

A. Permit Certificate

**INDUSTRIAL
WASTEWATER REUSE PERMIT
LA-000030-03**

Idaho Pacific Corporation, LOCATED AT 4723 E. 100 N., Ririe, ID 83443 AND IN Jefferson County, Township T4N, Range R40E, Sections 27, 28, 33, and 34 IS HEREBY AUTHORIZED TO CONSTRUCT, INSTALL, AND OPERATE A WASTEWATER REUSE SYSTEM IN ACCORDANCE WITH THE WASTEWATER REUSE RULES (IDAPA 58.01.17) AND 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 **December 18, 2013.**



Erick Neher, Regional Administrator
Idaho Falls Regional Office
Idaho Department of Environmental Quality

Date Issued: 12-18-08

DEPARTMENT OF ENVIRONMENTAL QUALITY

**Idaho Falls Regional Office
900 North Skyline, Suite B
Idaho Falls, Idaho 83402
(208) 528-2650**

POSTING ON SITE RECOMMENDED

B. Permit Contents, Appendices, and Reference Documents

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Appendices

1. Environmental Monitoring Serial Numbers
2. Site Maps

References

1. Well Location Acceptability Analysis (See CA-030-03)
2. Ground Water Assessment Plan (See CA-030-04)
3. Runoff Management Plan (See CA-030-05)
4. Nuisance Odor Management Plan (See CA-030-06)
5. Waste Solids Management Plan (See CA-030-07)
6. Plan of Operation (See CA-030-08)

The Sections, Appendices, and Reference Documents listed on this page are all elements of Wastewater Reuse Permit LA-000030-03 and are enforceable as such. This permit does not relieve Idaho Pacific Corporation, hereafter referred to as the permittee, from responsibility for compliance with other applicable federal, state or local laws, rules, standards or ordinances.

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C. Abbreviations, 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 – Typically April 01 through October 31 (214 days)
GW	Ground Water
GWQR	IDAPA 58.01.11 “Ground Water Quality Rule”
Guidance	Guidance for Reclamation and Reuse of Municipal and Industrial Wastewater
HLRgs	Growing Season Hydraulic Loading Rate. Includes any combination of wastewater and supplemental irrigation water applied to land application hydraulic management units during the growing season. The HLRgs limit is specified in Section F. Permit Limits and Conditions.
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. Permit Limits and Conditions.
HMU	Hydraulic Management Unit (Serial Number designation is MU)
IWR	<p>Irrigation Water Requirement – Any combination of wastewater and supplemental irrigation water applied at rates commensurate to the moisture requirements of the crop:</p> <p style="text-align: center;">$IWR = P_{def} / E_i$ Where:</p> <p style="text-align: center;">P_{def} = Precipitation deficit (crop specific)</p> <p style="text-align: center;">E_i = 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 Reporting Year)
NGS	Non-Growing Season – Typically November 01 through March 31 (151 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
SAR	Sodium Absorption Ratio

C. Abbreviations, Definitions

SI	Supplemental Irrigation water applied to the land application 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 (typically 60 inches or root limiting layer)
SMU	Soil Monitoring Unit (Serial Number designation is SU)
SW	Surface Water
TDS	Total Dissolved Solids or Total Filterable Residue
TMDL	Total Maximum Daily Load – The sum of the individual waste-load allocations (WLA's) for point sources, Load Allocations (LA's) for non-point sources, and natural background. Such load shall be established at a level necessary to implement the applicable water quality standards with seasonal variations and a margin of safety that takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality. IDAPA 58.01.02 <i>Water Quality Standards and Wastewater Treatment Requirements</i>
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
Reporting Year	The reporting year begins with the non-growing season and extends through the growing season of the following year, typically November 01 – October 31. For example, the 2006 Reporting Year would be November 01, 2005 through October 31, 2006.
WW	Wastewater applied to the land application treatment site

