PLANNING DEPARTMENT

P.O. Box 40 | Irrigon, Oregon 97844
(541) 922-4624 or (541) 676-9061 x 5503
FAX: (541) 922-3472

AGENDA

Morrow County Planning Commission
Thursday, November 14, 2024, 6:00 pm
Morrow County Government Building, Irrigon, OR
For Electronic Participation See Meeting Information on Page 2

Members of Commission

Stanley Anderson	Tripp Finch	Elizabeth Peterson
Charlene Cooley	John Kilkenny, Vice Chair	Karl Smith
Stacie Ekstrom, Chair		Brian Thompson

Members of Staff

Tamra Mabbott, Planning Director	Daisy Goebel, Principal Planner
Stephen Wrecsics, GIS Analyst	Kaitlin Kennedy, Compliance Planner
Michaela Ramirez, Administrative Assistant	Clint Shoemake, Planning Tech

1. **Call to Order**

2. **Roll Call**

3. **Pledge of Allegiance**

4. **Public Hearings** to begin at 6:00 PM (COMMISSION ACTION REQUIRED):

Presented by: Planning Director Tamra Mabbott

Continued Hearing - Land Use Decision LUD-N-75-24, Port of Morrow Applicant, and owner. This hearing was continued from the October 29, 2024 hearing.
Land Use Decision application to allow Port of Morrow to land apply industrial wastewater on land zoned Exclusive Farm Use (EFU). The subject property includes 7,300 acres located on a number of tax lots located in Township 2N Range 26 and 3N Range 26. Property is located approximately 10 miles southwest of Irrigon and 17 miles west of Echo, east of Bombing Range Road. Criteria for approval include Morrow County Zoning Ordinance (MCZO) Article 3 Sections 3.010(B)(23) and (D)(8) and (D)(9) as well as ORS 215.246 regarding land application of industrial process wastewater.

5. **Public Comment:**

6. **Adjourn:**

Next Meeting: Tuesday, December 3, 2024, at 6:00 p.m.

Location: Morrow County Government Center, Irrigon, OR

ELECTRONIC MEETING INFORMATION

Morrow County Planning is inviting you to a scheduled Zoom meeting. Topic: Planning Commission
Time: November 14, 2024, 6:00 PM Pacific Time (US and Canada)

Join Zoom Meeting
https://us02web.zoom.us/j/6554697321?pwd=dFMxR2xlaGZkK1ZJRFVrS1Q0SmRxUT09&omn=88477705737

Meeting ID: 655 469 7321
Passcode: 513093

Find your local number: https://us02web.zoom.us/u/kdmj6471tm

Should you have any issues connecting to the Zoom meeting, please call 541-922-4624. Staff will be available at this number after hours to assist.

This is a public meeting of the Morrow County Planning Commission and may be attended by a quorum of the Morrow County Board of Commissioners. Interested members of the public are invited to attend. The meeting location is accessible to persons with disabilities. A request for an interpreter for the hearing impaired, or for other accommodations for persons with disabilities, should be made at least 48 hours before the meeting to Tamra Mabbott at (541) 922-4624, or by email at tmabbott@co.morrow.or.us.

PRELIMINARY FINDINGS OF FACT
LAND USE DECISION
Application Number LUD-N-075-24

REQUEST: Approval of land application of wastewater from Port of Morrow on land zoned Exclusive Farm Use (EFU).

APPLICANT:	Port of Morrow 2 Marine Drive Boardman, OR 97818
OWNER:	Port of Morrow purchase agreement with Canyon Farm LLC & Canyon Farm II LLC 73920 Pole Line Road Boardman, OR 97818
PROPERTY LOCATION:	Approximately 10 miles southwest of Irrigon and 17 miles west of Echo.

FINDINGS OF FACT:

I. **BACKGROUND INFORMATION:** The Port of Morrow (Port) operates the Boardman Industrial Park, which houses agricultural food processors and other industrial facilities that support the region's farming community. Part of the Port's service to the industrial and food processors is the management of their wastewater through a land application program. This land application program also provides a service to the local farmers by providing them with low-cost, nutrient-rich irrigation water in this water-deficient region. The Port operates this land application system under an Oregon Department of Environmental Quality (DEQ) water pollution control facilities (WPCF) permit. The Port is proposing an expansion of the land application program through the purchase of an existing 7,300-acre farm located in Morrow County. The farm is being purchased from Canyon Farm, LLC, and Canyon Farm II, LLC and is zoned as exclusive farm use (EFU). The farm is located directly west of Farm 4. This expansion project will add up to 6,200 acres of land to the Port's land application program (to be designated as Farm 6), with the goal of distributing the wastewater across a larger land area, thereby reducing possible impacts. As part of this expansion project the Port will be constructing a new pipeline spur to deliver wastewater to the new property's existing piping system from the Port's existing wastewater pipeline to Farm 4. The Port is submitting to DEQ a WPCF permit modification request to add Farm 6 to the Port's land application program. The Port is requesting approval of the Land Use Decision application to permit the Port's process wastewater and the new pipeline spur.

II. **APPROVAL CRITERIA:** The applicant has filed under the Morrow County Zoning Ordinance, ARTICLE 3, USE ZONES, Section 3.010 Exclusive Farm Use Zone and Oregon

PRELIMINARY

Revised Statute ORS 215.246. REQUIREMENTS FOR APPROVAL are listed below in **bold** type, followed by a response in standard type:

SECTION 3.010(B) Uses Permitted Outright. In the EFU zone, the following uses and activities and their accessory buildings and uses are permitted subject to the general provisions set forth by this ordinance:

SECTION 3.010(B)(23) Land application of reclaimed water, agricultural or industrial process water or biosolids, or the onsite treatment of septage prior to the land application of biosolids subject to Subsection D.8.

SECTION 3.010(D)(8) Use Standards. Agricultural process or industrial process water or biosolids, or the onsite treatment of septage prior to the land application of biosolids for agricultural, horticultural or silvicultural production, or for irrigation in connection with a use allowed in an EFU zone is subject to the issuance of a license, permit or other approval by the Department of Environmental Quality under ORS 454.695, 459.205, 4688.050, 4688.053 or 4688.055, or in compliance with rules adopted under 4688.095, and with the requirements of ORS 215.246, 215.247, 215.249 and 215.251. For the purposes of this section, onsite treatment of septage prior to the land application of biosolids is limited to the treatment using treatment facilities that are portable, temporary and transportable by truck trailer, as defined in ORS 801.580, during a period of time within which land application of biosolids is authorized under the license, permit or other approval.
This authorization is for the expansion of the existing wastewater land application system for industrial process water and is subject to approval by the Department of Environmental Quality. See below applicable criteria for compliance with Oregon Revised Statutes.

215.246 Approval of land application of certain substances; subsequent use of tract of land; consideration of alternatives.

(1) The uses allowed under ORS 215.213 (Uses permitted in exclusive farm use zones in counties that adopted marginal lands system prior to 1993) (1)(y) and 215.283 (Uses permitted in exclusive farm use zones in nonmarginal lands counties) (1)(v):

(a) Require a determination by the Department of Environmental Quality, in conjunction with the department's review of a license, permit or approval, that the application rates and site management practices for the land application of reclaimed water, agricultural or industrial process water or biosolids ensure continued agricultural, horticultural or silvicultural production and do not reduce the productivity of the tract.

(b) Are not subject to other provisions of ORS 215.213 (Uses permitted in exclusive farm use zones in counties that adopted marginal lands system prior to 1993) or 215.283 (Uses permitted in exclusive farm use zones in nonmarginal lands counties) or to the provisions of ORS 215.274 (Associated transmission lines necessary for public service), 215.275 (Utility facilities necessary for public service) or

PRELIMINARY

215.296 (Standards for approval of certain uses in exclusive farm use zones).

The applicant has submitted the request with the Oregon Department of Environmental Quality and an application for a determination from the Morrow County Planning Department as outlined below. These criteria are met.

(2) The use of a tract of land on which the land application of reclaimed water, agricultural or industrial process water or biosolids has occurred under this section may not be changed to allow a different use unless:

- **(a) The tract is included within an acknowledged urban growth boundary;**
- **(b) The tract is rezoned to a zone other than an exclusive farm use zone;**
- **(c) The different use of the tract is a farm use as defined in ORS 215.203 (Zoning ordinances establishing exclusive farm use zones); or**
- **(d) The different use of the tract is a use allowed under:**
  - **(A) ORS 215.213 (Uses permitted in exclusive farm use zones in counties that adopted marginal lands system prior to 1993) (1)(b), (d) to (f), (i) to (n), (p) to (r), (u), (w) or (x);**
  - **(B) ORS 215.213 (Uses permitted in exclusive farm use zones in counties that adopted marginal lands system prior to 1993) (2)(a) to (c), (i), (m) or (p) to (r);**
  - **(C) ORS 215.213 (Uses permitted in exclusive farm use zones in counties that adopted marginal lands system prior to 1993) (11);**
  - **(D) ORS 215.283 (Uses permitted in exclusive farm use zones in nonmarginal lands counties) (1)(b), (d), (e), (h) to (L), (n) to (p), (r), (t) or (u);**
  - **(E) ORS 215.283 (Uses permitted in exclusive farm use zones in nonmarginal lands counties) (2)(a), (j), (L) or (p) to (s); or**
  - **(F) ORS 215.283 (Uses permitted in exclusive farm use zones in nonmarginal lands counties) (4).**

Where the application of industrial wastewater will be used in conjunction with farm management, the use is an allowed use under ORS 215.203. The application complies with this standard.

(3) When a state agency or a local government makes a land use decision relating to the land application of reclaimed water, agricultural or industrial process water or biosolids under a license, permit or approval by the Department of Environmental Quality, the applicant shall explain in writing how alternatives identified in public comments on the land use decision were considered and, if the alternatives are not used, explain in writing the reasons for not using the alternatives. The applicant must consider only those alternatives that are identified with sufficient specificity to afford the applicant an adequate opportunity to consider the alternatives. A land use decision relating to the land application of reclaimed water, agricultural or industrial process water or biosolids may not be reversed or remanded

PRELIMINARY

under this subsection unless the applicant failed to consider identified alternatives or to explain in writing the reasons for not using the alternatives.

Public comments for this proposal have not been received but will be incorporated if received within the 21-day comment period noted below. This criterion is met based on these factors.

(4) The uses allowed under this section include:

(a) The treatment of reclaimed water, agricultural or industrial process water or biosolids that occurs as a result of the land application;

(b) The establishment and use of facilities, including buildings, equipment, aerated and nonaerated water impoundments, pumps and other irrigation equipment, that are accessory to and reasonably necessary for the land application to occur on the subject tract;

(c) The establishment and use of facilities, including buildings and equipment, that are not on the tract on which the land application occurs for the transport of reclaimed water, agricultural or industrial process water or biosolids to the tract on which the land application occurs if the facilities are located within:

(A) A public right of way; or

(B) Other land if the landowner provides written consent and the owner of the facility complies with ORS 215.275 (Utility facilities necessary for public service) (4); and

(d) The transport by vehicle of reclaimed water or agricultural or industrial process water to a tract on which the water will be applied to land.

This authorization is for the establishment and use of facilities accessory for land application of reclaimed water on the subject tract. These criteria are met.

(5) Uses not allowed under this section include:

(a) The establishment and use of facilities, including buildings or equipment, for the treatment of reclaimed water, agricultural or industrial process water or biosolids other than those treatment facilities related to the treatment that occurs as a result of the land application; or

(b) The establishment and use of utility facility service lines allowed under ORS 215.213 (Uses permitted in exclusive farm use zones in counties that adopted marginal lands system prior to 1993) (1)(x) or 215.283 (Uses permitted in exclusive farm use zones in nonmarginal lands counties) (1)(u). [2001 c.488 §4; 2009 c.850 §5; 2011 c.567 §8; 2013 c.242 §6]

These criteria are not applicable as this authorization is not for the establishment or use of facilities for treatment of reclaimed water other than those related to the treatment that occurs as a result of the land application. These criteria are met.

215.247 Transport of biosolids to tract of land for application. If biosolids are transported by vehicle to a tract on which the biosolids will be applied to the land

PRELIMINARY

under a license, permit or approval issued by the Department of Environmental Quality under ORS 454.695, 459.205, 468B.050, 468B.053 or 468B.055 or in compliance with rules adopted under ORS 468B.095, the transport and the land application are allowed outright, and a state or local government license, permit or approval in connection with the use is not a land use decision. [2001 c.488 §5]
This criterion is not applicable as vehicular transport of biosolids is not proposed. The applicant states that process water and fresh water will be conveyed to the subject properties through an existing pipeline.

215.249 Division of land for application of biosolids. Notwithstanding ORS 215.263, the governing body of a county or its designee may not approve a proposed division of land in an exclusive farm use zone for the land application of reclaimed water, agricultural or industrial process water or biosolids described in ORS 215.213 (1)(y) or 215.283 (1)(v). [2001 c.488 §6; 2009 c.850 §6]
This criterion is not applicable as a division of land is not proposed.

215.251 Relationship to other farm uses. Nothing in ORS 215.213 (1)(y), 215.246 to 215.249 or 215.283 (1)(v) affects whether the land application of a substance not described in ORS 215.213 (1)(y), 215.246 to 215.249 or 215.283 (1)(v) is a farm use as defined in ORS 215.203. [2001 c.488 §7; 2003 c.14 §100; 2009 c.850 §7]
These activities do not affect or change the primary use of the farm activities which is agricultural production of farm crops. This criterion is met.

SECTION 3.010(D)(9) Use Standards. Utility facility service lines are utility lines and accessory facilities or structures that end at the point where the utility service is received by the customer and that are located on one or more of the following:

- **a. A public right of way;**
- **b. Land immediately adjacent to a public right of way, provided the written consent of all adjacent property owners has been obtained; or**
- **c. The property to be served by the utility.**

The proposed new pipeline will be adjacent to the existing right of way and will also connect to the place of use on Farm VI. The application complies with this criterion.

III. **AGENCIES NOTIFIED:** Dawn Hert, Eastern Oregon Region Representative, Oregon Department of Land Conservation & Development; Courtney Werner-Crowell, Regional Solutions Team, Sean Rochette, Department of Environmental Quality, Water Quality Division; Melody Henderson, Oregon Department of Fish & Wildlife; Chris Kowitz, Oregon Department of Water Resources; Mike Gorman, Morrow County Assessor; Eric Imes, Morrow County Public Works Director; Corey Sweeney, Morrow County Weed Coordinator; Bruce Brode-Heine, GSI; Miff Devin, Port of Morrow Water Quality Manager; Lisa Mittelsdorf, Port of Morrow, Executive Director, Jacob Cain, Port of Morrow Engineer; Kevin Payne, Morrow Soil and Water Conservation District; Columbia Improvement District, Sarah Stauffer-Curtiss, Attorney for Port of Morrow.

IV. **Property Owners Notified:**

September 13, 2024 for Administrative Review
October 9, 2024 for Planning Commission hearing

PRELIMINARY

V. **Public Comments Received:** A request for a hearing was filed on October 3, 2024. See attached letter from Andrew G. Martin, Attorney.

VI. **21- Day Public Comment Period:** September 13, 2024 - October 4, 2024.

VII. **Planning Commission Hearing:** October 29, 2024

VIII. **PRELIMINARY DECISION:** The Morrow County Planning Director tentatively approved Land Use Decision LUD-N-75-24 subject to the following CONDITIONS OF APPROVAL:

A final Zoning Permit is required for each tax lot. The ministerial Zoning Permits may be granted subject to the following conditions of approval:

1. The applicant shall comply with the regulations and directives stipulated by the Morrow County Weed Coordinator, which may include continued mitigation practices.

2. The applicant shall consult with Morrow County Public Works to identify and mitigate any anticipated impacts to County Roads during construction of the facility.

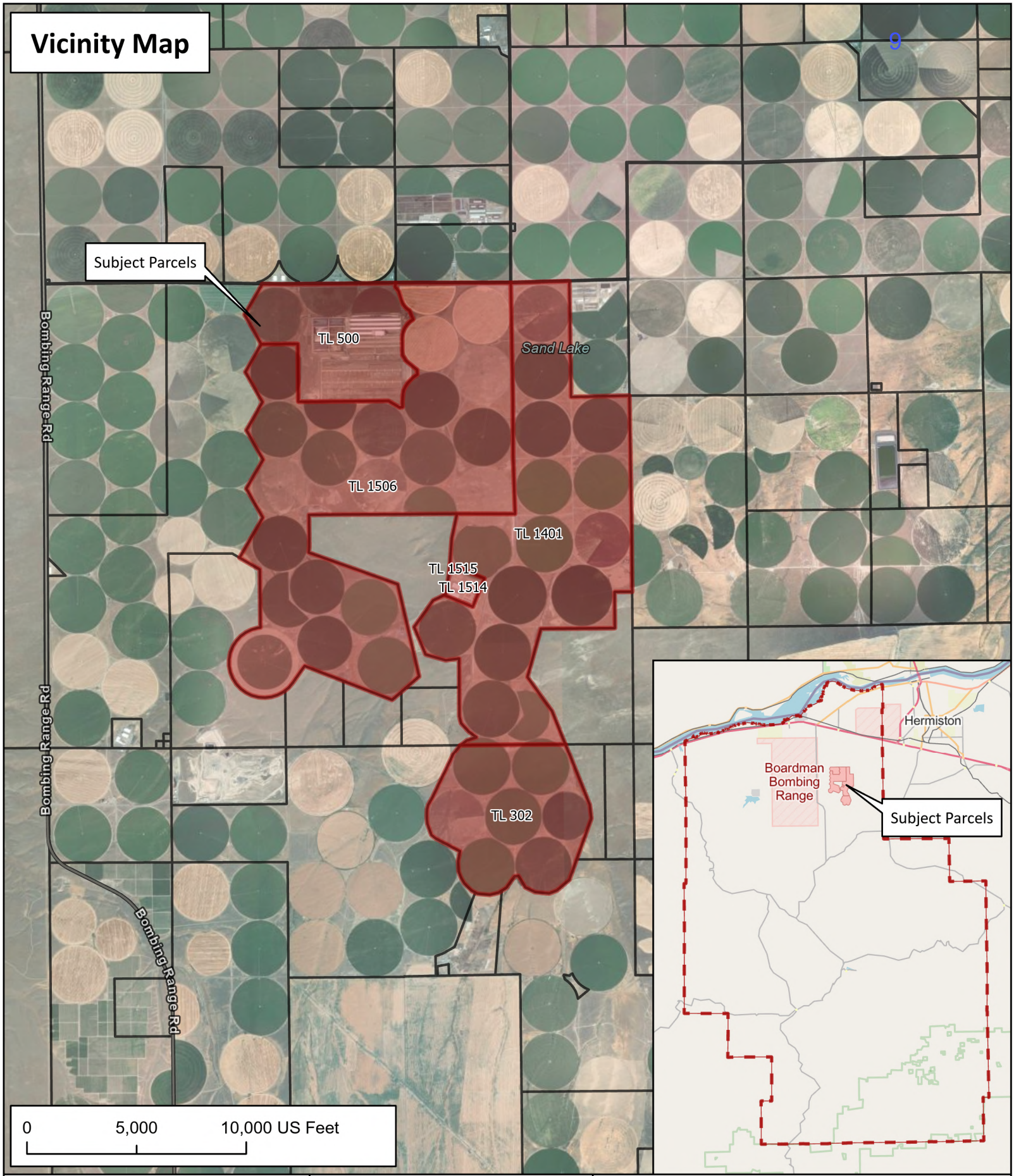
3. Applicant shall obtain access permit(s) for construction in the County right-of-way.

4. Applicant shall comply with the recommendations identified by affected agencies, if any.

Tamra Mabbott Date
Planning Director

Attachments: subject parcel map, Vicinity Map, Application and materials submitted by applicant, October 3, 2024 letter from Andrew Martin, Attorney at Law.

PRELIMINARY



LUD-N-075-24

Port of Morrow
Multiple Tax Lots

Morrow County Tax Lot
Morrow County Boundary
Subject Parcels

Coordinate System:
NAD 1983 HARN StatePlane Oregon North FIPS 3601
Projection: Lambert Conformal Conic
Datum: North American 1983 HARN

Cartography By: Stephen Wrecsics
Wednesday, August 7, 2024
Morrow County Planning Department

CORRECTED	OWNER 1	OWNER 2	MAIL ADDRESS	CITY	STATE	ZIPCODE
2N26E 302	CANYON FARM II, LLC		119 SOUTH B ST STE B	SAN MATEO	CA	94401
3N26E 1515	CANYON FARM II, LLC		119 SOUTH B ST STE B	SAN MATEO	CA	94401
3N26E 1514	CANYON FARM II, LLC		119 SOUTH B ST STE B	SAN MATEO	CA	94401
3N26E 1506	CANYON FARM II, LLC		119 SOUTH B ST STE B	SAN MATEO	CA	94401
3N26E 1401	CANYON FARM II, LLC		119 SOUTH B ST STE B	SAN MATEO	CA	94401
3N26E 1305	MADISON RANCHES LAND 1 LLC		29299 MADISON RD	ECHO	OR	97826
3N26E 1513	FINLEY BUTTES LTD PARTNERSHIP		3 WATERWAY SQUARE PL SUITE 110	THE WOODLANDS	TX	77380
3N26E 1000	SAGE HOLLOW RANCH, LLC, .01% ETAL		3620 INDEPENDENCE RD	SUNNYSIDE	WA	98944
3N26E 1400	MEENDERINCK LAND COMPANY LLC		PO BOX 1011	HERMISTON	OR	97838
3N26E 500	EASTERDAY DAIRY, LLC		PO BOX 2388	PASCO	WA	99301
2N26E 306	SANDHOLLOW LAND, LLC		PO BOX 307	LEXINGTON	OR	97839
2N26E 304	SANDHOLLOW LAND, LLC		PO BOX 307	LEXINGTON	OR	97839
2N26E 303	SANDHOLLOW LAND, LLC		PO BOX 307	LEXINGTON	OR	97839
2N26E 301	SANDHOLLOW LAND, LLC		PO BOX 307	LEXINGTON	OR	97839
3N26E 2300	SANDHOLLOW LAND, LLC		PO BOX 307	LEXINGTON	OR	97839
3N26E 1512	SANDHOLLOW LAND, LLC		PO BOX 307	LEXINGTON	OR	97839
3N26E 1511	SANDHOLLOW LAND, LLC		PO BOX 307	LEXINGTON	OR	97839
3N26E 1503	SANDHOLLOW LAND, LLC		PO BOX 307	LEXINGTON	OR	97839
3N26E 1501	SANDHOLLOW LAND, LLC		PO BOX 307	LEXINGTON	OR	97839
3N26E 509	OREGON POTATO COMPANY		PO BOX 3110	PASCO	WA	99302
3N26E 511	BAKER PRODUCE SOUTH, INC		PO BOX 4063	PASCO	WA	99302
3N26E 510	FARMLAND RESERVE, INC		PO BOX 511196	SALT LAKE CITY	UT	84151
3N26E 508	FARMLAND RESERVE, INC		PO BOX 511196	SALT LAKE CITY	UT	84151
3N26E 507	FARMLAND RESERVE, INC		PO BOX 511196	SALT LAKE CITY	UT	84151
3N26E 100	FARMLAND RESERVE, INC		PO BOX 511196	SALT LAKE CITY	UT	84151

LUD-N-75-24|Port of Morrow|EFU 500ft. notice.

Multiple, see supporting documents.

S:\Planning\LUD\North\2024

GSI Water Solutions, Inc.

September 10, 2024

Tamra Mabbott, Planning Director
Morrow County Planning Department
205 NE Third Street
Irrigon, Oregon, 97844

RE: **Port of Morrow Land Application Program - Farm 6 Expansion Project, Morrow County Land Use Application**

Dear Stephanie:

The Port of Morrow (Port) operates the Boardman Industrial Park, which houses agricultural food processors and other industrial facilities that support the region's farming community. Part of the Port's service to the industrial and food processors is the management of their wastewater through a land application program. This land application program also provides a service to the local farmers by providing them with low-cost, nutrient-rich irrigation water in this water-deficient region. The Port operates this land application system under an Oregon Department of Environmental Quality (DEQ) water pollution control facilities (WPCF) permit.

