisions of this permit.

The facility shall be constructed and operated in accordance with conditions set forth in the permit and the Utah Administrative Rules for Ground Water Quality Protection (UAC R317-6).

This renewed permit shall become effective on May 18, 2010.

The permit and the authorization to operate shall expire at midnight, February 28, 2015.

Signed this 18th day of May, 2010.

_____________________________________
Walter L. Baker, P.E.
Executive Secretary
Utah Water Quality Board
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I. SPECIFIC PERMIT CONDITIONS

A. GROUND WATER CLASSIFICATION

Based on data from monitoring wells, ground water near the tailings storage facility ranges in quality from Class I to Class III. Ground water class at each downgradient monitor well is listed in Table 3.

B. BACKGROUND GROUND WATER QUALITY

Ground water quality at existing monitor wells near the tailings storage facility is contained in Tables 1 and 2. A final determination of ground water quality in any new monitor wells will be made following accelerated background monitoring required under Part I.E.4(c)(3). A final determination of background concentrations of Dissolved Phosphorus shall be made after at least eight samples have been collected and analyzed, from both existing data and future regular quarterly compliance monitoring.

### TABLE 1

<table>
<thead>
<tr>
<th>Background Water Quality in Upgradient Wells</th>
<th>Units in mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weber Aquifer WW-D</td>
<td></td>
</tr>
<tr>
<td>TDS</td>
<td>218</td>
</tr>
<tr>
<td>Na</td>
<td>3</td>
</tr>
<tr>
<td>K</td>
<td>1</td>
</tr>
<tr>
<td>Mg</td>
<td>24</td>
</tr>
<tr>
<td>Ca</td>
<td>50</td>
</tr>
<tr>
<td>Cl</td>
<td>2</td>
</tr>
<tr>
<td>SO₄</td>
<td>30</td>
</tr>
<tr>
<td>HCO₃</td>
<td>185</td>
</tr>
<tr>
<td>Total P</td>
<td>&lt; 0.01</td>
</tr>
<tr>
<td>U</td>
<td>0.004</td>
</tr>
<tr>
<td>Moenkopi Fm GW-2</td>
<td></td>
</tr>
<tr>
<td>TDS</td>
<td>3,959</td>
</tr>
<tr>
<td>Na</td>
<td>532</td>
</tr>
<tr>
<td>K</td>
<td>12</td>
</tr>
<tr>
<td>Mg</td>
<td>132</td>
</tr>
<tr>
<td>Ca</td>
<td>454</td>
</tr>
<tr>
<td>Cl</td>
<td>38</td>
</tr>
<tr>
<td>SO₄</td>
<td>2,744</td>
</tr>
<tr>
<td>HCO₃</td>
<td>83</td>
</tr>
<tr>
<td>Total P</td>
<td>0.03</td>
</tr>
<tr>
<td>U</td>
<td>0.0009</td>
</tr>
<tr>
<td>Moenkopi Fm GW-4</td>
<td></td>
</tr>
<tr>
<td>TDS</td>
<td>4,401</td>
</tr>
<tr>
<td>Na</td>
<td>270</td>
</tr>
<tr>
<td>K</td>
<td>11</td>
</tr>
<tr>
<td>Mg</td>
<td>365</td>
</tr>
<tr>
<td>Ca</td>
<td>478</td>
</tr>
<tr>
<td>Cl</td>
<td>53</td>
</tr>
<tr>
<td>SO₄</td>
<td>2,951</td>
</tr>
<tr>
<td>HCO₃</td>
<td>315</td>
</tr>
<tr>
<td>Total P</td>
<td>0.02</td>
</tr>
<tr>
<td>U</td>
<td>0.0004</td>
</tr>
<tr>
<td>Alluvial Aquifer GE-1</td>
<td></td>
</tr>
<tr>
<td>TDS</td>
<td>1,045</td>
</tr>
<tr>
<td>Na</td>
<td>20</td>
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<tr>
<td>K</td>
<td>2</td>
</tr>
<tr>
<td>Mg</td>
<td>72</td>
</tr>
<tr>
<td>Ca</td>
<td>198</td>
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<tr>
<td>Cl</td>
<td>16</td>
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<tr>
<td>SO₄</td>
<td>491</td>
</tr>
<tr>
<td>HCO₃</td>
<td>273</td>
</tr>
<tr>
<td>Total P</td>
<td>0.6</td>
</tr>
<tr>
<td>U</td>
<td>0.008</td>
</tr>
</tbody>
</table>
### TABLE 2

