COMMONWEALTH OF VIRGINIA

Department of Environmental Quality

Subject: Guidance Memo No. 21-2003 - **Implementation Guidance for Reissuance of the VPDES General Permit Regulation for Discharges Resulting From the Application of Pesticides to Surface Water (VAG87)**

To: VPDES Water Permitting Managers, VPDES Water Compliance Managers

From: Melanie D. Davenport, Director, Water Permitting Division Melanie D. Davenport

Date: April 28, 2021

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Summary:
This guidance memo replaces Guidance Memo No. 11-2009. On December 13, 2018, the State Water Control Board adopted amendments to the VPDES General Permit Regulation for Discharges Resulting From the Application of Pesticides to Surface Water, 9VAC25-800, which modified General Permit VAG87 as part of the reissuance of this permit. These modifications are effective March 1, 2019. Copies of the amended permit regulation, fact sheet, and general permit can be found for internal staff use on DEQnet.

Electronic Copy:
Once effective, an electronic copy of this guidance will be available on:

- The Virginia Regulatory Town Hall under the Department of Environmental Quality (http://www.townhall.virginia.gov/L/gdocs.cfm?agencynumber=440).

Contact Information:
Please contact Peter Sherman, Office of VPDES Permits, (804) 698-4044 or peter.sherman@deq.virginia.gov with any questions regarding the application of this guidance.

Certification:
As required by Subsection B of § 2.2-4002.1 of the APA, the agency certifies that this guidance document conforms to the definition of a guidance document in § 2.2-4101 of the Code of Virginia.

Disclaimer:

This document is provided as guidance and, as such, sets forth standard operating procedures for the agency. However, it does not mandate any particular method nor does it prohibit any alternative method. If alternative proposals are made, such proposals should be reviewed and accepted or denied based on their technical adequacy and compliance with appropriate laws and regulations.

Effective Date: _____

Initials: _____

Introduction

This guidance memo identifies changes that have been made to General Permit VAG87 during the reissuance process and provides DEQ staff with information regarding implementation of the general permit.

Background

The amendments to the VPDES pesticide general permit regulation (9VAC25-800) were effective March 1, 2019. The prior pesticide general permit was due to expire on December 31, 2018 but coverage was administratively continued under the terms of that permit. The conditions of the expired pesticide general permit continued in force until coverage was granted under a reissued pesticide general permit if the board, through no fault of the operator, does not reissue a pesticide general permit on or before the expiration date of the expiring general permit.

This pesticide general permit addresses discharges of pesticides applied directly to surface waters to control pests, and/or applied to control pests that are present in or over, including near, surface waters. The general permit responds to court ordered requirements[1] for EPA and delegated states to issue NPDES permits for chemical pesticide applications that leave a residue in water and all biological pesticide applications that are made in or over, including near, waters of the United States. This general permit requirement is in addition to existing Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) requirements that are implemented by the Virginia Department of Agriculture and Consumer Services (VDACS).

Following the court ruling, EPA collected and analyzed data on pesticide applications, including labeling requirements, pesticide uses, best management practices employed to minimize the impact of pesticides on water quality, and existing state water quality standards for pesticides. EPA issued its initial NPDES Pesticides General Permit on October 31, 2011 and reissued that general permit on October 31, 2016. DEQ initially issued its pesticide general permit on October 31, 2011, and previously reissued this general permit on January 1, 2014.

Changes to the 2019 General Permit

Other than the effective and termination dates, no substantive changes have been made to the general permit for the 2019 reissuance. Most changes are minor corrections and clarifications. The following are the changes made to the general permit regulation effective March 1, 2019:

- 9VAC25-800-10. Definitions - Deleted "wildlife" in the description of "toxic or adverse effects." EPA made this change in the federal 2016 NPDES pesticide general permit.
- 9VAC25-800-15. Applicability of incorporated references based on the dates that they became effective - Changed the date to July 1, 2018, which will be the latest EPA update prior to issuance of the final permit.
- 9VAC25-800-20. Purpose; delegation of authority; effective date of permit - Revised the effective and expiration date of the permit to be March 1, 2019 and February 29, 2024,

[1] *National Cotton Council of America v. U.S. EPA*, 553 F.3d 927 (6th Cir. 2009).

respectively, to reflect reissuance of the permit regulation and the five-year term specified for VPDES permits. These revised dates are also included in 9VAC25-800-30 and 60.

- 9VAC25-800-30. Authorization to discharge - Where two treatment threshold choices are offered, added "or" between them to clarify that a permittee need only meet one of the applicable thresholds to be subject to pesticide discharge management plan requirements. EPA does this in its 2016 pesticide general permit (note that EPA applies these thresholds for different purposes than the state).
- 9VAC25-800-30. Authorization to discharge - Added language indicating that permit coverage also does not negate any applicable requirements to comply with state wetland program regulations administered by DEQ or the Virginia Marine Resources Commission. The TAC identified instances where there appears to be a lack of understanding that various requirements external to this permit apply to activities that could affect wetlands.
- 9VAC25-800-60. General Permit - Deleted the DEQ Lynchburg office information. That office is closed.
- 9VAC25-800-60. General Permit – With regard to the duty to reapply, removed the requirement to submit a registration statement (no registration statement is required under this general permit). Require an operator wishing to continue coverage under their current pesticide general permit to have coverage under a new permit. (Note that continued coverage under an expired general permit is authorized if, through no fault of the operator, a pesticides general permit is not reissued by the Board before the expiration date of the existing permit – see 9VAC25-800-30 G).
- 9VAC25-800-60. General Permit - Revised the "[T]ransfer of permit coverage" provision to state that permits are not transferable except upon notice to DEQ, and to indicate that coverage under this general permit is automatic where an operator meets eligibility requirements so permit transfer is not anticipated.

Coverages and Restrictions

The effective date of the general permit is March 1, 2019. The expiration date will be February 29, 2024.

The VPDES pesticide general permit addresses operators that discharge biological pesticides or chemical pesticides that leave a residue when the pesticide application is for one of the following five use patterns:

1. Mosquito and other flying insect pest control - To control public health, nuisance and other flying insect pests that develop or are present during a portion of their life cycle in or above standing or flowing water. Public health, nuisance and other flying insect pests in this use category include but are not limited to mosquitoes and black flies. All mosquito pest control activity using pesticide is considered to result in discharges to surface waters.

2. Weed and algae pest control - To control weeds, algae and pathogens that are pests in surface waters. Nuisance weeds include, but are not limited to cattails, hydrilla and watermeal. (NOTE: If an operator is spraying a ditch with water in it to keep the ditch clear of weeds the operator falls into this use pattern regardless of how near the operator is to the ditch or what

types of weeds are in the ditch. If the operator is spraying to clear the ditch itself and the ditch has water in it, the operator must meet the conditions of this permit.) Nuisance algae include, but are not limited to, blue green algae that can cause taste and odor problems in drinking water. Nuisance pathogens are disease-producing agents including, but not limited to, a virus, bacterium or other microorganism. The decision of whether a ditch is considered a surface water is usually made after its hydrological connection to a defined surface water is verified. However, for the purposes of this regulation, it is recommended to include every ditch in acreage calculations and consider yourself covered under this permit if you apply pesticides to ditches.

3. Animal pest control - To control animal pests in surface waters. Animal pests in this use category include, but are not limited to, fish (e.g., snakehead) and zebra mussels.

4. Forest canopy pest control - Application of a pesticide to the forest canopy to control the population of a pest species (e.g., insect or pathogen) where to target pests effectively a portion of the pesticide unavoidably will be applied over and deposited to surface water. Forest canopy pest control includes aerial mature forest canopy pest control where streams and other small creeks cannot be seen. Juvenile aerial canopy spraying can normally be done in such a way as to avoid surface waters and does not need coverage under the permit or do not need to be included in acreage calculations. Spraying forest canopy from the ground (rather than aerially) may or may not reach surface waters and may not need coverage under this permit or be included in annual treatment area thresholds. The permittee must determine if this type of forest canopy pest control ground spraying will or will not reach surface waters.

5. Intrusive vegetation pest control - Control of vegetation along roads, ditches, canals, waterways and utility rights of way where to target the intrusive pests effectively, a portion of the pesticide unavoidably will be applied over and deposited to surface water. This includes utility facilities such as pump stations, plants and electric substations.

The first four use patterns described above reflect the use pattern categories in U.S. EPA's NPDES Pesticide General Permit. The intrusive vegetation pest control use pattern is included in this VPDES pesticide general permit to ensure that the permit provides coverage for pesticide applications to areas where utility transmission and distribution lines are located and where such application (often aerial) would unavoidably reach surface waters.

The use of products such as pond dyes[2] and algistats (e.g., alum and ferric applications) can be covered under this general permit if the product constitutes a pesticide and it is used for a covered pesticide use. If a product makes a pesticidal claim, it is required to be registered as a pesticide with VDACS, which oversees the use of two types of pesticide products: 1) products registered as pesticides with EPA, which also must be registered with VDACS; and 2) products that are exempt from federal registration, but must be registered in the state (annual registration). If the product is not a registered pesticide in Virginia, then the use of the product could place the owner in violation of the State Water Control law: VA Code section 62.1-44.5. Specifically, paragraph three of the law addresses the alteration of "physical, chemical or biological properties" of state waters without a permit.

[2] Additional requirements in VA Code 62.1-44.5 and 9VAC25-260-20 may also be applicable to pond dye use.

The use of hydrogen peroxide in water is allowable. The "Hydrogen peroxide (Hydrogen dioxide) (000595) Fact Sheet" published by the EPA Office of Pesticide clearly states that if users follow label directions, no risks to the environment are expected from use of pesticide products containing hydrogen peroxide because 1) the substance readily decomposes to water and oxygen gas, leaving no residue; and 2) it is effective at low concentrations where no toxic effects are expected. However, if the product is a registered pesticide in Virginia, it is covered under this general permit if it falls under one of the five use categories. If the product is not a registered pesticide in Virginia, then application of the product is not eligible for coverage under this general permit.

Under the pesticide general permit, discharges resulting from the application of pesticides are not authorized where:

1. The operator is required to obtain an individual VPDES permit in accordance with 9VAC25-31-170 B 3 of the VPDES Permit Regulation.

2. The discharge would violate the antidegradation policy stated in 9VAC25-260-30 of the Virginia Water Quality Standards. Discharges resulting from the application of pesticides are temporary and allowable in exceptional waters (see 9VAC25-260-30 A 3 (b) (3)).

3. The operator is proposing a discharge from a pesticide application to surface waters that have been identified as impaired by that pesticide or its degradates. Impaired waters include both impaired waters with board-adopted, EPA-approved or EPA-imposed TMDLs, and impaired waters for which a TMDL has not yet been approved, established, or imposed. If the proposed discharge would not be eligible for coverage under this permit because the surface water is listed as impaired for that specific pesticide, but the applicant has evidence that shows the water is no longer impaired, the applicant may submit this information to the board and request that coverage be allowed under this permit.

This pesticide general permit does not cover terrestrial pesticide application or spray drift from terrestrial pesticide application, irrigation return flow and agricultural stormwater runoff. Terrestrial applications should not enter surface water because of restrictions provided under FIFRA, and therefore, do not require coverage under this permit. Return flows from irrigated agriculture and agricultural stormwater runoff are specifically exempted from discharge permitting under the Clean Water Act.

Coverage under this VPDES pesticide general permit does not relieve any operator of the responsibility to comply with any other applicable federal, state, or local statute, ordinance, or regulation. For example, this permit does not negate the requirements under FIFRA and its implementing regulations to use registered pesticides consistent with the product's labeling. It also does not negate the requirement to fully comply with applicable state wetland program requirements administered by DEQ and the Virginia Marine Resources Commission.

Registration for the 2019 Issuance

Operators are not required to submit a registration statement to apply for coverage under this VPDES general permit for discharges resulting from the application of pesticides to surface waters (9VAC25-31-170 B 2 e). Since there is no registration requirement, there is no fee. Permittees may obtain a copy of the general permit on the agency web site.

If there is a need to access information about potential operators covered by this general permit, the Virginia Department of Agriculture and Consumer Services (VDACS) maintains a database with persons or businesses operating in Virginia that sell, store, distribute, mix, apply or recommend for use, pesticides. These persons or businesses are required to obtain a valid pesticide business license in accordance with 2VAC5-680. These persons or businesses are also required to demonstrate knowledge of pesticide laws and regulations, potential hazards of pesticides to man and the environment and safe distribution, use, and disposal of pesticides. Furthermore, the VDACS also certifies commercial applicators, registered technicians and private applicators. Certified applicators must submit an application indicating contact information and use subcategory for which they wish to be certified (e.g., aquatic, forest canopy pest control, etc.). Commercial applicators must maintain records that contain the location, time, pest treated, pesticide and amount used. A list of pesticide business licensees representative of registrants (NOI submitters) can be found at VDACS Virginia Licensed Pesticide Businesses.

Anti-backsliding

The effluent limitations in this general permit are not being changed as part of this reissuance. Thus, anti-backsliding restrictions do not apply to this action.

Antidegradation

Antidegradation was considered in the reissuance of the general permit. Coverage under the general permit is not allowed if it would result in a violation of the antidegradation policy. However, under all circumstances a pesticide application and resulting discharge are considered 'temporary' and not in violation of the antidegradation policy (including in exceptional waters). In fact, the pesticide general permit regulation at 9VAC25-800-30 D 2 states that discharges resulting from the application of pesticides are temporary and allowable in exceptional waters (referencing the antidegradation policy at 9VAC25-260-30 A 3 (b) (3)).

Issuing Coverage under the General Permit

All eligible operators are automatically covered under the pesticide general permit. An operator is defined as any person involved in the application of a pesticide that results in a discharge to surface waters that meets either or both of the following two criteria:

1. The person has control over the financing for or the decision to perform pesticide applications that result in discharges, including the ability to modify those decisions; or

2. The person who performs the application of a pesticide or who has day-to-day control of the application (e.g., they are authorized to direct workers to carry out those activities that result in discharges to surface waters).

Therefore, there may be two operators responsible for implementation of the permit since the financier or decision maker (e.g., homeowners association; locality hiring a contractor; etc.) may not be the person actually applying the pesticide (i.e., the person having day-to-day control of meeting the terms of the permit). Both parties need to understand and be responsible for the parts of the permit that apply to them. The bottom line is that any and all operators covered under this pesticide general permit are still responsible, jointly and severally, for any violation of shared responsibilities that may occur, though the Department may consider this division of responsibilities when determining the appropriate enforcement response to a violation.

Entities such as subcontractors or employees of an operator (e.g., employees of a pesticide application business) are not operators. Similarly, you are likely not an operator if, for example, you own the land, but the activities are being performed outside of your control (e.g., a public entity is spraying for mosquitoes over your property).

General Permit Limits and Special Conditions

The general permit regulation is largely consistent with EPA's pesticide general permit. However, some aspects of EPA's general permit have been adjusted for Virginia users for clarification, flexibility, ease of implementation and to promote consistency with existing state pesticide regulatory programs.

The general permit sets narrative limitations in the form of best management practices to minimize pesticide discharges to surface waters. These best management practices are implemented via the use of integrated pest management practices and good equipment maintenance. Monitoring requirements are primarily visual with procedures and schedules for equipment maintenance.

Special conditions address corrective action (revise pest management measures to address releases or inspection findings, meet technology-based effluent limits and water quality standards, or address an adverse incident), adverse incident documentation and reporting, reportable spills and leaks, recordkeeping and annual reporting, and DEQ contact information.

CEDS/ECM

There are no Comprehensive Environmental Database System (CEDS) requirements or permit numbers associated with this pesticide general permit. Given that registration statements, discharge monitoring reports (DMRs), and regular reports are not required, there is limited paperwork required under this general permit. If any annual reports or correspondence related to the VPDES pesticide general permit are received, copy central office on the documentation and it will be filed under the Pesticide General Permit (PGP) regulatory development file in the Enterprise Content Management System (ECM). Twenty-four hour notifications and five-day reports should managed in a similar manner. This guidance is not intended to establish or change ECM requirements for Pollution Response Program (PReP) or enforcement activities.

Compliance Reporting

The pesticide general permit does not contain numerical effluent limitations; therefore, there are no DMRs or monthly reporting requirements. There are only reporting requirements in the case of a spill, leak or adverse incident.

Spills/Leaks/Other Releases
The operator must report to DEQ in the event of a spill, leak or other release of a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 117, or 302 as soon as the operator has knowledge of the release. Within five days of the spill, leak, or other unauthorized discharge triggering notification the operator shall submit a written report to the DEQ regional office. The report shall contain the following information:

1. A description of the nature and location of the spill, leak, or discharge;
2. The cause of the spill, leak, or discharge;
3. The date on which the spill, leak, or discharge occurred;
4. The length of time that the spill, leak, or discharge continued;
5. The volume of the spill, leak, or discharge;
6. If the discharge is continuing, how long it is expected to continue and what the expected total volume of the discharge will be;
7. A summary of corrective action taken or to be taken including date initiated and date completed or expected to be completed; and
8. Any steps planned or taken to prevent recurrence of such a spill, leak, or other discharge, including notice of whether Pesticide Discharge Management Plan (PDMP) modifications are required as a result of the spill or leak.

Discharges reportable to the Department under the immediate reporting requirements of other regulations are exempted from this requirement. The Board may waive the written report on a case-by-case basis for reports of noncompliance if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

Adverse Incidents
The operator is also subject to requirements to notify the appropriate DEQ regional office in the event of an adverse incident that occurs from applying pesticides on or over surface waters. An adverse incident is defined as an incident that the operator observes upon inspection or of which otherwise becomes aware, in which there is evidence that:

1. A person or non-target organism has likely been exposed to a pesticide residue; and
2. The person or non-target organism suffered a toxic or adverse effect.

The phrase "toxic or adverse effects" includes effects that occur within surface waters on non-target plants, fish, or wildlife that are unusual or unexpected as a result of exposure to a pesticide residue and may include any of the following:

1. Distressed or dead juvenile and small fishes;
2. Washed up or floating fish;

3. Fish swimming abnormally or erratically;
4. Fish lying lethargically at water surface or in shallow water;
5. Fish that are listless or nonresponsive to disturbance;
6. Stunting, wilting, or desiccation of non-target submerged or emergent aquatic plants; and
7. Other dead or visibly distressed non-target aquatic or semi-aquatic organisms (amphibians, turtles, invertebrates, etc.).

The spraying (exposure) of non-target organisms is only an 'adverse incident' if the non-target organism suffered an unusual or unexpected toxic effect.

Any adverse effects to humans (e.g., skin rashes), or domesticated animals (e.g., vomiting, lethargy) that occur either directly or indirectly from a discharge to surface waters that are temporally and spatially related to exposure to a pesticide residue are required to be reported.

If the operator observes or is otherwise made aware of an adverse incident that may have resulted from a discharge from the operator's pesticide application, the operator must immediately notify the DEQ regional office. This notification must be made by telephone within 24 hours of when the operator becomes aware of the adverse incident and must include at least the following information:

1. The caller's name and telephone number;
2. Operator's name and mailing address;
3. The name and telephone number of a contact person if different than the person providing the 24-hour notice;
4. How and when the operator became aware of the adverse incident;
5. Description of the location of the adverse incident;
6. Description of the adverse incident identified and the EPA pesticide registration number for each product that was applied in the area of the adverse incident; and
7. Description of any steps the operator has taken or will take to correct, repair, remedy, cleanup, or otherwise address any adverse effects.

If the operator is unable to notify the Department within 24 hours, notification shall be made as soon as possible and the rationale for why the notification was not possible within 24 hours shall be provided.

Reporting of adverse incidents is not required under this permit in the following situations:

1. The operator is aware of facts that clearly establish that the adverse incident was not related to toxic effects or exposure from the pesticide application.
2. The operator has been notified in writing by the board that the reporting requirement has been waived for this incident or category of incidents.
3. The operator receives notification of an adverse incident but that notification and supporting information are clearly erroneous.
4. An adverse incident occurs to pests that are similar in kind to pests identified as potential targets.

Within five days of a reportable adverse incident, the operator must provide a written report of the adverse incident to the DEQ regional office that includes at least the following information:

1. Information that was provided with the 24 hours notification;
2. Date and time the operator contacted DEQ notifying the department of the adverse incident, and whom the operator spoke with at DEQ, and any instructions the operator received from DEQ;
3. Location of incident, including the names of any waters affected and appearance of those waters (sheen, color, clarity, etc.);
4. A description of the circumstances of the adverse incident including species affected, estimated number of individuals, and approximate size of dead or distressed organisms;
5. Magnitude and scope of the affected area (e.g., aquatic square area or total stream distance affected);
6. Pesticide application rate, intended use site, method of application, and name of pesticide product, description of pesticide ingredients, and EPA registration number;
7. Description of the habitat and the circumstances under which the adverse incident occurred (including any available ambient water data for pesticides applied);
8. If laboratory tests were performed, indicate what tests were performed, and when, and provide a summary of the test results within five days after they become available;
9. If applicable, explain why it is believed the adverse incident could not have been caused by exposure to the pesticide;
10. Actions to be taken to prevent recurrence of adverse incidents; and
11. Signed and dated in accordance with the signature requirements in Part II G of the permit.

The operator shall report adverse incidents even for those instances when the pesticide labeling states that adverse effects may occur.

In addition to the 24-hour and 5-day written reports for adverse incidents, the operator is required to submit an annual adverse incident report summary due on February 10 of the following year in the event of an adverse incident. The annual report will contain:

1. Operator's name;
2. Contact person name, title, email address (where available), and phone number;
3. A summary report of all adverse incidents that occurred during the previous calendar year; and
4. A summary of any corrective actions, including spill responses, in response to adverse incidents, and the rationale for such actions.

No annual reports are necessary if there are no adverse incidents during the year. Historically, there have been very few adverse incidents resulting from pesticide applications. Therefore, 24-hour, 5-day and annual reports will be rare. The report should be submitted to the regional office water compliance manager.

