



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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May 25, 2021

Susan Poulsom, Manager
NPDES Permits Unit
United States Environmental Protection Agency - Region 10
1200 Sixth Avenue, Suite 155, OWW
Seattle, WA 98101

**RE: Clean Water Act Section 401 Certification for
EPA National Pollutant Discharge Elimination System
Pesticide General Permit.**

Dear Susan Poulsom:

This letter is in response to the U.S. Environmental Protection Agency letter, dated March 26, 2021 requesting Washington State Department of Ecology (Ecology) provide a Clean Water Act Section 401 Certification for the Final National Pollutant Discharge Elimination System (NPDES) Pesticide General Permit

With this Section 401 Water Quality Certification, Ecology certifies the EPA NPDES Pesticide General Permit (Permit) with conditions found in Order No. 20030. The Enclosed Order may be appealed by following the procedures described in the Order.

If you have any questions or would like to discuss this matter further, please contact Danielle Edelman, at danielle.edelman@ecy.wa.gov or (360) 407-7118.

Sincerely,

A handwritten signature in black ink, reading "Jeff Killelea".

Jeff Killelea, Manager
Program Development Services Section
Department of Ecology

Enclosure

cc: Bilin Basu, Permit Writer, Region 10 EPA
Danielle Edelman, Aquatic Pesticides NPDES Permit Writer, WQ Program
Angela Zeigenfuse, 401 Certification Coordinator, WQ Program
Vincent McGowan, P.E., Water Quality Program Manager, WQ Program
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ecyrefedpermits@ecy.wa.gov--Aquatics # 140164

By Certified Mail: 9489 0090 0027 6072 1470 45

IN THE MATTER OF GRANTING A)	ORDER # 20030
WATER QUALITY)	401 Water Quality Certification for the EPA
CERTIFICATION TO)	NPDES Pesticide General Permit authorizing
U.S. Environmental Protection Agency)	discharges from the application of pesticides to
pursuant to 33 U.S.C. 1341 (FWPCA §)	surface Waters of the State in Washington.
401), 40 CFR Part 121, RCW 90.48.120,)	
RCW 90.48.260 and chapter 173-201A)	
WAC)	

TO: UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 REGION 10
 ATTN: Susan Poulsom
 1200 Sixth Ave, Suite 155, OWW
 SEATTLE, WA 98101

On March 26, 2021, the U.S. Environmental Protection Agency (EPA) requested a Section 401 Water Quality Certification for the National Pollutant Discharge Elimination System (NPDES) Pesticide General Permit authorizing discharges to surface Waters of the State in Washington (defined in WAC 173-201 and RCW 90.48.020) from the application of pesticides.

EPA’S Pesticide General Permit for Point Source Discharges from the Application of Pesticides (PGP) went into effect on October 31, 2016 and will expire on October 31, 2021. The draft 2021 PGP, proposed under the Clean Water Act’s (NPDES), contains permit conditions for point source discharges of biological pesticides and chemical pesticides that leave a residue. The draft PGP covers mosquito and other flying insect pest control; weed and algae pest control; animal pest control; and forest canopy pest control. The draft 2021 PGP requirements are largely the same as the current 2016 PGP requirements. Once finalized, the 2021 PGP will replace the 2016 PGP currently in place.

EPA may not issue a NPDES permit to conduct any activity that may result in any discharges into surface waters of Washington State until the Washington State Department of Ecology (Ecology) has granted certification under Clean Water Act (CWA) section 401, or has waived its right to certify. 33 U.S.C. 1341(a)(1); 40 C.F.R. 124.53(a).

In accordance with 40 CFR 124.53(e)(3), Ecology has determined that no condition in the draft NPDES permit may be made less stringent without violating water quality standards in Washington State law. This Order and 401 Certification (Certification) imposes additional conditions, beyond the conditions of the draft NPDES permit, on the Project Proponent.

AUTHORITIES:

In exercising authority under 33 U.S.C. § 1341, 40 CFR Part 121, RCW 90.48.120, and RCW 90.48.260, Ecology has examined the U.S. EPA’s request for CWA 401 certification of the draft permit pursuant to the following:

1. Conformance with applicable water quality-based, technology-based, and toxic or pretreatment effluent limitations as provided under 33 U.S.C. §1311, 1312, 1313, 1316, and 1317 (FWPCA § 301, 302, 303, 306 and 307);

2. Conformance with the state water quality standards contained in chapter 173-201A WAC and authorized by 33 U.S.C. §1313 and by chapter 90.48 RCW, and with other applicable state laws; and
3. Conformance with the provision for industries and others to use all known, available and reasonable methods of prevention, control, and treatment (AKART) to protect state waters from pollution as required by RCW 90.48.010.
4. Conformance with Washington's prohibition on discharges that cause or tend to cause pollution of waters of the state of Washington as required by RCW 90.48.080.