**BACKGROUND WATER QUALITY IN DOWNGRADIENT MONITORING WELLS**

Units in mg/l except where noted

<table>
<thead>
<tr>
<th>WEBER AQUIFER</th>
<th>MOENKOPI FORMATION</th>
<th>ALLUVIAL AQUIFER</th>
<th>GARTRA GRIT MEMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>WW-E</td>
<td>CO-2</td>
<td>CO-4</td>
<td>GE-6</td>
</tr>
<tr>
<td>TOTAL DISSOLVED SOLIDS</td>
<td>1,119</td>
<td>3,110</td>
<td>3,155</td>
</tr>
<tr>
<td>Dissolved Phosphorus(^2)</td>
<td>0.007</td>
<td>0.18</td>
<td>0.008</td>
</tr>
<tr>
<td>Uranium</td>
<td>0.004</td>
<td>0.022</td>
<td>0.03</td>
</tr>
<tr>
<td>Sodium</td>
<td>12</td>
<td>76</td>
<td>140</td>
</tr>
<tr>
<td>Potassium</td>
<td>3</td>
<td>20</td>
<td>18</td>
</tr>
<tr>
<td>Magnesium</td>
<td>50</td>
<td>169</td>
<td>164</td>
</tr>
<tr>
<td>Calcium</td>
<td>220</td>
<td>535</td>
<td>506</td>
</tr>
<tr>
<td>Chloride</td>
<td>5</td>
<td>32</td>
<td>31</td>
</tr>
<tr>
<td>Sulfate</td>
<td>631</td>
<td>1,953</td>
<td>2,035</td>
</tr>
<tr>
<td>Bicarbonate</td>
<td>169</td>
<td>229</td>
<td>182</td>
</tr>
</tbody>
</table>

2. Preliminary values based on available data.
C. GROUND WATER PROTECTION LEVELS AND SURFACE WATER STANDARDS

Protection levels in existing downgradient monitor wells are listed in Table 3

Applicable surface water standards in Big Brush Creek must be met at the downstream monitoring point, where Highway 191 crosses the stream.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Surface Water Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Dissolved Solids</td>
<td>1,200 mg/l</td>
</tr>
<tr>
<td>Gross Alpha</td>
<td>15 pCi/l</td>
</tr>
<tr>
<td>Combined Ra-226 + Ra-228</td>
<td>5 pCi/l</td>
</tr>
<tr>
<td>Iron</td>
<td>1 mg/l</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parameter Indicator</th>
<th>Parameter Action Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Phosphorus</td>
<td>0.05 mg/l</td>
</tr>
<tr>
<td>Gross Beta</td>
<td>50 pCi/l</td>
</tr>
</tbody>
</table>

Colorado River Basin Salinity Forum

Discharge of salts from the tailings facility must be kept to the lowest level feasible.

D. WASTE CONTAINMENT AND DISCHARGE MINIMIZATION TECHNOLOGY

1. Authorized Discharge

Only solids and water from the phosphate ore milling operation and domestic wastewater treated to meet secondary standards may be discharged to the tailings impoundment, in addition to stormwater runoff from the area which naturally drains into the impoundment.

