

Idaho Department of Environmental Quality

Reuse Permit

I-210-02: Modification 1

Permittee Name: Raft River Energy I LLC

Effective Date of Modification: November 4, 2015

Complete Description of Modification:

1. Section 4.1 of the reuse permit lists the properties of each permitted management unit. The permitted acreage of the North Pivot, MU-210-01 has been increased to 65 acres.

4.1 Hydraulic Management Unit Descriptions

Serial Number	Description	Type of Recycled Water Allowed	Irrigation System Type and Irrigation Efficiency	Maximum Acres ^a Allowed
MU-210-01	North Pivot	Blowdown Water ^b	Pivot: (Ei = 0.85)	65
MU-210-02	South Pivot	Blowdown Water	Pivot: (Ei = 0.85)	65
MU-210-03	Infiltration Area	Blowdown Water	Infiltration/Flood Irrigation	2
Total acreage				132

- 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.
- b. Blowdown water is a mix of spent cooling water, RO concentrate, and untreated ground water.

2. Section 5.1 of the permit has been modified to accommodate the installation of the automatic composite sampler. There is now only one recycled water constituent monitoring point listed in section 5.1.1, WW-210-01. Section 5.1.2 of the permit no longer requires the flow monitoring of the separate streams contributing to the recycled water sent to the management units. FM-210-04 requires the permittee to monitor the total flow of recycled water to the management units using the flow meter on the blowdown water line. FM-210-05 now requires the flow monitoring of the ground water flow into the production plant used for cooling.

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-210-01 Sample tap on blowdown water line (downstream of the mixture of all contributing streams)	Blowdown water to all management units	24-Hour Composite/ monthly (during periods of use)	- Total Dissolved Solids (TDS) - Chloride - Specific Conductivity - pH - Arsenic - Lead - Total Kjeldahl nitrogen, as N - Nitrite + nitrate-nitrogen, as N - Total phosphorus, as P - Fluoride
IW-210-02 Surface water used for irrigation	Surface water to all management units.	Grab/annually (during periods of use)	- Total Dissolved Solids (TDS) - Specific Conductivity - Total Kjeldahl nitrogen, as N - Nitrite + nitrate-nitrogen, as N
IW-210-03 Ground water	Ground water to all management units.	Grab/annually ^a (during periods of use)	- Total Dissolved Solids (TDS) - Specific Conductivity - Total Kjeldahl nitrogen, as N - Nitrite + nitrate-nitrogen, as N

- a. Samples will not be necessary if the well that supplemental irrigation water is drawn from has been sampled within a half year of its use as a source of supplemental irrigation water.

5.1.2 Management Unit and Other Flow Monitoring

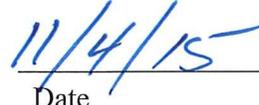
Management Unit or Flow Measurement Serial Number and Location	Sample Description	Sample Type and Frequency	Measured Parameters, each MU or FM
FM-210-01 Flow meter at North Pivot	Flow to MU-210-01	- Daily meter reading - Monthly compilation of data	- Volume (MG/month) - Application depth (inches/month)
FM-210-02 Flow meter at South Pivot	Flow to MU-210-02	- Daily meter reading - Monthly compilation of data	- Volume (MG/month) - Application depth (inches/month)
FM-210-03 Flow meter on piping to Infiltration Basins	Flow to MU-210-03	- Daily meter reading - Monthly compilation of data	- Volume (MG/month) - Application depth (inches/month)
FM-210-04 Flow meter on blowdown water line	Blowdown water flow to all management units	- Daily meter reading - Monthly compilation of data	- Volume (MG/month) - Volume (MG/year)
FM-210-05 Flow meter on ground water inflow line	Inflow of ground water from cooling wells to production plant	- Daily meter reading - Monthly compilation of data	- Volume (MG/month) - Volume (MG/year)
MU-210-01, MU-210-02, and MU-210-03 Supplemental irrigation water pump run times (ground water and/or surface water)	Flow from each supplemental irrigation water source to each management unit.	- Daily pump run times - Monthly compilation of data	- Volume (MG/month) - Application depth (inches/month)

3. The facility and regional maps located in Section 11 of the reuse permit have been updated to reflect the increase in the permitted acreage of the North Pivot, MU-210-01. The updated maps are attached to this modification.

