State of Oregon
Department of
Environmental
Quality

DRAFT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
WASTE DISCHARGE PERMIT

Oregon Department of Environmental Quality
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Telephone: 503-229-5696

Issued pursuant to ORS 468B.050 and the federal Clean Water Act

REGISTERED TO:

This National Pollutant Discharge Elimination System (NPDES) general permit provides coverage for point source discharges to surface waters of the state resulting from the application of biological pesticides or chemical pesticides that leave a residue (collectively referred to as pesticides). Point source discharges to surface waters of the state, whether the waters are wet or dry at the time of application, must be covered under a NPDES permit and may be authorized under this general permit. This includes discharges to features such as certain dry washes and ephemeral streams when controlling pests that occur in these occasionally wet areas. As such, these pesticide applications may use pesticides labeled for terrestrial, seasonally dry, or aquatic sites.

Pesticide applications covered under this permit:

Weed and algae control in an irrigation system or at the water's edge within irrigation system boundaries. "Weed and algae control" includes control of invasive or other nuisance weeds, algae and pathogens such as, fungi and bacteria. 'Irrigation System' is a controlled system consisting primarily of manmade canals, ditches and ponds designed and operated for delivery or management of water for irrigation purposes.

The following operators are authorized to obtain coverage under this permit for pesticide applications that result in a point source discharge to surface waters of the state.

- Irrigation Districts organized under ORS Chapter 545, Water Improvement District organized under 552 and Water Control Districts organized under ORS 553

DRAFT	DRAFT	DRAFT
Jennifer Wigal, Administrator Water Quality Division	Issuance Date	Effective Date

PERMITTED ACTIVITIES

Until this permit expires or is modified or revoked, an operator is authorized to apply pesticides in surface waters of the state or at water's edge only from the authorized discharge point or points in Schedule A in conformance with the requirements, limits, and conditions set forth in this permit.

Unless specifically authorized by this permit, by another NPDES or Water Pollution Control Facility permit, or by Oregon statute or administrative rule, any other direct or indirect discharge of pollutants to waters of the state is prohibited.

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DEFINITIONS

Action Threshold – The point at which pest populations or environmental conditions can no longer be tolerated, necessitating that pest control action must be taken based on economic, human health, aesthetics, or other effects. Detecting a single pest does not always mean pest control is needed. An action threshold may be based on current or past environmental factors that are or have been demonstrated to be conducive to pest emergence or growth, as well as past or current pest presence. Action thresholds are those conditions that indicate both the need for control actions and the proper timing of those actions.

Adverse Incident – An unusual or unexpected incident that an operator has observed upon inspection or of which the operator otherwise becomes aware, in which:
(1) A person or non-target organism has likely been exposed to a pesticide residue, (e.g. direct contact or through drinking water) and
(2) The non-target organism suffered a toxic or adverse effect.
The phrase "toxic or adverse effect" includes effects that occur within surface waters of the state on non-target plants, fish or wildlife that are unusual or unexpected (e.g., non-target organisms are those not described on the pesticide product label or otherwise not expected to be present) as a result of exposure to a pesticide residue, and may include:

- Distressed or dead juvenile and small fishes
- Washed up or floating fish
- Fish swimming abnormally or erratically
- Fish lying lethargically at water surface or in shallow water
- Fish that are listless or nonresponsive to disturbance
- Stunting, wilting, or desiccation of non-target submerged or emergent aquatic plants
- Other dead or visibly distressed non-target aquatic organisms (amphibians, turtles, invertebrates, etc.)

The phrase, "toxic or adverse effects" also includes any adverse effect to humans (e.g., skin rashes) or animals that occur either from direct contact with or as a secondary effect (e.g., sickness from consumption of plants or animals containing pesticides) from a point source discharge to surface waters of the state and that are temporally and spatially related to exposure to a pesticide residue (e.g. vomiting, lethargy).

Applicator – Any entity that performs the application of a pesticide.

Gate – A device used to control the flow of irrigation water.

Irrigation System – A controlled system consisting primarily of manmade canals, ditches and ponds designed and operated for delivery or management of water for irrigation purposes.

Minimize – To reduce or eliminate pesticide point source discharges to surface waters of the state through the use of Pest Management Measures to the extent technologically available and economically practicable and achievable.

Natural Water – Surface water of the state outside of the irrigation system.

OAR – Oregon Administrative Rules

Operator – Any owner or entity with operational control over the decision to perform a pesticide application that is covered under this permit or has the day-to-day operational control of activities that are necessary to ensure compliance with the permit.

- Owner is defined as landowner, facility owner, property owner. When the owner conducts the pesticide application or hires a pesticide applicator, then the owner is making a decision and paying to perform a pesticide application on the owner's property.

- Where pesticides are applied on an owner's land by another entity and the owner does not have the legal authority to control the application and is not directly financing the application, the owner is not an operator for purposes of this permit. (This would include, for example, when a governmental entity is spraying for mosquitoes over a person's property.)

- Examples of entities are mosquito control districts, homeowners' associations, local governments, and state and federal agencies that have the responsibility to perform pesticide applications to maintain properties for safety, health, and to control invasive species and nuisance pest control.

- An irrigation district that receives treated water from another irrigation district for purpose of controlling weeds or algae within its irrigation system boundaries.

Ordinary High Water Line – The line on the bank or shore to which the high water ordinarily rises annually in season as defined by ORS 274.005(3).

ORS - Oregon Revised Statues

Permittee – Reference to permittee in Schedule F means operator.

Pesticide – "Pesticide" includes:
(a) "Defoliant" which means any substance or mixture of substances intended for causing the leaves or foliage to drop from a plant with or without causing abscission;
(b) "Desiccant" which means any substance or mixture of substances intended for artificially accelerating the drying of plant tissue;
(c) "Fungicide" which means any substance or mixture of substances intended for preventing, destroying, repelling or mitigating any fungus;
(d) "Herbicide" which means any substance or mixture of substances intended for preventing, destroying, repelling or mitigating any weed;
(e) "Insecticide" which means any substance or mixture of substances intended for preventing, destroying, repelling or mitigating any insects that may be present in any environment whatsoever;
(f) "Nematicide" which means any substance or mixture of substances intended for preventing, destroying, repelling or mitigating nematodes;
(g) "Plant regulator" which means any substance or mixture of substances intended, through physiological action, to accelerate or retard the rate of growth or rate of maturation or to otherwise alter the behavior of ornamental or crop plants or the produce thereof, but does not include substances to the extent that they are intended as plant nutrients, trace elements, nutritional chemicals, plant inoculants or soil amendments; or
(h) Any substance, or mixture of substances intended to be used for defoliating plants or for preventing, destroying, repelling or mitigating all insects, plant fungi, weeds, rodents, predatory animals or any other form of plant or animal life that is, or that the department may declare to be a pest, which may infest or be detrimental to vegetation, humans, animals, or be present in any environment thereof. [ORS 634.006(8)]

Note 1: The reference to department in the definition of pesticide under (h) above refers to the State Department of Agriculture.

Note 2: Drugs used to control diseases of humans or animals (such as livestock, aquaculture, or pets) are not considered pesticides; such drugs are regulated by the Food and Drug Administration or the United States Department of Agriculture. Fertilizers, nutrients, and other substances used to promote plant survival and health are not considered plant growth regulators and thus are not pesticides.

