

Expiration Date:
Permit Number:
File Number: 107672
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WATER POLLUTION CONTROL FACILITIES PERMIT

Department of Environmental Quality
Eastern Region
700 S.E. Emigrant Avenue, Suite #330, Pendleton, OR 97801
Telephone: (541) 276-4063

Issued pursuant to ORS 468B.050

FACILITY:

Hermiston Generating Company, LP
78415 Westland Road
Hermiston, OR 97838

PacifiCorp
825 NE Multnomah, Suite 2000
Portland, OR 97232-2155

PLANT TYPE AND LOCATION:

Gas-Powered Electricity Generation Plant
Hermiston, OR

Land-application site:
Madison Farms
7 miles south of Hermiston Generating
Hermiston, OR

SOURCES COVERED BY THIS PERMIT:

<u>Type of Waste</u>	<u>Method of Disposal</u>
Industrial Wastewater	Land Application

RIVER BASIN INFORMATION:

Basin: Umatilla
Sub-Basin: Umatilla
Hydro Code: 27B-UMAT-13 N
County: Umatilla

Nearest surface stream which would receive waste if it were to discharge: Umatilla River
Applicable Standards: OAR 340-040, OAR 340-041-0642 to -0655

Issued in response to Application No. 996455 received 2-25-93.

This permit is issued based on the land use findings in the Final Order in the Matter of the Thermal Power Plant Site Certificate for the Hermiston Generating Project, Request for Amendment #5.

Barbara D. Sellars, Water Quality Manager
Eastern Region

Date

PERMITTED ACTIVITIES

Until this permit expires or is modified or revoked, the Permittee is authorized to construct, install, modify, or operate a wastewater collection, treatment, control and disposal system in conformance with all the requirements, limitations, and conditions set forth in the attached schedules as follows:

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Unless specifically authorized by this permit, by another NPDES or WPCF permit, or by Oregon Administrative Rule, any other direct or indirect discharge to waters of the state is prohibited, including discharge to an underground injection control system.

SCHEDULE A

Waste Disposal Limitations

1. The Permittee is authorized by this permit to land apply the following water from the sources indicated. The water is to be applied to crops and on acreage approved by the Department and in accordance with the conditions of this permit. Without prior approval from the Department, no additional sources of water shall be added to the land application program.
 - a. Co-gen Wastewater: shall only include cooling tower blowdown and clarifier drawdown water; and
 - b. Supplemental Fresh Water: shall only include Columbia River Water and incidental precipitation.
2. There shall be no direct discharge to Waters of the State.
3. All wastewater and supplemental fresh water shall be managed in a manner that will prevent:
 - a. A violation of the Department's Groundwater Quality Protection Rules (OAR 340-040); and
 - b. A violation of any permit-specific groundwater concentration limits, established pursuant to OAR 340-040-0030, which have been subsequently incorporated into the permit.
4. Without prior written approval from the Department, TDS loading from Co-Gen wastewater shall not exceed 1200 lbs/acre/year to any single circle.
5. Co-Gen wastewater shall only be applied to the crops identified in the approved OM&M Plan, and any amendments to the plan approved in writing by the Department.
6. The combined Co-Gen wastewater and supplemental fresh water shall not exceed the crop-specific irrigation needs and allowable leaching rates specified in the approved OM&M Plan. For additional crops other than those approved in Condition #5 above, crop irrigation needs and leaching requirements shall be specified in writing by the Department. Leaching below the root zone in excess of the maximum allowed, which is prescribed above, is prohibited. However, no wastewater shall be land applied until the OM&M Plan is approved in writing by the Department.
7. Total nitrogen from wastewater, supplemental fresh water, commercial fertilizer, residual soil nitrogen, and other nitrogen sources shall not exceed the agronomic rate for the specific crop grown. Agronomic rates shall be specified in the OM&M Plan and shall be determined based on Oregon State University Fertilizer Guides or other scientific literature that has been approved in writing by the Department.
8. Co-gen wastewater shall only be applied to the following acreage, unless otherwise approved in writing by the Department:

The pivot circles are located on Madison Farms at the latitude and longitude, and section, township and range shown below (They are shown in Figure 1, Site Certificate Amendment #5 Technical Standards Report, Hermiston Generating, LP, Hermiston, Oregon):

Circle 43 - 45°42'58" north, 119°24'28" west (S26 T3N R28E)
Circle 44 - 45°42'35" north, 119°24'28" west (S26 T3N R28E)
Circle 45 - 45°42'04" north, 119°24'25" west (S35 T3N R28E)
Circle 46 - 45°42'08" north, 119°25'04" west (S34 T3N R28E)
Circle 47 - 45°41'36" north, 119°25'24" west (S34 T3N R28E)
Circle 48 - 45°41'36" north, 119°25'43" west (S34 T3N R28E)

9. Only Columbia River water and incidental precipitation shall be used as supplemental fresh water on the acreage used for land application of Co-gen wastewater. No groundwater shall be used for irrigation on the circles receiving Co-gen wastewater. Unless otherwise approved, Columbia River water shall be taken from the west end of the Columbia Improvement District Canal on the Madison Farms property in Section 7, T3N, R27E.
10. Combined annual Co-Gen wastewater and supplemental Columbia River Water shall be applied in a ratio that will not exceed a combined concentration of 450 mg/l TDS.
11. Prior to initiating land application of wastewater, the permittee must submit an OM&M Plan to the Department and receive written approval (Schedule C, Condition 1a). Upon the Department's written approval of an OM&M Plan, all activities pertaining to the management, treatment, and disposal of the authorized wastes shall be conducted in accordance with the approved OM&M Plan, and any amendments to the plan approved in writing by the Department. No changes may be made in the approved OM&M Plan without written approval from the Department.
12. Land application of the authorized wastes shall:
 - a. Be conducted in a manner that prevents discharge of wastewater or contaminated drainage to waters of the state;
 - b. Be distributed as evenly as practicable within each land application unit;
 - c. Only be conducted on lands where a crop will be grown in accordance with the conditions of this permit;
 - d. Not occur during freezing and thawing cycles, nor during or after a precipitation event, nor any other conditions that may cause ponding and/or runoff from the site;
13. Based on monitoring data, additional information, changed standards, changed conditions or any other reason pursuant to applicable rules or statutes, the Department may reopen this permit to include new and/or revised waste disposal limitations and/or groundwater concentration limits.

SCHEDULE B

Minimum Monitoring and Reporting Requirements (unless otherwise approved in writing by the Department). These Minimum Monitoring and Reporting Requirements become effective upon initiation of land application.

1. Monitoring Requirements

a) Facility Monitoring

The Permittee shall monitor the operation and efficiency of the Co-gen wastewater treatment and land application facilities. Following Department approval, facility monitoring shall be in accordance with the approved OM&M Plan (See Schedule C) and any amendments to the plan approved in writing by the Department. Minimum monitoring shall include the following items or parameters:

Item	Monitoring Frequency	Monitoring Point	Type of Monitoring	Parameter
Inspect land application areas, equipment and pipeline.	Daily when operating, weekly when not	All fields ^{1/} , pipelines, pumping stations	Record Log	Damaged Equipment, leaks, overflows, field conditions, etc.
Co-gen Waste Water A. Quantity	Daily	Flow Meter at Hermiston Generating Plant	Meter Reading	Flow (gallons) to Madison Farms
B. Quality	Weekly	Sample Port at Hermiston Generating Plant	Grab Sample	pH, EC, TKN, NH ₄ -N, NO ₃ -N, COD, TSS, TDS, VDS
	Monthly	Sample Port at Hermiston Generating Plant	Grab Sample	Na, Mg, Ca, Cl, SO ₄ -S, K, P, CO ₃ , HCO ₃
Columbia River Water A. Quantity	Daily	Flow Meter At Booster Station #1	Meter Reading	Flow (gallons) to Application Site
B. Quality	May, July, September	Irrigation Canal ^{2/}	Grab Sample	pH, EC, TKN, NH ₄ -N, NO ₃ -N, COD, TSS, TDS, VDS
	July	Irrigation Canal ^{2/}	Grab Sample	Na, Mg, Ca, Cl, SO ₄ -S, K, P, CO ₃ , HCO ₃
Irrigation Volume	Weekly	Flow Meter at each Pivot ^{1/}	Meter Reading	Flow (gallons) to individual pivot

Crop Uptake, Yield	Each Cutting/Harvest	All Fields ^{1/}	Composite Sample by Field	Removed: Tons, Total N, Total salts; Dates Harvested; Forage/Crop Analysis: Moisture, Total N, protein, and ash.
Soil	March/April and October/ November (May petition for sample frequency reduction after two years)	All Fields ^{1/}	Composite Sample by Field by soil horizon 0 - 1', 1 - 2', 2 - 3', 3 - 4', and 4' - 5'	pH, EC _e , Soluble Salts, O.M., TKN, NO ₃ -N, NH ₄ -N, available P, Extractable Salts (Na, Ca, Mg, K, SO ₄ -S, Cl)
	March/April and October/ November (May petition for sample frequency reduction after two years)	All Fields ^{1/}	Composite Sample by Field by soil horizon 0 - 1', and 1 - 2'	Exchangable Sodium Percentage
Soil Moisture	Weekly during irrigation activities	All Fields ^{1/} - soil moisture stations	Soil moisture reading	Soil moisture (as approved in OM&M Plan)

^{1/} All fields includes Circles 43-48 on Madison Farms as defined in Item #6, Schedule A.