The Port is proposing an expansion of the land application program through the purchase of an existing 7,300-acre farm located in Morrow County. The farm is being purchased from Canyon Farm, LLC, and Canyon Farm II, LLC and is zoned as exclusive farm use (EFU). The farm is located directly west of Farm 4.This expansion project will add up to 6,200 acres of land to the Port's land application program (to be designated as Farm 6), with the goal of distributing the wastewater across a larger land area, thereby reducing possible impacts. As part of this expansion project the Port will be constructing a new pipeline spur to deliver wastewater to the new property's existing piping system from the Port's existing wastewater pipeline to Farm 4. The Port is submitting to DEQ a WPCF permit modification request to add Farm 6 to the Port's land application program.

GSI Water Solutions, Inc. (GSI) is submitting on the behalf of the Port the attached Morrow County Land Use Application requesting confirmation that the land application of the Port's process wastewater and the new pipeline spur are allowed outright under the County's zoning ordinance.

The Port's ultimate goal is to obtain the County's signature on the DEQ Land Use Compatibility Statement form that is required for the WPCF permit modification. This LUCS form is attached at the end of this land use application package.

Please do not hesitate to reach out to either myself at 541.390.0591 or Miff Devin at 541.481.7678 with any questions.

Sincerely,
GSI Water Solutions, Inc.

Bruce Brody-Heine

Bruce Brody-Heine
Principal Hydrogeologist

Enclosures: Morrow County Land Use Application Package

September 9, 2024

Tamra Mabbott
Planning Director, Morrow County
Morrow County Planning Department
215 NE Main Avenue
Irrigon, OR 97844

Re: Port of Morrow Land Use Application to Morrow County – Authorization for Port to Sign Application

Dear Ms. Mabbott:

The Port of Morrow (the "Port") has recently signed a purchase and sale agreement to acquire certain real property in Morrow County, Oregon ("Canyon Farm") from Canyon Farm, LLC and Canyon Farm II LLC (together, "Seller"). The closing of the transaction contemplated by the purchase agreement is scheduled to occur on or before December 31, 2024. Seller understands that the Port intends to submit a land use application to Morrow County regarding its use of Canyon Farm after the Port acquires Canyon Farm.

As the current landowner, Seller acknowledges that the Port intends to execute and submit the land use application form to the County based on the Port's right to acquire Canyon Farm.

If you have any questions, please contact me at (406) 750-1665 or baptiste@fall-line-cap.com

Sincerely,

Baptiste Tellier
Canyon Farm, LLC – Vice President
Canyon Farm II, LLC – Authorized Signatory

cc: Lisa Mittlesdorf/Port of Morrow

GSI Water Solutions, Inc.

September 10, 2024

Tamra Mabbott, Planning Director
Morrow County Planning Department
205 NE Third Street
Irrigon, Oregon, 97844

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GSI Water Solutions, Inc.

Bruce Brody-Heine

Bruce Brody-Heine
Principal Hydrogeologist

Enclosures: Morrow County Land Use Application Package

September 9, 2024

Tamra Mabbott
Planning Director, Morrow County
Morrow County Planning Department
215 NE Main Avenue
Irrigon, OR 97844

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If you have any questions, please contact me at (406) 750-1665 or baptiste@fall-line-cap.com

Sincerely,

Baptiste Tellier
Canyon Farm, LLC – Vice President
Canyon Farm II, LLC – Authorized Signatory

cc: Lisa Mittlesdorf/Port of Morrow

LAND USE APPLICATION

Fee_____

FILE NUMBER _____ Date Received _____

Date Deemed Complete _____

Type of Application (check one):

☐Non-Farm Use ☐Temporary Use ☐Dwelling Authorization

☐Agri-tourism ☐Event(s) ☒Other Farm 6 - Land Application Program Expansion

Applicant:

Name(s) Port of Morrow

Address 2 Marine Drive, Boardman, OR 97818

Phone (541) 481-7678 E-mail address MiffD@portofmorrow.com

Legal Owner (if different from the applicant):

Name(s) Canyon Farm LLC & Canyon Farm II LLC (Port of Morrow has a PSA to purchase this farm)

Address 73920 Pole Line Road, Boardman, OR 97818

Legal and Physical Description:

Township 2&3N Range 26E Section 2, 3, 10, 11 14-17, 20-23 26-29, 32-35 Tax Lot(s) see attached tax lot table - AttachmentB

Physical Address 73920 Pole Line Road, Boardman, OR 97818

General Location See attached project description, maps, and table - Attachment A

PROPOSAL (Identify what you are proposing): Expansion of Port of Morrow's Land Application program to include new acres (Farm 6) - see attached project description

APPROVAL CRITERIA:

Zoning Designation EFU Acreage ~ 7,300 Acres

List the applicable Article, Section(s), and Subsection(s):

Morrow County Zoning Ordinance (MCZO) Article 3, Section 3.010(B)(23) and (D)(8).

A Planner can assist you in identifying the review criteria that apply to your request. The review criteria are used to determine whether your application will be approved or denied. It is your responsibility to provide adequate written justification and any other evidence you feel is relevant to explain how your request complies with the review criteria. Failure to provide adequate justification may result in your application being denied, or deemed incomplete until additional information is provided. For additional space on any questions, please attach a separate sheet of paper.

PHYSICAL FEATURES (Describe the site):
Vegetation on the property: typical local vegetation and grasses, and irrigated pivots
Topography of the property (i.e. rocky, hilly, forested): combination of flat an hilly areas
Any significant features of the property (i.e. steep slopes, water bodies, etc.): No

Soil type(s): See attached descriptions - Attachment C
Is the land or any portion of it subject to flooding? No
Most current use of the property: irrigation pivot farming
Has the location been utilized as an integral part of the farming operation on the property? Yes
Does the location have water rights for irrigation? Yes
What are the predominant farming types in the area? Irrigated circle farming
Is the property currently under special assessment by the County Assessor's Office? No/unknown

EXISTING IMPROVEMENTS:
What structures or development does the property contain? Will any structure be removed or demolished? Remnants of previous cattle operations (mostly removed), Potato storage buildings, & 2 farm worker houses

DESCRIBE THE ACCESS TO THE PROPERTY (check one):
☐State Highway ☒County Road ☐Public Road ☐USFS ☒Private Easement
Road Name: Homestead Lane/Pole Line Road
Improvement type and condition of road: NA
Will any new access be required? No

EXISTING SERVICES:
Fire protection district or method: Boardman Rural Fire PD
Solid waste disposal method: NA
Utilities and other public services provided: Umatilla Electric

Please include a map or plot plan with the following information:
Existing and proposed water supply;
Existing and proposed sewage disposal method; NA
Location of existing and proposed structures; and NA
Existing and proposed roads and accesses.

With the map please provide a description of:
How the proposal will be compatible with surrounding land uses: Continue with current farming operations
How the proposal will protect and preserve existing natural resources such as trees, vegetation, water resources and wildlife habitat: No trees or natural features will be impacted
Whether you believe diking, screening or other landscaping will be required to protect nearby properties and habitats: NA

The applicant is responsible for providing all of the information to show compliance with the standards for approval. If you are unsure of the standards required by the code, the Planning Department will work with you to identify them. It is the applicant's duty to prove the proposal meets all of the given code requirements. Your plot plan and narrative should show or answer the above questions as well as address specific issues about your particular application.

Through applying for this application I authorize the Morrow County Planning Director or designee to enter upon the property subject of the application to conduct a site visit necessary for processing the requested application. Morrow County shall contact the Land Owner prior to the site visit to arrange an appropriate time for the site visit.

Signatures:

I(we), the undersigned, acknowledge that I am familiar with the standards and limitations set forth by the Morrow County Zoning Ordinance and that additional information and materials may be required, as provided by the Zoning Ordinance and Comprehensive Plan. I propose to meet all standards set forth by the County's Zoning Ordinance and any applicable State and Federal regulations. I(we) certify that the statements and information provided with this application are true and correct to the best of my(our) knowledge.

Signed: _____ _____

(Applicant) (Applicant)

_____ _____

(Legal Owner) (Legal Owner)

If this application is not signed by the property owner a letter authorizing signature by the applicant must be attached.

Morrow County Planning Department
P.O. Box 40, Irrigon Oregon 97844
(541) 922-4624 FAX: (541) 922-3472

ATTACHMENT A

Farm 6 – Expansion Project

Project Description

Port of Morrow
Farm 6 - Land Application Program Expansion

Project Description

The Port of Morrow (Port) operates an industrial wastewater land application system on farmlands near the Port's Boardman Industrial Park under an Oregon Department of Environmental Quality (DEQ) water pollution control facilities (WPCF) land application permit. The Port provides a service to the food processors and other industries in this area by managing their wastewater and to the local farmers by providing them with low-cost, nutrient-rich irrigation water. The land application program is beneficial because it reuses both the nutrients and the water and provides a valuable service to the farming economy in this water-deficient region.

The Port is proposing an expansion of the land application program through the purchase of an existing 7,300-acre farm located in Morrow County. The farm is being purchased from Canyon Farm, LLC, and Canyon Farm II, LLC and is zoned as exclusive farm use (EFU), which lists land application as an allowed use. The farm is located directly west of Farm 4 (see attached Figures 1 and 2). There are currently approximately 5,350 acres of irrigated pivots on the property (Figure 2). The Port will call this new property Farm 6 and is submitting to DEQ a WPCF permit modification request to add Farm 6 to the Port's land application program, with the goal of distributing the wastewater across a larger land area to reduce possible impacts. The use of this new property (Farm 6) for land application of wastewater will include all the existing pivots (5,350 acres) plus up to an additional 850 acres (totaling 6,200 acres) within the proposed Farm 6 boundary, as the alignment of the circles within the land application area may move, and new circles could be added within the boundary of Farm 6.

The Port is requesting Morrow County issue a land use decision (LUD) confirming that the land application of wastewater as proposed is allowed outright. The Port is also requesting the County complete and sign the DEQ Land Use Compatibility Statement (LUCS) form that states that the proposed land application is allowed under the current land use designation.

Water Conveyance System. Fresh water will continue to be delivered to Farm 6 through the CID distribution system under the property's water rights. Wastewater is currently being conveyed through an existing pipeline (Figure 2) from the Port to Farm 4.

The Port will deliver wastewater to Farm 6 through a new spur originating from the existing pipeline and extending to the existing wastewater piping network on Farm 6. This new spur will also connect the storage pond on Farm 4 to Farm 6. The Port requests that this new pipe spur be evaluated as part of the County's evaluation of the land application of wastewater.

Existing Land Use/Site Conditions. Figure 3 shows the general topography in the vicinity of the project sites, and the existing irrigation pivots. The farm will continue to grow a wide variety of crops including, but not limited to: wheat, alfalfa, corn, onions, canola, potatoes, triticale, giant cane, garlic, sorghum, hay, beets, etc.

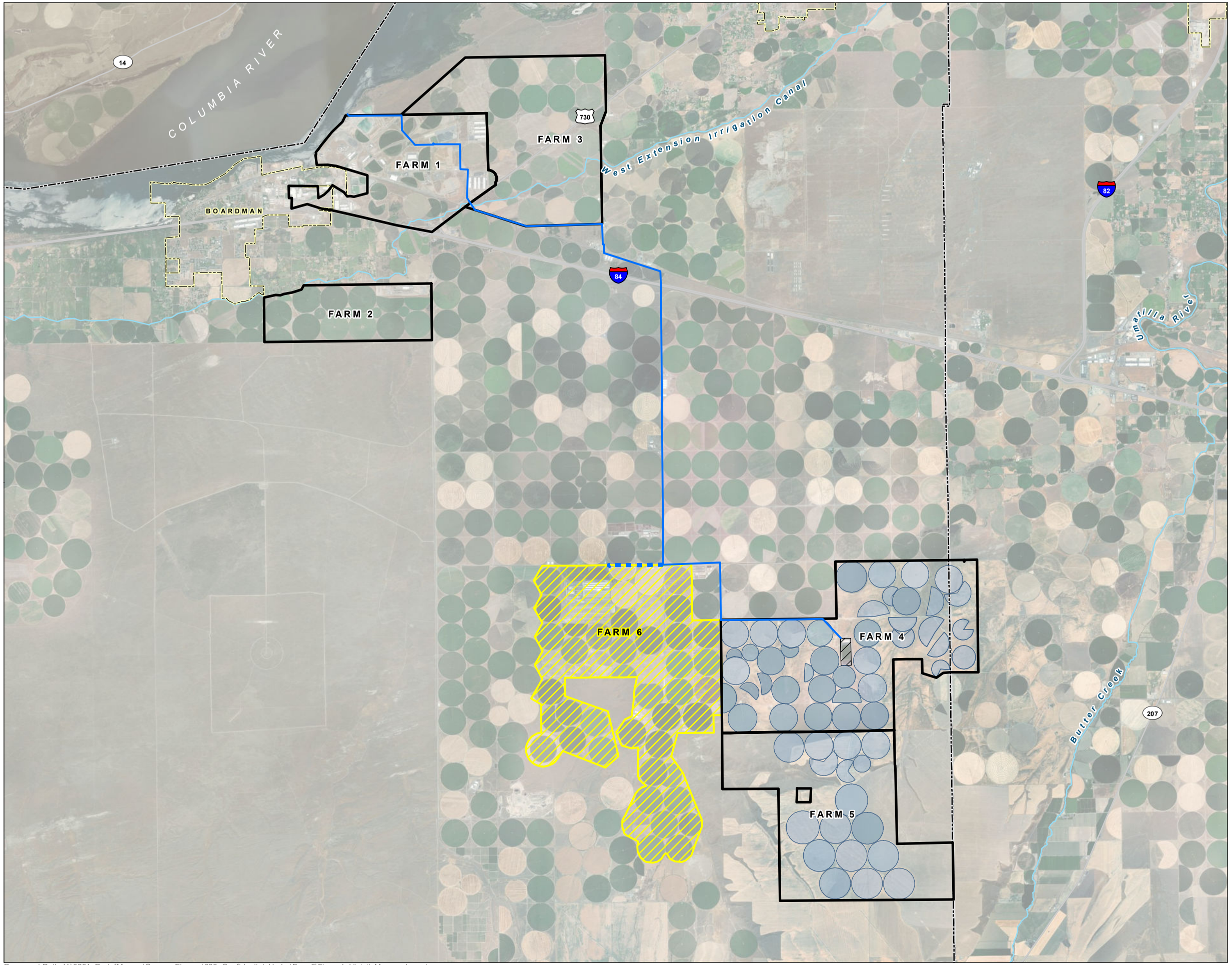
Port Land Application Program – Farm 6 Expansion
Land Use Decision Request:

- Issue a land use decision acknowledging land application is an allowed use on up to 6,200 acres of land on this property (Farm 6).
- Include in the land use decision confirmation that the new wastewater piping spur to convey the wastewater from the existing Port pipeline to the Farm 6 wastewater piping system (see Figure 4 for details of the new piping route) is an allowed accessory use.

FIGURE 1

Vicinity Map

Farm 6 - Land Application
Program Expansion
Port of Morrow (POM)



LEGEND

- Proposed New Pipeline
- Existing Pipeline
- Farm 6 Expansion
- POM Existing WPCF Permit Boundary
- Existing Land Application Irrigation Circle
- Existing Process Water Storage Pond

All Other Features

- City Boundary
- County Boundary
- Major Road
- Watercourse

N

0 4,500 9,000 13,500
Feet

Date: September 4, 2024
Data Sources: BLM, ESRI, ODOT, USGS, NAIP Imagery (2020), POM

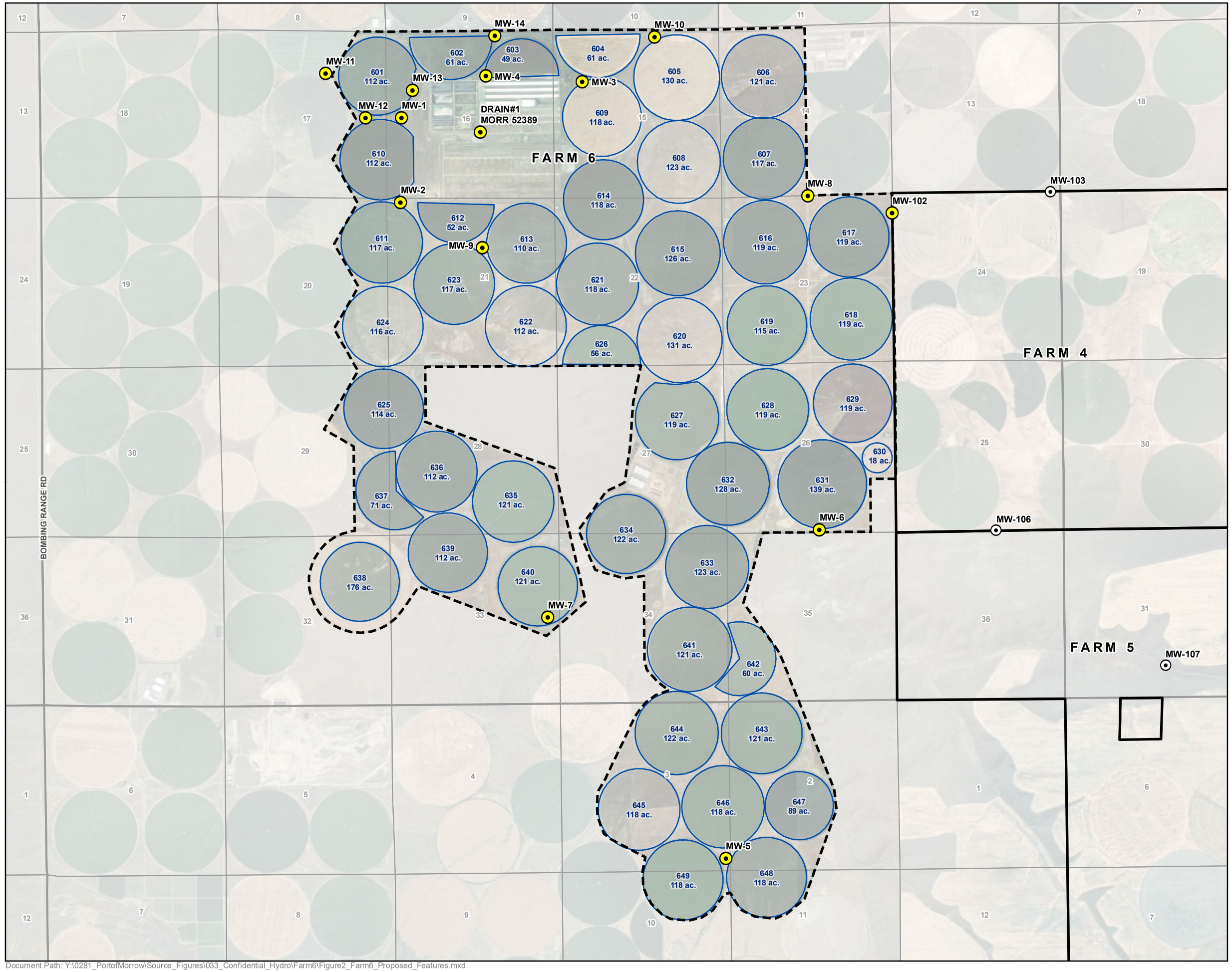
GSI Water Solutions, Inc.

Document Path: Y:\0281_PortofMorrow\Source_Figures\033_Confidential_Hydro\Farm6\Figure1_VicinityMap.mxd, npalmer

FIGURE 2

Proposed Expansion Project Boundary, Irrigation Circles, and Monitoring Wells

Farm 6 - Land Application Program Expansion
Port of Morrow (POM)



LEGEND

- Farm 6 Monitoring Well
- Monitoring Well
- Farm 6 Proposed WPCF Boundary Expansion
- POM Existing WPCF Permit Boundary
- Existing Irrigation Circle

N

0 1,500 3,000 4,500
Feet

Date: September 5, 2024
Data Sources: DOGAMI, USGS, ESRI

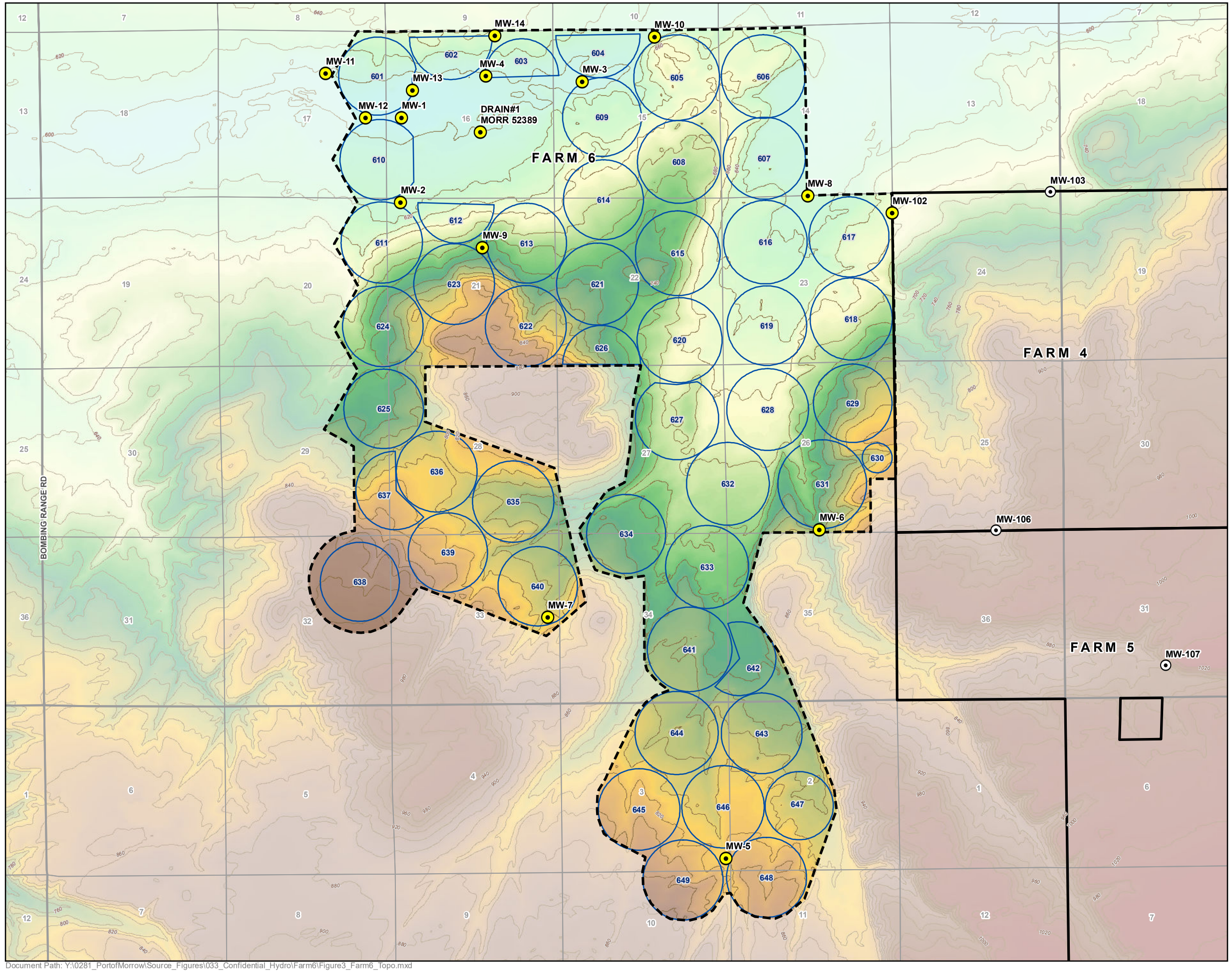
GSI Water Solutions, Inc.