WATER QUALITY CERTIFICATION CONDITIONS:

With this Certification and through issuance of this Order, Ecology grants with conditions that the discharge as proposed and conditioned by this Certification will comply with applicable water quality standards or other appropriate requirements of State law. In view of the foregoing and in accordance with 33 U.S.C. §1341, 40 CFR Part 121, RCW 90.48.120, RCW 90.48.260, chapter 173-200 WAC, and chapter 173-201A WAC, water quality certification is granted to the Project Proponent subject to the conditions within this Order and NPDES Permit.

Certification of the proposed draft permits does not authorize the Project Proponent to exceed applicable state surface water quality standards (chapter 173-201A WAC), ground water standards (chapter 173-200 WAC) or sediment quality standards (chapter 173-204 WAC), standards in the EPA's Revision of certain Federal water quality criteria applicable to Washington (40 CFR 131.45), and other appropriate requirements of State law.

A. Definitions

1. For purposes of this Order, the term "Project Proponent" shall mean those that are seeking coverage under this general permit, and its agents, assignees and contractors.
2. The Federal Agency shall mean the US Environmental Protection Agency (EPA). The Federal Agency shall enforce the permit and ensure that the Project Proponent complies with the conditions of the permits at all times.

B. Water Quality

1. Failure of any person or entity to comply with this Certification may result in the issuance of civil penalties or other actions, whether administrative or judicial, to enforce the terms of this Certification.
2. The Certification conditions within this Order must be incorporated into EPA's final NPDES permit. Pursuant to 40 CFR 121.10(a), all certification conditions herein that satisfy the requirements of 40 CFR 121.7(d) must be incorporated into the permit. Pursuant to 40 CFR 121.10(b), the permit must clearly identify all certification conditions.
3. This Certification does not authorize exceedances of water quality standards established in chapter 173-201A WAC. Authorizing exceedances of water quality standards is inconsistent with compliance.
4. Requirements for Pesticide Applicators

- A. Permittees must be licensed in the State of Washington to apply aquatically labelled pesticides and must comply with chapters 16-228 of the Washington Administrative Code (WAC), 15.58 Revised Code of Washington (RCW), and 17.21 RCW.

Citation: 16-228 WAC, 15.58 RCW, 17.21 RCW

Justification: *This is a requirement of the State in order to make sure that pesticides are applied legally and appropriately.*

5. Requirements for Pesticide Application

- A. The application of pesticide products must not cause or contribute to violations of the Water Quality Standards for Surface Water of the State of Washington (chapter 173-201A WAC), Ground Water Quality Standards (chapter 173-200 WAC), Sediment Management Standards (chapter 173-204 WAC), and human health-based criteria in the National Toxics Rule (40 CFR 131.36). Discharges that do not comply with these standards are prohibited.

Citation: 173-201A WAC, 173-200 WAC, 173-204 WAC, 40 CFR 131.36

Justification: *Ecology must ensure that the application of pesticide products does not cause harm to aquatic life, habitats, or human health.*

B. Short Term Modification of Water Quality Standards

- i. Water Quality Standards for Surface Waters of the State of Washington (chapter 173-201A WAC) allow a temporary exceedance of water quality criteria provided the Permittee has complied with WAC 173-201A-410. Compliance with a lawfully issued discharge permit satisfies this requirement.

Citation: 173-201A WAC

Justification: *Ecology may allow short term exceedance of water quality standards in order to allow for pesticide and other chemical treatments to occur to protect beneficial uses of waterbodies and human and environmental health.*

- C. All discharges of pesticides directly to water, discharged above water or at the water's edge where pesticides will enter the water must submit an NOI and obtain coverage under this permit (chapter 173-201A WAC and chapter 173-226 WAC).

The contents of this condition are required in order to comply with the State antidegradation policy (WAC 173-201A-300) and limit the discharge of polluting matter in water (RCW 90.48.080 and RCW 90.48.520).

Citation: 173-201A WAC, WAC 173-201A-300, 173-226 WAC, RCW 90.48.080, RCW 90.48.520

Justification: *Ecology must track discharges of wastewater and pollutants to waters of the state.*

6. Allowed active ingredients and conditions for use

A. Aquatic mosquito control

- i. Bacillus sphaericus (strain H-5a5b)
- ii. Bacillus thuringiensis israelensis (Bti)
- iii. Malathion
- iv. Methoprene
- v. Monomolecular surface films
- vi. Paraffinic white mineral oil
- vii. Spinosad
- viii. Etofenprox
- ix. Naled
- x. Natural Pyrethrins
- xi. Permethrin
- xii. Piperonyl Butoxide (PBO)
- xiii. Prallethrin
- xiv. Resmethrin
- xv. Sumithrin (d-phenothrin)
- xvi. Deltamethrin (adulticide)

Additional Restrictions

Endangered, Threatened, Sensitive, or Candidate Species

The Permittee must ensure that the application of larvicides or adulticides does not cause permanent harm to vulnerable species, which include endangered, threatened, sensitive, or candidate species. Washington Department of Fish and Wildlife (WDFW) identified specific areas, which are known habitat for vulnerable species. These areas are identified in the document titled *Areas of Restricted Larvicide and Adulticide Use Due to Presence of Vulnerable Species* (<https://ecology.wa.gov/DOE/files/3e/3e837bdb-10d0-4496-9b51-40a0f053f53f.pdf>).

