



"The Green Spot of the Columbia Basin"

South Columbia Basin Irrigation District

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Danielle Edelman
Washington State Department of Ecology
PO Box 47696
Olympia, WA 98504-7696

Dear Ms. Edelman,

Thank you for the opportunity to comment on the Draft Irrigation System Aquatic Weed Control General Permit. The South Columbia Basin Irrigation District (SCBID) maintains a water distribution system with over 2,000 miles of canals, laterals and drains. The vast conveyance and drainage system delivers roughly 825,000 acre-feet of irrigation water to 233,000 acres of land each season. A recently completed economic impact study of the Columbia Basin Project, of which SCBID is one of three irrigation districts, shows the total farm-gate crop value from lands served by SCBID at approximately \$1.2 billion annually. Without the necessary chemical means, aquatic vegetation would overwhelm the conveyance infrastructure, rendering the delivery of water throughout this system and to these highly productive lands impossible.

Water managers are tasked with controlling a variety of nuisance vegetation including numerous species of pondweed, Milfoil, Elodea, filamentous algae and others. Filamentous algae form dense mats on the water surface and within the water column. These algae mats break off and flow downstream clogging infrastructure such as intakes, screens and weed racks making water delivery difficult. Furthermore, the presence of submersed plants and floating algae can be disastrous if not managed properly. Aquatic plants decrease the hydraulic efficiency of irrigation canals and laterals, slowing the flow of water and causing the water level to raise. The presence of these aquatic plants makes it difficult, and in some cases impossible to meet demand and provide sufficient water to landowners. Additionally, higher water levels due to the aquatic plants increase the risk of canals overtopping and breaching, with associated risks to life and property.

For these reasons, the details of the final version of the Permit are incredibly important to our overall operations as an irrigation district. We appreciate the time and effort Ecology has put into refining the permit to this point, and look forward to seeing continued improvements. Please see our comments on the following pages.

Sincerely,

John O'Callaghan
Secretary/Manager
South Columbia Basin Irrigation District

SECTIONS S1.A. (PAGE 10) AND S8.D. (PAGE 40)

Section **S1.A.** of the draft permit states:

“This permit also covers the treatment of emergent vegetation on the banks of conveyances within the irrigation system, where pesticides may enter the water.”

Emergent applications are regulated under FIFRA and strict adherence to the product label is required by law. This should be sufficient for all emergent vegetation applications. Additionally, requiring coverage under this Permit for emergent vegetation treatments introduces unnecessary complications that would impede the effectiveness of vegetation management programs. For example, Section **S8.D.** requires a notice no later than 3:00 p.m. one day prior to the treatment. Emergent vegetation treatments require certain weather conditions in order to lawfully conduct a treatment. These conditions change constantly and cannot be determined on the day prior to a treatment. Factors such as wind speed, wind direction, inversions, and the relative location of sensitive crops, are all factors that can influence whether a treatment can be conducted. Applicators need the flexibility to determine if those conditions are appropriate at the time of the treatment and not before. Districts would be constantly announcing treatments and then subsequently cancelling them. These notifications and announcements take up a significant amount of time and inhibit staff from conducting operational activities. We request that emergent vegetation treatments be removed from coverage.

SECTIONS S2. (PAGES 11-12), S4.D. (PAGE 20) AND S8.D. (PAGES 40-41)

Section **S2.**, **S4.D.** and **S8.D.** discuss the implementation of individual plans for the use of acrolein, endothall and fluridone. These active ingredients are already addressed in our District's IVMP, which integrates the use of all active ingredients available under the Permit, as well as non-chemical methods for vegetation control. Creating individual plans for specific active ingredients undermines the integral nature of an IVMP. These active ingredients should not be isolated from the overall plan. We request that the acrolein, endothall and fluridone plans be removed from the Permit requirements.

SECTION S2.D.2 (PAGE 14)

Section **S2.D.2.a.** states:

“If you propose a change that will impact the quality of treated water discharged, the area covered by the permit, or the location of a POC you are not permitted to make the change until Ecology approves your application for coverage”

Please explain what is meant by “a change that will impact the quality of treated water discharged”. Is this referring to pesticide concentrations only, or other water quality parameters?

SECTION S4.D.1.a.i (PAGE 20)

Section **S4.D.1.a.i** states:

“Permittees must make reasonable efforts to reduce the use of acrolein in favor of more environmentally sensitive pesticides.”

