# Idaho Department of Environmental Quality
# Reuse Permit
# M-182-03

## (Previous Permit No. LA-000182-02)

Kootenai-Ponderay Sewer District (hereafter "permittee") is hereby authorized to construct, install, and operate a reuse facility in accordance with (1) this permit; (2) IDAPA 58.01.17 "Recycled Water Rules"; (3) an approved plan of operation; and (4) all other applicable federal, state, and local laws, statutes, and rules. This permit is effective from the date of signature and expires on (120 months from issue date).

Signature

Date

Daniel Redline

Regional Administrator
Coeur d'Alene Regional Office
Idaho Department of Environmental Quality

Department of Environmental Quality
Coeur d'Alene Regional Office
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# 1. Common Acronyms/Abbreviations and Definitions

| | |
|---|---|
| cwt | a unit of weight measurement equal to 100 pounds |
| DEQ | Idaho Department of Environmental Quality |
| DEQ Guidance | DEQ Guidance for Reclamation and Reuse of Municipal and Industrial Wastewater, latest revision |
| Director | Director of the Idaho Department of Environmental Quality or designee unless otherwise specified |
| EPA | Environmental Protection Agency |
| $E_i$ | irrigation efficiency |
| FM | flow measurement or monitoring description or identifier |
| GW | prefix for ground water reporting serial number |
| IDAPA | Idaho Administrative Procedures Act |
| IDWR | Idaho Department of Water Resources |
| IWR | irrigation water requirement - any combination of wastewater and supplemental irrigation water applied at rates commensurate to the moisture requirements of the crop, and calculated monthly during the growing season (GS). The equation used to calculate the IWR is: $IWR = P_{def} / E_i$ |
| KPSD | Kootenai-Ponderay Sewer District |
| LG | prefix for lagoon reporting serial number |
| MG | million gallons |
| mg/kg | milligram per kilogram |
| mg/L | milligram per liter |
| MU | prefix for management unit reporting environmental serial number |
| NPDES | National Pollutant Discharge Elimination System |
| NTU | nephelometric turbidity unit |
| $P_{def}$ | precipitation deficit - is synonymous with the net irrigation water requirement of the crop and for the purposes of this permit can be found at the following website: http://data.kimberly.uidaho.edu/ETIdaho/ (Sandpoint KSPT Station) |
| PO | plan of operation |
| QAPP | quality assurance project plan |
| SU | prefix for soil monitoring unit reporting serial number |
| SW | prefix for supplemental irrigation water reporting serial number |

| | |
|---|---|
| WW | prefix for wastewater reporting serial number |

# 2. Facility Information

| Information Type | Information Specific to This Permit |
|---|---|
| Type(s) of recycled water | Municipal, Class C and Class D |
| Method of treatment and reuse | Aerated and facultative lagoons, chlorine disinfection and growing season only, slow rate irrigation |
| System Classification | Collection – Class II, Treatment – Class II, Land Application |
| Facility location | Bonner County. Approximately 0.75 mile north of Hwy 200 and the city of Kootenai, on east side of railroad tracks.<br>Latitude: 48°19'31.82"N Longitude: 116°30'25.00"W |
| Facility mailing address | Kootenai-Ponderay Sewer District<br>511 Whiskey Jack Road, Sandpoint, Idaho 83864 |
| Facility responsible official and authorized representative | Responsible Official: Jim Osman, Chairman, (208)290-5979<br>Authorized Representative: Mr. Tim Closson, Operations Manager, (208)263-0229 (Office), (208)290-5979 (Cell Phone), Email - tim.closson@nctv.com |
| Ground Water | Aquifer Depths - Upper aquifer depth varies seasonally - 7 feet below ground surface (bgs) in August. Lower aquifer - 50 feet bgs.<br>Type of Aquifer - General Resource Aquifer<br>General Flow Direction – Not known<br>Beneficial uses of ground water – Primarily agriculture<br>Nearby public water supply wells – None within 1,000 feet. |
| Surface Water | Seasonal tributary to Boyer Slough – 200 feet from northeast corner of property. Beneficial Uses – Cold Water Communities and Primary and Secondary Contact Recreation as an “undesignated surface water”.<br>Lake Pend Oreille – approx. 1.25 miles to the south. Beneficial Uses – Cold Water Communities, Salmonid Spawning, Primary and Secondary Contact Recreation, Domestic Water Supplies<br>Seasonal drainage channel in south portion of site |

# 3. Compliance Schedule for Required Activities

| Compliance Activity (CA) Number and Completion Due Date | Compliance Activity Description |
|---|---|
| CA-182-01<br>Twelve (12) months after permit issuance | **Plan of Operation (PO)**: The permittee shall submit for review and approval an update to the existing Plan of Operation (PO) that reflects current operations and incorporates the requirements of this permit. The PO shall comply with the applicable requirements stated in IDAPA 58.01.17.300.05 and shall address applicable items in the Plan of Operation Checklist in the DEQ Guidance.<br><br>The PO shall include the following site management plans or the permittee may submit the site management plans individually:<br>1. Buffer zone plan;<br>2. Cropping plan for fodder crop;<br>3. Silviculture management plan for trees;<br>4. Instrumentation plan;<br>5. Emergency operating plan;<br>6. Irrigation management and scheduling plan;<br>7. Nuisance and odor management plan;<br>8. Runoff management plan;<br><br>The PO shall be updated as needed to reflect current operations. The permittee shall notify DEQ of material changes to the PO and copies must be kept on site and made available to DEQ upon request. |

| Compliance Activity (CA) Number and Completion Due Date | Compliance Activity Description |
|---|---|
| CA-182-02<br>Twelve (12) months after permit issuance | **Quality Assurance Project Plan (QAPP)**: The permittee shall prepare and implement a QAPP that incorporates all monitoring and reporting required by this permit. A copy of the QAPP along with written notice that the permittee has implemented the QAPP shall be provided to DEQ.<br><br>The QAPP shall be designed to assist in planning for the collection, analysis, and reporting of all monitoring in support of this permit and in explaining data anomalies when they occur. At a minimum, the QAPP must include the following:<br><br>1. Details on the number of measurements, number of samples, type of sample containers, preservation of samples, holding times, analytical methods, analytical detection, and quantitation limits for each target compound, type and number of quality assurance field samples, precision and accuracy requirements, sample preparation requirements, sample shipping methods, and laboratory data delivery requirements.<br>2. Maps indicating the location of each monitoring, and sampling point.<br>3. Qualification and training of personnel.<br>4. Names, addresses, and telephone numbers of the laboratories used by or proposed to be used by the permittee.<br>5. Example formats and tables that will be used by the permittee to summarize and present all data in the annual report.<br><br>The format and content of the QAPP should adhere to the recommendations and references in the Quality Assurance and Data Processing sections of the DEQ Guidance.<br><br>The permittee shall amend the QAPP whenever there is a modification in sample collection, sample analysis, or other procedure addressed by the QAPP. The permittee shall notify DEQ of material changes to the QAPP and copies must be kept on site and made available to DEQ upon request. |