For those areas identified in *Areas of Restricted Larvicide and Adulticide Use Due to Presence of Vulnerable Species* that are within the Permittee's jurisdiction, the Permittee must develop a plan for the management of mosquitoes within the area of concern.

Plans must include:

- a. How mosquitoes are managed in the area of concern, including timing of application, larvicides and adulticides used, and how impacts to vulnerable species will be minimized or eliminated.
- b. For state listed species: consultation and a letter of concurrence from Washington Department of Fish and Wildlife (WDFW).
- c. Identification of how the Permittee will notify WDFW and affected land management agencies when treatments will be occurring in areas identified as habitat for vulnerable species.

Until the plan is completed and implemented, the Permittee is limited to the use of Bacillus sphaericus and Bti based larvicides.

Larvicides

The Permittee is not authorized to apply malathion in lakes, streams, in the littoral zone of water bodies, or the sites referenced in *Areas of Restricted Larvicide and Adulticide Use Due to Presence of Vulnerable Species*. Use of malathion is only allowed in response to the development of pesticide resistance within a specific larval mosquito population and after consultation with WDFW. The use of methoprene briquette formulations in marine or estuarine treatment sites is prohibited.

Adulticides

The Permittee must use ultra-low volume (ULV) application equipment to apply adulticides if available.

Malathion and naled are not authorized to be used in the vulnerable species areas referenced in *Areas of Restricted Larvicide and Adulticide Use Due to Presence of Vulnerable Species*.

Citation: Chapter 90.48 RCW, RCW 90.48.010, RCW 90.48.520, RCW 90.52.040, RCW 90.54.020, RCW 90.48.080, RCW 90.48.260, Chapter 173-201A WAC, WAC 173-201A-020, WAC 173-201A-300, WAC 173-201A-240, WAC 173-201A-410(4)(c)(i and ii), Chapter 173-226 WAC, WAC 173-226-070, WAC 173-201A-320

Justification: Restrictions on the active ingredients allowed, as well as when and how pesticide products may be applied are technology-based requirements which Ecology has determined are necessary to meet the state requirement for the use of all known, available and reasonable methods of prevention, control and treatment (AKART).

B. Aquatic plant and algae management

For in water treatments of fresh water to manage aquatic noxious weeds, algae, and native nuisance plants.

- i. 2,4-D, Amine Formulation
- ii. 2,4-D, Ester Formulation
- iii. Aminopyralid
- iv. Bispyribac-sodium
- v. Carfentrazone-ethyl
- vi. Diquat Dibromide
- vii. Endothall, Dipotassium salt (e.g., Aquathol)
- viii. Endothall, Monopotassium salt (e.g., Hydrothol)
- ix. Florpyrauxifen-benzyl
- x. Flumioxazin
- xi. Fluridone
- xii. Glyphosate
- xiii. Imazamox
- xiv. Imazapyr
- xv. Penoxsulam
- xvi. Peroxyacetic/ Peracetic Acid plus Hydrogen Peroxide

- xvii. Sodium carbonate peroxyhydrate
- xviii. Topramezone
- xix. Triclopyr TEA
- xx. Adjuvants - Washington State Department of Agriculture (WSDA) registers adjuvants for aquatic use in Washington State (RCW15.58.050 and WAC 16-228-1400). Adjuvants approved for aquatic use by WSDA as of this date include: 800 Plus, Agri-Dex™, AgriSolutions Inergy, Antero-EA, Atmos™, Avor, Bond™, Brandt Magnify, Break-Thru SP 133, Breeze®, Bronc Max™, Bronc® Plus Dry, Bronc Plus Dry-EDT™, Choice Trio, CHS Deppepex, Cide-Kick II M®, Class Act NG™, Competitor™, Cut-Rate™, Cygnet Plus™, Denali-EA™, DestinyHC™, Droplex™, Dyne-Amic™, Enerplex, Fast Break®, Forge, Fraction™, Glacier-EA, Guidance-EA, Hasten-EA™, Interlock™, Kinetic™, Level 7™, LI-700™, Liberate™, MSO Concentrate, MSO Concentrate with LeciTech, One-Ap XL™, Optify L27, Phase, Pro AMS Plus™, Rainier-EA™, Renegade-EA, Sphere 7, Spray-Rite™, Spreader 90, Superb HC™, Syl-Tac-EA™, Tactic™, Trail Blazer, Trapline Pro, Tronic™, Turbulence®, Winfield Solutions Inergy®, Yardage™
- xxi. Nutrient Inactivation Products: aluminum sulfate, sodium aluminate, calcium hydroxide/oxide, and calcium carbonate, lanthanum-modified bentonite clay, and powdered or granulated iron.
- xxii. Marker dyes, shading and water clarification products.