2. Waste Containment

The tailings storage facility is located mainly over the outcrop of the Moenkopi Shale, a formation with generally low permeability which contains gypsum and other soluble salts. Wastewater from the ore milling process is of better quality than ground water in the Moenkopi. Because of these characteristics of the subsurface, and because of the size of the impoundment, lining will not be required. The dam for the tailings impoundment was constructed over three existing drainages. Cutoff slurry walls were later installed in the filled drainages to prevent excessive discharge of tailings water. Performance of these cutoff walls will be monitored under the terms of this permit.

3. Discharge Minimization Technology

There is a potential that the higher hydraulic head caused by water impounded in the tailings storage facility could cause increased leaching of soluble salts from the Moenkopi Shale beneath the impoundment.

If any unanticipated pathways for seepage of tailings water from the impoundment are identified, and if such seepage may affect waters of the state, Simplot Phosphates may be required to develop plans for minimizing the seepage.
E. COMPLIANCE MONITORING REQUIREMENTS

1. Sampling 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 current approved Sampling Quality Assurance Plan for this permit. The plan lists procedures for taking ground and surface water samples, and analytical methods to be used, with their minimum detection limits. The plan is an enforceable appendix to this permit. Analytical methods listed in the plan may only be changed with Executive Secretary approval.

Analysis of all ground and surface water samples required by this permit shall be performed by laboratories certified by the Utah State Health Laboratory.

2. Compliance Monitoring Wells

The permittee has constructed 16 compliance monitoring wells. Information on these wells is listed in Table 4. These wells shall be used to monitor ground water quality in several aquifers and also the performance of cutoff walls:

Moenkopi ground water: upgradient at GW-2 and GW-4; downgradient at CO-2, CO-4 and GE-6.

Alluvial aquifer: upgradient at GE-1; downgradient at CO-6, GE-2, GE-3, GE-4 and GE-5.

Weber Aquifer: upgradient at water supply well WW-D; downgradient at water supply well WW-E.

Effectiveness of cutoff walls shall be evaluated by measuring water levels at wells CO-1 through CO-6.

Gartra Grit Member: downgradient at GR-1.

---

**TABLE 3. GROUND WATER PROTECTION LEVELS**

<table>
<thead>
<tr>
<th>GROUND CLASS</th>
<th>WATER PROTECTION LEVEL</th>
<th>WW-E</th>
<th>CO-2</th>
<th>CO-4</th>
<th>GE-6</th>
<th>CO-6</th>
<th>GE-2</th>
<th>GE-3</th>
<th>GE-4</th>
<th>GE-5</th>
<th>GR-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDS mg/l</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>2,025(^3)</td>
<td>3,888(^4)</td>
<td>3,941(^4)</td>
<td>4,708(^4)</td>
<td>928(^3)</td>
<td>2,384(^2)</td>
<td>3,250(^2)</td>
<td>4,340(^4)</td>
<td>333(^3)</td>
<td>679(^4)</td>
</tr>
<tr>
<td>Dissolved Phosphorus mg/l</td>
<td></td>
<td>0.01(^3)</td>
<td>0.05(^3)</td>
<td>0.02(^3)</td>
<td>0.09(^3)</td>
<td>0.03(^3)</td>
<td>0.06(^3)</td>
<td>0.03(^3)</td>
<td>0.02(^3)</td>
<td>0.02(^3)</td>
<td>0.006(^1)</td>
</tr>
<tr>
<td>Uranium mg/l</td>
<td></td>
<td>0.005(^5)</td>
<td>0.03(^3)</td>
<td>0.04(^4)</td>
<td>0.1(^3)</td>
<td>0.006(^3)</td>
<td>0.02(^3)</td>
<td>0.003(^3)</td>
<td>0.03(^4)</td>
<td>0.04(^4)</td>
<td>0.08(^4)</td>
</tr>
<tr>
<td>Sulfate mg/l</td>
<td></td>
<td>1,221(^2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>452(^2)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 Preliminary values based on existing data.
2 Based on 1999-2000 data.
3 Background Mean + 2 X (Standard Deviation).
4 Background mean X (Ground Water Class Multiplier Factor).
### TABLE 4.