<table>
<tr><th>Compliance Activity (CA) Number and Completion Due Date</th><th>Compliance Activity Description</th></tr>
<tr><td>CA-182-03<br>As specified</td><td>

**Seepage Testing (for EXISTING FACILITIES)**: The following table shows the date by which the permittee shall complete seepage testing on the specified lagoons:

<table>
<tr><td>Lagoon:</td><td>Seepage Test Due Date:</td></tr>
<tr><td>Primary Aerated Lagoon</td><td>November 2013</td></tr>
<tr><td>Secondary Aerated Lagoon</td><td>November 2013</td></tr>
<tr><td>Chlorine Contact Basin</td><td>November 2013</td></tr>
<tr><td>Reservoir Polishing Lagoon</td><td>November 2013</td></tr>
</table>

Submit to DEQ for review and approval a proposed schedule and procedure for performing the required seepage tests at least 42 days prior to the planned seepage test. Seepage test procedures are available at: http://www.deq.idaho.gov/water-quality/wastewater/lagoon-seepage-testing.aspx The seepage test procedures shall be sealed by the Idaho licensed professional engineer or professional geologist in responsible charge for the test.

Seepage tests shall be completed in accordance with the procedures approved by DEQ. The seepage test report shall be sealed by the person in responsible charge and submitted within 90 days after completion of the seepage test.

Alternatively, if it can be shown to DEQ that accurate seepage testing of all or some of the lagoons cannot be performed, a DEQ approved ground water monitoring plan must be implemented by November 2013 to evaluate the impacts to ground water from any lagoon seepage.

</td></tr>
<tr><td>CA-182-04<br>1 year prior to permit expiration</td><td>**Pre-Application Workshop:** If the permittee intends to continue operating the reuse facility beyond the expiration date of this permit, the permittee shall contact DEQ and schedule a pre-application workshop to discuss the compliance status of the facility and the content required for the reuse permit application package.</td></tr>
<tr><td>CA-182-05<br>180 days prior to pemit expiration</td><td>**Renewal Permit Application:** The permittee shall submit to DEQ a complete permit renewal application package, which fulfills the requirements specified at the pre-application workshop identified in CA-182-04.</td></tr>
</table>

# 4. Permit Limits and Conditions

## 4.1 Hydraulic Management Unit Descriptions

| Serial Number | Description | Irrigation System Type and Irrigation Efficiency | Maximum Acres[a] Allowed |
|---|---|---|---|
| MU-182-01 | Tree farm | Drip Irrigation: (Ei = 0.85) | 2.5 |
| MU-182-02 | Tree farm | Drip Irrigation: (Ei = 0.85) | 2.5 |
| MU-182-03 | Tree farm | Drip Irrigation: (Ei = 0.85) | 2.5 |
| MU-182-04 | Tree farm | Drip Irrigation: (Ei = 0.85) | 2.5 |
| MU-182-05 | Tree farm | Drip Irrigation: (Ei = 0.85) | 2.5 |
| MU-182-06 | Tree farm | Drip Irrigation: (Ei = 0.85) | 2.5 |
| MU-182-07 | Hay Field | Hand line pipes with rotator sprinkler heads (Ei = 0.85) | 2.5 |
| MU-182-08 | Hay Field | Hand line pipes with rotator sprinkler heads (Ei = 0.85) | 2.5 |
| MU-182-09 | Native trees | Hand line pipes with rotator sprinkler heads (Ei = 0.85) | 5.6 |
| MU-182-10 | Native trees | Hand line pipes with rotator sprinkler heads (Ei = 0.85) | 10.9 |
| | | Total Acreage | 36.5 |

a. 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.

## 4.2 Hydraulic Loading Limits and Vegetation

| Serial Number | Growing Season Hydraulic Loading | Nongrowing Season Maximum Hydraulic Loading, inches | Allowed Vegetation |
|---|---|---|---|
| MU-182-01 | Substantially at the irrigation water requirement (IWR)[a] | Not allowed | Poplar and Willow Trees |
| MU-182-02 | Substantially at the irrigation water requirement (IWR)[a] | Not allowed | Poplar and Willow Trees |
| MU-182-03 | Substantially at the irrigation water requirement (IWR)[a] | Not allowed | Poplar and Willow Trees |
| MU-182-04 | Substantially at the irrigation water requirement (IWR)[a] | Not allowed | Poplar and Willow Trees |
| MU-182-05 | Substantially at the irrigation water requirement (IWR)[a] | Not allowed | Poplar and Willow Trees |
| MU-182-06 | Substantially at the irrigation water requirement (IWR)[a] | Not allowed | Poplar and Willow Trees |
| MU-182-07 | Substantially at the irrigation water requirement (IWR)[a] | Not allowed | Hay Crop |
| MU-182-08 | Substantially at the irrigation water requirement (IWR)[a] | Not allowed | Hay Crop |
| MU-182-09 | Substantially at the irrigation water requirement (IWR)[a] | Not allowed | Native Conifer Trees |
| MU-182-10 | Substantially at the irrigation water requirement (IWR)[a] | Not allowed | Native Cottonwood Trees |

a. For compliance purposes, the source of $P_{def}$ data used to calculate the IWR shall be specified in the PO.

## 4.3 Constituent Loading Limits

| Serial Number | Nitrogen (pounds/acre-year) |
|---|---|
| MU-182-01 | 150% of typical crop uptake[a] |
| MU-182-02 | 150% of typical crop uptake[a] |
| MU-182-03 | 150% of typical crop uptake[a] |
| MU-182-04 | 150% of typical crop uptake[a] |
| MU-182-05 | 150% of typical crop uptake[a] |
| MU-182-06 | 150% of typical crop uptake[a] |
| MU-182-07 | 150% of typical crop uptake[a] |
| MU-182-08 | 150% of typical crop uptake[a] |
| MU-182-09 | 150% of typical crop uptake[a] |
| MU-182-10 | 150% of typical crop uptake[a] |

a. Typical crop uptake is the median constituent crop uptake from the 3 most recent years the crop has been grown. For crops having less than 3 years of on-site crop uptake data, other crop yield data or nutrient content values may only be used if approved in writing by DEQ in advance of use. If written approval is not provided by DEQ, compliance with the 150% nitrogen loading limit shall be determined by comparing the current year nitrogen loading to the current year nitrogen uptake.