Additional restrictions

Littoral Zone Limitations for Native Nuisance Plants

The Permittee is authorized to apply chemicals to: A percentage of a water body's littoral zone based on the littoral acres of the water body and the size of the water body.

- a. The geographic area where the Permittee intentionally applies chemicals must remain the same for the entire length of the permit coverage up to the maximum percentage of the littoral zone allowed for by water body size.
- b. All untreated littoral areas must include native vegetation from the shore to the edge of the littoral zone where the plants stop growing in deeper water.
- c. The cumulative percentage of the littoral zone where herbicides are authorized to be applied must not exceed the amount allowed below:
 - i. In water bodies up to 15 acres in size, the Permittee is authorized to apply herbicides to no more than 75 percent of the littoral zone.
 - ii. In water bodies over 15 acres and up to 50 acres in size, the Permittee is authorized to apply herbicides to no more than 60 percent of the littoral zone.
 - iii. In water bodies over 50 acres and up to 500 acres in size, the Permittee is authorized to apply herbicides to no more than 50 percent of the littoral zone.

- iv. In water bodies over 500 acres in size, the Permittee is authorized to apply herbicides to no more than 30 percent of the littoral zone.

Shoreline and Emergent Native Nuisance Plants

- a. The Permittee is authorized to apply herbicides to 100 percent of the plants within the right-of-way and on levees and dikes.
- b. The Permittee is authorized to apply herbicides to no more than 40 percent of native vegetation on shorelines, roadsides and ditches, but is authorized to apply herbicide to 100 percent of any noxious or quarantine-listed weeds.

Note: Ecology recognizes that discharge permits can regulate the specific areas where a Permittee discharges (or intentionally applies) a chemical. A discharge permit cannot regulate or control the extent of dispersion because it varies depending on environmental conditions. Dispersion means that sometimes the treatment affects more area or less area than anticipated.

Algae Control

- a. The Permittee may intentionally apply algacides to filamentous green algae provided the treated areas do not exceed the maximum amount of littoral zone allowed according to the waterbody's size.
- b. The Permittee may intentionally apply algacides to the entire waterbody or sections of the waterbody, as needed, when cyanobacteria or other potentially toxic or environmentally harmful algae species are in the waterbody.
- c. Restrictions for algacide treatments are as follows:
- d. If a Permittee must conduct a full-waterbody pesticide (or algacide) treatment for algae:
 - i. Permittees must take at minimum one dissolved oxygen measurement approximately 24 hours prior to the planned algae treatment. Multiple dissolved oxygen measurements may be taken at the same time of day as the planned treatment to determine an average dissolved oxygen level for the waterbody.
 - ii. Permittees must measure dissolved oxygen after the algacide treatment is complete and the after effects of the treatment are occurring. The post-treatment dissolved oxygen level must not be lower than 0.2 mg/L below the mandatory single pre-treatment measurement or the average of multiple pre-treatment measurements.
- e. If water quality or algae conditions are such that a Permittee believes a full-waterbody treatment may cause a lethal drop in dissolved oxygen, or the Permittee is unable to conduct pre-treatment dissolved oxygen monitoring, the Permittee may use the following alternative treatment methods:
 - i. The Permittee may use only phosphorous sequestration products in the algae treatment.
 - ii. The Permittee may treat up to one third of the lake each week with algacide

Citation: Chapter 90.48 RCW, RCW 90.48.010, RCW 90.48.520, RCW 90.52.040, RCW 90.54.020, RCW 90.48.080, RCW 90.48.260, RCW 77.04.012, RCW 77.04.020, RCW 77.12.047, Chapter 173-201A WAC, WAC 173-201A-020, WAC 173-201A-320, WAC 173-201A-240, WAC 173-201A-300, WAC 173-201A-410(4)(c)(i and ii), Chapter 173-226 WAC, WAC 173-226-070

Justification: Restrictions on the active ingredients allowed, as well as when and how pesticide products may be applied are technology-based requirements which Ecology has determined are necessary to meet the state requirement for the use of all known, available and reasonable methods of prevention, control and treatment (AKART).

C. Aquatic noxious weed control

For Shoreline and emergent noxious weeds in both freshwater and marine locations where pesticides are not directly discharged to water. Permittees are authorized to make herbicide applications only for the control of state listed noxious weeds and weeds on the WSDA quarantine list that are found in aquatic environments. Noxious weed means those species of plants listed as noxious class A, B, and C weeds by the Washington State Noxious Weed Control Board in accordance with Chapter 17.10 RCW. WSDA maintains the quarantine list in accordance with Chapter 17.24 RCW. The following pesticides are approved for use on state listed noxious weeds:

- i. Aminopyralid
- ii. Bispyribac-sodium
- iii. Carfentrazone-ethyl
- iv. 2,4-D, Amine Formulation
- v. Florpyrauxifen-benzyl
- vi. Flumioxazin
- vii. Glyphosate
- viii. Imazamox
- ix. Imazapyr
- x. Penoxsulam
- xi. Topramezone
- xii. Triclopyr TEA
- xiii. Adjuvants – Washington State Department of Agriculture (WSDA) registers adjuvants for aquatic use in Washington State (RCW15.58.050 and WAC 16-228-1400). Adjuvants approved for aquatic use by WSDA as of this date include: 800 Plus, Agri-Dex™, AgriSolutions Inergy, Antero-EA, Atmos™, Avor, Bond™, Brandt Magnify, Break-Thru SP 133, Breeze®, Bronc Max™, Bronc® Plus Dry, Bronc Plus Dry-EDT™, Choice Trio, CHS Deppex, Cide-Kick II M®, Class Act NG™, Competitor™, Cut-Rate™, Cygnet Plus™, Denali-EA™, DestinyHC™, Droplex™, Dyne-Amic™, Enerplex, Fast Break®, Forge, Fraction™, Glacier-EA, Guidance-EA, Hasten-EA™, Interlock™, Kinetic™, Level 7™, LI-700™, Liberate™, MSO Concentrate, MSO Concentrate with LeciTech, One-Ap XL™, Optify L27, Phase, Pro AMS Plus™, Rainier-EA™, Renegade-EA, Sphere 7, Spray-

Rite™, Spreader 90, Superb HC™, Syl-Tac-EA™, Tactic™, Trail Blazer, Trapline Pro, Tronic™, Turbulence®, Winfield Solutions Inergy®, Yardage™

xiv. Marker Dyes

Citation: Chapter 90.48 RCW, RCW 90.48.010, RCW 90.48.520, RCW 90.48.445, RCW 90.52.040, RCW 90.54.020, RCW 90.48.080, RCW 90.48.260, Chapter 173-201A WAC, WAC 173-201A-020, WAC 173-201A-300, WAC 173-201A-240, WAC 173-201A-410(4)(c)(i and ii), Chapter 173-226 WAC, WAC 173-226-070, WAC 173-201A-320

Justification: Restrictions on the active ingredients allowed, as well as when and how pesticide products may be applied are technology-based requirements which Ecology has determined are necessary to meet the state requirement for the use of all known, available and reasonable methods of prevention, control and treatment (AKART).

D. *Zostera japonica* Management

Treatments of the non-native eelgrass *Zostera japonica* are limited to commercial clam beds in Willapa Bay and one application per year of imazamox with a treatment window of April 15 to June 30th. The Permittee must maintain a 10m buffer inside the parcel boundary where imazamox is not applied. The Permittee must not use adjuvants for *Zostera japonica* treatments.

Citation: Chapter 90.48 RCW, RCW 90.48.010, RCW 90.48.520, RCW 90.52.040, RCW 90.54.020, RCW 90.48.080, RCW 90.48.260, Chapter 173-201A WAC, WAC 173-201A-020, WAC 173-201A-300, WAC 173-201A-240, WAC 173-201A-410(4)(c)(i and ii), Chapter 173-226 WAC, WAC 173-226-070, WAC 173-201A-320

Justification: Restrictions on the active ingredients allowed, as well as when and how pesticide products may be applied are technology-based requirements which Ecology has determined are necessary to meet the state requirement for the use of all known, available and reasonable methods of prevention, control and treatment (AKART).

E. Irrigation system aquatic weed control

The following conditions on irrigation system aquatic weed control treatments are in place to protect aquatic life, sensitive or threatened species, and water quality standards in Washington State. Please refer to the Washington State Irrigation System Aquatic Weed Control General Permit and Fact Sheet for more information (<https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Aquatic-pesticide-permits/Irrigation-system-aquatic-weed-control>).

- i. Copper (dissolved)
- ii. Acrolein
- iii. Endothall, Dipotassium salt (e.g., Aquathol)
- iv. Endothall, Monopotassium salt (e.g., Hydrothol)

- v. Xylene
- vi. Sodium Carbonate Peroxyhydrate
- vii. Fluridone
- viii. Imazapyr

Additional restrictions

The Permittee must not use adjuvants for irrigation system aquatic weed control.

Wherever treated water from a pesticide application eventually flows to a point of compliance, the Permittee must ensure that the pesticide concentrations do not exceed the following limits at the point of compliance:

Parameter Maximum instantaneous concentration

- Copper (dissolved) 25 µg/l
- Acrolein 21 µg/l
- Dipotassium Salt of Endothall (such as Cascade) 5.0 mg/l (acid equivalent)
- Mono (N,N-Dimethyl Alkylamine) Salt of Endothall (such as Teton) 0.050 mg/l (equal to 50 ug/l) (acid equivalent) at any time and 0.2 mg/l (equal to 200 ug/l) (acid equivalent), subject to timing windows (Condition 7).
- Xylene 5.1 mg/l

The maximum instantaneous concentration means the highest allowable discharge at any time. The point of compliance means the location where water treated with pesticides enters surface water bodies that existed prior to the creation of reclamation and irrigation projects.