#### MONITOR WELL INFORMATION

<table>
<thead>
<tr>
<th>Hole ID</th>
<th>Northing</th>
<th>Easting</th>
<th>Elevation (cap)</th>
<th>Latitude</th>
<th>Longitude</th>
<th>Depth Screened</th>
<th>Interval (ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GW-1</td>
<td>31,879.349</td>
<td>54,720.862</td>
<td>6,112.3</td>
<td>40° 35' 58&quot;</td>
<td>109° 30' 20&quot;</td>
<td>125 - 145</td>
<td></td>
</tr>
<tr>
<td>GW-2</td>
<td>31,007.211</td>
<td>54,213.025</td>
<td>6,129.954</td>
<td>40° 35' 19.7&quot;</td>
<td>109° 30' 26.5&quot;</td>
<td>55 - 75</td>
<td></td>
</tr>
<tr>
<td>GW-3</td>
<td>31,572.674</td>
<td>52,226.885</td>
<td>6,137.568</td>
<td>40° 35' 56.2&quot;</td>
<td>109° 30' 52.5&quot;</td>
<td>75 - 95</td>
<td></td>
</tr>
<tr>
<td>GW-4</td>
<td>32,732.370</td>
<td>54,628.980</td>
<td>6,107.02</td>
<td>40° 36' 6.8&quot;</td>
<td>109° 30' 20.5&quot;</td>
<td>55 - 75</td>
<td></td>
</tr>
<tr>
<td>CO-1</td>
<td>30,862.160</td>
<td>62,392.470</td>
<td>5,731.4</td>
<td>40° 35' 46.2&quot;</td>
<td>109° 28' 39.5&quot;</td>
<td>5 - 25</td>
<td></td>
</tr>
<tr>
<td>CO-2</td>
<td>30,858.280</td>
<td>62,457.230</td>
<td>5,734.89</td>
<td>40° 35' 46.7&quot;</td>
<td>109° 28' 38.7&quot;</td>
<td>25 - 45</td>
<td></td>
</tr>
<tr>
<td>CO-3</td>
<td>29,838.520</td>
<td>63,067.520</td>
<td>5,689.95</td>
<td>40° 35' 36.3&quot;</td>
<td>109° 28' 31.2&quot;</td>
<td>5 - 25</td>
<td></td>
</tr>
<tr>
<td>CO-4</td>
<td>29,982.360</td>
<td>63,188.690</td>
<td>5,687.14</td>
<td>40° 35' 37.8&quot;</td>
<td>109° 28' 29.2&quot;</td>
<td>50 - 70</td>
<td></td>
</tr>
<tr>
<td>CO-5</td>
<td>32,288.910</td>
<td>61,294.260</td>
<td>5,769.98</td>
<td>40° 36' 1.2&quot;</td>
<td>109° 28' 53.5&quot;</td>
<td>22 - 42</td>
<td></td>
</tr>
<tr>
<td>CO-6</td>
<td>32,338.170</td>
<td>61,688.460</td>
<td>5,753.61</td>
<td>40° 36' 1.3&quot;</td>
<td>109° 28' 48.5&quot;</td>
<td>22 - 42</td>
<td></td>
</tr>
<tr>
<td>GE-1</td>
<td>31,423.209</td>
<td>62,847.918</td>
<td>5,693.175</td>
<td>40° 35' 59.5&quot;</td>
<td>109° 28' 40.5&quot;</td>
<td>10 - 30</td>
<td></td>
</tr>
<tr>
<td>GE-2</td>
<td>32,189.974</td>
<td>62,320.423</td>
<td>5,730.515</td>
<td>40° 35' 52.1&quot;</td>
<td>109° 28' 33.7&quot;</td>
<td>16.5 - 36.5</td>
<td></td>
</tr>
<tr>
<td>GE-3</td>
<td>31,288.982</td>
<td>63,274.046</td>
<td>5,685.711</td>
<td>40° 35' 50.9&quot;</td>
<td>109° 28' 28.5&quot;</td>
<td>15 - 35</td>
<td></td>
</tr>
<tr>
<td>GE-4</td>
<td>30,737.112</td>
<td>63,159.001</td>
<td>5,685.406</td>
<td>40° 35' 45&quot;</td>
<td>109° 28' 30&quot;</td>
<td>15 - 35</td>
<td></td>
</tr>
<tr>
<td>GE-5</td>
<td>30,104.903</td>
<td>63,622.291</td>
<td>5,681.808</td>
<td>40° 35' 39&quot;</td>
<td>109° 28' 24&quot;</td>
<td>10 - 30</td>
<td></td>
</tr>
<tr>
<td>GE-6</td>
<td>29,556.399</td>
<td>62,813.780</td>
<td>5,771.613</td>
<td>40° 35' 34&quot;</td>
<td>109° 28' 34.5&quot;</td>
<td>112 - 136</td>
<td></td>
</tr>
<tr>
<td>GR-1</td>
<td>27,820.1</td>
<td>64,954.6</td>
<td>5,714.6</td>
<td>40° 35' 15.06&quot;</td>
<td>109° 28' 09.56&quot;</td>
<td>105 - 125</td>
<td></td>
</tr>
<tr>
<td>WW-D</td>
<td>33,758.85</td>
<td>58,238.66</td>
<td>6,199.0</td>
<td>40° 36' 15&quot;</td>
<td>109° 28' 34&quot;</td>
<td>161 - 1303</td>
<td></td>
</tr>
<tr>
<td>WW-E</td>
<td>31,810.52</td>
<td>62,512.33</td>
<td>5,712.17</td>
<td>40° 35' 55&quot;</td>
<td>109° 28' 40&quot;</td>
<td>160 - 1320</td>
<td></td>
</tr>
</tbody>
</table>