## 4.4 Management Unit Buffer Zones

| Serial Number | Minimum Buffer Distances (in feet) from Hydraulic Management Units | | | | | |
|---|---|---|---|---|---|---|
| | Public Water Supplies | Private Water Supplies | Inhabited Dwellings | Permanent and Intermittent Surface Water, if Water is Present | Irrigation Ditches and Canals | Areas Accessible to the Public |
| MU-182-01 | 1,000 | 500 | 500 | 100 | 50 | 300 |
| MU-182-02 | 1,000 | 500 | 500 | 100 | 50 | 300 |
| MU-182-03 | 1,000 | 500 | 500 | 100 | 50 | 300 |
| MU-182-04 | 1,000 | 500 | 500 | 100 | 50 | 300 |
| MU-182-05 | 1,000 | 500 | 500 | 100 | 50 | 300 |
| MU-182-06 | 1,000 | 500 | 500 | 100 | 50 | 300 |
| MU-182-07 | 1,000 | 500 | 500 | 100 | 50 | 300 |
| MU-182-08 | 1,000 | 500 | 500 | 100 | 50 | 300 |
| MU-182-09 | 1,000 | 500 | 200[ab] | 100 | 50 | 0 |
| MU-182-10 | 1,000 | 500 | 200[a] | 100 | 50 | 0 |

a. A minimum 200 foott buffer from all inhabited dwellings on the eastern side of the MUs and the irrigated areas. A minimum 50 foot coniferous and deciduous vegetative buffer between any irrigated area and the eastern border of the MUs where an inhabited dwelling is closer than 300 feet to any irrigated area. Any proposed thinning and/or harvesting of the vegetative buffer on the eastern side of the MUs will require consultation with DEQ to determine if the vegetative buffer will continue to provide adequate public health protection. If the vegetative buffer is determined to be inadequate at anytime by DEQ, a minimum 300 foot buffer from all inhabited dwellings to the irrigated areas will be required.

b. A minimum 300 foot buffer from the inhabitated dwelling on the northern side of the MU.

## 4.5 Other Permit Limits and Conditions

| Category | Permit Limits and Conditions |
|---|---|
| Growing season | May 1 through September 30 (153 days)<br>Irrigation can start when GW-182-01 through GW-182-03 show the depth to ground water below the ground surface is at least three (3) feet<br>October 1 to October 15 (15 days) – Irrigation may occur if:<br>1. There is visible crop stress;<br>2. Soil moisture probe readings indicate the soil is not saturated;<br>3. Day time temperatures reach 50°F;and<br>4. No standing water is on the surface to freeze at night. |
| Non-growing season | October 16 through April 30 (212 days) |
| Reporting year for annual loading rates | January 1 through December 31 |
| Disinfection limits in recycled water:<br>MU-182-09 & MU-182-10<br><br>MU-182-01 through MU-182-08 | Class C: The median number of total coliform organisms does not exceed 23 total coliform organisms/100 mL, as determined from the bacteriological results of the last 5 days for which analyses have been completed. No sample shall exceed 230 total coliform organisms/100 mL in any confirmed sample.<br><br>Class D: The median number of total coliform organisms does not exceed 230 total coliform organisms/100 mL, as determined from the bacteriological results of the last 3 days for which analyses have been completed. No sample shall exceed 2,300 total coliform organisms/100 mL in any confirmed sample. |
| Allowed crops or vegetation | Poplars, Willows, Hay Crop, Native Conifers, Native Cottonwoods |
| Grazing | Grazing is not allowed. |
| Posting | Signs shall read “Warning: Recycled Water—Do Not Drink,” or equivalent signage both in English and Spanish. Signs to be posted every 500 feet and at each corner of the outer perimeter of the irrigated site. Signs are required where management unit border areas accessible to the public. |
| Fencing | MU-182-01 through MU-182-10: three-wire fencing, minimum |

| Category | Permit Limits and Conditions |
|---|---|
| Construction plans | Pursuant to Idaho Code §39-118, IDAPA 58.01.16, and IDAPA 58.01.17, detailed plans and specifications shall be submitted to DEQ for review and approval prior to construction, modification, or expansion of any wastewater treatment, storage, conveyance structures, or reuse facility. Inspection requirements shall be satisfied and within 30 days of completion of construction and the permittee shall submit as-built plans or a letter from an Idaho Professional Engineer certifying the facilities or structures were constructed in substantial accordance with the approved plans and specifications. |
| Backflow prevention and testing requirements | Backflow prevention is required to protect surface water and ground water from an unauthorized discharge of recycled water or wastewater. Refer to section 9.1.1 of this permit. |
| Records retention requirements | Keep records generated to meet the requirements of this permit for the duration of permit, including administrative extensions, plus 2 years. |

# 5. Monitoring Requirements

## 5.1 Recycled Water and Supplemental Irrigation Water Sampling and Analyses

### 5.1.1 Constituent Monitoring

| Monitoring Point Serial Number and Location | Sample Description | Sample Type and Frequency | Constituents (Units in mg/L Unless Otherwise Specified) |
|---|---|---|---|
| WW-182-01<br>Recycled water from Lagoon LG-182-04 at sample tap (post chlorination) | Recycled water to MU-182-01 through MU-182-10 | Grab/weekly (when irrigating) | - Total Coliform (CFU/100 mL) |
| WW-182-01<br>Recycled water from Lagoon LG-182-04 at sample tap (post chlorination) | Recycled water to MU-182-01 through MU-182-10 | Grab/monthly (when irrigating) | - Total Kjeldahl nitrogen, as N<br>- Nitrite + nitrate-nitrogen, as N<br>- Total phosphorus, as P |

### 5.1.2 Management Unit and Other Flow Monitoring

| Management Unit or Flow Measurement Serial Number and Location | Sample Description | Sample Type and Frequency | Measured Parameters, each MU |
|---|---|---|---|
| MU-182-01 through MU-182-10<br>Flow meter at the Irrigation Pump Station | Recycled water flow from<br>LG-182-01 | - Daily meter reading<br>- Monthly compilation of data | - Volume (MG/month)<br>- Application Depth (inches/acre-month) |