Citation: Chapter 90.48 RCW, RCW 90.48.010, RCW 90.48.520, RCW 90.52.040, RCW 90.54.020, RCW 90.48.080, RCW 90.48.260, RCW 77.04.012, RCW 77.04.020, RCW 77.12.047, Chapter 173-201A WAC, WAC 173-201A-020, WAC 173-201A-320, WAC 173-201A-240, WAC 173-201A-300, WAC 173-201A-410(4)(c)(i and ii), Chapter 173-226 WAC, WAC 173-226-070.

Justification: Restrictions on the active ingredients allowed, as well as when and how pesticide products may be applied are technology-based requirements which Ecology has determined are necessary to meet the state requirement for the use of all known, available and reasonable methods of prevention, control and treatment (AKART).

F. Fish management

- i. Rotenone
- ii. Potassium Permanganate (KMnO₄) is the only chemical permitted to neutralize rotenone treated waters when necessary to prevent damage to non-targeted organisms and maintain water quality outside of the area intended for rotenone treatment.

Additional restrictions

All treatments conducted for fisheries management must follow: *Planning and Standard Operating Procedures for Use of Rotenone in Fish Management*; Finlayson, B., R. Schnick, D. Skaar, J. Anderson, L. Demong, D. Duffield, W. Horton, and J. Steinkjer. 2010. American Fisheries Society, Bethesda, MD.

Citation: Chapter 90.48 RCW, RCW 90.48.010, RCW 90.48.520, RCW 90.52.040, RCW 90.54.020, RCW 90.48.080, RCW 90.48.260, Chapter 173-201A WAC, WAC 173-201A-020, WAC 173-201A-300, WAC 173-201A-240, WAC 173-201A-410(4)(c)(i and ii), Chapter 173-226 WAC, WAC 173-226-070, WAC 173-201A-320

Justification: Restrictions on the active ingredients allowed, as well as when and how pesticide products may be applied are technology-based requirements which Ecology has determined are necessary to meet the state requirement for the use of all known, available and reasonable methods of prevention, control and treatment (AKART).

G. Invasive moth control

The following conditions on invasive moth control treatments are in place to protect aquatic life, sensitive or threatened species, and water quality standards in Washington State. Please refer to the Invasive Moth Control Permit and Fact Sheet for more information (<https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Aquatic-pesticide-permits/Invasive-moth-control>).

- i. *Bacillus thuringiensis* var. *kurstaki* based pesticides
- ii. Gypsy moth pheromone based pesticides (e.g., disparlure)
- iii. Adjuvants authorized to be used for invasive moth control include latex-based adjuvants.

Additional restrictions

A period of three days between treatments is required prior to re-treating the previously treated area. The Permittee must notify WA State Department of Fish and Wildlife (WDFW) with regard to state listed threatened, endangered, and candidate species, on a site specific basis, 60 days prior to treatment. WDFW habitat biologist contact information can be found here:

<https://wdfw.maps.arcgis.com/apps/MapJournal/index.html?appid=48699252565749d1b7e16b3e34422271>.

Citation: Chapter 90.48 RCW, RCW 90.48.010, RCW 90.48.520, RCW 90.52.040, RCW 90.54.020, RCW 90.48.080, RCW 90.48.260, Chapter 173-201A WAC, WAC 173-201A-020, WAC 173-201A-300, WAC 173-201A-410(4)(c)(i and ii), WAC 173-201A-240, Chapter 173-226 WAC, WAC 173-226-070, WAC 173-201A-320

Justification: Restrictions on the active ingredients allowed, as well as when and how pesticide products may be applied are technology-based requirements which Ecology has determined are necessary to meet the state requirement for the use of all known, available and reasonable methods of prevention, control and treatment (AKART).

H. Forest canopy pest control

The following conditions on forest canopy pest control treatments are in place to protect aquatic life, sensitive or threatened species, and water quality standards in Washington State.

Permittees performing forest canopy pest control must follow the requirements in Title 76 RCW (Forests and Forest Products).

Citation: Title 76 RCW

Justification: *Restrictions on the active ingredients allowed, as well as when and how pesticide products may be applied are technology-based requirements which Ecology has determined are necessary to meet the state requirement for the use of all known, available and reasonable methods of prevention, control and treatment (AKART).*

7. Public notice

Ecology includes public notification and treatment area postings in the pesticide permits it issues. These requirements are intended to protect the public health, welfare, and enjoyment of waters of the state by reducing the public's exposure to pesticides.

The Permittee must publish a public notice in a newspaper of general circulation in the area where treatment will occur, prior to the first application of the season. The newspaper notice must contain:

- A. Proposed schedule of treatments for the season.
- B. Common name of the water body to be treated.
- C. Chemicals to be used.
- D. Any water use restrictions or precautions
- E. Contact information of the Permittee and any agency staff involved.
- F. Ecology's regional twenty-four (24) hour Emergency number.
- G. Notification shall explain the project and explain that any treated areas will be flagged no more than 48 hours before treatment begins.

