

**A. Permit Certificate**

**MUNICIPAL WASTEWATER REUSE PERMIT  
FREMONT COUNTY LAST CHANCE / PONDS LODGE  
PERMIT NUMBER LA-000058-03**

THE FREMONT COUNTY LAST CHANCE / PONDS LODGE WASTEWATER TREATMENT FACILITY, LOCATED AT LAST CHANCE, IDAHO AND IN TOWNSHIP 13 NORTH, RANGE 43 EAST, SECTION 4, IS HEREBY AUTHORIZED TO CONSTRUCT, INSTALL, AND OPERATE A WASTEWATER REUSE SYSTEM IN ACCORDANCE WITH THE RECYCLED WATER RULES (IDAPA 58.01.17), THE WASTEWATER RULES (IDAPA 58.01.16), THE GROUND WATER QUALITY RULE (IDAPA 58.01.11), AND ACCOMPANYING PERMIT, APPENDICES, AND REFERENCE DOCUMENTS. THIS PERMIT IS EFFECTIVE FROM THE DATE OF SIGNATURE AND EXPIRES ON AUGUST 15, 2016.

  
Erick Neher  
Idaho Falls Regional Administrator  
Idaho Department of Environmental Quality

Issued: August 15, 2011

**DEPARTMENT OF ENVIRONMENTAL QUALITY  
Idaho Falls Regional Office  
900 North Skyline, Suite B  
Idaho Falls, ID 83402  
Phone 208-528-2650**

**POSTING THIS PERMIT ON SITE IS RECOMMENDED**

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### References

1. Plan of Operation (Operation and Maintenance Manual)
  - Odor Management Plan
  - Waste Solids Management Plan
  - Runoff Management Plan

The Sections, Appendices, and Reference Documents listed on this page are all elements of Wastewater Reuse Permit LA-000058-03 and are enforceable as such. This permit does not relieve Fremont County, hereafter referred to as the permittee, from responsibility for compliance with other applicable federal, state or local laws, rules, standards or ordinances.

### C. Abbreviations and Definitions

Ac-in	Acre-inch: the volume of water or wastewater to cover 1 acre of land to a depth of 1 inch; equal to 27,154 gallons.
BMP or BMPs	Best Management Practices
COD	Chemical Oxygen Demand
DEQ or the Department	Idaho Department of Environmental Quality
Director	Director of the Idaho Department of Environmental Quality, or the Directors Designee, i.e. Regional Administrator
ET	Evapotranspiration – loss of water from the soil and vegetation by evaporation and by plant uptake (transpiration)
GS	Growing season: May 01 through October 15 (168 days)
GW	Ground water
GWQR	IDAPA 58.01.11 “Ground Water Quality Rule”
Guidance	Guidance for Reclamation and Reuse of Municipal and Industrial Wastewater, DEQ.
HLRgs	<p>Growing Season Hydraulic Loading Rate. Includes any combination of wastewater and supplemental irrigation water applied to reuse hydraulic management units during the growing season. The HLRgs limit is specified in Section F - <i>Permit Limits and Conditions</i>.</p> <p>Growing Season (GS) Hydraulic Loading Rate shall be no greater than the Irrigation Water Requirement (IWR) using data from the tables of the following University Of Idaho web site: <a href="http://www.kimberly.uidaho.edu/water/appndxet/index.shtml">http://www.kimberly.uidaho.edu/water/appndxet/index.shtml</a>. IWR is equal to the Mean IR (irrigation requirement) data from these tables divided by the irrigation system efficiency.</p> <p>In lieu of these tables, current climatic and evaporation data, or 30-year average data may be used to calculate the IWR, as defined in this permit. Assume no carryover soil moisture and a leaching rate of zero in calculating the IWR. Application shall generally follow consumptive use rates for the crop throughout the season.</p>
HLRngs	Non-Growing Season Hydraulic Loading Rate. Includes any combination of wastewater and supplemental irrigation water applied to each hydraulic management unit during the non-growing season. The HLRngs limit is specified in Section F - <i>Permit Limits and Conditions</i> .
HMU	Hydraulic Management Unit
IWR	<p>Irrigation Water Requirement – any combination of wastewater and supplemental irrigation water applied at rates commensurate to the moisture requirements of the crop. Calculation methodology for the IWR can be found at the following website: <a href="http://www.kimberly.uidaho.edu/ETIdaho/">http://www.kimberly.uidaho.edu/ETIdaho/</a></p> $IWR = P_{def} / E_i$ <p>Where: <math>P_{def}</math> is the (crop specific) precipitation deficit; and,  <math>E_i</math> is the irrigation system efficiency</p>
IDAPA	Idaho Administrative Procedures Act
LG	Lagoon
lb/ac*day	Pounds (of constituent) per acre per day
MG	Million gallons (1 MG = 36.827 acre*inches)

