Permittee Name: Kalispell Bay Sewer District

Effective Date of this Modification: July 24, 2020

Complete Description of Modification

The purpose of this Permit Modification is to modify hydraulic management unit descriptions and area, adjust constituent loading limits, and update facility contact information for Reuse Permit No. M-052-05. Items not changed by this modification are covered in Reuse Permit No. M-052-05.

1. Section 2 Facility Information. Page 7 of the Reuse Permit. Replace the table with the following:
<table>
<thead>
<tr>
<th>Information Type</th>
<th>Information Specific to This Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type(s) of recycled water</td>
<td>Class D, rural, municipal recycled water</td>
</tr>
</tbody>
</table>
| Method of treatment and reuse                  | Type of wastewater treated: municipal wastewater composed of residential and commercial septic tank effluent from the Kalispell Bay community and some raw sewage from the USFS Priest Lake Ranger Station.  
Wastewater Treatment system: Two (2) aerated lagoons with chlorine disinfection. Non-growing season storage also provided in lagoons.  
Recycled water: Disinfected lagoon effluent.  
Irrigation: Slow rate, growing season only. Spray irrigation with recycled water only (no supplemental water) onto native conifer forested site. Irrigation system is a solid set system with impact sprinkler heads on 10 foot tall risers. |
| Collection and treatment system classification  | Wastewater collection system classification: Class I  
Wastewater treatment system classification: Class I |
| Facility location                              | The facility is in a rural area of Bonner County near the Kalispell Bay community on the west side of Priest Lake. It is north of Kalispell Bay Road, east of Idaho State Highway 57 and west of the Kalispell Bay community.  
USF National Forest Road (FR) 1353 runs along the east side of the facility and serves as the access road for the facility. This road intersects Kalispell Bay Road approximately 0.35 miles east of the intersection of Kalispell Bay Road and Idaho State Highway 57. There is no road identification sign for FR 1353 at its intersection with Kalispell Bay Road.  
GPS Coordinates: 48°34'00.94"N and 116°56'48.29"W  
The dirt road to the KBSD Office is located about 0.9 miles east of the intersection of Kalispell Bay Road and State Route 57 on the north side of Kalispell Bay Road. The office is about 0.1 miles north of the intersection of the dirt road and Kalispell Bay Road. The physical address for the office is:  
851 Kalispell Bay Road  
(208) 443-2338 (KBSD office phone) |
| Facility mailing address                       | Kalispell Bay Sewer District  
PO Box 517  
Nordman, Idaho 83848 |
| Facility responsible official and authorized representative | Responsible Official:  
Mr. Russ Coykendall, Chairman  
Kalispell Bay Sewer District  
kbscpdl@hotmail.com  
(208) 443-2338 (KBSD office phone)  

Authorized Representative:  
Mr. Tom Holman, Operator  
Kalispell Bay Sewer District  
tomholman@live.com  
(208) 443-2338 (KBSD office phone)  
(208) 946-9077 (cell phone)  

Notify DEQ within 30 days if a change in personnel occurs for any of the facility contacts. DEQ will issue a minor permit modification to confirm the change. |
|---|---|
| Ground water | The depth to ground water under the irrigation site is at least 20 feet below the ground surface. Ground water flow direction may be to the east toward Priest Lake. Ground water supplies the drinking water for many of the KBSD customers.  
The closest public water supply well is:  
- Priest Lake Community Church (PWS #ID1090238) located about 3,300 feet to the east of the facility.  
The closest private water supply well is:  
- KBSD office well located about 2,350 feet to the east of the facility. |
| Surface water | Priest Lake: 3,500 feet east of the facility  
Kalispell Creek: 2,700 feet northeast of the facility  
Reynolds Creek: 3,500 feet southeast of the facility  
Beneficial uses include cold water aquatic life, salmonid spawning, primary contact recreation, and domestic water supply (IDAPA 58.01.02.110.06) |
Replace the table with the following:

<table>
<thead>
<tr>
<th>Serial Number</th>
<th>Description</th>
<th>Irrigation System Type and Irrigation Efficiency</th>
<th>Maximum Acres&lt;sup&gt;a&lt;/sup&gt; Allowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>MU-05206</td>
<td>Forested Irrigation Site – Zones 1-6</td>
<td>Solid set sprinkler system with impact sprinklers on 10 foot tall risers; (E&lt;sub&gt;i&lt;/sub&gt; = 0.75)</td>
<td>22.82</td>
</tr>
<tr>
<td></td>
<td>Total acreage</td>
<td></td>
<td>22.82</td>
</tr>
</tbody>
</table>

<sup>a</sup> Maximum acres represent the total permitted acreage of the MU as provided by the permittee. If the permittee uses less acreage in any season or year, then loading rates shall be presented and compliance shall be determined based on the actual acreage utilized during each season or year.

3. Section 4.3 Constituent Loading Limits. Page 12 of the Reuse Permit. Replace the table with the following:

<table>
<thead>
<tr>
<th>Serial Number</th>
<th>Constituent Loading (from all sources)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nitrogen (lbs./acre-year)&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>MU-05206</td>
<td>83&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>a</sup> The calculation methodology for annual nitrogen loading rate shall be specified in the Plan of Operation.
<sup>b</sup> Effective upon Reuse Permit M-052-05 Modification 1 being finalized.

4. Section 5.1.1 Constituent Monitoring. Page 14 of the Reuse Permit. Replace the table with the following:

<table>
<thead>
<tr>
<th>Monitoring Point Serial Number and Location</th>
<th>Sample Description</th>
<th>Sample Type and Frequency</th>
<th>Constituents (Units in mg/L Unless Otherwise Specified)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WW-05201&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Recycled water to MU-05206</td>
<td>Grab - daily (when irrigating)</td>
<td>- Total chlorine residual</td>
</tr>
<tr>
<td>WW-05201&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Recycled water to MU-05206</td>
<td>Grab - monthly (when irrigating)</td>
<td>- Total coliform (organisms/100mL) - Total nitrogen</td>
</tr>
</tbody>
</table>

<sup>a</sup> WW-05201 is the sample tap on the 4-inch pipe located after the chlorine contact chamber and prior to the first sprinkler head on any of the six (6) zones in MU-05206.
5. **Section 5.2.1 Soil Monitoring Unit Descriptions.** Page 15 of the Reuse Permit. Replace the table with the following:

<table>
<thead>
<tr>
<th>Monitoring Point Serial Number</th>
<th>Description</th>
<th>Associated Hydraulic Management Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>SU-05201</td>
<td>Irrigation site, Zones 1 through 6</td>
<td>MU-05206</td>
</tr>
</tbody>
</table>

6. **Section 5.2.2 Soil Monitoring, Sampling, and Analyses.** Page 15 of the Reuse Permit. Replace the table with the following:

<table>
<thead>
<tr>
<th>Monitoring Point Serial Number</th>
<th>Sample Type</th>
<th>Sample Frequency</th>
<th>Constituents (Units in mg/kg Soil Unless Otherwise Specified)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SU-05201</td>
<td>Composite samples&lt;sup&gt;a&lt;/sup&gt;</td>
<td>In October of 2017 and 2022</td>
<td>- Nitrate-nitrogen</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Ammonium-nitrogen</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- pH (unitless)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Plant available phosphorus</td>
</tr>
</tbody>
</table>

<sup>a</sup> The number of sample locations specified in the PO or QAPP for each SU shall be sampled. It is recommended that a total of twelve (12) locations are selected, two (2) locations in each irrigation zone. Samples at each location shall be obtained from three depths: 0-12 inches; 12-24 inches; and 24-36 inches or refusal. The samples obtained from each depth shall be composited by depth to yield three composite samples; one composite sample for each depth.

7. **Section 11 Site Maps.** Replace the maps with the following maps:
11.1 Regional Map
11.2 Facility Location Map
Modification 1 is hereby approved. This modification to the permit is incorporated into, and constitutes a part of, Reuse Permit No. M-052-05. This permit modification must be attached to the permit. The permit is incomplete and unlawful under IDAPA 58.01.17, *Recycled Water Rules*, without this permit modification attached.

Signed,

[Signature]

Dan McCracken, P.E., Regional Administrator
Coeur d'Alene Regional Office
Department of Environmental Quality

6/24/2020

Date