Document Path: Y:\0281_PortofMorrow\Source_Figures\033_Confidential_Hydro\Farm6\Figure2_Farm6_Proposed_Features.mxd

FIGURE 3

Surface Topography

Farm 6 - Land Application
Program Expansion
Port of Morrow (POM)



LEGEND

- Farm 6 Monitoring Well
- Monitoring Well
- Farm 6 Proposed WPCF Boundary Expansion
- POM Existing WPCF Permit Boundary
- Existing Irrigation Circle
- Surface Elevation Contour (20 foot interval)

Surface Elevation (feet)

High : 318.133

Low : 177.433

N

0 1,500 3,000 4,500

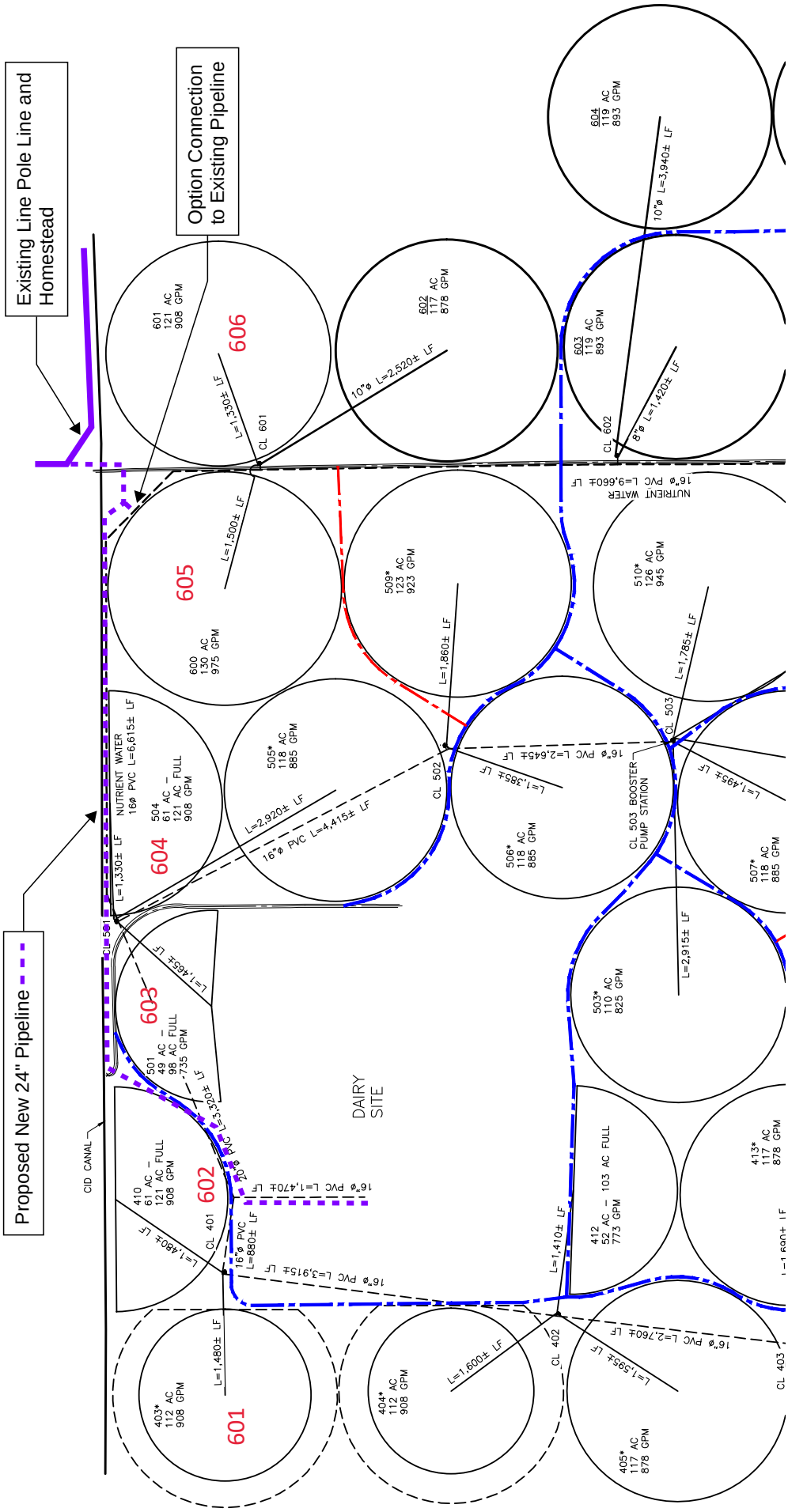
Feet

Date: September 4, 2024
Data Sources: DOGAMI, USGS, ESRI

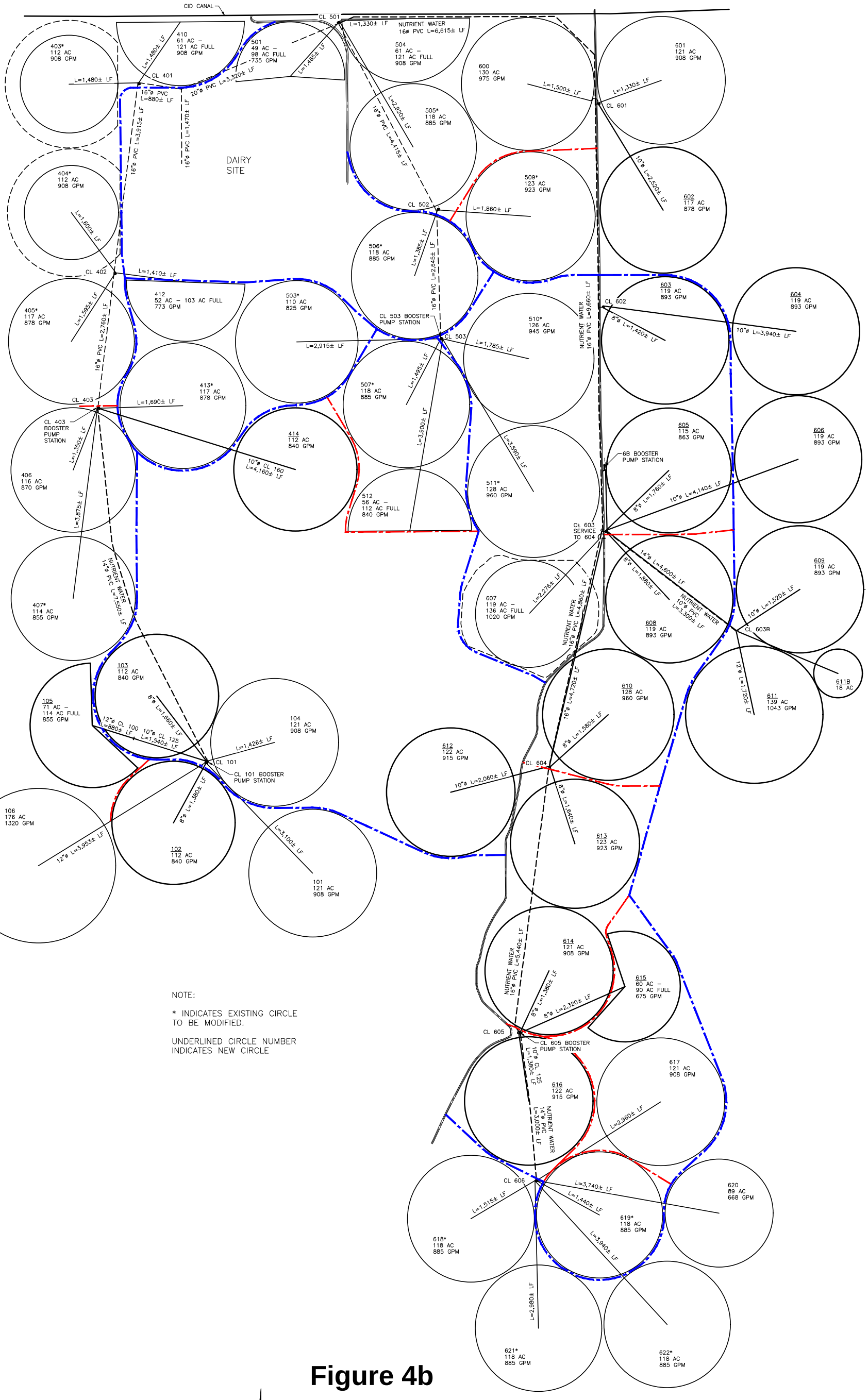
GSI Water Solutions, Inc.

Document Path: Y:\0281_PortofMorrow\Source_Figures\033_Confidential_Hydro\Farm6\Figure3_Farm6_Topo.mxd

FIGURE 4a
WASTEWATER PIPING SYSTEM MAP



WASTEWATER PIPING SYSTEM MAP



NOTE:

* INDICATES EXISTING CIRCLE TO BE MODIFIED.

UNDERLINED CIRCLE NUMBER INDICATES NEW CIRCLE

Figure 4b

NOTE:

30 FT WIDE ROAD
20 FT WIDE ROAD

CLUSTER TO PIVOT PIPES ARE 10"ø UNLESS NOTED OTHERWISE

N

NUTRIENT WATER

0 1,000 2,000

SCALE IN FEET

DATE: 9/20/2019

ATTACHMENT B

Farm 6 – Expansion Project

Tax Lot Table and Map

Tax Lots

Port of Morrow WPCF Permit Modification

Farm 6 Tax Lots & Current Ownership Pending Purchase by Port of Morrow

Township		Range		Section	Tax Lot #	County	Land Owner
3	N	26	E	15, 16, 17	500	Morrow	Canyon Farm, LLC
3	N	26	E	14, 23, 26, 27, 34, 35	1401	Morrow	Canyon Farm II, LLC
3	N	26	E	15, 16, 17, 20-22, 28, 29, 32-34	1506	Morrow	Canyon Farm II, LLC
3	N	26	E	27	1514	Morrow	Canyon Farm II, LLC
3	N	26	E	27	1515	Morrow	Canyon Farm II, LLC
2	N	26	E	2, 3, 10, 11	302	Morrow	Canyon Farm II, LLC

Farm 6 Tax Lot Map

Farm 6 - Land Application
Program Expansion
Port of Morrow (POM)

FARM 6

FARM 4

FARM 5

BOMBING RANGE RD

703 510 800 510 509 510 508 510 507 1000 100 200
500 1400 100 1300
1700 1506 1204
100 1305
511 1501 1515 1401 1700
512 1514
1513 1503 1300 1200
1511 1512 2300
513 504 505 506 307 200
400 306 200 100
200 400 301 302 102
501 603 303 700
500 304 303

LEGEND

- Morrow County Tax Lot
- Farm 6 Land Application Boundary
- POM Existing Land Application Boundary

N

0 1,500 3,000 4,500
Feet

Date: September 4, 2024
Data Sources: DOGAMI, USGS, ESRI

GSI Water Solutions, Inc.

Document Path: Y:\0281_PortofMorrow\Source_Figures\033_Confidential_Hydro\Farm6\FigureX_Farm6_TaxLots.mxd

ATTACHMENT C

Farm 6 – Expansion Project

Soils Map & Soils Description

FIGURE

General Soil Map

Farm 6 - Land Application
Program Expansion
Port of Morrow (POM)

FARM 6

FARM 4

FARM 5

s6474

s6475

s6436

BOMBING RANGE RD

LEGEND

- Farm 6 Proposed WPCF Boundary Expansion
- POM Existing WPCF Permit Boundary
- Existing Irrigation Circle

General Soil Types

- Ritzville-Mikkalo (s6436)
- Sagehill-Quincy-Koehler (S6474)
- Warden-Sagehill-Taunton (s6475)

N

0 1,500 3,000 4,500
Feet

Date: September 4, 2024
Data Sources: DOGAMI, USGS, ESRI

GSI Water Solutions, Inc.

Document Path: Y:\0281_PortofMorrow\Source_Figures\033_Confidential_Hydro\Farm6\Figure4_Farm6_Soils.mxd

LOCATION SAGEHILL WA+OR

Established Series
Rev. HRG/RJE/TLA/RWL
09/2019

SAGEHILL SERIES

Landscape--valleys
Landform--terraces, terrace escarpments
Slope--0 to 60 percent
Parent material--lacustrine deposits with a mantle of loess or eolian deposits
Mean annual precipitation--about 180 mm
Mean annual air temperature--about 10 degrees C
Depth class--very deep, deep
Drainage class--well drained
Soil moisture regime--aridic
Soil temperature regime--mesic
Soil moisture subclass--xeric

TAXONOMIC CLASS: Coarse-loamy, mixed, superactive, mesic Xeric Haplocalcids

TYPICAL PEDON: Sagehill very fine sandy loam, cultivated (All textures are apparent field textures.)

Ap--0 to 20 cm; very fine sandy loam, brown (10YR 5/3) dry, dark brown (10YR 3/3) moist; very weak fine granular structure; soft, very friable, nonsticky and nonplastic; common very fine roots; many very fine and fine irregular pores; slightly alkaline (pH 7.6); abrupt smooth boundary

Bw--20 to 48 cm; very fine sandy loam, brown (10YR 5/3) dry, dark brown (10YR 3/3) moist; weak very coarse prismatic structure; soft, very friable, nonsticky and nonplastic; common very fine roots; many very fine and fine irregular pores; slightly alkaline (pH 7.8); abrupt wavy boundary

2Bk1--48 to 76 cm; very fine sandy loam, pale brown (10YR 6/3) dry, grayish brown (2.5Y 5/2) moist; weak very coarse prismatic structure; slightly hard, friable, nonsticky and nonplastic; common very fine roots; common very fine and fine irregular pores; few spheroidal secondary lime aggregates; strongly effervescent; moderately alkaline (pH 8.4); abrupt wavy boundary

2Bk2--76 to 99 cm; silt loam, light brownish gray (2.5Y 6/2) dry, grayish brown (2.5Y 5/2) moist; massive; hard, firm, slightly sticky and slightly plastic; few very fine roots; common very fine and fine irregular pores; secondary lime in seams; violently effervescent; moderately alkaline (pH 8.4); abrupt wavy boundary

2Bk3--99 to 132 cm; very fine sandy loam, light brownish gray (2.5Y 6/2) dry, grayish brown (2.5Y 5/2) moist, massive; slightly hard, friable, nonsticky and nonplastic; few very fine roots; common very fine irregular pores; common secondary lime aggregates; violently effervescent; strongly alkaline (pH 8.6); abrupt smooth boundary

2Bk4--132 to 150 cm; very fine sandy loam, light brownish gray (2.5Y 6/2) dry, grayish brown (2.5Y 5/2) moist; massive; slightly hard, friable, nonsticky and nonplastic; few very fine roots; common very fine irregular pores; few spheroidal secondary lime aggregates; strongly effervescent; strongly alkaline (pH 8.6)

TYPE LOCATION: Grant County, Washington; about 3 km north of Warden; 770 m north and 660 m east of

the northwest corner of section 32, T. 18 N., R. 30 E.

RANGE IN CHARACTERISTICS:
Mean annual soil temperature--10 to 13 degrees C
Soil moisture--usually dry in all parts between depths of 20 and 60 cm
Depth to calcium carbonate (calcic horizon)--38 to 76 cm
Calcium carbonate equivalent in calcic horizon--5 to 35 percent
Depth to lime- and silica-indurated duripan in some pedons--100 to 150 cm

Ap horizon
Value--5 or 6 dry, 3 or 4 moist
Chroma--2 or 3 dry or moist
Texture--very fine sandy loam, fine sandy loam
Reaction--6.6 to 8.4
Thickness--10 to 25 cm

Bw horizon
Value--5 or 6 dry, 3 or 4 moist
Chroma--2 or 3 dry or moist
Texture--very fine sandy loam, silt loam, loamy very fine sand, fine sandy loam
Reaction--6.6 to 8.4
Thickness--23 to 50 cm

2Bk horizon
Hue--2.5Y, 10YR
Value--4 or 5 moist, 6 or 7 dry
Chroma--2 or 3 dry or moist
Texture--stratified silt loam, very fine sandy loam, or fine sandy loam; gravelly coarse sand or very gravelly coarse sand at a depth of 100 to 150 cm in some pedons
Reaction--7.4 to 9.0
Combined thickness--greater than 75 cm

COMPETING SERIES:
Adkins--no calcium secondary calcium carbonate within a depth of 61 cm
Atlanta--A horizon that has 15 to 25 percent calcium carbonate equivalent
Bertelson--no cambic horizon
Briabbit--50 to 100 cm (moderately deep) to a paralithic contact (tuff)
Crestline--15 to 35 percent gravel in particle-size control section
Declo--8 to 18 percent clay in particle-size control section; 8 to 46 cm deep to calcic horizon; laminated sediment below a depth of 64 to 100 cm
Eoyote--8 to 12 percent clay in particle-size control section; 20 to 30 cm deep to calcic horizon
Escalante--8 to 18 percent clay and 0 to 35 percent gravel in particle-size control section; 15 to 40 percent calcium carbonate equivalent in calcic horizon
Kecko--10 to 18 percent clay in particle-size control section; 50 to 100 cm deep to calcic horizon
Somsen--50 to 100 cm (moderately deep) to a lithic contact (basalt); 8 to 18 percent clay and 15 to 35 percent rock fragments in particle-size control section; 18 to 41 cm deep to calcic horizon
Strevell--10 to 15 percent clay and 5 to 30 percent rock fragments in particle-size control section; 25 to 50 cm deep to calcic horizon

GEOGRAPHIC SETTING:
Elevation--90 to 400 m in Washington, ranges to 790 m in MLRA 11 in Oregon
Climate--arid; warm, dry summers; cool, moist winters
Mean annual precipitation--150 to 250 mm
Mean January air temperature--about -3 degrees C

Mean July air temperature--about 22 degrees C
Mean annual air temperature--about 10 to 12 degrees C
Frost-free season--135 to 200 days

GEOGRAPHICALLY ASSOCIATED SOILS:
Hezel--on terraces; coarse texture in upper part of particle-size control section
Kennewick--on terraces; no cambic horizon; calcareous throughout
Nyssa--on terraces; silt loam in particle-size control section; duripan
Quincy--on dunes; sandy
Owyhee--coarse-silty, laminated, slowly permeable, calcareous sediment at a depth of 50 to 89 cm
Royal--no calcic horizon
Sagemoor, Warden--on terraces; coarse-silty
Shano--on hills; coarse-silty
Scooteney--averages 20 to 35 percent gravel in particle-size control section

DRAINAGE AND SATURATED HYDRAULIC CONDUCTIVITY:
Drainage class--well drained
Saturated hydraulic conductivity (Ksat)--moderately high

USE AND VEGETATION:
Use-nonirrigated wheat and rye production, livestock grazing, irrigated crop production
Native vegetation--bluebunch wheatgrass, Sandberg bluegrass, Thurber needlegrass, needle and thread, Wyoming big sagebrush

DISTRIBUTION AND EXTENT: South-central Washington and eastern Oregon; MLRAs 7 and 11; moderate extent

SOIL SURVEY REGIONAL OFFICE (SSRO) RESPONSIBLE: Portland, Oregon

SERIES ESTABLISHED: Malheur County, Oregon; 1975

REMARKS:
Diagnostic horizons and other features recognized in this pedon
*Ochric epipedon
*Cambic horizon--zone from 20 to 48 cm
*Calcic horizon--zone from 48 to 150 cm
*Particle-size control section--zone from 25 to 100 cm

National Cooperative Soil Survey
U.S.A.

LOCATION TAUNTON WA+ID OR UT

Established Series
Rev. JJR/KWH/TLA
09/2019

TAUNTON SERIES

Landscape--plateaus
Landform--structural benches, fan terraces, mesas
Slope--0 to 45 percent
Parent material--alluvium
Mean annual precipitation--about 200 mm
Mean annual air temperature--about 10 degrees C
Depth class--moderately deep to a duripan
Drainage class--well drained
Soil moisture regime--aridic
Soil temperature regime--mesic
Soil moisture subclass--xeric

TAXONOMIC CLASS: Coarse-loamy, mixed, superactive, mesic Xeric Haplodurids

TYPICAL PEDON: Taunton fine sandy loam, cultivated

Ap--0 to 13 cm; fine sandy loam, light brownish gray (10YR 6/2) dry, dark grayish brown (10YR 4/2) moist; weak fine granular structure; soft, very friable, nonsticky and nonplastic; common roots; moderately alkaline (pH 8.0); abrupt smooth boundary

Bw--13 to 46 cm; fine sandy loam, pale brown (10YR 6/3) dry, brown (10YR 4/3) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; common roots; few very fine tubular pores; moderately alkaline (pH 8.0); clear wavy boundary

Bkq--46 to 61 cm; gravelly fine sandy loam, pale brown (10YR 6/3) dry, brown (10YR 4/3) moist; massive; soft, very friable, nonsticky and nonplastic; common roots; few very fine tubular pores; 20 percent lime- and silica-cemented gravel-sized fragments; strongly effervescent; strongly alkaline (pH 8.6); abrupt smooth boundary

2Bkqm--61 cm; very pale brown (10YR 8/2) indurated duripan; thin smooth laminar cap on surface; violently effervescent in laminar cap and matrix

TYPE LOCATION: Adams County, Washington, about 75 m south and 15 m east of the center of the NW1/4 of section 16, T. 15 N., R. 28 E.; Willamette Meridian

RANGE IN CHARACTERISTICS:
Mean annual soil temperature--11 to 13 degrees C
Soil moisture--dry in all parts between depths of 20 and 60 cm, or to the duripan, more than one-half the time when the soil temperature is higher than 5 degrees C (about 105 to 135 days)
Depth to secondary carbonates (calcic horizon)--25 to 64 cm
Depth to indurated duripan--50 to 100 cm

Ap horizon
Value--5 or 6 dry, 3 or 4 moist
Chroma--2 to 4 dry or moist
Structure--granular, subangular blocky
Thickness--8 to 23 cm

Bw horizon
Value--5 to 8 dry, 3 to 6 moist
Chroma--2 to 4 dry or moist
Texture--silt loam, loam, very fine sandy loam, sandy loam, fine sandy loam
Reaction--7.4 to 8.4
Thickness--15 to 48 cm

Bkq horizon
Hue--2.5Y, 10YR
Value--5 to 8 dry, 3 to 6 moist
Chroma--1 to 4
Texture--silt loam, loam, sandy loam, fine sandy loam, very fine sandy loam
Content of gravel-sized, lime- and silica-cemented fragments--0 to 35 percent
Reaction--7.4 to more than 9.0
Calcium carbonate content--15 to 25 percent
Thickness--15 to 51 cm

COMPETING SERIES:
Doel--no carbonates above a duripan; sand below duripan
Jestrick--65 to 100 cm (moderately deep) to a lithic contact (basalt)
Ticeska--58 to 100 cm (moderately deep) to a lithic contact (basalt)
Oupico--calcareous throughout cambic horizon
Shalake--average of 15 to 35 percent rock fragments in particle-size control section
Tauncal--calcareous to the surface in areas mixed to a depth of 20 cm

GEOGRAPHIC SETTING:
Elevation--60 to 670 m in Washington and Oregon; dominantly 910 to 1525 m in Idaho, but ranges to 1675 m on south- and west-facing slopes
Climate--arid; hot, dry summers; cool, moist winters
Mean annual precipitation--150 to 310 mm
Mean January air temperature--about -2 degrees C
Mean July air temperature--about 22 degrees C
Mean annual air temperature--about 9 to 12 degrees C
Frost-free season--135 to 210 days in Washington and Oregon, 100 to 140 days in Idaho

GEOGRAPHICALLY ASSOCIATED SOILS:
Paulville, Royal--no duripan
Scoon--25 to 50 cm (shallow) to a duripan
Wiehl--no duripan; 50 to 100 cm (moderately deep) to a paralithic contact (sandstone)

DRAINAGE AND SATURATED HYDRAULIC CONDUCTIVITY:
Drainage class--well drained
Saturated hydraulic conductivity (Ksat)--moderately high above the duripan

USE AND VEGETATION:
Use--livestock grazing, irrigated crop production
Native vegetation--Wyoming big sagebrush, bluebunch wheatgrass, Thurber needlegrass, Sandberg bluegrass, buckwheat, gray rabbitbrush

DISTRIBUTION AND EXTENT: South-central Washington, north-central Oregon, and southern Idaho; MLRAs 7, 8, and 11; moderate extent

SOIL SURVEY REGIONAL OFFICE (SSRO) RESPONSIBLE: Portland, Oregon

SERIES ESTABLISHED: Walla Walla County, Washington; 1960

REMARKS:
Diagnostic horizons and other features recognized in this pedon
*Ochric epipedon
*Cambic horizon--zone from 13 to 46 cm
*Calcic horizon--zone from 46 to 61 cm
*Depth to duripan--61 cm
*Particle-size control section--zone from 25 to 61 cm

National Cooperative Soil Survey
U.S.A.