MGA	Million gallons annually (per Reuse reporting year)
NGS	Non growing season: October 16 to April 30 (197 days)
NVDS	Non Volatile Dissolved Solids ( = Total Dissolved Solids less Volatile Dissolved Solids)
O&M manual	Operation and Maintenance Manual, also referred to as the Plan of Operation
Reuse	The use of recycled water for, irrigation, ground water recharge, landscape impoundments, toilet flushing in commercial buildings, dust control, and other uses.
Reuse reporting year	The reporting year begins with the non-growing season and extends through the growing season of the following year, November 1 to October 31. For example, the 2010 reporting year was November 1, 2009 through October 31, 2010.
SAR	Sodium Absorption Ratio
SI	Supplemental irrigation water applied to the reuse treatment site.
Soil AWC	Soil available water holding capacity: the water storage capability of a soil to a depth at which plant roots will utilize it (typically 60 inches or root limiting layer).
SMU	Soil monitoring unit (serial number designation begins with SU)
SW	Surface water
TDS	Total Dissolved Solids or total filterable residue
TDIS	Total Dissolved Inorganic Solids: the sum concentrations (in mg/L) for the following common ions: calcium, magnesium, potassium, sodium, chloride, sulfate, and 0.6 times alkalinity (alkalinity expressed as calcium carbonate). Nitrate, silica and fluoride shall be included if present in significant quantities (> 5 mg/L each).
TKN	Total Kjeldahl Nitrogen
Typical Crop Uptake	Typical Crop Uptake is defined as the median constituent crop uptake from the three (3) most recent years the crop has been grown. Typical Crop Uptake is determined for each hydraulic management unit. For new crops having less than three years of on-site crop uptake data, regional crop yield data and typical nutrient content values, or other values approved by DEQ, may be used.
USGS	United States Geological Survey
WW	Wastewater applied to the reuse treatment site

### D. Facility Information

Legal name of permittee	Fremont County
Type of wastewater	Municipal wastewater; Class C
Method of treatment	Aerated lagoon and chlorine disinfection. Wastewater disposal methods: <ol style="list-style-type: none"> <li>1. slow rate land application during the growing season;</li> <li>2. artificial snow application during the non-growing season.</li> </ol>
Type of facility	Publicly owned treatment works
Facility location	Approximately 2 miles northeast of Last Chance, Idaho.
Legal location	Township 13 North, Range 43 East, Section 4
County	Fremont County
USGS quadrangle map	Last Chance
Soils on site	Flatstone, Fitzwill and Koffgo/Island Park, Potrmound and Spliten sandy loam to loam silt (37-42% sand, 40 – 48% loam/silt, and 11 - 17% clay).
Depth to ground water	35 feet to first water; 85 feet to the regional aquifer.
Beneficial uses of ground water	Domestic and agriculture
Nearest surface water	Henry's Fork (of the Snake) River
Beneficial uses of surface water	Domestic water supply, agricultural water supply, cold water biota, salmonid spawning, primary and secondary contact recreation and special resource water.
Responsible official	Chairman Skip Hurt Fremont County Commission 151 West 1 <sup>st</sup> North St. Anthony, ID 83445 Phone (208) 624-4271; Fax (208) 624-7335
Licensed operator	Supervisor Daniel Lostutter Fremont County Sewer P.O. Box 131 Mack's Inn, ID 83433 Phone (208) 558-7341; Fax (208) 558-7641

### E. Compliance Schedule for Required Activities

The activities in the following table shall be completed on or before the completion date unless modified by the Department in writing.

Compliance Activity Number & Completion Date	Compliance Activity Description
CA-058-01 Within one year of permit renewal	<p>An <b>updated Operation and Maintenance Manual</b> (O&amp;M Manual) for the wastewater reuse facility, incorporating the requirements of this permit, shall be submitted to DEQ for review and comment. The O&amp;M manual shall be designed for use as an operator guide for actual day-to-day operations to meet permit requirements and shall include daily sampling and monitoring requirements to insure proper operation of the wastewater treatment facility. The O&amp;M Manual shall contain at a minimum all of the items in the Plan of Operation Checklist located in section 1.7 of the <i>DEQ Guidance for Reclamation and Reuse of Municipal and Industrial Wastewater</i>.</p> <p>Upon approval, the manual shall be incorporated by reference into this permit and shall be enforceable as a part of this permit.</p>
CA-058-02 Within one year of permit renewal	Irrigation schedules for the growing season application shall be submitted to the DEQ for review and approval, and incorporated into the O&M Manual.