Acrolein is the only active ingredient listed for use in the NPDES permit that both provides control of a broad spectrum of aquatic weeds and algae, and has a half-life of hours as opposed to days. Other available pesticides do not serve the same purpose as acrolein, and therefore, are not substitutes. We request that the language in section **S4.D.1.a.i** be removed from the Permit.

SECTION S5.A.2. (PAGE 24)

The multilevel list labels a. and b. appear to be out of place in section **S5.A.2.**

Section **S5.A.2.** states:

“Take two (2) samples per treatment event to identify the highest concentration of the pesticide.”

Please provide clarification on what is meant by “treatment event”. Is this referring to one or more applications at multiple sites within the same system?

Section **S5.A.2.** states:

“Take both samples at the POC when the pesticide is at its peak concentration. If you track multiple treatments simultaneously, use the shortest travel time.”

Does this mean that if the permittee is conducting multiple applications that flow to the same POC at the same time, only two samples are required for the “treatment event”, and the application site with the shortest travel time should be used to determine sample timing? Please provide clarification.

TABLE 3: MONITORING REQUIREMENTS (PAGE 27)

The bottom of table 3 states that a meter is required for measuring flow for permittees that use acrolein. Does this allow for rated sections that were determined using a meter? It is impractical to directly measure the flow at each compliance point prior to every acrolein treatment.

SECTIONS S5.B.1.b.i and S5.B.1.b.ii (PAGE 28)

Sections **S5.B.1.b.i** and **S5.B.1.b.ii** indicate that samples should be taken at the treatment site rather than at associated point(s) of compliance.

SECTION S5.B.2.b.i.b (PAGE 29)

Section **S5.B.2.b.i.b** states:

“Permittees must have the results of water hardness analysis for one (1) full permit cycle of monitoring. (A full permit cycle is five (5) years.)”

We suggest that if permittees have been on reduced monitoring for a full permit cycle, the reduced number of samples should be sufficient to qualify for reduced monitoring of hardness.

SECTION S6.D. (PAGE 32)

Public notices should be broad, not specific to location or time and should not include emergent vegetation treatments.

SECTION S6.D.1.b. (PAGE 32)

Section **S6.D.1.b.** states that if there is **“no deviation from the public notice, then the permittee is not required to make another public notice for that treatment season”**. We suggest that cancelled treatments should not prompt another public notice.

SECTION S6.D.1.b. AND S6.D.1.d. (PAGES 32-33)

Section **S6.D.1.b.** states:

“Make the public notice no later than 5:00 p.m. one day prior to the treatment. If the public notice includes all pesticide treatments for the entire treatment season and there is no deviation from that public notice, then the permittee is not required to make another public notice for that treatment season.”

Section **S6.D.1.d.** states:

“The public notice must include:

- i. The purpose of the treatment.**
- ii. A general description of the canals to be treated, including the approximate location(s) of the treatment.**
- iii. The pesticide(s) that will be applied and the active ingredient(s).**
- iv. The approximate date(s) of treatment.**
- v. Water use restrictions or precautions, if any.**
- vi. The name and contact information of the person that can be contacted by the public.**
- vii. The address and phone number of the appropriate Ecology regional office.”**

Is this public notice similar to the public notice in the 2012 Permit? For example, to satisfy **S6.D.1.d.ii**, is it sufficient to state that treatments will be to all irrigation canals, drains, and wasteways constructed by the United States Bureau of Reclamation within the boundaries of the South Columbia Basin Irrigation District located in Adams, Grant, Franklin, and Walla Walla Counties? To satisfy **S6.D.1.d.iv**, is it sufficient to state that treatments will be daily on various canals, drains, and wasteway systems from March 1, 2024 through February 2025? In other words, how specific does the information need to be?

To satisfy requirements for the 2012 Permit regarding public notifications, activities related to aquatic pesticide usage are posted in the newspaper prior to each season, and many districts post the notice to a website, social media, etc. This method of notification encourages the public to assume that there is the potential for pesticides to be present in the water at any time, and that applications are being conducted at numerous locations every week. Providing specific information such as treatment dates and locations to the public promulgates a message that trespassing is acceptable when treatments are not occurring. Furthermore, supplying dates and locations of treatments introduces added legal liability in the event of human error.

We would like to suggest that to satisfy **S6.D.1.ii**, the approximate location should not include specific treatment sites, canals or laterals, but rather the district boundaries.

We would like to suggest that to satisfy section **S6.D.1.d.iv**, the approximate dates should include the beginning and end of the treatment season, not specific days or weeks.