D. Facility Information

Legal Name of Permittee	Idaho Pacific Corporation (a subsidiary of Otter Tail Corp.)
Type of Wastewater	Potato Processing Wastewater
Method of Treatment	Land Treatment
Type of Facility	Potato Processor
Facility Location	4723 E. 100 N., P.O. Box 478, Ririe, ID 83443
Legal Location	Township T4N, Range R40E, Sections 27, 28, 33, and 34
County	Jefferson
USGS Quad	Ririe & Heise (2 Quadrangles)
Soils on Site	Dark brown sandy loam (0-10 inches), dark grayish brown sandy loam (10-36 inches in some areas), dark grayish brown loamy sand (27-44 inches in some areas), brown loamy sand (36-60 inches in some areas), multi-colored extremely gravelly sand (22-60 inches in some areas)
Depth to Ground Water	4- 30 feet
Beneficial Uses of Ground Water	Drinking Water, Irrigation Water for Agriculture, Industrial
Nearest Surface Water	Dry Bed and Harrison Canal join to form northern site property boundary and Enterprise Canal runs along the southern edge. The Snake River is located approximately 1.6 miles to north and 1.8 miles to the east of the site.
Beneficial Uses of Surface Water	Agricultural Irrigation, Cold Water Biota, Salmon Spawning, Primary Contact Recreation, and Domestic Water Supply

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D. Facility Information

Responsible Official Mailing Address	Mr. Wally Browning, COO P.O. Box 478 Ririe, Idaho 83443
Phone / Fax Email	TEL: 208-538-6971 FAX: 208-538-5082 wallybrowning@idahopacific.com
Facility Contact Mailing Address	Mr. Ben Summers, Environmental Manager P.O. Box 478 Ririe, Idaho 83443
Phone / Fax Email	TEL: 208-538-6319 FAX: 208-538-5063 safety@idahopacific.com

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-030-01 Three (3) Months after Permit Issuance	A tamper-proof 24-hour composite sampler shall be installed at the wastewater sampling compliance point (WU-003001).
CA-030-02 Plan and Specification Submittal within Six (6) Months after Permit Issuance Complete Installation Six (6) Months after Plan and Specification Approval	Flow meters shall be installed to independently track and record all wastewater and supplemental irrigation flows to each HMU. Engineering Plans and specifications for the installation of the meters shall be reviewed and approved by DEQ prior to construction or installation. The meters shall be of the mechanical or non-volatile memory type which prevent tampering, deleting, or any modification of the recorded total volume. A schematic of the flow network and a theory of operation shall be submitted with the plans and specifications to explain how all flows to each HMU will be measured, tracked, and documented to maintain permit compliance.
CA-030-03 Twelve (12) Months after Permit Issuance	Submit to the Department for review and approval a Well Location Acceptability Analysis (WLAA), as outlined in the <i>Guidance for Municipal and Industrial Wastewater, Section 6.6.3</i> , for all municipal and domestic wells located within a quarter mile radius of the land application site.
CA-030-04 Plan Submittal Twelve (12) Months after Permit Issuance Complete Plan Implementation Twelve (12) Months after Plan Approval	<p>A Ground Water Monitoring Well Network Assessment Plan prepared by a qualified registered geologist or engineer shall be submitted to DEQ. The plan shall include detailed plans for at least two new down-gradient wells to replace at least MW-4 and MW-5, and possibly MW-6 and MW-7 (or detailed justification as to why these wells are unnecessary and how Idaho Pacific proposes to monitor down-gradient ground water without significant canal influence) and the recompletion, or replacement of the remaining existing wells, as necessary, so that all wells, both old and new, yield samples <u>year-round</u>. The Plan should also include the best management practices that the facility intends to employ to prevent water from ponding around or within 25 feet of the wellheads. The plan shall include an implementation schedule for construction of the new down-gradient wells, the improvements and/or reconstruction of the existing wells, and other improvements which the assessment may deem necessary.</p> <p>Upon Plan approval by DEQ, Idaho Pacific shall complete the construction and implementation of the Plan within twelve (12) months after approval of the Plan, or upon an alternate, reasonable, deadline proposed by Idaho Pacific within the Plan and specifically approved by DEQ in writing.</p>