Threatened and Endangered Species or Critical Habitat Adverse Incident

In addition to the reporting of adverse incidents to the DEQ regional office, the operator has additional reporting requirements to the Virginia Department of Game and Inland Fisheries, National Marine Fisheries Service, U.S. Fish and Wildlife Service and Virginia Department of Agriculture and Consumer Services when a threatened or endangered species or critical habitat is affected. The agency that the operator is required to contact depends on the species affected. The VPDES pesticide general permit fact sheet contains a list of species, critical habitat and links to the agency web sites that contain this information.

Pollution Response Program (PReP)

The Pollution Response Program (PREP) may receive a pollution incident report related to any pesticide application and will respond as generally described in GUIDANCE DOCUMENT: PREP-2017-01 Pollution Response Program – Base Manual. The PReP staff will need to make a judgment of whether or not the incident is related to any of the following pesticide use patterns requiring coverage under the General Permit:

1. Mosquito and other flying insect pest control
2. Weed and algae pest control
3. Animal pest control
4. Forest canopy pest control
5. Intrusive vegetation pest control.

Where it appears that the pesticide is discharged to surface water for one or more of the five use categories above a VPDES pesticide general permit is required. Pollution incidents involving such applications will be entered into the CEDS PReP module and assigned to the regional office water compliance manager to determine if a follow up inspection is needed. A follow up inspection should be conducted by water compliance staff in the case of an adverse incident (see adverse incident section above) to ensure the conditions of the permit are met (e.g. PDMP is in place if applicable).

Under the pesticide general permit adverse incidents must be reported by the operator.[3] Any 5-day written report received by PReP should also be forwarded to the water compliance auditor. Events and documentation related to the pollution incident (e.g., 24-hour notification, the five-day letter, should be entered into the CEDS PREP module and uploaded to ECM under the PREP series.

Additionally, the regional office water compliance manager should contact VDACS Office of Pesticide Services enforcement supervisor (804-371-6560) to notify them of the adverse incident and to let VDACS know if we are following up with an inspection to determine compliance with the pesticide general permit.

If a fish kill has occurred that appears related to the reported incident, PReP should follow the fish kill procedures contained in the PReP manual.

[3] The updated reporting webpage is at: https://www.deq.virginia.gov/get-involved/pollution-response/report-pollution.

Inspections

The water compliance inspector will follow-up at the place of business or contact location and check to see that the proper records are in place. These records must be accurate, complete, and sufficient to demonstrate compliance with the conditions of this permit. The operator 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. The inspector will look for the following records:

1. A copy of any adverse incident reports.
2. The operator's rationale for any determination that reporting of an identified adverse incident is not required consistent with allowances identified in Part I D 2 b of the permit.
3. Any corrective action documentation per Part I D 2 of the permit.
4. Operators exceeding the annual thresholds must also maintain a PDMP (see below).

In addition, any operator applying pesticides (a pesticide applicator) and exceeding the annual treatment area thresholds used for PDMP requirements (9VAC800-30 C, Table 1) must also maintain a record of each pesticide applied. This applies to both general use and restricted use pesticides. The records should be assembled no later than 30 days following the completion of any pesticide application and are retained for at least three years. These records shall contain the following:

1. Name, address, and telephone number of customer and address or location, if different, of site of application;
2. Name and VDACS certification number of the person making the application or certification number of the supervising certified applicator;
3. Day, month, and year of application;
4. Type of plants, crop, animals, or sites treated and principal pests to be controlled;
5. Acreage, area, or number of plants or animals treated;
6. Brand name or common product name;
7. EPA registration number;
8. Amount of pesticide concentrate and amount of diluting used, by weight or volume, in mixture applied; and
9. Type of application equipment used.

The operator is required to make available to the inspector all records kept under this permit upon request and provide copies of such records, upon request.

Following the records review the inspector may determine that it is appropriate to inspect the incident site to document the extent of environmental damage and permit noncompliance.

Recordkeeping

Pesticide applicators are required to keep certain records that mirror recordkeeping required by the Virginia Board of Agriculture and Consumer Services. Reporting to DEQ is done in the event of a spill or leak or an adverse incident.

Pesticide Discharge Management Plan (PDMP)

Any operator applying pesticides and exceeding the annual treatment area thresholds[4] must prepare a PDMP for the pest management area. The plan must be kept up-to-date even if discharges subsequently fall below the annual treatment area thresholds during the term of the permit. The operator who knows they will exceed the annual treatment area thresholds shall develop a PDMP prior to the first pesticide application covered under the permit. Operators who do not know until after commencement of discharge that they will exceed an annual treatment area threshold for that year must have a PDMP prior to exceeding an annual treatment area threshold.

Operators commencing discharge in response to a declared pest emergency situation as defined in 9VAC25-800-10 that will cause the operator to exceed an annual treatment area threshold must have a PDMP no later than 90 days after responding to declared pest emergency situation.

The PDMP documents how the operator will implement the effluent limitations in Parts I A 1 and I A 2 of the permit, including the evaluation and selection of control measures to meet those effluent limitations and minimize discharges. In the PDMP, the operator may incorporate by reference any procedures or plans in other documents that meet the requirements of this permit. If other documents are relied upon by the operator to describe how compliance with the effluent limitations in this permit will be achieved, such as a pre-existing integrated pest management (IPM) plan, a copy of any portions of any documents that are being used to document the implementation of the effluent limitations shall be attached to the PDMP. The control measures implemented must be documented and the documentation must be kept up to date.

The PDMP must include the following elements:

1. Pesticide discharge management team.
2. Problem identification.
    a. Pest problem description.
    b. Actions thresholds.
    c. General location map.
3. Integrated pest management options evaluation.
4. Response procedures.
    a. Spill response procedures.
    b. Adverse incident response procedures.

[4] Annual (calendar year is recommended) treatment area thresholds established in 9VAC25-800-30 C: 6,400 acres for mosquito, flying insect, and forest canopy pest control; 80 acres or 20 linear miles for weed and algae, and animal pest control; and 6400 acres or 20 linear miles for intrusive vegetation pest control.

5. Signature requirements.

A PDMP template (Attachment D) is also available at https://www.deq.virginia.gov/permits-regulations/permits/water/surface-water-virginia-pollutant-discharge-elimination-system as well at 9VAC25-800 (FORMS) and on DEQnet and can be used to determine compliance with the above items. As part of documenting implementation, the PDMP template also asks for information regarding procedures for meeting permit conditions, including conditions addressing pesticide application rate and frequency, spill prevention, pesticide application equipment and pest surveillance. It further asks for information regarding pesticide monitoring.

The operator should review the PDMP at least once per calendar year and whenever necessary to update pest problems identified or pest management strategies evaluated for the pest management area.

While not required to be submitted to or approved by the Department, interested persons can request a copy of the PDMP through the Department, at which point the Department will likely request the operator to provide a copy of the PDMP. By requiring members of the public to request a copy of the PDMP through the Department, the Department is able to provide the operators with assurance that any confidential business information that may be contained within its PDMP is not released to the public. The Water Control Law states that any information, except effluent data, as to secret formulae, processes, or secret methods shall be kept confidential (§ 62.1-44.21). It is the responsibility of the source providing confidential information, not that of DEQ, to identify the information as confidential and seek DEQ's acquiescence in that designation. DEQ is responsible for keeping designated information confidential. It is the Department's expectation that operators can write the PDMP appropriately without including confidential business information.

Facility Changes and Termination of Coverage

Operators are not required to submit a notice of termination to terminate permit coverage under this VPDES general permit. The transfer of permit coverage does require notice to the Department; however, the transfer of permit coverage under this pesticide general permit is not anticipated since coverage under the permit is automatic where an operator meets the permit eligibility requirements. If there is an ownership change, one permit should be considered 'terminated' and the new owner automatically covered under a new permit. All records required by the permit should be retained by the permittee for three years after the date that coverage under the permit expires.

Other Information

The general permit regulation and PDMP template are available at https://www.deq.virginia.gov/permits-regulations/permits/water/surface-water-virginia-pollutant-discharge-elimination-system and at 9VAC25-800. The general permit regulation, fact sheet, permit pages and PDMP template also are available on the DEQ permits and fees web page and on DEQnet.

Attachments:

A. General Permit Regulation

B. General Permit Pages
C. Fact Sheet
D. Pesticide Discharge Management Plan Template

ATTACHMENT A

GENERAL PERMIT REGULATION

Virginia Pollutant Discharge Elimination System General Permit Regulation for Discharges Resulting From the Application of Pesticides to Surface Waters 9VAC25-800 Sections 10 through 60

Chapter 800

Virginia Pollutant Discharge Elimination System (VPDES) General Permit Regulation for Discharges Resulting from the Application of Pesticides to Surface Waters

9VAC25-800-10. Definitions.

The words and terms used in this chapter shall have the same meanings as given in the State Water Control Law (§ 62.1-44.2 et seq. of the Code of Virginia) and the VPDES Permit Regulation (9VAC25-31), unless the context clearly indicates otherwise, except that for the purposes of this chapter:

"Action threshold" means the point at which pest populations or environmental conditions necessitate that pest control action be taken based on economic, human health, aesthetic, or other effects. An action threshold may be based on current or past environmental factors that are or have been demonstrated to be conducive to pest emergence or growth, as well as past or current pest presence. Action thresholds are those conditions that indicate both the need for control actions and the proper timing of such actions.

"Active ingredient" means any substance (or group of structurally similar substances if specified by the federal Environmental Protection Agency (EPA) that will prevent, destroy, repel, or mitigate any pest, or that functions as a plant regulator, desiccant, or defoliant within the meaning of § 2(a) of the Federal Insecticide, Fungicide and Rodenticide Act(FIFRA) (40 CFR 152.3). Active ingredient also 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 the production of such a pesticidal substance (40 CFR 174.3).

"Adverse incident" meansan unusual or unexpected incident that the operator observes upon inspection or of which otherwise becomes aware, in which there is evidence that:

1. A person or nontarget organism has likely been exposed to a pesticide residue; and

2. The person or nontarget organism suffered a toxic or adverse effect.

The phrase "toxic or adverse effects" includes effects that occur within surface waters on nontarget plants, fish, or wildlife that are unusual or unexpected (e.g., effects are to organisms not described on the pesticide product labels or not expected to be present) as a result of exposure to a pesticide residue and may include:

1. Distressed or dead juvenile and small fishes;

2. Washed up or floating fish;

3. Fish swimming abnormally or erratically;

4. Fish lying lethargically at water surface or in shallow water;

5. Fish that are listless or nonresponsive to disturbance;

6. Stunting, wilting, or desiccation of nontarget submerged or emergent aquatic plants; and

7. Other dead or visibly distressed nontarget aquatic or semi-aquatic organisms (amphibians, turtles, invertebrates, etc.).

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

"Biological control" means organisms that can be introduced to sites, such as herbivores, predators, parasites, and hyperparasites.

"Biological pesticides" or "biopesticides" includes microbial pesticides, biochemical pesticides, and plant-incorporated protectants (PIP).

1. "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:

   a. Is a eukaryotic microorganism, including protozoa, algae, and fungi;

   b. Is a prokaryotic microorganism, including Eubacteria and Archaebacteria; or

   c. Is a parasitically replicating microscopic element, including viruses.

2. "Biochemical pesticide"means a pesticide that:

   a. Is a naturally occurring substance or structurally similar and functionally identical to a naturally occurring substance;

   b. Has a history of exposure to humans and the environment demonstrating minimal toxicity, or in the case of a synthetically derived biochemical pesticide, is equivalent to a naturally occurring substance that has such a history; and

   c. Has a nontoxic mode of action to the target pests.

3. "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.

"Chemical pesticides" means all pesticides not otherwise classified as biological pesticides.

"Cultural methods" means manipulation of the habitat to increase pest mortality by making the habitat less suitable to the pest.

"Declared pest emergency situation" means 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 10 days after identification of the need for pest control. This public declaration may be based on:

1. Significant risk to human health;
2. Significant economic loss; or
3. Significant risk to:
    a. Endangered species;
    b. Threatened species;
    c. Beneficial organisms; or
    d. The environment.

"DEQ" or "department" means the Virginia Department of Environmental Quality.

"Discharge of a pollutant" means the addition of any "pollutant" or combination of pollutants to surface waters from any point source, or the addition of any pollutant or combination of pollutants to the water of the contiguous zone or the ocean from any point source.

"FIFRA" means the Federal Insecticide, Fungicide and Rodenticide Act (7 USC § 136 et seq.) as amended.

"Impaired water" or "water quality impaired water" or "water quality limited segment" means any stream segment where the water quality does not or will not meet applicable water quality standards, even after the application of technology-based effluent limitations required by §§ 301(b) and 306 of the Clean Water Act (CWA) (33 USC § 1251 et seq. as of 1987). Impaired waters include both impaired waters with approved or established TMDLs, and impaired waters for which a TMDL has not yet been approved or established.

"Inert ingredient" means any substance (or group of structurally similar substances if designated by EPA), other than an active ingredient, that is intentionally included in a pesticide product. Inert ingredient also means any substance, such as a selectable marker, other than the active ingredient, where the substance is used to confirm or ensure the presence of the active ingredient, and includes the genetic material necessary for the production of the substance, provided that genetic material is intentionally introduced into a living plant in addition to the active ingredient.

"Integrated pest management" or "IPM" means an effective and environmentally sensitive approach to pest management that relies on a combination of common-sense practices. IPM uses current, comprehensive information on the life cycles of pests and their interaction with the environment. This information, in combination with available pest control methods, is used to manage pest damage by the most economical means, and with the least possible hazard to people, property, and the environment.

"Label" means the written, printed, or graphic matter on, or attached to, the pesticide or device, or the immediate container thereof, and the outside container or wrapper of the retail package, if any, of the pesticide or device.

"Labeling" means all labels and other written, printed, or graphic matter:

1. Upon the pesticide or device or any of its containers or wrappers;

2. Accompanying the pesticide or device at any time; or

3. To which reference is made on the label or in literature accompanying the pesticide or device, except when accurate, nonmisleading reference is made to current official publications of the agricultural experiment station, the Virginia Polytechnic Institute and State University, the Virginia Department of Agriculture and Consumer Services, the State Board of Health, or similar federal institutions or other official agencies of the Commonwealth or other states when such states are authorized by law to conduct research in the field of pesticides.

"Mechanical or physical methods" means mechanical tools or physical alterations of the environment for pest prevention or removal.

"Minimize" means to reduce or eliminate pesticide discharges to surface waters through the use of pest management measures to the extent technologically available and economically practicable and achievable.

"Nontarget organisms" means the plant and animal hosts of the target species, the natural enemies of the target species living in the community, and other plants and animals, including vertebrates, living in or near the community that are not the target of the pesticide.

"Operator" means any person involved in the application of a pesticide that results in a discharge to surface waters that meets either or both of the following two criteria:

1. The person who has control over the financing for or the decision to perform pesticide applications that result in discharges, including the ability to modify those decisions; or

2. The person who performs the application of a pesticide or who has day-to-day control of the application (e.g., they are authorized to direct workers to carry out those activities that result in discharges to surface waters).

"Person" means an individual; a corporation; a partnership; an association; a local, state, or federal governmental body; a municipal corporation; or any other legal entity.

"Pest" means any deleterious organism that is:

1. Any vertebrate animal other than man;

2. Any invertebrate animal excluding any internal parasite of living man or other living animals;

3. Any plant growing where not wanted, and any plant part such as a root; or

4. Any bacterium, virus, or other microorganisms, except for those on or in living man or other living animals and those on or in processed food or processed animal feed, beverages, drugs (as defined by the federal Food, Drug, and Cosmetic Act at 21 USC § 321(g)(1)), and cosmetics (as defined by the federal Food, Drug, and Cosmetic Act at 21 USC § 321(i)).

Any organism classified by state or federal law or regulation as endangered or threatened shall not be deemed a pest for the purposes of this chapter.

"Pest management area" means the area of land, including any water, for which pest management activities covered by this permit are conducted.

"Pest management measure" means any practice used to meet the effluent limitations that comply with manufacturer specifications, industry standards, and recommended industry practices related to the application of pesticides, relevant legal requirements, and other provisions that a prudent operator would implement to reduce or eliminate pesticide discharges to surface waters.

"Pesticide" means:

1. Any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any insects, rodents, fungi, bacteria, weeds, or other forms of plant or animal life or viruses, except viruses on or in living man or other animals, which the Commissioner of Agriculture and Consumer Services shall declare to be a pest;

2. Any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant; and

3. Any substance which is intended to become an active ingredient thereof.

Pesticides that are used or applied shall only be those that are approved and registered for use by the Virginia Department of Agriculture and Consumer Services.

"Pesticide product" means a pesticide in the particular form (including active and inert ingredients, packaging, and labeling) in which the pesticide is, or is intended to be, distributed or sold. The term includes any physical apparatus used to deliver or apply the pesticide if distributed or sold with the pesticide.

"Pesticide research and development" means activities undertaken on a systematic basis to gain new knowledge (research) or apply research findings or other scientific knowledge for the creation of new or significantly improved products or processes (experimental development).

"Pesticide residue" means that portion of a pesticide application that has been discharged from a point source to surface waters and no longer provides pesticidal benefits. It also includes any degradates of the pesticide.

"Point source" means any discernible, confined, and discrete conveyance including any pipe, ditch, channel, tunnel, conduit, or container from which pollutants are or may be discharged. This includes biological pesticides or chemical pesticides that leave a residue coming from a

container or nozzle of a pesticide application device. This term does not include return flows from irrigated agriculture or agricultural stormwater run-off.

"Pollutant" means biological pesticides and any pesticide residue resulting from use of a chemical pesticide.

"Surface waters" means:

1. All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide;

2. All interstate waters, including interstate wetlands;

3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

a. That are or could be used by interstate or foreign travelers for recreational or other purposes;

b. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

c. That are used or could be used for industrial purposes by industries in interstate commerce;

4. All impoundments of waters otherwise defined as surface waters under this definition;

5. Tributaries of waters identified in subdivisions 1 through 4 of this definition;

6. The territorial sea; and

7. Wetlands adjacent to waters, other than waters that are themselves wetlands, identified in subdivisions 1 through 6 of this definition.

Surface waters do not include wastewater treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act (CWA) and the law. Surface waters do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other agency, for the purposes of the CWA, the final authority regarding the CWA jurisdiction remains with the EPA.

"Target pest" means the organism toward which pest management measures are being directed.

"Total maximum daily load" or "TMDL" means a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL includes wasteload allocations (WLAs) for point source discharges, and load allocations (LAs) for nonpoint sources or

natural background or both, and must include a margin of safety (MOS) and account for seasonal variations.

"Treatment area" means the area of land including any waters, or the linear distance along water or water's edge, to which pesticides are being applied. Multiple treatment areas may be located within a single pest management area.

Treatment area includes the entire area, whether over land or water, where the pesticide application is intended to provide pesticidal benefits. In some instances, the treatment area will be larger than the area where pesticides are actually applied. For example, the treatment area for a stationary drip treatment into a canal should be calculated by multiplying the width of the canal by the length over which the pesticide is intended to control weeds. The treatment area for a lake or marine area is the water surface area where the application is intended to provide pesticidal benefits.

Treatment area calculations for pesticide applications that occur at water's edge, where the discharge of pesticides directly to waters is unavoidable, are determined by the linear distance over which pesticides are applied.

"VDACS" means the Virginia Department of Agriculture and Consumer Services. VDACS administers the provisions of Virginia's pesticide statute, Chapter 39 (§ 3.2-3900 et seq.) of Title 3.2 of the Code of Virginia, as well as the regulations promulgated by the Virginia Pesticide Control Board. VDACS also has delegated authority to enforce the provisions of FIFRA. As such, VDACS is the primary agency for the regulatory oversight of pesticides in the Commonwealth.

"Wetlands" means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

9VAC25-800-15. Applicability of Incorporated References Based on the Dates That They Became Effective.

Except as noted, when a regulation of the U.S. Environmental Protection Agency set forth in Title 40 of the Code of Federal Regulations (CFR) is referenced and incorporated in this chapter, that regulation shall be as it exists and has been published as of the July 1, 2018, CFR update.

9VAC25-800-20. Purpose; Delegation of Authority; Effective Date of Permit.

A. This general permit regulation governs discharges resulting from the application of pesticides to surface waters.

B. The Director of the Department of Environmental Quality, or his designee, may perform any act of the board provided under this chapter, except as limited by § 62.1-44.14 of the Code of Virginia.

C. This VPDES general permit will become effective on March 1, 2019, and expire on February 29, 2024.

9VAC25-800-30. Authorization to Discharge.

A. Any operator that meets the eligibility requirements in subsection B of this section is hereby authorized for his discharges resulting from the application of pesticides to surface waters of the Commonwealth of Virginia.

The definition of operator in 9VAC25-800-10 provides that more than one person may be responsible for the same discharge resulting from pesticide application. Any operator authorized to discharge under this general permit is responsible for compliance with the terms of this permit for discharges resulting from the application of pesticides.

B. Eligibility. This permit is available to operators who discharge to surface waters from the application of (i) biological pesticides, or (ii) chemical pesticides that leave a residue (pesticides), when the pesticide application is for one of the following pesticide use patterns:

1. Mosquito and other flying insect pest control - to control public health, nuisance and other flying insect pests that develop or are present during a portion of their life cycle in or above standing or flowing water.

2. Weed and algae pest control - to control weeds, algae, and pathogens that are pests in surface waters.

3. Animal pest control - to control animal pests in surface waters.

4. Forest canopy pest control - application of a pesticide to the forest canopy to control the population of a pest species (e.g., insect or pathogen) where to target the pests effectively, a portion of the pesticide unavoidably will be applied over and deposited to surface water.

5. Intrusive vegetation pest control - to control vegetation along roads, ditches, canals, waterways, and utility rights of way where to target the intrusive pests effectively, a portion of the pesticide unavoidably will be applied over and deposited to surface water.

C. Operators applying pesticides are required to maintain a pesticide discharge management plan (PDMP) if they exceed the annual calendar year treatment area thresholds in Table 1 of this subsection:

Table 1. Annual Treatment Area Thresholds

Pesticide Use	Annual Threshold
Mosquito and Other Flying Insect Pest Control	6400 acres of treatment area[1]
Weed and Algae Pest Control	80 acres of treatment area[1] or 20 linear miles of treatment area[2]
Animal Pest Control	80 acres of treatment area[1] or 20 linear miles of treatment area[2]

Forest Canopy Pest Control	6400 acres of treatment area[1]
Intrusive Vegetation Pest Control	6400 acres of treatment area[1] or 20 linear miles of treatment area[2]

[1]Calculations include the area of the applications made to: (i) surface waters and (ii) conveyances with a hydrologic surface connection to surface waters 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 twice a year to a 10-acre site is counted as 20 acres of treatment area.