^{2/} Columbia Improvement District Canal Intake, as described in Item #9, Schedule A.

b. Groundwater Monitoring

If groundwater monitoring wells are installed, pursuant to Schedule C, and until a Groundwater Monitoring Plan is approved, groundwater monitoring shall include the following parameters:

Item or Parameter	Minimum Frequency	Type of Sample
pH	Quarterly	Field Measurement
Nitrate – N	Quarterly	Grab
TKN	Quarterly	Grab
Specific Electrical Conductance	Quarterly	Field Measurement
Sodium	Quarterly	Grab
TDS	Quarterly	Grab

Following approval, groundwater monitoring shall be in accordance with the approved Groundwater Monitoring Plan (See Schedule C). At a minimum, groundwater monitoring shall be quarterly (4x/year) at equal intervals.

2. **Annual Reporting Requirements**

- a. On or before June 15 of each calendar year, the Permittee shall submit an annual facility monitoring report to the Department that summarizes operations for the preceding year. Following approval, annual reporting and data analyses shall be in accordance with the

approved OM&M Plan and Groundwater Monitoring Plan (if required pursuant to Schedule C, Condition 3), and any amendments to the plans approved in writing by the Department.

- b. On or before February 1 of each calendar year, the Permittee shall submit an annual update of the approved OM&M Plan for Department approval. At a minimum the updates will include the proposed application areas, crops to be grown the following year, proposed monthly supplemental and wastewater irrigation rates, and other proposed changes to the OM&M Plan.

3. **Quarterly Reporting Requirements**

If a Groundwater Monitoring Program is required, pursuant to Schedule C, Condition 3, then the Permittee shall submit quarterly groundwater monitoring reports to the Department. Following approval, the reports shall be in accordance with the approved Groundwater Monitoring Plan, and any amendments to the plan approved in writing by the Department. The reports shall be submitted by the 15th day of the month following the close of the calendar quarter.

4. **Groundwater Action Requirements**

If a Groundwater Monitoring Program is required, pursuant to Schedule C, Condition 3, then the following action requirements shall apply:

- a. If monitoring indicates that a concentration limit has been exceeded at a compliance point, the Permittee shall notify the Department within 10 days and shall immediately resample the monitoring well. The results of both sampling events shall be reported to the Department within 10 days of receipt of the laboratory data.
 - b. If monitoring indicates a significant increase (increase or decrease for pH) in the value of a parameter monitored, the Permittee shall immediately resample unless otherwise approved in writing by the Department. If the resampling confirms a change in water quality, the Permittee shall:
 - (1) Report the results to the Department within 10 days of receipt of the laboratory data; and
 - (2) Prepare and submit to the Department within 30 days a plan for developing a preliminary assessment unless another time schedule is approved by the Department.
5. Based on monitoring data, additional information, changed standards, changed conditions or any other reason pursuant to applicable rules or statutes, the Department may reopen this permit to include new and/or revised monitoring and/or reporting requirements.

SCHEDULE C

Compliance Conditions and Schedules

1. **Operations, Monitoring and Management Plan**

- a. Not less than 45 days prior to initiation of land application, the Permittee shall submit to the Department for review and approval, a wastewater disposal facility Operations, Monitoring and Management (OM&M) Plan. The OM&M Plan shall specify the allowed crops, maximum allowed irrigation, maximum allowed leaching, and nutrient needs. Upon Department approval, the OM&M Plan shall be implemented. However, no wastewater shall be land applied until the OM&M Plan is approved in writing by the Department.
- b. The OM&M Plan shall be revised as necessary to ensure compliance with the conditions of this permit. Revisions to the OM&M Plan shall be implemented upon Department approval.

2. **Hydrogeologic Characterization Report**

If facility monitoring indicates that hydraulic, nitrate, or TDS loadings exceed the prescribed levels, or if other information indicates that the facility has the potential to impact groundwater, then the Department may require a Hydrogeologic Characterization of the site.

Not less than six months after notification that a hydrogeologic characterization is required, the Permittee shall submit a Hydrogeologic Characterization Report¹ to the Department for review and approval. A work plan may be submitted for approval prior to developing the report.

3. **Groundwater Monitoring Plan**

If after review of the Hydrogeologic Characterization, required pursuant to Condition 2 above, the Department determines that the facility has a potential to impact groundwater, then the Department will require the facility to implement the following Groundwater Monitoring Program:

- a. Not later than 45 days following Department approval of the Hydrogeologic Characterization Report, the Permittee shall submit a Groundwater Monitoring Plan¹ to the Department for review and approval. Upon Department approval, the Groundwater Monitoring Plan shall be implemented.
- b. In conjunction with submittal of the Groundwater Monitoring Plan, the Permittee shall propose for Department approval a submittal date for a Water Quality Analysis Report. The proposed date for report submittal must be the earliest practicable date after completion of nine (9) quarters of groundwater monitoring (to enable the Permittee to establish background groundwater conditions).

4. **Groundwater Concentration Limits or Concentration Limit Variance**

If the Department requires a Groundwater Monitoring Program, pursuant to Condition 3 above, then the permittee shall submit to the Department for review and approval a Water Quality Analysis Report not later than the date approved by the Department under Schedule C, Condition 3.b. for submittal of the report. The report shall include, but not be limited to: a determination of background groundwater quality, an analysis of existing water quality data and existing impacts, and an analysis of potential impacts from facility activities.

Concurrent with submittal of the Water Quality Analysis Report, the Permittee shall:

- a. Propose site-specific concentration limits pursuant to OAR 340-040-0030(3) for the Department's consideration; and/or
 - b. Apply for a concentration limit variance pursuant to OAR 340-040-0030(4).
5. The Permittee is required to meet the compliance dates that have been established in this schedule. Either prior to or not later than 14 days following any lapsed compliance date, the Permittee shall submit to the Department a notice of noncompliance with the established schedule. Any reports of noncompliance shall include the cause of noncompliance.
6. Based on monitoring data, additional information, changed standards, changed conditions or any other reason pursuant to applicable rules or statutes, the Department may reopen this permit to include new and/or revised compliance conditions or schedules.

SCHEDULE D

Special Conditions

1. **Monitoring Well Management/Maintenance**
 - a. The Permittee shall protect and maintain each groundwater monitoring well so that samples can be collected that are representative of actual conditions.
 - b. All monitoring well abandonment, replacement and installation must be conducted to comply with the Water Resources Department Rules (OAR Chapter 690, Division 240) and with the Department's Guidelines for Groundwater Monitoring Well Drilling, Construction, and Decommissioning. All monitoring well repairs, abandonments, replacements and installations must be documented in a report prepared by an Oregon registered geologist.
 - c. If a monitoring well becomes damaged or inoperable, the Permittee shall notify the Department in writing within 14 days. The written report shall describe what problem has occurred, the remedial measures that have been taken to correct the problem, and the measures taken to prevent its recurrence. The Department can require the replacement of inoperable monitoring wells.
 - d. All new and replacement monitoring well locations and designs must be approved in writing by the Department prior to well installation. Well logs and well completion reports shall be submitted to the Department within 30 days of well installation. Reports shall include land survey drawings that depict actual location of all monitoring wells, land application areas, and surface waters.
 - e. Modification and/or abandonment plans must be submitted to and approved in writing by the Department prior to modification and/or abandonment of any existing monitoring well.
2. Prior to constructing or modifying wastewater management, treatment and disposal facilities, detailed plans and specifications shall be submitted to and approved in writing by the Department.
3. An adequate contingency plan for prevention and handling of spills and unplanned discharges shall be in force at all times. A continuing program of employee orientation and education shall be maintained to ensure awareness of the necessity for good in-plant control and proper action in the event of a spill or accident.
4. An environmental supervisor shall be designated to coordinate and implement all necessary functions related to maintenance and operation of waste management, treatment, and disposal facilities. This person must have access to all information pertaining to the generation of wastes in the various process areas.
5. The Permittee shall notify the Department's Eastern Region office at (541) 276-4063 in accordance with the response times contained in the General Conditions of this permit in the event of any malfunction of the wastewater system to enable coordination of corrective action between the Permittee and the Department.