E. Compliance Schedule for Required Activities

Compliance Activity Number Completion Date	Compliance Activity Description
CA-030-05 Eighteen (18) Months after Permit Issuance	Idaho Pacific shall prepare and submit to DEQ for approval a Runoff Management Plan with control structures and other BMPs (e.g. collection basins, berms, etc.) designed to prevent runoff from any site or fields used for wastewater reuse to property not owned by Idaho Pacific except in the event of a 25 year, 24-hour storm event or greater, using Western Regional Climate Center (WRCC) Precipitation Frequency Map, Figure 28, 'Isopluvials of 25-YR, 24-HR Precipitation'. For this site, the 25-year, 24-hour event is 2.2 inches. Upon approval of the plan by DEQ, Idaho Pacific shall implement the runoff management plan, and shall construct, operate, and maintain the control structures and other BMPs in accordance with the approved plan.
CA-030-06 Twelve (12) Months after Permit Issuance	A revised Nuisance Odor Management Plan shall be submitted to DEQ for review and approval. The Odor Management Plan shall include wastewater treatment systems, reuse facilities, and other operations associated with the facility. The plan shall include specific design considerations, operation and maintenance procedures, and management practices to be employed to minimize the potential for or limit odors. The plan shall also include procedures to respond to an odor incident if one should occur, including notification procedures.
CA-030-07 Eighteen (18) Months after Permit Issuance	A revised Waste Solids Management Plan shall be submitted to DEQ for review and approval. At a minimum the revised plan must address all solids generated through the wastewater treatment process including: waste (tare) potatoes, Imhoff tanks, clarifier solids, filter drum, hydrosieve, and any other equipment that generates waste sludge or other solids.
CA-030-08 Twelve (12) Months after Permit Issuance	A Plan of Operation (Operation and Maintenance Manual or O&M Manual) for the wastewater reuse facilities, incorporating the requirements of this permit, shall be submitted to DEQ for review and approval. The O&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 ensure proper operation of the wastewater treatment facility. The Plan of Operation shall contain at a minimum all applicable information required by the latest revision of the Plan of Operation Checklist in the Reuse Program Guidance. The Plan of Operation shall also include a Quality Assurance/Quality Control (QA/QC) plan for the monitoring required in this permit. The plan shall cover field activities, including cropping and harvesting plans and agreements with any contracting farmer(s); laboratory analytical methods, required detection limits and other activities; data verification and validation; data storage, retrieval and assessment; and monitoring program evaluation and improvement.

F. Permit Limits and Conditions

Category	Permit Limits and Conditions																								
Type of Wastewater	Potato Processing Wastewater																								
Application Site Area	All Hydraulic Management Unit Designations listed as Active in Appendix 1.																								
Application Season	Year round.																								
Growing Season (GS)	April 1 through October 31 (214 days).																								
Non-growing Season (NGS)	November 1 through March 31 (151 days).																								
Reporting Year for Annual Loading Rates	November 1 through October 31.																								
Growing Season Hydraulic Loading Rate, each HMU (Applies to wastewater and supplemental irrigation water)	<p>Growing Season (GS) Hydraulic Loading Rate shall substantially follow the Irrigation Water Requirement (IWR) for the crops grown throughout the growing season (See Section E definitions).</p> <p>IWR shall be determined based upon the Precipitation Deficit (Pdef) data from the Rexburg AgriMet Station (RXGI), available at http://www.kimberly.uidaho.edu/ETIdaho and an Irrigation Efficiency of 80%.</p>																								
Non-Growing Season Maximum Hydraulic Loading Rate, each HMU	<p><u>NGS Maximum Hydraulic Loading Rates per HMU</u></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">HMU</th> <th style="text-align: center;">Acres</th> <th style="text-align: center;">(in/ac) per NGS</th> <th style="text-align: center;">(MG) per NGS</th> </tr> </thead> <tbody> <tr> <td>MU #1 (MU-003021)</td> <td style="text-align: center;">22.8</td> <td style="text-align: center;">4.0</td> <td style="text-align: center;">2.48</td> </tr> <tr> <td>MU #2 (MU-003022)</td> <td style="text-align: center;">107.1</td> <td style="text-align: center;">7.0</td> <td style="text-align: center;">20.36</td> </tr> <tr> <td>MU #3 (MU-003023)</td> <td style="text-align: center;">131.6</td> <td style="text-align: center;">6.5</td> <td style="text-align: center;">23.23</td> </tr> <tr> <td>MU #4 (MU-003024)</td> <td style="text-align: center;">57.4</td> <td style="text-align: center;">8.4</td> <td style="text-align: center;">13.09</td> </tr> <tr> <td>Total (Acres):</td> <td style="text-align: center;">318.9</td> <td style="text-align: center;">Total (MG):</td> <td style="text-align: center;">59.16</td> </tr> </tbody> </table>	HMU	Acres	(in/ac) per NGS	(MG) per NGS	MU #1 (MU-003021)	22.8	4.0	2.48	MU #2 (MU-003022)	107.1	7.0	20.36	MU #3 (MU-003023)	131.6	6.5	23.23	MU #4 (MU-003024)	57.4	8.4	13.09	Total (Acres):	318.9	Total (MG):	59.16
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Total (Acres):	318.9	Total (MG):	59.16																						
Maximum Non-Volatile Dissolved Solids (NVDS) Loading Rate Limit, pounds/acre-year, each HMU	4,500 lb/ac-yr.																								
Livestock Grazing	Grazing not allowed.																								
Ground Water Quality	Ground water quality shall be in compliance with the Ground Water Quality Rule (GWQR), IDAPA 58.01.11.																								
Maximum COD Loading, seasonal average in Pounds/acre-day, each HMU	<p>50 pounds / acre-day seasonal average for growing season.</p> <p>50 pounds / acre-day seasonal average for the non-growing season.</p>																								