[2]Calculations include the extent of the application made to linear features (e.g., roads, ditches, canals, waterways, and utility rights of way) or along the water's edge adjacent to: (i) surface waters and (ii) conveyances with a hydrologic surface connection to surface waters at the time of pesticide application. For calculating annual treatment totals, count each pesticide application activity or area as a separate activity. For example, applying pesticides twice a year to a one mile linear feature (e.g., ditch) equals two miles of treatment area regardless of whether one or both sides of the ditch are treated. Applying pesticides twice a year along one mile of lake shoreline equals two miles of treatment area.

D. An operator's discharge resulting from the application of pesticides is not authorized under this permit in the event of any of the following:

1. The operator is required to obtain an individual VPDES permit in accordance with 9VAC25-31-170 B 3 of the VPDES Permit Regulation.

2. The discharge would violate the antidegradation policy stated in 9VAC25-260-30 of the Virginia Water Quality Standards. Discharges resulting from the application of pesticides are temporary and allowable in exceptional waters (see 9VAC25-260-30 A 3 (b) (3)).

3. The operator is proposing a discharge from a pesticide application to surface waters that have been identified as impaired by that pesticide or its degradates. Impaired waters include both impaired waters with board-adopted, EPA-approved or EPA-imposed TMDLs, and impaired waters for which a TMDL has not yet been approved, established, or imposed. If the proposed discharge would not be eligible for coverage under this permit because the surface water is listed as impaired for that specific pesticide, but the applicant has evidence that shows the water is no longer impaired, the applicant may submit this information to the board and request that coverage be allowed under this permit.

E. Discharge authorization date. Operators are not required to submit a registration statement and are authorized to discharge under this permit immediately upon the permit's effective date of March 1, 2019.

F. Compliance with this general permit constitutes compliance with the federal Clean Water Act (33 USC § 1251 et seq.) and the State Water Control Law with the exceptions stated in 9VAC25-31-60 of the VPDES Permit Regulation. Approval for coverage under this VPDES general permit does not relieve any operator of the responsibility to comply with any other applicable federal, state, or local statute, ordinance, or regulation. For example, this permit does not negate the requirements under FIFRA and its implementing regulations to use registered pesticides consistent with the product's labeling. It also does not negate the requirement to fully comply with applicable state wetland program requirements administered by DEQ and the Virginia Marine Resources Commission.

G. Continuation of permit coverage.

1. This general permit shall expire on February 29, 2024, except that the conditions of the expired pesticides general permit will continue in force for an operator until coverage is granted under a reissued pesticides general permit if the board, through no fault of the operator, does not reissue a pesticides general permit on or before the expiration date of the expiring general permit.

2. General permit coverages continued under this section remain fully effective and enforceable.

3. When the operator that was covered under the expiring or expired pesticides general permit is not in compliance with the conditions of that permit, the board may choose to do any or all of the following:

a. Initiate enforcement action based upon the pesticides general permit that has been continued;

b. Issue a notice of intent to deny coverage under a reissued pesticides general permit. If the general permit coverage is denied, the operator would then be required to cease the activities authorized by the continued general permit or be subject to enforcement action for operating without a permit;

c. Issue an individual permit with appropriate conditions; or

d. Take other actions authorized by the VPDES Permit Regulation (9VAC25-31).

9VAC25-800-40. Registration Statement.

Operators are not required to submit a registration statement to apply for coverage under this VPDES general permit for discharges resulting from the application of pesticides to surface waters.

9VAC25-800-50. Termination of Permit Coverage.

Operators are not required to submit a notice of termination to terminate permit coverage under this VPDES general permit for discharges resulting from the application of pesticides to surface waters.

9VAC25-800-60. General Permit.

Any operator who is authorized to discharge shall comply with the requirements contained in this general permit and be subject to all requirements of 9VAC25-31-170.

NOTE: THE REMAINING REGULATORY TEXT OF SECTION 60 FOLLOWS IN ATTACHMENT B (PERMIT PAGES)

ATTACHMENT B

General Permit Pages for Pesticides General Permit 9VAC25-800

Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

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General Permit No.: VAG87
Effective Date: March 1, 2019
Expiration Date: February 29, 2024

GENERAL PERMIT FOR DISCHARGES RESULTING FROM THE APPLICATION OF PESTICIDES TO SURFACE WATERS OF VIRGINIA

AUTHORIZATION TO DISCHARGE UNDER THE VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM AND THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act (33 USC § 1251 et seq.), as amended, and pursuant to the State Water Control Law and regulations adopted pursuant thereto, operators that apply pesticides that result in a discharge to surface waters are authorized to discharge to surface waters within the boundaries of the Commonwealth of Virginia.

The authorized discharge shall be in accordance with this cover page, Part I-Effluent Limitations, Monitoring Requirements, and Special Conditions, and Part II-Conditions Applicable to All VPDES Permits, as set forth in this general permit. Coverage under this VPDES general permit does not relieve any operator of the responsibility to comply with any other applicable federal, state, or local statute, ordinance, or regulation, including the pesticide product label.

Part I
Effluent Limitations, Monitoring Requirements, and Special Conditions

A. Effluent limitations.

1. Technology-based effluent limitations. To meet the effluent limitations in this permit, the operator shall implement pest management measures that minimize discharges of pesticides to surface waters.

a. Minimize pesticide discharges to surface waters. All operators who perform the application of pesticides or who have day-to-day control of applications shall minimize the discharge of pollutants resulting from the application of pesticides, and:

(1) Use the lowest effective amount of pesticide product per application and optimum frequency of pesticide applications necessary to control the target pest, consistent with reducing the potential for development of pest resistance without exceeding the maximum allowable rate of the product label;

(2) No person shall apply, dispense, or use any pesticide in or through any equipment or application apparatus unless the equipment or apparatus is in sound mechanical condition and capable of satisfactory operation. All pesticide application equipment shall be properly equipped to dispense the proper amount of material. All pesticide mixing, storage, or holding tanks, whether on application equipment or not, shall be leak proof. All spray distribution systems shall be leak proof, and any pumps that these systems may have shall be capable of operating at sufficient pressure to assure a uniform and adequate rate of pesticide application;

(3) All pesticide application equipment shall be equipped with cut-off valves and discharge orifices to enable the operator to pass over nontarget areas without contaminating them. All hoses, pumps, or other equipment used to fill pesticide handling, storage, or application equipment shall be fitted with an effective valve or device to prevent backflow into water supply systems, streams, lakes, other sources of water, or other materials. However, these backflow devices or valves are not required for separate water storage tanks used to fill pesticide application equipment by gravity systems when the fill spout, tube, or pipe is not allowed to contact or fall below the water level of the application equipment being filled, and no other possible means of establishing a back siphon or backflow exists; and

(4) Assess weather conditions (e.g., temperature, precipitation, and wind speed) in the treatment area to ensure application is consistent with product label requirements.

b. Integrated pest management (IPM) practices. The operator with control over the financing for or the decision to perform pesticide applications that result in discharges, including the ability to modify those decisions, shall to the extent practicable consider integrated pest management practices to ensure that discharges resulting from the application of pesticides to surface waters are minimized. Operators that exceed the annual treatment area thresholds established in 9VAC25-800-30 C are also required to maintain a pesticide discharge management plan (PDMP) in accordance with Part I C of this permit. The PDMP documents the operator's IPM practices.

The operator's IPM practices shall consider the following for each pesticide use pattern:

(Note: If the operator's discharge of pollutants results from the application of a pesticide that is being used solely for the purpose of "pesticide research and development," as defined in 9VAC25-800-10, the operator is only required to fully implement IPM practices to the extent that the requirements do not compromise the research design.)

(1) Mosquito and other flying insect pest control. This subpart applies to discharges resulting from the application of pesticides to control public health, nuisance and other flying insect pests that develop or are present during a portion of their life cycle in or above standing or flowing water.

(a) Identify the problem. Prior to the first pesticide application covered under this permit that will result in a discharge to surface waters, and at least once each calendar year thereafter prior to the first pesticide application for that calendar year, the operator shall consider the following for each pest management area:

(i) Identify target pests;

(ii) Establish densities for pest populations or identify environmental conditions, either current or based on historical data, to serve as action thresholds for implementing pest management measures;

(iii) Identify known breeding sites for source reduction, larval control program, and habitat management;

(iv) Analyze existing surveillance data to identify new or unidentified sources of pest problems as well as sites that have recurring pest problems; and

(v) In the event there are no data for the pest management area in the past calendar year, use other available data as appropriate to meet the conditions in Part I A 1 b (1) (a).

(b) Pest management options. Prior to the first pesticide application covered under this permit that will result in a discharge to surface waters, and at least once each calendar year thereafter prior to the first pesticide application for that calendar year, the operator shall select and implement for each pest management area efficient and effective pest management measures that minimize discharges resulting from application of pesticides to control mosquitoes or other flying insect pests. In developing these pest management measures, the operator shall evaluate the following management options, including a combination of these options, considering impact to water quality, impact to nontarget organisms, pest resistance, feasibility, and cost effectiveness:

(i) No action;

(ii) Prevention;

(iii) Mechanical or physical methods;

(iv) Cultural methods;

(v) Biological control; and

(vi) Pesticides.

(c) Pesticide use. If a pesticide is selected to manage mosquitoes or flying insect pests and application of the pesticide will result in a discharge to surface waters, the operator shall:

(i) Conduct larval or adult surveillance in an area that is representative of the pest problem or evaluate existing larval surveillance data, environmental conditions, or data from adjacent areas prior to each pesticide application to assess the pest management area and to determine when the action threshold is met;

(ii) Reduce the impact on the environment and on nontarget organisms by applying the pesticide only when the action threshold has been met;

(iii) In situations or locations where practicable and feasible for efficacious control, use larvicides as a preferred pesticide for mosquito or flying insect pest control when larval action thresholds have been met; and

(iv) In situations or locations where larvicide use is not practicable or feasible for efficacious control, use adulticides for mosquito or flying insect pest control when adult action thresholds have been met.

(2) Weed and algae pest control. This subpart applies to discharges resulting from the application of pesticides to control weeds, algae, and pathogens that are pests in surface waters.

(a) Identify the problem. Prior to the first pesticide application covered under this permit that will result in a discharge to surface waters, and at least once each calendar year thereafter prior to the first pesticide application for that calendar year, the operator shall consider the following for each pest management area:

(i) Identify target pests;

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

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

(iv) Establish past or present pest densities to serve as action thresholds for implementing pest management strategies; and

(v) In the event there are no data for the pest management area in the past calendar year, use other available data as appropriate to meet the conditions in Part I A 1 b (2) (a).

(b) Pest management options. Prior to the first pesticide application covered under this permit that will result in a discharge to surface waters, and at least once each calendar year thereafter prior to the first pesticide application for that calendar year, the operator shall select and implement, for each pest management area, efficient and

effective pest management measures that minimize discharges resulting from application of pesticides to control pests. In developing these pest management measures, the operator shall evaluate the following management options, including a combination of these options, considering impact to water quality, impact to nontarget organisms, pest resistance, feasibility, and cost effectiveness:

(i) No action;

(ii) Prevention;

(iii) Mechanical or physical methods;

(iv) Cultural methods;

(v) Biological control; and

(vi) Pesticides.

(c) Pesticide use. If a pesticide is selected to manage pests and application of the pesticide will result in a discharge to surface waters, the operator shall:

(i) Conduct surveillance in an area that is representative of the pest problem prior to each pesticide application to assess the pest management area and to determine when the action threshold is met that necessitates the need for pest management; and

(ii) Reduce the impact on the environment and nontarget organisms by applying the pesticide only when the action threshold has been met.

(3) Animal pest control. This subpart applies to discharges resulting from the application of pesticides to control animal pests in surface waters.

(a) Identify the problem. Prior to the first pesticide application covered under this permit that will result in a discharge to surface waters, and at least once each calendar year thereafter prior to the first pesticide application for that calendar year, the operator shall consider the following for each pest management area:

(i) Identify target pests;

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

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

(iv) Establish past or present pest densities to serve as action thresholds for implementing pest management strategies; and

(v) In the event there are no data for the pest management area in the past calendar year, use other available data as appropriate to meet the conditions in Part I A 1 b (3) (a).

(b) Pest management options. Prior to the first pesticide application covered under this permit that will result in a discharge to surface waters, and at least once each year thereafter prior to the first pesticide application during that calendar year, the operator shall select and implement, for each pest management area, efficient and effective pest management measures that minimize discharges resulting from application of pesticides to control animal pests. In developing these pest management measures, the operator shall evaluate the following management options, including a combination of these options, considering impact to water quality, impact to nontarget organisms, pest resistance, feasibility, and cost effectiveness:

(i) No action;

(ii) Prevention;

(iii) Mechanical or physical methods;

(iv) Biological control; and

(v) Pesticides.

(c) Pesticide use. If a pesticide is selected to manage animal pests and application of the pesticide will result in a discharge to surface waters, the operator shall:

(i) Conduct surveillance prior to each application to assess the pest management area and to determine when the action threshold is met that necessitates the need for pest management; and

(ii) Reduce the impact on the environment and nontarget organisms by evaluating site restrictions, application timing, and application method in addition to applying the pesticide only when the action threshold has been met.

(4) Forest canopy pest control. This subpart applies to discharges resulting from the application of pesticides to the forest canopy to control the population of a pest species where, to target the pests effectively, a portion of the pesticide unavoidably will be applied over and deposited to surface waters.

(a) Identify the problem. Prior to the first pesticide application covered under this permit that will result in a discharge to surface waters, and at least once each calendar year thereafter prior to the first pesticide application in that calendar year, the operator shall consider the following for each pest management area:

(i) Identify target pests;

(ii) Establish target pest densities to serve as action thresholds for implementing pest management measures;

(iii) Identify current distribution of the target pest and assess potential distribution in the absence of pest management measures; and

(iv) In the event there are no data for the pest management area in the past calendar year, use other available data as appropriate to meet the conditions in Part I A 1 (b) (4) (a).

(b) Pest management options. Prior to the first pesticide application covered under this permit that will result in a discharge to surface waters, and at least once each calendar year thereafter prior to the first pesticide application for that calendar year, the operator shall select and implement for each pest management area efficient and effective pest management measures that minimize discharges resulting from application of pesticides to control forestry pests. In developing these pest management measures, the operator shall evaluate the following management options, including a combination of these options, considering impact to water quality, impact to nontarget organisms, pest resistance, feasibility, and cost effectiveness:

(i) No action;

(ii) Prevention;

(iii) Mechanical or physical methods;

(iv) Cultural methods;

(v) Biological control; and

(vi) Pesticides.

(c) Pesticide use. If a pesticide is selected to manage forestry pests and application of the pesticide will result in a discharge to surface waters, the operator shall:

(i) Conduct surveillance prior to each application to assess the pest management area and to determine when the pest action threshold is met that necessitates the need for pest management;

(ii) Assess environmental conditions (e.g., temperature, precipitation, and wind speed) in the treatment area to identify conditions that support target pest development and are conducive for treatment activities;

(iii) Reduce the impact on the environment and nontarget organisms by evaluating the restrictions, application timing, and application methods in addition to applying the pesticide only when the action thresholds have been met; and

(iv) Evaluate using pesticides against the most susceptible developmental stage.

(5) Intrusive vegetation pest control. This subpart applies to discharges resulting from the application of pesticides along roads, ditches, canals, waterways, and utility rights

of way where, to target the intrusive pests effectively, a portion of the pesticide will unavoidably be applied over and deposited to surface waters.

(a) Identify the problem. Prior to the first pesticide application covered under this permit that will result in a discharge to surface waters, and at least once each calendar year thereafter prior to the first pesticide application in that calendar year, the operator shall consider the following for each pest management area:

(i) Identify target pests;

(ii) Establish target pest densities to serve as action thresholds for implementing pest management measures;

(iii) Identify current distribution of the target pest and assess potential distribution in the absence of pest management measures; and

(iv) In the event there are no data for the pest management area in the past calendar year, use other available data as appropriate to meet the conditions in Part I A 1 (b) (5) (a).

(b) Pest management options. Prior to the first pesticide application covered under this permit that will result in a discharge to surface waters, and at least once each calendar year thereafter prior to the first pesticide application for that calendar year, the operator shall select and implement for each pest management area efficient and effective pest management measures that minimize discharges resulting from application of pesticides to intrusive vegetation pests. In developing these pest management measures, the operator shall evaluate the following management options, including a combination of these options, considering impact to water quality, impact to nontarget organisms, pest resistance, feasibility, and cost effectiveness:

(i) No action;

(ii) Prevention;

(iii) Mechanical or physical methods;

(iv) Cultural methods;

(v) Biological control; and

(vi) Pesticides.

(c) Pesticide use. If a pesticide is selected to manage intrusive vegetation pests and application of the pesticide will result in a discharge to surface waters, the operator shall:

(i) Conduct surveillance prior to each application to assess the pest management area and to determine when the pest action threshold is met that necessitates the need for pest management;

(ii) Assess environmental conditions (e.g., temperature, precipitation, and wind speed) in the treatment area to identify conditions that support target pest development and are conducive for treatment activities;

(vi) Reduce the impact on the environment and nontarget organisms by evaluating the restrictions, application timing, and application methods in addition to applying the pesticide only when the action thresholds have been met; and

(vii) Evaluate using pesticides against the most susceptible developmental stage.

2. Water quality-based effluent limitations. The operator's discharge of pollutants must be controlled as necessary to meet applicable numeric and narrative water quality standards for any discharges authorized under this permit, with compliance required upon beginning such discharge.

If at any time the operator become aware, or the board determines, that the operator's discharge of pollutants causes or contributes to an excursion of applicable water quality standards, corrective action must be taken as required in Part I D 1 of this permit.

B. Monitoring requirements.

All operators covered under this permit must conduct a visual monitoring assessment (i.e., spot checks in the area to and around where pesticides are applied) for possible and observable adverse incidents caused by application of pesticides, including the unanticipated death or distress of nontarget organisms and disruption of wildlife habitat, recreational, or municipal water use.

A visual monitoring assessment is only required during the pesticide application when feasibility and safety allow. For example, visual monitoring assessment is not required during the course of treatment when that treatment is performed in darkness as it would be infeasible to note adverse effects under these circumstances. Visual monitoring assessments of the application site must be performed:

1. During any post-application surveillance or efficacy check that the operator conducts, if surveillance or an efficacy check is conducted.

2. During any pesticide application, when considerations for safety and feasibility allow.

C. Pesticide discharge management plan (PDMP). Any operator applying pesticides and exceeding the annual application thresholds established in 9VAC25-800-30 C must prepare a PDMP for the pest management area. The plan must be kept up-to-date thereafter for the duration of coverage under this general permit, even if discharges subsequently fall below the annual application threshold levels. The operator applying pesticides shall develop a PDMP consistent with the deadline outlined in Table I-1 below.

Table I-1. Pesticide Discharge Management Plan Deadline

Category	PDMP Deadline

Operators who know prior to commencement of discharge that they will exceed an annual treatment area threshold identified in 9VAC25-800-30 C for that year.	Prior to first pesticide application covered under this permit.
Operators who do not know until after commencement of discharge that they will exceed an annual treatment area threshold identified in 9VAC25-800-30 C for that year.	Prior to exceeding an annual treatment area threshold.
Operators commencing discharge in response to a declared pest emergency situation as defined in 9VAC25-800-10 that will cause the operator to exceed an annual treatment area threshold.	No later than 90 days after responding to declared pest emergency situation.

The PDMP does not contain effluent limitations; the limitations are contained in Parts I A 1 and I A 2 of the permit. The PDMP documents how the operator will implement the effluent limitations in Parts I A 1 and I A 2 of the permit, including the evaluation and selection of pest management measures to meet those effluent limitations and minimize discharges. In the PDMP, the operator may incorporate by reference any procedures or plans in other documents that meet the requirements of this permit. If other documents are being relied upon by the operator to describe how compliance with the effluent limitations in this permit will be achieved, such as a pre-existing integrated pest management (IPM) plan, a copy of the portions of any documents that are being used to document the implementation of the effluent limitations shall be attached to the PDMP. The pest management measures implemented must be documented and the documentation must be kept up to date.

1. Contents of the pesticide discharge management plan. The PDMP must include the following elements:

a. Pesticide discharge management team;

b. Problem identification;

c. Pest management options evaluation;

d. Response procedures:

(1) Spill response procedures;

(2) Adverse incident response procedures; and

e. Signature requirements.

2. PDMP team. The operator shall identify all the persons (by name and contact information) who compose the team as well as each person's individual responsibilities, including:

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

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

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

3. Problem identification. The operator shall document the following:

a. Pest problem description. Describe the pest problem at the pest management area, including identification of the target pests, sources of the pest problem, and sources of data used to identify the problem in Part I A 1 b (1) through b (5).

b. Action thresholds. Describe the action thresholds for the pest management area, including how they were determined.

c. General location map. Include a general location map that identifies the geographic boundaries of the area to which the plan applies and location of major surface waters.

4. Integrated pest management options evaluation. Operators shall document the evaluation of the pest management options, including a combination of the pest management options, to control the target pests. Pest management options include the following: no action, prevention, mechanical or physical methods, cultural methods, biological control agents, and pesticides. In the evaluation, decision makers shall consider the impact to water quality, impact to nontarget organisms, feasibility, cost effectiveness, and any relevant previous pest management measures.

5. Response procedures. Document the following procedures in the PDMP:

a. Spill response procedures. At a minimum the PDMP must have:

(1) Procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases to surface waters. 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.

(2) Procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies.

b. Adverse incident response procedures. At a minimum the PDMP must have:

(1) Procedures for responding to any incident resulting from pesticide applications; and

(2) Procedures for notification of the incident, both internal to the operator's agency or organization and external. Contact information for DEQ, nearest emergency medical

facility, and nearest hazardous chemical responder must be in locations that are readily accessible and available.

