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STATE OF UTAH  
DIVISION OF WATER QUALITY  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
SALT LAKE CITY, UTAH

**FACT SHEET/STATEMENT OF BASIS (FSSOB)**

UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM (UPDES),  
PESTICIDE GENERAL PERMIT  
UPDES Permit Number UTG170000

**BACKGROUND**

The Utah Division of Water Quality (DWQ), Utah Pollutant Discharge Elimination System (UPDES) Pesticide General Permit covers discharges of residues from the application of pesticides to surface waters of the state that are not on Indian lands. Discharges of biological pesticides, biochemical pesticides, and chemical pesticides (as defined in Utah Administrative Code R317-8-9.2) to surface waters of the state are covered under this permit, upon permit compliance. In addition, the discharge of residues from the application of biological agents and chemicals, as defined in the permit, to surface waters of the state are covered under this permit.

The U.S. Environmental Protection Agency (EPA) has traditionally regulated the application of pesticides, even those applied on or near waters of the United States, through the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). On November 27, 2006, EPA issued a rule that FIFRA would continue to cover pesticide applications to surface waters. Subsequent to Pesticide Rule issuance, the rule was taken to court where the United States 6<sup>th</sup> Circuit Court ruled that pesticide discharges to surface waters must be covered under the National Pollutant Discharge Elimination System (NPDES) Program. On October 31, 2011, EPA issued the first federal Pesticide General Permit (PGP) which has been renewed every five years since 2011. Also, by October 2011, DWQ issued state administrative code changes and the UPDES general permit to meet the federal pesticide permit requirements. The UPDES pesticide permit has also been renewed every five years.

At this time, a new permit must be issued by DWQ to replace the expiring pesticide permit which was set to terminate on November 30, 2021. The permit will be issued after December 1, 2021 due to recent additions to permit which are summarized in this FSSOB. Since the permit will be issued after the renewal date of December 1st, the permit will be administratively extended until the new permit is issued. The renewal of the Pesticide General Permit will be effective after a 30-day public notice period and any permit changes. Those pesticide operators that submit notice of intents (NOIs), pay their annual permit fees, and are in compliance with the permit will be covered for pesticide discharges under the renewed Pesticide General Permit, UPDES Permit Number UTG170000, once issued.

## **APPROPRIATENESS OF THE GENERAL PERMIT**

Utah Administrative Code (UAC) R317-8-2.5 authorizes the issuance of general permits for categories of point sources within Utah for discharge of pollutants to state waters. In addition, R317-8-9 specifically addresses the requirements of the state pesticide permit. The purpose of this permit is to protect water quality and maintain water quality subsequent to pesticide applications to surface water. This permit is intended for operators who are governmental, quasi-governmental, companies or corporations, contractors, private applicators, or individuals who apply pesticides to surface water. The permit covers the pesticide use patterns of: 1) mosquito and other insect control; 2) weeds and plant control; 3) nuisance animal control; 4) declared emergency pest situation treatments; and 5) algae, cyanobacteria, pathogen control, and nutrient abatement. Other types of pesticide treatments are not covered the permit.

## **WHO MUST OBTAIN COVERAGE UNDER THE GENERAL PESTICIDE APPLICATION PERMIT**

Operators involved in the application of pesticides, biological agents, or chemicals to surface waters of the state that leaves a residue must obtain the permit. Operators may include those who employ any person to apply pesticides, organizations or individuals who apply pesticides themselves, entities who are involved in the financing of pesticide applications, or anyone who makes decisions regarding the application of pesticides on, in, or over surface waters of the state. An operator generally includes both: 1) the entity with control over the financing for, or the decision to perform pesticide applications, including the ability to modify those decisions, and 2) the entity with day-to-day operational control of, or who performs activities (e.g., the application of pesticides) that are necessary to ensure compliance with the permit. As such, more than one entity may require permit coverage for the application of pesticide.

The permit is required for governmental and quasi-governmental operators for applications of any size to surface waters of the state. Non-governmental and private operators must meet at least the small applicator size threshold, as shown in Table 3 (except for Group 5 Utah Lake treatments), for the respective pest control activity to require the permit. A new operator group (Group 5) was added to the permit for operators that apply to Utah Lake to treat algae, cyanobacteria, pathogens, or nutrients with nutrient abatement products. The permit is required for pesticide treatments of any size to Utah Lake under Group 5.

Operators that discharge pesticides to surface waters of the state must meet the requirements below in order to require the permit, these are:

1. The operator must belong in one or more of the operator groups.
  - a. Group 1. Operators that apply to Category 1 Waters.
  - b. Group 2. Operators who are government, quasi-government, or special service districts.
  - c. Group 3. Other operators such as contractors, private companies or individuals, duck hunting clubs, etc.
  - d. Group 4. Operators involved in a declared pest emergency situation.
  - e. Group 5. Operators that apply pesticides to Utah Lake to treat algae, cyanobacteria, pathogens, or nutrients.

2. The operator must meet one of the treatment thresholds to require submission of a notice of intent (NOI).
  - a. Group 1. DWQ will notify the operator when an NOI is required.
  - b. Group 2. Pesticide treatment of any area/amount to surface waters of the state.
  - c. Group 3. Operators must meet an application threshold in Table 3.
  - d. Group 4. The treatment must be for a declared pest emergency situation and meet the NOI threshold treatment area for the respective operator group, whether group 1, 2 or 3.
  - e. Group 5. Any size of treatment to Utah Lake requires a permit.
3. The operator must apply pesticides according to one or more of the permit's pesticide use patterns.
  - a. Mosquito and other insect pest control.
  - b. Weeds and plant control.
  - c. Aquatic animal nuisance control.
  - d. Forest canopy pest control.
  - e. Algae, cyanobacteria, pathogen, or nutrient abatement.