F. Permit Limits and Conditions

Category	Permit Limits and Conditions
Maximum Nitrogen Loading Rate, pounds/acre-year, each HMU (from all sources including waste solids and supplemental fertilizers)	150% of typical crop uptake (see Section C definitions).
Maximum Phosphorus Loading Rate, pounds/acre-year (from all sources including waste solids and supplemental fertilizers)	No limit at this time. DEQ reserves the right to re-open this permit for inclusion of phosphorous limits.
Construction Plans	Prior to construction or modification of all wastewater facilities associated with the land application system or expansion, detailed plans and specifications shall be submitted for review and approved by DEQ. Within 30 days of completion of construction, the permittee shall submit as-built plans for DEQ review and approval.
Buffer Zones	<p>All buffer zones must comply with, at a minimum, local zoning ordinances. Other minimum buffer zones are as follows:</p> <ul style="list-style-type: none"> • 300 ft from reuse site and inhabited dwellings¹ • 50 ft from reuse site and areas accessible by the public • 100 ft from reuse site and permanent and intermittent surface water • 50 feet from reuse site and irrigation ditches and canals • 500 feet from reuse site and private water supply wells¹ • 1000 feet from reuse site and public water supply wells • Berms and other BMPs shall be used to protect the well head of on-site wells. <p>Any mitigation measures to reduce buffer zone distances shall be submitted to and approved by DEQ prior to use.</p> <p>1) Following the submission and approval of an acceptable Well Location Acceptability Analysis as required by CA-030-03, buffer zones for the on-site farmhouse and accompanying well can be reduced to 200 ft and 300 ft, respectively, when the dwelling is unoccupied. When occupied buffer zones revert to standard distances.</p>
Supplemental Irrigation Water Protection	For systems with wastewater and fresh irrigation water interconnections, DEQ-approved backflow prevention devices are required.

F. Permit Limits and Conditions

Category	Permit Limits and Conditions
Odor Management	The land application 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 the most recent DEQ approved Odor Management Plan (See CA-030-06). In the event that nuisance odors, verified by DEQ, occur, the Plan shall be revised as necessary, and implemented by the permittee, to eliminate or minimize the reoccurrence of nuisance odors.
Fencing and Posting	None Required.
Runoff Control	Runoff shall be managed in accordance with the most recent DEQ-approved Runoff Management Plan as required by Section E, CA-030-05 of this permit.
Allowable Crops	Crops grown for direct human consumption (those crops that are not processed prior to consumption) are not allowed.

G. Monitoring Requirements

The Permittee is allowed to apply wastewater and treat it on a land application site as prescribed in the table below and in accordance with all other applicable permit conditions and schedules.