6. PDMP signature requirements.

a. The PDMP, including changes to the PDMP to document any corrective actions taken as required by Part I D 1, and all reports submitted to the department must be signed by a person described in Part II G 1 or by a duly authorized representative of that person described in Part II G 2.

b. All other changes to the PDMP, and other compliance documentation required under this permit, must be signed and dated by the person preparing the change or documentation.

c. Any person signing documents in accordance with Part I C 6 a must include the certification from Part II G 4.

7. PDMP modifications and availability.

a. PDMP modifications. The operator shall modify the PDMP whenever necessary to address any of the triggering conditions for corrective action in Part I D 1 a, 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, as soon as possible thereafter. The revised PDMP must be signed and dated in accordance with Part II G.

The operator shall 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.

b. PDMP availability. The operator shall retain a copy of the current PDMP, along with all supporting maps and documents. The operator shall make the PDMP and supporting information available to the department upon request. The PDMP is subject to the provisions and exclusions of the Virginia Freedom of Information Act (§ 2.2-3700 et seq. of the Code of Virginia).

D. Special conditions.

1. Corrective action.

a. Situations requiring revision of pest management measures. If any of the following situations occur, the operator shall review and, as necessary, revise the evaluation and selection of pest management measures to ensure that the situation is eliminated and will not be repeated in the future:

(1) An unauthorized release or discharge associated with the application of pesticides occurs (e.g., spill, leak, or discharge not authorized by this or another VPDES permit);

(2) The operator becomes aware, or the board concludes, that the pest management measures are not adequate or sufficient for the discharge of pollutants to meet applicable water quality standards;

(3) Any monitoring activities indicate that the operator failed to meet the technology-based effluent limitations in Part I A 1 a of this permit;

(4) An inspection or evaluation of the operator's activities by DEQ, VDACS, EPA, or a locality reveals that modifications to the pest management measures are necessary to meet the non-numeric effluent limits in this permit; or

(5) The operator observes (e.g., during visual monitoring that is required in Part I B) or is otherwise made aware of an adverse incident.

b. Corrective action deadlines. If the operator determines that changes to the pest management measures are necessary to eliminate any situation identified in Part I D 1 a, such changes must be made before the next pesticide application that results in a discharge if practicable, or if not, as soon as possible thereafter.

2. Adverse incident documentation and reporting.

a. Twenty-four-hour adverse incident notification. If the operator observes or is otherwise made aware of an adverse incident that may have resulted from a discharge from the operator's pesticide application, the operator shall immediately notify the department (see Part I D 5). This notification must be made within 24 hours of when the operator becomes aware of the adverse incident and must include at least the following information:

(1) The caller's name and telephone number;

(2) Operator's name and mailing address;

(3) The name and telephone number of a contact person if different than the person providing the 24-hour notice;

(4) How and when the operator became aware of the adverse incident;

(5) Description of the location of the adverse incident;

(6) Description of the adverse incident identified and the EPA pesticide registration number for each product that was applied in the area of the adverse incident; and

(7) Description of any steps the operator has taken or will take to correct, repair, remedy, cleanup, or otherwise address any adverse effects.

If the operator is unable to notify the department within 24 hours, notification shall be made as soon as possible and the rationale for why the notification was not possible within 24 hours shall be provided.

The adverse incident notification and reporting requirements are in addition to what the registrant is required to submit under FIFRA § 6(a)(2) and its implementing regulations at 40 CFR Part 159.

b. Reporting of adverse incidents is not required under this permit in the following situations:

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

(2) The operator has been notified in writing by the board that the reporting requirement has been waived for this incident or category of incidents.

(3) The operator receives notification of a potential adverse incident but that notification and supporting information are clearly erroneous.

(4) An adverse incident occurs to pests that are similar in kind to pests identified as potential targets.

c. Five-day adverse incident written report. Within five days of a reportable adverse incident pursuant to Part I D 2 a, the operator shall provide a written report of the adverse incident to the appropriate DEQ regional office at the address listed in Part I D 5. The adverse incident report must include at least the following information:

(1) Information required to be provided in Part I D 2 a;

(2) Date and time the operator contacted DEQ notifying the department of the adverse incident, and with whom the operator spoke at DEQ, and any instructions the operator received from DEQ;

(3) Location of incident, including the names of any waters affected and appearance of those waters (sheen, color, clarity, etc.);

(4) A description of the circumstances of the adverse incident including species affected, estimated number of individuals, and approximate size of dead or distressed organisms;

(5) Magnitude and scope of the affected area (e.g., aquatic square area or total stream distance affected);

(6) Pesticide application rate, intended use site, method of application, and name of pesticide product, description of pesticide ingredients, and EPA registration number;

(7) Description of the habitat and the circumstances under which the adverse incident occurred (including any available ambient water data for pesticides applied);

(8) If laboratory tests were performed, indicate what tests were performed, and when, and provide a summary of the test results within five days after they become available;

(9) If applicable, explain why it is believed the adverse incident could not have been caused by exposure to the pesticide;

(10) Actions to be taken to prevent recurrence of adverse incidents; and

(11) Signed and dated in accordance with Part II G.

The operator shall report adverse incidents even for those instances when the pesticide labeling states that adverse effects may occur.

d. Adverse incident to threatened or endangered species or critical habitat.

(1) Notwithstanding any of the other adverse incident notification requirements of this section, if the operator becomes aware of an adverse incident to threatened or endangered species or critical habitat that may have resulted from a discharge from the operator's pesticide application, the operator shall immediately notify the:

(a) National Marine Fisheries Service (NMFS) and the Virginia Department of Game and Inland Fisheries (DGIF) in the case of an anadromous or marine species;

(b) U.S. Fish and Wildlife Service (FWS) and the DGIF in the case of an animal or invertebrate species; or

(c) FWS and the Virginia Department of Agriculture and Consumer Services in the case of plants or insects.

(2) Threatened or endangered species or critical habitats include the following:

(a) Federally listed threatened or endangered species;

(b) Federally designated critical habitat;

(c) State-listed threatened or endangered species; and

(d) Tier I (critical conservation need) or Tier II (very high conservation need) species of greatest conservation need (SGCN) as defined in Virginia's Wildlife Action Plan (www.bewildvirginia.org).

(3) This notification must be made by telephone immediately upon the operator becoming aware of the adverse incident and must include at least the following information:

(a) The caller's name and telephone number;

(b) Operator's name and mailing address;

(c) The name of the affected species, size of area impacted, and if applicable, the approximate number of animals affected;

(d) How and when the operator became aware of the adverse incident;

(e) Description of the location of the adverse incident;

(f) Description of the adverse incident, including the EPA pesticide registration number for each product the operator applied in the area of the adverse incident;

(g) Description of any steps the operator has taken or will take to alleviate the adverse impact to the species; and

(h) Date and time of application. Additional information on federally listed threatened or endangered species and federally designated critical habitat is available from NMFS (www.nmfs.noaa.gov) for anadromous or marine species or FWS (www.fws.gov) for terrestrial or freshwater species. Additional information on state-listed threatened or endangered wildlife species is available through the Virginia Fish and Wildlife Information Service (www.dgif.virginia.gov). Listing of state threatened or endangered plants and insects can be found in §§ 3.2-1000 through 3.2-1011 of the Code of Virginia and 2VAC5-320-10 of the Virginia Administrative Code (both the Code of Virginia and the Virginia Administrative Code must be referenced in order to obtain the complete plant and insect list). (Contact information for these agencies can be found on the contact information form or through the DEQ website.)

3. Reportable spills and leaks.

a. Spill, leak, or other unauthorized discharge notification. Where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 117, or 302 occurs in any 24-hour period, the operator shall notify the department (see Part I D 2) as soon as the operator has knowledge of the release. Department contact information must be kept in locations that are readily accessible and available in the area where a spill, leak, or other unpermitted discharge may occur.

b. Five-day spill, leak, or other unauthorized discharge report. Within five days of the operator becoming aware of a spill, leak, or other unauthorized discharge triggering the notification in subdivision 3 of this subsection, the operator shall submit a written report to the appropriate DEQ regional office at the address listed in Part I D 5. The report shall contain the following information:

(1) A description of the nature and location of the spill, leak, or discharge;

(2) The cause of the spill, leak, or discharge;

(3) The date on which the spill, leak, or discharge occurred;

(4) The length of time that the spill, leak, or discharge continued;

(5) The volume of the spill, leak, or discharge;

(6) If the discharge is continuing, how long it is expected to continue and what the expected total volume of the discharge will be;

(7) A summary of corrective action taken or to be taken including date initiated and date completed or expected to be completed; and

(8) Any steps planned or taken to prevent recurrence of such a spill, leak, or other discharge, including notice of whether PDMP modifications are required as a result of the spill or leak.

Discharges reportable to the department under the immediate reporting requirements of other regulations are exempted from this requirement.

The board may waive the written report on a case-by-case basis for reports of noncompliance if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

4. Recordkeeping and annual reporting. The operator shall keep records as required in this permit. These records must be accurate, complete, and sufficient to demonstrate compliance with the conditions of this permit. The operator 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. The board 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.

a. All operators must keep the following records:

(1) A copy of any adverse incident reports (see Part I D 2 c).

(2) The operator's rationale for any determination that reporting of an identified adverse incident is not required consistent with allowances identified in Part I D 2 b.

b. Any operator performing the application of a pesticide or who has day-to-day control of the application and exceeding the annual application thresholds established in 9VAC25-800-30 C must also maintain a record of each pesticide applied. This shall apply to both general use and restricted use pesticides. Each record shall contain the:

(1) Name, address, and telephone number of customer and address or location, if different, of site of application;

(2) Name and VDACS certification number of the person making the application or certification number of the supervising certified applicator;

(3) Day, month, and year of application;

(4) Type of plants, crop, animals, or sites treated and principal pests to be controlled;

(5) Acreage, area, or number of plants or animals treated;

(6) Brand name or common product name;

(7) EPA registration number;

(8) Amount of pesticide concentrate and amount of diluting used, by weight or volume, in mixture applied; and

(9) Type of application equipment used.

c. All required records must be assembled as soon as possible but no later than 30 days following completion of such activity. The operator shall retain any records required under this permit for at least three years from the date of the pesticide application. The operator shall make available to the board, including an authorized representative of the board, all records kept under this permit upon request and provide copies of such records, upon request.

d. Annual reporting.

(1) Any operator applying pesticides that reports an adverse incident as described in Part I D 2 must submit an annual report to the department no later than February 10 of the following year (and retain a copy for the operator's records).

(2) The annual report must contain the following information:

(a) Operator's name;

(b) Contact person's name, title, email address (where available), and phone number;

(c) A summary report of all adverse incidents that occurred during the previous calendar year; and

(d) A summary of any corrective actions, including spill responses, in response to adverse incidents, and the rationale for such actions.

5. DEQ contact information and mailing addresses.

a. All incident reports under Part I D 2 must be sent to the appropriate DEQ regional office within five days of the operator becoming aware of the adverse incident.

b. All other written correspondence concerning discharges must be sent to the address of the appropriate DEQ regional office listed in Part I D 5 c.

NOTE: The immediate (within 24 hours) reports required in Part I D 2 may be made to the department's regional office. Reports may be made by telephone, fax, or online (http://www.deq.virginia.gov/Programs/PollutionResponsePreparedness/MakingaReport.aspx). For reports outside normal working hours, leave a message, and this shall fulfill the

immediate reporting requirement. For emergencies, the Virginia Department of Emergency Management maintains a 24-hour telephone service at 1-800-468-8892.

c. DEQ regional office addresses.

(1) Blue Ridge Regional Office (BRRO)
901 Russel Drive
Salem, VA 24153
(540) 562-6700

(2) Northern Virginia Regional Office (NVRO)
13901 Crown Court
Woodbridge, VA 22193
(703) 583-3800

(3) Piedmont Regional Office (PRO)
4949-A Cox Road
Glen Allen, VA 23060
(804) 527-5020

(4) Southwest Regional Office (SWRO)
355 Deadmore St.
P.O. Box 1688
Abingdon, VA 24212
(276) 676-4800

(5) Tidewater Regional Office (TRO)
5636 Southern Blvd.
Virginia Beach, VA 23462
(757) 518-2000

(6) Valley Regional Office (VRO)
4411 Early Road
Mailing address: P.O. Box 3000
Harrisonburg, VA 22801
(540) 574-7800

Part II
Conditions Applicable to all VPDES Permits

A. Monitoring.

1. Samples and measurements taken as required by this permit shall be representative of the monitored activity.

2. Monitoring shall be conducted according to procedures approved under 40 CFR Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this permit.

3. The operator shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will ensure accuracy of measurements.

B. Records.

1. Records of monitoring information shall include:

a. The date, exact place, and time of sampling or measurements;

b. The individuals who performed the sampling or measurements;

c. The dates and times analyses were performed;

d. The individuals who performed the analyses;

e. The analytical techniques or methods used; and

f. The results of such analyses.

2. The operator shall retain records of all monitoring information, including all calibration and maintenance records and copies of all reports required by this permit for a period of at least three years from the date that coverage under this permit expires. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the operator, or as requested by the board.

C. Reporting monitoring results. Monitoring results under this permit are not required to be submitted to the department. However, should the department request that the operator submit monitoring results, the following subdivisions would apply.

1. The operator shall submit the results of the monitoring required by this permit not later than the 10th day of the month after monitoring takes place, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to the department's regional office.

2. Monitoring results shall be reported on a discharge monitoring report (DMR) or on forms provided, approved, or specified by the department.

3. If the operator monitors any pollutant specifically addressed by this permit more frequently than required by this permit using test procedures approved under 40 CFR Part 136 or using other test procedures approved by the U.S. Environmental Protection Agency or using procedures specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted on the DMR or reporting form specified by the department.

4. Calculations for all limitations that require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

D. Duty to provide information. The operator shall furnish to the department, within a reasonable time, any information that the board may request to determine whether cause exists for terminating coverage under this permit or to determine compliance with this permit. The board may require the operator to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from the permittee's discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the State Water Control Law. The operator shall also furnish to the department, upon request, copies of records required to be kept by this permit.

E. Compliance schedule reports. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized discharges. Except in compliance with this permit, or another permit issued by the board, it shall be unlawful for any person to:

1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or

2. Otherwise alter the physical, chemical, or biological properties of such state waters and make them detrimental to the public health, to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, recreation, or other uses.

G. Signature requirements.

1. The PDMP, including changes to the PDMP to document any corrective actions taken as required by Part I D 1, and all reports submitted to the department must be signed by a person described in this subsection or by a duly authorized representative of that person described in subdivision 2 of this subsection.

a. For a corporation: by a responsible corporate officer. For the purpose of this subsection, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-making or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions that govern the operation of the regulated activity including having the explicit or implicit duty of making major capital investment recommendations and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this subsection, a principal executive officer of a federal agency includes (i) the chief executive officer of the agency or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit or the agency.

2. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described in subdivision 1 of this subsection;

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated activity such as the position of superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or any individual occupying a named position; and

c. The signed and dated written authorization is included in the PDMP. A copy of this authorization must be submitted to the department if requested.

3. All other changes to the PDMP, and other compliance documentation required under this permit, must be signed and dated by the person preparing the change or documentation.

4. Any person signing documents in accordance with subdivision 1 or 2 of this subsection must include the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

H. Duty to comply. The operator shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law and the federal Clean Water Act, except that noncompliance with certain provisions of this permit may constitute a violation of the State Water Control Law but not the Clean Water Act. Permit noncompliance is grounds for enforcement action, for permit coverage termination, or denial of permit coverage renewal.

The operator shall comply with effluent standards or prohibitions established under § 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that

establish these standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

I. Duty to reapply. If the operator wishes to continue an activity regulated by this permit after the expiration date of this permit, the operator must have coverage under a new permit.

J. Effect of a permit. This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state, or local law or regulations.

K. State law. Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the operator from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by § 510 of the Clean Water Act. Nothing in this permit shall be construed to relieve the operator from civil and criminal penalties for noncompliance.

L. Oil and hazardous substance liability. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the operator from any responsibilities, liabilities, or penalties to which the operator is or may be subject under §§ 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

M. Proper operation and maintenance. The operator shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the operator to achieve compliance with the conditions of this permit. Proper operation and maintenance also include effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by the operator only when the operation is necessary to achieve compliance with the conditions of this permit.

N. Disposal of solids or sludges. Solids, sludges, or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

O. Duty to mitigate. The operator shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

P. Need to halt or reduce activity not a defense. It shall not be a defense for an operator in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

Q. Inspection and entry. The operator shall allow the director, or an authorized representative (including an authorized contractor acting as a representative of the director), upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the operator premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and the State Water Control Law, any substances or parameters at any location.

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours or whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

R. Permit actions. Permit coverage may be terminated for cause. The filing of a request by the operator for a permit termination or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

S. Transfer of permit coverage. Permits are not transferable to any person except after notice to the department. The transfer of permit coverage under this pesticide general permit is not anticipated since coverage is automatic where an operator meets the permit eligibility requirements.

T. Severability. The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

ATTACHMENT C

Pesticide General Permit Fact Sheet

COMMONWEALTH OF VIRGINIA STATE WATER CONTROL BOARD

FACT SHEET

REISSUANCE OF A GENERAL VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT TO DISCHARGE TO STATE WATERS AND STATE CERTIFICATION UNDER THE STATE WATER CONTROL LAW

Reissuance Year: March 1, 2019

The State Water Control Board (Board) has under consideration the reissuance of a general Virginia Pollutant Discharge Elimination System (VPDES) permit for point source discharges resulting from the application of pesticides to surface waters. The issuance of this general permit is required by the Sixth Circuit Court January 9, 2009 decision to vacate EPA's 2006 NPDES Pesticides Rule in National Cotton Council of America v. EPA, 553 F.3d 927 (6th Cir., 2009). The court held that the Clean Water Act unambiguously includes "biological pesticides" and "chemical pesticides" with residuals within its definition of "pollutant." Therefore, pesticide applications to surface waters need to be permitted under discharge elimination system programs in all state and federal permitting programs. This Virginia Pollutant Discharge Elimination System (VPDES) permit has taken into account the requirements of the EPA National Pollutant Discharge Elimination System permit for discharges from the application of pesticides effective October 31, 2016 (see 2016 EPA NPDES Pesticide General Permit).

Permit Number: VAG87

Name of Permittee: Any operator with point source discharges resulting from the application of pesticides to surface waters. Operator is defined as any person involved in the application of a pesticide that results in a discharge to state waters that meets either or both of the following two criteria: (1) The person has control over the financing for, or the decision to perform pesticide applications that result in discharges, including the ability to modify those decisions; or (2) The person has day-to-day control of or performs activities that are necessary to ensure compliance with the permit (e.g., they are authorized to direct workers to carry out activities required by the permit or perform such activities themselves).

Entities such as subcontractors or employees that are hired by an owner (e.g., of a pesticide application business) or other entity but are under the supervision of such owner or entity generally are not operators. Similarly, you are likely not an operator if, for example, you own the land, but the

activities are being performed outside of your control (e.g., a public entity is spraying for mosquitoes over your property).

This permit is available to operators who discharge to surface waters from the application of: (1) biological pesticides; or (2) chemical pesticides that leave a residue (hereinafter collectively "pesticides"), when the pesticide application is for one of the following pesticide use patterns:

- Mosquito and other flying insect pest control
- Weed and algae pest control
- Animal pest control
- Forest canopy pest control
- Intrusive vegetation pest control.

Operator Location: Commonwealth of Virginia

Receiving Waters: Surface waters within the boundaries of the Commonwealth of Virginia, except those specifically named in Board Regulations that prohibit such discharges.

Restrictions: The Department will deem an operator ineligible to discharge under this general permit if the operator is required to obtain an individual permit (9VAC25-31-170 B 3), if the operator is proposing to discharge to surface waters specifically named in Board regulations which prohibit such discharges, if the discharge would violate the Virginia Water Quality Standards antidegradation policy (9VAC25-260-30), or if the discharge is to surface waters that have been identified as impaired by that pesticide or its degradates. Impaired waters include both impaired waters with Board adopted, EPA approved or EPA imposed TMDLs (per 303(d) of the Clean Water Act), and impaired waters for which a TMDL has not yet been approved, established, or imposed for the discharge (those listed in the Virginia Water Quality Assessment 305(b)/303(d) Integrated Report as ‘impaired’ (includes all categories)).

The Board has made the determination that if the operator meets the conditions of this permit, they will comply with sections 9VAC25-26-30 A 1 and 2 (Tier 1 and 2) of the antidegradation policy in the Water Quality Standards Regulation. Section 9VAC25-260-30 A 3 provides for protection of exceptional waters (Tier 3) and does not allow new, additional, or increased discharge of waste to these waters. However, 9VAC25-260-30 A 3 b (3) allows for activities causing temporary sources of pollution in exceptional waters. The pesticides general permit regulation (9VAC25-800-30 D 2) recognizes applications of pesticides as temporary and allowable in exceptional waters. Currently, there no other Board regulations that prohibit these discharges. However, this general permit regulation prohibits coverage under this permit for operators that

discharge to waters that are impaired for that pesticide or its degradates. A list of pesticide-impaired waters in Virginia is in Attachment A.

The permit does not include terrestrial pesticide application or spray drift from terrestrial pesticide application, irrigation return flow and agricultural stormwater runoff. Terrestrial applications should not enter surface water because of restrictions provided under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), and therefore do not require coverage under this permit. Return flows from irrigated agriculture and agricultural stormwater runoff are specifically exempted from discharge permitting under the Clean Water Act.

On the basis of preliminary review and application of lawful standards and regulations, the Board proposes to issue the general permit subject to certain conditions and has prepared a draft permit. The Board has determined that this category of discharges is appropriately controlled under a general permit. The category of discharges to be included involves facilities with the same or similar types of operations and the facilities discharge the same or similar types of wastes. The draft general permit requires that all covered discharges meet technology and water quality based effluent limitations, special conditions and monitoring requirements. It also requires that certain covered operators develop a pesticide discharge management plan (PDMP).