Pesticide Discharge Management Plan (PDMP) – A tool for operators to document, among other things, how Pest Management Measures will be implemented to comply with the permit effluent limitations. For more information on the specific requirements for a PDMP and what is required of operators please refer to Schedule D - Special Conditions.

Pest Management Area – The area of land, including any water, for which the operator has the responsibility, control, or jurisdiction for conducting pest management activities covered by this permit.

Pest Management Measure – Any practice used to meet the effluent limitations that comply with manufacturer specifications, industry standards and recommended industry practices related to the application of pesticides, relevant legal requirements and other provisions that a prudent operator would implement to reduce and/or eliminate pesticide point source discharges to surface waters of the state.

Pesticide Research and Development – Activities undertaken on a systematic basis to gain new knowledge (research) and/or the application of research findings or other scientific knowledge for the creation of new or significantly improved products or processes (experimental development).

Pesticide Residue – Includes that portion of a pesticide application that is discharged from a point source to surface waters of the state and no longer provides pesticidal benefits. It also includes any degradates of the pesticide.

Target Pest – The pest intended to be controlled.

Treatment Area – The area where a pesticide application is intended to provide pesticidal benefits within an irrigation system boundary. Multiple treatment areas may be located within an irrigation system boundary.

The pesticide application to surface waters of the state that is dry at the time of the pesticide application, such as an intermittent stream or conveyance ditch, is also considered treatment area.

Treatment Period – The time, as estimated by an operator, during which aquatic herbicide is applied and controlling weeds within the irrigation system treatment area.

Water's Edge – Pesticide applications made within three feet of surface waters of the state and conveyances at the time of pesticide application. The three-foot distance is measured horizontally from the ordinary high water line of the waterbody.

Waters of the State – Lakes, bays, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Pacific Ocean within the territorial limits of the State of Oregon, and all other bodies of surface or underground waters, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters that do not combine or effect a junction with natural surface or underground waters) that are located wholly or partially within or bordering the state or within its jurisdiction. This definition is in Oregon Administrative Rules (OAR) 340-045-0010(21) and Oregon Revised Statutes 468B.005(10).

COVERAGE AND ELIGIBILITY

1. Point Source Discharges authorized by this permit

Weed and algae control in an irrigation system or at the water's edge within irrigation system boundaries. "Weed and algae control" includes control of invasive or other nuisance weeds, algae and pathogens such as, fungi and bacteria. 'Irrigation System' is a controlled system consisting primarily of manmade canals, ditches and ponds designed and operated for delivery or management of water for irrigation purposes.

2. Limitations On Coverage for All Operators (OAR 340-045-0033(10))

a. DEQ may revoke the authority to point source discharge under this general permit as it applies to any operator and require the operator to apply for and obtain an individual NPDES permit if:

   i. The permitted source or activity is a significant contributor of pollution, causes environmental problems, or

   ii. The operator is not in compliance with the terms and conditions of this general permit, or

iii. Circumstances have changed so that the source or activity is no longer appropriately controlled by a general permit.

b. Coverage under this permit is not available under the following circumstances:

i. The point source discharges are covered by another NPDES permit.

ii. The point source discharges were included in a permit that has been or is in the process of being denied, terminated or revoked.

3. Point Source Discharges Not Authorized by This Permit

The coverage for a point source discharge provided by this general permit does not extend to all surface waters of the state. The waters where point source discharges are not authorized by the general permit are set out below. Subject to applicable laws, an operator wishing to conduct a pesticide application in these areas may apply for coverage under an individual permit

a. Water Quality Limited Streams 303(d) List: This general permit does not authorize a point source discharge on any stream segment that is listed as water quality limited in categories 4 and 5 for that pesticide or its degradates, on the list published by DEQ pursuant to OAR 340-041-0046, unless a stream segment is subject to a total maximum daily load (TMDL) that includes a wasteload allocation for pesticide application under the 2000J permit. The 303(d) list as approved or established by EPA that is in effect as of January 1 of each year will be used to determine if initial coverage or coverage at a later date is available.

4. Registration for permit coverage

a. To register, an applicant must submit all required applications, data, documents, payments and reports using DEQ's electronic data management system, as specified on DEQ's website. A person unable to file electronically may request an electronic reporting waiver. An applicant or registrant interested in a waiver shall first contact their DEQ regional office about the waiver process and general information. DEQ will notify them of the approval or denial of their waiver request. If approved, registrants must submit applications and required data, documents, reports and other information required by this permit and use the DEQ-approved reporting forms as directed by DEQ. Submittals must be certified by the appropriate signatory according to 40 CFR 122.22.

b. A new operator seeking to register under this permit is authorized for point source discharge of pesticides under the permit upon the effective date of this permit and must take the following steps to continue permit coverage authorization:

i. Submit a completed application to DEQ 30 days prior to the first pesticide application or 60 days after the effective date of this permit whichever is later.

c. Registration and annual fees for general permits are on DEQ's Permit Applications and Renewal Forms webpage and in OAR 340-045-0075 Permit Fee Schedule in Table 70G.

i. For new registration under this permit, an applicant must submit a new permit application fee and an annual fee with the application.

ii. To maintain registration coverage under the permit, an annual fee is due each year. The due date for the annual fee is dependent upon the date of registration and can be different for each registrant.

iii. Failure to pay applicable fees may result in denial of an application or termination of coverage under this permit.

d. Operators seeking to renew registration before the expiration date of this permit must follow these steps:

i. On or before 60 days prior to permit expiration those registered under this permit must submit a complete application form to DEQ to renew permit coverage. (Note: The DEQ

Director may grant permission to submit the application later than 60 days prior to the expiration but no later than the permit expiration date.)

SCHEDULE A: WASTE DISCHARGE LIMITS

1. An operator must meet the following water quality-based effluent limits for point source discharges to surface waters of the state from the use of biological pesticides or chemical pesticides for the pest control covered under this permit. The permit considers that all pesticide applications will leave a residue.

   a. The point source discharge of a chemical pesticide must not cause or contribute to a violation of water quality standards as adopted in OAR Chapter 340, Division 041 within the irrigation system but outside of the treatment area during the treatment period, or within the irrigation system and treatment area after the treatment period has elapsed.

   b. The point source discharge of a biological pesticide must not cause or contribute to a violation of water quality standards (in OAR 340 Division 041) within the irrigation system.

   c. If at any time the operator becomes aware, or is informed by DEQ, that the point source discharge causes or contributes to a violation of water quality standards, the operator must take the appropriate corrective action required in Schedule A.9.