LOCATION WARDEN WA+OR

Established Series
Rev. HRG/TLA/RWL
09/2019

WARDEN SERIES

Landscape--hills, plateaus, valleys
Landform--dominantly terraces and terrace escarpments, but also strath terraces, hillslopes, and dunes
Slope--0 to 65 percent
Parent material--thin mantle of loess over lacustrine or glaciolacustrine deposits
Mean annual precipitation--about 180 mm
Mean annual air temperature--about 10 degrees C
Depth class--very deep, deep
Drainage class--well drained
Soil moisture regime--aridic
Soil temperature regime--mesic
Soil moisture subclass--xeric

TAXONOMIC CLASS: Coarse-silty, mixed, superactive, mesic Xeric Haplocambids

TYPICAL PEDON: Warden very fine sandy loam, cultivated

Ap--0 to 15 cm; very fine sandy loam, light brownish gray (10YR 6/2) dry, dark grayish brown (10YR 4/2) moist; weak fine granular structure; soft, very friable, nonsticky and nonplastic; many fine roots; slightly alkaline (pH 7.8); abrupt smooth boundary

Bw--15 to 48 cm; very fine sandy loam, pale brown (10YR 6/3) dry, brown (10YR 4/3) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; common fine roots; common very fine tubular pores; slightly alkaline (pH 7.8); abrupt smooth boundary

2Bk--48 to 102 cm; silt loam, pale brown (10YR 6/3) dry, brown (10YR 4/3) moist; massive; hard, firm, slightly sticky and slightly plastic; few thinly laminated lenses; common fine roots; many very fine tubular pores; few secondary lime aggregates; violently effervescent; moderately alkaline (pH 8.4); clear wavy boundary

2C1--102 to 137 cm; very fine sandy loam, pale brown (10YR 6/3) dry, brown (10YR 5/3) moist; massive; soft, friable, nonsticky and nonplastic; common fine roots; common very fine tubular pores; violently effervescent; strongly alkaline (pH 8.6); clear wavy boundary

2C2--137 to 150 cm; silt loam, light gray (10YR 7/2) dry, light brownish gray (10YR 6/2) moist; massive; hard, firm, slightly sticky and slightly plastic; few roots; few very fine tubular pores; violently effervescent; strongly alkaline (pH 8.6)

TYPE LOCATION: Adams County, Washington; about 30 m south and 150 m east of the northwest corner of section 19, T. 16 N., R. 30 E., Willamette Meridian

RANGE IN CHARACTERISTICS:
Mean annual soil temperature--10 to 13 degrees C
Moisture control section--continuously dry in all parts between depths of 10 and 30 cm from about May 1 to

October 1
Depth to secondary carbonates--38 to 97 cm
Depth to a duripan in some pedons--more than 100 cm
Content of gravel--as much as 15 percent

Ap horizon
Value--5 or 6 dry; 3, 4, or 5 moist
Chroma--2 or 3 moist or dry
Texture--fine sandy loam, silt loam, very fine sandy loam
Content of clay--5 to 15 percent
Content of fine gravel--0 to 2 percent
Thickness--8 to 25 cm

Bw horizon
Value--5 or 6 dry; 3, 4, or 5 moist
Chroma--2 to 4 moist or dry
Texture--very fine sandy loam, silt loam
Content of clay--8 to 15 percent
Content of fine gravel--0 to 2 percent
Thickness--23 to 71 cm

2Bk horizon
Hue--10YR, 2.5Y
Value--6 or 7 dry, 4 or 5 moist
Chroma--2 or 3 moist or dry
Texture--stratified silt loam and very fine sandy loam
Calcium carbonate equivalent--1 to 30 percent
Thickness--20 to 100 cm

2C horizon
Texture-- silt loam to loamy fine sand
Vertical or diagonal clastic dikes--in some pedons

COMPETING SERIES:
Bedground--100 to 150 cm (deep) to a lithic contact; no secondary carbonates above 50 cm
Sagemoor--38 to 76 cm to continuous thin laminations; 36 to 61 cm to secondary carbonates
Shano--no stratified substratum; 20 to 115 cm to secondary carbonates

GEOGRAPHIC SETTING:
Elevation--90 to 400 m
Climate--warm, dry summers; cool, moist winters
Mean annual precipitation--150 to 230 mm
Mean January air temperature--about -3 degrees C
Mean July air temperature--about 22 degrees C
Mean annual air temperature--about 9 to 12 degrees C
Frost-free season--135 to 200 days

GEOGRAPHICALLY ASSOCIATED SOILS:
Gravden--loamy-skeletal particle-size class; 25 to 50 cm (shallow) to a duripan; on terraces
Kennewick--calcareous in all parts; on terraces
Royal, Sagehill--coarse-loamy particle-size class; on terraces
Sagemoor--38 to 76 cm to continuous thin laminations; 36 to 61 cm to secondary carbonates
Shano--solum more than 150 cm thick; no stratified substratum; 30 to 114 cm to secondary carbonates
Taunton--coarse-loamy particle-size class; on terraces; 50 to 100 cm (moderately deep) to a duripan

Wahluke--weakly cemented; no cambic horizon; on lakebeds and terraces

DRAINAGE AND SATURATED HYDRAULIC CONDUCTIVITY:
Drainage class--well drained
Saturated hydraulic conductivity (Ksat)--moderately high

USE AND VEGETATION:
Use--irrigated crop production, livestock grazing, some nonirrigated crop production
Nonirrigated crops--wheat and rye grown in a summer fallow system
Irrigated crops--wheat, grass-legume hay, potatoes, dry beans, dry peas, tree fruit, hops, mint, vegetables
Native vegetation--bluebunch wheatgrass, Sandberg bluegrass, needleandthread, big sagebrush

DISTRIBUTION AND EXTENT: Central Washington and north-central Oregon; MLRAs 7 and 8; moderate extent

SOIL SURVEY REGIONAL OFFICE (SSRO) RESPONSIBLE: Portland, Oregon

SERIES ESTABLISHED: Columbia Basin Area Reconnaissance, Washington; 1929

REMARKS:
Diagnostic horizons and other features in this pedon
*Ochric epipedon
*Cambic horizon--zone from 15 to 48 cm
*Carbonate accumulation--zone from 48 to 102 cm
*Calcium carbonate equivalent--assumed less than 15 percent
*Particle-size control section--zone from 25 to 100 cm

National Cooperative Soil Survey
U.S.A.

ATTACHMENT D

Farm 6 – Expansion Project

DEQ Land Use Compatibility Statement Requiring County Signature

State of Oregon Department of Environmental Quality

Land Use Compatibility Statement

What is a Land Use Compatibility Statement?

A LUCS is a form developed by DEQ to determine whether a DEQ permit or approval will be consistent with local government comprehensive plans and land use regulations.

Why is a LUCS required?

DEQ and other state agencies with permitting or approval activities that affect land use are required by Oregon law to be consistent with local comprehensive plans and have a process for determining consistency. DEQ activities affecting land use and the requirement for a LUCS may be found in Oregon Administrative Rules (OAR) Chapter 340, Division 18.

When is a LUCS required?

A LUCS is required for nearly all DEQ permits and certain approvals of plans or related activities that affect land use prior to issuance of a DEQ permit or approval. These permits and activities are listed in section 1.D on p. 2 of this form. A single LUCS can be used if more than one DEQ permit or approval is being applied for concurrently.

Permit modifications or renewals also require a LUCS when any of the following applies:

1. Physical expansion on the property or proposed use of additional land;
2. Alterations, expansions, improvements or changes in method or type of disposal at a solid waste disposal site as described in OAR 340-093-0070(4)(b);
3. A significant increase in discharges to water;
4. A relocation of an outfall outside of the source property; or
5. Any physical change or change of operation of an air pollutant source that results in a net significant emission rate increase as defined in OAR 340-200-0020.

How to complete a LUCS:

Step	Who does it?	What happens?
1.	Applicant	Applicant completes Section 1 of the LUCS and submits it to the appropriate city or county planning office.
2.	City or County Planning Office	City or county planning office completes Section 2 of the LUCS to indicate whether the activity or use is compatible with the acknowledged comprehensive plan and land use regulations, attaches written findings supporting the decision of compatibility, and returns the signed and dated LUCS to the applicant.
3.	Applicant	Applicant submits the completed LUCS and any supporting information provided by the city or county to DEQ along with the DEQ permit application or approval request.

Where to get help:

For questions about the LUCS process, contact the DEQ staff responsible for processing the permit or approval. DEQ staff may be reached at 1-800-452-4011 (toll-free, inside Oregon) or 503-229-5630. For general questions, please contact DEQ land use staff listed on our Land Use CompatibilityStatement page online.

Cultural resources protection laws:

Applicants involved in ground-disturbing activities should be aware of federal and state cultural resources protection laws. ORS 358.920 prohibits the excavation, injury, destruction, or alteration of an archeological site or object or removal of archeological objects from public and private lands without an archeological permit issued by the State Historic Preservation Office. 16 USC 470, Section 106, National Historic Preservation Act of 1966 requires a federal agency, prior to any undertaking, to take into account the effect of the undertaking that is included on or eligible for inclusion in the National Register. For further information, contact the State Historic Preservation Office at 503-378-4168, ext. 232.

Land Use Compatibility Statement

Section 1 – To be completed by the applicant	
1A. Applicant Name:	1B. Project Name:
Contact Name: Lisa Mittesdorf, General Manager	Physical Address: 73956 Homestead Lane
Mailing Address: 2 Marine Drive	City, State, Zip: Boardman, OR 97818
City, State, Zip: Boardman, OR 97818	Tax Lot #: (see ExhibitB)
Telephone: (541) 481-7678	Township: 2N & 3N Range: 26E Section: see attached
Tax Account #: Port of Morrow Tax ID #: 93-0575616	Latitude: (see attached maps)
	Longitude: (see attached maps)

1C. Describe the project, include the type of development, business, or facility and services or products provided (attach additional information if necessary):

The Port of Morrow collects and manages the wastewater associated with the mostly agriculture-based industries located on the Port's industrial lands. The Port land applies the wastewater to nearby farmlands under a DEQ WPCF permit. The land application program provides a beneficial service to the industrial clients while also providing the local farmers a low-cost nutrient rich water source for irrigation. The Port is planning to expand its land application operations to a new location, Farm 6, located west of Farm 4 (see attached figures). This LUCS statement is for the addition of Farm 6 to the Port's land application program, which will add up to approx. 6,200 acres to the program and include the installation of a pipeline spur from an existing pipeline to deliver wastewater to Farm 6.

1D. Check the type of DEQ permit(s) or approval(s) being applied for at this time.

- ☐ Air Quality Notice of Construction
- ☐ Air Contaminant Discharge Permit
- ☐ Air Quality Title V Permit
- ☐ Air Quality Indirect Source Permit
- ☐ Parking/Traffic Circulation Plan
- ☐ Solid Waste Land Disposal Site Permit
- ☐ Solid Waste Treatment Facility Permit
- ☐ Solid Waste Composting Facility Permit (includes Anaerobic Digester)
- ☐ Conversion Technology Facility Permit
- ☐ Solid Waste Letter Authorization Permit
- ☐ Solid Waste Material Recovery Facility Permit
- ☐ Solid Waste Energy Recovery Facility Permit
- ☐ Solid Waste Transfer Station Permit
- ☐ Waste Tire Storage Site Permit
- ☐ Pollution Control Bond Request
- ☐ Hazardous Waste Treatment, Storage or Disposal Permit
- ☐ Clean Water State Revolving Fund Loan Request
- ☑ Wastewater/Sewer Construction Plan/ Specifications (includes review of plan changes that require use of new land)
- ☐ Water Quality NPDES Individual Permit
- ☑ Water Quality WPCF Individual Permit (for onsite construction-installation permits use the DEQ Onsite LUCS form)
- ☐ Water Quality NPDES Stormwater General Permit (1200-A, 1200-C, 1200-CA, 1200-COLS, and 1200-Z)
- ☐ Water Quality General Permit (all general permits, except 600, 700-PM, 1700-A, and 1700-B when they are mobile)
- ☐ Water Quality 401 Certification for federal permit or license

This application is for: ☐ Permit Renewal ☐ New Permit ☑ Permit Modification ☐ Other:

Section 2 – To be completed by city or county planning official	44
Applicant name:	Project name:

Instructions: Written findings of fact for all local decisions are required; written findings from previous actions are acceptable. For uses allowed outright by the acknowledged comprehensive plan, DEQ will accept written findings in the form of a reference to the specific plan policies, criteria, or standards that were relied upon in rendering the decision with an indication of why the decision is justified based on the plan policies, criteria, or standards.

2A. The project proposal is located: ☐ Inside city limits ☐ Inside UGB ☐ Outside UGB

2B. Name of the city or county that has land use jurisdiction (the legal entity responsible for land use decisions for the subject property or land use):

2C. ☐ This project is not within the jurisdiction of any other land use, zoning, or planning entity
☐ This project is also within the jurisdiction of the following land use, zoning, or planning entity _____

2D. Is the activity allowed under Measure 49 (2007)? ☐ No, Measure 49 is not applicable ☐ Yes, if yes, then check one:

☐ Express; approved by DLCD order #:

☐ Conditional; approved by DLCD order #:

☐ Vested; approved by local government decision or court judgment docket or order #:

2E. Is the activity a composting facility?
☐ No ☐ Yes; Senate Bill 462 (2013) notification requirements have been met.

2F. Is the activity or use compatible with your acknowledged comprehensive plan as required by OAR 660-031?
Please complete this form to address the activity or use for which the applicant is seeking approval (see 1.C on the previous page). If the activity or use is to occur in multiple phases, please ensure that your approval addresses the phases described in 1C. For example, if the applicant's project is described in 1C. as a subdivision and the LUCS indicates that only clearing and grading are allowed outright but does not indicate whether the subdivision is approved, DEQ will delay permit issuance until approval for the subdivision is obtained from the local planning official.

☐ The activity or use is specifically exempt by the acknowledged comprehensive plan; explain:

☐ Yes, the activity or use is pre-existing nonconforming use allowed outright by (provide reference for local ordinance):

☐ Yes, the activity or use is allowed outright by (provide reference for local ordinance):

☐ Yes, the activity or use received preliminary approval that includes requirements to fully comply with local requirements; findings are attached.

☐ Yes, the activity or use is allowed; findings are attached.

☐ No, see 2D. above, activity or use allowed under Measure 49; findings are attached.

☐ No, (complete below or attach findings for noncompliance and identify requirements the applicant must comply with before compatibility can be determined):
Relevant specific plan policies, criteria, or standards:

Provide the reasons for the decision:

Additional comments (attach additional information as needed):

Planning Official Signature:		Title:
Print Name:	Telephone #:	Date:

If necessary, depending upon city/county agreement on jurisdiction outside city limits but within UGB:

Planning Official Signature:		Title:
Print Name:	Telephone #:	Date:

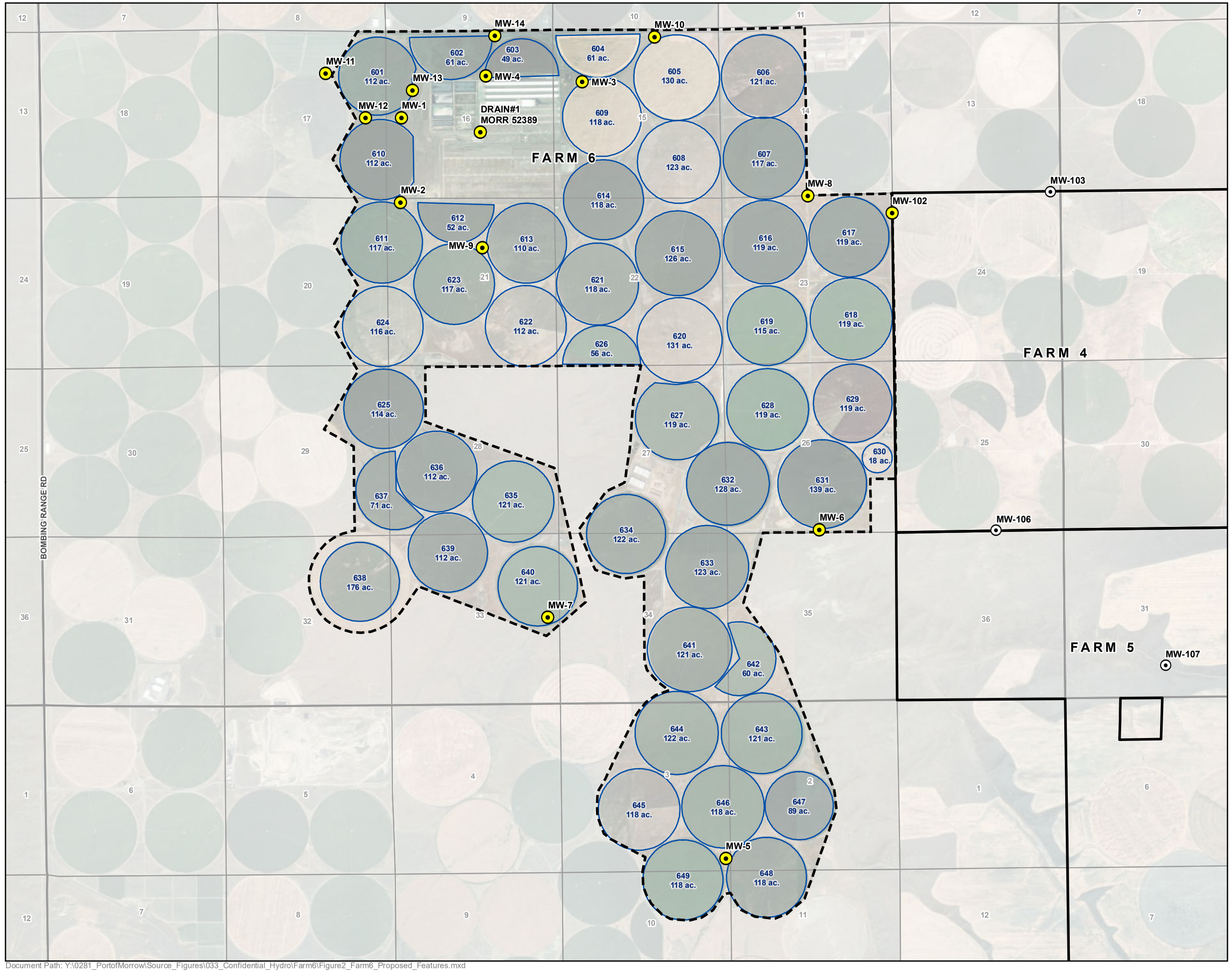
Alternative formats

DEQ can provide documents in an alternate format or in a language other than English upon request. Call DEQ at 800-452-4011 or email deqinfo@deq.state.or.us.

FIGURE

Proposed Expansion Project Boundary, Irrigation Circles, and Monitoring Wells

Farm 6 - Land Application Program Expansion
Port of Morrow (POM)



LEGEND

- Farm 6 Monitoring Well
- Monitoring Well
- Farm 6 Proposed WPCF Boundary Expansion
- POM Existing WPCF Permit Boundary
- Existing Irrigation Circle

N

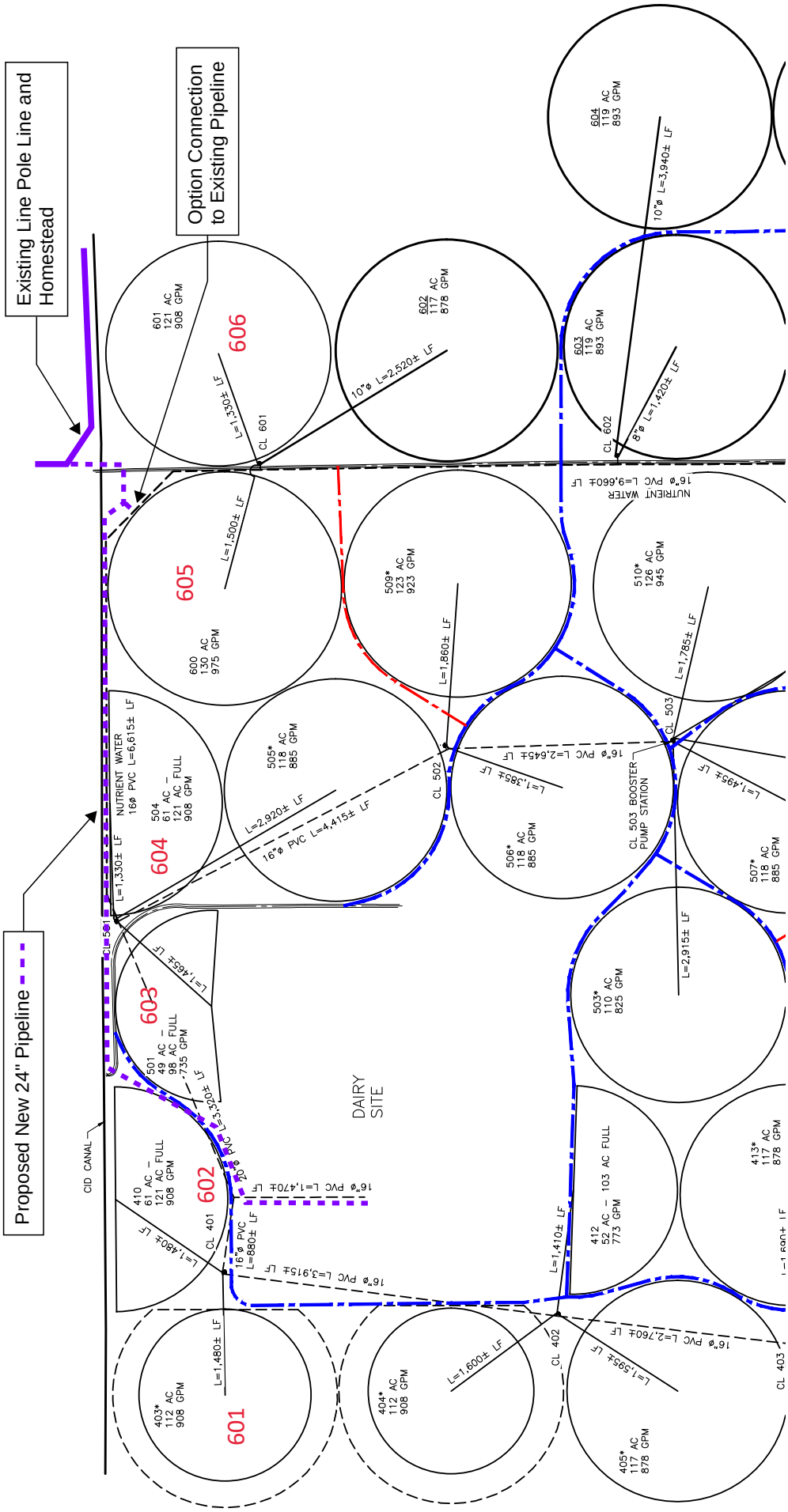
0 1,500 3,000 4,500
Feet

Date: September 5, 2024
Data Sources: DOGAMI, USGS, ESRI

GSI Water Solutions, Inc.

Document Path: Y:\0281_PortofMorrow\Source_Figures\033_Confidential_Hydro\Farm6\Figure2_Farm6_Proposed_Features.mxd

FIGURE 4a
WASTEWATER PIPING SYSTEM MAP



COMMENT LIST FOR

PORT OF MORROW LUD-N-075-24

Comment #	Date Submitted	Comment from	Exhibit description
A	October 3, 2024	Andrew Martin	Letter of objection
B	October 29, 2024	Intermountain Law, PC (Andrew Martin) Representing Meenderinck Land Co., LLC	Letter of objection
C	October 29, 2024	Justin Green	H2O EO Comment Letter
D	October 28, 2024	Dave Dillon	Food NW letter to Planning Commission
E	October 29, 2024	Port of Morrow Miff Devin	Water Pollution Control Facilities Permit Modification #1 Effective Date: 11022022
F	October 29, 2024	Port of Morrow Miff Devin	Water Pollution Control Facilities Permit Modification #4 Effective Date: 10252024
G	October 29, 2024	Port of Morrow Miff Devin	Overview Map, Current Operations of water, and Future Operations of water
H	October 29, 2024	Sarah Stauffer Curtiss	OAR 340-055-0012 & Map

October 3, 2024

Morrow County Planning Department
PO Box 40
215 NE Main Street
Irrigon, OR 97844

RE: Application No. LUD-N-075-24
Our File M24-445

Dear Tamra,

Our office represents Meenderinck Land Company, LLC and Meenderinck Dairy, LLC. In response to Land Use Application No. LUD-N-075-24, my client objects to the application submitted. We formally request a hearing regarding our objection to the application.

Our grounds for objection include, but are not limited to, the lack of consideration for the alternatives of the application of reclaimed industrial water. There has not been due consideration for the alternatives of the application of such water, specifically, the impacts it has to neighboring landowners, such as my client. Although it may be a permitted use, careful consideration should be given to the alternatives and the impact of neighboring EFU properties.

For these reasons, additional time and consideration should be given to this application a hearing should be had. If you have any questions please do not hesitate to contact me.