All pertinent information is on file and may be inspected, and arrangements made for copying by contacting Peter Sherman at:

Virginia Department of Environmental Quality, P.O. Box 1105, Richmond, VA 23218
email: peter.sherman@deq.virginia.gov Telephone (804) 698- 4044 FAX (804) 698-4032

1.0 Activities Covered by this Permit

This permit is available to operators who discharge to surface waters from the application of: (1) biological pesticides; or (2) chemical pesticides that leave a residue (hereinafter collectively "pesticides"), when the pesticide application is for one of the following pesticide use patterns:

- Mosquito and other flying insect pest control - to control public health/nuisance and other flying insect pests that develop or are present during a portion of their life cycle in or above standing or flowing water. Public health/nuisance and other flying insect pests in this use category include but are not limited to mosquitoes and black flies. All mosquito pest control activity using pesticide is considered to result in discharges to surface waters.
- Weed and algae pest control - to control weeds, algae and pathogens that are pests in surface waters. Nuisance weeds include, but are not limited to cattails, hydrilla and watermeal. (NOTE: If an operator is spraying a ditch with water in it to keep the ditch clear of weeds the operator falls into this use pattern regardless of how near the operator is to the ditch or what types of weeds are in the ditch. If the operator is spraying to clear the ditch itself and the ditch has water in it, the operator must meet the conditions of this

permit.) Nuisance algae include, but are not limited to, blue green algae that can cause taste and odor problems in drinking water. Nuisance pathogens are disease-producing agent s including, but not limited to, a virus, bacterium or other microorganism. The decision of whether a ditch 'counts' as surface water is usually made after its hydrological connection to a defined surface water is verified. However, for the purposes of this regulation, it is recommended to 'count' every ditch in acreage calculations and consider yourself 'covered' under this permit if you apply pesticides to ditches.

- Animal Pest Control - to control animal pests in surface waters. Animal pests in this use category include, but are not limited to, fish (e.g., snakehead) and zebra mussels.
- Forest Canopy Pest Control - application of a pesticide to the forest canopy to control the population of a pest species (e.g., insect or pathogen) where to target pests effectively a portion of the pesticide unavoidably will be applied over and deposited to surface water. Forest canopy pest control includes aerial mature forest canopy pest control where streams and other small creeks cannot be seen. Juvenile aerial canopy spraying can normally be done in such a way as to avoid surface waters and does not need coverage under the permit or do not need to be included in acreage calculations. Spraying forest canopy from the ground (rather than aerially) may or may not reach surface waters and may not need coverage under this permit or be included in annual treatment area thresholds. The permittee must determine if this type of forest canopy pest control ground spraying will or will not reach surface waters.
- Intrusive vegetation pest control - control of vegetation along roads, ditches, canals, waterways and utility rights of way where to target the intrusive pests effectively, a portion of the pesticide unavoidably will be applied over and deposited to surface water. This includes utility facilities such as pump stations, plants and electric substations where the property is owned by the utility.

The first four use patterns described above reflect the activity categories in U.S. EPA's Pesticide General Permit. The intrusive vegetation pest control use pattern is included in this VPDES general permit to ensure that the permit provides coverage for pesticide applications to areas where utility transmission and distribution lines are located and where such application (often aerial) would unavoidably reach surface waters. DEQ considered expanding the forestry pest control use pattern to include these areas, but received public comment expressing concern that the language proposed was not broad enough to encompass the expected activity and additional coverage was requested for more utility-type pesticide applications that reach surface waters.

The use patterns above were chosen because they represent pesticide discharges that may enter surface waters. Other use patterns where biological pesticides or chemical pesticides are applied (crops or other terrestrial applications) should not enter surface water when the operator correctly follows the product label and FIFRA requirements. If non-exempt biological pesticide or chemical pesticide residue resulting from other use patterns enters state waters, then the operator is discharging to surface waters without a VPDES permit and is subject to enforcement action under the State Water Control Law.

1.1 Other Pesticide Related Activities Not Covered

Hydrogen Peroxide

The *Hydrogen peroxide (Hydrogen dioxide) (000595) Fact Sheet* published by the EPA Office of Pesticide clearly states that if users follow label directions, no risks to the environment are expected from use of pesticide products containing hydrogen peroxide because 1) the substance readily decomposes to water and oxygen gas, leaving no residue; and 2) it is effective at low concentrations where no toxic effects are expected. However, if the product is a registered pesticide in Virginia, you need to consider yourself covered under this general permit under one of the five use categories. If the product is not a registered pesticide in Virginia, then application of the product does not need coverage, even if it falls under one of the five use categories.

Pond Dye

Most citizens use pond dyes to enhance the color of a water feature but it is also effective at controlling weed and algae growth due to blocking out sunlight needed for photosynthesis. If the pond dye product is a registered pesticide in Virginia (check Virginia Department of Agriculture and Consumer Services Pesticide Database Search page for a list of approved pesticides), the owner should consider himself covered under this general permit and abide to the permit requirements. If the pond dye product is not a registered pesticide in Virginia, the use of the dye could still place the owner in violation of the State Water Control law (see Code of Virginia Title 62.1-44.5). Specifically, paragraph three of the law addresses the alteration of "physical, chemical or biological properties" of state waters without a permit (also see 9VAC25-260-20 A, which requires control of substances that produce color).

1.2 No Requirement to Submit a Registration Statement (Notice of Intent)

9VAC25-31-170 B 2 e states that discharges, other than discharges from publicly owned treatment works, combined sewer overflows, primary industrial facilities, and storm water discharges associated with industrial activity may, at the discretion of the Board, be authorized to discharge under a general permit without submitting a notice of intent where the Board finds that a notice of intent requirement would be inappropriate. In making such a finding, the Board shall consider: the type of discharge; the expected nature of the discharge; the potential for toxic and conventional pollutants in the discharges; the expected volume of the discharges; other means of identifying discharges covered by the permit; and the estimated number of discharges to be covered by the permit. The Board shall provide in the public notice of the general permit the reasons for not requiring a notice of intent. The Department is exercising this option for pesticide operators after considering the items listed above, with input from the stakeholders on the technical advisory committee that was formed to assist the Department with the development of this permit.

The Department believes this is appropriate for several reasons. Primarily, the registration statements would only provide very general information to the staff. In addition, EPA is focusing their notice of intent submittals on large entities that apply pesticides to large areas (e.g., irrigation control districts, localities with mosquito control programs, etc.). The Virginia

Department of Agriculture and Consumer Services (VDACS) maintains a database with persons or businesses operating in Virginia that sell, store, distribute, mix, apply or recommend for use, pesticides. These persons or businesses are required to obtain a valid pesticide business license in accordance with 2VAC20-40-20. These persons or businesses are also required to demonstrate knowledge of pesticide laws and regulations, potential hazards of pesticides to man and the environment and safe distribution, use, and disposal of pesticides. Furthermore, the VDACS also certifies commercial applicators, registered technicians and private applicators. Certified applicators must submit an application indicating contact information and use subcategory for which they wish to be certified (e.g., aquatic, forest canopy pest control, etc.). Commercial applicators must maintain records that contain the location, time, pest treated, pesticide and amount used. It is the Department's view that this information constitutes the information from the largest category of operators that would be on any notices of intent submitted to the Department. Any submittal of paperwork to the Department would be a duplicative effort on the part of the applicant, and present an unnecessary use of staff resources. Not requiring registration statements also eliminates staff resources needed to review registrations, send out acceptance letters and other correspondence normally associated with registrations. Therefore, all operators falling under one or more of the five pesticide 'uses' are automatically covered for discharge to surface waters. Since there is no registration requirement, there is also no fee requirement. A list of pesticide business licensees representative of registrants (NOI submitters) can be found at VDAC Virginia Licensed Pesticide Businesses.

1.3 Deadlines

This permit is effective March 1, 2019 and will remain effective for five years. Since no registration or notice of intent to apply is required, there are no deadlines for the submittal of these documents. The permit requires annual summary reports by February 10 of each year citing adverse incident events observed during the previous year (if any). If there are no adverse incidents, then no report is due. No other reports or plans are required to be submitted to the DEQ. All permittees should read, understand and have a copy of the permit. Permittees that exceed the annual treatment area thresholds in part 9VAC25-800-30 C must maintain a pesticide discharge management plan (PDMP). The requirements for the PDMP are in part 9VAC25-800-60 C. The permit, this fact sheet and a PDMP template are available online at DEQ's VPDES Permits, Fees and Regulations website page.

1.4 Complying with Other Statutes, Regulations and Requirements

Having coverage under this permit does not relieve operators of their responsibility to meet other applicable federal, state or local statutes, ordinances or regulations For example, coverage under the VPDES pesticide general permit does not negate the requirements under FIFRA and its implementing regulations or under state pesticide law or regulation to use registered pesticides consistent with the product's labelling. In addition, coverage under the VPDES pesticide general permit does not negate the need to fully comply with state wetland program requirements, including requirements applicable to activities affecting tidal wetlands administered by the Virginia Marine Resources Commission (see generally Subtitle III of Title 28.2 of the Code of Virginia) and wetland compensation sites under DEQ's Virginia Water Protection permit

program (see generally 9VAC25-210). VMRC contact information is available at the Virginia Marine Resource Commission's Contact Information webpage. DEQ VWP program information is at DEQ's Wetlands and Stream webpage.

1.5 Terminations

There are no additional termination procedures when an operator decides to stop discharges resulting from the application of pesticides to surface waters.

1.6 Endangered and Threatened Species

Recommendations from various natural resource agencies regarding endangered and threatened species protection for this general permit were provided via the participation of representatives of these agencies on the technical advisory committee during the 2013 reissuance. The public notice comment period for the 2019 reissuance will be the opportunity for the natural resource agencies to provide any updated recommendations. The general permit does not alter existing endangered and threatened species protections that exist under applicable law and requires operators to document and report adverse impacts to threatened and endangered species (see Part I D 2 below).

Operators with concerns about threatened and endangered species or critical habitat for a specific location can consult the U.S. FWS Virginia Field Office's Endangered Species Project Review webpage for the federally designated critical habitat in Virginia. For location information on all state and federal threatened and endangered species or species of concern, the wildlife information mapper can take you to any location in Virginia, and if you click on 'report' it will list all species within a designated search radius (e.g., 3miles). See the Virginia Department of Game and Inland Fisheries geographic search page. It will list the threatened and endangered species first.

A full listing of all aquatic and terrestrial species (except insects and plants) is at the Virginia Department of Game and Inland Fisheries list of Threatened and Endangered Faunal Species as well as in Attachment B.

Listing of state threatened or endangered plants and insects can be found in § 3.2-1000-1011 of the Code of Virginia and 2VAC5-320-10 of the Virginia Administrative Code, and is in Attachment B.

For a more detailed interaction with U.S. Fish and Wildlife Service's on federally listed species found, the operator may have a project reviewed by following the instructions on the FWS's project review website.

2.0 Substantive Revisions to the Expiring VPDES Pesticide General Permit

No substantive changes have been made to VAG87.

3.0 Effluent Limitations and Monitoring Requirements (Part I)

The general permit requires that all covered discharges meet technology and water quality based effluent limitations (Part I A). Violation of any of these effluent limitations constitutes a violation of the permit.

3.1 Technology-based Limits (Part I A 1)

Part I A 1 Technology-based limits - Minimize

Technology-based limits are required per 9VAC25-31-220 A of the VPDES Permit Regulation. Technology-based limits in this permit are not numerical, rather narrative best management practices that minimize discharges of pesticides to surface waters. These narrative technology limits are based on EPA's NPDES Pesticide General Permit for Discharges from the Application of Pesticides (2016), in compliance with the provisions of the Clean Water Act (CWA), as amended (33 United States Code [U.S.C.] 1251 et seq.).

Part I A 1 a - Technology-based limits – Operator/Applicator

Operators who perform the application of pesticides or who have day to day control of applications (operator / applicator) are responsible for meeting the first part of the technology-based limits (i.e., to 'minimize pesticide discharges to surface waters'). This is met by following the label (use the lowest effective amount), maintaining application equipment, using equipment with cut-off valves and devices to avoid spills to surface waters, and assessing weather conditions to ensure the application is consistent with product label requirements. See detail below (Technology-Based Limits Operator/Applicator).

Part I A 1 b - Technology-based limits – Operator/Decision Maker

The second part of the technology-based limits to 'minimize pesticide discharges to surface waters' is the practice and consideration of integrated pest management (IPM). Operators with control over the financing for, or the decision to perform pesticide applications (operator / decision maker) that result in discharges to surface water shall consider IPM to ensure that discharges resulting for the pesticide application to surface waters are minimized. See detail below (Technology-Based Limits Operator/Decision Maker). In addition, operators (either applicators or decision makers) who exceed the annual treatment area thresholds (those that have to do a PDMP) must document integrated pest management in the PDMP. IPM measures include identifying the target pest, densities and sources or factors contributing to the problem and making determinations about pest management options to manage that problem. Pest management options include no action, prevention, physical methods, cultural methods, biological control or pesticides. If pesticides are chosen, then conduct surveillance to assess the pest management area, determine action thresholds for its use, make sure environmental conditions are correct for application, evaluate site restrictions, application timing and application methods and evaluate using the pesticide against the most susceptible developmental stage of the pest. All these pest management measures to meet these limitations should be done to the extent technologically available and economically achievable.

Technology-Based Limits Operator/Applicator

Part I A 1 a (1) Use the lowest effective amount of pesticide product per application and optimum frequency of pesticide applications necessary to control the target pest, consistent with reducing the potential for development of pest resistance without exceeding the maximum allowable rate of the product label.

It is illegal to use a pesticide in any way prohibited by the FIFRA labeling. In addition, use of pesticides must be consistent with any other applicable state or federal laws. To minimize the total amount of pesticide discharged, operators must consider lower application rates, frequencies, or both to accomplish effective control keeping in mind pesticide resistance. Using the lowest possible effective rate ensures maximum efficiency in pest control with the minimum quantity of pesticide. Using the lowest possible effective rate does not necessarily mean choosing the lowest rate on the label. Sometimes using a higher rate (without exceeding the maximum allowable rate of the product label) is more effective and more protective for the environment. The lowest effective application rate also reduces the amount of pesticide available that is not performing a specific pest-control function. Using the lowest possible effective rate and frequency of application can result in cost and time savings to the user. To minimize discharges of pesticide, operators should base the rate and frequency of application on what is known to be effective against the target pest. Using the lowest effective amount (and not exceeding the product label will assist with resistance management. See National Pesticide Applicator Certification Core Manual, Chapter 1 – Pest Management for additional information on pesticide resistance.

Part I A 1 a (2) No person shall apply, dispense, or use any pesticide in or through any equipment or application apparatus unless the equipment or apparatus is in sound mechanical condition and capable of satisfactory operation. All pesticide application equipment shall be properly equipped to dispense the proper amount of material. All pesticide mixing, storage, or holding tanks, whether on application equipment or not, shall be leak proof. All spray distribution systems shall be leak proof, and any pumps that these systems may have shall be capable of operating at sufficient pressure to assure a uniform and adequate rate of pesticide application.

This requirement is taken from 2VAC5-670-170 A, Regulations Governing Pesticide Product Registration, Handling, Storage, and Disposal under Authority of the Virginia Pesticide Control Act –Application and Equipment.

Common sense and good housekeeping practices enable pesticide users to save time and money and reduce potential for unintended discharges of pesticides to surface waters. Regular maintenance activities should be practiced and improper pesticide mixing and equipment loading should be avoided. When preparing the pesticides for application be certain that you are mixing them correctly and preparing only the amount of material that you need. Carefully choose the pesticide mixing and loading area and avoid places where a spill will discharge into surface waters. Some basic factors operators should consider are:

- Inspect pesticide containers at purchase to ensure proper containment;

- Maintain clean storage facilities for pesticides;
- Regularly monitor containers for leaks;
- Rotate pesticide supplies to prevent leaks that may result from long term storage; and
- Promptly deal with spills following manufacturer recommendations.

Part I A 1 a (3) All pesticide application equipment shall be equipped with cut-off valves and discharge orifices to enable the operator to pass over non-target areas without contaminating them. All hoses, pumps, or other equipment used to fill pesticide handling, storage, or application equipment shall be fitted with an effective valve or device to prevent backflow into water supply systems, streams, lakes, other sources of water, or other materials. However, these backflow devices or valves are not required for separate water storage tanks used to fill pesticide application equipment by gravity systems when the fill spout, tube, or pipe is not allowed to contact or fall below the water level of the application equipment being filled, and no other possible means of establishing back siphon or backflow exists.

This requirement is taken from 2VAC5-670-170 B, Regulations Governing Pesticide Product Registration, Handling, Storage, and Disposal under Authority of the Virginia Pesticide Control Act –Application and Equipment.

To minimize discharges of pesticide, operators must ensure that the rate of application is calibrated (i.e., nozzle choice, droplet size, etc.) to deliver the appropriate quantity of pesticide needed to achieve greatest efficacy against the target pest. Improperly calibrated pesticide equipment may cause either too little or too much pesticide to be applied. This lack of precision can result in excess pesticide being available or result in ineffective pest control. When done properly, equipment calibration can assure uniform application to the desired target and result in higher efficiency in terms of pest control and cost. It is important for applicators to know that pesticide application efficiency and precision can be adversely affected by a variety of mechanical problems that can be addressed through regular calibration. Sound calibration practices to consider are:

- Choosing the right spray equipment for the application;
- Ensuring proper regulation of pressure and choice of nozzle to ensure desired application rate;
- Calibrating spray equipment prior to use to ensure the rate applied is that required for effective control of the target pest;
- Cleaning all equipment after each use and/or prior to using another pesticide unless a tank mix is the desired objective and cross contamination is not an issue;
- Checking all equipment regularly (e.g., sprayers, hoses, nozzles, etc.) for signs of uneven wear (e.g., metal fatigue/shavings, cracked hoses, etc.) to prevent equipment failure that may result in inadvertent discharge into the environment;
- Replacing all worn components of pesticide application equipment prior to application.

Part I A 1 a (4) Assess weather conditions (e.g., temperature, precipitation and wind speed) in the treatment area to ensure application is consistent with product label requirements.

Weather conditions may affect the results of pesticide application. Applicators must assess the treatment area to determine whether weather conditions support pest populations and are suitable for pesticide application.

Part I A 1 b Technology Based Limits, Operator/Decision Maker

The second part of the technology-based effluent limitations in Part I A 1 b are based on integrated pest management (IPM) practices. IPM, as defined in FIFRA, is a sustainable approach to managing pests by combining biological, cultural, physical, and chemical tools in a way that minimizes economic, health, and environmental risks (FIFRA, 7 U.S.C. 136r-1). IPM is not a single pest control method but, rather, a series of pest management evaluations, decisions and controls. Operators whose discharges of pesticides to surface waters are solely from pesticide research and development activities do not have to comply with these additional technology-based effluent limitations to the extent the limits may compromise the research design.

Part I A 1 b of this permit requires all operators to identify the pest problem; to evaluate and implement efficiently and effectively pest management; and to use pesticides properly. Operators are required to perform each of these permit conditions prior to the first pesticide application covered under this permit and at least once each calendar year thereafter. Below is a general discussion describing the limitations for all use patterns. Requirements for documentation of the specific measures implemented are contained in Part I C (Pesticide Discharge Management Plan).

Operators required to perform IPM practices will be required to do the following regardless of use pattern:

Identify the Problem

Operators are required to identify the pest problem, identify the target pest, and establish an action threshold. Understanding the pest biology and ecology will provide insight into selecting the most effective and efficient pest management strategies (pesticidal or non-pesticidal methods), and in developing an action threshold. An action threshold is a point at which pest populations or environmental conditions indicate that pest control action must be taken. Action thresholds help determine both the need for control actions and the proper timing of such actions. It is a predetermined pest level that is deemed to be unacceptable. In some situations, the action threshold for a pest may be zero (i.e., no presence of the pest is tolerated). This is especially true when the pest is capable of transmitting a human pathogen (e.g., mosquitoes and the West Nile virus). In areas where aquatic weeds are problematic, it may be preferable to use an aquatic herbicide as a preventive measure rather than after weeds become established. In some situations, even a slight amount of pest damage may be unacceptable for ecological or aesthetic reasons. Sometimes pre-emergent pesticide application is needed as a preventive measure to keep aquatic weeds at bay. Action thresholds can vary by pest, by site, and by season. Often the action threshold is expressed as the number of pests per unit area. Action thresholds may be difficult to establish. In a new IPM program, a practical approach is to establish an action threshold for the major pests. As operators gain insight and experience into specific pest management settings, the action levels can be revised up or down.

To identify the problem at a treatment area, operators may use existing data to meet the conditions of the permit. For example, a mosquito district may use surveillance data from an adjacent district to identify mosquito species at their pest management area. Operators may also use relevant historic site data.

Pest Management Options

Operators are required to implement efficient and effective means of pest management that most successfully minimizes discharges to surface waters resulting from the application of pesticides. Operators must evaluate both pesticide and non-pesticide methods. Operators must consider and evaluate the following options or combination of options: no action, prevention, mechanical/physical methods, cultural methods, biological control agents, and pesticides. In the evaluation of these options, operators must consider impacts to water quality, impacts to non-target organisms, pest resistance, feasibility, and cost effectiveness. Combinations of various management methods are frequently the most effective pest management strategies over the long term. The goal should be to emphasize long-term control rather than a temporary fix. Examples of options to pesticide use include:

- Eliminating breeding sites (for insects)
- Reduce nutrients to ponds to control weed and algae growth
- Removing animal pests (e.g. fishing, netting) or preventing their spread (e.g. educating the public)
- Planting trees resistant to parasites
- Mowing or physical removal of intrusive plants.

A list of references for IPM practices are included as Attachment D.

Pesticide Use

Operators are required to conduct pest surveillance and reduce the impact on the environment. Pest surveillance is important to time the need for pest control. To reduce the impact on the environment and non-target organisms, operators are required to apply pesticide when the action threshold has been met. As noted earlier, action thresholds help determine both the need for control actions and the proper timing of such actions. There are additional requirements designed for each use pattern in Sections Part I A 1 b (1), (2), (3), (4) and (5) of the permit. For additional information and other limits on pesticide use, see specific IPM discussion under each use pattern.