2. For acrolein-, copper-, and xylene-based aquatic pesticides applied within an irrigation system, an operator must not exceed the numeric water quality-based effluent limitations listed below outside of the treatment area during the treatment period or within the irrigation system and treatment area, after the treatment period has elapsed.

   a. For an operator using acrolein-based pesticide:

Table A1: Acrolein Permit Limit

Parameter	Units	Daily Maximum	Quantitation Limit (See Note a.)
Acrolein	µg/L	0.9	5

Note:

a. DEQ has established a QL of 5 µg/L for acrolein. Any analysis done for acrolein must have a QL that is either equal to or less than 5 µg/L. In cases where the maximum daily limit for acrolein is lower than the QL, DEQ will use the reported QL as the compliance evaluation level if best management practices associated with acrolein-based pesticide use in Schedule A: 6.b, either 6.c.i or 6.c.iii, 6.d are followed.

   b. For an operator using copper-based pesticide in each region listed below and as shown in Figure 1 below:

Table A2: Copper Permit Limits for each region

Parameter	Region	Units	Daily Maximum	Quantitation Limit (See Note a.)
Dissolved Copper	Cascades	µg/L	0.65	2
	Coastal	µg/L	2.5	2
	Columbia River	µg/L	6.6	2

Parameter	Region	Units	Daily Maximum	Quantitation Limit (See Note a.)
	Eastern	µg/L	8.4	2
	Willamette Valley	µg/L	3.4	2

Note:

a. DEQ has established a QL of 2 µg/L for copper. Any analysis done for copper must have a QL that is either equal to or less than 2 µg/L. In cases where the maximum daily limit for copper is lower than the QL, DEQ will use the reported QL as the compliance evaluation level if best management practices associated with copper-based pesticide use in Schedule A: 6.b, either 6.c.iii, 6.d are followed.

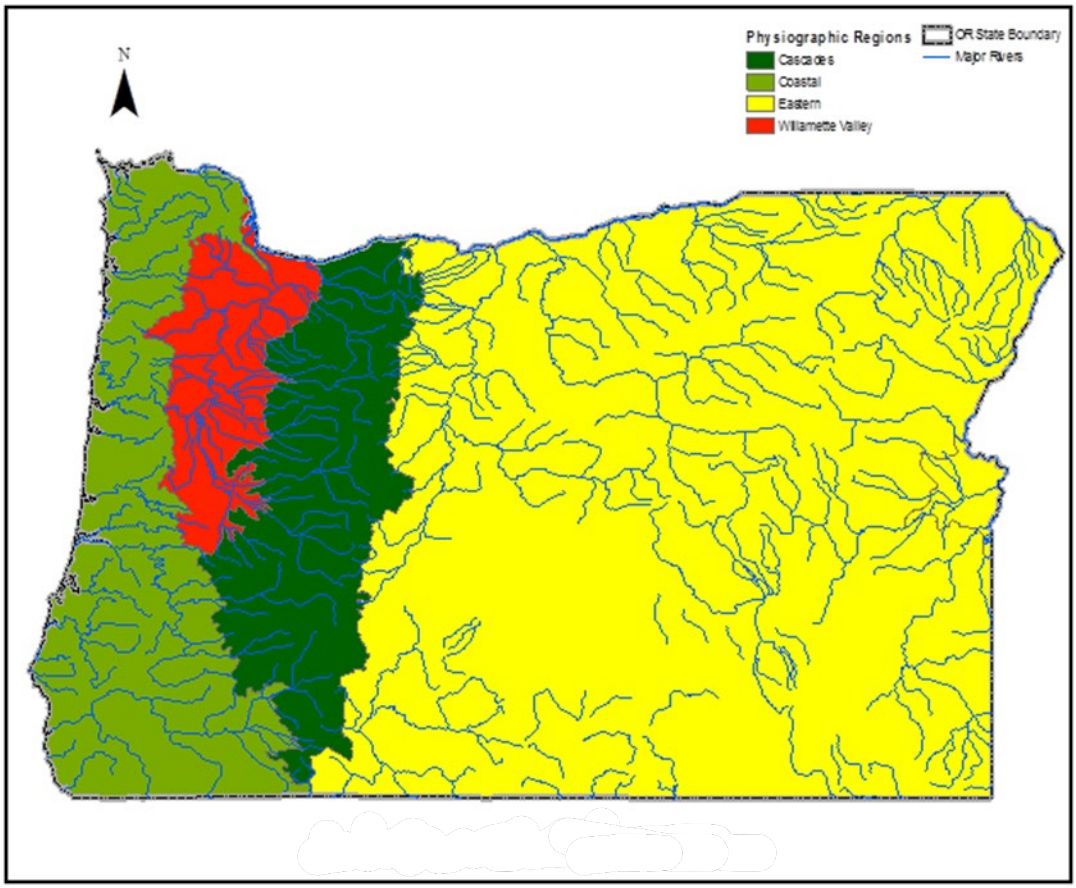

Figure 1 Bioligand Model Dissolved Copper Regions

c. For an operator using xylene-based pesticide:

Table A3: Xylene Permit Limit

Parameter	Units	Daily Maximum	Quantitation Limit
Xylene	µg/L	40	1

3. Instead of meeting effluent limits in Schedule A.2.a, 2.b or 2.c above, the operator of West Extension Irrigation District must not exceed applicable water quality criteria in OAR 340-041-0310 and 0315 that apply to the constructed channel segment of the West Division Main Canal in Umatilla Basin.

    a. Per OAR 340-041-0315(2)(a), canal waters may not exceed 200 µg/L of copper outside of the treatment area during the treatment period or within the constructed channel segment and treatment area, after the treatment period has elapsed.

4. An operator must implement the following pest management measures as technology-based effluent limits to minimize the point source discharge of biological pesticides or chemical pesticides:

    a. Follow mandatory Federal Insecticide Fungicide Rodenticide Act (FIFRA) label requirements that when followed may prevent or minimize pesticide residues from being discharged from a point source to surface waters of the state. These label requirements can include, but are not limited to, the following sections of a label: Directions for Use, Environmental Hazards, Spray Drift Management, Endangered Species Protection, and Buffers (vegetative and "No Spray Buffers").

    b. Follow current label requirements that includes implementing measures to protect listed species required by Biological Opinions published by the National Marine Fisheries Service or the U.S. Fish and Wildlife Service.

    c. Review and comply with any EPA issued Endangered Species Protection Bulletins applicable to the applied pesticide;

    d. Use the optimal amount of pesticide to reduce the potential for development of pest resistance and to minimize the frequency of pesticide application necessary to control the target pest;

    e. Perform regular maintenance activities to reduce leaks, spills, or other unintended point source discharges of biological pesticides or chemical pesticides associated with the application of pesticides, including mixing and loading activities;

    f. Maintain the pesticide application equipment in proper operating condition by calibrating, cleaning and repairing the equipment as necessary to ensure effective and accurate pesticide applications;

    g. Assess environmental conditions (e.g. air and water temperature, precipitation and wind speed if applicable to label requirement) in the treatment area to ensure application is consistent with all applicable pesticide application requirements.

5. An operator must implement pest management measures in the following manner to minimize the point source discharge of pesticides. Before the first pesticide application that will result in a point source discharge to surface waters of the state and at least once each calendar year thereafter prior to the first pesticide application for that calendar year the operator must, for each pest management area, select and implement pest management measures by identifying the problem, evaluating pest management options, and minimizing pesticide use.

    a. Identify the Problem

        i. Identify areas with pest problems and characterize the extent of the problems, including water use goals not attained (e.g. wildlife habitat, fisheries, vegetation, and recreation; water delivery for irrigation);

        ii. Identify the target pest or pests causing the problems;

        iii. Identify possible factors causing or contributing to the pest problem (e.g., nutrients, invasive species;

        iv. Establish any pest- and site-specific action threshold to serve as action thresholds for implementing pest management options in 1.b below; and

v. In the event there are no data for the pest management area in the past calendar year, use other available data as appropriate to meet the permit conditions in 1.a above.

b. Evaluate Pest Management Options

The operator must evaluate the following management options, including a combination of these management options, for the target pest in the pest management area. This includes considering the impact to water quality, non-target organisms, pest resistance, feasibility, and cost effectiveness:

i. No action;

ii. Prevention;

iii. Mechanical or physical methods;

iv. Cultural methods;

v. Biological control agents;

vi. Pesticides.

c. Determine Appropriate Pesticide Use

If a pesticide is selected as part of the pest management measure, the operator must follow these pesticide use practices:

i. Evaluate using pesticides against the most susceptible developmental stage;

ii. Conduct surveillance, in an area that is representative of the pest problem prior to each application to assess the pest management area and to determine when the pest action threshold is met;

iii. Reduce the impact on the environment and non-target organisms by evaluating the restrictions, application timing, and application methods in addition to applying the pesticide only when the action thresholds have been met.