Category	Permitted Limits and Conditions
No runoff	Operate and maintain the facility and runoff control structures according to the approved Runoff Management Plan.
Construction plans	Prior to construction or modification of all wastewater facilities associated with the reuse system or expansion, detailed plans and specifications shall be reviewed and approved by DEQ. Within 30 days of completion of construction, the permittee shall submit as-built plans for review and approval.
Fencing and posting	Signs should read "Irrigated with Reclaimed Wastewater – Do Not Drink" or equivalent, to be posted every 500 feet and at each corner of the outer perimeter of the buffer zones of the site.
Odor management	The wastewater treatment plant, reuse facilities, and other operations associated with the facility shall not create a public health hazard or nuisance conditions, including odors. These facilities shall be managed in accordance with a DEQ approved Odor Management Plan.
Grazing	Grazing is not allowed at the facility.

## G. Monitoring Requirements

- 1) Appropriate analytical methods, as given in the *Guidance for Reclamation and Reuse of Municipal and Industrial Wastewater*, or as approved by the Idaho Department of Environmental Quality (hereinafter referred to as DEQ), shall be employed. A description of approved sample collection methods, appropriate analytical methods and companion QA/QC protocol shall be included in the Operation and Maintenance Manual.
- 2) The permittee shall monitor and measure parameters and submit information as stated in the *Facility Monitoring Table* in this section.
- 3) Samples shall be collected at times and locations that represent typical environmental and process parameters being monitored.
- 4) Monitoring locations are described in Appendix 1 - *Environmental Monitoring Serial Numbers*.
- 5) Monitoring is required at the frequency shown in the *Facility Monitoring Table* below if wastewater is applied anytime during the time period shown. Unless otherwise agreed in writing by the DEQ, data collected and submitted shall include, but not be limited to, the parameters and frequencies in the *Facility Monitoring Table* as follows.
- 6) Soil monitoring procedure:
  - if the soil management unit is less than 15 acres, use 5 sub-samples. If the soil management unit is greater than 15 acres, use 10 sub-samples.
  - Three (3) soil samples shall be collected at each sample location, one at 0-12 inches, one at 12-24 inches, and one at 24-36 inches. The soil samples collected at 0-12 inches from each sample location shall be composited. Similarly, all soil samples collected at 12-24 inches shall be composited and all soil samples collected at 24-36 inches shall be composited. This method will yield three samples for analysis, one for 0-12 inches, one for 12-24 inches and one for 24-36 inches for each soil management unit.
- 7) Ground water monitoring procedure: ground water monitoring wells shall be purged a minimum of three casing volumes and/or until field measurements for pH, specific conductance and temperature meet the following conditions:
  - two successive temperature values measured at least five minutes apart are within one degree Celsius of each other;
  - pH values for two successive measurements taken at least five minutes apart are within 0.2 units of each other; and,
  - two successive specific conductance values measured at least five minutes apart are within 10% of each other.

This procedure will determine when the wells are suitable for sampling for constituents required by the permit. Other procedures, such as low flow sampling, may be considered by DEQ for approval. The static water level shall be measured prior to pumping or sampling for ground water.
- 8) Annual reporting of monitoring requirements is described in Section H - *Standard Reporting Requirements*.

**Facility Monitoring Table**

<b>Frequency</b>	<b>Monitoring Point</b>	<b>Description and Type of Monitoring</b>	<b>Parameters</b>
Weekly	Wastewater to reuse flow meters	Volume of wastewater	Gallons and acre*inches applied to each HMU, following the irrigation schedule.
	Discharge point of wastewater to reuse	grab sample	Total coliform
Monthly	Discharge point of wastewater to reuse	grab sample	(nitrate + nitrite) nitrogen, pH, TDS, TKN, total phosphorus
Annually	Hydraulic management unit	Acres used for reuse	Number of acres used
		Report total nitrogen and phosphorus load for each HMU.	Nitrogen and phosphorus applied in lbs/acre*year.
		Calculate the irrigation water requirement for the crop grown.	Volume in inches per acre and total gallons for each month.
		Report hydraulic loading for each HMU.	Wastewater gallons/year and acre*inches/year applied to each HMU. For the growing season report gallons/month and acre*inches/month for comparison to the irrigation schedule.
	Ground water monitoring wells listed in Appendix 1	Grab sample of ground water after purging	Static water level, (depth and elevations), (nitrate + nitrite) nitrogen, total and dissolved iron, total and dissolved manganese, phosphorous, pH, TDS, total coliform.
	Soil monitoring unit	Composite soil sample	Electrical conductivity, nitrate-N, ammonium-N, pH, plant available phosphorous, chloride, Cation Exchange Capacity.
First year of permit only	Soil monitoring unit	Composite soil sample	SAR, DTPA-Fe, DTPA-Mn
Once during the permit period	All flow measurement locations.	Calibration of all flow meters	Document the flow measurement calibration of all flow meters and pumps used directly or indirectly to measure all wastewater.