- 1) Appropriate analytical methods, as given in the *Idaho 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 facility's Plan of Operation as required by Compliance Activity CA-030-08.
- 2) The permittee shall monitor and measure parameters 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. Wastewater samples shall be 24-hr composite samples collected using a tamper-proof composite sampler installed in accordance with CA-030-01. Manual 24-hr compositing is only allowed until the sampler is installed.
- 4) Unless otherwise agreed to in writing by DEQ, data collected and submitted shall include, but not be limited to, the parameters and frequencies in the Facility Monitoring Table on the following pages. Wastewater monitoring is required at the frequency show in the table below if wastewater is applied anytime during the time period shown.
- 5) Ten (10) soil sample locations shall be selected for each Soil Monitoring Unit (SMU) with greater than fifteen acres and Five (5) soil sample locations shall be selected for each SMU with fifteen acres or less. 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, or refusal. The soil samples collected at each depth shall be composited to yield three (3) samples for analysis from each SMU.
- 6) 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 measured 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 of ground water.
- 7) Surface water sampling guidance: DEQ to review and approve methods, timing and locations for sampling prior to initial sampling event.
- 8) Annual reporting of monitoring requirements is described in Section H, Standard Reporting Requirements.
- 9) Monitoring locations are defined in Appendix 1, "Environmental Monitoring Serial Numbers".

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G. Monitoring Requirements

Facility Monitoring Table

Frequency	Monitoring Point	Description/Type of Monitoring	Parameters
Daily	Flow meter(s)	Flow of wastewater to each HMU	Volume (million gallons and acre-inches) to each hydraulic management unit (HMU), record daily, compile monthly
Monthly	Effluent to land application	Wastewater quality into land application system – 24-hr. Composite	Chemical Oxygen Demand, Total Kjeldahl Nitrogen, Ammonia-Nitrogen, Nitrite + Nitrate-Nitrogen, Total Phosphorus, Chloride, Electrical Conductivity, Potassium, pH, Total Dissolved Solids (TDS), Volatile Dissolved Solids (VDS)
Daily	Flow meter(s)	Supplemental Irrigation Water	Volume (million gallons and acre-inches) to each HMU, record daily, compile monthly
May and Oct of first permit year	Supplemental Irrigation at diversions and/or production wells	Grab sample – See Note 7	Nitrate + Nitrite Nitrogen, Total Phosphorus, Total Dissolved Solids (TDS), Volatile Dissolved Solids (VDS), Chloride, Total Kjeldahl Nitrogen
April, July, and October of each year	Ground Water monitoring wells listed in Appendix 1	Ground Water- See Note 6	Water Table Depth, Water Table Elevation, pH, Conductivity, Temperature, Nitrate-Nitrogen, Ortho Phosphorus, Total Dissolved Solids (TDS), Total Iron, Total Manganese, Chloride, Dissolved Iron, Dissolved Manganese. Submit Ground Water Contour Maps for each sample event with the Annual Report.
Annually (April)	SMUs listed in Appendix 1	Soil - See note 5	Electrical Conductivity, Nitrate-Nitrogen, Ammonium Nitrogen, Plant Available Phosphorus, pH, % organic matter, potassium, and SAR. Note: Conduct DTPA Fe and Mn analyses in first and last years of the permit only.

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G. Monitoring Requirements

Frequency	Monitoring Point	Description/Type of Monitoring	Parameters
Annually	HMUs listed in Appendix 1	Calculate both GS and NGS wastewater loading rate	Million gallons/HMU & Inches/acre for each HMU
		Calculate Season-Specific Irrigation Water Requirement for comparison with GS hydraulic loading.	Inches/acre-month for each crop type
		Calculate seasonal average COD loading rate for both GS and NGS	Pounds/acre-day
		Calculate wastewater nitrogen, phosphorus, and NVDS loading rates	Pounds/acre-year
		Report nitrogen and phosphorus fertilizer application rates	Type and Pounds/acre-year
		Calculate nitrate-nitrogen, phosphorus, and NVDS loading rates from supplemental irrigation application.	Pounds/acre-year
		Calculate nitrogen and phosphorus application rates from waste solids	Pounds/acre-year
Annually	HMUs listed in Appendix 1	Calculate nitrogen and phosphorus application rates from waste solids	Pounds/acre-year
Each Harvest or Cutting	HMUs listed in Appendix 1	Crop type and yield, each crop, each harvest, on each HMU	<p>Pounds/acre and total pounds per HMU (both wet and dry basis)</p> <p>Maintain and submit documentation of each cutting and harvest with each annual report including truck weight receipts, bale counts, bushels, certified statements from contract harvesters, etc.</p>