3. Protection of Monitoring Well Network

All compliance monitoring wells must be protected from damage or from contamination due to surface spills. They shall be maintained in full operational condition for the life of this permit. Any well that becomes damaged beyond repair or is rendered unusable by any cause shall be replaced by the permittee within 90 days or as directed by the Executive Secretary.

4. Ground Water Monitoring Requirements

a. Ground Water Level Measurements: Ground water level measurements shall be made quarterly in each monitor well and water supply well at the mine site prior to any collection of water samples. These measurements will be made from a permanent reference point clearly marked on the surface casing. Measurements shall be made to the nearest 0.01 foot, and shall be reported as ground water elevation.

b. Frequency: Routine ground water monitoring shall be done at upgradient wells semi-annually and at downgradient wells quarterly. Upgradient wells screened in the Moenkopi Formation (GW-2 and GW-4) shall be sampled annually.

c. Sampling Procedures: Grab samples of ground water from all compliance monitoring
wells shall be collected and analyzed in conformance to the most recent version of the Sampling Quality Assurance Plan (Part I.E.1) that has been approved by the Executive Secretary.

1) Laboratory analytical methods used to analyze ground water samples must comply with the following:
   i. Methods cited in UAC R317-6-6.3.L, and
   ii. Have detection limits which are less than or equal to those of the currently accepted analytical techniques for drinking water as determined by the U.S. Environmental Protection Agency.

2) Analytical Parameters: The following analysis shall be conducted on all ground water samples collected.
   i. Field Parameters: pH, temperature, and specific conductance, and
   ii. Lab Parameters: Total dissolved solids, sodium, calcium, potassium, magnesium, chloride, sulfate, bicarbonate, carbonate, total phosphorus, dissolved phosphorus, uranium, nitrate + nitrite, ammonia, fluorine.