6. At all times that Permittee is delivering water to Madison Farms under this permit, the Permittee shall maintain a written agreement with the owner of Madison Farms that shall:
 - a. Authorize the permitted treatment and disposal activities.
 - b. Authorize DEQ access to the land application site, irrigation system, and records as necessary to monitor permit compliance; and
 - c. Require that the owner of the land application site will either perform all activities necessary to ensure compliance with the permit or allow Hermiston Generating access as necessary to perform the activities.

7. Based on monitoring data, additional information, changed standards, changed conditions or any other reason pursuant to applicable rules or statutes, the Department may reopen this permit to include new and/or revised special conditions.

SCHEDULE F

General Conditions

SECTION A. STANDARD CONDITIONS

1. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State, or local laws, or regulations.

2. Liability

The Department of Environmental Quality, its officers, agents, or employees shall not sustain any liability on account of the issuance of this permit or on account of the construction or maintenance of facilities because of this permit.

3. Permit Actions

After notice by the Department, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including but not limited to the following:

- a. Violation of any term or condition of this permit, any applicable rule or statute, or any order of the Commission;
- b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts.

4. Transfer of Permit

This permit shall not be transferred to a third party without prior written approval from the Department. Such approval may be granted by the Department where the transferee acquires a property interest in the permitted activity and agrees in writing to fully comply with all the terms and conditions of this permit and the rules of the Commission. A transfer application and filing fee must be submitted to the Department.

5. Permit Fees

The permittee shall pay the fees required to be filed with this permit application and to be paid annually for permit compliance determination as outlined in the Oregon Administrative Rules.

SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance

The permittee shall at all times maintain in good working order and properly operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit.

2. Standard Operation and Maintenance

All waste collection, control, treatment, and disposal facilities shall be operated in a manner consistent with the following:

- a. At all times, all facilities shall be operated as efficiently as possible and in a manner which will prevent discharges, health hazards, and nuisance conditions.

- b. All screenings, grit, and sludge shall be disposed of in a manner approved by the Department such as to prevent any pollutant from such materials from reaching any waters of the state, creating a public health hazard, or causing a nuisance condition.
- c. Bypassing of untreated waste is generally prohibited. No bypassing shall occur without prior written permission from the Department except where unavoidable to prevent loss of life, personal injury, or severe property damage.

3. Noncompliance and Notification Procedures

In the event the permittee is unable to comply with all the conditions of this permit because of surfacing sewage, a breakdown of equipment or facilities, an accident caused by human error or negligence, or any other cause such as an act of nature, the permittee shall:

- a. Immediately take action to stop, contain, and clean up the unauthorized discharges and correct the problem.
- b. Immediately notify the Department's Regional office, so that an investigation can be made to evaluate the impact and the corrective actions taken and determine additional action that must be taken.
- c. Within 5 days of the time the permittee becomes aware of the circumstances, the permittee shall submit to the Department a detailed written report describing the breakdown, the actual quantity and quality of resulting waste discharges, corrective action taken, steps taken to prevent a recurrence, and any other pertinent information.

Compliance with these requirements does not relieve the permittee from responsibility to maintain continuous compliance with the conditions of this permit or the resulting liability for failure to comply.

4. Wastewater System Personnel

The permittee shall provide an adequate operating staff which is duly qualified to carry out the operation, maintenance, and monitoring requirements to assure continuous compliance with the conditions of this permit.

SECTION C. MONITORING AND RECORDS

1. Inspection and Entry

The permittee shall, at all reasonable times, allow authorized representatives of the Department of Environmental Quality to:

- a. Enter upon the permittee's premises where a waste source or disposal system is located or where any records are required to be kept under the terms and conditions of this permit;
- b. Have access to and copy any records required to be kept under the terms and conditions of this permit;
- c. Inspect any treatment or disposal system, practices, operations, monitoring equipment, or monitoring method regulated or required by this permit; or
- d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by state law, any substances or parameters at any location.

2. Averaging of Measurements

Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean, except for bacteria which shall be averaged as specified in the permit.

3. Monitoring Procedures

Monitoring must be conducted according to test procedures specified in the most recent edition of **Standard Methods for the Examination of Water and Wastewater**, unless other test procedures have been approved in writing by the Department and specified in this permit.

4. Retention of Records

The permittee shall retain records of all monitoring and maintenance information, including all calibrations, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. The Director may extend this period at any time.

SECTION D. REPORTING REQUIREMENTS

1. Plan Submittal

Pursuant to Oregon Revised Statute 468B.055, unless specifically exempted by rule, no construction, installation or modification of disposal systems, treatment works, or sewerage systems shall be commenced until plans and specifications are submitted to and approved in writing by the Department. All construction, installation or modification shall be in strict conformance with the Department's written approval of the plans.

2. Change in Discharge

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, a new application must be submitted together with the necessary reports, plans, and specifications for the proposed changes. No change shall be made until plans have been approved and a new permit or permit modification has been issued.

3. Signatory Requirements

All applications, reports or information submitted to the Department shall be signed and certified by the official applicant of record (owner) or authorized designee.

SECTION E. DEFINITIONS

1. BOD₅ means five-day biochemical oxygen demand.
2. TSS means total suspended solids.
3. FC means fecal coliform bacteria.
4. NH₃-N means Ammonia Nitrogen.
5. NO₃-N means Nitrate Nitrogen.
6. NO₂-N means Nitrite Nitrogen.
7. TKN means Total Kjeldahl Nitrogen.
8. Cl means Chloride.

9. TN means Total Nitrogen.
10. mg/L means milligrams per liter.
11. ug/L means micrograms per liter.
12. kg means kilograms.
13. GPD means gallons per day.
14. MGD means million gallons per day.
15. The term "bacteria" includes but is not limited to fecal coliform bacteria, total coliform bacteria, and E. coli bacteria.
16. Total residual chlorine means combined chlorine forms plus free residual chlorine.
17. Grab sample means an individual discrete sample collected over a period of time not to exceed 15 minutes.
18. Composite sample means a combination of samples collected, generally at equal intervals over a 24-hour period, and apportioned according to the volume of flow at the time of sampling.
19. Week means a calendar week of Sunday through Saturday.
20. Month means a calendar month.
21. Quarter means January through March, April through June, July through September, or October through December.

**WATER POLLUTION CONTROL FACILITIES
PERMIT EVALUATION**

November 1, 2000

Department of Environmental Quality
700 S.E. Emigrant Avenue, Suite 330, Pendleton, OR 97801
Telephone: (541) 276-4063

FACILITY:

Hermiston Generating Company, LP
78415 Westland Road
Hermiston, OR 97838

PacifiCorp
825 NE Multnomah, Suite 2000
Portland, OR 97232-2155

PLANT TYPE AND LOCATION:

Gas-Powered Electricity Generation Plant
Hermiston, OR

Land-application site:

Madison Farms
7 miles south of Hermiston Generating
Hermiston, OR

SOURCES COVERED BY THIS PERMIT:

Type of Waste

Industrial Wastewater

Method of Disposal

Land Application

RIVER BASIN INFORMATION:

Basin: Umatilla

Sub-Basin: Umatilla

Hydro Code: 27B-UMAT-13 N

County: Umatilla

Nearest surface stream which would receive waste if it were to
discharge: Umatilla River

Applicable Standards: OAR 340-040

OAR 340-041-0642 to -0655

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1.0 SUMMARY AND RECOMMENDATIONS

1.1 Summary

Hermiston Generating Company, LP (Hermiston Generating) operates a gas-powered co-generation plant near Hermiston, Oregon, and generates approximately 240,000 gallons per day (gpd) of wastewater from the cooling towers. Currently, the company discharges the wastewater to the Lamb-Weston potato processing facility, which land applies the wastewater under WPCF Permit # 101326. However, Hermiston Generating is developing plans to pipe the wastewater directly to Madison Farms to land-apply the wastewater to agricultural land. Pursuant to the Site Certificate, the Department of Environmental Quality (the Department) maintains authority to issue the proposed Water Pollution Control Facilities (WPCF) permit for the treatment and disposal of wastewater.

On February 25, 1993, the Company submitted an application (# 996455) for the proposed individual Water Pollution Control Facilities (WPCF) permit. This evaluation report addresses waste disposal limitations, minimum monitoring and reporting requirements, compliance conditions and schedules, and special conditions included in the proposed WPCF permit.