Best Regards,

Andrew G. Martin

Andrew G. Martin

AGM/mc

INTERMOUNTAIN LAW, PC
Attorneys at Law

DAVID R. AUXIER*
JESSICA PEREZ*

Of Counsel:
ANDREW G. MARTIN*
RYAN H. HOLDEN**
DARCY ARRIOLA KINDSCHY*

*Licensed in Oregon and Idaho
**Licensed in Oregon, Idaho and Washington

OREGON
3370 10th Street, Suite B
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Phone: 541 523-6535

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Phone: 208 452-6535
Fax: 208 452-7307

office@intermountainlaw.com
www.intermountainlaw.com

Sent via email tmabbott@co.morrow.or.us

October 29, 2024

Morrow County Planning Department
PO Box 40
215 NE Main Avenue
Irrigon, OR 97844

RE: Application No. LUD-N-075-24
Our File M24-445

Dear Tamra,

Our office submitted a written objection and request for hearing to the above referenced land use application on behalf of Meenderinck Land Company, LLC and Meenderinck Dairy, LLC (hereinafter "Meenderinck"). On behalf of Meenderinck this letter and the attached documents are submitted to supplement Meenderinck objection to Application No. LUD-N-075-24.

The land use application at issue here is a component of the Port of Morrow's ("POM") application to the Oregon DEQ for a modification to its Water Pollution Control Facility Permit No. 102325. Attached to this letter is the written comment submitted to the DEQ by Meenderinck which is incorporated herein.

The POM's Application No. LUD-N-075-24 fails to provide information required by the Morrow County Planning Department and must be denied. The key issues and fundamental deficiencies of the application are the failure to identify that application of industrial wastewater is incompatible with the Meenderinck neighboring land use (dairy operation) and failure to provide information as to how the POM will prevent escape of industrial wastewater from the irrigation system to adjoining water resources and neighboring property (Meenderinck). Based on the information submitted by the POM it is clear that the land impacted by the POM application of industrial wastewater is not limited to and will not be confined to the POM's Farm 6.

Pursuant to Pg. 2 of the Morrow County Land Use Application form, POM was required to describe how its proposal for the application of industrial wastewater will be compatible with surrounding land uses, how the proposal will protect water resources and whether protections would be needed to protect nearby properties and habitats. The POM application failed to address all those issues. Those issues are of particular significance to Meenderinck which owns and operates a dairy and farm that borders what POM has described as Farm 6 in its application. The POM application entirely failed to mention or identify the Meenderinck property and dairy operation as a neighboring/adjacent property and land use in the DEQ proceeding and in its land use application. Oregon Administrative Rule (OAR) 340-055-0012 provides that industrial wastewater is incompatible with dairy operations and protection of the Meenderinck property and dairy operation must be addressed in the County's decision on the pending application. In addition to the Meenderinck dairy operation there are other CAFO facilities in the area that could be impacted by the POM's proposal. The POM must be required to submit an application with complete and accurate information about neighboring land uses and how those pre-existing permitted uses will be protected.

The POM application also fails to identify water resources and dairy operations that will be impacted by the POM proposal. As depicted in the exhibits to its land use application, POM proposes to use a pivot sprinkler irrigation system to apply industrial wastewater on Farm 6 directly adjacent to the Meenderinck property and the CID irrigation canal. Those exhibits, however, omit the location of the CID canal and fail to identify the Meenderinck property and its use as a dairy operation. The CID canal borders the northern boundary of Farm 6 and is adjacent to the irrigation pivots identified as 601, 602, 603, 604, 605, and 606 (See Figure 4a attached to POM Application). The proximity of the sprinkler system to the CID canal combined with reasonably foreseeable wind conditions and direction will result in wastewater entering the canal and the Meenderinck property. Therefore, the information submitted by the POM shows that the wastewater will not be confined to Farm 6 but will also enter the Meenderinck property and CID canal via direct / sprinkler application and groundwater migration. See also attached letter/public comment to Oregon DEQ.

Because the applicant failed to notify the planning department that its proposed use is incompatible with the neighboring property/land use, and no provisions are made for the protection of the Meenderinck dairy operation and property, the application must be denied unless and until the POM provides the necessary information and addresses these issues.

For the reasons set forth in the attached letter/public comment and those set forth in this letter, the application must be denied.

Best Regards,

Andrew G. Martin

Andrew G. Martin

AGM/mc
Enclosure

October 21, 2024

VIA E-mail only: Water.PermitER@deq.oregon.gov

Patty Isaak/Permit Coordinator
Oregon DEQ
800 SE Emigrant Ave., Ste 330
Pendleton, OR 97801

RE: Port of Morrow Permit Modification; Permit No. 102325

Meenderinck Land Company, LLC and Meenderinck Dairy, LLC offer the following comments to the Port of Morrow's (POM) request to modify its Industrial Water Pollution Control Facilities Permit. Meenderinck Land Company, LLC owns property that is adjacent to and borders what is identified as "Farm 6" in the POM's application. Meenderinck Land Company, LLC property is identified as Morrow County as Map No. 3N26 Tax Lot 1400, 318.18 acres consisting of dairy/milking facilities, residences, domestic well, irrigation well and irrigated crop land. Meenderinck Dairy, LLC operates the dairy facilities located on the property.

Page 7 of the Industrial Land Application Site Checklist specifically requires the applicant/POM to identify "The nearest developed property from (ft): (Irrigated Ag Pivots Or CAFO present immediately surrounding Farm 6 Expansion Site). The Meenderinck property is developed, has a CAFO permit and includes irrigated ag pivots, however POM failed to include any of that information in its application.

The terms and conditions in Schedule A Condition (5) of the Permit specifies that land application of the POM water must be limited to sites authorized by a DEQ-approved OM&M Plan. The proposed modification to expand the land application site to include the entirety of "Farm 6" with the proposed irrigation system will result in the POM's wastewater escaping from "Farm 6" to the Meenderinck's property. The irrigation sprinkler pivots identified in the application as Nos. 606, 607 and 617 border the Meenderinck property. Topography and prevailing wind directions will cause drift from those sprinklers to enter the Meenderinck property and dairy facilities. The application for modification also fails to address the open CID irrigation canal that borders the northern boundary of "Farm 6". The proximity of the sprinkler irrigation pivots on "Farm 6" identified as 601, 602, 603, 604, 605 and 606 are likely to cause industrial wastewater to enter the CID canal.

Contamination of the Meenderinck property and dairy facilities with the POM's wasterwater poses a substantial risk to the Meenderinck's property and operation as well as to other operations that border land application sites and/or use water from the CID canal. Conditions requiring additional sampling, monitoring and buffer zones to prevent application of wastewater on neighboring properties/unauthorized sites must be included in the modified permit.

Meenderinck **Land Company, LLC**
By: Pete Meenderinck, Member
4:27 pm - 6-25-24

Meenderinck Dairy, **LLC**
By: Pete Meenderinck, Member
4:27 pm 6-25-24

WATER FOR

Tamra Mabbott
Planning Director
Morrow County Planning Department
P.O. Box 40
Irrigon, Oregon 97844
Sent via Electronic Mail to: tmabbott@co.morrow.or.us

Re: Approval of Land Application of Wastewater from Port of Morrow on Land Zoned Exclusive Farm Use (EFU) - Land Use Decision Application - LUD-N-075-2024

Dear Morrow County Planning Commission,

Water for Eastern Oregon (H2OEO) submits the following comments in support of Morrow County's tentative approval of the above-referenced Land Use Application (Application) submitted by the Port of Morrow (Port). H2OEO is a nonprofit coalition of businesses and community organizations in Morrow and Umatilla counties supporting efforts to provide clean drinking water to every household and resident. H2OEO is committed to supporting long-term efforts to reduce groundwater nitrate concentrations. We drive collaboration among businesses, government, and community organizations, and support the science to mitigate current impacts and restore groundwater.

The Morrow County Planning Director's tentative approval of Land Use Decision LUD-N-75-24 should be confirmed because the Port's proposed land application program expansion, and new pipeline spur, meet all approval criteria. The beneficial reuse of industrial wastewater via land application is a state-permitted activity based on science and is commonly adopted in Oregon, the United States and internationally. All uses in the Application are permitted outright and permitted by relevant state authorities.

In addition, the incorporation of the land at reference is necessary for the Port to effectively manage wastewater and remain open this winter. This land is the only option for the Port to land apply wastewater, and the Application must be approved to avoid significant negative environmental impacts to Morrow County and the region.

The story of the Port and its collocated businesses and farms is one of resource stewardship and sustainability. The Port provides infrastructure and geographic proximity to highways and rail for food processors, while local farmers provide crops to be processed and transported. The water and residual nutrients generated from the processing of crops is then provided to farmers as nutrients for crop production. In fact, the state of Washington (along with many other states and countries) is looking at developing similar models. Another major benefit of this program is that it reduces the need for the production and transportation of commercially manufactured fertilizer. It does this without sacrificing the productivity of fields growing crops to feed the state and the world.

The Port is the major economic driver in the Lower Umatilla Basin. A shutdown of the Port for any length of time would have a significant and negative consequence on the local economy and the locally produced food supply. The Port of Morrow and related businesses provide:

- Total permanent employment of more than 6,700 jobs.
- Annual economic output of more than $2.5 billion.
- Annual gross domestic product of more than $900 million.
- More than $400 million in labor income.

Thank you again for the opportunity to comment on the Application. We request the Morrow County Planning Commission confirm the tentative approval of land use decision application LUD-N-075-2024.

Sincerely,

Justin Green
Executive Director
Water for Eastern Oregon

FOOD NORTHWEST

Oct. 28, 2024

Tamra Mabbott, Planning Director
Morrow County Planning Commission
215 NE Main Avenue
Irrigon, Oregon 97844 Submitted via email

Dear Director Mabbott-

I am writing to offer public comment on the Commission's consideration of **Land Use Decision LUD-N-75-24**, the Port of Morrow's request for approval to apply process water to irrigate its recently acquired farm. Food Northwest is the trade association for food companies in Oregon, Washington, and Idaho. Five of our member companies are sited at the Port of Morrow and depend on the port for inbound and outbound water.

We believe the Port of Morrow application to irrigate this EFU farm ground meets all necessary land-use requirements for approval. The Commission's decision on this matter is of utmost importance, and the timing of the decision is absolutely critical. This letter is provided to demonstrate the urgency of a Commission decision on this matter at its Oct. 29, 2024 meeting. We strongly oppose any delay in the decision because of the devastating consequences a delay could cause the community. The following information addresses the need for the Commission's timely action and not the merits of the application, which should be decided on objective criteria alone.

This land use application is part of a comprehensive effort developed through a collaborative process that included months of technical analyses and stakeholder input. At the end of this process, a thoughtful and effective set of changes have been recommended by the DEQ, including updates to non-growing season limits, additional soil monitoring and reporting requirements, and prohibitions on winter land applications to high-risk sites. In addition, the permit modification includes the expansion of acreage for land application of process water, in accordance with the port's compliance plan. The farm subject to this land use decision represents these needed additional acres. Because of infrastructure limitations, there are no other viable sites where process water can be applied this winter. Timely approval of this land use decision is essential to the success of this plan and the well-being of the Boardman community.

The consequences of even a brief delay in a decision could be devastating, environmentally, economically, and socially. Any delay would greatly increase the likelihood of a winter shutdown of the port's water system and the companies that depend on it. Any delay means farmers leasing this ground cannot have access to water needed to plant and grow crops, meaning potential loss of an important growing season. A shutdown would also mean loss of water available to other area farms hurting farmers far beyond the

subject property.

Any shutdown would lead to the immediate need for dumping milk from area dairy farms which have little storage and nowhere else to send their product. Interruptions in operations at all port-sited companies put about 2,000 jobs at unnecessary risk and put the companies that provide them at risk. Employees who lose jobs, even temporarily due to a shutdown, may seek employment and move outside the community which only exacerbates a difficult workforce environment here and causes upheaval for kids taken from school mid-year among other societal impacts from losing community members.

Unlike some areas, the food processing that happens at the Port of Morrow is not closely bound to harvest season. Winter is a crucial time when food companies here ramp up to meet high customer demand. For some companies, winter is the busiest season, making the prospect of any shutdown even more damaging.

The Port of Morrow, DEQ, area farmers, food companies, and other members of the community have come together to protect both our economy and our environment. At this moment, the success of this incredible collaboration depends on approval of this LUD at this week's Commission meeting.

Time is truly of the essence. We respectfully ask the Commission to make its criteria-based decision on Tuesday October 29, 2024.

Sincerely,

Dave Dillon, President

Expiration: November 30, 2027
Permit #: 102325
File #: 70590

WATER POLLUTION CONTROL FACILITIES PERMIT
Modification #1

State of Oregon Department of Environmental Quality

Department of Environmental Quality
Eastern Region
800 S.E. Emigrant Avenue, Suite #330, Pendleton, OR 97801
Telephone: (541) 276-4063
Issued pursuant to ORS 468B.050

ISSUED TO:
Port of Morrow
Post Office Box 200
Boardman, OR 97818

SOURCES COVERED BY THIS PERMIT:

Type of Waste	Method of Disposal
Industrial Wastewater	Land Application

FACILITY TYPE AND LOCATION:
Wastewater Lagoons and
Land Application Treatment System

Boardman, Oregon

RIVER BASIN INFORMATION:
Basin: Umatilla
Sub-Basin: Middle Columbia / Boardman
LLID: 1240483462464-266.02
Columbia River
Location of Farm 3 Lagoon
Lat.: 45.858804
Long.: -119.618202
County: Morrow

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

Renewal issued in response to Application No. 977616 received 7-20-2006. This modification is issued in response to the permit modification request submitted to DEQ on 9-18-2020.

This permit is issued based on the land use findings in the permit record.

Mike Hiatt, Water Quality Permit Manager Eastern Region	November 2, 2022 Signature Date	November 2, 2022 Effective 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.

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.

Table of Contents

SCHEDULE A - Waste Disposal Terms and Conditions

Authorized Wastewater Sources

(1) In accordance with the terms and conditions of this permit, the Permittee is authorized to collect, store and land apply stormwater and wastewater only from sources listed in this permit and/or the Operations, Monitoring, and Management (OM&M) Plan. The Permittee must receive written authorization from the Department prior to acceptance of wastewater from a source not listed in the current DEQ-approved OM&M Plan or this permit.

The permittee is authorized to accept wastewater from the following sources:

(A) Boardman Foods: onion wash and freezer run-off wastewater,
(B) Calbee North America: finish potato wash wastewater,
(C) Tillamook: cheese byproducts and tank wash wastewater,
(D) Con Agra, Lamb-Weston-West Plant: potato wastewater, freezer defrost wastewater,
(E) Con Agra, Lamb-Weston-East Plant: potato wastewater, freezer defrost wastewater,
(F) JSH Farms: steam water discharge used to process mint oil,
(G) Oregon Potato: potato wastewater,
(H) Pacific Ethanol: cooling tower wastewater,
(I) PGE Coyote Springs: cooling tower wastewater, boiler blow down, washwater
(J) VA Data #1: cooling tower blowdown,
(K) VA Data #4: cooling tower blowdown,
(L) Morrow Cold Storage: freezer defrost water,
(M) Zeachem: cooling tower wastewater
(N) PDX 62: cooling water blowdown
(O) PDX 90: cooling water blowdown
(P) PDX 109: cooling water blowdown
(Q) PDX 178: cooling water blowdown

Wastewater Source Management and System Capacity

(2) The Permittee must receive written approval from the Department before any new wastewater source is allowed to discharge to the permitted wastewater management system. An updated system capacity assessment to include an up-to-date nitrogen and hydraulic balance for all influent sources and the lagoons and land application system must be provided with any request for an additional influent source. The facility must document capacity to accept additional flows and retain compliance with this permit.

The permittee must notify DEQ of changes in wastewater source water quality or quantity for existing or proposed new sources that may affect permit compliance.

Application Site Management

(3) The Permittee must receive written approval from the Department before application of wastewater or any waste solids at any new application site listed in the permit and/or OM&M Plan.

(4) Prior to the application of any irrigation water at any wastewater land application site the Permittee must establish the water holding capacity (in/ft) for each of the top five feet of the soil column.
(A) The water holding capacity (field capacity) must be determined by a scientific method standard to the agricultural industry and approved by the Department. The method of determination must be described in the OM&M Plan.
(B) The soil column water holding capacity for each approved application site must be listed in the Department approved Operation, Monitoring and Management (OM&M) plan.
(C) Once approved by the Department, the water holding capacity for each of the top 5 feet of the soil column at each approved application site must not be changed or modified without the Department's written approval.

Authorized Land Application Sites

(5) The Permittee is authorized to land apply permitted wastes only at the land application sites authorized by a DEQ-approved OM&M Plan. The Permittee must request and receive written authorization from the Department prior to application of wastewater at any site not listed in the DEQ-approved OM&M Plan. The Permittee is authorized to apply wastewater at the following application sites:

- **(A)** Farm 1 (Portview) authorized application sites listed in OM&M Plan.
- **(B)** Farm 2 (Southport) authorized application sites listed in OM&M Plan.
- **(C)** Farm 3 (Eastport) authorized application sites listed in OM&M Plan.
- **(D)** Farm 4 (Madison) authorized application sites listed in OM&M Plan.
- **(E)** Farm 5 (Mader-Rust) authorized application sites listed in OM&M Plan.

Facility Operations

(6) Land application of all permitted wastewaters must:

- **(A)** Be managed to prevent channeling, ponding and runoff,
- **(B)** Be distributed as evenly as practicable within each land application unit,
- **(C)** Be land applied at or below DEQ approved agronomic rates and within irrigation requirements to meet the crop needs in the growing season unless otherwise authorized by DEQ,
- **(D)** Only be conducted on lands where a crop will be grown in accordance with the conditions of this permit, unless otherwise approved in writing by the Department,
- **(E)** Not occur on fields under which drainage tiles have been installed, unless by written approval from the Department,
- **(F)** Only occur at application sites with Land Use Compatibility Statements issued to the Permittee,
- **(G)** Not occur during any condition that causes ponding and/or runoff from the site, such as freezing weather or precipitation, and
- **(H)** Be conducted in a manner that prevents organic solids contained in the wastewater from accumulating on the ground surface to the point where the solids putrefy or support vectors or insects.

Operations, Monitoring and Management Plan

(7) The Permittee must conduct all activities pertaining to the management, treatment, and disposal of authorized wastes in accordance with an Operations, Monitoring and Management (OM&M) Plan approved in writing by the Department. If wastewater management activities of the OM&M Plan conflict with conditions of this Permit, this Permit shall prevail. Modification of the OM&M plan requires prior written approval from the Department.

- **(A)** No later than 90 days after the effective date of a renewed or modified permit the Permittee must submit, to the Department, a revised and complete OM&M plan that conforms to all terms and conditions of the renewed or modified permit.
- **(B)** On or before April 15 of each year during the term of this permit, the permittee must submit, to the Department, an update of the OM&M plan with any proposed modifications.
  - **(i)** The annual OM&M plan submittal must include a numbered list of proposed modifications.
  - **(ii)** If no modifications to the OM&M plan are proposed, the facility must submit the plan noting that no changes are proposed.
  - **(iii)** The annual OM&M submittal must include a statement certifying the facility has or has not complied with the OM&M plan over the previous year.
- **(C)** The OM&M plan must include an up-to-date system capacity assessment to include nitrogen balance and hydraulic capacity assessments. The nitrogen and hydraulic balance is based upon the previous annual report per the permit and OM&M Plan.
- **(D)** The OM&M Plan must include a current list of all land application sites authorized by the permit or otherwise approved in writing, and description, sources, and characteristics of influent wastewaters.
- **(E)** The OM&M Plan must contain an up-to-date effluent wastewater characterization. At minimum, wastewater must be tested annually for the characteristics described in Table B8 of this permit.

(F) The plan must include a section describing chemical additives discharged into the wastewater system from influent sources which may affect compliance with this permit. Safety data sheets must be made available upon request.

Nitrogen Availability and Loading

(8) Unless otherwise authorized by the Department in writing, the Permittee is prohibited from allowing the nitrogen available to crops at approved application sites to exceed the crop-specific agronomic rates listed in the approved OM&M Plan. For this permit, the nitrogen available to an individual crop between field preparation at crop start and harvest is the sum total of all nitrogen from the following sources:

(A) All nitrate (NO_3) in the crop-specific root zone of soil,
(B) All ammonium (NH_4) in the first foot of the root zone of soil,
(C) 70% of the Total Kjeldahl Nitrogen (TKN) in applied wastewater[1],
(D) All Nitrate/Nitrite-N in applied wastewater and supplemental irrigation water from any source,
(E) All nitrogen applied as commercial fertilizer,
(F) Plant Available Nitrogen from applied manure and cover crops tilled under (calculated per approved OM&M Plan), and
(G) All nitrogen from any other source applied between crop start and harvest.

[1]Upon completion of the anaerobic digester project (beginning November 1, 2023), the Total Nitrogen in applied wastewater is to be used to calculate loading (all TKN plus Nitrate/Nitrite-N).

Agronomic Rates for Nitrogen

(9) Crop specific agronomic loading rates for nitrogen will be evaluated by the Department after consideration of agronomic rates published in appropriate, region specific, fertilizer guides proposed by the permittee.

After review of site information (including trends for crop yield, crop nitrogen removal, and soil residual data) the permittee must restrict nitrogen applications as necessary in order to comply with the provisions of this permit and to prevent adverse impacts to groundwater. DEQ may also require the permittee to adjust the allowable agronomic rate based upon review of submitted data required by this permit, including groundwater data.

The Permittee shall list the approved agronomic rates in the Department approved OM&M plan. The listed agronomic rates may not be exceeded without DEQ approval.

Prescribed Leaching

(10) Prescribed leaching events designed to remove excess salt from the root zone require prior written approval from the Department.

Leaching Prohibition

(11) Other than a prescribed leaching event pre-approved by the Department the leaching of moisture and nutrients caused by means of irrigation beyond the 5th foot of the soil column is prohibited.

A violation of this prohibition will have occurred at an approved application site anytime required moisture monitoring determines that the moisture is at or above the water holding capacity for the field past the 5th foot of the soil column caused by irrigation, unless the permittee demonstrates that the excess moisture was due to reasons beyond its reasonable control such as excessive precipitation.

Active irrigation activities are to be managed within the field capacity of the listed rooting depth of the current crop being grown.

Wastewater Storage

(12) The Permittee is authorized to store wastewater under the following conditions:

(A) Storage of wastewater from authorized sources must not be allowed to putrefy. Supplemental fresh water shall be added and treatment utilized as necessary to prevent putrefaction.

(B) Settled solids must be removed as necessary to prevent odors, vector attraction, and/or other nuisance conditions.

Non-Growing Season Limits

(13) The Permittee must conduct all land application activities during the non-growing season in accordance with the permit and the facility OM&M Plan. The non-growing season is defined by this permit as November 1st through February.

(A) The OM&M plan must include, but is not limited to, the following terms and conditions for operations during the non-growing season:

(i) Application sites must be ranked and evaluated according to the presence and location of nitrogen in the soil profile, and the moisture level in the 4th foot of the soil profile,

(ii) Application sites where the sum of soil nitrate, in the 4th and 5th foot, is greater than or equal to 30 lbs/ac are prohibited from receiving non-growing season irrigation,

(iii) Application sites with soil moisture in the 4th foot of the soil profile equal to or greater than 75% of the 4th foot water-holding capacity are prohibited from receiving additional non-growing season irrigation,

(iv) Non-growing season irrigation is to be limited to utilization of the available water-holding capacity in the top three (3) feet of the soil column, only, and

(v) Non-growing season irrigation events will be planned based on the most recent soil moisture monitoring event.

(vi) These interim limits apply until November 1, 2026 when non-growing season wastewater will be stored except as approved by DEQ for beneficial uses with treated effluent.

(B) Supplemental commercial nitrogen fertilizer application is not permitted from November 15 – February 15 without DEQ approval.

Effluent Treatment and Storage

(14) **By no later than November 1, 2025** the facility must not exceed the following effluent concentration limits for all wastewater land applied during the non-growing season:

Table A1: Final Effluent Concentration Limits

Parameter	Monthly Average
Total Nitrogen[1]	7 mg/L
Total Suspended Solids (TSS)	20 mg/L
BOD_5	20 mg/L
pH	Instantaneous limit of 6.0 – 9.0

[1] **Total Kjeldahl Nitrogen (TKN) plus Nitrate/Nitrite-N**

(A) The permittee must utilize the wastewater treatment system year-round as necessary to ensure permit compliance.