## 5.2 Ground Water Monitoring

### 5.2.1 Ground Water Monitoring Point Descriptions

| Monitoring Point Serial Number | Common Designation | Well Type |
|---|---|---|
| GW-182-01 | MW 1 (north) | Monitoring well |
| GW-182-02 | MW 2 (middle) | Monitoring well |
| GW-182-03 | MW 3 (south) | Monitoring well |

### 5.2.2 Ground Water Monitoring, Sampling, and Analyses

| Monitoring Point Serial Number | Sampling Point Description | Sample Type and Frequency | Constituents (Units in mg/L Unless Otherwise Specified) |
|---|---|---|---|
| GW-182-01 through GW-182-09 | Monitoring wells | Prior to the start of irrigation season. Depth to ground water below the ground surface must be at least three (3) feet. | - Water table depth below the ground surface (feet) |

## 5.3 Soil Monitoring

### 5.3.1 Soil Monitoring Unit Descriptions

| Monitoring Point Serial Number | Description | Associated Hydraulic Management Unit |
|---|---|---|
| SU-182--01 | Field 3 (Poplars and Willows) | MU-182-03 |
| SU-182-02 | Field 5 (Poplars and Willows) | MU-182-05 |
| SU-182-03 | Field 7 (Hay) | MU-182-07 |
| SU-182-04 | Field 9 (Conifers) | MU-182-09 |
| SU-182-05 | Field 10 (Cottonwoods) | MU-182-10 |

### 5.3.2 Soil Monitoring, Sampling, and Analyses

| Monitoring Point Serial Number | Sample Type | Sample Frequency | Constituents (Units in mg/kg Soil Unless Otherwise Specified) |
|---|---|---|---|
| SU-182-01<br>SU-182-02<br>SU-182-03<br>SU-182-04<br>SU-182-05 | Composite samples | Annually, prior to the start of irrigation | - Plant available nitrate-nitrogen<br>- Plant available ammonium nitrogen<br>- Plant available phosphorus |
| The number of sample locations specified in the PO or QAPP for each SU shall be sampled. At each location, samples shall be obtained from two (2) depths: 0–12 inches and 12–24 inches or refusal. The samples obtained from each depth shall be composited by depth to yield three composite samples for each soil monitoring unit; one composite sample for each depth. | | | |

## 5.4 Plant Tissue Monitoring

### 5.4.1 Crop Harvest Monitoring

| Associated Hydraulic Management Units | Sample Type | Sample Frequency | Parameters[a] |
|---|---|---|---|
| MU-182-01through MU-182-10 | Harvested portion, each crop, each MU | Each harvest | - Crop Type<br>- Harvest Date<br>- Sample Collection Date<br>- Harvested acreage (acres);<br>- As-harvested ('wet') Yield in customary harvested units (tons, bushels, cwt, etc.);<br>- As-harvested (field) moisture content (%);<br>- Dry Yield (lbs.) |

a. Documentation of reported yields shall be provided for each harvest from each MU

### 5.4.2 Plant Tissue Monitoring

| Associated Hydraulic Management Units | Sample Type | Sample Frequency | Parameters[a] |
|---|---|---|---|
| MU-182-01through MU-182-10 | Harvested portion, each crop, each harvest | Each harvest | - Lab moisture content (%);<br>- Total Nitrogen, as N (%);<br>- Phosphorus as P (ppm) |

a. Report dry-basis results for all parameters except lab moisture content

## 5.5 Lagoon Information

| Serial number | Description | Surface Area, acres | Maximum Operating Volume, MG | Liner Type |
|---|---|---|---|---|
| LG-182-01 | Primary Aerated Lagoon | 0.9 | 1.8 | Clay |
| LG-182-02 | Secondary Aerated Lagoon | 2.0 | 3.3 | Clay |
| LG-182-03 | Chlorine Contact Basin | 0.8 | 0.5 | Clay |
| LG-182-04 | Reservoir Polishing Lagoon | 5.7 | 25 | 60 mil HDPE |

# 6. Reporting Requirements

## 6.1 Annual Report Requirements

The permittee shall submit to DEQ an Annual Report prepared by a competent environmental professional covering the previous reporting year.

### 6.1.1 Due Date

The Annual Report is due no later than January 31 of each year, which shall cover the previous reporting year.

### 6.1.2 Required Contents

The Annual Report shall include the following:

1. A brief interpretive discussion of all required monitoring data. The discussion shall address data quality objectives, validation, and verification; permit compliance; and reuse facility environmental impacts. The reporting year for this permit is specified in Section 0.
2. Results of the required monitoring as described in Section 5 of this permit. If the permittee monitors any parameter for compliance purposes more frequently than required by this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Annual Report. The report shall present all monitoring data in organized data summary tables to expedite review.
3. Status of all work described in Section 3 of this permit.
4. Results of all backflow testing, repairs, and replacements required by Section 9.1.1 of this permit.
5. Discussion of major maintenance activities such as major equipment replacement, lagoon liner maintenance, and wastewater treatment and reuse facility maintenance.
6. A summary of all noncompliance events that occurred during the reporting year. Examples of noncompliance events that must be discussed include, but are not limited to: complaints, missed monitoring events, incorrect monitoring dates or frequencies, dry monitoring wells, uncontained spills causing runoff, construction without DEQ engineering plan approval, construction without engineering inspection, and reporting incorrect acreage.
7. Submittal of the calculations and observations for hydraulic management units specified in the table below.
8. All laboratory analytical reports, chain of custody forms, and crop yield documentation.
9. The parameters in the following table:

| Monitoring Point Serial Number | Parameter (Calculate for each MU) | Units |
|---|---|---|
| MU-182-01<br>MU-182-02<br>MU-182-03<br>MU-182-04<br>MU-182-05<br>MU-182-06<br>MU-182-07<br>MU-182-08<br>MU-182-09<br>MU-182-10 | Recycled water loading rate | - Million gallons/month<br>- Inches/acre-month |
| | Irrigation water requirement (IWR) for each crop grown | - Inches/acre-month<br>- Inches/GS |
| | Recycled water total nitrogen and phosphorus loading rates | Pounds/acre-year |
| | Fertilizer nitrogen and phosphorus application rates, reported as elemental N and P | Pounds/acre-year |
| | Waste solids and/or biosolids nitrogen and phosphorus application rates | Pounds/acre-year |
| | Crop Harvest and Yield<br>Report each harvest and the annual totals for each MU. | - Crop Types Harvested<br>- Total Harvested Area (acres)<br>- Total 'wet' yield (pounds/year, pounds/acre-year)<br>- Total 'dry' yield (pounds/year, pounds/acre-year) |
| | Crop nitrogen, phosphorus, and ash removal rates (dry-basis)<br>Report each harvest and the annual totals for each MU. | - Pounds-N/acre-year<br>- Pounds-P/acre-year |
| Other Reporting Requirements:<br>1. | | |

### 6.1.3 Submittals

All applications, annual reports, or information submitted to DEQ as required by this permit shall be signed and certified as follows:

1. 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, Indian tribe, or other public agency: by either the principal executive officer or ranking elected official.
2. Annual reports and other information requested by DEQ shall be signed by the responsible official 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 the responsible official;

b. The authorization specifies either an individual or position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual having overall responsibility for environmental matters for the company; and

c. The written authorization is submitted to DEQ.