3) Accelerated Background Monitoring: The permittee shall collect at least eight independent samples over a one-year period at any new monitor well and analyze them for the parameters listed above.

5. Surface Water Monitoring
   a. Routine Monitoring
      Grab samples of water from Big Brush Creek shall be collected quarterly at the north sample point BCF (between the gorge and mine road crossing) and downstream sample point BC191 (Highway 191 crossing), as identified in SF Phosphates’ March 19, 1999 hydrogeology report. The stream flow rate shall also be determined at these points at the time of sampling. Samples shall be analyzed for total dissolved solids, gross alpha, combined Ra-226 and Ra-228, iron, total phosphorus, and gross beta.
   b. Source Monitoring
      Grab samples of water from the tailings impoundment shall be collected annually, during the third quarter, and analyzed for the parameters listed in Part I.E.4.c(2), above.
F. REPORTING REQUIREMENTS

1. Routine Reporting

The permittee shall furnish the Executive Secretary quarterly reports of compliance monitoring. Reports shall include the following information:

a. Field data sheets, or copies thereof, including the field parameters required in Part I.E.(4), above, and other pertinent field data, such as well name, date and time, names of sampling crew, depth to ground water, type of sampling pump or bailer, calculated casing volume and volume of water purged before sampling.

b. Results of analyses of surface and ground water samples required in Part I. E.(4), including date sampled, date received and results of analysis for each parameter, including: value or concentration, units of measurement, method detection limit for the examination, analytical method and date of analysis. The analytical methods and method detection limits for every parameter must conform to those in the currently-approved Sampling Quality Assurance Plan. The report must include error terms and Lower Limit of Detection (LLD) for gross alpha and gross beta analyses. Analytical results from re-sampling due to exceedance of total phosphorus protection levels shall be reported in the next quarterly report after the permittee’s receipt of the analytical results.

c. Reports of ground water elevations measured at monitor wells and water supply wells at the mine site, and an evaluation of:

i. Whether the data indicate that a downward hydraulic gradient exists between the Weber Aquifer and shallow aquifers in the vicinity of the wells where ground water elevations have been measured, and

ii. Whether the ground water elevation data and/or ground water chemistry data indicate significant ground water flow bypassing the cutoff slurry walls.

d. The quantity of total dissolved solids passing both Big Brush Creek sampling sites in 24 hours, as derived from the estimated flow rates and the total dissolved solids analyses at each site.

5. Reports on any new construction or modifications to facilities covered under this permit or used for monitoring under this permit.

6. Reports on any flow or seepage in the drainage immediately south of the tailings impoundment (drainage in which well GR-1 is located) that is not related to precipitation or snow melt events.

e. Routine quarterly monitoring shall be reported according to the schedule below, unless modified by the Executive Secretary:

<table>
<thead>
<tr>
<th>Monitoring Period</th>
<th>Report Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan., Feb., March</td>
<td>May 1</td>
</tr>
<tr>
<td>Apr., May, June</td>
<td>August 1</td>
</tr>
<tr>
<td>July, Aug., Sept.</td>
<td>November 1</td>
</tr>
<tr>
<td>Oct., Nov., Dec.</td>
<td>February 1</td>
</tr>
</tbody>
</table>

2. Noncompliance or Probable Noncompliance
Reporting requirements for noncompliance or probable noncompliance status shall be according to the provisions of Part I.G.

3. **Electronic Filing Requirements**

In addition to submittal of the hard copy data as required above, the permittee will electronically submit ground water monitoring data in the Excel spreadsheet format. The spreadsheet shall include, for each well and surface water sample site: sample date, results of analysis for each parameter required to be monitored in Part I.E, error terms and LLDs for gross alpha and gross beta analyses, and reports of previous analyses done under this permit. The data may be sent by e-mail, floppy disk, modem or other approved transmittal mechanism.