SECTION S6.D.2.e.i. (PAGE 34)

Section **S6.D.2.e.i.** states to include on the signage:

“The name and contact information of the person that can be contacted by the public.”

It would be more appropriate to include the name and contact information of the District. The contact person can be absent or change at any time. If the District office is the contact number, office staff can direct the inquirer in the appropriate employee.

SECTION S6.D.2.f. (PAGE 34)

Section **S6.D.2.f.** states:

“Signs may include the months of the treatment season (such as March through November) as an alternative to specific treatment dates. Remove signs by the end of the treatment season. “

Our treatment season runs year-round with applications potentially being made to pooled water or dry ditches in the non-irrigation season. We would like the option to post permanent signs and not remove them by the end of the season.

SECTION S6.E.1.a. (PAGE 34)

Section **S6.E.1.a.** states:

“Prepare and implement an Integrated Vegetation Management Plan (IVM Plan). New permittees must submit an IVM plan upon application. Before treating to reduce or eliminate pesticide residues, permittees must submit two (2) copies of an engineering report to Ecology for review and approval. The engineering report must be developed in accordance with Chapter 173-240 WAC – Submission of Plans and Reports for Construction of Wastewater Facilities.”

Please specify what is meant by “before treating to reduce or eliminate pesticide residues...”

Chapter 173-240 WAC refers to domestic and industrial wastewater treatment facilities and does not discuss irrigation water conveyance systems. We request that section **S6.E.1a** be removed from the final Permit.

SECTION S.6.E.3.b. (PAGE 35)

Section **S6.E.3.b.** states:

“Travel time studies must be less than five (5) years old.”

The majority of SCBID conveyances subjected to aquatic applications are constructed, controlled facilities and are not subject to the same channel-altering factors that affect travel times in natural waterways over time. Rather, irrigation conveyance systems exhibit variations in travel time due to aquatic vegetation density, farm deliveries, return flows and weather events that all vary from day to day and season to season. Factors that account for these variabilities are already incorporated into Permit requirements, which include sampling frequencies and sampling windows. We would like to recommend that travel time studies only need to be re-done when a significant change occurs that may invalidate the accuracy of historical studies.

SECTION S.6.E.3.c.i.a (PAGE 35)

Section **S6.E.3.c.i.a** states that permittees may determine the travel time from the application site to the POC by:

“Measuring the time it takes water to flow from the application site to the POC.”

What constitutes a measurement? Would it be acceptable to measure the velocity at various transects between the treatment site and the POC rather than tracking dye or pesticide?

SECTION S6.E.3.d. (PAGE 35)

Section **S6.E.3.d.** states:

“Once per year, measure the travel time of each segment of the canal that contains an application site where treated water could flow to a POC. If there is a change in the travel time that differs more than 5% of the previously reported travel time, then complete a revised travel time study and submit it to Ecology in accordance with Special Condition S6.E (Plans and Studies).”

What is the basis behind requiring a new travel time study when the change differs by more than 5%? What information was used to warrant using 5% rather than another number?

We recommend that this section be removed from the Permit. This is the same as requiring a travel time study to be completed for each site annually, which would require the employment of a full-time seasonal employee and tens of thousands of dollars in tracking equipment, tracer dye and other supplies.

As stated in our comments under the header **SECTION S.6.E.3.b. (PAGE 35)**, the majority of SCBID conveyances subjected to aquatic applications are constructed, controlled facilities and are not subject to the same channel-altering factors that affect travel times in natural waterways over time. Rather, irrigation conveyance systems exhibit variations in travel time due to aquatic vegetation density, farm deliveries, return flows and weather events that all vary from day to day and season to season. Factors that account for these variabilities are already incorporated into Permit requirements, which include sampling frequencies and sampling windows.

We would like to recommend that travel time studies only need to be re-done when a significant change occurs that may invalidate the accuracy of historical studies.

SECTION S8.A.1.b. (PAGE 37)

Section **S8.A.1.b.** states that permittees must submit a Discharge Monitoring Report (DMR) to Ecology **“On or before the first day of the second month after the month discussed in your DMR.”**

This is frequently not a long enough period of time to accommodate lab turnaround, especially for the treatments that are conducted at the end of the month, where samples may not be taken until a day or two after the treatment. Additionally, sometimes treated water is held and not released until weeks later. There should be allowance for these scenarios.

SECTION S8.B.3. (PAGE 39)

Section **S8.B.3.** states:

“If the permittee samples treated water more frequently than required or analyzes a parameter not required by this permit, they must include the results of that sampling and analysis in your records.”