An individual UPDES permit may be needed when the pesticide permit does not adequately protect water quality during a specific treatment situation or the operator fails to comply with the pesticide permit. In addition, operators may voluntarily seek coverage under an individual UPDES permit from DWQ.

## **OPERATOR GROUPS**

### 1. Operator Group 1, Operators Discharging into Category 1 Waters of the State

Operators that will discharge pesticides to surface waters of the state that have been determined by the Water Quality Board to be Category 1 Waters (Tier 3 Waters), must submit a NOI which details the area where applications will occur. Only pesticide applications which are made to restore or maintain water quality or to protect public health or the environment are covered by this permit. Projects covered under this permit are allowed in Category 1 Waters when contamination will be temporary and limited, and result only during actual activity, and best management practices will be employed to minimize pollution effects. DWQ will notify operators in group 1 when this permit is required and when the notice of intent is due.

### 2. Operator Group 2, Government, Quasi-Government Agencies, or Special Service Districts

Operators that are government agencies (federal, state, county, local), quasi-government organizations, special service districts, mosquito abatement districts, irrigation districts, etc. that discharge pesticides to waters of the state must submit a NOI regardless of the size of the treatment area or amount of pesticide applied. NOIs are due as described in "When to Submit a NOI" below.

3. Operator Group 3, Non-government and Other Operators

Other operators engaged in the discharge of pesticides such as corporations, companies, pest control companies, contractors, canal companies, duck hunting clubs, individuals, etc. whose applications exceed the thresholds detailed in Table 3 below, must submit an NOI to obtain coverage under the permit. Details for the submission of NOIs are found in “When to Submit a NOI” and Table 2 below.

4. Operator Group 4, Operators Involved in a “Declared Pest Emergency Situation”

All operators that otherwise aren’t required to obtain an NOI, but become involved in a declared pest emergency situation, and will exceed any of the NOI treatment thresholds in the respective operator group, may apply pesticides to address the emergency but are required to submit an NOI a maximum of 30 days after the commencement of the discharge.

A declared pest emergency situation is an event defined by a public declaration by a federal agency, state, or local government of a pest problem determined to require control through application of a pesticide beginning less than ten days after identification of the need for pest control. This public declaration may be based on a significant risk to human health, or significant economic loss, or significant risk to endangered or threatened species, beneficial organisms, or the environment.

5. Operator Group 5, Operators that Apply Pesticides, Biological Agents, or Chemicals to Utah Lake

This group consists of all operators that apply to Utah Lake to treat algae, cyanobacteria, pathogens, or nutrient abatement. Any size of treatment area requires the permit. NOIs are due as described in “When to Submit a NOI” below.

## **APPLICATIONS TO SURFACE WATERS OF THE STATE**

All pesticides and products used statewide for treatments under the use patterns, must be EPA-approved products, except for biological agents and chemicals (as defined) applied to Utah Lake. Utah Lake is the only waterbody that may receive biological agent or chemical treatments. Utah lake treatments can be EPA-approved pesticides, or biological agents or chemicals approved by the Director. Any biological agent or chemical approved by the Director for Utah Lake is on a case-by-case basis. Below are the definitions of the products that are covered by the permit,

“Biological Agents” - only for Group 5 operators with the control activities in Part I.C.1.(e), means fungi, bacteria, viruses, microbes, algae, plants or plant material, hormones, enzymes, genetically modified or irradiated organisms, or living organisms, other than biological control agents, used to control or minimize a targeted pest or water parameter that are not EPA-registered pesticides.

"Biological Pesticides" (also called biopesticides) - include microbial pesticides, biochemical pesticides and plant-incorporated protectants (PIP). Microbial pesticide means a microbial agent

intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant, or desiccant, that (1) is a eucaryotic microorganism including, but not limited to, protozoa, algae, and fungi; (2) is a procaryotic microorganism, including, but not limited to, Eubacteria and Archaeobacteria; or (3) is a parasitically replicating microscopic element, including but not limited to, viruses (40 CFR 158.2100(b)). Biochemical pesticide mean a pesticide that (1) is a naturally-occurring substance or structurally-similar and functionally identical to a naturally-occurring substance; (2) has a history of exposure to humans and the environment demonstrating minimal toxicity, or in the case of a synthetically-derived biochemical pesticides, is equivalent to a naturally-occurring substance that has such a history; and (3) has a non-toxic mode of action to the target pest(s) (40 CFR 158.2000(a)(1)). Plant-incorporated protectant means a pesticidal substance that is intended to be produced and used in a living plant, or in the produce thereof, and the genetic material necessary for production of such a pesticidal substance. It also includes any inert ingredient contained in the plant, or produce thereof (40 CFR 174.3).

“Chemical” - only for Group 5 operators with the control activities in Part I.C.1.(e), means oxidizers, metals, gas, elements, inorganic compounds, salts, bases, acids, organic compounds, plant derivatives, surfactants, buffers, and enzymes that are not EPA-registered pesticides used to control or minimize a targeted pest or water parameter problem.