The modifications described above in this Modification 1 are hereby approved. This modification to the permit is incorporated into and constitutes as part of Reuse Permit I-210-02. The modified permit is incomplete and unlawful under IDAPA 58.01.17 Recycled Water Rules without this modification attached.



Signature



Date

David Anderson

Regional Administrator
Twin Falls Regional Office
Idaho Department of Environmental Quality

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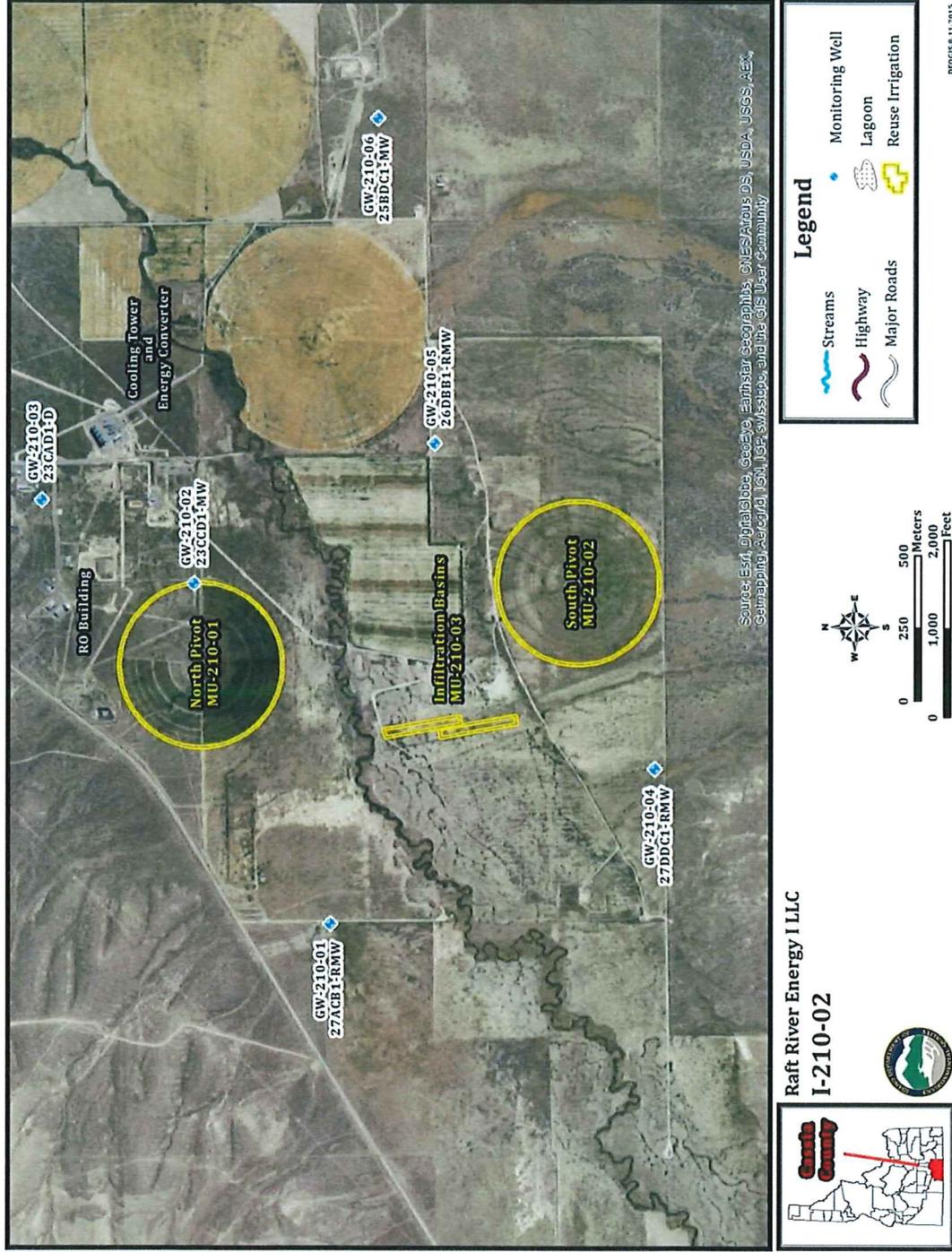