Concerns for pesticide use during mosquito control as it relates to bee population health were raised during public comment in 2013 (addressing the prior general permit) because bees can be susceptible to mosquito pesticides. Information about IPM practices to protect bee health population during mosquito control activities are included in Attachment D.

3.2 Water Quality-based Limitations (Part I A 2)

The Permit Regulation at 9VAC25-31-220 D requires VPDES permits to meet water quality standards. The Department does this by including water quality-based effluent limits (WQBELs) in permits where necessary. Unlike individual permits that include requirements tailored to site-specific considerations, general permits, while tailored to specific industrial processes or types of discharges (e.g., specific applications of pesticides), often do not contain site-specific WQBELs. Instead, in general, a narrative statement is included that addresses WQBELs. These narrative limits are based on EPA's NPDES Pesticide General Permit for Discharges from the Application of Pesticides (2016), in compliance with the provisions of the Clean Water Act (CWA), as amended (33 *United States Code* [U.S.C.] 1251 *et seq.*).

In this permit, the WQBEL is as follows:

The operator's discharge of pollutants must be controlled as necessary to meet applicable numeric and narrative water quality standards for any discharges authorized under this permit, with compliance required upon beginning such discharge.

If at any time the operator becomes aware, or the board determines, that the operator's discharge of pollutants causes or contributes to an excursion of applicable water quality standards, corrective action must be taken as required in Part I D 1 of this permit.

Any discharge that results in an excursion of any applicable numeric or narrative water quality standard is prohibited. The Department expects that compliance with the FIFRA label requirements, the technology-based effluent limitations, and other terms and conditions in this permit will meet applicable WQBELs. If an operator becomes aware that an excursion of water quality standards has occurred, corrective actions must be taken and documented per Part I D 1 of the permit. If a water quality standards excursion has also caused an adverse incident, the adverse incident must be documented and reported per Part I D 2. If the water quality standards excursion occurred because of a spill, leak or other unauthorized discharge, notification in excess of a reportable quantity in 40 CFR Parts 110, 117 or 302, it must be reported per Part I D 3 of this permit. A link to the 40 CFRs (Code of Federal Regulations) can be found on the Government Publishing Office's E-CFR webpage.

3.3 Monitoring (Part I B)

Monitoring is required in any VPDES permit to demonstrate compliance with the permit conditions per 9VAC25-31-220 I. However, monitoring of pesticide discharges poses several challenges not generally encountered in "traditional" VPDES permitting situations. For example, there is no "wastewater discharge" per se from pesticide applications that is analogous to end-of-pipe discharges. A manufacturing plant would, for example, typically direct its wastewater through a treatment system to remove pollutants and, then, would direct the effluent through a pipe into a receiving waterbody. However, for chemical pesticide applications, at the time of application the pesticide contains both the portion serving its intended purpose as well as the potential residual for which monitoring data would be appropriate. Thus, monitoring the "outfall" in this case would merely provide data on the amount of the product as applied (information

already known through the FIFRA registration process) and would not be useful for comparing with any type of effluent limitation or water quality standard.

Ambient water quality monitoring was also considered for this permit and determined that it was infeasible/impracticable for the following reasons:

- Uncertainty: Ambient water quality monitoring would generally not be able to distinguish whether the results were from the relevant pesticide application some other upstream source.
- Lack of applicable measurable standards: Pesticide-specific water quality standards do not exist at this time for the vast majority of constituents in the products authorized for use under this PGP.
- Safety and Accessibility: Pesticides, particularly those used for mosquito control and forest canopy pest control, are often applied over waterbodies in remote areas, hazardous terrain, and swamps that are either inaccessible or pose safety risks for the collection of samples.
- Difficulty of residue sampling for chemical pesticides: For chemical pesticides, the "pollutant" regulated by the PGP is the residue that remains after the pesticide has completed its activity, and it is this residue that would be the subject of any water quality monitoring requirement. However, the point at which only "residue" remains is not practically discernable at this time for a pesticide application.
- Usefulness of data: Some states have questioned the value of ambient water quality monitoring data obtained from state permitting programs. The data generally showed that water quality impacts were not occurring, and one state even discontinued the requirement in revisions of its state permit.

Given the questionable ability of ambient water quality data to demonstrate permit compliance, EPA (per the NPDES Pesticide General Permit for Discharges from the Application of Pesticides (2016), in compliance with the provisions of the Clean Water Act (CWA), as amended (33 *United States Code* [U.S.C.] 1251 *et seq.*)) has determined that there are suitable alternative monitoring activities to determine permit compliance, other than ambient water quality monitoring, for this permit.

Monitoring requirements for all operators (applicators and decision makers) include visual assessment in the area where pesticides are applied to look for adverse incidents caused by application of pesticides. The visual monitoring requires spot checks in the area to and around where pesticides are applied and must be done during any post-application surveillance or efficacy check, if the operator does one, and during a pesticide application. Visual monitoring is not required when it is infeasible or unsafe to do so (e.g., when the pesticide application is performed in darkness, applications made from aircraft and applications made from a moving vehicle (road vehicle, watercraft, etc.) when the applicator is the driver). A visual monitoring assessment must also be conducted during any post-application surveillance to determine the efficacy of the pesticide treatment. Visual monitoring of this type is only required if the operator

performs post application surveillance in the normal course of business. The Department expects that visual assessments may reasonably be conducted during applications and efficacy inspections may be conducted on foot or from a stationary vehicle.

Visual monitoring observations are not required to be submitted to DEQ (except in the case of adverse incidents). The permit does not require the operator to keep a record of the visual monitoring assessments.

3.4 Pesticide Discharge Management Plan (Part I C)

Any operator exceeding certain annual area thresholds must maintain a pesticide discharge monitoring plan (PDMP) in order to document how the operator will implement the effluent limitations. There is no explicit regulatory requirement in the VPDES Permit Regulation for a PDMP; however, it is standard practice when best management practices are used to meet effluent limits to prepare some type of operations manual or a pollution prevention plan to document the management practices and adjustments to the program. EPA has included the PDMP concept in their pesticide general permit and the VA PDMP mirrors the EPA plan. This requirement is based on EPA's NPDES Pesticide General Permit for Discharges from the Application of Pesticides (2016), in compliance with the provisions of the Clean Water Act (CWA), as amended (33 *United States Code* [U.S.C.] 1251 *et seq.*).

A PDMP is a "living" document that requires periodic review and must be kept up-to-date. Where pest management measures are modified or replaced to meet effluent limitations, such as in response to a Part I A 2 water quality standards violation triggering a Part I D 1 corrective action, such changes must be documented in the PDMP. The PDMP is not a limitation and it does not impose requirements on discharges. These are already imposed by the limitations in parts I A 1 and 2. The PDMP is rather a tool for operators to document, among other things, how pest management measures will be implemented to comply with the permit's effluent limitations, and is a permit "term or condition." Failure to have a PDMP, where required, is a violation of the permit.[5] A PDMP template is available to assist operators develop plans. The PDMP can be expanded and improved over time.

The PDMP must be developed prior to the first application for those operators who know prior to commencement of discharge that they will exceed an annual treatment threshold, prior to exceeding an annual threshold for operators who do not know until after commencement of discharge that they will exceed an annual treatment threshold for that year, and no later than 90 days after responding to a declared pest emergency situation for operator commencing discharge in response to a declared pest emergency situation.

[5] This permit is also consistent with the decision in Texas Independent Producers and Royalty Owners Assoc., et. al. v. EPA, 410 F.3d 964 (7th Cir. 2005), where petitioners challenged EPA's issuance of the construction general permit (CGP) that covers stormwater discharges. In that case, the Court found that neither the Stormwater Pollution Prevention Plan (SWPPP) nor the Notices of Intent (NOIs) are permits or permit applications because they do not amount to limits. 410 F.3d at 978. Further, the Court found that the permit requirement to develop a SWPPP is not an effluent limitation. For the PGP, the PDMP serves a similar purpose as the CGP SWPPP.

The PDMP is not required to be submitted to the Department, but must be made available to the public when requested per the Freedom of Information Act (FOIA) (Chapter 37 of Title 2.2) - see *Part I C 7 PDMP Modifications and Availability* section below.

If you exceed the following annual thresholds, you must develop a PDMP:

Annual Treatment Area Thresholds
9VAC25-800-30 C (Table 1)

Pesticide Use	Annual Threshold
Mosquitoes and Other Flying Insect Pest Control	6400 acres of treatment area[6]
Weed and Algae Pest Control:	80 acres of treatment area[7] or 20 linear miles of treatment area[8]
Animal Pest Control:	80 acres of treatment area[6] or 20 linear miles of treatment area[7]
Forest Canopy Pest Control	6400 acres of treatment area[5]
Intrusive Vegetation Pest Control	6400 acres of treatment area[5] or 20 linear miles of treatment area[7]

These calculations include farm ponds, ditches (including roadside and irrigation ditches) and storm water best management practices with a hydrologic connection to surface water. Sediment ponds during construction and retention ponds with no spill way are not surface waters and are not included in calculations. Typically, a storm water pond will start out being used for erosion and sediment control but then will be a water feature and the storm water pond is maintained but it is no longer a treatment unit. If unsure, assume any water body has a hydrologic connection and must be counted. If a ditch is dry or expected to be dry during the application period, it does not need to be counted. Wetlands can be dry or wet, and both must be counted. If unsure about wetlands locations, include the entire spray area, even if it includes land. Wetlands information and acreages can be found at http://www.fws.gov/wetlands/data/Mapper.html . At the web site, zoom to the application area and use the information tool to see the wetlands acreages.

The rationale for the annual treatment area threshold for each use pattern is as follows:

[6] The total acreage may include water and land for ease of calculation.

[7] Calculations include the area of the applications made to: (1) surface waters and (2) conveyances with a hydrologic surface connection to surface waters 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 twice a year to a ten-acre site is counted as twenty acres of treatment area. For lake acreages, the operator may include the entire lake acreage OR only the areas intended to provide pesticidal benefit.

[8] Calculations include the extent of the application made to linear features (e.g., roads, ditches, canals, waterways and utility rights of way) or along the water's edge adjacent to: (1) surface waters and (2) conveyances with a hydrologic surface connection to surface waters at the time of pesticide application. For calculating annual treatment totals, count each pesticide application activity or area as a separate activity. For example, applying pesticides twice a year to a 1 mile linear feature (e.g., ditch) equals 2 miles of treatment area regardless of whether one or both sides of the ditch are treated. Applying pesticides twice a year along 1 mile of lake shoreline equals 2 miles of treatment area.

For mosquitoes and other flying insect pests, the annual treatment area threshold has been set at 6400 acres. The Department believes that the vast majority of mosquito control and abatement districts in Virginia manages areas significantly larger than this threshold and may reasonably expect to exceed it during any given year.

For weeds and algae pest control, the annual treatment area threshold has been set at 80 acres or 20 linear miles of treatment on canals and irrigation system conveyances. This threshold has been set to capture operators treating relatively large portions of surface waters and watersheds, such as water management districts, wildlife and game departments, and some homeowner and lake associations.

Animal pest control is most commonly treated by public agencies such as departments of fish and game or utilities such as water management districts that manage areas of surface water in excess of 80 acres. The high mobility and prolific breeding ability that necessitate control of aquatic animals usually means that their treatment most often occurs in the entirety or large portions of the water bodies they inhabit.

Forest canopy pest suppression programs are designed to be applied to large tracts of terrain, throughout which operators may not be able to see or avoid surface waters beneath the canopy. The annual treatment area threshold at 6400 acres for this use pattern will exclude only the smallest applications from the PDMP requirement. These smaller applications generally occur on private lands. Therefore, the Department believes the threshold appropriately captures most operators engaging in this use pattern, particularly public agencies managing large tracts of land.

Intrusive vegetation pest control is designed to be applied to linear features or large tracts of land to maintain public utility structures, roads, rights of way etc... Most structures and rights of way should use the more stringent measurement (that which results in a PDMP) which is normally >20 linear miles. It is reasonable to apply the same acreages and linear mileage for this category as in the other large management areas (mosquito and forest canopy pest control) for consistency.

The PDMP must include the following elements:

Part I C 2 Pesticide discharge management team

The permit requires that a qualified individual or team of individuals be identified to manage pesticide discharges covered under the permit. Identification of a pesticide discharge management team ensures that appropriate persons (or positions) are identified as necessary for developing and implementing the plan. Inclusion of the team in the plan provides notice to staff and management (i.e., those responsible for signing and certifying the plan) of the responsibilities of certain key staff for following through on compliance with the permit's conditions and limits.

The pesticide discharge management team is responsible for developing and revising the PDMP, implementing and maintaining the pest management measures to meet effluent limitations, and

taking corrective action where necessary. Team members should be chosen for their expertise in the relevant areas to ensure that all aspects of pest management are considered in developing the plan. The PDMP must clearly describe the responsibilities of each team member to ensure that each aspect of the PDMP is addressed. The Department expects most operators will have more than one individual on the team, except for small entities with relatively simple plans and/or staff limitations. The permit requires that team members have ready access to any applicable portions of the PDMP and the permit.

Part I C 3 Pest Problem Description

The permit requires that the PDMP include a description of the pest problem at the pest management area. A detailed pest management area description assists operators in subsequent efforts to identify and set priorities for the evaluation and selection of pest management measures taken to meet effluent limitations set forth in Parts I A 1 and 2 and in identifying necessary changes in pest management. The description must include identification of the target pest(s), source of the pest problem, and source of data used to identify the problem. Historic data or other available data (e.g., from another similar site) may be used to identify the problem at your site. If you use other site data, you must document in this section why data from your site is not available or not taken within the past year and explain why the data is relevant to your site. Additionally, the pest management area descriptions should include any sensitive resources in the area, such as unique habitat areas, rare or listed species, or other species of concern that may limit pest management options.

Action Threshold(s)

The permit requires that the PDMP include a description of the action threshold(s) established for the target pest, including a description of how they were determined and method(s) to determine when the action threshold(s) has been met. An action threshold is a level of pest prevalence at which an operator takes action to reduce the pest population. For some pests, action may be needed before pests or pest damage appears. In those cases, an action threshold may be defined as a set of conditions, e.g., a plant is at a susceptible stage for a disease under the right weather conditions.

General Location Map

The PDMP must also contain a general location map of the site that identifies the geographic boundaries of the area to which the plan applies and location of surface waters (this could be from a state wide or county wide approach or individual water bodies, depending on the extent of applications for that operator). To improve readability of the map, some detailed information may be kept as an attachment to the site map and pictures may be included as deemed appropriate.

Part I C 4 Integrated pest management options evaluation

The permit requires the PDMP to document how pest management options or a combination of pest management options are evaluated. Pest management options include no action, prevention, mechanical/physical methods, cultural methods, biological control agents, and pesticides.

All six pest management tools may not be available for a specific use category and/or treatment area. However, the PDMP must include documentation of how the six pest management tools were evaluated prior to selecting a site specific pest management strategy. For the no action option, operators should document the impact of this option without any current pest management strategy at the site. For the prevention option, the operator should document the methods implemented to prevent new introductions or the spread of the pests to new sites such as identifying routes of invasion and how these can be intercepted to reduce the chance of invasion. Prevention may include source reduction, using pathogen-free or weed-free seeds or fill; exclusion methods (e.g., barriers) and/or sanitation methods, like wash stations, to prevent reintroduction by vehicles, personnel, etc. Some prevention management methods may fall under mechanical/physical or cultural methods as well.

For the pesticide management option, operators must include a list of the active ingredient(s) evaluated. Discussion should also identify specific equipment or methods that will prevent or reduce the risks to non-target organisms and pesticide discharges to surface waters.

Part I C 5 Response Procedures

Spill Response Procedures

The PDMP must document procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other release to surface waters. In addition, the PDMP must include documentation of the procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies.

Adverse Incident Response Procedures

In the PDMP, operators must document appropriate procedures for responding to an adverse incident resulting from pesticide applications. Operator must identify and document the following:

- Course of action or responses to any incident resulting from pesticide applications;
- Chain of command notification for the incident, both internal to your agency/organization and external;
- State/Federal contacts with phone numbers;
- Name, location, and telephone of nearest emergency medical facility;
- Name, location, and telephone of nearest hazardous chemical responder; including police/fire.

Part I C 6 Signature Requirements

The PDMP must be signed and certified in accordance with the signatory requirements in Part II G of the permit. This requirement is consistent with standard VPDES permit conditions described in 9VAC25-31-110 and is intended to ensure that the operator understands his/her responsibility to create and maintain a complete and accurate PDMP. The signature requirement includes an acknowledgment that there are significant penalties for submitting false information.

Part I C 7 PDMP Modifications and Availability

While not required to be submitted to the Department, interested persons can request a copy of the PDMP through the Department, at which point the Department will likely request the operator to provide a copy of the PDMP. By requiring members of the public to request a copy of the PDMP through the Department, the Department is able to provide the operators with assurance that any Confidential Business Information that may be contained within its PDMP is not released to the public. The Water Control Law states that any information, except effluent data, as to secret formulae, processes, or secret methods shall be kept confidential (§ 62.1-44.21). It is the responsibility of the source providing confidential information, not that of DEQ, to identify the information as confidential and seek DEQ's acquiescence in that designation. DEQ is responsible for keeping such designation confidential. It is the Department's expectation that operators can write the PDMP appropriately without including confidential business information.

The operator shall review the PDMP, at a minimum, once per calendar year and whenever necessary to update the pest problem identified and the pest management strategies evaluated for the pest management area.

A PDMP template is available on the DEQ VPDES Permits, Fees and Regulations website under general permit regulations, Pesticide Discharges GP (VAG87).

3.5 Special Conditions (Part I D)

Special conditions are included in all VPDES permits per 9VAC25-31-210 (establishing permit conditions). This states that the Board shall establish conditions, as required on a case-by-case basis, to provide for and assure compliance with all applicable requirements of the law, the CWA and regulations. These shall include conditions under 9VAC25-31-240 (duration of permits), 9VAC25-31-250 (schedules of compliance) and 9VAC25-31-220 (monitoring). With some exceptions, the special conditions in this permit mirror sections 6 and 7 of the EPA NPDES Pesticide General Permit for Discharges from the Application of Pesticides (2016), in compliance with the provisions of the Clean Water Act (CWA), as amended (33 *United States Code* [U.S.C.] 1251 *et seq.*).

Part I D 1 Corrective Action

Corrective actions in this permit are follow-up actions an operator must take to assess and correct problems. They require review and revision of pest management measures and pesticide application activities, as necessary, to ensure that these problems are eliminated and will not be repeated in the future. Changes to pest management measures to eliminate unauthorized releases,

meet effluent limits, minimize discharges or correct adverse incidents must be made before the next pesticide application, or if not practical, as soon as possible.

A situation triggering corrective action is not necessarily a permit violation and, as such, may not necessarily trigger a modification of pest management measures to meet effluent limitations. However, failure to conduct corrective action reviews in such cases does constitute a permit violation.

Part I D 2 Adverse Incident Documentation and Reporting

Operators are required to take specific actions in response to identified adverse incidents that may have resulted from a discharge from the pesticide application. Namely, operators are required to provide notice (via telephone, fax or DEQ online portal) to the Department within 24 hours and then follow-up with a written report within 5 days of becoming aware of the adverse incident. "Adverse incident" is defined in section 9VAC25-800-10 of the permit regulation but, generally, an adverse incident is defined as any effect of a pesticide's use that is unexpected or unintended. Adverse incidents must be reported even when the product label states that adverse effects may occur.
The 24-hour notification must include at least the following information:

- The caller's (i.e., reporter's) name and telephone number;
- Operator name and mailing address;
- The name and telephone number of a contact person, if different than the person providing the 24-hour notice;
- How and when the permittee became aware of the adverse incident;
- Description of the location of the adverse incident;
- Description of the adverse incident identified and the EPA pesticide registration number for each product that was applied in the area of the adverse incident; and
- Description of any steps the permittee has taken or will take to correct, repair, remedy, cleanup, or otherwise address any adverse effects.

If notification cannot be completed within 24-hours, notification shall be as soon as possible, and a reason for why the notification was not possible within 24 hours must be provided.

The operator is still required to do FIFRA section 6(a)(2) (40 CFR Part 159) notification and reporting.

The operator does not need to report adverse incidents under the following conditions:

- The operator is aware of facts that clearly establish that the adverse incident was not related to toxic effects or exposure from the pesticide application.
- The operator has been notified in writing by the Board that the reporting requirement has been waived for this incident or category of incidents.
- The operator receives information notifying him of an adverse incident but that information is clearly erroneous.

- An adverse incident occurs to pests that are similar in kind to pests identified as potential targets.

A written report of a reportable adverse incident must be submitted to the Department within 5 days of discovering the adverse incident and must include the following information:

- Information required to be provided in Part I D 2 a;
- Date and time you contacted the Department notifying the agency of the adverse incident and who you spoke to and any instructions you were given;
- Location of incident, including the names of any waters affected and appearance of those waters (sheen, color, clarity, etc.);
- A description of the circumstances of the incident including species affected, number of individual and approximate size of dead or distressed organisms;
- Magnitude and scope of the affected area (e.g., aquatic square area or total stream distance affected);
- Pesticide application rate, intended use site (e.g., banks, above, or direct to water), method of application and name of pesticide product, description of pesticide ingredients and EPA registration number;
- Description of the habitat and the circumstances under which the incident occurred (including any available ambient water data for pesticides applied);
- If laboratory tests were performed, indicate what tests were performed, and when, and provide a summary of the test results within 5 days after they become available;
- If applicable, explain why it is believed the adverse incident could not have been caused by exposure to the pesticide;
- Actions to be taken to prevent recurrence of adverse incidents; and
- Signed and dated in accordance with Part II G.

The Department believes adverse incident information associated with discharges from the application of pesticides is useful to the Agency because the information:

- Indicates the effectiveness of the permit in controlling discharges to protect water quality, including data upon which the Department may base future permit decisions (e.g., modifications to or reissuance of this permit).
- Assists review of current or future pesticide use, adherence to, or effectiveness of Best Management Practices;
- Provides information on the nature, extent, and severity of incidents to decision-makers, stakeholders, and the public; and
- Provides the Agency with information on which to assess compliance with regulatory requirements, including documentation and reporting.