"Chemical Pesticides" - all pesticides not otherwise classified as biological pesticides.

“Pesticide” - means (1) any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, (2) any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant, and (3) any nitrogen stabilizer, except that the term “pesticide” shall not include any article, or that is a “new animal drug” within the meaning of section 201(w) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 321(w)), that has been determined by the Secretary of Health and Human Services not to be a new animal drug by a regulation establishing conditions of use for the article, or that is an animal feed within the meaning of section 201(x) of such Act (21 U.S.C. 321(x)) bearing or containing a new animal drug. The term “pesticide” does not include liquid chemical sterilant products (including any sterilant or subordinate disinfectant claims on such products) for use on a critical or semi-critical device, as defined in section 201 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C' 321). For purposes of the preceding sentence, the term “critical device” includes any device that introduced directly into the human body, either into or in contact with the bloodstream or normally sterile areas of the body and the term “semi-critical device” includes any device that contacts intact mucous membranes but which does not ordinarily penetrate the blood barrier or otherwise enter normally sterile areas of the body (FIFRA Section 2(u)).

The term “pesticide” applies to insecticides, herbicides, fungicides, rodenticides, and various other substances used to control pests. The definition encompasses all uses of pesticides authorized under FIFRA including uses authorized under sections 3 (registration), 5 (experimental use permits), 18 (emergency exemptions), 24(c) (special local needs registrations), and 25(b) (exemptions from FIFRA).

Note: drugs used to control diseases of humans or animals (such as livestock and pets) are not considered pesticides; such drugs are regulated by the Food and Drug Administration. Fertilizers, nutrients, and other substances used to promote plant survival and health are not considered plant growth regulators and thus are not pesticides. Biological control agents, except for certain

microorganisms, are exempted from regulation under FIFRA. (Biological control agents include beneficial predators such as birds or ladybugs that eat insect pests, parasitic wasps, fish, etc.).

This permit uses the term “pesticide” when referring to “the pesticide, as applied.” When referring to the chemical in the pesticide product with pesticidal qualities, the permit and forms use the term “active ingredient.”

### WHEN TO SUBMIT A NOTICE OF INTENT (NOI)

All operators with coverage under the pesticide permit issued on December 1, 2016, that intended to continue coverage under the reissued permit were required to submit their NOI prior to October 1, 2021. For continuing operators or new operators that submit NOIs after October 1, 2021, will have permit coverage when the NOI is approved by DWQ and the appropriate permit fee is received by DWQ.

**Table 1. NOI Deadlines for New Operators in Group 2 and 5 (Government, and Utah Lake Operators with Activity E. Applications (Part I.C.1.e))**

| Category  | NOI Submittal Deadline                                 | Discharge Authorization Date  |
|---|--|---|
| Group 2 Operators who know or should have reasonably known that they would discharge.     | At least 10 days prior to commencement of discharge.   | No earlier than 10 days after a complete and accurate NOI is mailed and postmarked.     |
| Group 2 Operators who do not know or would not reasonably know that they would discharge. | At least 10 days prior to commencement of discharge.   | No earlier than 10 days after a complete and accurate NOI is mailed and postmarked.     |
| Operators commencing discharge in response to a declared pest emergency situation.        | No later than 30 days after commencement of discharge. | Immediately, for activities conducted in response to declared pest emergency situation. |

**Table 2. NOI Deadlines for New Operators in Groups 3 and 4 (Other Operators and Declared Pest Emergency Situation Operators)**

| Category   | NOI Submittal Deadline                                   | Discharge Authorization Date  |
|--|--|---|
| Group 3 operators who know or should have reasonably known that they would exceed an annual treatment area threshold.  | At least 10 days prior to exceeding an annual threshold. | No earlier than 10 days after a complete and accurate NOI is mailed and postmarked.     |
| Group 3 operators who do not know or would not reasonably know that they would exceed an annual treatment threshold.   | At least 10 days prior to exceeding an annual threshold. | No earlier than 10 days after a complete and accurate NOI is mailed and postmarked.     |
| Group 4 operators commencing discharge in response to a declared pest emergency that will exceed an annual treatment area threshold identified in Table 1 for that year. | No later than 30 days after commencement of discharge.   | Immediately, for activities conducted in response to declared pest emergency situation. |

## TREATMENT THRESHOLDS FOR EACH PESTICIDE USE PATTERN

DWQ will notify operators in Group 1 if a permit is needed. The annual thresholds for Group 2 and 5 operators are pesticide applications of any size. For operators in Group 3, the annual application thresholds are shown in Table 3 below. For Group 4, the operator must meet the NOI threshold treatment area for their respective operator group, whether Group 1, 2 or 3.

**Table 3. NOI Thresholds on an Annual Basis for Operator Groups 3 and 4**

| Pesticide Use  | Annual Threshold   |
|--|--|
| 1. Mosquitoes and Other Insect Pests                       | 6,400 acres of treatment area                                  |
| 2. Weed and Plant Control:                                 |  |
| In Water   | 80 acres of treatment area <sup>1</sup>                        |
| At Water's Edge  | 20 linear miles of treatment area at water's edge <sup>2</sup> |
| 3. Nuisance Animal Control:                                |  |
| In Water   | 80 acres of treatment area <sup>1</sup>                        |
| At Water's Edge  | 20 linear miles of treatment area at water's edge <sup>2</sup> |
| 4. Forest Canopy Pest Control:                             | 6,400 acres of treatment area                                  |
| 5. Algae, Cyanobacteria, Pathogens, or Nutrient Abatement: |  |
| In Water   | 80 acres of treatment area <sup>1</sup>                        |
| At Water's Edge  | 20 linear miles of treatment area at water's edge <sup>2</sup> |

Calculations should include the area of the applications made to: (1) surface waters of the State and (2) conveyances with a hydrologic surface connection to surface waters of the State at the time of pesticide application. For calculating annual treatment area totals, count each pesticide application activity as a separate activity. For example, applying pesticides three times a year to a ten-acre site should be counted as thirty acres of treatment area.