G. Monitoring Requirements

Frequency	Monitoring Point	Description/Type of Monitoring	Parameters
Each Harvest or Cutting	HMUs listed in Appendix 1	Plant tissue analysis: Composite sample of harvested portion for each crop, each harvest, on each HMU	Nitrate-nitrogen, Total Kjeldahl Nitrogen, Total Phosphorus, ash (dry basis)
		Calculate crop nitrogen, phosphorus, and ash removal for each crop, each harvest, on each HMU	Pounds/acre and total pounds per HMU (dry basis). Compile each harvest and annual totals.
First Year of Permit and after replace or modification of meter & associated piping	All flow measurement locations	Flow measurement calibration of all flows to land application.	Document and submit to DEQ in the Annual Report the flow measurement calibration of all flow meters and pumps used directly or indirectly measure all wastewater, tail water, flushing water, and supplemental irrigation water flows applied to each HMU.
Annually	All supplemental irrigation pumps directly connected to the wastewater distribution system.	Backflow testing	Document and submit to DEQ in the Annual Report the testing of all backflow prevention devices for all supplemental irrigation pumps directly connected to the wastewater distribution system(s). If any test failed, report the date of repair or replacement of backflow prevention device, and if the repaired/replaced device was re-tested and confirmed to be operating correctly.
April of first and last years of permit	Groundwater Monitoring Wells listed in Appendix 1.	Grab sample (See Note 6).	Sodium, Potassium, Calcium, Magnesium, carbonate, bicarbonate sulfate.

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 March 1st of each year, which shall cover the previous reporting year. The Annual Report shall include an interpretive discussion of monitoring data (ground water, soils, 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 Engineering Manager in the applicable Regional DEQ Office.

Greg Eager, P.E.
Idaho Falls Regional Office
900 N. Skyline, Suite B
Idaho Falls, ID 83402

A copy of the annual report shall also be mailed to:

Richard Huddleston, P.E.
Wastewater Program Manager
1410 N. Hilton
Boise, ID 83706
208-373-0561

- 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.

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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 Plan of Operations (Operations and Maintenance Manual) which describes in detail the operation, maintenance, and management of the wastewater treatment system. This Plan of Operations shall be updated as necessary to reflect current operations.
2. Wastewater(s) 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 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.
 - 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 in the permit by the Director (see below)

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I. Standard Permit Conditions: Procedures and Reporting

DEQ Regional Office: see Permit Certificate Page
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.

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J. Standard Permit Conditions: Modifications, Violation, and Revocation

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 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 Wastewater 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 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 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.

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Appendix 2

HYDRAULIC MANAGEMENT UNITS

HMU	New Common Name	Comments	Acres
MU-003021	MU #1	Northwest of Plant. Contains portions of old IPC Unit 2	22.8
MU-003022	MU #2	West Pivot and associated corners on west side north-south mainline. Contains portions of old IPC Units 3 and 4	107.1
MU-003023	MU #3	East Pivot and associated corners on east side of north-south mainline. Contains portions of old IPC Units 5 and 6	131.6
MU-003024	MU #4	4 North Pivot, 4 South Pivot, and associated corners. Previously referred to as Old IPC Unit 8	57.4
		Total:	318.9

Notes:

- 1) New naming conventions are due to reorganization of field units based on common irrigation and management.
- 2) New Common Names are field names provided by Idaho Pacific in Reuse Permit Application Materials.
- 3) Acreage values in this table are from Drawing No: 2621018, CES dated 2/1/2008 and are the acreage values used in this permit for compliance and enforcement purposes.
- 4) Permit compliance will be determined based on actual acreage used, if it is less than shown in HMU table.

WASTEWATER SAMPLING POINTS

Serial Number	Description
WW-003001	24 hour wastewater composite sample at clarifier effluent wet well prior to irrigation

Appendix 2

SOIL MONITORING UNITS

SMU	New Common Name	Comments	Corresponding HMU
SU-003021	MU #1	Contains portions of old IPC Unit 2	MU-003021
SU-003022	MU #2	West Pivot and associated corners on west side north-south mainline. Contains portions of old IPC Units 3 and 4	MU-003022
SU-003023	MU #3	East Pivot and associated corners on east side of north-south mainline. Contains portions of old IPC Units 5 and 6	MU-003023
SU-003024	MU #4	4 North Pivot, 4 South Pivot, and associated corners. Previously referred to as Old IPC Unit 8	MU-003024