Land application of wastewater is a feasible treatment method provided that it is performed in a controlled manner that is protective of the environment. Agronomic application of water and controlled deep percolation are key elements of an environmentally protective land-application treatment system. Each of these elements has been addressed in the proposed WPCF permit.

It is equally important that a land application facility be managed in accordance with a comprehensive, readily amendable, and "user friendly" Operations, Monitoring and Management (OM&M) Plan. The proposed WPCF permit requires Hermiston Generating to develop and comply with an OM&M Plan.

Land application facilities must be adequately monitored to ensure protection of the environment, with emphasis on protection of the groundwater resource. The facility is not required to perform a hydrogeologic characterization at this time. However, if facility monitoring or other information indicates that the operation has the potential to impact groundwater, then the company will be required to prepare a Hydrogeologic Characterization to evaluate potential groundwater impacts that could result from operation of the facility. Depending on the results of the characterization, a Groundwater Monitoring Plan may also be required. The proposed permit is also structured to comply with the Department's Groundwater Quality Protection Rules (OAR 340-040) and to require compliance with any subsequently established permit-specific groundwater concentration limits.

1.2 Recommendations

The Department of Environmental Quality (the Department) should present the proposed permit to the Energy Facilities Siting Council (EFSC) for public comments to be solicited concurrent with the proposed amendments to the Site Certificate.

2.0 FACILITY DESCRIPTION AND CHRONOLOGY

2.1 Facility Description

Hermiston Generating Company, LP (Hermiston Generating) operates a gas-powered co-generation plant at 705 Westland Rd., southwest of Hermiston, Oregon (legal description: Sec 30, T4N, R28E, WM). The plant operates year round. Currently, Hermiston Generating discharges approximately 240,000 gpd of wastewater to the Lamb-Weston facility. However, Hermiston Generating developed plans to land-apply the wastewater on 731 acres of agricultural land that is owned by Madison Farms. The land-application site is located approximately two miles south of the plant (legal description: Sec 26, 34, and 35, T3N, R28E, WM). The Department will require maintenance of a written agreement between the Company and the recipient property owner for the duration of the activity.

Principal components of the wastewater disposal system will include the existing sprinkling system at the Madison Farms site, which consists of six center pivots covering 731 acres. The piping is expected to only carry wastewater from Hermiston Generating. Supplemental Columbia River water will be land applied on the circles as needed to meet the crops irrigation requirements. The OM&M plan will specify crops, irrigation, leaching, and nutrient needs.

A wastewater characterization can be found in “Feasibility Study, Process Water Land Application System”, which was submitted by Cascade Earth Sciences (CES) on May 23, 2000. Table 3. Process Water Quality Data, US Generating, Hermiston, indicates that the average total dissolved solids concentration is approximately 1100 mg/l. Routine wastewater and supplemental fresh water monitoring will be required under the proposed permit.

Sanitary sewage will continue to be discharged to Lamb-Weston’s sanitary treatment system. Storm water runs into a catch basin on the site and drains into a storm water detention basin.

2.2 Facility Chronology

February 25, 1993, the Department received Hermiston Generating’s WPCF permit application.

3.0 COMPLIANCE RECORDS AND COMPLAINTS

3.1 Notices of Noncompliance (NONs)

This is a new permit, and there have been no water quality related NONs.

3.2 Complaints

The Department has no record of any water quality related complaints regarding this facility.

3.3 Compliance and Other Inspections

August 7, 2000, the Department inspected the Hermiston Generating plant prior to drafting the proposed permit.

4.0 ENVIRONMENTAL CONCERNS

4.1 Groundwater Management Area

Hermiston Generating's land application area is located within the Lower Umatilla Basin Groundwater Management Area (LUBGMA), which has been designated as such by the Department because groundwater nitrate concentrations exceed ten (10) mg/l in a widespread area. A joint agency investigation identified irrigated agriculture, food processing, confined animal feeding operations (CAFOs), domestic sewage, and military operations to have contributed in varying amounts to the problem.

Typically, wastewater from cooling towers is high in salt content. Application of salt is generally not considered to be of beneficial use. The proposed WPCF permit specifies the loading of Total Dissolved Solids (TDS) not to exceed 1200 lbs/acre/year, with a combination of process wastewater and supplemental Columbia River Water to be applied in a ratio not exceed a combined concentration of 450 mg/l TDS. This concentration is comparable to concentrations seen in alluvial aquifer wells at the site.

4.2 Groundwater Monitoring

Hermiston Generating did not propose groundwater monitoring for the land application facility in their WPCF permit application. The proposed permit requires Hermiston Generating to prepare a Hydrogeologic Characterization Report to document current groundwater conditions at the site, if certain parameters are exceeded or the monitoring information indicates potential impacts to groundwater. The permit will be reopened to include any revised monitoring requirements that are deemed appropriate to protect the groundwater resource.

4.3 Winter Wastewater Application

The Department encourages facilities to provide for storage of wastewater during periods within the winter months when the weather does not allow for land application. Hermiston Generating has not proposed any structures for storage of wastewater, but have proposed controlled leaching and storage of wastewater produced during the winter season within the soil profile.

Therefore, the proposed WPCF permit includes system performance monitoring designed to accurately evaluate whether winter operations will be allowed. The OM&M Plan will also include soil moisture monitoring/storage capacity criteria. The WPCF permit prohibits land application of process wastewater during freezing and thawing cycles and during any precipitation or post-precipitation event that may cause ponding and/or runoff from the site.

5.0 PERMIT DISCUSSION

The following discussion pertains to selected portions of the proposed WPCF Permit for the Hermiston Generating plant.

5.1 Face Page

The face page of the WPCF permit identifies that Hermiston Generating, as Permittee, is permitted to dispose of industrial wastewater by land application. The permit will expire approximately five years from the date of issuance.

5.2 Schedule A - Waste Disposal Limitations

Condition 1. identifies the Co-Gen wastewater and supplemental water that is authorized for land application under this permit.

Condition 2. prohibits discharges to public waters.

Condition 3. requires the Permittee to manage and dispose of in a manner that will prevent violation of the Department's Groundwater Quality Protection Rules and any permit-specific concentration limits. In the event that permit-specific concentration limits are established, they will be subsequently incorporated into this permit.

Condition 4. prohibits the TDS loading from exceeding 1200 lbs/acre/year to any circle, without prior written approval from the Department.

Condition 5. specifies that the crops allowed at the irrigation site will be specified in the OM&M plan.

Condition 6. prohibits leaching below the crop root zone in excess of the requirements that are prescribed in the approved OM&M Plan.

Condition 7. requires the Permittee ensure that total nitrogen does not exceed agronomic rates for the specific crops.

Condition 8. specifies which circles the wastewater can be applied to on Madison Farms.

Condition 9. specifies the source of the supplemental fresh water used in conjunction with the process wastewater.

Condition 10. specifies the combined concentration that TDS can be applied.

Condition 11. requires that all activities pertaining to the management, treatment, and disposal of the authorized wastes shall be conducted in accordance with the approved OM&M Plan. The OM&M Plan must be approved in writing by the Department prior to initiating land application.

Condition 12. contains land-application criteria to ensure protection of surface waters and groundwater.

Condition 13. allows the Department to re-open the permit if necessary.

5.3 Schedule B - Minimum Monitoring and Reporting Requirements

Condition 1. requires the Permittee to monitor the facility in accordance with the approved OM&M Plan. Specific items or parameters that are to be included in the monitoring program are listed. Additional monitoring parameters may be included in the Plan. The Plan is required under Schedule C of this permit. However, these Schedule B, Minimum Monitoring and Reporting Requirements do not become effective until initiation of land application.

Conditions 2. and 3. require the Permittee to submit annual and quarterly monitoring reports to the Department.

Condition 4. identifies actions that the Permittee must take in the event that monitoring data indicate a significant increase (increase or decrease for pH) in the value of a parameter monitored.

Condition 5. allows the Department to re-open the permit if necessary.

5.4 Schedule C - Compliance Conditions and Schedules

Condition 1. requires the Permittee to submit a wastewater disposal facility Operations, Monitoring and Management (OM&M) Plan. The OM&M Plan will be implemented upon the Department's approval. No wastewater shall be land applied until the OM&M Plan is approved in writing by the Department.

Condition 2. requires the Permittee to submit a Hydrogeologic Characterization Report to the Department for review and approval, if notified by the Department.

Condition 3. requires the Permittee to submit a Groundwater Monitoring Plan to the Department for review and approval, and propose a submittal date for a Water Quality Analysis Report, if notified by the Department.

Condition 4. requires submittal of the Water Quality Analysis Report as well as a concurrent proposal for site-specific groundwater concentration limits and/or an application for a concentration limit variance in accordance with the Department's Groundwater Quality Protection Rules (OAR 340-040).