Submit the annual report to the following DEQ regional office at this address:

Engineering Manager
Idaho Department of Environmental Quality
Coeur d'Alene Regional Office
2110 Ironwood Parkway
Coeur d'Alene, ID 83814

The annual report shall include the following certification statement and be signed, dated, and certified by the permittee's Responsible Official or Authorized Representative:

> "*I certify under penalty of law that this report and all attachments were prepared under my direction or supervision and the data and information presented in this report was collected, evaluated and prepared in conformance with the Quality Assurance Project Plan required by the permit. I also certify that the information provided in this submission is, to the best of my knowledge, true, accurate and complete and I acknowledge that knowing submission of false or incomplete information may result in permit revocation as provided for in IDAPA 58.01.17.920.01 or other enforcement action as provided for under Idaho law.*"

## 6.2 Emergency and Noncompliance Reporting

Report noncompliance incidents to DEQ's regional office at 208-769-1422.

In case of emergencies, call the emergency 24-hour number at 1-800-632-8000 and DEQ's regional office.

See Section 8, "Standard Permit Conditions," and IDAPA 58.01.17.500.06 for reporting requirements for facilities.

All instances of unpermitted discharges of wastewater to Surface Waters of the United States shall also be reported to the Environmental Protection Agency by telephone within 24 hours from the time the permittee becomes aware of the discharge and in writing within five days at this address:

NPDES/Stormwater Coordinator, USEPA Idaho Operations Office
950 W. Bannock, Suite 900
Boise, ID 83702
208-378-5746 / 208-378-5744 and EPA Hot Line (206) 553-1846

# 7. Reserved

# 8. Standard Permit Conditions

The following standard permit conditions are included as terms of this permit as required by the "Recycled Water Rules," (IDAPA 58.01.17.500).

**500. STANDARD PERMIT CONDITIONS.**
The following conditions shall apply to and be included in all permits. (4-1-88)

**01. Compliance Required**. The permittee shall comply with all conditions of the permit. (4-1-88)

**02. Renewal Responsibilities**. If the permittee intends to continue operation of the permitted facility after the expiration of an existing permit, the permittee shall apply for a new permit in accordance with these rules. (4-1-88)

**03. Operation of Facilities**. The permittee shall at all times properly maintain and operate all structures, systems, and equipment for treatment, control and monitoring, which are installed or used by the permittee to achieve compliance with the permit or these rules. (4-1-88)

**04. Provide Information**. The permittee shall furnish to the Director within a reasonable time, any information including copies of records, which may be requested by the Director to determine whether cause exists for modifying, revoking, re-issuing, or terminating the permit, or to determine compliance with the permit or these rules. (4-1-88)

**05. Entry and Access**. The permittee shall allow the Director, consistent with Title 39, Chapter 1, Idaho Code, to: (4-1-88)

**a.** Enter the permitted facility. (4-1-88)

**b.** Inspect any records that must be kept under the conditions of the permit. (4-1-88)

**c.** Inspect any facility, equipment, practice, or operation permitted or required by the permit. (4-1-88)

**d.** Sample or monitor for the purpose of assuring permit compliance, any substance or any parameter at the facility. (4-1-88)

**06. Reporting**. The permittee shall report to the Director under the circumstances and in the manner specified in this section: (4-1-88)

**a.** In writing at least thirty (30) days before any planned physical alteration or addition to the permitted facility or activity if that alteration or addition would result in any significant change in information that was submitted during the permit application process. When the alteration or addition results in a need for a major modification, such alteration or addition shall not be made prior to Department approval issued in accordance with these rules. (4-7-11)

**b.** In writing thirty (30) days before any anticipated change which would result in noncompliance with any permit condition or these rules. (4-1-88)

**c.** Orally within twenty-four (24) hours from the time the permittee became aware of any noncompliance which may endanger the public health or the environment at telephone numbers provided in the permit by the Director. (4-1-88)

**d.** In writing as soon as possible but within five (5) days of the date the permittee knows or should know of any noncompliance unless extended by the Department. This report shall contain: (4-1-88)

i. A description of the noncompliance and its cause; (4-1-88)

ii. The period of noncompliance including to the extent possible, times and dates and, if the noncompliance has not been corrected, the anticipated length of time it is expected to continue; and (4-7-11)

iii. Steps taken or planned, including timelines, to reduce or eliminate the continuance or reoccurrence of the noncompliance. (4-7-11)

**e.** In writing as soon as possible after the permittee becomes aware of relevant facts not submitted or incorrect information submitted, in a permit application or any report to the Director. Those facts or the correct information shall be included as a part of this report. (4-1-88)

**07. Minimize Impacts**. The permittee shall take all necessary actions to eliminate and correct any adverse impact on the public health or the environment resulting from permit noncompliance. (4-1-88)

**08. Compliance with "Ground Water Quality Rule."** Permits issued pursuant to these rules shall require compliance with IDAPA 58.01.11, "Ground Water Quality Rule." (4-7-11)

# 9. General Permit Conditions

The following general permit conditions are identical to the cited rules at the time of issuance and are enforceable as part of this permit. Note that the rules cited in this section, and elsewhere in this permit, are supplemented by the rules themselves. Rules applicable to your facility are enforceable whether or not they appear in this permit.

## 9.1 Operations

### 9.1.1 Backflow Prevention

Reuse facilities with existing or planned cross-connections or interconnections between the recycled water system and any water supply (potable or nonpotable) or surface water, shall have backflow prevention assemblies, devices, or methods as required by applicable rule or as specified in this permit and approved by DEQ.

For public water systems, backflow assemblies shall meet the requirements of IDAPA 58.01.08.543. Assemblies shall be adequately maintained and shall be tested annually by a certified backflow assembly tester, and repaired or replaced as necessary to maintain operational status.