## WHERE TO SUBMIT A NOTICE OF INTENT (NOI)

The notice of intent (NOI), which is the permit application, may be obtained from Appendix A of the permit, or the Division of Water Quality website at: <https://documents.deq.utah.gov/legacy/permits/water-quality/utah-pollutant-discharge-elimination-system/docs/2015/pesticideNOI.pdf>. An NOI and supporting documentation that is timely and complete must be submitted to DWQ in order to obtain the permit. The NOI should be submitted to DWQ through one of the following means:

### Mail

The Utah Division of Water Quality  
 Attn. Pesticide Permit Coordinator  
 PO Box 144870  
 Salt Lake City, UT 84114-4870; or

### Hand Delivered

The Utah Division of Water Quality  
 195 North 1950 West  
 Salt Lake City, UT 84114-4870; or

## Electronic Submissions Portal

<https://deq.utah.gov/water-quality/water-quality-electronic-submissions>

### **ANNUAL PERMIT FEES**

An annual fee will be invoiced around July or August of each year. Invoices will be mailed or emailed with fee payment deadlines. Fees are subject to change year to year upon approval of the Utah Department of Environmental Quality (UDEQ) and the Utah Legislature, the fees haven't increased since 2011. Fees cover permit coverage based on the state's fiscal year, July 1<sup>st</sup> through June 30<sup>th</sup>. The fee amount based on the area of treatment, whether a small, medium, or large applicator.

### **ELIGIBILITY - PESTICIDE USE PATTERN CATEGORIES**

Only operators that have pesticide applications to surface waters of the state from one or more of the five use patterns will be authorized to have discharges to surface waters under this permit. Other types of applications will not be covered by this permit. The five use patterns are: 1) Mosquito and Other Insect Pests; 2) Weed and Plant Control; 3) Nuisance Animal Control; 4) Forest Canopy Pest Control; and 5) Algae, Cyanobacteria, Pathogen, or Nutrient Abatement. The five use patterns are summarized below:

1. Mosquito and Other Insect Pests

Applications to control pests that threaten public health and have nuisance concerns. Examples of possible pests to be controlled are mosquitoes and black flies.

2. Weed and Plant Control

Applications to control plants, algae, and cyanobacteria that are invasive, nuisance, or toxic. These applications include pesticide applications to ditches and canals if it is a surface water of the state.

3. Nuisance Animal Control

Applications to control invasive and nuisance animals. These treatments may include applications to control nuisance fish, lampreys, and mollusks.

4. Forest Canopy Pest Control

Applications to a forest canopy to control pests or pathogens where a portion of the pesticide will unavoidably be applied over waters and the pesticide is deposited or contacts surface waters of the state.

5. Algae, Cyanobacteria, Pathogen, and Nutrient Abatement

Applications to control algae, harmful algal blooms, toxins, or to bind phosphorus or nitrogen to reduce nutrients that increase algal or cyanobacteria outbreaks.



Any pest control research and development project as defined in Part V.A.32 of the permit, must fall under one of the five pesticide use patterns to be covered under this permit. Any pest control research project that is not covered under one of the use patterns may be required to obtain another UPDES permit issued by DWQ.

This permit does not provide coverage for any discharges from a pesticide application to surface waters of the state if the water is identified as impaired by that pesticide or its degradates. For purposes of this permit, impaired waters are those that have been identified pursuant to Section 303(d) of the CWA as not meeting applicable state water quality standards. Impaired waters for the purposes of this permit include both waters with DWQ approved or EPA-established total maximum daily loads (TMDLs) and waters for which DWQ has not yet approved or established a TMDL.

### **TECHNOLOGY-BASED EFFLUENT LIMITATIONS**

To meet the effluent limitations all operators must implement site-specific control measures that optimize discharges of pesticides, biological agents, or chemicals to surface waters of the state. All operators must do the following to protect water quality.

1. Use the lowest effective amount of product and application frequency needed to control pest and reduce potential for pest resistance.
2. Perform regular maintenance on equipment and facilities for proper operation.
3. Comply with the Narrative Water Quality Standard. The Narrative Water Quality Standards in R317-2-7.2 states that: "It shall be unlawful, and a violation of this permit, for the permittee to discharge or place any waste or other substance in such a way as will be or may become offensive such as unnatural deposits, floating debris, oil, scum or other nuisances such as color, odor or taste, or cause conditions which produce undesirable life or which produce objectionable tastes in aquatic edible organisms; or result in concentrations or combinations of substances which produce undesirable physiological responses in desirable resident fish, or other desirable aquatic life, or undesirable human health effects, as determined by bioassay or other tests performed in accordance with standard procedures; or determined by biological criteria in Subsection R317-2-7.3."
4. Comply with any applicable Numeric Water Quality in (R317-2-14 and R317-2-6);
5. Follow FIFRA application rates and other label instructions when applying pesticides or other EPA-approved products for control of target species.
6. Follow guidance provided by the Director, when biological agents or chemicals not approved by EPA are applied. These products must be approved by the Director prior to use in Utah Lake. These Director-approved products can only be applied to Utah lake by Group 5 operators.
7. Protect threatened and endangered species and their habit, including, but not limited to, the June Sucker (*Chasmistes liorus*).