Condition 5. requires the Permittee to notify the Department of any lapsed compliance date that has been established by this schedule

Condition 6. allows the Department to re-open the permit if necessary.

5.5 Schedule D - Special Conditions

Condition 1. identifies monitoring well management and maintenance requirements.

Condition 2. requires the Permittee to receive the Department's approval of detailed plans and specifications prior to constructing or modifying wastewater management, treatment and disposal facilities.

Condition 3. requires a contingency plan and employee education for the prevention and handling of spills and unplanned discharges.

Condition 4. requires the Permittee to designate an environmental supervisor to coordinate and implement all necessary functions related to maintenance and operation of waste management, treatment, and disposal facilities.

Condition 5. requires the Permittee to notify the Department in the event of any malfunction of the wastewater system.

Condition 6. requires the Permittee to maintain a written agreement with the owner of the land application site.

Condition 7. allows the Department to re-open the permit if necessary.

5.6 Schedule F - General Conditions

These conditions are standard to all WPCF permits.

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Water Quality Program

LAND USE STANDARD

I. INTRODUCTION AND OVERVIEW

Under the EFSC Land Use Standard, OAR 345-022-0030, the Council must determine whether the proposed facilities comply with the statewide planning goals adopted by the Land Conservation and Development Commission (LCDC). Holders have elected to address this standard by obtaining a land use determination from the Council pursuant to ORS 469.504(1)(b). This requires the following finding:

(A) The facility complies with applicable substantive criteria from the affected local government's acknowledged comprehensive plan and land use regulations that are required by the statewide planning goals and in effect on the date the application is submitted; and

(B) The facility complies with any Land Conservation and Development Commission administrative rules and goals and any land use statutes directly applicable to the facility under ORS 197.646(3); or

(C) The proposed facility does not comply with one or more of the applicable substantive criteria described in paragraph (b)(A) of this subsection but the Council finds that the facility does otherwise comply with the statewide planning goals, or that an exception to any applicable statewide planning goal is justified under section (3) of this rule. OAR 345-022-030(2)(b). See also, 469.504(1)(b).

The proposed facilities, as addressed in this Order and in the site certificate amendment, are an on-site reuse water pump station (pump station) and a industrial wastewater pipeline (pipeline) by which Holders will deliver industrial wastewater to Madison Farms, a commercial farming operation south of the energy facility. The pump station and pipeline will be located on land within the land use jurisdiction of Umatilla County (County). The pump station and a portion of the pipeline will be located on land zoned Light Industrial (LI). The remainder (and majority) of the pipeline will be located on land zoned Exclusive Farm Use (EFU).

II. DESCRIPTION OF PROPOSED FACILITIES

The Hermiston Generating Plant currently discharges cooling water blow-down industrial wastewater (industrial wastewater) to the nearby Lamb-Weston potato processing facility for use in Lamb-Weston's potato wash system and subsequent land application at Madison Farms. The proposed facilities will deliver the industrial wastewater directly to Madison Farms through a dedicated pipeline.

The proposed system includes a new pump station and about 13,000 feet (or 2.46 miles) of pipeline from the facility to the Madison Farms property line and about 15,000 feet (or 2.9 miles) of pipeline across Madison Farms to booster station number one, where it tie into the existing irrigation system at Madison Farms. The pump station will be located at the energy

facility site and enclosed in a pre-engineered building. The pipeline will consist of 10- to 12-inch HDPE piping.

The pipeline will be located in the same right-of-way and parallel the existing Lamb-Weston industrial wastewater lines and the existing gas pipeline that serves the energy facility until it reaches Madison Farms. The proposed route of the pipeline from the pump station is east approximately 1,850 feet parallel to the Union Pacific Railroad (UPRR) line to Cottonwood Bend Road, south along Cottonwood Bend Road approximately 5,500 feet passing under the existing UPRR trestle and a Westland Irrigation District canal before intersecting with Interstate 84. The pipeline will pass under Interstate 84 through an existing 12-inch carrier pipe (approx 400 feet) and continue south another 1,450 feet to Colonel Jordan Road. After crossing Colonel Jordan Road the pipeline will continue south another 1,150 before turning southwest for approximately 2,650 feet to Madison Farms where it will connect with the pipeline that Madison Farms will install. The pipeline will be buried at a depth of three feet (as are the existing Lamb-Weston pipelines).

Lamb-Weston will be repairing and replacing its own industrial wastewater pipeline within the same ditch and easement that the proposed pipeline will be located in. Holders plan to coordinate installation of their proposed pipeline with Lamb-Weston's work to minimize ground disturbance and any other potential impacts to underground facilities located on the pipeline route. Holders expect this work to take approximately three weeks and occur before the end of the year. The project will not permanently remove any agricultural lands from production.

When the pipeline reaches Madison Farms, it will continue straight to booster station one. It will take a separate route from the Lamb-Weston line after it crosses the property line. While the line will pass under existing crop circles, it will not permanently remove any agricultural lands from production. Madison Farms will install the pipeline. HGP will pay for the construction.

The proposed land application site is owned and operated by Kent Madison of Madison Farms. It is located approximately seven miles south of the energy facility and totals 731 acres in Fields 43 through 48. These fields are already under irrigated agricultural production. Industrial wastewater delivered to Madison Farms via the proposed pipeline will be commingled with the existing fresh water supply and land applied through the existing irrigation system.

Madison Farms may apply the industrial wastewater on a variety of crops. It has particular value for application on potato fields. According to Kent Madison, the direct delivery of water from the Hermiston Generating Plant is preferable to delivery from Lamb-Weston because potato wash water is not ideal for use on potato crops due to uncontrolled nitrogen sources associated with the potato wash water.

III. UMATILLA COUNTY LAND USE REGULATIONS

As noted above, the pump station and entire pipeline will be located on land within the land use jurisdiction of Umatilla County, and therefore subject to the provisions of the Umatilla County Development Ordinance (UCDO). The energy facility site is itself located on land zoned LI (or Light Industrial). Thus, the pump station and a portion of the pipeline will necessarily be located on land zoned LI. In addition, the pipeline will cross through approximately ¼ mile of LI zoned

land immediately south of Interstate 84. The remainder of the pipeline is located on land zoned EFU (or Exclusive Farm Use).

A. LIGHT INDUSTRIAL ZONE

Utility facilities, and their accessory uses, are a conditional use in Umatilla County's LI Zone. UCDO § 152.307(A)(16). As such, the proposed pump station and pipeline are subject to three sets of criteria: the general criteria for conditional uses in the LI zone (UCDO § 152.307(B)), the general criteria for all uses in the LI Zone (UCDO §§ 152.308 to .310), and the more specific criteria for utility facilities as conditional uses (UCDO §§ 152.610 to .616).

UCDO 152.307(B): General Criteria

“The following general criteria shall be used to review all conditional uses listed in the LI Zone, notwithstanding any other criteria listed in this chapter for a particular use:

“(1) The use will be compatible with other uses allowed in the LI Zone;

The LI Zone permits industrial uses such as warehousing and storage, manufacturing of processed materials, machine shops, bottling works, food processing facilities, nurseries and greenhouses, grain elevators, flour mills, truck sales and service, hauling, freighting, and trucking yards, and other uses. UCDO § 152.306. Conditional uses include utility facilities, major manufacturing industries of a certain size, junkyards, sand or gravel storage yards, wood processing facilities, service stations, wrecking yards, gravel extraction and processing facilities, concrete and pipe manufacturing, and other uses. UCDO § 152.307(A).

The energy facility is itself located in an area that presently contains a potato processing plant, railroad tracks, warehouses, animal stockyards, agricultural activities, and several rural residences. The proposed facilities will be minor accessory facilities to the existing energy facility and are not expected to increase the impacts of the existing energy facility. The pump station will be located in a building on the existing plant site. The pipeline will be underground, located in existing easements, and installed during other construction work already planned by Lamb-Weston within those easements. Any minor impacts (noise, dust, traffic) associated with construction are not considered significant. Ongoing operation of the proposed facilities will not create any impacts (e.g. noise, dust, vibrations, or odors) that would be incompatible with other uses allowed in the LI Zone.

“(2) The use will be in conformance with the policies listed in the Comprehensive Plan;

The Comprehensive Plan has not been amended since the 1994 Final Order was issued. Because the pump station and pipeline are minor accessory facilities that will not increase the impacts of the energy facility in a manner that would affect the findings in the 1994 Order, there are only a few additional Plan Policies that are applicable to this amendment and not otherwise addressed by the 1994 Order.