## H. Standard Reporting Requirements

1. The permittee shall submit an Annual Wastewater Reuse Site Performance Report ("Annual Report") prepared by a competent environmental professional no later than January 31 of each year which shall cover the previous year (see Section F for reuse reporting period). The Annual Report shall include:
  - a. results for monitoring required in Section G;
  - b. status of compliance activities; and,
  - c. an interpretive discussion of monitoring data (ground water, vadose zone, hydraulic loading, wastewater, etc.) with particular respect to environmental impacts by the facility.
2. The annual report shall contain the results of the required monitoring as described in Section G - *Monitoring Requirements*. If the permittee monitors any parameter 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.
3. The annual report shall be submitted to the DEQ Idaho Falls Regional office:

Greg Eager, P.E.  
Engineering Manager  
DEQ Idaho Falls Regional Office  
900 N. Skyline, Suite B  
Idaho Falls, ID 83402
4. Notice of completion of any work described in Section E - *Compliance Schedule for Required Activities* shall be submitted to the Department within 30 days of activity completion. The status of all other work described in Section E shall be submitted with the Annual Report.
5. All laboratory reports containing the sample results for monitoring required by Section G - *Monitoring Requirements* of this permit shall be submitted with the Annual Report.

## I. Standard Permit Conditions: Procedures and Reporting

1. The permittee shall at all times properly maintain and operate all structures, systems, and equipment for treatment, operational controls and monitoring, which are installed or used by the permittee to comply with all conditions of the permit or the Wastewater Reuse Permit Regulations, in conformance with a DEQ approved, current Operations and Maintenance Manual which describes in detail the operation, maintenance, and management of the wastewater treatment system. The Operations and Maintenance Manual shall be updated as necessary to reflect current operations.
2. Wastewater 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 U.S. Environmental Protection Agency.
3. Wastewater must not create a public health hazard or nuisance condition as stated in IDAPA 58.01.16.600.03. In order to prevent public health hazards and nuisance conditions the permittee shall:
  - a. apply wastewater as evenly as practicable to the treatment area;
  - b. prevent organic solids (contained in the wastewater) from accumulating on the ground surface to the point where the solids putrefy or support vectors or insects; and,
  - c. prevent wastewater from ponding in the fields to the point where the ponded wastewater putrefies or supports vectors or insects.
4. The permittee shall:
  - a. manage the wastewater reuse treatment site as an agronomic operation where vegetative cover is grown and harvested or grazed to utilize the nutrients and minerals in the wastewater, and,
  - b. not hydraulically overload any particular areas of the wastewater reuse treatment site.
5. All waste solids, including dredgings and sludges, shall be utilized or disposed in a manner which will prevent their entry, or the entry of contaminated drainage or leachate therefrom, into the waters of the state such that health hazards and nuisance conditions are not created; and to prevent impacts on designated beneficial uses of the ground water and surface water. The permittee's management of waste solids shall be governed by the terms of the DEQ approved Waste Solids Management Plan, which upon approval shall be an enforceable portion of this permit.
6. 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 at least six months prior to the expiration date of the existing permit in accordance with the Wastewater Reuse Permit Regulations and include seepage tests on all lagoons per latest DEQ procedures.
7. The permittee shall allow the Director of the Idaho Department of Environmental Quality or the Director's designee (hereinafter referred to as Director), consistent with Title 39, Chapter 1, Idaho Code, to:
  - a. enter the permitted facility;
  - b. inspect any records that must be kept under the conditions of the permit;
  - c. inspect any facility, equipment, practice, or operation permitted or required by the permit; and,
  - d. sample or monitor for the purpose of assuring permit compliance, any substance or any parameter at the facility.