For domestic water supply wells, backflow prevention devices shall meet the requirements of IDAPA 07.02.04 and shall be adequately operated and maintained.

Irrigation water supply wells shall meet the requirements of IDAPA 37.03.09.36 for preventing any waste or contamination of the ground water resource. Backflow prevention assemblies or devices used to protect the ground water shall be adequately operated and maintained.

Discharge of recycled water to surface water is authorized by the EPA NPDES program. An NPDES permit is required for any discharge to surface water and backflow prevention shall be implemented to prevent any unauthorized discharge. Backflow prevention assemblies or devices used to protect surface ~~the ground~~ water shall be adequately operated and maintained.

Records of all testable backflow assembly test results, repairs, and replacements shall be kept at the reuse facility along with other operational records, and shall be discussed in the Annual Report and made available for inspection by DEQ. Other approved means of backflow prevention, such as siphons and air-gap structures that cannot be tested, shall be maintained in operable order.

### 9.1.2 Restricted to Premises

Wastewaters or recharge waters applied to the land surface must be restricted to the premises of the application site. Wastewater discharges to surface water that require a permit under the Clean Water Act must be authorized by the United States Environmental Protection Agency (IDAPA 58.01.16.600.02).

### 9.1.3 Health Hazards, Nuisances, and Odors Prohibited

Health hazards, nuisances, and odors are prohibited as follows:

- Wastewater must not create a public health hazard or nuisance condition (IDAPA 58.01.16.600.03).
- No person shall allow, suffer, cause or permit the emission of odorous gases, liquids, or solids into the atmosphere in such quantities as to cause air pollution (IDAPA 58.01.01.776.01).
- Air Pollution. The presence in the outdoor atmosphere of any air pollutant or combination thereof in such quantity of such nature and duration and under such conditions as would be injurious to human health or welfare, to animal or plant life, or to property, or to interfere unreasonably with the enjoyment of life or property (IDAPA 58.01.01.006.06).

### 9.1.4 Solids Management

**Biosolids** are the nutrient-rich organic materials resulting from the treatment of sewage sludge. When treated and processed, sewage sludge becomes biosolids which can be safely recycled and applied as fertilizer to sustainably improve and maintain productive soils and stimulate plant growth.

Biosolids generated from sewage sludge are regulated by EPA under 40 CFR Part 503 and require a DEQ approved sludge disposal plan as outlined in IDAPA 58.01.16.650.

Biosolids used on hydraulic management units identified in section 4.1of this permit must be reported as specified in section 6.1.2.

**Sludge** is the semi-liquid mass produced and removed by wastewater treatment processes. This does not include grit, garbage, and large solids.

Sludge is generated by wastewater treatment processes at municipal and industrial facilities.

**Solid Waste** is any garbage or refuse, sludge from a waste water treatment plant, water supply treatment plant, or air pollution control facility and other discarded material including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations and from community activities, but does not include solid or dissolved materials in domestic sewage, or solid or dissolved material in irrigation return flows or industrial discharges which are point sources subject to permits under Section 402 of the Federal Water Pollution Control Act, or source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954.

Solid waste does not include inert wastes, manures and crop residues ultimately returned to the soils at agronomic rates, and any agricultural solid waste which is managed and regulated pursuant to rules adopted by the Idaho Department of Agriculture. DEQ reserves the right to use existing authorities to regulate agricultural waste that impacts human health or the environment.

Solid waste is regulated under “Solid Waste Management Rules”, IDAPA 58.01.06. Wastes otherwise regulated by DEQ (i.e. this permit) are not regulated under 58.01.06.

**Waste Solids** include sludge and wastes otherwise regulated by DEQ in accordance with IDAPA 58.01.06.001.03.a.xii. Waste solids may include vegetative waste, silt and mud containing organic matter, and other non-inert solid wastes.

Inert wastes are defined as non-combustible, nonhazardous, and non-putrescible solids wastes that are likely to retain their physical and chemical structure and have a deminimis potential to generate leachate under expected conditions of disposal, which includes resistance to biological attack.

Waste solids require a DEQ approved sludge disposal plan as outlined in IDAPA 58.01.16.650.

### 9.1.5 Temporary Cessation of Operations and Closure (IDAPA 58.01.17.801)

Temporary cessation of operations and closure must be addressed as follows:

**01. Temporary Cessation**. A permittee shall implement any applicable conditions specified in the permit for temporary cessation of operations. When the permit does not specify applicable temporary cessation conditions, the permittee shall notify the Director prior to a temporary cessation of operations at the facility greater than sixty (60) days in duration and any cessation not for regular maintenance or repair. Cessation of operations necessary for regular maintenance or repair of a duration of sixty (60) days or less are not required to notify the Department under this section. All notifications required under this section shall include a proposed temporary cessation plan that will ensure the cessation of operations will not pose a threat to human health or the environment. (4-7-11)

**02. Closure**. A closure plan shall be required when a facility is closed voluntarily and when a permit is revoked or expires. A permittee shall implement any applicable conditions specified in the permit for closure of the facility. Unless otherwise directed by the terms of the permit or by the Director, the permittee shall submit a closure plan to the Director for approval at least ninety (90) days prior to ceasing operations. The closure plan shall ensure that the closed facility will not pose a threat to human health and the environment. Closure plan approval may be conditioned upon a permittee's agreement to complete such site investigations, monitoring, and any necessary remediation activities that may be required. (4-7-11)

### 9.1.6 Plan of Operation (IDAPA 58.01.17.300.05)

The PO must comply with the following:

**05. Reuse Facility Operation and Maintenance Manual or Plan of Operations**. A facility's operation and maintenance manual must contain all system components relating to the reuse facility in order to comply with IDAPA 58.01.16 "Wastewater Rules," Section 425. Manuals and manual amendments are subject to the review and approval provision therein. In addition to the content required by IDAPA 58.01.16.425, manuals for reuse facilities shall include, if applicable: operation and management responsibility, permits and standards, general plant description, operation and control of unit operations, land application site maps, wastewater characterization, cropping plan, hydraulic loading rate, constituent loading rates, compliance activities, seepage rate testing, site management plans, monitoring, site operations and maintenance, solids handling and processing, laboratory testing, general maintenance, records and reports, store room and inventory, personnel, an emergency operating plan, and any other information required by the Department. (4-7-11)

### 9.1.7 Seepage Testing Requirements (IDAPA 58.01.16.493.02.c)

**03. Subsequent Tests**. All lagoons covered under these rules must be seepage tested by an Idaho licensed professional engineer, an Idaho licensed professional geologist, or by individuals under their supervision every ten (10) years after the initial testing. (5-8-09)

### 9.1.8 Ground Water Quality Rule (IDAPA 58.01.11)

The permittee shall comply with the requirements of "Ground Water Quality Rule" (IDAPA 58.01.11).