Immediately observable signs of distress or damage to non-target plants, animals and other macro-organisms within the treatment area may warrant concern for a possible adverse incident related to a discharge of pesticides during application. The Department acknowledges that some degree of detrimental impact to non-target species is to be expected and is acceptable during the course of normal pesticide treatment. We expect operators to use their best professional judgment in determining the extent to which non-target effects appear to be abnormal or indicative of an unforeseen problem associated with an application of pesticides.

During visual monitoring, operators should watch for distressed or dead juvenile and small fishes, washed up or floating fish, fish swimming abnormally or erratically, fish lying lethargically at the water surface or in shallow water, fish that are listless or nonresponsive to disturbance, the stunting, wilting, or desiccation of non-target submerged or emergent aquatic plants, and other dead or visibly distressed non-target organisms including amphibians, turtles, and macro-invertebrates. These observations must be noted unless they are deemed not to be aberrant (for example, distressed non-target fish are to be expected when conducting a treatment with rotenone and non-target vegetation will be stressed near the target of contact herbicides). It should be noted that observation of these impacts does not necessarily imply that a pesticide has been misused or that there has been a permit violation or an instance of noncompliance, but may provide cause for further investigation of local water quality or reconsideration of Best Management Practices. Not reporting such incidents, however, is a permit violation.

Part I D 2 d specifies which agencies the operator must notify in the event of an adverse incident to federally or state threatened or endangered species, federally-designated critical habitat and Tier I (critical conservation need) and Tier II (very high conservation need) species of greatest conservation need. These species are defined in Virginia's Wildlife Action Plan (www.bewildvirginia.org). Federally-designated critical habitat in Virginia includes portions of the Clinch River, Copper Creek, Indian Creek, the Middle and North Forks of the Holston River, Big Moccasin Creek, Little River and the Powell River (see U.S. FWS Environmental Conservation Online System webpage, Critical Habitat Report and the U.S. FWS Virginia Field Office, Step Three C – Critical Habitat, Project Reviews in Virginia, webpage for the Virginia habitat information. A full listing of all aquatic and terrestrial species (except insects and plants) can be found at Virginia Department of Game and Inland Fisheries list of Threatened and Endangered Faunal Species and can be found in Attachment B.

For location information, the Virginia Department of Game and Inland Fisheries wildlife information mapper can take you to any location in Virginia and if you click on 'report' it will list all species within a designated search radius (e.g., 2 or 3miles). It will list the threatened and endangered species first.

Listing of state threatened or endangered plants and insects can be found in § 3.2-1000-1011 of the Code of Virginia and 2VAC5-320-10 of the Virginia Administrative Code and is in Attachment B.

In the event of an adverse incident to threatened or endangered species, federally designated critical habitat, or Tier 1 (critical conservation need) or Tier II (very high conservation need) areas, you must inform the appropriate agency. This is the National Marine Fisheries Service and

Virginia Department of Game and Inland Fisheries (DGIF) for anadromous or marine species, and US Fish and Wildlife Service and DGIF for terrestrial or freshwater species. The following information must be provided (see Attachment C for contact information):

- The caller's name and telephone number;
- Operator name and mailing address;
- The name of the affected species, size of area impacted, and if applicable, the approximate number of animals affected;
- How and when the permittee became aware of the adverse incident;
- Description of the location of the adverse incident;
- Description of the adverse incident, including the EPA pesticide registration number for each product the permittee applied in the area of the adverse incident;
- Description of any steps the permittee has taken or will take to alleviate the adverse impact to the species; and
- Date and time of application.

Part I D 3 Reportable Spills and Leaks

Operators are required to notify (via phone, fax or DEQ online portal) the Department (contact information in Part I D 5) to report any spill or leak of a hazardous substance or oil into surface waters with 24 hours of becoming aware of the spill, leak, or other release.[9] This must be documented in written a report within 5 days of becoming aware of such spill or leak. The report shall contain the following information:

- A description of the nature and location of the spill, leak or discharge;
- The cause of the spill, leak or discharge;
- The date on which the spill, leak or discharge occurred;
- The length of time that the spill, leak or discharge continued;
- The volume of the spill, leak or discharge;
- If the discharge is continuing, how long it is expected to continue, and what the expected total volume of the discharge will be;
- A summary of corrective action taken or to be taken including date initiated and date completed or expected to be completed, and
- Any steps planned or taken to prevent recurrence of such a spill or leak or other discharge, including notice of whether PDMP modifications are required as a result of the spill or leak.

This information will be used by the Department to ascertain compliance with permit conditions.

[9] Reportable Spills and Leaks are defined as those that trigger the requirement to notify the National Response Center (40 CFR Parts 110, 117, 302) based on the type of pollutant and quantity released.

The Board may waive the written report on a case-by-case basis for reports of noncompliance of the oral report has been received within 24 hours and no adverse impact on state water has been reported

Part I D 4 Recordkeeping and annual reporting

Operators must maintain certain records to help them assess performance of pest management measures and to document compliance with permit conditions. Operators can rely on records and documents developed for other programs, such as requirements under FIFRA, provided all requirements of the permit are satisfied.

All operators must keep copies of any adverse incident 5-day reports submitted to the Department or a rational for any determination that reporting of an identified adverse incident is not required per Part I D 2 a.

Any operators applying pesticides and exceeding the annual application thresholds in 9VAC25-800-30 C (e.g., 6,400 acres, 20 linear miles, etc.) must also maintain a record of each pesticide applied. This applies to both general use and restricted use pesticides. These record requirements mirror VDACS recordkeeping requirements in 2VAC20-40-65. The Department thinks the recordkeeping requirements for the agency mandated to administer the pesticide program in Virginia (i.e., VDACS) is sufficient information for the Department. These records are as follows:

- Name, address, and telephone number of customer and address or location, if different, of site of application (e.g. the customer may be the county, naval base, homeowner association, etc… It does not usually mean individual private properties within the larger entity);
- Name and VDACS certification number of the person making the application or certification number of the supervising certified applicator;
- Day, month and year of application;
- Type of plants, crop, animals, or sites treated and principal pests to be controlled;
- Acreage, area, or number of plants or animals treated;
- Brand name or common product name;
- EPA registration number;
- Amount of pesticide concentrate and amount of diluting used, by weight or volume, in mixture applied; and
- Type of application equipment used.

All required records must be assembled as soon as possible but no later than 30 days following completion of such activity. The operator shall retain any records required under this permit for at least 3 years from the date of the pesticide application. This is consistent with 9VAC25-31-190 J 2 of the permit regulation. The operator shall make available to the Board, including an authorized representative of the Board, all records kept under this permit upon request and provide copies of such records, upon request. This is consistent with 9VAC25-31-190 H.

In addition to recordkeeping, all operators must submit annual reports of any adverse incidents as described in Part I D 2 no later than February 10 of the following year. The operator must also retain a copy for 3 years. The Department believes that the annual report of adverse incidents, along with the VDACS list of licensed pesticide businesses and certified operators, and the availability of records containing location, pest and product information with the operator, is equal to the annual reporting requirements in the federal EPA NPDES permit.

The annual report must contain the following:

- Operator's name;
- Contact person name, title, e-mail address (where available), and phone number;
- A summary report of all adverse incidents that occurred during the previous calendar year; and
- A summary of any corrective actions, including spill responses, in response to adverse incidents, and the rationale for such actions.

This information in the annual report will be used by the Department to assess permit compliance and to determine whether additional controls on pesticide discharges are necessary to protect water quality.

Part I D 5 DEQ contact information and mailing addresses

This section contains all the DEQ contact information for 24-hour reporting for adverse incidents and spills and leaks.

4.0 Conditions Applicable to All Permits (Part II)

VPDES Permit Regulation, 9VAC25-31-190, requires all VPDES permits to contain or specifically cite the conditions that are listed in this section. Some of the conditions in section 190 of the VPDES Permit Regulation have been eliminated because either there was no application to pesticide discharges or the requirement was already in Part I. For example, in monitoring Part II B we removed references to records related to sewage sludge, removed 'notice of planned changes', 'bypass' and 'upset' conditions as these relate only to treatment works. Also, removed 'reports of unauthorized discharges' and 'reports of unusual or extraordinary discharges' as these requirements exist elsewhere in the permit. Some of these conditions also have been edited to reflect the nature of VPDES general permits and specific aspects of this general permit.

ATTACHMENT A
Pesticide Impaired Waters

James River (City of Richmond) **Chlordane*, DDE*, DDT***
James River from the Boulevard Bridge to the fall line at approximately the railroad trestle above Mayos Bridge.

Harwood Mills Reservoir (York County) **Copper.**
Segment begins at northwest end of reservoir and ends at southeast end of reservoir, Rt 17 crossing. This cause encompasses the Harwood Mills Reservoir, portion of Poquoson River upstream of dam @ RM 5.7. PWS for York County.

Lee Hall Reservoir, East and West Segments (York County, Newport News) **Copper.**
This includes the entirety of Lee Hall Reservoir. Located southeast of Lee Hall area. Northeast of Fort Eustis. Lee Hall is split by I-64.

Bailey Creek (Hopewell City, Prince George County) **Aldrin.***
Segment begins at the headwaters of Bailey Creek and extends downstream to the fall line.

Bailey Branch (Surry County) **Mirex.***
Bailey Branch from the headwaters to its tidal limit.

Occupacia Creek and tributaries (Essex County) **Mirex.***
Occupacia Creek from the headwaters to Hunters Millpond dam, and all tributaries entering above the tidal limit.

Lovills Creek Lake (Carroll County) **DDD*, DDE* and DDT.***
The Lovills Creek flood control impoundment east of Cana.

Lovills Creek (Carroll County) **DDE* and DDT.***
Lovills Creek mainstem from the North Carolina state line upstream to just above the Route 686 crossing.

Difficult Run (Fairfax County) **Hepatachlor Epoxide.***
Begins at the confluence with Captain Hickory Run, approximately 0.6 rivermile upstream from Route 683, and continues downstream until the confluence with the Potomac River.

Four Mile Run (Arlington County) **Chlordane.***
Tidal waters of Fourmile Run; from rivermile 1.46 downstream until the confluence with the Potomac River, at the state line.

Pimmit Run (Arlington and Fairfax Counties) **Chlordane.***
Location begins at the confluence with Little Pimmit Run, approximately 0.1 rivermile downstream from Route 695, and continues downstream until the confluence with the Potomac River

Pimmit Run (Arlington and Fairfax Counties) **Heptachlor Epoxide.***
Location begins at the confluence with Little Pimmit Run, approximately 0.1 rivermile downstream from Route 695, and continues downstream until the confluence with the Potomac River.

Bluestone River (Tazewell County) **Chlordane.***

This segment includes the mainstem from the confluence with Big Branch downstream to West Virginia political boundary; may be found on the Bramwell quad sheet.

*** Legacy pesticides or used in pesticides that are currently banned in the United States. You may apply other allowable pesticides in these waters.**

List Derived From Virginia DEQ 2016 Impaired Waters – 303(d) List, Category 5 – Waters needing Total Maximum Daily Load Study.

ATTACHMENT B

Threatened and Endangered Fauna

FRESHWATER FISHES

Atlantic sturgeon Acipenser oxyrinchus FE SE

Blackbanded sunfish Enneacanthus chaetodon SE

Blackside dace Phoxinus cumberlandensis FT ST

Candy darter Etheostoma osburni (Federal proposed)

Carolina darter Etheostoma collis ST

Duskytail darter Etheostoma percnurum FE SE

Emerald shiner Notropis atherinoides ST

Golden darter Etheostoma denoncourti ST

Greenfin darter Etheostoma chlorobranchium ST

Orangefin madtom Noturus gilberti ST

Paddlefish Polyodon spathula ST

Roanoke logperch Percina rex FE SE

Sharphead darter Etheostoma acuticeps SE

Shortnose sturgeon Acipenser brevirostrum FE SE

Sickle darter Percina williamsi ST

Slender chub Erimystax cahni FT ST

Spotfin chub Erimonax monachus FT ST

Steelcolor shiner Cyprinella whipplei ST

Tennessee dace Phoxinus tennesseensis SE

Variegate darter Etheostoma variatum SE

Western sand darter Ammocrypta clara ST

Whitemouth shiner Notropis alborus ST

Yellowfin madtom Noturus flavipinnis FT ST

AMPHIBIANS

Frogs

Barking treefrog Hyla gratiosa ST

Salamanders

Eastern tiger salamander Ambystoma tigrinum tigrinum SE

Mabee's salamander Ambystoma mabeei ST

Shenandoah salamander Plethodon shenandoah FE SE

REPTILES

Lizards

Eastern glass lizard Ophisaurus ventralis ST

Snakes

Canebrake rattlesnake Crotalus horridus SE (Coastal Plain population of timber rattlesnake)

Turtles

Bog (= Muhlenberg) turtle Glyptemys (=Clemmys) muhlenbergii FT SE

Eastern chicken turtle Deirochelys reticularia reticularia SE

Green sea turtle Chelonia mydas FT ST

Hawksbill sea turtle Eretmochelys imbricata FE SE

Kemp's ridley sea turtle Lepidochelys kempii FE SE

Leatherback sea turtle Dermochelys coriacea FE SE

Loggerhead sea turtle Caretta caretta FT ST

Wood turtle Glyptemys insculpta ST

BIRDS

Bachman's sparrow Aimophila aestivalis ST

Bachman's warbler (=wood) Vermivora bachmanii FE SE

Bewick's wren Thryomanes bewickii SE

Black rail Laterallus jamaicensis SE

Gull-billed tern Sterna nilotica ST

Henslow's sparrow Ammodramus henslowii ST

Kirtland's warbler (=wood) Dendroica kirtlandii FE SE

Loggerhead shrike Lanius ludovicianus ST

Peregrine falcon Falco peregrinus ST

Piping plover Charadrius melodus FT ST

Red knot Calidris canutus rufa FT St

Red-cockaded woodpecker Picoides borealis FE SE

Roseate tern Sterna dougallii dougallii FE SE

Wilson's plover Charadrius wilsonia SE

MAMMALS

American water shrew Sorex palustris SE

Carolina northern flying squirrel Glaucomys sabrinus coloratus FE SE

Eastern puma (=cougar) Puma (=Felis) concolor cougar FE SE

Gray bat Myotis grisescens FE SE

Gray wolf Canis lupus FE SE

Indiana bat Myotis sodalis FE SE

Little brown bat Myotis lucifugus SE

Norther long-eared bat Myotis septentrionalis FT ST

Rafinesque's eastern big-eared bat Corynorhinus rafinesquii macrotis SE

Rock vole Microtus chrotorrhinus SE

Snowshoe hare Lepus americanus SE

Tri-colored bat Perimyotis subflavus SE

Virginia big-eared bat Corynorhinus (= Plecotus) townsendii virginianus FE SE

MARINE MAMMALS

Blue whale Balaenoptera musculus FE SE

Finback whale Balaenoptera physalus FE SE

Humpback whale Megaptera novaeangliae FE SE

North Atlantic Right whale Eubalaena borealis FE SE

Sei whale Balaenoptera borealis FE SE

Sperm whale Physeter catodon (= macrocephalus) FE SE

West Indian manatee Trichechus manatus FE SE

MOLLUSKS

Freshwater Mollusks

Appalachian monkeyface (pearlymussel) Quadrula sparsa FE SE

Atlantic pigtoe Fusconaia masoni ST

Birdwing pearlymussel Conradilla caelata (= Lemiox rimosus) FE SE

Black sandshell Ligumia recta ST

Brook floater Alasmidonta varicosa SE

Cracking pearlymussel Hemistena lata FE SE

Cumberland bean (pearlymussel) Villosa trabalis FE SE

Cumberland monkeyface (pearlymussel) Quadrula intermedia FE SE

Cumberlandian combshell Epioblasma brevidens FE SE

Deertoe Truncilla truncata SE

Dromedary pearlymussel Dromus dromas FE SE

Dwarf wedgemussel Alasmidonta heterodon FE SE

Elephantear Elliptio crassidens SE

Fanshell Cyprogenia stegaria FE SE

Fine-rayed pigtoe Fusconaia cuneolus FE SE

Fluted kidneyshell Ptychobranchus subtentum FE SE

Fragile papershell Leptodea fragilis ST

Green blossom (pearlymussel) Epioblasma torulosa gubernaculum FE SE

Green floater Lasmigona subviridis ST

James spinymussel Pleurobema collina FE SE

Little-wing pearlymussel Pegias fabula FE SE

Ohio pigtoe Pleurobema cordatum SE

Oyster mussel Epioblasma capsaeformis FE SE

Pimpleback Quadrula pustulosa pustulosa ST

Pink mucket (pearlymussel) Lampsilis abrupta FE SE

Pistolgrip Tritogonia verrucosa ST

Purple bean Villosa perpurpurea FE SE

Purple lilliput Toxolasma lividus SE

Pyramid pigtoe Pleurobema rubrum SE

Rayed bean Villosa fabalis FE SE

Rough pigtoe Pleurobema plenum FE SE

Rough rabbitsfoot Quadrula cylindrica strigillata FE SE

Sheepnose Plethobasus cyphyus ST

Shiny pigtoe Fusconaia cor FE SE

Slabside pearlymussel Lexingtonia dolabelloides ST

Slippershell mussel Alasmidonta viridis SE

Snuffbox Epioblasma triquetra SE

Spectaclecase Cumberlandia monodonta SE

Tan riffleshell Epioblasma florentina walkeri (= E. walkeri) FE SE

Tennessee heelsplitter Lasmigona holstonia SE

Yellow lance Elliptio lanceolate (Federal proposed)

Freshwater & Land Snails

Appalachian springsnail Fontigens bottimeri SE

Brown supercoil Paravitrea septadens ST

Rubble coil Helicodiscus lirellus SE

Shaggy coil Helicodiscus diadema SE

Spider elimia Elimia arachnoidea SE

Spiny riversnail Io fluvialis ST

Spirit supercoil Paravitrea hera SE

Thankless ghostsnail Holsingeria unthanksensis SE

Virginia fringed mountain snail Polygriscus virginianus FE SE

Virginia springsnail Fontigens morrisoni SE

FRESHWATER CRUSTACEANS

Big Sandy crayfish Cambarus veteranus SE

Lee County Cave isopod Lirceus usdagalun FE SE

Madison Cave amphipod Stygobromus stegerorum ST

Madison Cave isopod Antrolana lira FT ST

MILLIPEDES

Ellett Valley pseudotremia Pseudotremia cavernarum ST

Laurel Creek xystodesmid Sigmoria whiteheadi ST

ARACHNIDS

Spruce-fir moss spider microhexura montivaga FE SE

For further information or details regarding this list or any species listed herein, please contact: Wildlife Diversity Division Virginia Department of Game and Inland Fisheries (804) 367-6913.

FE=Federal Endangered

FT=Federal Threatened

SE=State Endangered

ST=State Threatened

ATTACHMENT B, continued…

Threatened and Endangered Plants and Insects

Threatened per § 3.2-1000-1011 Code of Virginia

Panax quinquefolius L, Wild Ginseng (threatened only when occurring in the wild)

Threatened per 2VAC5-320-10 Virginia Administrative Code

1. Aeschynomene virginica, sensitive-joint vetch.
2. Amaranthus pumilus, seabeach amaranth.
3. Arabis serotina, shale barren rock cress.
4. Cicindela dorsalis dorsalis, Northeastern beach tiger beetle.
5. Clematis viticaulis, Millboro leather flower.
6. Echinacea laevigata, smooth coneflower.
7. Juncus caesariensis, New Jersey rush.
8. Lycopodiella margueritiae, Northern prostrate clubmoss.
9. Nuphar sagittifolia, narrow-leaved spatterdock.
10. Platanthera leucophaea, Eastern prairie fringed orchid.
11. Pyrgus wyandot, Appalachian grizzled skipper.
12. Rhus michauxii, Michaux's sumac.
13. Scirpus flaccidifolius, reclining bulrush.

Endangered per § 3.2-1000-1011 Code of Virginia

Betula uber, Virginia birch or round-leaf birch

Endangered per 2VAC5-320-10 Virginia Administrative Code

1. Boltonia montana, valley doll’s-daisy
2. Cardamine micranthera, small-anthered bittercress.
3. Carex juniperorum, juniper sedge.
4. Corallorhiza bentley, Bentley's coralroot.
5. Fimbristylis perpusilla, Harper's fimbristylis.
6. Helenium virginicum, Virginia sneezeweed.
7. Helonias bullata, swamp-pink.
8. Ilex collina, long-stalked holly.
9. Iliamna corei, Peter's mountain mallow.
10. Isoetes viginica, Virginia quillwort.
11. Isotria medeoloides, small whorled pogonia.
12. Neonympha mitchellii, Mitchell's satyr butterfly.
13. Ptilimnium nodosum, harperella.
14. Puto kosztarabi, Buffalo Mountain mealybug.

15. Pseudanophthalmus holsingeri, Holsinger's cave beetle.
16. Pseudanophthalmus thomasi, Thomas' cave beetle.
17. Scirpus ancistrochaetus, Northeastern bulrush.
18. Sigara depressa, Virginia Piedmont water boatman.
19. Spiraea virginiana, Virginia spiraea.
20. Trifolium calcaricum, running glade clover.

Federally Endangered

1. Nicrophorus americanus, American burying beetle.
2. Bombus affinis, rusty patched bumble bee FE.

ATTACHMENT C

CONTACT INFORMATION FOR THREATENED AND ENDANGERED SPECIES ADVERSE INCIDENT REPORTING

FOR THREATENED OR ENDANGERED ANADROMOUS OR MARINE SPECIES CONTACTS:

Department of Game and Inland Fisheries at (804) 367-6913

AND

National Marine Fisheries Service at NOAA OLE national hotline at 1-800-853-1964.