This is a vague statement and has implications for any sampling we conduct, whether related to a treatment or not. If samples are taken that are outside the scope of this Permit, permittees should not be required to include results in their records. We suggest removal of section **S8.B.3.**

SECTION S8.D.1.a. (PAGE 40)

Section **S8.D.1.a.** states:

“Permittees must notify Ecology via email of planned treatment events no later than 3:00 p.m. one day before the application of pesticide. For example, if a treatment is scheduled for a Monday, Ecology must be notified by 3:00 p.m. on the Sunday before. Report to Ecology the name and location of the application site and the name of the pesticide being applied.”

This section should not apply to emergent vegetation treatments. As stated above in our comments under the header **SECTIONS S1.A. (PAGE 10) AND S8.D. (PAGE 40)**, section **S8.D.** requires a notice no later than 3:00 p.m. one day prior to the treatment. Emergent vegetation treatments require certain weather conditions in order to lawfully conduct a treatment. These conditions change constantly and cannot be determined on the day prior to a treatment. Factors such as wind speed, wind direction, inversions, and the relative location of sensitive crops, are all factors that can influence whether a treatment can be conducted. Applicators need the flexibility to determine if those conditions are appropriate at the time of the treatment and not before. Districts would be constantly announcing treatments and then subsequently cancelling them. These notifications and announcements take up a significant amount of time and inhibit staff from conducting operational activities.

We request that emergent vegetation treatments be removed from coverage. If emergent vegetation treatments are not removed from the final permit, they should not be subject to these notifications.

SECTION S8.F.1. (PAGE 43)

Section **S8.F.1.** refers to waste treatment equipment. This does not apply to irrigation districts. We request that you remove this language from the final Permit.

SECTION S8.F.1.c. (PAGE 43)

Section **S8.F.1.c.** states:

“Submit a written report to Ecology within five (5) days of the time that you first became aware of the noncompliance. If you comply with Special Condition S6 and you request an extension, Ecology may waive or extend the requirement for a written report on a case-by-case basis.”

Five days is insufficient to properly understand the cause of a noncompliance, determine corrective actions and submit a meaningful report. This gives districts three days to comply with this section when a weekend falls within the time-period. Ten business days would be more appropriate.

SECTION S8.F.3.b. (PAGE 44)

Section **S8.F.3.b.** states that **“any fish or fauna exhibiting stress or dying inside or outside of the treated area”** is considered a reportable adverse incident.

Irrigation conveyance systems are constructed facilities and are not meant to accommodate fish or fauna. However, fish/fauna that find their way into the conveyance system will be subjected to stress due to treatments upstream of points of compliance. Additionally, the Draft Environmental Impact Statement states in several instances that:

“It should be noted that the inside of irrigation canals within an irrigation system are not considered part of the natural environment.”

Section **S8.F.3.b.** is unreasonable and should be removed from the Permit or changed to exclude any area upstream of a point of compliance.

SECTION G6. (PAGE 48)

Section **G6.** states:

“Collected screenings, grit, solids, sludge, filter backwash, or other pollutants removed in the course of treatment or control of wastewater must not be re-suspended or reintroduced to the final effluent stream for discharge to State waters.”

This appears to be a reference to wastewater treatment facilities. We suggest removal of section **G6.**

SECTION G9. (PAGE 48)

Section **G9.** states:

“The Permittee, in order to maintain compliance with their permit coverage, must control production or all discharges upon reduction, loss, failure, or *bypass* of the treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.”

This appears to be a reference to wastewater treatment facilities. We suggest removal of section **G9.**

SECTION G10. (PAGE 48)

Section **G10.** states:

“The Permittee is required to take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting public health or the environment.”

This appears to be a reference to wastewater treatment facilities. We suggest removal of section **G10.**

SECTION G22. (PAGE 52)

Section **G22.** states:

“Bypass, which is the intentional diversion of waste streams from any portion of a treatment facility, is prohibited, and Ecology may take enforcement action against a Permittee for bypass unless one of the following circumstances (A, B, or C) is applicable.”

This appears to be a reference to wastewater treatment facilities. We suggest removal of section **G22.**

APPENDIX C: TABLE 4 (PAGE 61)

Table 4 in **appendix C** of the Permit requires a quantitation level of 9 µg/L for endothall analysis. The lab we currently send samples to uses EPA method 548.1 but reports a PQL of 10.0 µg/L. For hardness, they list the method SM 2340-C, not SM2340-B. Are these procedures acceptable for compliance?