(B) No later than November 1, 2026, all wastewater must be stored in lined lagoons for the non-growing season unless authorized for beneficial use and treated not to exceed the Table A1 limits at the time of land application. Beneficial uses must be described in a DEQ-approved OM&M Plan.

Food Processing Residuals, Wastewater Treatment Residuals and Pond Solids

(15) The Permittee must manage all residuals and solids that result from the operation of their wastewater treatment facility in compliance with all applicable state, federal and local requirements. The Permittee must document the solids management practices in the DEQ-approved OM&M plan.

Groundwater Protection

(16) The Permittee must manage and land apply all authorized wastewater in compliance with the terms and conditions of this permit and 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, established by this permit, or which have been incorporated into the groundwater monitoring plan or permit by addendum.

Sanitary Wastes

(17) This permit does not authorize treatment and disposal of sanitary wastes. Permittee is prohibited from mixing and/or blending sanitary waste with any authorized wastewater or solids.

Discharge Prohibited

(18) Permittee is prohibited from direct discharge of wastewater, solids, or contaminated drainage to waters of the state.

Reopener Condition

(19) Department may reopen this permit to include new and/or revised waste disposal limitations, new and/or revised monitoring and reporting requirements, new/and or revised compliance schedule requirements, or new and/or revised groundwater concentration limits.

SCHEDULE B – Minimum Monitoring and Reporting Requirements

(1) The permittee must submit to DEQ the reports and plans as listed below:

Table B1: Reporting Requirements and Due Dates

Reporting Requirement	Frequency	Due Date (See Note a.)	Report Form (See Note b.)	Submit To:
Facility Monthly Report	Monthly	By the 15th of the following month	Specified in Schedule B. Section 14 of this permit	Electronic reporting as directed by DEQ
Facility Annual Report	Annually	April 15	Specified in Schedule B. Section 15 of this permit	Electronic reporting as directed by DEQ Hardcopy to DEQ Regional Office
Operations, Monitoring, and Management (OM&M) Plan	One-Time	Within 90 days of permit modification effective date	Specified in Schedule A. Section 7 of this permit	Electronic reporting as directed by DEQ
Operations, Monitoring, and Management (OM&M) Plan Update	Annually	April 15	Specified in Schedule A. Section 7 of this permit	Electronic reporting as directed by DEQ
Quarterly Groundwater Report	Quarterly	By the 15th of the following month	Specified in Schedule B. Section 16 of this permit	Electronic reporting as directed by DEQ
Piping Plans and System Schematic	One-Time	By July 1, 2023	Specified in Schedule D. Section 16 of this permit.	Electronic reporting as directed by DEQ.

Conformance with Operation, Monitoring and Management (OM&M) Plan

(2) The Permittee must perform wastewater treatment system monitoring in accordance with this permit and the approved OM&M Plan unless otherwise approved by the Department in writing.

Visual Inspections

(3) The Permittee shall perform the following visual inspections:

Table B2: Visual Inspections

Item or Parameter	Minimum Frequency	Sample Type/Action
Inspect Storage Lagoon dikes	Weekly	Record Observations[1]
Inspect pipelines	Daily when in use	Record Observations[1]
Inspect land application sites	Daily when irrigating	Record Observations[1]
Inspect sprinkler nozzles	Semi-annually	Record Observations[1]
Pond 41 storage lagoon volume, MG	Daily	Record Observations[1]
Sand Dune storage lagoon volume, MG	Daily	Record Observations[1]
Inspect wastewater treatment units	Daily when in use	Record Observations[2]

[1] **Maintain record of inspector, date, time, and operational status.**

[2] Maintain record of inspector, date, time and operational status of each wastewater treatment unit including the anaerobic digesters and secondary treatment system. Inspect in accordance with Operations and Maintenance Manual for each unit when in operation.

With the exception of the storage pond lagoon volumes which must be reported monthly, Table 2 information must be retained by the permittee according to Schedule F- General Conditions- Condition C(4) and must be provided to the Department upon request.

Flow Monitoring

(4) The Permittee shall monitor wastewater treatment system flows as follows:

(A) Industrial process wastewater influent flow from each source authorized by this permit:

Table B3: Influent Flow Monitoring

Item or Parameter	Minimum Frequency	Sample Type/Action
Each authorized source Wastewater Flow[1], gals	Monthly	Record Monthly Total

[1] Authorized source wastewater flow may be defined as equal to the metered delivery of potable water or by totalization by an approved flow measuring device at the point where wastewater is discharged to the common collection system.

(B) Wastewater system internal measured flow, gallons per day (gpd):

Table B4: Internal Flow Monitoring

Item or Parameter	Minimum Frequency	Sample Type/Action
South Pump Station Discharge	Daily	Record Daily Data, Totalize Monthly
North Pump Station Discharge	Daily	Record Daily Data, Totalize Monthly
Discharge to 41 Storage Lagoon	Daily	Record Daily Data, Totalize Monthly
Discharge to Sand Dune Storage Lagoon	Daily	Record Daily Data, Totalize Monthly
41 Lagoon Meter #1	Daily	Record Daily Data, Totalize Monthly
41 Lagoon Meter #2	Daily	Record Daily Data, Totalize Monthly
41 Lagoon Meter #3	Daily	Record Daily Data, Totalize Monthly
41 Lagoon Meter #4	Daily	Record Daily Data, Totalize Monthly
41 Lagoon Meter #5	Daily	Record Daily Data, Totalize Monthly
Influent to Each Wastewater Treatment System Unit[1]	Daily	Record Daily Data, Totalize Monthly
Effluent from Each Wastewater Treatment System Unit[1]	Daily	Record Daily Data, Totalize Monthly

[1] Each anaerobic digester and secondary treatment oxidation ditch is a treatment unit.

(C) Wastewater applied as irrigation to each farm area, gallons per day (gpd):

Table B5: Wastewater Irrigation

Item or Parameter	Minimum Frequency	Sample Type/Action
Farm 1	Daily	Record Daily Data, Totalize Monthly
Farm 2	Daily	Record Daily Data, Totalize Monthly
Farm 3	Daily	Record Daily Data, Totalize Monthly
Farm 4	Daily	Record Daily Data, Totalize Monthly
Farm 5	Daily	Record Daily Data, Totalize Monthly

(D) Supplemental water applied as irrigation to each farm area, gallons per day (gpd):

Table B6: Supplemental Water Irrigation

Item or Parameter	Minimum Frequency	Sample Type/Action
Farm 1	Daily	Record Daily Data, Totalize Monthly
Farm 2	Daily	Record Daily Data, Totalize Monthly
Farm 3	Daily	Record Daily Data, Totalize Monthly
Farm 4	Daily	Record Daily Data, Totalize Monthly
Farm 5	Daily	Record Daily Data, Totalize Monthly

(E) Wastewater and supplemental water applied at each approved land application site:

Table B7: Total Irrigation Per Site

Item or Parameter	Minimum Frequency	Sample Type/Action
Wastewater Applied, MG	Daily	Record Daily Data, Totalize Monthly
Supplemental Water Applied, MG	Daily	Record Daily Data, Totalize Monthly

Wastewater and Supplemental Water Characterization

(5) The Permittee must collect and analyze, by accepted laboratory methods, representative samples of influent wastewater, effluent wastewater and supplemental water as required by Table 8 below. Samples of effluent wastewater must be collected at monitoring points as identified in the OM&M plan and be representative of wastewater land applied to the authorized sites.

Table B8: Wastewater and Supplemental Water Characterization

Item or Parameter, Units	Minimum Frequency	Sample Type/Action
Influent Wastewater Parameters pH (field measurement), s.u., Temperature, Conductivity, Total Kjeldahl Nitrogen (TKN), mg/L, Total Ammonia Nitrogen, mg/L, Nitrate/Nitrite-N, mg/L, Total Suspended Solids (TSS), mg/L, Total Dissolved Solids (TDS), mg/L	Annually, Each Influent Source in Schedule A(1)	Grab

Effluent Wastewater Parameters pH (field measurement), s.u. Total Kjeldahl Nitrogen (TKN), mg/L, Total Ammonia Nitrogen (mg/L), Nitrate/Nitrite-N (mg/L), BOD_5 (mg/L), Total Suspended Solids, and Total Dissolved Solids (TDS), mg/L	Weekly	Grab
Supplemental Fresh Water Parameters Nitrate/Nitrite-N, (mg/L), and Total Dissolved Solids (TDS), mg/L	Quarterly	Grab

Commercial Fertilizer and Additional Nitrogen Sources

(6) The Permittee must monitor nitrogen applied as commercial fertilizer (Commercial Fertilizer - N, lbs/ac) and any other nitrogen sources applied, to each crop, at each approved application site in the following manner:

Table B9: Additional Nitrogen Sources

Item or Parameter, Units	Minimum Frequency	Sample Type/Action
Commercial Fertilizer Nitrogen, lbs/ac, Other Nitrogen sources including manure (lbs/ac)	As applied	Record amounts, Totalize monthly for each application site, and totalize collectively for Farm 1, Farm 2, Farm 3, Farm 4, and Farm 5.

Totalizing Hydraulic, Nitrogen, and TDS Loading

(7) The Permittee must monitor, record and totalize loading, at each application site (each field), as per the below conditions. Loading calculations must be based on the most recent sampling analytical data collected as required by this permit. All nitrogen loading calculations used to supply the required information must be shown in the annual report and include the following:

(A) Hydraulic loading from wastewater must be monitored daily as, gallons/day, and totalized monthly as, gallons/month,

(B) Hydraulic loading from supplemental water must be monitored daily as, gallons/day, and totalized monthly as, gallons/month,

(C) Hydraulic loading from all sources must be totalized monthly, as gallons/month,

(D) Nitrogen loading from wastewater must be monitored daily and totalized monthly as, lbs/ac/month according to Schedule A(8) of the permit,,

(E) Nitrogen loading (nitrate/nitrite-N) from supplemental water must be monitored daily and totalized monthly as, lbs/ac/month,

(F) Nitrogen loading from all sources (wastewater + supplemental water + commercial fertilizer + manure + other nitrogen sources) must be totalized monthly as, lbs/ac/month,

(G) The nitrogen balance for each crop at each field must be reported in lbs/acre and calculated as:

N Balance = N input – N removed – Soil N residual at Harvest

Where,

- The N input is calculated based on the data from the Nitrogen Availability and Loading section in Schedule A of the permit modification (Schedule A(8)(A-G).
- N removed is the estimated crop harvest nitrogen removal (% Total N from crop testing x Yield lbs/ac).
- Post-harvest Soil N Residual as calculated from Schedule A(8)(A-B). Units of lbs/ac.

(H) Total Dissolved Solids (TDS) loading from wastewater must be totalized monthly as, lbs/ac/month,

(I) Total Dissolved Solids (TDS) loading from supplemental water must be totalized monthly as, lbs/ac/month, and

(J) Total Dissolved Solids (TDS) loading from all sources (wastewater +supplemental) water must be totalized monthly as, lbs/ac/month.

Soil Moisture Monitoring

(8) The Permittee must monitor soil moisture at each land application site by an accepted soil moisture monitoring method as defined in the approved OM&M Plan. The permittee must review soil moisture data monthly and submit collected data with the annual report.

Table B10: Soil Moisture Monitoring

Item or Parameter, Units	Minimum Frequency	Sample Type/Action
Water Holding Capacity, inches of water/ft	Annually[1]	Record value
Soil Moisture, inches of water/ft	Weekly[2]	Record amounts, Totalize monthly
Soil Moisture, inches of water/ft	Twice per Week[3]	Record amounts, Totalize monthly

[1] See Schedule A-Condition 4. [2] March through October. [3] November through February if non-growing season irrigation occurs.

Soil Characterization

(9) At each approved application site, the Permittee must collect representative soil samples from each foot increment of the top 5-feet of the soil column and analyze each, by accepted laboratory methods, for the following parameters:

Table B11: Soil Characterization

Item or Parameter, Units	Minimum Frequency	Sample Type/Action
Nitrate-Nitrogen, lbs/ac	After harvest of each crop and prior to planting next crop[2]	In Accordance with OM&M Plan
Ammonium-Nitrogen, lbs/ac	After harvest of each crop and prior to planting next crop[2]	In Accordance with OM&M Plan
EC of saturated extract, *u*S/cm	After harvest of each crop[2]	In Accordance with OM&M Plan
pH, s.u.[1]	After harvest of each crop[2]	In Accordance with OM&M Plan

[1] pH is required in the top foot of soil at each site only.

[2]The after harvest soil analysis can be used for the next crop preplant soil nitrogen test requirement within the same year provided all sources of nitrogen applied have been accounted for as calculated by Schedule A(8) and credited as loading to the next crop. For cover crops, soil characterization samples are to be taken prior to being tilled under.

Crop Monitoring

(10) The Permittee must monitor and record crop information, for each authorized application site, as follows:

Table B12: Crop Monitoring

Item or Parameter	Minimum Frequency	Sample Type/Action
Crops grown	When planted and harvested	Record dates
Crop Tissue Total Nitrogen (%) [1]	At harvest	Calculation/Record amounts
Crop Nitrogen removal [1]	At harvest	Calculation
Crop Yield (lb/ac or tons/ac)[1]	At harvest	Record amounts

[1]Crop Nitrogen removal is to be calculated based on % Total N from crop tissue sampling and recorded crop yield. Tissue testing, nitrogen removal, and yield reporting is not required for cover crops that are tilled-under. The associated contribution of nitrogen mineralization for cover crops or crop residues being tilled under after soil testing must be accounted for in the nutrient loading for the next crop as described in the OM&M Plan.

Groundwater Monitoring

(11) The Permittee must monitor groundwater in accordance with the approved Groundwater Monitoring Plan and any amendments to the plan approved by the Department in writing. Minimum groundwater monitoring must include the following parameters:

Table B13: Groundwater Monitoring

Item or Parameter	Minimum Frequency	Type of Sample
pH (field measurement)	Quarterly	Grab
Nitrate Nitrogen	Quarterly	Grab
Chloride	Quarterly	Grab
Sulfate	Quarterly	Grab
TDS	Quarterly	Grab
Specific Conductivity	Quarterly	Grab
Temperature	Quarterly	Grab
Static Water Level	Quarterly	Measurement

Approved Testing Methods

(12) The Permittee must ensure that all required monitoring and laboratory analysis is conducted in accordance with 40 CFR Part 136 approved test procedures, unless other test procedures that have been approved by the Department in writing.

Records Retention

(13) The Permittee must retain sufficient documentation for the Department to determine compliance with this permit, including original records of all monitoring required by this permit, for a period of at least five years. Original records that are required to be kept must be specified in the OM&M Plan. All documentation must be available for review by Department personnel upon request.

Reporting Requirements

Facility Monthly Report

(14) The Permittee must submit a monthly facility monitoring report (FMR). The reporting period for the FMR is the calendar month. The FMR for each calendar month must be submitted, to the Department, on or before the 15th of the next calendar month. The FMR format and content must be in accordance with DEQ approval, and must include, but not be limited to:

- **(A)** Monitoring results as required by Schedule B- Condition (3)- Table B2[1]
- **(B)** Monitoring results as required by Schedule B- Condition (4)(A)- Table B3,
- **(C)** Monitoring results as required by Schedule B- Condition (4)(B)- Table B4,
- **(D)** Monitoring results as required by Schedule B- Condition (4)(C)- Table B5,
- **(E)** Monitoring results as required by Schedule B- Condition (4)(D)- Table B6,
- **(F)** Monitoring results as required by Schedule B- Condition (4)(E)-Table B7,
- **(G)** Monitoring results as required by Schedule B- Condition (5)-Table B8,
- **(H)** Monitoring results as required by Schedule B- Condition (6) -Table B9,
- **(I)** A narrative summary to include, but not be limited to a written evaluation of:
  - **(i)** General wastewater system performance, issues and concerns,
  - **(ii)** Wastewater system maintenance, repair and construction,
  - **(iii)** Changes at authorized wastewater sources with the potential to impact system operation or capacity, and
  - **(iv)** A statement that either confirms compliance with all the terms and conditions of the permit and OM&M Plan or lists violations that have occurred during the reporting month[2].

[1]Report only the stored wastewater volume in 41 Lagoon and Sand Dune Lagoon on last day of reporting month.
[2]In response to a violation notification, DEQ may investigate to evaluate the nature and extent of the violation and may require additional information and/or corrective actions from the Permittee. Compliance with this requirement 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.

Facility Annual Report

(15) The Permittee must submit an annual report on or before April 15 for the prior calendar year. The report must be submitted both electronically to the assigned DEQ compliance inspector and a bound hardcopy to the DEQ office for review. The report must provide annual summary statistics and performance analysis for the land application system as a whole, for each crop utilized and for each individual application site.

The Annual Report format and content must be in accordance with DEQ approval, and must include, but not be limited to:

- **(A)** Monitoring results as required by Schedule B- Condition (5)- Table B8,
- **(B)** Monitoring results as required by Schedule B- Condition (6)- Table B9,
- **(C)** Monitoring results as required by Schedule B- Condition (7)(A)-(J),
- **(D)** Monitoring results as required by Schedule B- Condition (8)- Table B10,
- **(E)** Monitoring results as required by Schedule B- Condition (9)- Table B11, and
- **(F)** Monitoring results as required by Schedule B- Condition (10)- Table B12.
- **(G)** A narrative summary to include, but not be limited to a written evaluation of:
  - **(i)** General wastewater system performance issues and concerns,
  - **(ii)** Changes at authorized wastewater sources with the potential to impact system operation or capacity,
  - **(iii)** A summary of adjustments identified to ensure protection of groundwater,
  - **(iv)** A summary statement that either confirms compliance with all the terms and conditions of the permit and OM&M plan or lists permit violations that have occurred over the annual period of reporting.

Quarterly Groundwater Report

(16) The Permittee must submit quarterly groundwater monitoring reports to the Department. The format and content of the groundwater report must be in accordance with the approved Groundwater Monitoring Plan, and any amendments to the plan approved by the Department in writing, but at a minimum must include the monitoring requirements in Schedule B Condition (11)-Table B13. The reports must be submitted by the 15th day of the month following the end of each calendar quarter.

Additional Groundwater Reports

(17) The Permittee will take the following action and submit additional reports as follows, or in accordance with the approved Groundwater Monitoring Plan, and any amendments to the Plan approved by the Department in writing that may differ from the following requirements:

- **(A)** When groundwater monitoring indicates that a concentration limit has been exceeded at a compliance point, the Permittee must:
  - **(i)** Consult with the Department within 10 days of receipt of the laboratory data from the quarterly sampling event,
  - **(ii)** Depending upon results of consultation with the Department resample and test the monitoring well as directed, and
  - **(iii)** Report the results of both sampling events to the Department.
  - **(iv)** If necessary, conduct a preliminary investigation into the exceedance as directed by the Department.
- **(B)** When groundwater monitoring indicates a significant increase (increase or decrease for pH) in the value of a parameter monitored, the Permittee must:
  - **(i)** Consult with the Department within 10 days of receipt of the laboratory data from the quarterly sampling event,
  - **(ii)** Depending upon results of consultation with the Department resample unless otherwise directed by the Department,
  - **(iii)** Depending on whether or not the new sample confirms a change in water quality, the Permittee must:
    - **(a)** Report the original sample to the Department in the quarterly report, if the new sample does not confirm a water quality change,
    - **(b)** Report the new sample result to the Department in the quarterly report, if a change in water quality is confirmed.
  - **(iv)** If determined by the Department to be necessary, conduct a preliminary investigation into the increase as directed by the Department.

SCHEDULE C – COMPLIANCE SCHEDULE

1. Groundwater Corrective Measures at Farm 1 and Farm 3

Complete By	Requirement
December 31, 2022	The permittee must submit an update to the 2015 Port of Morrow Groundwater Corrective Measures Plan for Farm 1 and Farm 3 in the form of a Remedial Investigation/Feasibility Study (RI/FS). The submittal must include: 1. A summary of current groundwater monitoring trend analysis at Farm 1 and Farm 3 sites. 2. An update on corrective actions completed under the 2015 Groundwater Corrective Measures Plan and identification of new proposed corrective actions as necessary. 3. All RI/FS information required under OAR 340-040-0040. 4. A proposed implementation schedule for identified remedial actions for DEQ review, public comment process, and approval.

2. Water Quality Analysis Report for Farm 2, Farm 4, and Farm 5

Complete By	Requirement
December 31, 2022	The permittee must submit a Water Quality Analysis Report (WQAR) and propose groundwater concentration limits for Farm 2.
June 30, 2023	The permittee must submit a Water Quality Analysis Report (WQAR) and propose groundwater concentration limits for Farm 4 (Madison) and Farm 5 (Mader-Rust).

3. Completion of Anaerobic Digester Project

Complete By	Requirement
July 1, 2023	The permittee must submit the following in writing: 1. A start-up, testing, and certification process with associated schedule for each unit. 2. Identification and proposed methods for disposal or beneficial use of anaerobic digester solids. 3. Assessment digester unit performance vs. predicted performance for the following wastewater constituents, at minimum: TDS, pH, TKN, Total Ammonia Nitrogen, Organic Matter, Nitrate-Nitrite-Nitrogen, Total Phosphorus, Potassium, Electrical Conductivity, Sodium Adsorption Ratio, and BOD5.
November 1, 2023	Complete construction and startup of the three-unit digester system. Provide DEQ a start-up summary report for the three-unit anaerobic digester lagoon project as per the DEQ-approved plans and specifications.

4. Secondary Treatment of Wastewater Effluent

Complete By	Requirement
December 31, 2022	Submit a Preliminary Design Report to DEQ for review of Secondary Treatment System. The preliminary design report must include nitrogen and hydraulic balances to document system capacity upon completion of the project.
July 30, 2023	Submit 90% Plans and Specifications to DEQ for review of Secondary Treatment System. The 90% plans must address all DEQ comments on the Preliminary Design Report.
December 31, 2023	The permittee must submit to DEQ: 1. Final draft plans and specifications in accordance with OAR 340-052 for a selected secondary treatment system. 2. A completed Land Use Compatibility Statement (LUCS) for the selected project.
July 1, 2024	Submit to DEQ a project status report.
July 1, 2025	Complete construction and startup.
October 1, 2025	Submit to DEQ a summary of performance for the secondary treatment system. The summary must include a comparison of the wastewater characteristics in Table B8 before and after secondary treatment.
November 1, 2025	The permittee must comply with Schedule A(14) effluent limits for wastewater land applied in the non-growing season.

5. Storage of Non-Growing Season Effluent

Complete By	Requirement
May 31, 2023	Submit Preliminary Design Report to DEQ for review of Storage Addition to cease non-growing season disposal program. The preliminary design must include nitrogen and hydraulic balances to document system capacity upon completion of the project.
November 30, 2023	Submit 90% Plans and Specifications to DEQ for review of Storage Addition. The 90% plans must address all DEQ comments on the Preliminary Design Report.
April 1, 2024	The permittee must submit to DEQ: 1. Final draft plans and specifications in accordance with OAR 340-052 for the storage system. 2. A completed Land Use Compatibility Statement (LUCS) for the selected project.
April 1, 2025	Submit to DEQ a progress status report.
April 1, 2026	Submit to DEQ a progress status report.
November 1, 2026	The permittee must complete construction and provide DEQ a start-up summary for the project in accordance with DEQ approval. Any wastewater applied during the non-growing season after this date, must be treated to Table A1 effluent limits and for defined beneficial uses as described in the facility OM&M plan and approved by DEQ.

6. Wastewater Pond Solids Removal

Complete By	Requirement
July 1, 2025	The permittee must submit a plan to quantify, characterize, remove, and dispose of accumulated sediments in Pond #41. The plan must include a project schedule for DEQ approval.
July 1, 2026	Submit to DEQ a progress status report.
January 31, 2027	Complete the sediment removal and disposal project in accordance with DEQ approval.

7. Responsibility to Meet Compliance Dates

No later than 14 days following each compliance date listed in the tables above, the permittee must notify DEQ in writing of its compliance or noncompliance with the requirements. Any reports of noncompliance must include the cause of noncompliance, any remedial actions taken, and a discussion of the likelihood of meeting the next scheduled requirement.

SCHEDULE D - Special Conditions

Monitoring Well Management/Maintenance

(1) The Permittee must protect and maintain each groundwater monitoring well so that samples can be collected that are representative of actual conditions.

(2) 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.

(3) If a monitoring well becomes damaged or inoperable, the Permittee must notify the Department in writing within 14 days. The written report must 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.

(4) 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 must be submitted to the Department within 30 days of well installation. Reports must include land survey drawings that depict actual location of all monitoring wells, land application areas, and surface waters.