6. Operators must follow the pesticide use practices below for acrolein-, copper- and xylene-based aquatic pesticide applications within an irrigation system:

a. When requested to do so in writing by a water user before a pesticide is applied, stop water deliveries to that user during pesticide application.

i. Attach an easily visible tag to each water user delivery point that cannot be locked. The tag must state that the delivery point has been closed at the request of the water user and may be reopened only by the operator's personnel.

b. Required Gate Management Practices for Irrigation Systems with Gates:

i. Prior to the first application of the calendar year in a specific treatment area, operators must ensure that all gates in that treatment area are in working order. Document this inspection and any repairs.

ii. Close and lock each gate within the treatment area that discharges to natural waters. For any lateral canal that discharges to natural waters, either the point of discharge to natural waters must be closed or the turnout to the lateral canal from the main canal must be closed.

iii. To support the determination of when the gates must be closed, and to support optimal pesticide use, an operator must perform a time of travel study as described in Schedule D.3.

iv. In making the determination of when the gates must be closed, consider the volume and velocity of flow in the treatment area and the distance between the point of the aquatic pesticide application and the gate to be closed.

v. The calculations for the determination above must be documented in the application log.

c. Reopening of Gates for Irrigation Systems with Gates: Operators may reopen gates only when acrolein-, copper- or xylene-based pesticides are no longer present at levels above the effluent limitations specified in Schedule A.2.a, 2.b, 2.c, or 3. This determination may be made using one of the following:

i. Holding: When applying acrolein- or xylene-based pesticide, wait for the expiration of the holding period as specified in the EPA-approved FIFRA label.

ii. Testing: For copper and xylene-based pesticides, collect and analyze representative samples of water, as described below within the treatment area to demonstrate that treated water is no longer present prior to re-opening gates:

(1) Detention Basins

For detention basins, at least two samples must be collected as follows:

a. The first sample must be collected near the discharge gate.

b. The second sample must be collected near the inflow to the detention basin.

(2) Other Treatment Areas

For other areas, at least two samples must be collected as follows:

a. The first sample must be collected upstream of the open delivery point farthest from the application site within the treatment area.

b. The second sample must be collected halfway between the most downstream point in the treatment area and the application site.

If the treatment area consists of a main canal and laterals, sampling may be conducted in the main canal or in a lateral, whichever best fits the description of the two required sampling locations described above.

iii. Turnover: For acrolein-, copper- and xylene-based pesticides, calculate the rate at which the volume of water in the treatment area is replaced by fresh, untreated water, based on the portion of the treatment area where such turnover is the slowest. All operators, except Klamath Irrigation District (PLC# 28046), must not open the gate(s) until the water in the treatment area has turned over at least two times. The operator of Klamath Irrigation District (PLC# 28046) must not open the gate(s) until the water in the treatment area has turned over at least once.

(1) The operator may use turnover calculations to open gates in individual laterals that are fed from the main canal. For example, a lateral closer to the aquatic herbicide application point may turn over more quickly than the main canal or a lateral located farther away from the application point.

(2) In making this calculation, the operator must consider the distance between the aquatic pesticide application point and the gate farthest from the application point to be reopened. When channel configurations vary, calculations may be made on

different sections of the treatment area to determine turnover time for the treatment area.

(3) The turnover period begins when an aquatic herbicide is no longer being applied within the irrigation ditch and water treated with aquatic pesticide is being replaced with fresh, untreated water.

(4) These calculations and measurements must be documented as required in Schedule B.6.f.viii.

d. Daily Inspection Requirements for Irrigation Systems with Gates: At least once a day, during the period when pesticide levels in the irrigation system are likely to be above the effluent limitation for acrolein-, copper-, or xylene-based pesticides, operator must inspect each locked gate within the treatment area and water user delivery point that has been closed as requested by a water user. Document the inspection and any repair.

e. Use a licensed pesticide applicator.

f. Ensure the licensed applicator has a copy of the contingency plan section of the Pest Management Plan, as required by Schedule D.e on site during pesticide applications.

g. Maintain a continuing program of employee orientation and education to ensure proper action in the event of a spill or accident.

7. Operators of Owhyee Irrigation District (PLC# 28177), Old Owhyee Ditch Improvement District (PLC# 34205), Klamath Irrigation District (PLC# 28046), and Ochoco Irrigation District (PLC# 28050) must verify fish screen or other structure or fish control management practices are in place prior to the first pesticide application of the year. For irrigation systems with fish screens or by-pass systems, pesticide applications may occur downstream of fish screens or by-pass areas but not in the fish screen or by-pass area.

8. Compliance with this permit is not intended to relieve the operator of Klamath Irrigation District (PLC# 28046) from compliance with applicable portions of the biological opinions dated February 9, 1995 and February 2, 1996, or to relieve the operator of Klamath Irrigation District from compliance with applicable portions of biological opinions issued to revise or replace the February 9, 1995 and February 2, 1996 opinions.

9. An operator must take Corrective Action for all pesticide applications under this permit by reviewing and evaluating the pest management measures in Schedule A, conditions 4 through 8, and implementing changes as follows:

a. Where appropriate, revise the pest management measures to ensure that the situations listed below are eliminated and will not be repeated

i. A spill, leak, or unpermitted point source discharge;

ii. A point source discharge that causes or contributes to a violation of water quality standards;

iii. A failure to follow pest management measures;

iv. Pest management measures that are not sufficient to meet the pest management measures and water quality-based effluent limitations in the permit; and

v. A reportable adverse incident.

b. If the operator determines that revisions to the Pest Management Measures in Schedule A, conditions 4 through 8, are necessary for any situation that was identified above, the operator must implement changes to the pest management measures before proceeding with any subsequent pesticide applications.

c. Upon becoming aware of a leak or spill, the operator must take immediate corrective action to stop and contain leaks or spills of pesticides.

10. Operators discharging pesticides to surface waters of the state solely from pesticide research and development activities must use the pesticide consistent with any applicable research plan and experimental use permit and are exempt from the pest management measures in Schedule A.5 through 8, to the extent that such measures may compromise the research design.

SCHEDULE B: MINIMUM MONITORING AND REPORTING REQUIREMENTS

1. Reporting Requirements

The operator must submit to DEQ monitoring results and reports as listed below.