## 9.2 Administrative

Requirements for administration of the permit are defined as follows.

### 9.2.1 Permit Modification (IDAPA 58.01.17.700)

**01.** **Modification of Permits**. A permit modification may be initiated by the receipt of a request for modification from the permittee, or may be initiated by the Department if one (1) or more of the following causes for modification exist: (4-7-11)

**a.** Alterations. There are material and substantial alterations or additions to the permitted facility or activity which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit. (4-7-11)

**b.** New standards or regulations. The standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued. (4-7-11)

**c.** Compliance schedules. The Department determines good cause exists for modification of a compliance schedule or terms and conditions of a permit. (4-7-11)

**d.** Non-limited pollutants. When the level of discharge of any pollutant which is not limited in the permit exceeds the level which may cause an adverse impact to surface or ground waters. (4-7-11)

**e.** To correct technical mistakes, such as errors in calculation, or mistaken interpretations of law made in determining permit conditions. (4-7-11)

**f.** When a treatment technology proposed, installed, and properly operated and maintained by the permittee fails to achieve the requirements of the permit. (4-7-11)

### 9.2.2 Permit Transferable (IDAPA 58.01.17.800)

**01.** **General**. A permit may be transferred only upon approval of the Department. No transfer is required for a corporate name change as long as the secretary of state can verify that a change in name alone has occurred. An attempted transfer is not effective for any purpose until approved in writing by the Department. (4-7-11)

### 9.2.3 Permit Revocation (IDAPA 58.01.17.920)

**01.** **Conditions for Revocation**. The Director may revoke a permit if the permittee violates any permit condition or these rules, or the Director becomes aware of any omission or misrepresentation of condition or information relied upon when issuing the permit. (4-7-11)

**02.** **Notice of Revocation**. Except in cases of emergency, the Director shall issue a written notice of intent to revoke to the permittee prior to final revocation. Revocation shall become final within thirty-five (35) days of receipt of the notice by the permittee, unless within that time the permittee requests an administrative hearing in writing. The hearing shall be conducted in accordance with IDAPA 58.01.23, Rules of Administrative Procedure Before the Board of Environmental Quality." (5-3-03)

**03. Emergency Action**. If the Director finds the public health, safety or welfare requires emergency action, the Director shall incorporate findings in support of such action in a written notice of emergency revocation issued to the permittee. Emergency revocation shall be effective upon receipt by the permittee. Thereafter, if requested by the permittee in writing, the Director shall provide the permittee a revocation hearing and prior notice thereof. Such hearings shall be conducted in accordance with IDAPA 58.01.23, Rules of Administrative Procedure Before the Board of Environmental Quality." (3-15-02)

**04. Revocation and Closure**. A permittee shall perform the closure requirements in a permit, the closure requirements of these rules, and complete all closure plan activities notwithstanding the revocation of the permit. (4-7-11)

### 9.2.4 Violations (IDAPA 58.01.17.930)

Any person violating any provision of these rules or any permit or order issued thereunder shall be liable for a civil penalty not to exceed ten thousand dollars ($10,000) or one thousand dollars ($1,000) for each day of a continuing violation, whichever is greater. In addition, pursuant to Title 39, Chapter 1, Idaho Code, any willful or negligent violation may constitute a misdemeanor. (4-1-88)

### 9.2.5 Severability

The provisions of this permit are severable, and if a provision or its application is declared invalid or unenforceable for any reason, that declaration will not affect the validity or enforceability of the remaining provisions.

# 10. Other Applicable Laws

DEQ may refer enforcement of the following provisions to the state agency authorized to enforce that rule. The permittee shall comply with all applicable provisions identified in this section, as well as all other applicable federal, state, and local laws, statutes, and rules.

## 10.1 Owner Responsibilities for Well Use and Maintenance

### 10.1.1 Well Use

The well owner must not operate any well in a manner that causes waste or contamination of the ground water resource. Failure to operate, maintain, knowingly allow the construction of any well in a manner that violates these rules, or failure to repair or properly decommission (abandon) any well as herein required will subject the well owner to civil penalties as provided by statute. See IDAPA 37.03.09.036.01 and consult the Idaho Department of Water Resources (IDWR) for more information.

### 10.1.2 Well Maintenance

The well owner must maintain the well to prevent waste or contamination of ground waters through leaky casings, pipes, fittings, valves, pumps, seals, or through leakage around the outside of the casings, whether the leakage is above or below the land surface. Any person owning or controlling a noncompliant well must have the well repaired by a licensed well driller under a