## **INTEGRATED PEST MANAGEMENT (IPMs) PRACTICES**

IPMs are applicable to any entity that is required to submit an NOI, including any pesticide applicator hired by such entity or any other employee, contractor, subcontractor or other agent must use integrated pest management practices. IPMs include: 1) Identification of the problem; 2) Review and Select pest management options; and 3) Determine proper pesticide use and treatments.

## **WATER QUALITY BASED EFFLUENT LIMITATIONS AND CORRECTIVE ACTIONS**

Discharges must be controlled as necessary to meet applicable numeric and narrative state water quality standards. If at any time operators become aware, or DWQ determines, that a discharge violates applicable water quality standards, operators must take corrective action as required in Part III.D.

## **PESTICIDE DISCHARGE MANAGEMENT PLAN REQUIREMENTS**

If operators are required to submit an NOI, they must prepare a PDMP for the pest management area. Operators must develop and retain a PDMP consistent with their respective NOI deadline in Part I.D. The PDMP documents how operators will implement the effluent limitations of the permit, including the evaluation and selection of control measures to meet those effluent limitations and minimize discharges. In the PDMP, operators may incorporate by reference any procedures or plans in other documents needed to meet the requirements of this permit. If operators rely upon other documents to describe how they will comply with the effluent limitations in this permit, such as a pre-existing integrated pest management (IPM) plan, operators must attach to the PDMP, a copy of any portions of any documents that are used to document the implementation of the effluent limitations. All operators must implement control measures to satisfy the effluent limitations.

PDMPs are developed to document and manage the following: 1) the pesticide discharge management team information; 2) pest management area description; 3) control measures description; 4) schedules and procedures pertaining to control measures used to comply with the effluent limitations; and 5) documentation to support eligibility considerations under other state laws. In addition, the application rate and frequency, spill prevention, pesticide application equipment, pest surveillance, and assessing environmental conditions pertaining to other actions necessary to minimize discharges are to be included in the PDMP. The PDMP must be kept up-to-date and modified whenever necessary to meet the effluent limitations in the permit. If on-the-ground practices are different than practices and procedures in the PDMP, the PDMP must be updated.

The PDMP must include the following elements:

1. PDMP Team

Operators must identify all the persons by name that compose the team as well as each person's individual responsibilities, including:

- a. Person(s) responsible for managing pests in relation to the pest management area;
- b. Person(s) responsible for developing and revising the PDMP;
- c. Person(s) responsible for developing, revising, and implementing corrective actions and other effluent limitation requirements; and
- d. Person(s) responsible for pesticide applications. If the pesticide applicator is unknown at the time of plan development, indicate whether or not a for-hire applicator will be used and when you anticipate that you will identify the applicator.

## 2. Pest Management Area Description

Operators must document the following:

- a. Pest problem description. Document a description of the pest problem at your pest management area, including identification of the target pest(s), source of the pest problem, and source of data used to identify the problem in Parts I.G.1-4.
- b. Action threshold(s). Describe the action threshold(s) for your pest management area, including a description of how they were determined.
- c. General location map. In the plan, include a general location map (e.g., USGS quadrangle map, a portion of a city or county map, or other map) that identifies the geographic boundaries of the area to which the plan applies and location of the surface waters of the state; and
- d. Water quality standards. Document the water quality standards applicable to waters to which there may be a discharge, including the list of pesticide(s) or any degradates for which the water is impaired.

## 3. Control Measure Description

Operators must document their evaluation of control measures for the pest management area. Operators must document the control measures that will be implemented to comply with the effluent limitations. Include in the description the active ingredient(s) evaluated.

## 4. Schedules and Procedures

Operators must document the following schedules and procedures in the PDMP:

- a. Pertaining to Control Measures Used to Comply with the Effluent Limitations in Part I.F. The following must be documented in the PDMP:
  - i. Application Rate and Frequency. Procedures for determining the lowest effective amount of pesticide product per application and the optimum frequency of pesticide applications necessary to control the target pest, consistent with reducing the potential for development of pest resistance;
  - ii. Spill Prevention. Procedures and schedule of maintenance activities for preventing spills and leaks of pesticides associated with the application of pesticides covered under this permit.
  - iii. Pesticide Application Equipment. Schedules and procedures for maintaining the pesticide application equipment in proper operating condition, including calibrating, cleaning, and repairing the equipment.

- iv. Pest Surveillance. Procedures and methods for conducting pre-application pest surveillance.
  - v. Assessing Environmental Conditions. Procedures and methods for assessing environmental conditions in the treatment area.
- b. Pertaining to Other Actions Necessary to Minimize Discharges. The following must be documented in the PDMP:
- i. Spill Response Procedures – At a minimum, operators must have:
    - a) 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.
    - b) Procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies.
  - ii. Incident Response Procedures – At a minimum, operators must have:
    - a) Procedures for responding to any incident resulting from pesticide applications;
    - b) Procedures for notification of the incident, both internal to the agency/organization and external. Contact information for state/federal permitting agency, nearest emergency medical facility, and nearest hazardous chemical responder must be in locations that are readily accessible and available.
  - iii. Pesticide Monitoring Schedules and Procedures – Operators must document procedures for monitoring including:
    - a) The process for determining the location of any monitoring;
    - b) A schedule for monitoring;
    - c) The person (or position) responsible for conducting monitoring; and
    - d) Procedures for documenting any observed impacts to non-target organisms resulting from the pesticide discharge.