Table B1: Reporting Requirements and Due Dates

Reporting Requirement	Frequency (See note a.)	Due Date	Report Form (See note b.)	Submit To:
Table B1, B2 and B3 discharge monitoring	Monthly	By the 15th of the following month	DMR	Electronic reporting as directed by DEQ
Schedule B Annual Report	Annually	February 15th of the following year	Report	Electronic reporting as directed by DEQ

2. Monitoring

a. An operator must conduct visual assessments of application sites. Visual assessments consist of spot checks in and around the treatment area for possible and observable adverse impacts caused by an application of pesticides subject to this permit. Possible and observable adverse impacts include, but are not limited to, the unanticipated death or distress of non-target organisms, disruption of fish or wildlife habitat, and disruption of recreational or municipal water use.

   i. An operator must perform visual assessments as follows:

      (1) During the application of pesticides when considerations for safety and feasibility allow;

      (2) During any post-application surveillance or efficacy check that is conducted.

   ii. An operator must notify, take corrective action, report or record the result of a visual inspection.

b. The operator must inspect the gates prior to the first pesticide application of the calendar year as required in Schedule A.6.b.i and record the results of those inspections.

c. The operator must check to ensure that fish control structures or other fish control management practices are in place prior to the first pesticide application of the calendar year as required in Schedule. A.7 and record the results.

3. Effluent Monitoring

a. The operator may take a sample of copper -or xylene-based pesticide for a determination based on Schedule A.6.c.ii.

b. The operator must take a sample that is representative of the first release in a calendar year from the irrigation system to natural water from a first point of discharge that is nearest to natural water in a treatment area following an application of acrolein-based, copper-based or xylene-based pesticide. Each first point of discharge to natural water from a gate or connection to natural waters must be sampled at least once following an application of acrolein-based, copper-based or xylene-based pesticide. Sampling of return flow, e.g. treated water used for crop irrigation that returns to a ditch or canal, is not required. If an irrigation system does not overflow or return flow to natural waters following aquatic pesticide applications, sampling is not required.

   i. A sample must be representative of each pesticide used: a separate sample must be taken for acrolein, (following an acrolein-based pesticide) copper (following a copper-based pesticide) or xylene (following a xylene-based pesticide).

ii. A sample must be representative of a first point of discharge nearest to natural water in a treatment area.

c. Sample Location and Parameters: The operator must monitor and record the parameters below from a reopened gate nearest to natural water within 30 minutes of opening the gate that releases to natural water. A grab sample is collected at a point where the discharge from the gate enters natural waters or at the gate. If there is no gate, then sampling for the parameters below must be performed at a point nearest to natural water after treatment is complete and within 30 minutes of the pesticide wave reaching that point.

i. Following an acrolein-based pesticide application when the irrigation system overflows or returns flow to natural waters following aquatic pesticide application:

Table B1: Acrolein Monitoring

Item or Parameter	Location/ Minimum Frequency	Quantitation Limit	Type of Sample/Action
Estimate of Flow during the sample	With each acrolein sample	N/A	Measurement or Calculation
Acrolein	Take a sample that is representative of the first release in a calendar year from the irrigation system to natural water from a first point of discharge that is nearest to natural water	5 µg/L	Grab sample Acrolein sampling and analysis must follow the procedures in 40 CFR Part 136.
Sample location by name and latitude/longitude in decimal degrees	With each acrolein sample	NA	Record location
Pesticide use practice in Schedule A.6.c.i (holding) and 6.c.iii (turnover)	With each acrolein sample	NA	When applicable, record the pesticide use practice used before discharge to natural water.

ii. Following a copper-based pesticide application: Within the treatment area prior to re-opening gates per Schedule A.6.c.ii or when the irrigation system overflows or returns flow to natural waters following aquatic pesticide application:

Table B2: Copper Monitoring

Item or Parameter	Location/ Minimum Frequency	Quantitation Limit	Type of Sample/Action
Estimate of Flow during the sample	With each copper sample	N/A	Measurement or Calculation

Copper (dissolved) 7440-50-8 (D)	Sample as per Schedule A.6.c.ii or Take a sample that is representative of the first release in a calendar year from the irrigation system to natural water from a first point of discharge that is nearest to natural water	2 µg/L	Grab sample Copper sampling and analysis must follow procedures in 40 CFR Part136 for analysis of dissolved copper.
Sample location by name and latitude/longitude in decimal degrees	With each copper sample	NA	Record location
Pesticide use practice in Schedule A.6.c.iii (turnover)	With each copper sample	NA	When applicable, record the pesticide use practice used before discharge to natural water.

iii. Following a xylene-based pesticide application: Within the treatment area prior to re-opening gates per Schedule A.6.c.ii or when the irrigation system overflows or returns flow to natural waters following aquatic pesticide application:

Table B3: Xylene Monitoring

Item or Parameter	Location/ Minimum Frequency	Quantitation Limit	Type of Sample/Action
Estimate of Flow during the sample	With each xylene sample	N/A	Measurement or Calculation
Xylene (total xylene)	Sample as per Schedule A.6.c.ii or Take a sample that is representative of the first release in a calendar year from the irrigation system to natural water from a first point of discharge that is nearest to natural water	1 µg/L (0.001 mg/L)	Grab sample Xylene sampling and analysis must follow procedures in 40 CFR Part 136.
Sample location by name and latitude/longitude in decimal degrees	With each xylene sample	NA	Record location
Pesticide use practice in Schedule A.6.c.i (holding) and 6.c.iii. (turnover)	With each xylene sample	NA	When applicable, record the pesticide use practice used before discharge to natural water.

d. If a sample result is above an effluent limit or its corresponding quantitation limit in Schedule A.2.a, 2.b, 2.c or 3, an operator must take corrective action as required in Schedule A.9 and repeat the sampling requirement for that pesticide with the next application.

e. Repeated monitoring is not required at the same point of discharge in a calendar year, when all the following conditions are met:

i. One sample result for either acrolein, dissolved copper or xylene is at or below the effluent limit or its corresponding QL in Schedule A.2.a, 2.b, 2.c or 3;

ii. A time of travel study required in Schedule D.3 is complete for that section of treatment area; and

iii. Recordkeeping as required in Schedule B.6 is complete.

4. Monitoring and Reporting Protocols

a. Electronic Submissions

The operator must submit to DEQ a discharge monitoring report each month in an electronic format as specified below.

i. Discharge Monitoring Report:

(1) Each month, the operator must submit a discharge monitoring report on DEQ-approved web-based DMR forms to DEQ via electronic reporting unless DEQ has granted a waiver for electronic reporting. Any data used to calculate summary statistics must be submitted as a separate attachment approved by DEQ via electronic reporting.

(2) The reporting period is the calendar month.

(3) The operator must submit monitoring data and other information required by this permit by the 15th day of the month following the reporting period unless specified otherwise in this permit or as specified in writing by DEQ.

ii. Annual Report

(1) The operator must submit an annual report on DEQ-approved web-based DMR forms to DEQ via electronic reporting unless DEQ has granted a waiver from electronic reporting. Any data used to calculate summary statistics must be submitted as a separate attachment approved by DEQ via electronic reporting.