Economic Policies:

- 8. Evaluate economic development proposals upon the following: will the proposal: (a) increase or decrease available [water] supplies; (b) improve or degrade [water] qualities; (c) balance [water] withdrawal with recharge rates; (d) be a beneficial use; (e) have sufficient quantities available to meet needs of the proposed project and other existing and reasonably anticipated needs; and (f) reduce other opportunities and, if so, will the loss be compensated by other equal opportunities?**

This policy concerns the availability of water for future economic growth in the county. The proposed facilities will allow Holders to redirect recycled industrial wastewater directly to an existing agricultural operation. The proposal will not cause Holders to use more water at the energy facility, but will allow Holders to supply a nearby farm operation with water for the production of various crops. This amendment is conditioned upon Holders obtaining a Water Pollution Control Facilities (WPCF) permit from the Oregon Department of Environmental Quality (DEQ). That permit will include conditions designed to ensure that appropriated groundwater monitoring and protection measures are implemented at the land application site. The proposed pump station and pipeline are supportive of the County's economic development policies.

Agriculture Policies:

- 8. The county shall require appropriate procedures/standards/policies be met in the Comprehensive Plan and Development Ordinance when reviewing nonfarm uses for compatibility with agriculture.*

The pump station will be located in a building on the existing plant site. The pipeline will be underground and located in existing easements and rights-of-way. The installation of the pipeline is planned to coincide with excavation and repair/replacement of existing pipelines owned by Lamb-Weston and located in the same easements and rights-of-way. There will be minimal temporary impact on farmland during installation of the new pipeline. The new pipeline will not impair farm use of farmland or permanently remove farmland from production. In fact, the pipeline is similar to the existing Lamb-Weston pipeline and not dissimilar from the irrigation lines already used at Madison Farms. Direct delivery of water to Madison Farms will improve the quality of water available for certain crops.

Open Space, Scenic and Historic Areas, and Natural Resources Policies:

There are no inventoried significant open space, scenic, historic, or natural resource areas in the vicinity of the proposed pump station or pipeline. There is no riparian vegetation on the energy facility site. The pump station will be a minor addition within the energy facility site and will not affect the overall visual impact of the facility. The pipeline will be underground, will not be visible, and will not cross any natural streams.

Policy 26 of the County's Open Space, Scenic and Historic Areas, and Natural Resources Comprehensive Plan element calls for the County to "cooperate with the [Umatilla] Tribe, Oregon State Historic Preservation Office, and others involved in identifying and protecting Indian cultural areas and archeological sites."

Both the energy facility site and the gas pipeline route were surveyed by Heritage Research Associates to determine the historical, cultural, and archaeological resources in conjunction with the original Application for Site Certificate. No resources were discovered. It is unlikely that the pump station, which will be located on the energy facility site or the pipeline, which will parallel the existing gas pipeline and be located in Lamb-Weston's existing pipeline easement or under cultivated fields (which have been previously disturbed) will result in significant impact to such resources. In addition, Holders will also be subject to conditions, which require tribal notification prior to construction, and protection of any cultural or archaeological resources discovered during construction.

Air, Land and Water Quality Policies:

- 1. Discharges from existing and future developments shall not exceed applicable Federal and State environmental quality standards.*

The proposed pump station and pipeline will not have any significant impacts on air, land, or water quality. The project must meet Federal and State environmental quality standards. Holders will obtain a WPCF permit for the land application of industrial wastewater on the designated fields. The WPCF permit will prohibit discharges to surface water and include conditions designed to ensure that appropriate groundwater monitoring and protection measures are implemented. Further, as detailed in Section 6.4 of the Site Certificate Amendment #5 Technical Standards Report, the pump station and the pipeline will not result in a significant adverse impact to soils. No discharges to air are anticipated from operation of the pump station and pipeline.

For the foregoing reasons, and for the reasons detailed in the 1994 Order, the pump station and pipeline, comply with Umatilla County's Comprehensive Plan.

“(3) The use would not have an adverse impact on existing industrial uses in that it would not be incompatible with noise, dust, vibrations and odors that may emanate from or be caused by the existing adjacent industrial uses.”

The energy facility is located in an area that presently contains a potato processing plant, railroad tracks, warehouses, animal stockyards, agricultural activities, and several rural residences. The proposed pump station will be located in a building on the existing plant site, and screened from adjacent uses. The off-site portion of the pipeline will be underground. Neither of the proposed facilities is sensitive to or incompatible with noise, dust, vibrations, or odors emanating from or caused by existing adjacent industrial uses.

UCDO Section 152.308: Limitations on Use

- (A) *“All business, commercial and industrial activities, and storage allowed in an LI Light Industrial Zone shall be conducted wholly within a building or shall be screened from view from adjacent public roads or surrounding properties in farm, residential or commercial zones unless the entire activity is conducted more than 500 feet from said surrounding property or roads.*
- (B) *All off-street loading areas shall be screened from view if adjoining properties are in a residential zone;*
- (C) *All noise, vibration, dust, odor, smoke, appearance or other objectionable factors involved in any activity shall comply with appropriate state and federal regulations.”*

The proposed facilities will comply with these requirements. The pump station will be located in a building on the existing energy facility site. The landscaping and screening requirements do not apply to the pipeline because it will be an underground facility. The proposal does not involve off-street loading areas. Applicable state and federal regulations relating to noise, vibration, dust, odor, smoke, and appearance will be met during construction and operation of both the pump station and pipeline, pursuant to site certificate condition I.C.

UCDO Section 152.309: Design Review

This code section requires that an application for a zoning permit be accompanied by a site plan. This code section also provides that the Planning Director may require landscaping around the building(s) or property line to ensure conformance with county policies, and will review the site plan for compliance with access, parking and loading, setback, sign, and vision clearance and other standards.

The overall facility has a landscape plan. The Planning Director may also require Holders to prepare and implement a landscaping plan for the on-site pump station to screen any exterior work areas from view. No parking or access improvements are necessary in conjunction with the proposed facilities. Setbacks are described immediately below. This section does not apply to the pipeline, which will be underground.

UCDO Section 152.310: Dimensional Standards

The dimensional standards establish lot size, lot width, setback, and stream setback requirements for the LI zone. The pump station will be located on the existing energy facility site. The pipeline will be located in existing easements and will be buried. With respect to setbacks, the following setbacks will be observed: front yard -- 20 feet; side yard -- 20 feet; rear yard -- 20 feet. There are no streams on the energy facility site and the pipeline will not cross any natural streams.

UCDO Sections 152.611: New or Altered Conditional Uses; Conformance with Requirements; Performance Bonds

Section 152.611 provides, in pertinent part as follows:

- (B) In permitting a new conditional use or the alteration of an existing conditional use, the Hearings Officer may impose conditions which the Hearings Officer considers necessary to protect the best interests of the surrounding area or the county as a whole;***

- (D) The county may require the applicant to furnish the county with a performance bond or such other form of assurance that the county deems necessary to guarantee development in accordance with the standards established and conditions attached in granting a conditional use.***

These provisions give the County the authority to impose conditions in order to minimize or avoid off-site effects of a proposed use. Holders are still bound by the conditions in the Site Certificate for the Hermiston Generating Plant. The County has not indicated that other conditions are warranted by the pump station or pipeline.

Section 152.615: Additional Restrictions

Section 152.615 provides, in pertinent part, as follows:

“In addition to the requirements and criteria listed in this subchapter, the Hearings Officer may impose the following conditions upon a finding that circumstances warrant such additional restrictions:

- (A) Limiting the manner in which the use is conducted, including restricting hours of operation and restraints to minimize such environmental effects as noise, vibration, air pollution, glare or odor;***
- (B) Establishing a special yard, other open space or lot area or dimension;***
- (C) Limiting the height, size or location of a building or other structure;***
- (D) Designating the size, number, location and nature of vehicle access points;***
- (E) Increasing the required street dedication, roadway width or improvements within the street right-of-way;***

- (F) Designating the size, location, screening, drainage, surfacing or other improvement of a parking or loading area;***
- (G) Limiting or otherwise designating the number, size, location, height and lighting of signs;***
- (H) Limiting the location and intensity of outdoor lighting and requiring its shielding;***
- (I) Requiring diking, screening, landscaping or other methods to protect adjacent or nearby property and designating standards for installation and maintenance;***
- (J) Designating the size, height, location and materials for a fence;***
- (K) Protecting and preserving existing trees, vegetation, water resources, wildlife habitat, or other significant natural resources;***
- (L) Parking area requirements as listed in §§ 152.560 through 152.562 of this chapter."***

These provisions give the County the authority to impose conditions in order to minimize or avoid off-site effects of a proposed use. Holders are still bound by the conditions in the Site Certificate for the Hermiston Generating Plant. The County has not indicated that other conditions are warranted by the pump station or pipeline.