(5) Modification and/or abandonment plans must be submitted to and approved by the Department in writing prior to modification and/or abandonment of any existing monitoring well.

Plans and Specifications Required

(6) Prior to constructing or modifying wastewater management, treatment and disposal facilities, or groundwater monitoring facilities, detailed plans and specifications must be submitted to and approved by the Department in writing.

Spill Prevention and Response

(7) An adequate contingency plan for prevention and handling of spills and unplanned discharges must be in force at all times. A continuing program of employee orientation and education must be maintained to ensure awareness of the necessity for good in-plant control and quick and proper action in the event of a spill or accident. The Permittee will include documentation of compliance with this requirement in the required OM&M plan.

Environmental Supervision Required

(8) The Permittee must designate one or more environmental supervisors to coordinate and implement all necessary functions related to the maintenance and operation of waste management, treatment, and disposal facilities. This staff must have access to all information pertaining to the generation of wastes in the various process areas.

The facility must maintain appropriate personnel and employ training to staff providing system oversight, including for primary and secondary treatment equipment to maintain compliance with the permit.

Notification Requirement

(9) The Permittee must 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.

Land Owner Agreements Required

(10) The Permittee must maintain written agreements with the owners of each land application site that is not owned by the Port of Morrow. The agreements must authorize the permitted treatment and disposal activities in accordance with this permit. The agreements must be made available to DEQ upon request.

Ammonia Volatilization

(11) The Permittee must not include any claimed ammonia volatilization loss when determining crop nitrogen loading.

Irrigation Efficiency Allowance

(12) The Permittee must use an irrigation efficiency value of no less than 90% when calculating application site nitrogen loading as required by Schedule A(8). Irrigation efficiency for hydraulic loading calculations must be approved in the facility OM&M plan based upon irrigation method used.

Total Kjeldahl Nitrogen Availability

(13) The Permittee must assume that 70% of Total Kjeldahl Nitrogen (TKN) applied to an authorized application site becomes plant available during the crop season when calculating nitrogen loading rates until the date specified in Schedule A(8).

Nitrogen Credits and Hydraulic Loading

(14) The Permittee must credit all nitrogen and/or hydraulic loading after crop harvest and before re-seeding to the next re-seeded crop.

Sprinkler, Sampler and Flow Meter Maintenance

(15) Sprinkler devices, above- and underground wastewater lines, auto-samplers, and flow-measuring devices must be maintained to ensure system integrity. Sprinkler nozzles that do not meet specification must be replaced within 30 days.

Piping Plans & System Schematic

(16) By July 1, 2023, the facility must provide to DEQ an accurate and up-to-date system schematic to include piping plans of wastewater conveyances at the facility. This must include all conveyances of industrial wastewater, potable water, groundwater lines supplying supplemental water, river water lines, and any other sources used to supply water to the approved land application sites of this permit. The schematic must include a narrative detailing lines which convey multiple sources of water to the land application network and/or treatment system and include GIS coordinates with overhead system-wide map.

SCHEDULE F

WPCF GENERAL CONDITIONS – INDUSTRIAL FACILITIES

SECTION A. STANDARD CONDITIONS

Duty to Comply with Permit

1. The permittee must comply with all conditions of this permit. Failure to comply with any permit condition is a violation of Oregon Revised Statutes (ORS) 468B.025 and grounds for an enforcement action. Failure to comply is also grounds for the Department to modify, revoke, or deny renewal of a permit.

Property Rights and Other Legal Requirements

2. Issuance of this permit does not convey any property rights of any sort, or any exclusive privilege, or authorize any injury to persons or property or invasion of any other rights, or any infringement of federal, tribal, state, or local laws or regulations.

Liability

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

Permit Actions

4. 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.

Transfer of Permit

5. This permit may not be transferred to a third party without prior written approval from the Department. The Department may approve transfers 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.

Permit Fees

6. The permittee must pay the fees required by Oregon Administrative Rules.

SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

Proper Operation and Maintenance

1. At all times the permittee must 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 comply with the terms and conditions of this permit.

Standard Operation and Maintenance

2. All waste collection, control, treatment, and disposal facilities or systems must be operated in a manner consistent with the following:

a. At all times, all facilities or systems must be operated as efficiently as possible in a manner that will prevent discharges, health hazards, and nuisance conditions.

b. All screenings, grit, and sludge must be disposed of in a manner approved by the Department to prevent any pollutant from the materials from reaching waters of the state, creating a public health hazard, or causing a nuisance condition.

c. Bypassing untreated waste is generally prohibited. Bypassing may not occur without prior written permission from the Department except where unavoidable to prevent loss of life, personal injury, or severe property damage.

Noncompliance and Notification Procedures

3. If the permittee is unable to comply with conditions of this permit because of surfacing sewage; a breakdown of equipment, facilities or systems; an accident caused by human error or negligence; or any other cause such as an act of nature, the permittee must:

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 to determine any additional action that must be taken.

c. Within 5 days of the time the permittee becomes aware of the circumstances, the permittee must submit to the Department a detailed written report describing the breakdown, the actual quantity and quality of waste discharged, 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 liability for failure to comply.

Wastewater System Personnel

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

Public Notification of Effluent Violation

5. If effluent limitations specified in this permit are exceeded or an overflow occurs that threatens public health, the permittee must take such steps as are necessary to alert the public, health agencies and other affected entitles (e.g., public water systems) about the extent and nature of the discharge in accordance with the notification procedures developed in accordance with General Condition B.6. Such steps may include, but are not limited to, posting of the river at access points and other places, news releases, and paid announcements on radio and television.

Emergency Response and Public Notification Plan

6. The permittee must develop and implement an emergency response and public notification plan that identifies measures to protect public health from bypasses or upsets that may endanger public health. At a minimum the plan must include mechanisms to:

a. Ensure that the permittee is aware (to the greatest extent possible) of such events;

b. Ensure notification of appropriate personnel and ensure that they are immediately dispatched for investigation and response;

c. Ensure immediate notification to the public, health agencies, and other affected entities (including public water systems). The response plan must identify the public health and other officials who will receive immediate notification;

d. Ensure that appropriate personnel are aware of and follow the plan and are appropriately trained;

e. Provide emergency operations: and

f. Ensure that DEQ is notified of the public notification steps taken.

SECTION C. MONITORING AND RECORDS

Inspection and Entry

1. The permittee must at all reasonable times allow authorized representatives of the Department 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 by 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 any substances or permit parameters at any location at reasonable times for the purpose of assuring permit compliance or as otherwise authorized by state law.

Averaging of Measurements

2. Calculations of averages of measurements required for all parameters except bacteria must use an arithmetic mean; bacteria must be averaged as specified in the permit.

Monitoring Procedures

3. 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.

Retention of Records

4. The permittee must 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 Department may extend this period at any time.

SECTION D. REPORTING REQUIREMENTS

Plan Submittal

1. Pursuant to Oregon Revised Statute 468B.055, unless specifically exempted by rule, construction, installation, or modification of disposal systems, treatment works, or sewerage systems may not commence 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.

Change in Discharge

2. Whenever a facility expansion, production increase, or process modification is expected to result in a change in the character of pollutants to be discharged or 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. A change may not be made until plans have been approved and a new permit or permit modification has been issued.

Signatory Requirements

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

Twenty-Four Hour Reporting

4. The permittee must report any noncompliance that may endanger health or the environment. Any information must be provided orally (by telephone) within 24 hours from the time the permittee becomes aware of the circumstances, unless a shorter time is specified in the permit. During normal business hours, the Department's Regional office must be called. Outside of normal business hours, the Department must be contacted at 1-800-452-0311 (Oregon Emergency Response System).

The following must be included as information that must be reported within 24 hours under this paragraph:

a. Any unanticipated bypass that exceeds any effluent limitation in this permit;
b. Any upset that exceeds any effluent limitation in this permit;
c. Violation of maximum daily discharge limitation for any of the pollutants listed by the Department in this permit; and
d. Any noncompliance that may endanger human health or the environment.

A written submission must also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission must contain:

e. A description of noncompliance and its cause;
f. The period of noncompliance, including exact dates and times;
g. The estimated time noncompliance is expected to continue if it has not been corrected;
h. Steps taken or planned to reduce, eliminate and prevent reoccurrence of the noncompliance; and
i. Public notification steps taken, pursuant to General Condition B.6.

The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

SECTION E. DEFINITIONS

1. *BOD or BOD_5* means five-day biochemical oxygen demand.
2. *CBOD or $CBOD_5$* means five-day carbonaceous biochemical oxygen demand.
3. *TSS* means total suspended solids.
4. *Bacteria* means but is not limited to fecal coliform bacteria, total coliform bacteria, *Escherichia coli* (*E. coli*) bacteria, and *Enterococcus* bacteria.
5. *FC* means fecal coliform bacteria.
6. *Total residual chlorine* means combined chlorine forms plus free residual chlorine
7. *Technology based permit effluent limitations* means technology-based treatment requirements as defined in 40 CFR § 125.3, and concentration and mass load effluent limitations that are based on minimum design criteria specified in OAR 340-041.
8. *mg/l* means milligrams per liter.
9. *µg/l* means microgram per liter.
10. *kg* means kilograms.
11. *m^3/d* means cubic meters per day.
12. *MGD* means million gallons per day.
13. *Average monthly effluent limitation* as defined at 40 CFR § 122.2 means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
14. *Average weekly effluent limitation* as defined at 40 CFR § 122.2 means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.
15. *Daily discharge* as defined at 40 CFR § 122.2 means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge must be calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge must be calculated as the average measurement of the pollutant over the day.
16. *24-hour composite sample* means a combination of at least six discrete sample aliquots of at least 100 milliliters, collected at periodic intervals from the same location, during the operating hours of the facility over a 24 hour period. Four (rather than six) aliquots should be collected for volatile organics analyses. The composite must be flow or time proportional, whichever is more appropriate. The sample aliquots must be collected and stored in accordance with procedures prescribed in the most recent edition of *Standard Methods for the Examination of Water and Wastewater*.

17. *Grab sample* means an individual discrete sample collected over a period of time not to exceed 15 minutes.
18. *Quarter* means January through March, April through June, July through September, or October through December.
19. *Month* means calendar month.
20. *Week* means a calendar week of Sunday through Saturday.

102325-PERM-MOD1POM11012022

Final Audit Report 2022-11-02

Created:	2022-11-02
By:	Patty Isaak (patty.isaak@deq.oregon.gov)
Status:	Signed
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Expiration: November 30, 2027
Permit #: 102325
File #: 70590

DEQ
State of Oregon
Department of
Environmental
Quality

WATER POLLUTION CONTROL FACILITIES PERMIT

Modification #4

Department of Environmental Quality
Eastern Region
800 S.E. Emigrant Avenue, Suite #330, Pendleton, OR 97801
Telephone: (541) 276-4063
Issued pursuant to ORS 468B.050

ISSUED TO:
Port of Morrow
Post Office Box 200
Boardman, OR 97818

SOURCES COVERED BY THIS PERMIT:

Type of Waste	Method of Disposal
Industrial Wastewater	Land Application

FACILITY TYPE AND LOCATION:
Wastewater Lagoons and
Land Application Treatment System

Boardman, Oregon

RIVER BASIN INFORMATION:
Basin: Umatilla
Sub-Basin: Middle Columbia / Boardman
LLID: 1240483462464-266.02
Columbia River
Location of Farm 3 Lagoon
Lat.: 45.858804
Long.: -119.618202
County: Morrow

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

Renewal issued in response to Application No. 977616 received 7-20-2006. This modification is issued in response to the permit modification request #948055 submitted by the permittee.

This permit modification is issued based on the land use findings in the permit record.

Mike Hiatt, Water Quality Permit Manager Eastern Region	10/25/2024 Signature Date	10/25/2024 Effective 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.

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.

Table of Contents

SCHEDULE A - Waste Disposal Terms and Conditions

Schedule A, Conditions 5, 8, 11, 13, and 14 are replaced as follows. All other Schedule A conditions of the November 2, 2022 permit are not modified.

Authorized Land Application Sites

(5) The Permittee is authorized to land apply permitted wastes only at the land application sites authorized by a DEQ-approved OM&M Plan. The Permittee must request and receive written authorization from the Department prior to application of wastewater at any site not listed in the DEQ-approved OM&M Plan.

Nitrogen Availability and Loading

(8) Unless otherwise authorized by the Department in writing, the Permittee is prohibited from allowing the nitrogen available to crops at approved application sites to exceed the crop-specific agronomic rates listed in the approved OM&M Plan. For this permit, unless other calculation methods are approved by the Department in writing, the nitrogen available to an individual crop between field preparation at crop start and harvest is the sum total of all nitrogen from the following sources:

(A) All nitrate (NO_3) in the crop-specific root zone of soil,
(B) All ammonium (NH_4) in the first foot of the root zone of soil,
(C) 70% of the Total Kjeldahl Nitrogen (TKN) in applied wastewater[1],
(D) All Nitrate/Nitrite-N in applied wastewater and supplemental irrigation water from any source,
(E) All nitrogen applied as commercial fertilizer,
(F) Plant Available Nitrogen from applied manure and cover crops tilled under (calculated per approved OM&M Plan), and
(G) All nitrogen from any other source applied between crop start and harvest.

[1]Upon completion of the anaerobic digester project (beginning November 1, 2023), the Total Nitrogen in applied wastewater is to be used to calculate wastewater nitrogen loading (all TKN plus Nitrate/Nitrite-N).

Leaching Prohibition

(11) Other than a prescribed leaching event pre-approved by the Department the leaching of moisture and nutrients caused by means of irrigation beyond the 5th foot of the soil column is prohibited.

A violation of this prohibition will have occurred at an approved application site anytime required soil moisture monitoring as described in the OM&M determines that the average soil moisture is at or above the field capacity for the field in the 5th foot of the soil column caused by irrigation, unless the permittee demonstrates that the excess moisture was due to reasons beyond its reasonable control such as excessive precipitation.

Active irrigation activities during the growing season may saturate up to field capacity only the listed rooting depth of the current crop. Irrigation activities during the non-growing season must adhere to the limits specified in Schedules A(13) and A(14) of this permit.

Non-Growing Season Limits

(13) The Permittee must conduct all land application activities during the non-growing season in accordance with this permit and the facility OM&M Plan. The non-growing season is defined by this permit as November 1st through February, unless otherwise approved in writing by DEQ.

(A) The OM&M plan must include, but is not limited to, the following terms and conditions for operations during the non-growing season:

(i) Application sites must be ranked and evaluated according to the presence and location of nitrogen and moisture in the soil profile,-water holding capacity (field capacity), modeled nitrate leaching potential using publicly available models, and other factors in consult with DEQ.

(a) Based on the evaluation, the Permittee shall submit a Non-Growing Season Irrigation Plan for DEQ approval prior to the beginning of each non-growing season that describes how the Port plans to irrigate sites based on the criteria in Schedule 13(A)(i).

(b) The permittee shall irrigate sites during the non-growing season in accordance with the DEQ approved Non-Growing Season Irrigation Plan.

(c) Application sites are prohibited from receiving non-growing season irrigation if they are ranked as "high risk" or otherwise ineligible for non-growing season irrigation in accordance with the approved Non-Growing Season Irrigation plan evaluation.

(ii) Application sites where the sum of soil nitrate (as N)-in the top five feet of soil is greater than or equal to 150 lbs/ac are prohibited from receiving non-growing season irrigation,

(iii) Application sites with soil moisture in the 4th foot of the soil profile equal to or greater than 75% of the 4th foot water-holding capacity are prohibited from receiving additional non-growing season irrigation, with the following exceptions:

(a) For application sites with crops harvested between November 1 and December 31 of a calendar year, the 75% of the 4th foot water holding capacity prohibition shall be applied the calendar day following harvest of the crop.

(iv) Non-growing season irrigation is to be limited to utilization of the available water-holding capacity in the top three (3) feet of the soil column, only, and

(v) Non-growing season irrigation events must be planned based on the most recent soil moisture monitoring event.

(vi) These interim limits apply until November 1, 2025 when non-growing season wastewater must be stored except as approved by DEQ for beneficial use with treated effluent in accordance with Schedule A(14).

(B) Supplemental commercial nitrogen fertilizer application is not permitted from November 15 – February 15 without DEQ approval.

Effluent Treatment and Storage

(14) Unless otherwise approved in writing by DEQ, by no later than November 1, 2029, the facility must not exceed the following effluent concentration limits for all wastewater land applied during the non-growing season:

Table A1: Final Effluent Concentration Limits

Parameter	Monthly Average
Total Nitrogen[1]	7 mg/L
Total Suspended Solids (TSS)	20 mg/L
BOD_5	20 mg/L
pH	Instantaneous limit of 6.0 – 9.0

[1] Total Kjeldahl Nitrogen (TKN) plus Nitrate/Nitrite-N

(A) The permittee must utilize the wastewater treatment system during the growing season (March 1 – October 31 each calendar year) as necessary to reduce effluent constituent concentrations and ensure permit compliance.

(B) Beginning November 1, 2025, all wastewater is to be stored in lined lagoons for the non-growing season unless authorized for beneficial uses using wastewater treated to the Table A1 standards and as described in a DEQ-approved OM&M.

SCHEDULE B – Minimum Monitoring and Reporting Requirements

Schedule B, Conditions 3, 4(B), 4(C), 4(D), 6, and 14 are replaced as follows. All other Schedule B conditions of the November 2, 2022 permit are not modified.

Visual Inspections

(3) The Permittee shall perform the following visual inspections:

Table B2: Visual Inspections

Item or Parameter	Minimum Frequency	Sample Type/Action
Inspect Storage Lagoon dikes	Weekly	Record Observations[1]
Inspect pipelines	Daily when in use	Record Observations[1]
Inspect land application sites	Daily when irrigating	Record Observations[1]
Inspect sprinkler nozzles	Semi-annually	Record Observations[1]
Storage lagoon volume, MG	Daily, Each Lagoon	Record Observations[1] Record Amount Stored in MG Record Total Storage Capacity in MG
Inspect wastewater treatment units	Daily when in use	Record Observations[2]

[1] Maintain record of inspector, date, time, and operational status.

[2] Maintain record of inspector, date, time and operational status of each wastewater treatment unit including the digesters and secondary treatment system. Inspect in accordance with Operations and Maintenance Manual for each unit when in operation.

With the exception of the storage pond lagoon volumes which must be reported monthly, Table 2 information must be retained by the permittee according to Schedule F- General Conditions- Condition C(4) and must be provided to the Department upon request.

Flow Monitoring

(4) The Permittee shall monitor wastewater treatment system flows as follows:

(B) Wastewater system internal measured flow, gallons per day (gpd):

Table B4: Internal Flow Monitoring

Item or Parameter	Minimum Frequency	Sample Type/Action
South Pump Station Discharge	Daily	Record Daily Data, Totalize Monthly
North Pump Station Discharge	Daily	Record Daily Data, Totalize Monthly
Discharge to Storage Lagoons	Daily	Record Daily Data, Totalize Monthly For Each Lagoon
Influent to Each Wastewater Treatment System Unit[1]	Daily	Record Daily Data, Totalize Monthly
Effluent from Each Wastewater Treatment System Unit[1]	Daily	Record Daily Data, Totalize Monthly

[1] Each digester and secondary treatment oxidation ditch is a treatment unit.

(C) Wastewater applied as irrigation to each farm area, gallons per day (gpd):

Table B5: Wastewater Irrigation

Item or Parameter	Minimum Frequency	Sample Type/Action
Farm 1	Daily	Record Daily Data, Totalize Monthly
Farm 2	Daily	Record Daily Data, Totalize Monthly
Farm 3	Daily	Record Daily Data, Totalize Monthly
Farm 4	Daily	Record Daily Data, Totalize Monthly
Farm 5	Daily	Record Daily Data, Totalize Monthly
Farm 6	Daily	Record Daily Data, Totalize Monthly
Additional Farm Areas as approved by DEQ	Daily	Record Daily Data, Totalize Monthly

(D) Supplemental water applied as irrigation to each farm area, gallons per day (gpd):

Table B6: Supplemental Water Irrigation

Item or Parameter	Minimum Frequency	Sample Type/Action
Farm 1	Daily	Record Daily Data, Totalize Monthly
Farm 2	Daily	Record Daily Data, Totalize Monthly
Farm 3	Daily	Record Daily Data, Totalize Monthly
Farm 4	Daily	Record Daily Data, Totalize Monthly
Farm 5	Daily	Record Daily Data, Totalize Monthly
Farm 6	Daily	Record Daily Data, Totalize Monthly
Additional Farm Areas as approved by DEQ	Daily	Record Daily Data, Totalize Monthly

Commercial Fertilizer and Additional Nitrogen Sources

(6) The Permittee must monitor nitrogen applied as commercial fertilizer (Commercial Fertilizer - N, lbs/ac) and any other nitrogen sources applied, to each crop, at each approved application site in the following manner:

Table B9: Additional Nitrogen Sources

Item or Parameter, Units	Minimum Frequency	Sample Type/Action
Commercial Fertilizer Nitrogen, lbs/ac, Other Nitrogen sources including manure (lbs/ac)	As applied	Record amounts, Totalize monthly for each application site, and totalize collectively for each Farm

Reporting Requirements

Facility Monthly Report

(14) The Permittee must submit a monthly facility monitoring report (FMR). The reporting period for the FMR is the calendar month. The FMR for each calendar month must be submitted, to the Department, on or before the 15th of the next calendar month. The FMR format and content must be in accordance with DEQ approval, and must include, but not be limited to:

- **(A)** Monitoring results as required by Schedule B- Condition (3)- Table B2[1]
- **(B)** Monitoring results as required by Schedule B- Condition (4)(A)- Table B3,
- **(C)** Monitoring results as required by Schedule B- Condition (4)(B)- Table B4,
- **(D)** Monitoring results as required by Schedule B- Condition (4)(C)- Table B5,
- **(E)** Monitoring results as required by Schedule B- Condition (4)(D)- Table B6,
- **(F)** Monitoring results as required by Schedule B- Condition (4)(E)-Table B7,
- **(G)** Monitoring results as required by Schedule B- Condition (5)-Table B8,
- **(H)** Monitoring results as required by Schedule B- Condition (6) -Table B9,
- **(I)** A narrative summary to include, but not be limited to a written evaluation of:
  - **(i)** General wastewater system performance, issues and concerns,
  - **(ii)** Wastewater system maintenance, repair and construction,
  - **(iii)** Changes at authorized wastewater sources with the potential to impact system operation or capacity, and
  - **(iv)** A statement that either confirms compliance with all the terms and conditions of the permit and OM&M Plan or lists violations that have occurred during the reporting month[2].

[1]**Report the stored wastewater volume and total storage capacity in each lagoon on last day of reporting month.**

[2]**In response to a violation notification, DEQ may investigate to evaluate the nature and extent of the violation and may require additional information and/or corrective actions from the Permittee. Compliance with this requirement 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.**

SCHEDULE C – COMPLIANCE SCHEDULE

Schedule C, Conditions 4 and 5 are replaced as follows. Condition 7 is new. Schedule C, Conditions 1, 2, 3, and 6 of the November 2, 2022 permit are not modified.

4. Secondary Treatment of Wastewater Effluent

Complete By	Requirement
September 1, 2025	Submit a Preliminary Design Report to DEQ for review of Secondary Treatment System. The preliminary design report must include nitrogen and hydraulic balances to document system capacity upon completion of the project.
April 1, 2026	Submit 90% Plans and Specifications to DEQ for review of Secondary Treatment System. The 90% plans must address all DEQ comments on the Preliminary Design Report.
December 31, 2026	The permittee must submit to DEQ: 1. Final draft plans and specifications in accordance with OAR 340-052 for a selected secondary treatment system. 2. A completed Land Use Compatibility Statement (LUCS) for the selected project.
April 1, 2027	Submit to DEQ a progress status report.
April 1, 2028	Submit to DEQ a progress status report.
April 1, 2029	Submit to DEQ a progress status report.
July 1, 2029	Complete construction and startup of the secondary treatment system as per the DEQ-approved plans and specifications.
October 1, 2029	Submit to DEQ a summary of performance for the Secondary Treatment System. The summary must include a comparison of the wastewater characteristics in Table B8 before and after secondary treatment.
November 1, 2029	The permittee must comply with Schedule A(14) effluent limits for wastewater land applied in the non-growing season and use the secondary treatment system in the growing season to ensure permit compliance and groundwater protection.