Figure 1: Facility Map

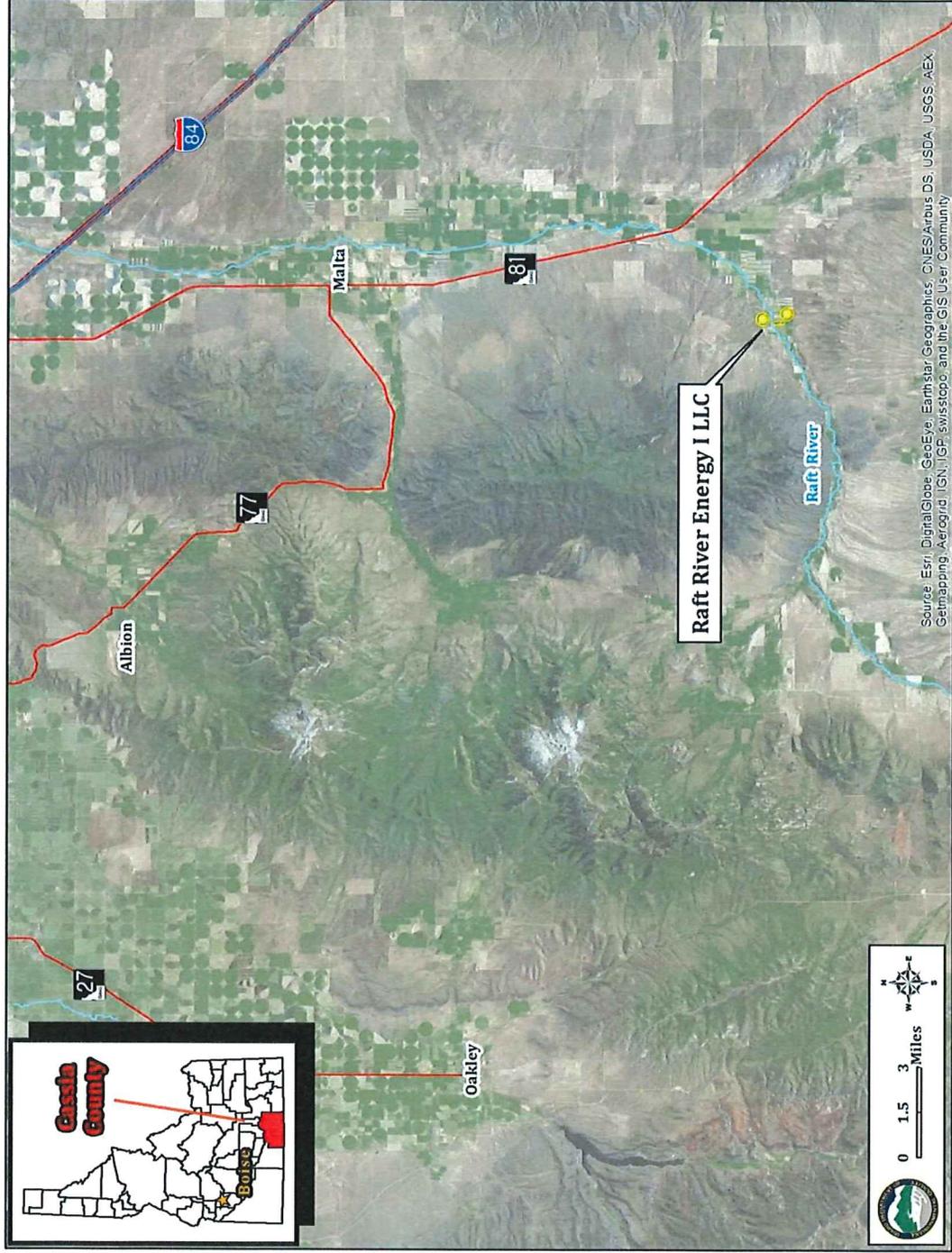


Figure 2: Regional Map