**G. COMPLIANCE EVALUATION**

1. **Exceedance of Ground Water Protection Levels**

Ground water protection levels are listed in Table 3. For any new monitor wells, ground water protection levels shall be determined following the accelerated background monitoring required in Part I.E.4(c)(3) above. After the one-year background monitoring period, the permit shall be reopened and incorporate these standards, based on the background data and UAC R317-6-3, for total dissolved solids, dissolved phosphorus and uranium. If changes in ground water quality in monitor wells occur that are not due to the permittee’s activities, ground water protection levels may be revised upon collection of adequate data.

If the results of quarterly ground water monitoring indicate that the protection levels are exceeded for any parameter in any downgradient compliance monitoring well, the permittee shall notify the Executive Secretary of the protection level exceedance within 5 days of its detection, resample the monitor well where the exceedance has occurred and submit the analytical results thereof within 30 days of the original detection.

If the value for any one ground water pollutant exceeds the protection level in two consecutive sample events from a ground water compliance monitoring point, which are required under the terms of this permit, the permittee shall verbally notify the Executive Secretary of the exceedance within 24 hours, and provide written notice within 5 days of the detection, and immediately implement an accelerated schedule of monthly ground water monitoring for all wells that are both adjacent to and completed in the same geologic formation as the monitoring point well where the exceedance occurred, which shall continue for two months or as required by the Executive Secretary.

2. **Noncompliance Status Due to Ground Water Pollution**

The permittee shall be in noncompliance if the Executive Secretary determines, after review of all available ground water monitoring data and any other relevant information, that release of water from the tailings impoundment to the subsurface is causing ground water pollution, as defined in UAC R317-6-1.33.

Upon making the determination of noncompliance, the Executive Secretary may require the permittee to submit an assessment study plan and compliance schedule, as applicable, for:

   i. Assessment of the source or cause of the contamination, and determination of steps necessary to correct the source, if the contamination is caused by facilities
or activities for which the permittee is responsible.

ii. Assessment of the extent of the ground water contamination and any potential dispersion.

iii. Evaluation of potential remedial actions to restore and maintain ground water quality, and ensure that the ground water standards will not be exceeded at the downgradient monitoring wells.

3. Noncompliance Due to Failure of Discharge Minimization Technology

The facility will be determined to be in noncompliance status if the tailings dam, slurry walls, or other features required for discharge minimization technology have failed or cannot be maintained according to the provisions required by this permit, unless:

a. The permittee has notified the Executive Secretary of the potential noncompliance situation verbally within 24 hours and in writing within 5 days of becoming aware of it, and

b. The failure was not intentional or was not caused by the permittee’s negligence, either in action or failure to act, and

c. The permittee has taken adequate remedial measures in a timely manner or has developed an approvable remedial action plan and implementation schedule for restoration of discharge minimization technology, an equivalent technology or closure of the facility (implementation of an equivalent technology will require permit modification and reissuance), and

d. The permittee has demonstrated that any discharge of a pollutant from the facility is not in violation of the provisions of UCA 19-5-107.

H. Compliance Schedule

1. Ground Water Accelerated Background Monitoring Report

If new monitor well construction or monitoring for new parameters is required, within 60 days of completion of accelerated background monitoring, the permittee shall submit a report and an electronic spreadsheet containing all the results of the accelerated background monitoring, according to the provisions of Part I.F.

2. Monitor Well As-Built Report

If new monitor well construction is required, the permittee shall submit a report on the well construction, including surveyed location, elevation of water level measuring point, well construction and screening details, and a log of geologic materials encountered during drilling within 30 days of well completion.