(2) If registration is confirmed, before Dec. 1, the reporting period is no later than Feb. 15 of the following year for all pesticide activities covered under this permit that occurred during the previous calendar year

(3) If registration confirmed after Dec. 1, the reporting period is later than Feb.15 after the following full year for all pesticide activities covered under the permit as of registration.

b. Test Methods

The operator must conduct monitoring according to test procedures in 40 CFR 136 and 40 CFR 503 for biosolids or other approved procedures as per Schedule F.

c. Detection and Quantitation Limits

i. Detection Level (DL) – The DL is defined as the minimum measured concentration of a substance that can be distinguished from method blank results with 99% confidence. The DL is derived using the procedure in 40 CFR 136 Appendix B and evaluated for reasonableness relative to method blank concentrations to ensure results reported above the DL are not a result of routine background contamination. The DL is also known as the Method Detection Limit (MDL) or Limit of Detection (LOD).

ii. Quantitation Limits (QLs) – The QL is the minimum level, concentration or quantity of a target analyte that can be reported with a specified degree of confidence. It is the lowest level at which the entire analytical system gives a recognizable signal and acceptable calibration for the analyte. It is normally equivalent to the concentration of the lowest calibration standard adjusted for sample weights, volumes, preparation and cleanup procedures employed. The QL as reported by a laboratory is also sometimes referred to as the method reporting limit (MRL) or limit of quantitation (LOQ).

d. Sufficient Sensitivity of Quantitation Limits

i. The Laboratory QLs (adjusted for any dilutions) for analyses performed to demonstrate compliance with permit limits or as part of effluent characterization, must meet at least one of the requirements below:

(1) The QL is at or below the level of the water quality criterion for the measured parameter.

(2) The QL is above the water quality criterion but the amount of the pollutant in a facility's discharge is high enough that the method detects and quantifies the level of the parameter in the discharge.

(3) The QL has the lowest sensitivity of the analytical methods procedure specified in 40 CFR 136.

(4) The QL is at or below those defined in Oregon DEQ list of quantitation limits posted online at DEQ permitting website.

e. Quality Assurance and Quality Control

i. Quality Assurance Plan – The operator must develop and follow effluent sampling procedures. The operator must use a laboratory that has developed and implements a written Quality Assurance Plan that details effluent sampling procedures, equipment calibration and maintenance, analytical methods, quality control activities and laboratory data handling and reporting. The QA/QC program must conform to the requirements of 40 CFR 136.7.

ii. If QA/QC requirements are not met for any analysis, the operator must re-analyze the sample. If the sample cannot be re-analyzed, the operator must re-sample and analyze at the earliest opportunity. If the operator is unable to collect a sample that meets QA/QC requirements, then the operator must include the result in the discharge monitoring report (DMR) along with a notation (data qualifier). In addition, the operator must explain how the sample does not meet QA/QC requirements.

f. Reporting Sample Results

i. The operator must report the laboratory QL as defined above for each analyte and only when the result is ND.

ii. The operator must report the same number of significant digits as the permit limit for a given parameter.

5. Notifications

a. Notice of Intended Use: For every calendar year, prior to the permit registrant’s first application of acrolein-, copper- or xylene-based pesticide within the irrigation system, the operator must provide notification on proposed activities.

i. The registrant must notify the following interested parties:

(1) Each water user served by the irrigation system.

(2) The public in the area served by the permit registrant's system by publication in one or more newspapers with a combined circulation area encompassing the area in which the irrigation system is located.

(3) DEQ regional office.

ii. The notice must include the following information:

(1) A statement of operator's intent to apply aquatic pesticide(s);

(2) Name of the pesticide(s);

(3) Purpose of use;

(4) General description of where aquatic pesticide(s) will be used;

(5) General time period of expected use;

(6) Any water use restrictions or precautions during treatment;

(7) Contact information for persons to get more information; and

(8) A statement indicating that any affected water user may request in writing that water deliveries be stopped during aquatic pesticide application. This includes water users with dairy animals and drinking water users.

b. An operator who plans to use a pesticide with a label that contains a potable water use restriction must identify those water users, such as a public or private domestic drinking water supplier, and notify them if any potable water use restriction, is not met. Notification is not required when the potable water use restrictions on a label are met. Drinking water source information tools are available from DEQ's Drinking Water Protection Program and the Oregon Department of Water Resources, to identify downstream intake locations.

c. An operator must contact the Oregon Emergency Response System (OERS) if an operator observes or is otherwise made aware of an adverse incident that may have resulted from a point source discharge from the operator's pesticide application. The operator must contact OERS no later than 24 hours after the operator becomes aware of the adverse incident. The Oregon Emergency Response System can be reached at 800-452-0311 or Salem Area 503-378-6377.

d. Adverse Incident Notification to the Oregon Emergency Response System (OERS) at 800-452-0311 or Salem Area 503-378-6377 must include the following information.

i. Name of the person providing the notification and telephone number;

ii. Location address and description of the area including water bodies affected;

iii. Operator name and mailing address if different from above;

iv. The NPDES Permit License Certificate number if known;

v. Name of a contact person if different from the person providing the notification;

vi. Date, time, and the way that the adverse incident was discovered;

vii. Description of the adverse incident including name of the affected species;

viii. EPA registration number of each product applied in the area of the adverse incident;

ix. Description of any steps taken or plan to take to correct, repair, clean up or mitigate the adverse effects; and

x. Reason why notification was made later than 24 hours, if applicable.

e. The operator is not required to report an adverse incident in the following situations:

i. The operator is aware of facts that clearly establish that the adverse incident was not related to toxic effects or exposure from the pesticide application;

ii. The operator has received notification in writing that DEQ has waived the reporting requirements for this incident or category of incidents;

iii. The operator receives information about the adverse incident, but that information is clearly erroneous; or

iv. An adverse incident occurs to pests that are similar in kind to potential target pests identified on the FIFRA label.

f. The operator must provide a written report within thirty (30) days of an adverse incident reported in Schedule B.5.c above to the DEQ local regional field office. The report must include the following information:

i. Date, time and the information that was provided in the initial notification in Schedule B.5.c above;

ii. The DEQ or OERS employee who was contacted and any instructions received from that person;

iii. The effect of the adverse incident on species involved, including the type of species (if known), estimate of the number dead, estimate of the number distressed, the size of the number of dead and the size of the number distressed;

iv. The size of the area of surface water of the state that was affected (square area or stream miles);

v. Pesticide application rate, where the pesticide was applied (e.g. water's edge, in surface water of the state), method of application, name of the pesticide product, description of the pesticide active ingredient(s), and EPA registration number for the product;

vi. Description of the circumstances under which the adverse incident occurred;

vii. If laboratory tests were performed, provide information on what tests were performed, when the tests were performed, who conducted the tests and a summary of the test results within 5 days after they become available;

viii. If applicable, explain why you believe the adverse incident could not have been caused by exposure to the pesticide;

ix. Actions to be taken to prevent the recurrence of the adverse incidents; and

x. A signature and date on report.

g. An operator must immediately notify the Oregon Emergency Management Division's Oregon Emergency Response System (OERS) by calling 1-800-452-0311 if the amount of oil or hazardous material spilled or released, or threatening to spill or release, exceeds the reportable quantity established in ORS 466.605 or listed in OAR 340-142-0050, or will exceed a reportable quantity in any 24-hour period.

The reportable quantities in OAR 340-142-0050 include, but are not limited to, any quantity of oil that would produce a visible film, sheen, oily slick, oily solids, or coat aquatic life, habitat or property with oil, and 200 pounds (25 gallons) of pesticide residue. A release does not include a point source discharge from pesticide applications that are made in compliance with applicable pesticide application laws.