UCDO Section 152.616: Standards for Conditional Use

(T) Commercial utility facilities. “. These uses are allowed provided that:***

“(1) Facility is designed to minimize conflicts with scenic values and adjacent forest, farming and recreational uses as outlined in policies of the Comprehensive Plan;

The pump station and pipeline will be minor accessory facilities to the energy facility and will not increase the impacts of the energy facility or alter its operation in a manner that would affect the findings in the 1994 Final Order. The pipeline will be buried and is not dissimilar to the pipelines used by Madison Farms for its own irrigation use. The facilities will aid nearby farm uses by allowing the energy facility to recycle its water and deliver it directly to Madison Farms. Madison Farms will benefit from availability of the water for its crops.

“(2) Facility be of a size and design to help reduce noise or other detrimental effects when located adjacent to farm, forest and grazing dwelling(s) or a recreational residential zone;

The pump station is not located adjacent to any dwellings or a recreational residential zone. The pipeline will be located underground and co-located with existing pipelines in existing easements. Its size or design should not impact any adjacent uses.

“(3) Facility be fenced when located adjacent to dwelling(s) or a Mountain Recreational or Forest Residential Zone and landscaping, buffering and/or screening be provided;

The pump station and pipeline will not be adjacent to dwellings or to a Mountain Recreational or Forest Residential Zone. The pump station will be fenced and landscaped as is required by the supplementary regulations of UCDO Section 152, discussed below. The pipeline will be buried.

(4) The facility does not constitute an unnecessary fire hazard and consideration be made of minimum fire safety measures if located in a forested area, which can include but are not limited to:

The proposed facilities will not be located in a forested area.

(a) The site be maintained free of litter and debris;

Litter and debris will be stored in on-site dumpsters, with periodic hauling via a private contractor to a properly licensed facility as is currently the case at the energy facility site. Site maintenance will be performed on a regular basis to assure that the grounds are kept free of litter and debris. The only portion of the proposed facilities that will extend off the existing energy facility site is the pipeline, which will be buried.

(b) Use of non-combustible or fire retardant treated materials for structures and fencing;

The pump station will be constructed primarily from fire retardant materials and will use the energy facility’s on-site fire suppression system. Further, the pipeline will be a buried water delivery line, which by its very nature is fire retardant.

(c) Removal of all combustible materials within 30 feet of structures;

Clearing of combustible materials from the energy facility site at regular intervals, including all areas within 30 feet of structures, is required as part of the maintenance plan for the Hermiston Generating Plant.

(5) Major transmission towers, poles and similar gear shall consider locations within or adjacent to existing rights-of-way in order to take the least amount of timber land out of production and maintain the overall stability and land use patterns of the area, and construction methods consider minimum soil disturbance to maintain water quality;”

The pump station and pipeline will not take any timberland out of production and will maintain the overall stability and land use patterns in the area. The pump station will be located on the energy facility site, adjacent to existing energy facility structures. The pipeline will be underground and will not permanently remove any agricultural land from production. Much of

the pipeline will follow existing road rights-of-way. In addition, the construction work is planned to coincide with work to be performed by Lamb-Weston, which is expected to take place before the end of the year (i.e. in November or December). Thus, any disruption to farm use or soil disturbance associated with this project should be minimal and temporary. The pump station and the pipeline will enable the energy facility to provide irrigation water for nearby agricultural uses, thereby enhancing existing agricultural operations and maintaining the overall stability and land use patterns of the area.

- (6) Facility shall not alter accepted timber management operations on adjacent forest land;**

The pump station and pipeline are not adjacent to forest land.

- (7) Facility shall adequately protect fish and wildlife resources by meeting minimum Oregon State Department of Forestry regulations;**

This criterion is applicable only to forest lands.¹ There are no forest lands on or in the vicinity of the Hermiston Generating Plant or the right-of-way for the pipeline.

- (8) Access roads or easements be improved to a standard and follow grades recommended by the Public Works Director;**

No road construction will be performed in conjunction with this project. Existing access roads and rights-of-way will be used.

- (9) Road construction be consistent with the intent and purposes set forth in the Oregon Forest Practices Act or the 208 Water Quality Program to minimize soil disturbance and help maintain water quality;"**

No road construction will be performed in conjunction with this project. Existing access roads and rights-of-way will be used. Much of the pipeline construction work is planned to coincide with other construction to minimize soil disturbance.

- (10) Complies with other conditions deemed necessary by the Hearings Officer.**

No other conditions relating to the construction or operation of the pump station or pipeline have been identified as necessary by Umatilla County.

UCDO 152.025(A): Zoning Permit.

“ Prior to the construction, reconstruction, addition to or change in use of a structure, or the change in use of a lot or the installation or replacement of a mobile home on a lot, a zoning permit shall be obtained from the County Planning Department. Within the flood hazard area, a zoning permit shall be required for all other developments including

¹ Confirmed with Patty Perry, Umatilla County Planning on October 31, 2000.

placement of fill, mining, paving, excavation or drilling. Structures of 120 square feet or less in area and structures described in § 152.026 [farm uses] do not require a zoning permit except when located in a designated flood hazard area. A zoning permit shall be voided after one year unless construction has commenced. The Planning Commission or its authorized agent may extend the permit for an additional period not to exceed one year upon written request.”

The Umatilla County Department of Resource Services and Development has determined that a zoning permit will be needed for the proposed pump station structure if it exceeds 120 square feet in size. The county does not view the pipeline as a “structure” subject to the requirements of UCDO 152.025(A).²

Supplementary Regulations: UCDO §§ 152.010 through .016 and §§ 152.545 to .562.

Chapter 152 of the UCDO contains supplementary regulations regarding signs, off-street parking and loading, access and vision clearance, fences and riparian areas. Few of these standards apply to the proposed facilities. Holders have assured OOE that any signs erected in connection with the proposed pump station or pipeline will comply with the sign standards in UCDO Sections 152.545 through 152.548, that the energy facility site will continue to meet the standards for parking and loading in Sections 152.560 through 152.562, and that any fences constructed in connection with the pump station will comply with applicable Uniform Building Code requirements and will be placed outside of vision clearance areas consistent with UCDO Section 152.015.

The access standards in UCDO Section 152.010 encourage shared access in industrial zones. No new access roads will be constructed in connection with the pump station or pipeline. Existing on-site roads will be used to access the pump station. Further, UCDO Section 152.016 does not apply to the proposed facilities. No riparian vegetation is present at the energy facility site and the pipeline does not cross any streams.

B. EXCLUSIVE FARM USE ZONE

Section 152.056: Uses Permitted Outright

This section provides that “farm uses” as defined in ORS 215.203(2) are permitted outright in an EFU Zone and without a zoning permit. Holders take the position that the pipeline should be permitted outright as a “farm use” because it provides irrigation water to an existing commercial farm. Umatilla County also takes the position that the pipeline qualifies as a “farm use.” (See, letter from Patty Perry, Umatilla County Land Use Planning, October 24, 2000). Both Holders and Umatilla County rely on the case of *Swensen v. Department of Environmental Quality*, 9 Or LUBA 10 (1983).

² Confirmed with Patty Perry, Umatilla County Planning on October 31, 2000. Ms. Perry also clarified that the zoning permit requirement is triggered by structures of 120 square feet in size, not 100 square feet as indicated in her October 24, 2000, letter to Sam Sadler.

After Holders submitted their application, LUBA ruled, on somewhat similar facts, that a wastewater treatment facility delivering wastewater to a land application site for irrigation is a “utility facility” within the meaning of ORS 215.283(1)(d) and that the land application site itself is *both* a “farm use” within the meaning of ORS 215.203(2) and a “utility facility” within the meaning of ORS 215.283(1)(d). *Cox v. Polk County*, __ Or LUBA __ (No. 2000-030, November 2, 2000).³ As such, the criteria applicable to both a farm use and a utility facility must be satisfied. *Cox*, at 14.

As noted above, farm uses are allowed outright in the EFU zone. Utility facilities are permitted in the EFU zone, if they are deemed to be “necessary for public service.” UCDO § 152.058(D) (Uses permitted with a Zoning Permit).⁴

UCDO § 152.003 defines the term “utility facility.” The UCDO does not, however, define the term “utility facility necessary for public service,” or otherwise establish the criteria for establishing that a utility facility is necessary for public service. That test is found in ORS 215.275(2).⁵

Pursuant to ORS 215.275, a utility facility established under ORS 215.283(1)(d) is necessary for public service if the facility “*must be sited in an exclusive farm use zone in order to provide the service.*” ORS 215.275(1).

