

IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY

REUSE PERMIT

M-015-05 – Modification 2

Permittee Name: Bottle Bay Recreational Water and Sewer District

Effective Date of this Modification: January 22, 2019

Complete Description of Modification

The purpose of this Permit Modification is to update hydraulic management unit descriptions and areas as well as update and reduce buffer distances to hydraulic management units for Reuse Permit No. M-015-05. Items not changed by this modification are covered in Reuse Permit No. M-015-05 and Reuse Permit No. M-015-05 Modification 1.

1. Section 4.1 Hydraulic Management Unit Descriptions. Page 12 of the Reuse Permit.

Replace the table with the following:

Serial Number	Description	Irrigation System Type and Irrigation Efficiency	Maximum Acres ^a Allowed
MU-01501	North Irrigation Site	Solid Set, Above-Ground, Impact Sprinklers: (Ei = 0.80)	10.19
MU-01502	Expansion Irrigation Site 1	Solid Set, Above-Ground, Impact Sprinklers: (Ei = 0.80)	5.93
MU-01503	Expansion Irrigation Site 2	Solid Set, Above-Ground, Impact Sprinklers: (Ei = 0.80)	4.22
Total acreage			20.34

- 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.

2. Section 4.2 Hydraulic Loading Limits. Page 12 of the Reuse Permit. Replace the table with the following:

Serial Number	Growing Season Hydraulic Loading	Nongrowing Season Maximum Hydraulic Loading, inches ^a
MU-01501	Below or Substantially at the irrigation water requirement (IWR) ^b	Not allowed
MU-01502	Below or Substantially at the irrigation water requirement (IWR) ^b	Not allowed
MU-01503	Below or Substantially at the irrigation water requirement (IWR) ^b	Not allowed

- a. Record daily, as necessary, abnormal conditions as a result of nongrowing season application including ponding, excessive ice buildup, or runoff from the permitted site.
- b. For compliance purposes, the source of P_{def} data used to calculate the IWR shall be specified in the PO.

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

Serial Number	Constituent Loading (from all sources)	
	Nitrogen (lb/acre)	Phosphorus (lb/acre)
MU-01501	150	25
MU-01502	150	25
MU-01503	150	25

4. Section 4.4 Management Unit Buffer Zones. Page 13 of the Reuse Permit. Replace the table with the following:

Serial Number	Buffer Distances (in feet) from Hydraulic Management Units					
	Public Water Supplies	Private Water Supplies	Inhabited Dwellings	Permanent and Intermittent Surface Water	Irrigation Ditches and Canals	Areas Accessible to the Public
MU-01501	1,000	300	300	100	50	50
MU-01502	1,000	500 ^a	300	100	50	50
MU-01503	1,000	500 ^a	300 ^b	100	50	50

- a. 300 feet buffer distance to Potter and Hartnett wells for MU-01502 and MU-01503
- b. 150 feet buffer distance to inhabited dwellings south of MU-01503

5. Section 4.5 Other Permit Limits and Conditions. Page 13 of the Reuse Permit. Replace the table with the following:

Category	Permit Limits and Conditions
Growing season	April 1 through October 31 (214 days)
Nongrowing season	November 1 through March 31 (151 days)
Reporting year for annual loading rates	November 1 through October 31
Operator certification and endorsement	The wastewater treatment facility and reuse system shall be operated by personnel certified and licensed in the State of Idaho wastewater operator training program at the operator class level specified in IDAPA 58.01.16.203 and properly trained to operate and maintain the system.
Disinfection limits in recycled water	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.
Crop or vegetation allowed	Native Forest
Minimum depth to groundwater	Three (3) feet below the ground surface in all piezometers before irrigation can occur in any week (April and June) or month (July, August, September, October)
Grazing	Grazing is not allowed.
Posting	Signs shall read "Caution: 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 are accessible to the public.
Fencing	MU-01501, MU-01502, MU-01503: Three-wire pasture fence or equivalent approved by DEQ
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, ground water monitoring wells, 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.

6. Section 5.1.1 Constituent Monitoring. Page 15 of the Reuse Permit. Replace the table with the following:

Monitoring Point Serial Number and Location	Sample Description	Sample Type and Frequency	Constituents (Units in mg/L Unless Otherwise Specified)
WW-01501 Recycled water from lagoon LG-01501 & LG-01502	Recycled water to MU-01501, MU-01502, MU-01503	Grab/monthly (during periods of use)	- Total Kjeldahl nitrogen, as N - Nitrite + nitrate-nitrogen, as N - Total phosphorus, as P - pH
WW-01501 Recycled water from lagoon LG-01501 & LG-01502	Recycled water to MU-01501, MU-01502, MU-01503	Grab/weekly (during periods of use)	- Total coliform (total coliform organisms/100mL)

7. Section 5.1.2 Management Unit and Other Flow Monitoring. Page 15 of the Reuse Permit. Replace the table with the following:

Management Unit or Flow Measurement Serial Number and Location	Sample Description	Sample Type and Frequency	Measured Parameters, each MU
MU-01501 MU-01502 MU-01503 Effluent flow meter	Recycled water flow from LG-01501 & LG-01502	- Daily meter reading - Monthly compilation of data	- Volume (MG/month) - Application depth (inches/month)

8. Section 5.3.1 Soil Monitoring Unit Descriptions. Page 16 of the Reuse Permit. Replace the table with the following:

Monitoring Point Serial Number	Description	Associated Hydraulic Management
SU-01501	North Irrigation Site	MU-01501
SU-01502	Expansion Irrigation Site 1	MU-01502
SU-01503	Expansion Irrigation Site 2	MU-01503

9. Section 5.3.2 Soil Monitoring, Sampling, and Analyses. Page 17 of the Reuse Permit.

Replace the table with the following:

Monitoring Point Serial Number	Sample Type	Sample Frequency	Constituents (Units in mg/kg Soil Unless Otherwise Specified)
SU-01501 SU-01502 SU-01503	Composite samples ^a	Annually, April (prior to irrigation)	- Electrical conductivity (µmhos/cm in saturated paste extract) - Nitrate-nitrogen - Ammonium nitrogen - Plant available phosphorus

- a. 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 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 for each soil monitoring unit; one composite sample for each depth.

10. Section 6.1.2 Required Contents. Page 19 of the Reuse Permit. Replace the table with the following:

Monitoring Point Serial Number	Parameter (Calculate for each MU)	Units
MU-01501 MU-01502 MU-01503	Recycled water loading rate	Million gallons/month Inches/month
	Irrigation water requirement (IWR) for each crop grown	Inches/month Inches/GS
	Recycled water nitrogen and phosphorus loading rates	Pounds/acre-year
GW-01501 through GW-01508	Monthly water table elevations	Feet below ground surface

Reuse Permit M-015-05
Modification 2: FINAL

Permit Expiration: June 11, 2021

Modification 2 is hereby approved. This modification to the permit is incorporated into, and constitutes a part of, Reuse Permit No. M-015-05. 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,



Daniel Redline, Regional Administrator
Coeur d'Alene Regional Office
Department of Environmental Quality

January 22, 2019
Date