6. Recordkeeping

a. Within 5 days of becoming aware of a spill, leak or other unpermitted point source discharge of a pesticide to surface waters of the state, an operator must document and retain the following information in response to Schedule A.9.a.i.

   i. Information provided to the Oregon Emergency Response System;

   ii. Summary of corrective action taken or to be taken including date the corrective action was started and the date completed or expected to be completed;

   iii. Any measures taken to prevent the recurrence of such a spill or leak or other unpermitted point source discharge;

   iv. Whether Pesticide Discharge Management Plan (PDMP) modifications are required, if applicable.

b. An operator must document corrective actions taken in response to Schedule A.9.a.ii through 9.a.v, within 5 days of becoming aware of that situation and retain a copy of the documentation. The operator must document and retain the following information:

   i. Identify what triggered the need for corrective action and include a brief description;

   ii. The date the need for corrective action was identified;

   iii. How the operator became aware of the situation;

   iv. Results of any water quality sampling data;

   v. The type of corrective action(s) taken;

   vi. Date the corrective action began and ended; and

   vii. Measures taken to prevent the recurrence, including whether PDMP modifications are required, if applicable.

c. Operators must keep the records identified in this condition at the address provided on the permit registration. Operators must record this information as soon as possible but no later than 14 days following completion of each pesticide application in a treatment area. The operator can rely on copies of the records and documents that are developed for other obligations, such as required under FIFRA, USDA, and state and local pesticide programs, provided that these separate documents satisfy the requirements of the permit and are kept at the address provided on the permit registration.

   i. A copy of the permit (either electronic copy or hardcopy)

   ii. Name of the water users or public or private drinking water supplier notified per Schedule B.5.b

   iii. A copy of the documentation required in Schedule B.5.f, 6.a and 6 b

   iv. Rationale for not reporting an adverse incident as allowed in Schedule B.5.e

   v. If licensed as a pesticide applicator or pesticide consultant in Oregon, pesticide application records as required by ORS 634.146 and OAR 603-057-0130

   vi. Records must be kept for a period of at least 3 years per Schedule F, section C8

   vii. A copy of the application for permit registration submitted to DEQ

   viii. Correspondence exchanged with DEQ specific to coverage under this permit

d. A copy of the annual report;

e. Information on each treatment area to which pesticides are discharged from a point source as follows:

i. Pest surveillance methods used, dates of surveillance activities, and findings of surveillance;

ii. Target pest(s) and explanation of the need for pest control;

iii. Pest or site-specific action threshold prior to pesticide application;

iv. Description of pest management measures(s) implemented prior to the first pesticide application;

v. Company name and contact information for pesticide applicator if different from irrigation district information;

vi. Pesticide application dates and time of day of the application;

vii. Description of treatment area, including location and identification of any surface waters of the state, either by name or by location, to which any pesticides were discharged from a point source;

viii. Information about each pesticide product used, including information that can be used determine FIFRA label requirements were followed, such as but not limited to:

(1) Name of product, including the EPA registration number

(2) Size (acres or linear feet) of treatment area, cfs of flowing water, surface area in acre/feet

(3) Quantity of pesticide applied (application rate, diluents, dilution);

(4) Concentration (%) of active ingredient in formulation;

(5) Effective concentration of active ingredient required for control; presence of weed or algae, size of weed or algae

(6) Assessment of application conditions relating to proper pesticide use (e.g. air and water temperature, precipitation and wind speed if applicable to label requirement).

(7) Retention time in treatment area, calculations used to determine retention

ix. Any unusual or unexpected effects identified to non-target organisms;

x. Whether or not a visual assessment was conducted. If a visual assessment was conducted was it during the pesticide application or post pesticide application, and if no visual assessment was conducted, explain why it was not conducted;

xi. Documentation of any equipment calibration, for example date of equipment calibration; (Copies of records kept by a pesticide application equipment operator may be used.); and

xii. A copy of the PDMP along with all the supporting maps and documents, including any modifications made to the PDMP during the term of this permit.

f. Operators that use acrolein-, copper- or xylene-based pesticide must follow these additional recordkeeping requirements:

i. Record the results of a gate inspection prior to pesticide use in a calendar year as required in Schedule A.1.b.i;

ii. Date of gate inspection and note any repair to gates as required in Schedule A.7;

iii. Record the results of inspections to verify that fish screen or other control structures or other management practices are in place prior to the first pesticide application of the calendar year as required in Schedule A.7;

iv. Record parameters in Schedule B.3.c.i following an acrolein-based pesticide application, Schedule B.3.c.ii following a copper-based pesticide application and parameters in Schedule B.3.c.iii following a xylene-based pesticide application;

v. Keep a copy of the public notice required in Schedule B.5.a;

vi. Pest- or site-specific action threshold prior to pesticide application;

vii. Environment details if applicable to label requirement (e.g., water temperature, total flow and wind speed), time application started and stopped, gallons of aquatic pesticide applied, dosage rate, concentration, application rate,); and

viii. Application details for acrolein-, copper- and xylene-based aquatic pesticides within an irrigation system including:

(1) Location of gates in the treatment area that discharge to natural waters;

(2) Flow calculations used to determine when to close the gates and when to reopen the gates (see Schedule A.6.b.iii and 6.c.iii.);

(3) When gates are closed, the time of closure and the time reopened (if using turnover time as specified in Schedule A, condition 6.c.iii include flow measurements or calculations used to determine turnover of at least two times);

(4) Expected duration of the treatment period;

(5) Time application started and stopped;

(6) Location of treatment area (e.g. location for start of treatment and where treatment is complete);

(7) Date and time of daily inspection of locked gate and closed water delivery point as required by Schedule A.6.b.ii;

(8) Date and time of daily gate inspections as required in Schedule A.6.d;

(9) Documentation of any equipment calibration, for example date of equipment calibration. (Copies of records kept by a pesticide application equipment operator may be used.).

7. Monthly Reporting

a. Operators must submit the sampling and laboratory analysis results and other required information in Schedule B.3 including.

i. whether or not pesticides were applied

ii. whether or not there was overflow or return flow to natural waters; and

iii. whether or not acrolein-, copper- or xylene-based pesticides were applied within the irrigation system;

iv. results from monitoring in Schedule B.3 if there was an overflow or return flow to natural waters and acrolein-, copper- or xylene-based pesticides were applied within the irrigation system or if sampling occurred per Schedule A.6.c.ii.

b. Operators must submit the results of the most recent time of travel study.

8. Annual Reporting

a. After the initial registration, an annual report is due each year the permit is in effect even if there has been no pesticide application. The annual report is due each February 15th of the following year.

b. If permit coverage is terminated, an annual report is due no later than 45 days after the termination date or Feb. 15 of the following year, whichever is earlier. The annual report must address the portion of the year the permit registration was effective.

c. The annual report must contain the following information:

i. Operator's name;

ii. NPDES permit number;

iii. Timeframe the annual report covers;

iv. Contact person name, title, mailing address, e-mail address (if any), and phone number;

v. For each pest treatment area:

vi. Identification of any surface waters of the state or other treatment area, including size, either by name or by location, to which you discharged any pesticide from a point source;

(1) What the pesticide application was used to control (i.e., weeds and algae) and target pest;

(2) Company name and contact information for a pesticide applicator, that is different from the operator (e.g., a contracted pesticide applicator);

(3) Total amount of each pesticide product applied for the reporting year by the EPA registration number and by application method (e.g., aerially by fixed-wing or rotary aircraft, broadcast spray, etc.);

(4) Whether the pest control activity was addressed in your Pesticide Discharge Management Plan (PDMP) prior to pesticide application;

(5) If applicable, an annual report of any adverse incidents as a result of a treatment for incidents, as described in Schedule B.5;

(6) A description of any corrective action and the rationale for such action, including spill responses, resulting from pesticide application activities; and

(7) A description of any modifications made to the PDMP.