“To demonstrate that a utility facility is necessary, an applicant for approval under ORS 215.213(1)(d) or 215.283(1)(d) must show that reasonable alternatives have been considered and that the facility must be sited in an exclusive farm use zone due to one or more of the following factors:

- a. Technical and engineering feasibility;*
- b. The proposed facility is locationally dependent. A utility facility is locationally dependent if it must cross land in one or more areas zoned for exclusive farm use in order to achieve a reasonably direct route or to meet unique geographical needs that cannot be satisfied on other lands;*
- c. Lack of available urban and nonresource lands;*
- d. Availability of existing rights of way;*

³ One feature distinguishing this case is that the land application site at Madison Farms is a long-established commercial farm rather than an agricultural operation established as part of a wastewater treatment process.

⁴ The county does not view the pipeline as a “structure” subject to the requirements of UCDO 152.025(A), including the need to obtain a zoning permit. See note 2.

⁵ ORS 215.275 was enacted into law in 1999. It clarifies when a utility facility is “necessary” as the term is used in ORS 215.213(1)(d) and 215.283(1)(d). It is directly applicable under ORS 197.646(3), discussed further below.

- e. *Public health and safety; and*
- f. *Other requirements of state or federal agencies.”* ORS 215.275(2).

“Costs associated with any of the factors listed above may be considered, but cost alone may not be the only consideration in determining that a utility facility is necessary for public service.” ORS 215.275(3).

Based on the factors cited above, the pipeline and the land application site would both qualify as a utility facility necessary for public service. Holders have considered reasonable alternatives and have determined that the facility must be sited on EFU lands due to the ORS 215.275(2) factors addressed below. Regardless of the route, the pipeline must cross EFU land to deliver irrigation water from the energy facility to Madison Farms. Madison Farms is zoned EFU. The LI Zone in which the energy facility is located is primarily surrounded by EFU land.

a. Technical and Engineering Feasibility.

Based on technical and engineering feasibility considerations, the most reasonable and efficient route from the energy facility to Madison Farms is the route proposed. The route will parallel the existing Lamb-Weston industrial wastewater lines and the gas pipeline that services the energy facility. It will follow existing road right-of way and existing utility easements until it is on Madison Farms. At Madison Farms, it then takes the most direct route to booster station number one.

b. The Proposed Facility Is Locationally Dependent.

The pipeline is by its very nature locationally dependent. It is being constructed to deliver water to a site on EFU land. Therefore, it must cross EFU land to reach the land application site and to tie into the Madison Farms’ existing irrigation system.

c. Lack of Available Urban and Non-Resource Lands.

Madison Farms is zoned EFU. The LI Zone in which the energy facility is located is primarily surrounded by EFU land. Thus, there is no reasonable route from the Hermiston Generating Plant to Madison Farms across urban or non-resource lands. Immediately south of Interstate 84, the pipeline will cross industrially-zoned (LI) land. However, once the pipeline crosses that ¼ mile stretch of LI-zoned land, the surrounding property is zoned EFU, and there are no urban or non-resource lands to accommodate the pipeline route.

d. Availability of Existing Rights-of-Way.

Holders chose the proposed pipeline route based on the availability of existing rights-of-way. The route parallels the existing Lamb-Weston industrial wastewater line and the gas pipeline that now service the energy facility. The pipeline also follows an existing road right-of-way (Cottonwood Bend Road) south from the energy facility before it turns southwest to tie into the Madison Farms pipe system.

Directly Applicable State Regulations: EFU Zone

In 1994, LCDC amended the planning goals for farm zones, as set forth in Division 33. Umatilla County has not yet adopted amendments to its land use regulations implementing the 1994 revisions to the LCDC rules. Therefore, under ORS 197.646(3), the amended LCDC rules are directly applicable to the local government's land use decisions. The directly applicable LCDC rules are as follows:

OAR 660-033-0120: Uses Authorized on Agricultural Lands

“The specific development and uses listed in Table 1 are permitted in the areas that qualify for the designation pursuant to this division. All uses are subject to the general provisions, special conditions, additional restrictions and exceptions as set forth in this division. The abbreviations uses within the schedule shall have the following meanings:

- (1) A—Use may be allowed. Authorization of some uses may require notice and the opportunity for a hearing because the authorization qualifies as a land use decision pursuant to ORS Chapter 197. Minimum standards for uses in the table that include a numerical reference are specified in OAR 660-033-0130. Counties may prescribe additional limitations and requirements to meet local concerns as authorized by law.*
- (2) R—Use may be approved, after required review. The use requires notice and the opportunity for a hearing. Minimum standards for uses in the table that include a numerical reference are specified in OAR 660-033-0130.. Counties may prescribe additional limitations and requirements to meet local concerns as authorized by law.*
- (3) * -- Use not permitted.*
- (4) # -- Numerical references for specific uses shown on the chart refer to the corresponding section of OAR 660-033-0130. Where no numerical reference is noted for a use on the chart, this rule does not establish criteria for the use.*

Table 1, referred to in the rule, lists “farm use as defined in ORS 215.203” as an “A” or allowed use on all agricultural lands, high value or otherwise. There are no other minimum standards/criteria. Table 1 lists “utility facilities necessary for public service” as an “R” or allowable use on agricultural lands, subject to the minimum standards found in OAR 660-033-0130(16).

OAR 660-033-0130: Minimum Standards Applicable to Schedule of Permitted and Conditional Uses.

OAR 660-033-0130(16) was promulgated to administer ORS 215.275, which is discussed above. OAR 660-033-0130(16)(a) and (b) repeat the standards found in ORS 215.275(2) and (3). OAR 660-033-0130(16)(c) through (f) impose the following additional standards:

- (c) The owner of a utility facility approved under this section shall be responsible for restoring, as nearly as possible, to its former condition any agricultural land and*

associated improvements that are damaged or otherwise disturbed by the siting, maintenance, repair or reconstruction of the facility. Nothing in this subsection shall prevent the owner of the utility facility from requiring a bond or other security from a contractor or otherwise imposing on a contractor the responsibility for restoration.

Proposed site certificate condition 7 under the “Structural Standard” provides for restoration of topsoil to minimize impacts.

(d) The governing body of the county or its designee shall impose clear and objective conditions on an application for utility facility siting to mitigate and minimize the impacts of the proposed facility, if any, on surrounding lands devoted to farm use in order to prevent a significant change in accepted farm practices or a significant increase in the cost of farm practices on surrounding farmlands

The County has not indicated that any additional conditions are necessary to prevent a significant change in accepted farm practices or a significant increase in the cost of farm practices on surrounding farmlands. The proposed facility will not impact surrounding lands devoted to farm use in a manner that would cause a significant change in accepted farm practices or a significant increase in the cost of farm practices on surrounding farmlands such that it should impose additional conditions on the use.

The pipeline will be three feet underground and co-located in existing easements and rights-of-way with existing pipelines owned by Lamb-Weston until it reaches Madison Farms, at which point it takes the most direct route to booster station number one. The installation of the pipeline is planned to coincide with excavation and repair/replacement of the existing pipelines. There will be minimal temporary impact on farmland during installation of the new pipeline, however, much if not all of that impact would occur during Lamb-Weston’s work independent of this project. The existing Lamb-Weston pipelines have not and the proposed pipeline will not impair farm use of farmland or permanently remove farmland from production. In fact, the pipeline is not dissimilar from the buried irrigation lines used by Madison Farms. Direct delivery of water to Madison Farms will improve the quality of water available for use on certain crops.

(e) In addition to the provisions of subsections 16(a) to (d) of this rule, the establishment or extension of a sewer system as defined by OAR 660-011-0060(1)(f) in an exclusive farm use zone shall be subject to the provisions of OAR 660-011-0060.

The proposed use does not involve the establishment or extension of a sewer system. For that reason, this section is not applicable.

(f) The provisions of subsections 16(a) to (d) of this rule do not apply to interstate natural gas pipelines and associated facilities authorized by and subject to regulation by the Federal Energy Regulatory Commission.

The proposed use does not involve the establishment of an interstate natural gas pipeline or associated facilities authorized by and subject to regulation by the Federal Energy Regulatory Commission. For that reason, this section is not applicable.

Holders have demonstrated compliance with LCDC statutes and rules directly applicable to the proposed facilities in the EFU zone, regardless of whether the proposed facilities are characterized as a “farm use” or a “utility facility” necessary for public service.

Conclusion: Based on the foregoing analysis, the Office recommends that the Council find that Holders have demonstrated compliance with the applicable criteria in Umatilla County’s acknowledged comprehensive plan and land use regulations that are required by the statewide planning goals and in effect on the date the application is submitted, as well as the LCDC administrative rules and goals and any land use statutes directly applicable to the proposed facilities under ORS 197.646(3).