5. Storage of Non-Growing Season Effluent

Complete By	Requirement
May 31, 2023	Submit Preliminary Design Report to DEQ for review of Storage Addition to cease non-growing season disposal program. The preliminary design must include nitrogen and hydraulic balances to document system capacity upon completion of the project.
November 30, 2023	Submit 90% Plans and Specifications to DEQ for review of Storage Addition. The 90% plans must address all DEQ comments on the Preliminary Design Report.
April 1, 2024	The permittee must submit to DEQ: 1. Final draft plans and specifications in accordance with OAR 340-052 for the storage system. 2. A completed Land Use Compatibility Statement (LUCS) for the selected project.
April 1, 2025	Submit to DEQ a progress status report.
November 1, 2025	The permittee must complete construction and provide DEQ a start-up summary for the project in accordance with DEQ approval.

7. Groundwater Corrective Measures and Remedial Actions

Complete By	Requirement
March 31, 2025	Submit an update to the August 29, 2023 Farms 1-5 Remedial Investigation/Feasibility Study and Corrective Measures Plan. The updated plan must include: 1. A summary of current groundwater monitoring trend analysis at Farms 1, 2, 3, 4, and 5. 2. A summary of groundwater trend analysis and proposed groundwater concentration limits at the acreage expansion for Farm 6. 3. All RI/FS information required under OAR 340-040-0040. 4. An update on corrective actions completed and identification of new proposed corrective actions as necessary, to include the new Farm 6 acreage.

8. Responsibility to Meet Compliance Dates

No later than 14 days following each compliance date listed in the tables above, the permittee must notify DEQ in writing of its compliance or noncompliance with the requirements. Any reports of noncompliance must include the cause of noncompliance, any remedial actions taken, and a discussion of the likelihood of meeting the next scheduled requirement.

SCHEDULE D - Special Conditions

Schedule D, Condition 13 is replaced as follows. New Schedule D, Condition 17 is added to the permit. All other Schedule D conditions of the November 2, 2022 permit are not modified.

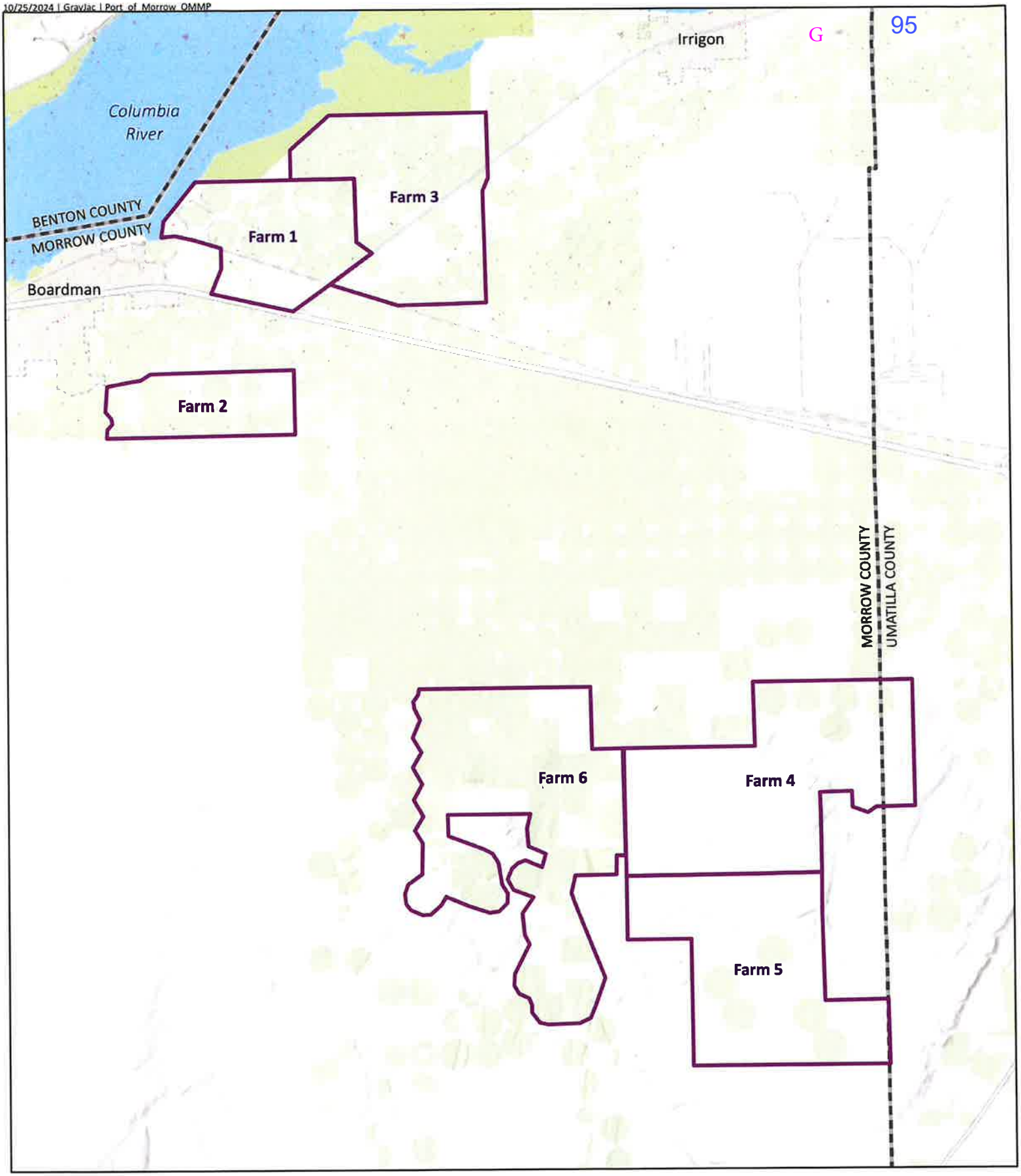
Total Kjeldahl Nitrogen Availability

(13) Unless otherwise approved by DEQ in writing, the Permittee must assume that 70% of Total Kjeldahl Nitrogen (TKN) applied to an authorized application site becomes plant available during the crop season when calculating nitrogen loading rates until the date specified in Schedule A(8).

Soil Moisture Monitoring Sensor Density and Calibration

(17) By November 1, 2024, the facility must install additional soil moisture monitoring sensors at all fields that will receive non-growing season irrigation at a minimum density of one sensor per twenty-five acres. The facility must provide written verification to DEQ of completion of install and use of the additional soil moisture sensors prior to the November 1, 2024 non-growing season period. Sensors must be installed and calibrated in accordance with the OM&M Plan and used to assess permit non-growing season and leaching compliance as per the approved OM&M.

By no later than the April 15th, 2025 OM&M plan update, the facility must provide a plan and schedule to also begin assessing site soil field capacity using additional verified methodology of 1) the Saxton and Rawls Method, or 2) the pressure plate method. The facility may propose other methods along with information to support the requested approach.



Farm Boundary

County Boundary

Overview Map

Sources: Morrow County, Umatilla County, USGS, ESRI

0 1 2 4 Miles

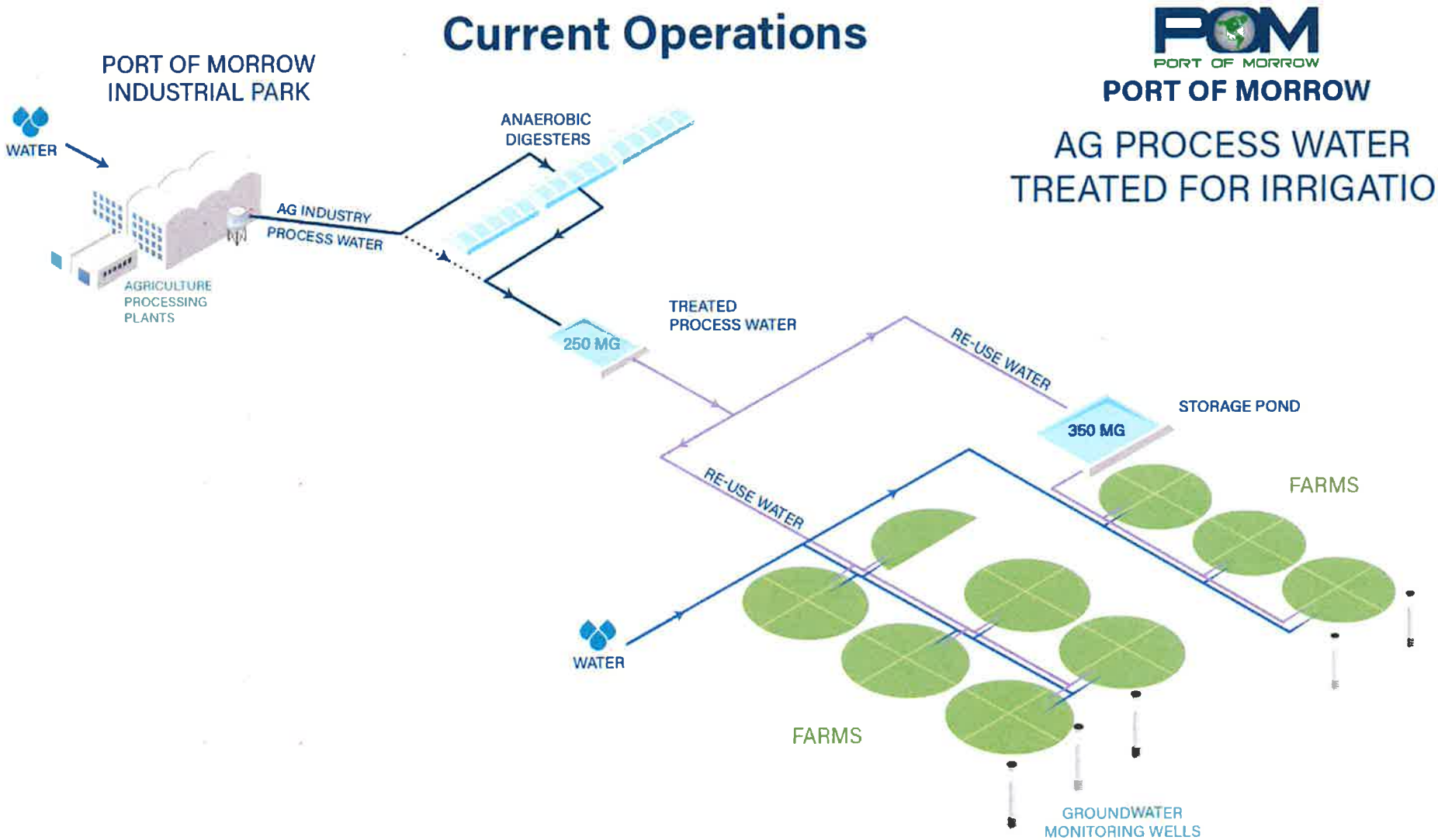
Morrow County, OR

Current Operations

PORT OF MORROW

PORT OF MORROW

AG PROCESS WATER TREATED FOR IRRIGATION



PORT OF MORROW

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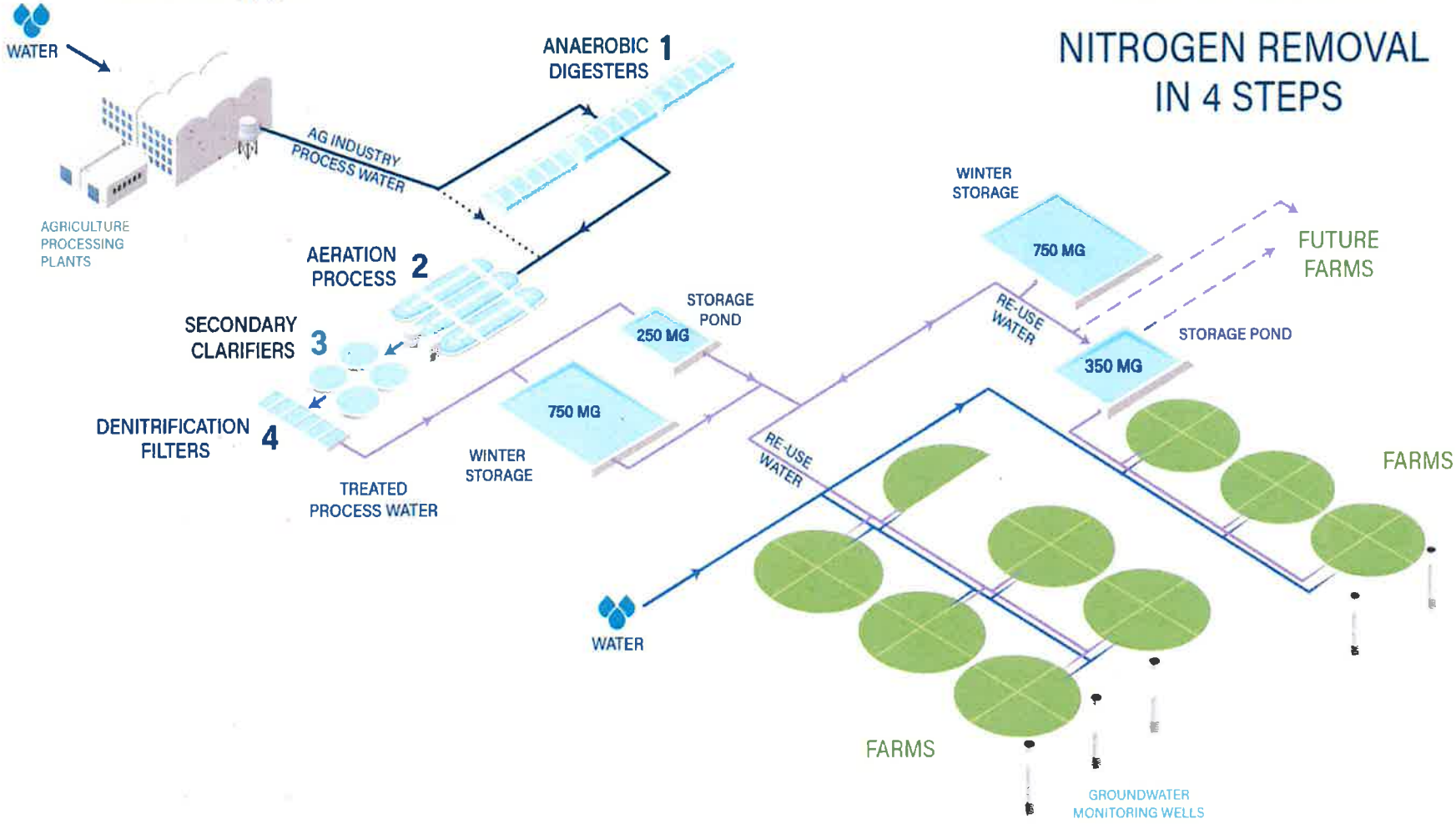
Future Operations

PORT OF MORROW

PORT OF MORROW INDUSTRIAL PARK

NITROGEN REMOVAL IN 4 STEPS



Oregon Administrative Rules Compilation
Chapter 340. Department of Environmental Quality
Division 55. Recycled Water Use

OAR 340-055-0012

340-055-0012. Recycled Water Quality Standards and Requirements

Currentness

(1) Any person having control over the treatment or distribution or both of recycled water may distribute recycled water only for the beneficial purposes described in this rule, and must take all reasonable steps to ensure that the recycled water is used only in accordance with the standards and requirements of the rules of this division.

(2) Any person who uses recycled water may use recycled water only for the beneficial purposes described in this rule, and must comply with the standards and requirements of this rule and the rules of this division.

(3) The following requirements apply to nondisinfected recycled water.

(a) Beneficial Purposes. Nondisinfected recycled water may be used only for the following beneficial purposes and only if the rules of this division are met:

(A) Irrigation for growing fodder, fiber, seed crops not intended for human ingestion, or commercial timber; and

(B) Any beneficial purpose authorized in writing by the department pursuant to OAR 340-055-0016(6).

(b) Treatment. Nondisinfected recycled water must be an oxidized wastewater.

(c) Criteria. There are no disinfection criteria for nondisinfected recycled water.

(d) Monitoring. Monitoring must be in accordance with the wastewater treatment system owner's NPDES or WPCF permit.

(e) Setback Distances. There must be a minimum of 150 feet from the edge of the irrigation site to a water supply source used for human consumption. Other site specific setback distances for irrigation necessary to protect public health and the environment must be established in the recycled water use plan and must be met when irrigating.

(f) Access and Exposure. Public access to the irrigation site must be prevented.

(g) Site Management.

(A) Irrigation with recycled water is prohibited for 30 days before harvesting.

(B) Sprinkler irrigation is prohibited unless authorized in advance and in writing by the department based on demonstration that public health and the environment will be adequately protected from aerosols.

(4) The following requirements apply to Class D recycled water.

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(a) Beneficial Purposes. Class C recycled water may be used only for the following beneficial purposes and only if the rules of this division are met:

(A) Any beneficial purpose defined in subsection (4)(a) of this rule;

(B) Irrigation of processed food crops;

(C) Irrigation of orchards or vineyards if an irrigation method is used to apply recycled water directly to the soil;

(D) Landscape irrigation of golf courses, cemeteries, highway medians, or industrial or business campuses;

(E) Industrial, commercial, or construction uses limited to: industrial cooling, rock crushing, aggregate washing, mixing concrete, dust control, nonstructural fire fighting using aircraft, street sweeping, or sanitary sewer flushing;

(F) Water supply source for landscape impoundments; and

(G) Any beneficial purpose authorized in writing by the department pursuant to OAR 340-055-0016(6).

(b) Treatment. Class C recycled water must be an oxidized and disinfected wastewater that meets the numeric criteria in subsection (c) of this section.

(c) Criteria. Class C recycled water must not exceed a median of 23 total coliform organisms per 100 milliliters, based on results of the last seven days that analyses have been completed, and 240 total coliform organisms per 100 milliliters in any two consecutive samples.

(d) Monitoring. Monitoring for total coliform organisms must occur once per week at a minimum.

(e) Setback Distances.

(A) Where an irrigation method is used to apply recycled water directly to the soil, there must be a minimum of 10 feet from the edge of the site used for irrigation and the site property line.

(B) Where sprinkler irrigation is used, there must be a minimum of 70 feet from the edge of the site used for irrigation and the site property line.

(C) There must be a minimum of 100 feet from the edge of an irrigation site to a water supply source used for human consumption.

(D) Where sprinkler irrigation is used, recycled water must not be sprayed within 70 feet of an area where food is being prepared or served, or where a drinking fountain is located.

(f) Access and Exposure.

(A) When irrigating for a beneficial purpose defined in subsection (4)(a) of this rule, the access and exposure requirements defined in subsection (4)(f) of this rule must be met.

(B) During irrigation of a golf course, a cemetery, a highway median, or an industrial or business campus, the public must be restricted from direct contact with the recycled water.

(A) Where an irrigation method is used to apply recycled water directly to the soil, there are no setback requirements.

(B) Where sprinkler irrigation is used, there must be a minimum of 10 feet from the edge of the site used for irrigation and the site property line.

(C) There must be a minimum of 50 feet from the edge of the irrigation site to a water supply source used for human consumption.

(D) Where sprinkler irrigation is used, recycled water must not be sprayed within 10 feet of an area where food is being prepared or served, or where a drinking fountain is located.

(f) Access and Exposure.

(A) During irrigation of a golf course, the public must be restricted from direct contact with the recycled water.

(B) If aerosols are generated when using recycled water for an industrial, commercial, or construction purpose, the aerosols must not create a public health hazard.

(C) When using recycled water for an agricultural or horticultural purpose where sprinkler irrigation is used, or an industrial, commercial, or construction purpose, the public and personnel at the use area must be notified that the water used is recycled water and is not safe for drinking. The recycled water use plan must specify how notification will be provided.

(g) Site Management.

(A) When irrigating for a beneficial purpose defined in subsection (4)(a) of this rule, the site management requirements defined in subsection (4)(g) of this rule must be met.

(B) When using recycled water for a landscape impoundment or for irrigating a golf course, cemetery, highway median, or industrial or business campus, signs must be posted at the use area and be visible to the public. The signs must state recycled water is used and is not safe for drinking.

(C) Irrigation of processed food crops is prohibited for three days before harvesting.

(D) When irrigating an orchard or vineyard, the edible portion of the crop must not contact the ground, and fruit or nuts may not be harvested off the ground.

(7) The following requirements apply to Class A recycled water.

(a) Beneficial Purposes. Class A recycled water may be used only for the following beneficial purposes and only if the rules of this division are met:

(A) Any beneficial purpose defined in subsection (6)(a) of this rule;

(B) Irrigation for any agricultural or horticultural use;

(C) Landscape irrigation of parks, playgrounds, school yards, residential landscapes, or other landscapes accessible to the public;

Current with rules filed through September 27, 2024. Some sections may be more current; see credits for details.

OAR 340-055-0012, OR ADC 340-055-0012

End of Document

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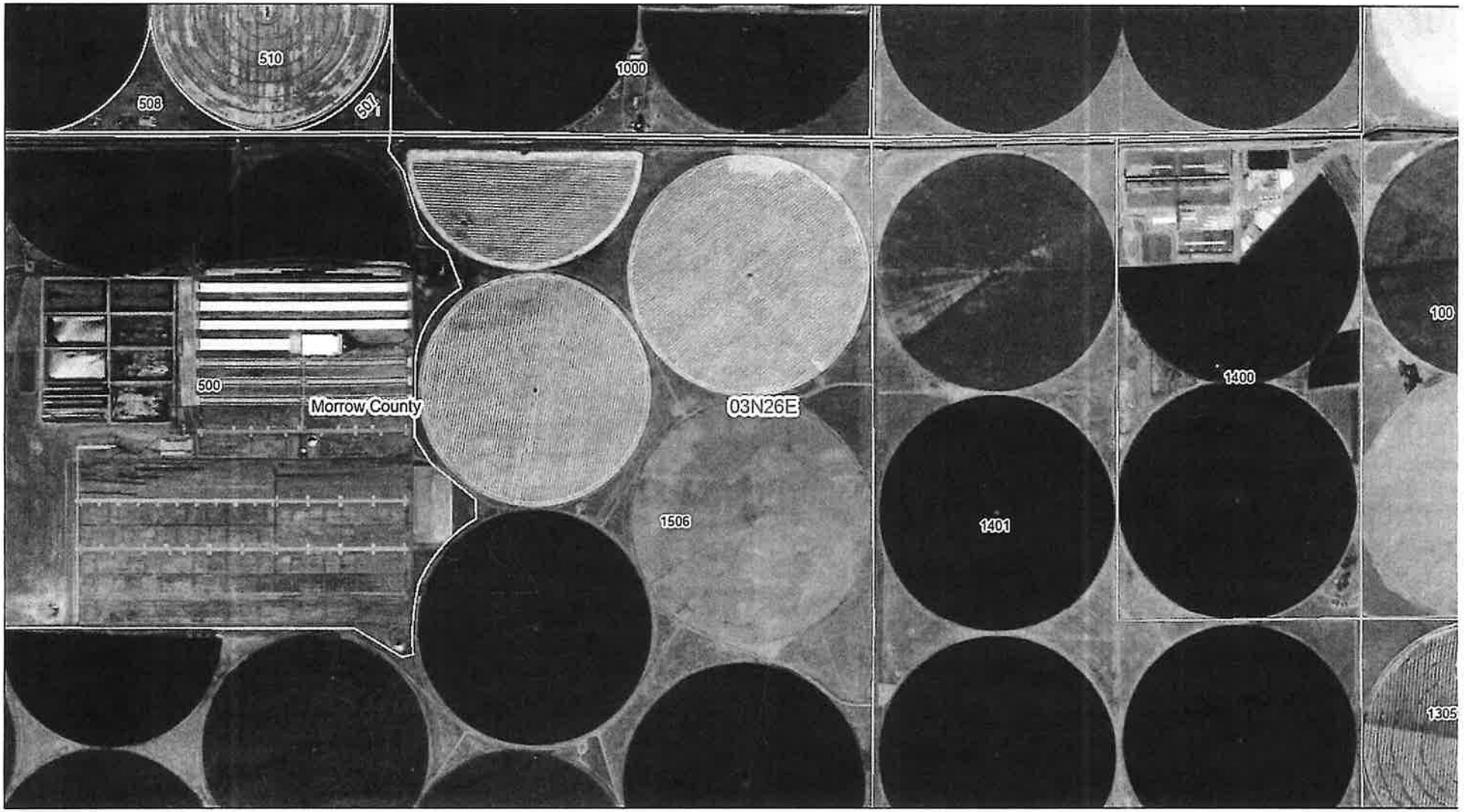
ArcGIS Web Map



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taxlot

mapIndex

CountyLines

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