Schedule C: Compliance

There is no Schedule C in this permit

Schedule D: Special Conditions

1. Pesticide Discharge Management Plan

Operators must develop and maintain a PDMP for their pest management area as follows:

a. Operators must develop the PDMP by the time the application for registration is submitted to DEQ.

b. Operators must keep the PDMP up-to-date for the duration of registration under the general permit.

c. Operators must review and modify the PDMP as follows:

   i. Review the PDMP at least once per calendar year and whenever necessary to update the pest problem identified, scope of pest management area and pest management strategies evaluated.

   ii. Modify the PDMP to address corrective actions taken in Schedule A, or

   iii. Modify the PDMP when a change in pest control activities significantly changes the type or quantity of pollutants discharged from a point source.

   iv. Make the changes to the PDMP before the next pesticide application that results in a point source discharge, if practicable, or if not, as soon as possible thereafter.

2. Contents of the PDMP

The PDMP required under Condition 1 above can include copies of the records and documents that are developed for other obligations, such as required by FIFRA, USDA, and state and local pesticide programs, if these separate documents satisfy the requirements for the content of the PDMP. Operators must develop and maintain a PDMP that contains the following elements:

a. Pesticide Discharge Management Team - The PDMP must identify all the persons (by name and contact information) that compose the team and each person's individual responsibilities, including:

   i. Persons responsible for managing pests in relation to the pest management area;

   ii. Persons responsible for developing and revising the PDMP; and

   iii. Persons responsible for developing, revising, and implementing corrective actions and other effluent limitation requirements.

b. Pest Problem Identification - The operator must document the pest problem in the pest management area by including the following elements:

   i. Pest problem description. Description of the pest problem in the pest management area, including identification of the target pest or pests, source of the pest problem, and source of data used to identify the problem in Schedule A.5.a.

   ii. Action thresholds. Describe the action thresholds in the pest management area, including a description of how they were determined. Include action thresholds for use of acrolein-, xylene- and copper-based pesticides within the irrigation system based on plant growth. (e.g. data used in developing an action threshold and method used to determine when the action threshold has been met).

   iii. General location map. In the plan, include a general location map (e.g., USGS quadrangle map, or a portion of a city or county map) that identifies the geographic boundaries of the pest management area to which the plan applies, the anticipated treatment areas and location of the surface waters of the state.

Include a map that indicates sampling locations for pesticide application of acrolein-, copper- or xylene-based pesticides as required in Schedule B.3.

iv. Water quality limited water. Use the DEQ 303(d) list of impaired water bodies on DEQ's web site to identify surface waters of the state that are impaired for the substance discharged from a point source, including the list of pesticide(s) or degradates for which the surface water of the state is impaired.

c. Pest Management Options Evaluation - The PDMP must include an evaluation of pest management options including a combination of pest management options to control the target pest for the pest management area.

i. The evaluation must include pest management options that will be implemented to comply with the effluent limitations required in Schedule A.

ii. The evaluation must include a description of active ingredients evaluated for pesticide use. Operators are encouraged to consult with Oregon Department of Fish and Wildlife to determine specific risks to fish, wildlife and habitats in an application area.

d. Schedules and Procedures - The PDMP must include the following schedules and procedures to document the pest management measures used to comply with the effluent limitations in Schedule A:

i. List of proposed pesticides to be applied including brand name and EPA registration number, and a copy of the label. (Schedule A.4.a, 4.b and 4.c).

ii. Application rate and frequency. (Schedule A.4.d) Procedures for using the optimal amount of pesticide consistent with the pesticide label directions to reduce the potential for development of pest resistance and to minimize the frequency of pesticide applications necessary to control the target pest.

iii. Spill prevention. (Schedule A.4.e) Procedures and schedule of maintenance activities for preventing spills and leaks of pesticides associated with the application of pesticides covered under this permit.

iv. Pesticide application equipment. (Schedule A.4.f) Schedules and procedures for maintaining the pesticide application equipment in proper operating condition, including calibrating, cleaning, and repairing the equipment.

v. Pesticide monitoring. The operator must document procedures for monitoring consistent with the requirements in Schedule B.2 and B.4.e including:

(1) A schedule for monitoring

(2) Sample integrity (e.g. quality assurance/ quality control of temperature, container type, and holding time)

(3) The person (or position) responsible for conducting monitoring

e. Response Procedures - Pertaining to Other Actions Necessary to Minimize Point Source Discharges. At a minimum, the PDMP must include the following actions necessary to minimize point source discharges:

i. Spill response. Procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases. Employees who may cause, detect, or respond to a spill or leak must be trained in these procedures and have necessary spill response equipment available. If possible, one of these individuals should be a member of the PDMP team.

ii. Adverse incident response. Procedures for responding to any adverse incident resulting from pesticide applications.

iii. Notification of spill and adverse incident response. Procedures for notification of appropriate facility personnel, emergency chemical responders, drinking water intake

contacts and OERS, contact information for the notifications and information on the nearest emergency medical facility must be in locations that are readily accessible and available.

iv. Include procedures for prevention, containment, and handling of spills and releases into the air or into or on any land or surface waters of the state from the application, storage and transport of acrolein-, xylene- or copper-based pesticides, including:

(1) Description of employee orientation and education program; and

(2) A list of the reportable quantities for the aquatic pesticides with reporting thresholds in OAR Chapter 340, Division142.

f. Supporting Documentation-

i. Documentation of approvals for pesticide applications in sensitive areas, such as required by Oregon Department of Fish and Wildlife under ORS 452.140(1) and (2), 452.245(1) and (2), and pesticide licensing as required by Oregon Department of Agriculture under ORS chapter 634. Copies of any portions of any documents that are incorporated by reference to satisfy the required elements of the PDMP.

ii. Operators of Owhyee Irrigation District , Old Owhyee Ditch Improvement District, Klamath Irrigation District, Ochoco Irrigation District must include the fish control evaluation that documents the presence of fish screens, structures or other management practices intended to the extent practicable to discourage fish from entering the treatment area.

iii. An operator that is required to complete a time of travel study may include keep these results in this section of the PDMP.

g. Signature Requirement -

i. The PDMP and revisions to the PDMP must be signed, dated and certified as described in Schedule F, **Error! Reference source not found.** in Reporting Requirements.

3. Time of Travel Study

Prior to the application of acrolein-, copper- or xylene-based pesticides to a treatment area within the irrigation system, an operator must conduct a time of travel study under the following methods or conditions to support turnover methods and travel times used to comply with the permit. An operator must document results of a time of travel study.

a. A dye study where dye is released at one or more points in the system and concentrations downstream are measured over time or measurement of velocity and cross-sectional area at various representative points in the system or combination of these two methods.

b. The operator must complete a time of travel study at each application site no less than once every five years.

c. The flow conditions during the time of travel study must mimic the conditions during pesticide application.

d. The operator must submit the results of the most recent time of travel studies to DEQ with the first set of monitoring reports submitted in a given calendar year.

Schedule E: Pretreatment

There is no Schedule E in this permit

SCHEDULE F: NPDES GENERAL CONDITIONS