Shoreline Signs

The Permittee must use Ecology posting templates contained in each pesticide permit to post the treated areas, where feasible, to 400 feet beyond the boundary of the treatment area. Sign postings must occur at all reasonable points of public access to the treatment area. Signs posting of treatment areas must be posted before treatment commences, but no more than 48 hours before the start of treatment. Signs must also be posted in the commonly spoken language of the area where treatment is occurring. Remove all old signs at the end of the water use restriction.

Shoreline posting templates can be found on the permit websites:

Aquatic Invasive Species Management:

<https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Aquatic-pesticide-permits/Aquatic-invasive-species-management>

Aquatic Mosquito Control:

<https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Aquatic-pesticide-permits/Aquatic-mosquito-control>

Aquatic Noxious Weed Control:

<https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Aquatic-pesticide-permits/Aquatic-noxious-weed-control>

Aquatic Plant and Algae Management:

<https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Aquatic-pesticide-permits/Aquatic-plant-algae-management>

Fisheries Management:

<https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Aquatic-pesticide-permits/Fisheries-resource-management>

Citation: RCW 90.48.010, WAC 173-226-130

Justification: *The public must be notified of chemical treatments in order to be aware of possible dangers of exposure. The public must be given the opportunity to comment on proposed projects or permits which may impact the beneficial uses of waterbodies, the environment, and aquatic life.*

8. Water rights

Ecology includes notification of treatments and requirements for replacement water for individuals who withdraw potable water or that have a valid water right or claim for irrigation water or livestock in the pesticide permits it issues.

Permittees are required to provide, as detailed below, an alternative or replacement water source when treatment will affect potable water, irrigation water, or livestock watering, uses in order to comply with water rights laws and regulations.

- a. The Permittees must notify individuals who withdraw potable water, or that have a valid water right or claim for irrigation water or livestock watering prior to treatment with any chemical that restricts the use of the water for these purposes.
- b. Notification must be made to all those with a valid water claim or right in the treatment area, as well as in any applicable setback distances on the product label from the edge of the treatment area whose water use may be affected by the pending treatment.
 - i. Initial notification must occur prior any chemical treatment occurring during the year, and must occur each year treatment takes place.
- c. If requested by an affected water user, the Permittees must provide at least two weeks advance notice of pending treatments with potable water, irrigation water, or livestock watering, restrictions.
- d. If requested by an affected water user(s), the Permittees, at their own expense, must provide a replacement/alternative water supply until the water at the point of withdrawal tests at or below the concentration specified for the active ingredient(s) on the product label for the restricted water use. The replacement/alternative water supply must allow the requestor to use water as they are accustomed to (e.g. be able to run their kitchen faucet and obtain potable

water), however the requestor may agree to lesser water provision (e.g. bottled water for a vacation house) if they choose.

- i. Permittees are responsible for reaching an agreement with the requestor (affected water user) to determine how the replacement/alternative water supply will be provided.

Citations: 90.48.010 RCW, 173-201A-200(3) WAC

Justification: *These requirements are intended to protect the public health, welfare, and enjoyment of waters of the state by reducing the public's exposure to pesticides and preventing the improper discharge of pesticides.*

9. Treatment timing windows

Permittees must consult the WDFW timing windows prior to conducting any treatments. The Permittees must comply with WDFW timing windows to protect sensitive, threatened, or endangered species, and priority habitats and species such as salmon, steelhead, and bull trout. WDFW timing window are located at:

<https://www.arcgis.com/apps/MapSeries/index.html?appid=34533b2dd4f84932b5fd1a46e494bde6>.

Timing windows may apply to either fish or non-fish species. Permittees must refer to the WDFW timing window map for more information about waterbody-specific timing windows before conducting any treatments.

Some treatment timing windows require consultation with WDFW prior to beginning any treatment. Permittees must follow WDFW guidance and treatment limits on waterbodies where the treatment timing window requires consultation.

Timing windows do not apply to:

- a. Treatments conducted for emergent and shoreline plants.
- b. Treatments conducted for roadside, ditch bank and flood control structure plant control.
- c. Nonnative fish such as bass, walleye, sunfish, perch, carp, or catfish. At their discretion, Permittees may choose to comply with the nonnative fish timing windows noted in the WDFW timing table.

Modified Timing Window Requests

Contact the regional WDFW biologist to develop a new timing window if the default window will not provide for adequate treatment. WDFW biologist contact information may be found through the Areas of Responsibilities Map Tool:

<https://www.arcgis.com/apps/MapJournal/index.html?appid=48699252565749d1b7e16b3e34422271>.

Chemicals subject to WDFW Timing Windows for Salmon, steelhead, bull trout and other priority species:

- A. 2,4-D Amine
- B. 2,4-D Ester
- C. Carfentrazone-ethyl
- D. Copper

- E. Chlorine
- F. Diquat
- G. Endothall Dipotassium Salt
- H. Endothall Mono Salt
- I. Flumioxazin
- J. Potassium Permanganate
- K. Rotenone

For all other chemicals allowed for use under Aquatic Plant and Algae Management and Aquatic Invasive Species Control check the WDFW Timing Window map tool for other priority species (non-fish) work windows.