## 5. Signature Requirement and Modifications

Operators must sign, date and certify the PDMP in accordance with Part IV.D of the permit. Operators must modify their PDMP whenever necessary to address any of the triggering conditions for corrective action in Part III.D, or when a change in pest control activities significantly changes the type or quantity of pollutants discharged. Changes to the PDMP must be made before the next pesticide application that results in a discharge, if practicable, or if not, within 90 days thereafter. The revised PDMP must be signed and dated in accordance with Part IV.D. Operators must review the PDMP at a minimum once

per calendar year and whenever necessary to update the pest problem identified and pest management strategies evaluated for the pest management area.

Operators must retain a copy of the current PDMP, along with all supporting maps and documents, at the address provided in the NOI. The PDMP and all supporting documents must be readily available, upon request, and copies of any of these documents provided, upon request to DWQ and EPA.

## **MONITORING REQUIREMENTS**

### Site and Treatment Monitoring

All operators must monitor the amount of pesticide applied to ensure that they are using the lowest amount to effectively control the pest, consistent with reducing the potential for development of pest resistance. Operators must also monitor the pesticide application activities to ensure operators are performing regular maintenance activities and to ensure that application equipment is in proper operating condition to reduce the potential for leaks, spills, or other unintended discharge of pesticides to surface waters of the state. Additionally, operators must monitor their pesticide application activities to ensure that the application equipment is in proper operating condition by adhering to any manufacturer's conditions and industry practices, and by calibrating, cleaning, and repairing equipment on a regular basis.

### Visual Monitoring Requirements for all Operators

All operators covered under this permit must conduct spot checks in the area to and around where pesticides are applied for possible and observable adverse incidents, as defined in Part V. of the permit, caused by application of pesticides, including but not limited to the unanticipated death or distress of non-target organisms and disruption of wildlife habitat, recreational or municipal water use. Visual assessments of the application site must be performed during any post-application surveillance or efficacy check and during any pesticide application, when considerations for safety and feasibility allow.

### Monitoring Requirements of Operator Group 5

Operators are required to monitor treatments per Tables 4, 5, and 6, as applicable for the product's constituents, below for applications to Utah Lake.

**Table 4. Monitoring Requirements for Group 5**

| <b>Parameter</b>                                | <b>Limit</b>   |
|---|----------------|
| pH, standard units, (for Aluminum Applications) | <b>6.5-9.0</b> |
| Total Hardness, mg/L, (for Copper Applications) | <b>N/A</b>     |

**Table 5. Group 5 Effluent Limits for Metals**

| <b>A. Aluminum (Al), Total Recoverable (Chronic Criteria), for Products with Al Ingredients</b>  |                           |
|--|---------------------------|
|  | <b>Aluminum Limit</b>     |
| Aluminum   | <b>750 ug/L</b>           |
| <i>The effluent limit is 750 micrograms per liter for the chronic criteria when pH is equal to or greater than 7.0 and hardness is equal to or greater than 50 milligrams per liter.</i> |                           |
| <b>B. Copper (Cu), Dissolved, for Products with Cu Ingredients</b>   |                           |
| <b>Hardness Range, mg/L</b>  | <b>Copper Limit, ug/L</b> |
| 0-24   | <b>0.2</b>                |
| 25-49  | <b>2.9</b>                |
| 50-74  | <b>5.2</b>                |
| 75-99  | <b>7.3</b>                |
| 100-124  | <b>9.3</b>                |
| 125-149  | <b>11.3</b>               |
| 150-174  | <b>13.2</b>               |
| 175-199  | <b>15.0</b>               |
| 200-224  | <b>16.9</b>               |
| 225-249  | <b>18.7</b>               |
| 250-274  | <b>20.4</b>               |
| 275-299  | <b>22.1</b>               |
| 300-324  | <b>23.9</b>               |
| 325-349  | <b>25.5</b>               |
| 350-374  | <b>27.2</b>               |
| 375-399  | <b>28.9</b>               |
| 400>400  | <b>30.5</b>               |

**Table 6. Monitoring Frequency for Group 5 Operators**

| <b>Parameter</b>             | <b>Monitoring Frequency</b>  |
|------------------------------|--|
| pH, (for Aluminum)           | Just prior to treatment, 4 hours following treatment.  |
| Total Hardness, (for Copper) | Bi-annually.   |
| Copper                       | Within 24 hours prior to treatment, 4 days following treatment, monthly for two months following the last treatment. |
| Aluminum                     | Within 24 hours prior to treatment, 4 days following treatment, monthly for two months following the last treatment. |

Monitoring Notification Requirement for Group 5

Group 5 operators are required to notify DWQ of a pending treatment five or more days prior to each treatment. Please see Appendix E or <https://deq.utah.gov/water-quality/updes-permitting-program#general-pesticides> for the treatment notification form to be submitted.

Monitoring Report Requirements for Group 5

Operators must submit monitoring reports to DWQ for every month that products are applied to Utah Lake. Monthly reports must be submitted to DWQ by the 20<sup>th</sup> of the month for the previous month of monitoring. Please see Appendix F or <https://deq.utah.gov/water-quality/updes-permitting-program#general-pesticides> for the monitoring report form.