GROUND WATER MONITORING

Serial Number	Description (private, irrigation, dedicated monitoring)	Activity Status
GW-003001	MW-1 (up-gradient)	Active
GW-003002	MW-2	Active
GW-003003	MW-3	Active
GW-003004	MW-4	Active
GW-003005	MW-5	Active
GW-003006	MW-6	Active
GW-003007	MW-7	Active

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Appendix 2

Site Maps

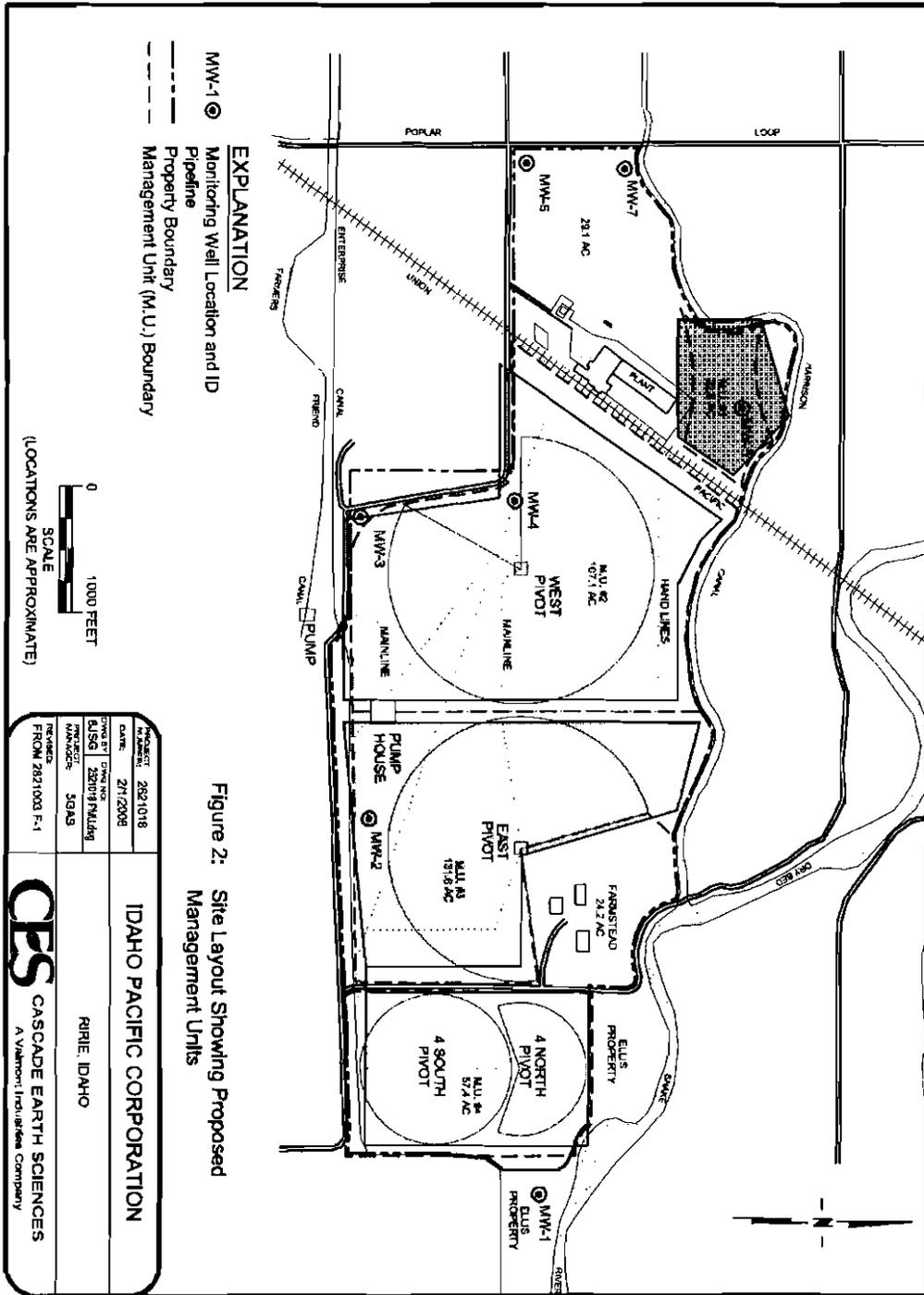


Figure 2: Site Layout Showing Proposed Management Units

Figure 1. Idaho Pacific Site Layout and Monitoring Well Locations.

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