8. The permittee shall report to the Director under the circumstances and in the manner specified in this section:
- a. in writing 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;
  - b. in writing thirty (30) days before any anticipated change which would result in non-compliance with any permit condition or these regulations;
  - c. orally within twenty-four (24) hours from the time the permittee became aware of any non-compliance which may endanger the public health or the environment at telephone numbers provided below:

**DEQ Regional Office: 208-528-2650**

**Emergency 24 Hour Number 1-800-632-8000**

- d. in writing as soon as possible but within five (5) days of the date the permittee knows or should know of any non-compliance unless extended by the DEQ. This report shall contain:
    - i. a description of the non-compliance and its cause;
    - ii. the period of non-compliance including to the extent possible, times and dates and, if the non-compliance has not been corrected, the anticipated time it is expected to continue; and,
    - iii. steps taken or planned to reduce or eliminate reoccurrence of the non-compliance.
  - 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.
9. The permittee shall take all necessary actions to prevent or eliminate any adverse impact on the public health or the environment resulting from permit noncompliance.
10. The permittee shall determine (on an on-going basis) if any noxious weed problems relate to the permitted sites. If problems are present, coordinate with the Idaho Department of Agriculture or the local County authority regarding their requirements for noxious weed control. Also address these control operations in an update to the Operations and Maintenance Manual.

## **J. Standard Permit Conditions: Modifications, Violations, and Revocations**

1. The permittee shall furnish to the Director within 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 regulations.
2. Both minor and major modifications may be made to this permit as stated in IDAPA 58.01.17.700.01 and 02 with respect to any conditions stated in this permit upon review and approval of the DEQ.
3. Whenever a facility expansion, production increase or process modification is anticipated which will result in a change in the character of pollutants to be discharged or which will result in a new or increased discharge that will exceed the conditions of this permit, or if it is determined by the DEQ that the terms or conditions of the permit must be modified in order to adequately protect the public health or environment, a request for either major or minor modifications must be submitted together with the reports as described in Permit Section I - *Standard Reporting Requirements*, and plans and specifications for the proposed changes. No such facility expansion, production increase or process modification shall be made until plans have been reviewed and approved by the DEQ and a new permit or permit modification has been issued.
4. Permits shall be transferable to a new owner or operator provided that the permittee notifies the Director by requesting a minor modification of the permit before the date of transfer.
5. Any person violating any provision of the Waste Water Reuse Permit Regulations, 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.
6. The Director may revoke a permit if the permittee violates any permit condition or the Wastewater Reuse Permit Regulations.
7. 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 request an administrative hearing in writing to the Board of the Department of Environmental Quality pursuant to the Rules of Administrative Procedures contained in IDAPA 58.01.23.
8. If, pursuant to Idaho Code § 67-5247, 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, a revocation hearing before the Board of the Department of Environmental Quality shall be provided. Such hearings shall be conducted in accordance with the Rules of Administrative Procedures contained in IDAPA 58.01.23.
9. 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. The permittee shall notify the DEQ at least six (6) months prior to permanently removing any permitted reuse facility from service, including any treatment, storage, or other facilities or equipment associated with the reuse site. Prior to commencing closure activities, the permittee shall:
  - a. participate in a pre-site closure meeting with the DEQ;
  - b. develop a site closure plan that identifies specific closure, site characterization, or cleanup tasks with scheduled task completion dates in accordance with agreements made at the pre-site closure meeting; and,
  - c. submit the completed site closure plan to the DEQ for review and approval within forty-five (45) days of the pre-site closure meeting. The permittee must complete the DEQ approved site closure plan.

## Appendix 1: Environmental Monitoring Serial Numbers

### Hydraulic Management Units

Serial Number	Description	Acres
MU-005801	Growing season land application area	23.1
MU-005802	Non growing season application area	14.9

### Wastewater Sampling Points

Serial Number	Description
WW-005801	Disinfected effluent to growing season and non growing season land application.

### Soil Monitoring Units

Serial Number	Description	Associated MU
SU-005801	Growing season land application area	MU-005801
SU-005802	Non growing season application area	MU-005802

### Ground Water Monitoring

Serial Number	Description	Location
GW-005801	Well 1: growing season application area	SW corner, down gradient
GW-005802	Well 2: growing season application area	NW corner, upgradient
GW-005803	Well 3	NE corner, upgradient
GW-005804	Well 4	SE corner, down gradient
GW-005805	Well 5: non growing season application area	SE corner, down gradient
GW-005806	Well 6: non growing season application area	E side
GW-005807	Well 7: non growing season application area	NE corner, upgradient

### Lagoons

Serial Number	Description
LG-005801	Lagoon 1: partial mix aerated cell
LG-005802	Lagoon 2: partial mix aerated cell
LG-005803	Lagoon 3: facultative polishing and storage cell

**Appendix 2: Site Maps**