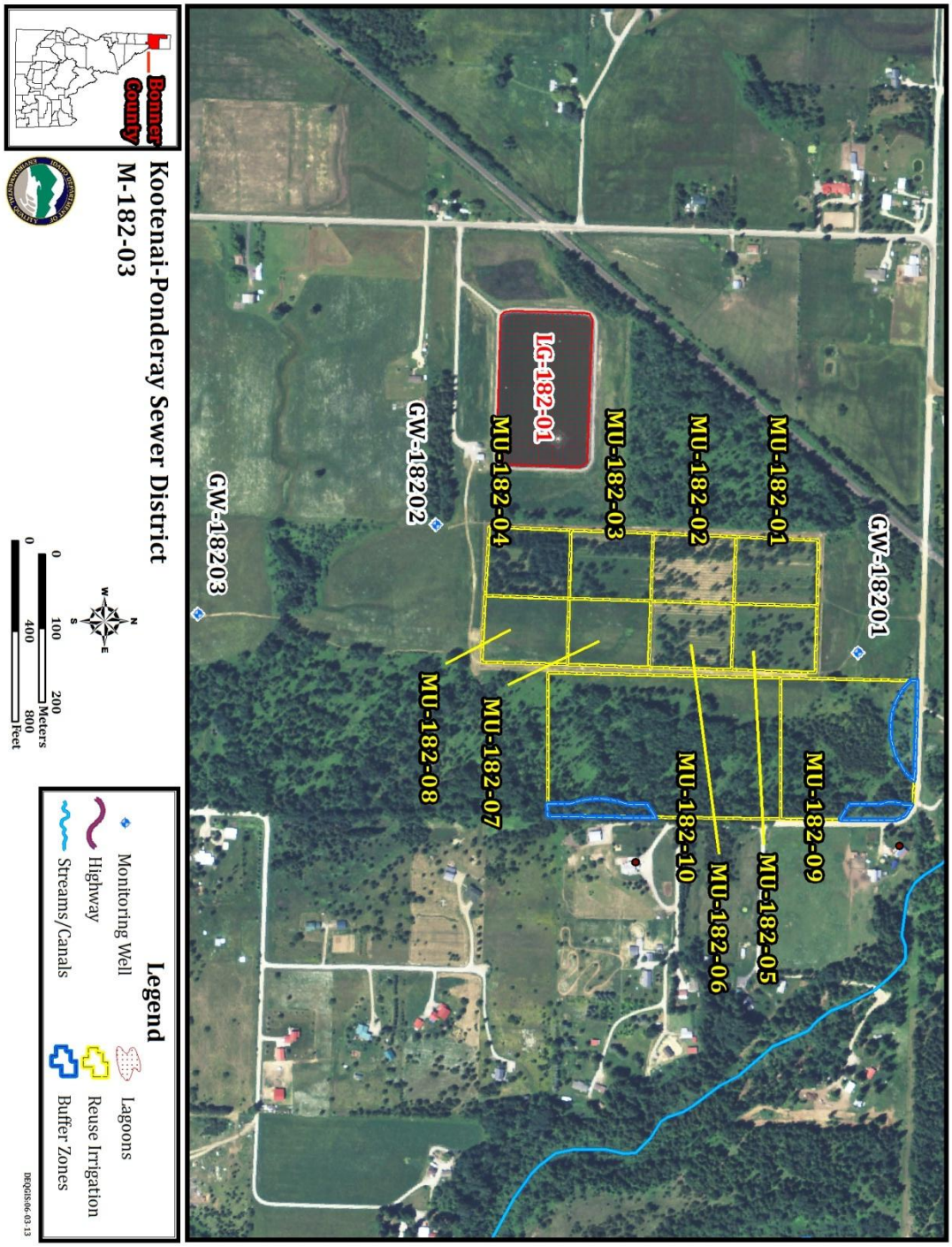
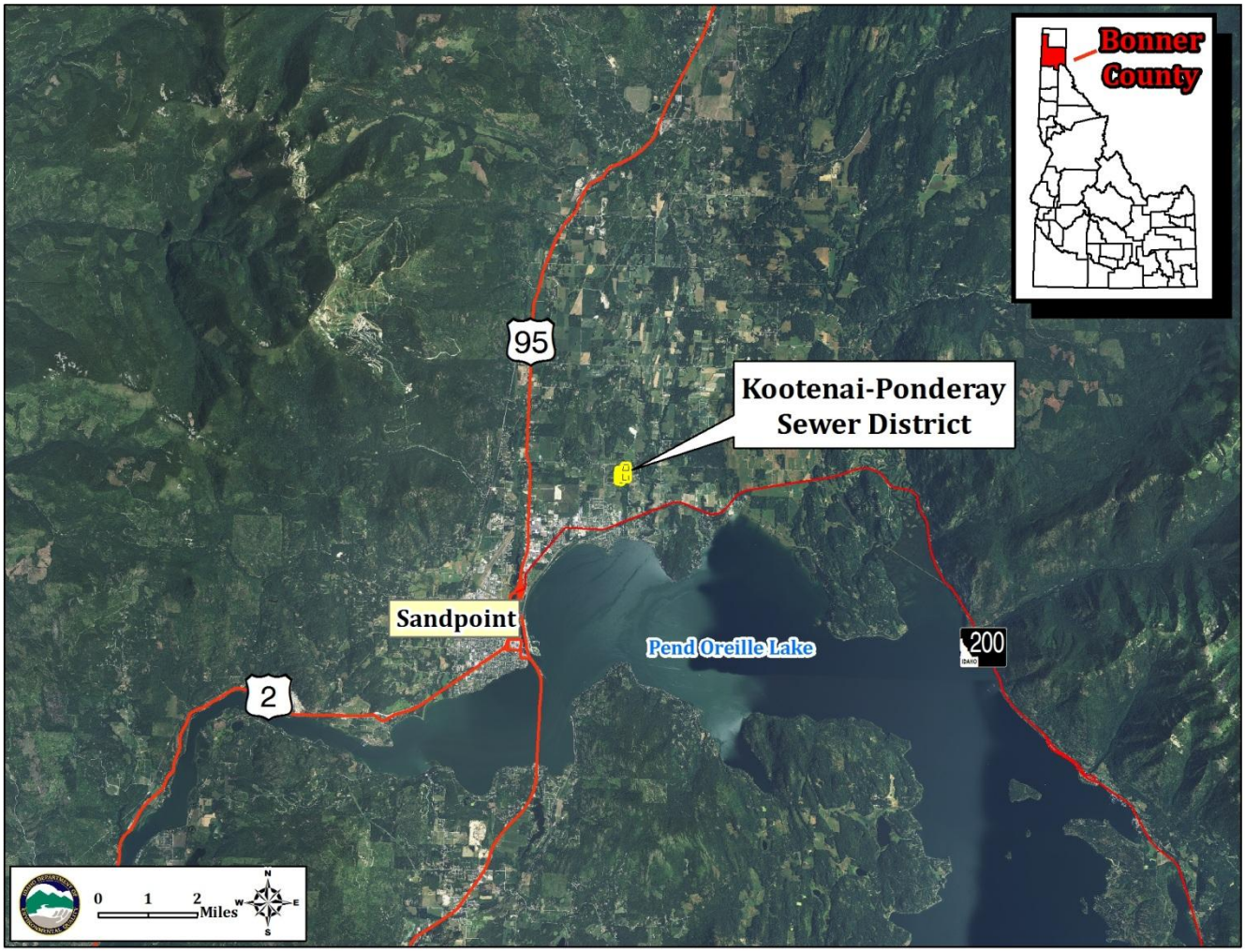
permit issued by the IDWR director in accordance with the applicable rules. See IDAPA 37.03.09.036.02 and consult IDWR for more information.

### 10.1.3 Wells Posing a Threat to Human Health and Safety or Causing Contamination of the Ground Water Resource

The well owner must have any well shown to pose a threat to human health and safety or cause contamination of the ground water resource immediately repaired or decommissioned (abandoned) by a licensed well driller under a permit issued by the IDWR director in accordance with the applicable rules. See IDAPA 37.03.09.036.06 and consult the IDWR for more information.

# 11. Site Maps

## 11.1 Facility Maps



## 11.2 General Area Maps