## RECORD KEEPING REQUIREMENTS

Operators must keep written records as required in this permit. These records must be accurate and complete and sufficient to demonstrate operator compliance with the conditions of this permit. Operators can rely on records and documents developed for other obligations, such as requirements under FIFRA, and state or local pesticide programs, provided all requirements of this permit are satisfied.

DWQ recommends that all operators covered under this permit keep records of acres or linear miles treated for all applicable use patterns covered under this general permit. The records should be kept up-to-date to help you determine the annual treatment area during the year. All operators must keep the following records under the permit:

1. A copy of this permit
2. A copy of any adverse incident reports.
3. Rationale for any determination that reporting of an identified adverse incident is not required consistent with allowances.
4. A copy of any corrective action documentation.
5. A copy of any spill or leak or other unpermitted discharge documentation.
6. Copies of the annual reports.
7. Treatment notification forms (Group 5).
8. Monitoring reports (Group 5).
9. A copy of the NOI submitted to DWQ, any correspondence exchanged between the operator and DWQ specific to coverage under this permit, and a copy of the DWQ acknowledgment letter assigning your permit tracking number.
10. The date on which you knew or reasonably should have known that you would exceed an annual treatment area threshold during any year, as identified in Table 1.
11. Surveillance method(s) used, date(s) of surveillance activities, and findings of surveillance.
12. Target pest(s).
13. Pest density prior to pesticide application.
14. Company name and contact information for pesticide applicator.
15. Pesticide application date(s).
16. Description of treatment area, including location and size (acres or linear feet) of treatment area and identification of any waters, either by name or by location, to which you discharged any pesticide(s).
17. Name of each pesticide product used, including the registration number;
18. Quantity of pesticide applied (and specify if quantities are for the pesticide product as packaged or as formulated and applied).
19. Concentration (%) of active ingredient(s) in formulation.
20. For pesticide applications directly to waters, the effective concentration of active ingredient required for control.
21. Any unusual or unexpected effects identified to non-target organisms.
22. Documentation of any equipment cleaning, calibration, and repair (to be kept by pesticide application equipment operator).
23. A copy of the PDMP, including any modifications made to the PDMP during the term of this permit.

24. Records of whether or not visual monitoring was conducted during pesticide application and/or post application and if not, why not, and whether monitoring identified any possible or observable adverse incidents caused by application of pesticides.

All required records must be documented as soon as possible but no later than 14 days following completion of such activity. Operators must retain any records required under this permit for at least five years after the record was collected. Upon request, permit-related records must be made available to DWQ and provide copies of such records if requested.

## REPORTING REQUIREMENTS

The permit requires reporting to DWQ for discharges, adverse incidents, and annual reports as required. In addition, operators must give advance notice to the DWQ of any planned changes in the permitted activity which may result in noncompliance with permit requirements. Where applicable, the following are the reports that must be sent to DWQ:

1. Twenty-Four Hour Reports

For any adverse incidents, spills, and permit non-compliance which may endanger health or the environment must be reported to DWQ. Reports must be provided verbally within 24 hours from the time the operator becomes aware of the circumstances. Operators must notify the DWQ Incident Reporting line at (801) 536-4300, or 24-hour answering service (801) 536-4123 of adverse incidents. Also, a written submission must also be provided within five days of the time you become aware of the circumstances.

Operators also must submit a 24-hour report under this section for any upset, as defined in Part III.L that exceeds any effluent limitation in the permit. DWQ may waive the written report on a case-by-case basis for reports if the verbal report has been received within 24 hours.

2. Five-Day Reports

Within five (5) days of a reportable adverse incident pursuant to Part III.G, operators must provide a written report of the adverse incident to the DWQ. The five-day adverse incident report is in Appendix D of the permit or on DWQ's website at: <https://documents.deq.utah.gov/legacy/permits/water-quality/utah-pollutant-discharge-elimination-system/docs/2016/incident-report.pdf>.

Operators with adverse incidents are required to submit annual reports. The written submission must contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.



### 3. Annual Reports

All large size applicators and operators with adverse incidents, must submit an annual report to DWQ. Table 4 below shows the application threshold areas for a large applicator. All Group 5 operators must submit annual reports regardless of the size of their treatment area.

**Table 7: Large Applicator Thresholds**

| <b>Target</b>   | <b>Area or Distance</b>                |
|---|--|
| Insects and other Pests                                   | 75,000 acres or more                   |
| Weed and Plants   | 300 miles or more<br>300 acres or more |
| Nuisance Animals<br>(undesirable species)                 | 300 miles or more<br>300 acres or more |
| Canopy Spraying   | 100,000 acres or more                  |
| Algae, Cyanobacteria, Pathogens,<br>or Nutrient Abatement | 300 miles or more<br>300 acres or more |

Any operator (of any size treatment area) applying pesticides that reports an adverse incident must submit an annual report to DWQ no later than August 15<sup>th</sup> for the previous fiscal year. Please see Appendix C of the permit for the Annual Report form.

## **SIGNIFICANT CHANGES FROM PREVIOUS PESTICIDE PERMIT**

### Part I.A.3.c.

Operators will need to use EPA's NPDES eReporting Tool (NeT) to submit NOIs and other forms and reports once the tool is available.