3. Source and Contamination Assessment Study Plan for Well GE-2

Within 30 days of issuance of this renewed permit, Simplot Phosphates shall submit a plan to investigate methods to chemically distinguish water from the tailings impoundment from ground water in the area that is unaffected by mining activities, and apply these methods to determine whether the observed rise in dissolved constituents in monitor well GE-2 is due to
leakage from the tailings impoundment or migration of natural ground water. Simplot Phosphates shall begin the investigation upon DWQ approval of the plan. Within one year of renewed permit issuance, Simplot Phosphates shall submit a report to DWQ on distinguishing tailings impoundment water from unaltered ground water at the site, and the cause of the observed trend in water chemistry in well GE-2.
II. REPORTING REQUIREMENTS

A. REPRESENTATIVE SAMPLING

Samples taken in compliance with the monitoring requirements established under Part II shall be representative of the monitored activity.

B. ANALYTICAL PROCEDURES

Water sample analysis must be conducted according to test procedures specified under UAC R317-6-6.3L, 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 quarterly reporting period specified in the permit, shall be submitted to the Executive Secretary, Utah Division of Water Quality at the following address according to the schedule in Part I.F.1(e):

Attention: Mark Novak - Ground Water Protection Program
State of Utah
Division of Water Quality
288 North 1460 West
P.O. Box 144870
Salt Lake City, Utah 84114-4870

The due dates for reporting are defined in Part II G of this permit.

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 at a compliance monitoring point 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.

1. Records of monitoring information shall include:
   a) The date, exact place, and time of sampling or measurements:
   b) The individual(s) who performed the sampling or measurements;
c) The date(s) and time(s) analyses were performed;
d) The name of the certified laboratory which performed the analyses;
e) The analytical techniques or methods used; and,
f) 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 five years from the date of the sample, measurement, report or application. This period may be extended by request of the Executive Secretary at any time.

**I. NOTICE OF NONCOMPLIANCE REPORTING**

1. The permittee shall verbally report any noncompliance which may endanger public health or the environment as soon as possible, but no later than 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 Water Quality, Ground Water Protection Section at (801) 536-4300, during normal business hours (Monday through Thursday 7:00 am - 6:00 pm Mountain Time).

2. A written submission shall also be provided to the Executive Secretary 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; and,
   d) Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

3. Reports shall be submitted to the addresses in Part II D, Reporting of Monitoring Results.

**J. OTHER NONCOMPLIANCE REPORTING**

Instances of noncompliance not required to be reported within 5 days, shall be reported at the time that monitoring reports for Part II D are submitted.

**K. INSPECTION AND ENTRY**

The permittee shall allow the Executive Secretary, 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 must 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 Executive Secretary of the Water Quality Board 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 the conditions of the permit.
IV. GENERAL REQUIREMENTS

A. PLANNED CHANGES

The permittee shall give notice to the Executive Secretary as soon as possible of any planned physical alterations or additions to the permitted facility which 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 is anticipated may result in noncompliance with permit requirements.

C. 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.

D. 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 new permit. The application should be submitted at least 180 days before the expiration date of this permit.

E. DUTY TO PROVIDE INFORMATION

The permittee shall furnish to the Executive Secretary, within a reasonable time, any information which the Executive Secretary 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 Executive Secretary, upon request, copies of records required to be kept by this permit.

F. 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 Executive Secretary, it shall promptly submit such facts or information.

G. SIGNATORY REQUIREMENTS

All applications, reports or information submitted to the Executive Secretary 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.
Part IV
Permit No. UGW470001

2. All reports required by the permit and other information requested by the Executive Secretary 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 Executive Secretary, and,

b) The authorization specified 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 Part IV.G.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 Part IV.G.2. must be submitted to the Executive Secretary 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."

H. 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.

I. 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 Executive Secretary. As required by the Act, permit applications, permits, effluent data, and ground water quality data shall not be considered confidential.

J. 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.
K. **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.

L. **Transfers**

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

1. The current permittee notifies the Executive Secretary 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 Executive Secretary 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 mentioned in paragraph 2 above.

M. **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.

N. **Reopener Provisions**

This permit may be reopened and modified (following proper administrative procedures) 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. Changes have been determined in background ground water quality.