For irrigation systems the WDFW timing windows only apply to endothall mono salt.

Citations: *RCW 77.15.120, RCW 77.15.130(1), RCW 77.04.012, Washington Department of Fish and Wildlife's Priority Habitat and Species Program is a science-based agency initiative used as part of AKART (173-201A-020 WAC)*

Justification: *Ecology must condition its permits to follow WDFW mandates to protect sensitive species and habitats.*

10. Rare plants

For treatments using herbicides or algaecides the Permittee must use Washington Department of Natural Resources (WDNR) Natural Heritage Program database to determine if sensitive, threatened, or endangered (rare) plants are present in the proposed treatment area in order to protect rare plants. If a rare plant does occur in or around the waterbody, the Permittee must survey for the rare plant and mitigate for impacts. The rare plant database is currently located at <https://www.dnr.wa.gov/NHPwetlandviewer>. If a rare plant is found in the treatment area the Permittee must consult with WDNR Natural Heritage Program staff for appropriate mitigations (<http://www.dnr.wa.gov/natural-heritage-program>) prior to beginning application of pesticides.

Citations: *Chapter 79.70 RCW, 79.70.010 RCW, 79.70.020 RCW, 79.70.030 RCW*

Justification: *Ecology must condition its permits to follow WDFW mandates to protect sensitive species and habitats.*

Your right to appeal

You have a right to appeal this Certification/Consistency Determination to the Pollution Control Hearings Board (PCHB) within 30 days of the date of receipt of this Certification/Consistency Determination. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal you must do all of the following within 30 days of the date of receipt of this Certification/Consistency Determination:

- File your appeal and a copy of this Certification/Consistency Determination with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.

- Serve a copy of your appeal and this Certification/Consistency Determination on Ecology in paper form - by mail or in person. (See addresses below.) Email is not accepted. You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

Street Address	Mailing Address
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503	Department of Ecology Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608
Pollution Control Hearings Board 1111 Israel RD SW, Suite 301 Tumwater, WA 98501	Pollution Control Hearings Board PO Box 40903 Olympia, WA 98504-0903

C. Timing Requirements

1. This Certification is valid until the expiration date including any administrative extension or termination date of the Pesticide General NPDES Permit.

D. Notification Requirements

1. The Federal Agency shall enforce and the Project Proponent must comply with all the reporting and notification conditions of the Pesticide General NPDES permit, including conditions of the permit requiring the Project Proponent to report to Ecology.

YOUR RIGHT TO APPEAL

You have a right to appeal this Order to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt of this Order. The appeal process is governed by chapter 43.21B RCW and chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal you must do all of the following within 30 days of the date of receipt of this Order:

- File your appeal and a copy of this Order with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.
- Serve a copy of your appeal and this Order on Ecology in paper form - by mail or in person (see addresses below). E-mail is not accepted.

You must also comply with other applicable requirements in chapter 43.21B RCW and chapter 371-08 WAC.

ADDRESS AND LOCATION INFORMATION

Street Addresses	Mailing Addresses
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503	Department of Ecology Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608
Pollution Control Hearings Board 1111 Israel RD SW STE 301 Tumwater, WA 98501	Pollution Control Hearings Board PO Box 40903 Olympia, WA 98504-0903

CONTACT INFORMATION

Please direct all questions about this Order to:

Danielle Edelman
Department of Ecology
P.O. Box 47600
Olympia, WA 98503-7600
(360) 407-7118
danielle.edelman@ecy.wa.gov

MORE INFORMATION

- **Pollution Control Hearings Board Website**
<http://www.eluho.wa.gov/Board/PCHB>
- **Chapter 43.21B RCW - Environmental and Land Use Hearings Office – Pollution Control Hearings Board**
<http://apps.leg.wa.gov/RCW/default.aspx?cite=43.21B>
- **Chapter 371-08 WAC – Practice And Procedure**
<http://apps.leg.wa.gov/WAC/default.aspx?cite=371-08>
- **Chapter 34.05 RCW – Administrative Procedure Act**
<http://apps.leg.wa.gov/RCW/default.aspx?cite=34.05>
- **Chapter 90.48 RCW – Water Pollution Control**
<http://apps.leg.wa.gov/RCW/default.aspx?cite=90.48>
- **Chapter 173.204 Washington Administrative Code (WAC) Sediment Management Standards**
<https://apps.leg.wa.gov/WAC/default.aspx?cite=173-204>
- **Chapter 173-200 WAC Water Quality Standards for Ground Waters of the State of Washington**
<https://apps.leg.wa.gov/WAC/default.aspx?cite=173-200>
- **Chapter 173-201A WAC Water Quality Standards for Surface Waters of the State of Washington**
<https://apps.leg.wa.gov/WAC/default.aspx?cite=173-201A>

SIGNATURE



May 25, 2021

Jeff Killelea
Program Development Services Section Manager
Department of Ecology
State of Washington

DATE