### Part I.A.4.

The NOI has been updated to include the new pesticide use pattern in Part I.C.1.e. It was also updated to include Operator Group 5 for Utah Lake applications. NOIs can be submitted to the electronic submission portal: <https://deq.utah.gov/water-quality/water-quality-electronic-submissions>.

### Part I.C.1.b. and e.

C.1.b. was edited to remove algae and pathogens from the use pattern. Algae and pathogens were added to a new use pattern in e. The new use pattern is Algae, Cyanobacteria, Pathogen Control, and Nutrient Abatement. This use pattern clarifies that cyanobacteria is grouped with algae control. Nutrient abatement is a new use for nutrient inactivation and sequestration for algae and cyanobacteria minimization. If nutrient abatement is needed for weed and plant control in C.1.b, then both b. and e, will be the use patterns for plant control with nutrient abatement.

#### Part I.C.2.b.

Only EPA approved pesticides can be used under this permit. However, Group 5 Operators with the use pattern of Part I.C.1.e. can also use biological agents and chemicals, as defined, when approved by the Director. This is to allow greater flexibility in the treatment of algae and cyanobacteria in Utah Lake. This also allows the use of additional nutrient abatement products which may not be EPA approved pesticides, such as aluminum salts. On a case-by-case basis, any EPA unapproved product to be used, must be approved by the Director for use in Utah Lake.

#### Part I.D.1.e.

A new operator group, Group 5, has been added to the permit for all entities that apply to Utah Lake. These operators apply to control algae, cyanobacteria, pathogens, and nutrient availability in the lake.

#### Part I.D.2.c.

Treatments to Utah Lake of any size by Group 5 operators requires the permit.

#### Part I.F.1.f.

Operators are required to follow FIFRA requirements and label instructions and other label instructions. The requirement to follow FIFRA labels is in administrative code, R317-8-9.3(5), this requirement has been added to the permit.

#### Part I.F.1.g.

Any biological agents or chemicals approved by the Director for use in Utah lake, must follow any guidance provided by the Director for product use, area of treatment, amount, or any other guidance provided.

#### Part I.F.1.h.

Operators must protect threatened and endangered species and their habitat in the areas of treatment.

#### Part I.G.5.

Algae, Cyanobacteria, Pathogens, and Nutrient Abatement use patterns were added to the integrated pest management (IPM) practices.

#### Part II.A.3.

Group 5 operators must monitor pH, total hardness, copper, and aluminum, according to Tables 4, 5, and 6, in the permit.

## Part II.B

Group 5 must notify DWQ of a pending treatment five or more days prior to each application. Appendix E includes the notification form.

## Part II.C

Monitoring reports are required by Group 5 operators. The monitoring report form can be found in Appendix F. Later, discharge monitoring reports (DMRs) may be required for sample reporting, once NeTDMR is established for the pesticide permit.

## Part II.D.3.g. and h.

As part of required recordkeeping, treatment notification forms and monitoring reports must be maintained and retained.

## Part II.D.7.a.

Group 5 operators must submit annual reports.

## Part IV.E.3.a.

If required after permit issuance, operators must use NeTDMR to submit sampling results.

## Part V. Definitions and Acronyms

6. The definition of “biological agents” was added to the permit. These are EPA unregistered biological products that the Director approves for use in Utah Lake to treat algae, cyanobacteria, pathogens, and to provide nutrient abatement.

“Biological Agents” – only for Group 5 operators with the control activities in Part I.C.1.(e), means fungi, bacteria, viruses, microbes, algae, plants or plant material, hormones, enzymes, genetically modified or irradiated organisms, or living organisms, other than biological control agents, used to control or minimize a targeted pest or water parameter that are not EPA-registered pesticides.

9. The definition of “chemical” was added. These are chemicals that are approved by the Director for use in Utah Lake to control algae, cyanobacteria, pathogens, or nutrient availability in the water column.

“Chemical” – only for Group 5 operators with the control activities in Part I.C.1.(e), means oxidizers, metals, gases, elements, inorganic compounds, salts, alkaline compounds, bases, acids, organic compounds, plant derivatives, surfactants, buffers, and enzymes that are not EPA-registered pesticides used to control or minimize a targeted pest or water parameter problem.

33. The definition of “pesticide residue” was edited.

"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. Pesticide residue also includes the pesticide or its degradates that persist in the environment, whether it binds or doesn't bind, or reacts or doesn't react, with; soil, sediment, suspended solids, water constituents, non-target organisms, chemicals, or the active ingredients or degradates of other pesticides.

The original definition:

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

### **WEB ADDRESS TO ACCESS PERMIT FORMS AND REPORTS**

Use <https://deq.utah.gov/water-quality/updes-permitting-program#general-pesticides> to access the following permit forms and reports:

1. Notice of Intent (NOI).
2. Notice of Termination (NOT).
3. Annual Report.
4. Adverse Incident Report
5. Treatment Notification Form for Group 5.
6. Monitoring Report.

### **PERMIT PERIOD**

The permit will be effective January 1, 2021 and is effective until November 30, 2026. The annual permit fee as appropriate must be paid each year to retain permit coverage year to year.

### **PUBLIC NOTICE INFORMATION**

**Began:**

**Ended:**

**Public Notice Publications:**

**Public Comment Response Date:**

**Permit Final:**

*The permit and FS/SOB were prepared by Donald Hall, Environmental Scientist, Utah Division of Water Quality on 12/6/21.*