FOR THREATENED OR ENDANGERED ANIMAL OR INVERTEBRATE SPECIES CONTACTS:

Department of Game and Inland Fisheries at collectionpermits@dgif.virginia.gov and/or (804) 367-6913 (email notification is preferred for record keeping purposes)

AND

U.S. Fish and Wildlife Service Virginia Law Enforcement Office at 804-771-2883, 5721 South Laburnum Avenue, Richmond, Virginia 23231 and the Virginia Field Office at 804-693-6694, Virginia Field Office, 6669 Short Lane, Gloucester, Virginia 23061

FOR THREATENED OR ENDANGERED PLANTS OR INSECTS CONTACTS:

Virginia Department of Agriculture and Consumer Services

Mr. Keith Tignor

804.786.3515

E-mail: Keith.Tignor@vdacs.virginia.gov

U.S. Fish and Wildlife Service Virginia Law Enforcement Office at 804-771-2883, 5721 South Laburnum Avenue, Richmond, Virginia 23231 and the Virginia Field Office at 804-693-6694, Virginia Field Office, 6669 Short Lane, Gloucester, Virginia 23061

ATTACHMENT D

INTEGRATED PEST MANAGEMENT REFERENCES

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Steinke, T.L., McDonald, S.K. 2004. Pesticide Fact Sheet #142, Adult Mosquito Control and Honey Bee Safety. Colorado Environmental Pesticide Education Program. Available at http://webdoc.agsci.colostate.edu/cepep/FactSheets/142AdultMosquito&HoneyBees.pdf

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AQUATIC WEED AND ALGAE PEST CONTROL

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ATTACHMENT D

Pesticide Discharge Management Plan Template

Virginia Pollutant Discharge Elimination System (VPDES)
Pesticide General Permit – VAG87
Pesticide Discharge Management Plan (PDMP)

Company Name [1] _____

Address _____

City _____ State _____ Zip_____

Phone _____

Email_____

Section 1 - Pesticide Discharge Management Team
Instructions: Identify each person by name, title or both and check off their specific responsibilities: *(This form allows for four individuals. If you have more than four people composing the Management Team, make copies of this page or copy and insert a new box and complete the information).*

❶	Name _____ Title _____
	Responsibilities include:
☐	Managing pests in relation to the pest management area
☐	Developing and revising the PDMP
☐	Developing, revising and implementing control measures to meet effluent limits
☐	Developing, revising and implementing corrective actions during adverse incidents

❷	Name _____ Title _____
	Responsibilities include:
☐	Managing pests in relation to the pest management area
☐	Developing and revising the PDMP.
☐	Developing, revising and implementing control measures to meet effluent limits
☐	Developing, revising and implementing corrective actions during adverse incidents

❸	Name _____ Title _____
	Responsibilities include:
☐	Managing pests in relation to the pest management area
☐	Developing and revising the PDMP.
☐	Developing, revising and implementing control measures to meet effluent limits
☐	Developing, revising and implementing corrective actions during adverse incidents

❹	Name _____ Title_____
	Responsibilities include:
☐	Managing pests in relation to the pest management area
☐	Developing and revising the PDMP.
☐	Developing, revising and implementing control measures to meet effluent limits

☐	Developing, revising and implementing corrective actions during adverse incidents

Section 2 – Problem Identification *(add additional space as needed or additional pages)*

Instructions: Complete the following information which is related to the pest problem and the location of the treatment area.

Pest Problem Description *(check all that apply).*

☐	**Mosquito and other flying insect pest control** - to control public health/nuisance and other flying insect pests that develop or are present during a portion of their life cycle in or above standing or flowing water.
☐	**Weed and algae pest control** – to control weeds, algae and pathogens that are pests in surface water.
☐	**Animal pest control** – to control animal pests in surface waters.
☐	**Forest canopy pest control** – application of a pesticide to the forest canopy to control the population of a pest species (e.g., insect or pathogen) where to target the pests effectively, a portion of the pesticide unavoidably will be applied over and deposited to surface water.
☐	**Intrusive vegetation pest control** –. to control vegetation along roads, ditches, canals, waterways, and utility rights of way where to target the intrusive pests effectively, a portion of the pesticide unavoidable will be applied over and deposited to surface water.

General Description of Application Site(s) [2]

_____

_____

_____

_____

_____

Target Pest(s) [3]

_____

_____

_____

_____

Source of the Pest Problem[4]

_____

_____

_____

_____

_____

Action Thresholds[5] – the point at which pest populations can no longer be tolerated necessitating that pest control action be taken based on economic, human health, aesthetic, or other effects.

Describe information related to action thresholds here and/or attach documentation:

_____

_____

_____

_____

_____

_____

General Location Map(s) – Include a general location map (e.g., USGS quadrangle map, a portion of a city or county map, computer or other map) that identifies the geographic boundaries of the area to which the plan applies and location of major surface waters.

Section 3 –Integrated Pest Management Options Evaluation
Instructions: Check all boxes that describe the procedures that you or your organization will implement in order to minimize discharge of pesticides into surface waters using integrated pest management. Attach or cite supporting documentation such as Best Management Practices, Integrated Pest Management Plans, certificates, licenses, etc.

IPM Control Methods[6] **That Will Be Used** *(Check all that apply and explain method used and, if unchecked, why a method is not feasible. Note: No explanation is needed for pesticides to be used because further description follows later in this document.)*

☐	No Action
☐	Prevention
☐	Mechanical/Physical
☐	Cultural
☐	Biological

IPM Non-pesticide Management Measures Used *(check all that apply)*

☐	Devices including light traps, sticky, pheromone, and other traps.

☐	Water management including diversion and draining.
☐	Nutrient management including erosion and fertilizer control.
☐	Biological control including insects, vertebrate organisms, and/or pathogens.
☐	Mechanical controls including burning, mowing, and harvesting.
☐	Preventative methods including exclusion, quarantines, clean equipment, certified seed, feed, and straw.
☐	Other measures as described below.

Describe Other IPM Non-pesticide Management Methods To Be Used or Considered

_____

_____

_____

_____

_____

_____

Pesticides

Information on pesticide application, spill prevention, equipment maintenance, and pest surveillance methods that will be used is provided here **(***check all that apply).*

☐	Pest surveillance is conducted or environmental conditions are assessed that can no longer be tolerated based on economic, human health, aesthetic or other effects, prior to pesticide application.
☐	Pesticides are applied when action thresholds are met.
☐	Most susceptible developmental stage (e.g., larvicides) considered and used when practical and feasible (if applicable).
☐	Environmental conditions are assessed (temperature, precipitation, wind) prior to application.
☐	Consult with local Cooperative Extension and Department of Agriculture pest management specialists.
☐	Use the lowest effective amount of pesticide per application and optimum frequency of pesticide applications necessary to control the target pest consistent with reducing the potential for development of pest resistance.
☐	Read and comply with pesticide labeling.
☐	Mix and apply the pesticide according to pesticide labeling.
☐	Perform regular maintenance activities to reduce leaks, spills, or other unintended discharges of pesticides.
☐	All pesticide application equipment is properly equipped to dispense the proper amount of material.
☐	All mixing, storage, or holding tanks are leak proof, whether on application equipment or not.
☐	All spray distribution systems are leak proof, and any pumps that these systems have are capable of operating at sufficient pressure to assure a uniform and adequate rate of pesticide application.
☐	All pesticide application equipment has cut-off valves and discharge orifices to enable the operator to pass over non-target areas.

☐	All hoses, pumps or other equipment used to fill pesticide handling, storage or application equipment is fitted with an effective valve or device to prevent back flow into water supply systems, streams, lakes, other sources of water, or other materials.[7]
☐	Inspect all application equipment including hoses, tanks, nozzles, and valves before each application.
☐	Replace or repair broken or worn application equipment per manufacturers guidelines.
☐	Maintain pesticide application equipment in proper operating condition which includes proper cleaning, repairing, and calibration.
☐	Individuals on the PDMP team have attended pesticide applicator training or continuing education programs.

Describe Procedures for Determining the Proper Pesticide Application[8], Spill Prevention[9], Equipment Maintenance[10] and Pest Surveillance[11] That Will Be Used:

_____

_____

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_____

Spill and Adverse Incident Response Procedures

☐	Control, contain, and clean up the spill immediately.
☐	Keep the public and others out of the spill area.
☐	Report adverse incidents within 24 hours to DEQ by telephone (see table below).[12]
☐	Provide written adverse incident report within five days to DEQ (see table below).[13]
☐	In emergency situations, contact the VA Dept of Emergency Management (see table below).
☐	Report adverse incidents to threatened and endangered species immediately to additional state agencies (see table below).[14]
☐	Report the spill to immediate supervisors and management.
☐	Provide written spill report within five days to DEQ (see table below).[15]
☐	Additional spill and adverse incident response procedures as described below.

Additional Spill and Adverse Incident Procedures

_____

_____

_____

_____

_____

Complete the Emergency Phone Number List and Post in a Readily Accessible Location

Agency	Phone Number/Web
VA Dept of Environmental Quality (DEQ)	http://www.deq.virginia.gov/Programs/PollutionResponsePreparedness/PollutionReportingForm.aspx *(Insert appropriate DEQ regional office phone numbers and addresses in additional instructions[16]).*
Virginia Department of Emergency Management	For emergencies only: 1-800-468-8892 (24-hour hotline) Emergency Operations Center: 1-804-674-2400
VA Department of Agriculture and Consumer Services	No VDACS reporting is required for this permit unless it is for endangered or threatened plants or insects (below); HOWEVER, you might need to contact VDACS under their regulations or FIFRA requirements.
Nearest Medical Facility	
Additional Phone Numbers When Adverse Incidents Occur to Threatened or Endangered Species	
VA Dept of Game and Inland Fisheries (when aware of adverse incidents to anadromous fish, animal or invertebrate endangered or threatened species)	(804) 367-1000 vafwis_support@dgif.virginia.gov
National Marine Fisheries Service (when aware of adverse incidents to anadromous or marine endangered or threatened species)	NOAA OLE Hotline 1-800-853-1964
U.S. Fish and Wildlife Service (when aware of adverse incidents to animal, invertebrate, insects or plant endangered or threatened species)	USFWS Law Enforcement (703) 358-1949 Regional LE Office (413) 253-8274 VA Field Office (804) 693-6694
VA Dept of Agriculture and Consumer Services (when aware of adverse incidents	Keith Tignor (804) 786-3515 Keith.Tignor@vdacs.virginia.gov

to plants or insects endangered or threatened species)	

The Process, Schedule, and Site Selection For Monitoring Includes *(check all that apply).*

☐	Visual monitoring for possible and observable adverse incidents including but not limited to the unanticipated death or distress of non-target organisms and disruption of wildlife habitat, recreational, or municipal water use (to be conducted before, during, and after pesticide applications, if feasible).
☐	Monitoring includes visual counts and/or photos and surveys if an adverse incident occurs or non-target organisms are affected.
☐	Visual monitoring occurs during post-application surveillance or efficacy checks.
☐	Monitoring sites are selected based on pesticide application locations, human population, pest sightings, pest population, and environmental conditions.
☐	Other procedures and processes as described below.

List Other Processes and Procedures Related to Monitoring and Documenting Impacts to Non-target Organisms

_____

_____

_____

_____

_____

_____

List the Name of the Pesticide(s) Used and the Active Ingredient(s) - Use Additional Sheets if Necessary.

Pesticide Name	Active Ingredient

Pesticide Discharge Management Plan Modifications

You must modify your PDMP whenever necessary to address any of the triggering conditions for corrective action in Part I D 1 of the Pesticide General Permit or when a change in pest control

activities significantly changes the type or quantity of pollutants discharged. Changes to your PDMP must be made before the next pesticide application that results in a discharge to surface water, if practicable, or if not practicable, as soon as possible thereafter. A new signature and date must be added to the revised PDMP.

The operator shall also 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.

A copy of the current PDMP, along with all supporting maps and documents will be retained. The PDMP and supporting information will be made available to the Department of Environmental Quality upon request.

Signature Section Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

_____ _____

Signature of Responsible Party [17] **Date**

_____

Position/Title

Additional Instructions and Examples for Filling out the PDMP

[1] **Company Name -** Insert name of company, municipality, organization or operator.

[2] **General Description of Application Site(s) –** This does not have to include addresses. It is a general description. Examples: 10 golf courses, approximately 30 wetland mitigation banks, 1 reservoir (name), approximately 10,000 forested woodlands in X,Y, Z Counties, etc…

[3] **Target Pest(s) -** Insert common and Latin names. Does not have to be to species level.

[4] **Source of the pest problem** - Explain the source of the pest problem (provide some information as to the nature of the pest) and source of data used to identify that there is a problem (Is data collected from maintenance and monitoring reports by you? Is historical or alternate site data used?).

Examples of explanation of source of the pest problem:

1. The restored streams consist of disturbed land that was denuded of vegetation during construction, leaving large areas of bare soil to be invaded by aggressive, exotic species. Target species found along the stream restoration bank consist of Mile-a-Minute (Polygonum perfoliatum), Japanese Hops (Humulus japonicus), and Stilt Grass (Microstegium vimineum). Several of these species where present before any stream restoration activities took place and are still found throughout the neighboring forested regions. It is believed that these target species were introduced several years ago through human and animal dispersal, as well as environmental factors such as wind, and water. Any target pests identified during regular visits to the streams, or vegetation monitoring is recorded in maintenance logs or monitoring reports, respectively. The data collected from these maintenance and monitoring reports is the primary source of information used by to determine the priority level and occurrence of target species within each site.

*2. Aedes albopictus, the Asian tiger mosquito, is an introduced species of mosquito that was first found in our service area **describe date, if known**. This species is a container breeding mosquito, and is commonly associated with the more urbanized areas in our jurisdiction. However, it can also be an abundant species in the more rural regions of the county, especially in the vicinity of trash piles or tire dumps. It is a fierce daytime biter and a major nuisance mosquito within our service area. Data is collected during pest surveillance (see action threshold, pest surveillance schedules and procedures, e.g.).*

[5] **Action Threshold(s) Description -**

Examples of Action Threshold Descriptions:

1. Pest Plant Species in Constructed Wetlands

The 50/20 rule outlined in the US Army Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Regional Supplement. According to this supplement "dominants are the most abundant species that individually or collectively account for more than 50 percent of the total coverage of vegetation in the stratum, plus any other species that, by itself, accounts for at least 20 percent of the total cover." The "stratum" mentioned above is the breakdown of plants into four categories: Trees (woody plants with a DBH 3 inches or greater), Sapling/Shrub (woody plants less than 3 inches DBH and taller than 3.28 ft.), Herbs (all non-woody plants as well as woody plants less than 3.28 ft. tall), and Woody Vines (greater than 3.28 ft. tall). Monitoring reports (see section 4.1) include the absolute percent cover of vegetation at each monitoring plot surveyed within the report. Thus any target species considered dominant within these monitoring plots is given a high priority status. Areas falling outside of these monitoring plots are evaluated by employees trained in

both aquatic weed control, wetland vegetation identification, and wetland delineation (per Army Core of Engineers Standards) using the same guidelines set forth by 50/20 rule mentioned above to determine the priority level of target pests found. The priority level of noxious species present as dominant vegetation are to be evaluated according to the invasive status (highly invasive vs. occasionally invasive) of the species reported by the Virginia Department of Conservation and Recreation (see http://www.dcr.virginia.gov/natural-heritage/invsppdflist)

2. Adult Mosquito Control:

The adult mosquito population must meet, or exceed, a minimum density to justify the application of pesticide. Two measurements of adult mosquito density are used in Maryland: (1) landing rate counts, and (2) light traps.

The minimum landing rate threshold to initiate spraying of insecticide with ULV ground application equipment is 3 mosquitoes landing on an inspector in a 2-minute period. The minimum light trap collection to warrant ground spraying is 12 female mosquitoes, of a species known to feed on humans, per night.

The minimum action thresholds for aerial application of an insecticide for nuisance adult mosquito control are: (1) an average landing rate count of 12 mosquitoes per minute; or (2) a light trap collection of 100 female mosquitoes per night.

It is preferred that landing rate and light trap criteria be used to evaluate the need for application of an insecticide. However, either method alone can be used. Aerial or ground spraying for adult mosquitoes will be done only when the minimum action threshold for landing rate counts or light trap collections is met or exceeded. The mosquito surveillance data must have been collected in the vicinity of the proposed treatment area within 48 hours prior to the treatment date.

Service requests, i.e., complaints, from communities participating in mosquito control efforts do not provide sufficient justification for nuisance adult mosquito control. However, service requests will result in increased mosquito surveillance by mosquito control staff. An inspector will respond to a service request within two (2) business days after the request is received.

[6] **IPM control methods** –

No Action - Insert incidence where no action would be the choice. Examples might be cases where available control methods may cause secondary or non-target impacts that are not justified.

Prevention – Describe primary pathways of introduction and actions to cut off those pathways and how to reduce conditions that encourage the spread of the pest. Example 1 – Educating the public on how to avoid introduction and spread of invasive plants and animals. Example 2 – Shaking clothing before leaving the site or entering vehicles to prevent the accidental spread of the pest that may have become caught on applicator's clothing.

Mechanical/Physical - Describe mechanical/physical methods for eliminating pests. Example 1 – Weed removal by hand or machine. Example 2 – Clipping seed heads with proper disposal. Example 3 – Capturing nuisance animals (traps, fishing, etc.)

Cultural – Describe methods to alter the habitat to avoid culture of the pest. Example 1 – Dumping water in flower pots to eliminate mosquito breeding areas. Example 2 – Adding dyes to prevent algae growth.

Biological – Insert biological methods (diseases, predators or parasites) to use to control the pest. Example 1 – Use of mosquitofish (Gambusia holbrooki) as a biocontrol agent to feed on mosquito larvae.

[7] **Pesticides (Spill prevention- hoses and pumps) -** These backflow devices or valves are not required for separate water storage tanks used to fill pesticide application equipment by gravity systems when the fill spout, tube, or pipe is not allowed to contact or fall below the water level of the application equipment being filled, and no other possible means of establishing a back siphon or backflow exists.

[8] **Describe procedure(s) for determining proper pesticide application**

Example of procedure for proper pesticide application:

In accordance with Part I A.1 of the VPDES Pesticide General Permit, all pesticide products applied through {INSERT NAME OF COMPANY, MUNICIPALITY, ORGANIZATION OR OPERATOR} are to be used at "the lowest effective amount of pesticide product per application and optimum frequency of pesticide applications necessary to control the target pest, consistent with reducing the potential for development of pest resistance without exceeding the maximum allowable rate of the product label." Before any product mixing takes place all operators must first read the respective specimen label of the {pesticide, herbicide, insecticide, etc…} in which they plan to apply, specifically focusing on the target species and treatment applications being implemented. The following spray solution guidelines should be strictly adhered to during all application processes:

Product Name	*Active Ingredient*	*Controlled Species*	*Percent Solution Used (Note – proprietary information is not required, including percentages that are considered proprietary.)*	*Volume Product Used Per Gallon*
Rodeo	*Glyphosate*	*Purple Loostrife*	*1%*	*1.3 fluid ounces*
Clearcast	*ammonium salt of imazamox*	*Reed Canarygrass*	*3%*	*4 fluid ounces*
Renovate 3	*Triclopyr*	*Floating & Emerged Vegetation*	*surface acres treated*	*2 quarts/acre*
Renovate 3	*Triclopyr*	*Submerged Vegetation*	*surface acres treated*	*5 gallons/ surface acre*
Captain	*Copper Carbonate*	*Planktonic, or Filamentous Algae*	*0.2ppm Copper*	*0.6 gallons/ surface acre*
*Sonar A.S.**	*Fluridone*	*Floating, Emergent & Submerged Vegetation*	*45ppb*	*0.12 Quarts/ surface acre*

In the event that these solutions are not adequately controlling the target species, the concentration of the solution may need to be increased only after the specimen label has been checked to ensure the maximum allowable rate of the product is not exceeded. If the target species is showing signs of resistance, an alternative chemical should be investigated and used during the next application. Whenever possible, alternative chemicals should be used for sites being treated on multiple occasions in order to decrease the chances of pest resistance and unnecessary chemical residues.

[9] **Describe procedure(s) for spill prevention**

Describe the spill prevention program for the pest management areas. The program should address areas and activities at the site that typically pose a high risk for spill including loading and unloading areas, storage areas, process areas, and waste disposal activities. It should address appropriate material handling procedures, storage requirements, and containment or diversion equipment that will minimize the potential for spill or in the event of a spill, enable proper and timely responses. Note that per Part I D 3 of the permit, any spills or leaks must be documented.

Example of spill prevention procedures:

In an effort to reduce the possibility of chemical spills this company has taken the following precautions:

- *All spray equipment must be emptied of pesticide solutions before the loading of vehicles, transportation and storage of equipment.*
- *The universal spill kit, safety kit, and tool kit is required to be brought to every site during applications to ensure proper materials in the event of an adverse incident.*
- *All mixing shall be done on site, above/on the chemical resistant mat provided.*
- *Water to create pesticide solutions is brought with each application crew in 55 gallon barrels. A hand pump is used to pump water from barrels into packs.*
- *During pumping operations the spray pack filters should be in place at the opening of the pack with the pump's tube held above the opening to ensure no pesticide residue contaminate the hand pump. If chemicals are already inside spraying equipment, the packs must be left on the chemical resistant mat while filling with water.*
- *All pesticide chemicals and spray equipment are not allowed to be inside the passenger compartment of any vehicle. They shall be transported in truck beds and closed trailers to prevent any vapors from causing the driver or passengers to be ill.*
- *Chemicals are to remain in the original containers with proper labeling during transportation.*
- *The handling of chemicals or spraying equipment is only permitted when the operator is wearing the proper personal protective gear outlined in the specimen label of the chemical (often long sleeves, long pants, gloves, protective eyewear).*
- *Cleaning of spray equipment is performed on a chemical resistant material, often large plastic sheets, which can be discarded after use.*
- *All stored equipment must be empty of chemicals and properly labeled with the last chemical used in equipment in case any residues are present.*
- *All stored chemicals contain proper labeling in accordance with EPA regulations, and are stored in latched green cabinets that are clearly labeled for pesticide use.*

[10] **Describe procedure(s) for equipment maintenance**

Describe the preventative equipment maintenance program to keep pesticide application equipment in proper operating condition; including how and when the following will be addressed: calibration, regular inspections, and cleaning/repairing of the application equipment to avoid situation that may result in leaks, spills and other releases.

Examples of equipment maintenance schedule and procedures:

1. Typical pesticide applications are made using 3 gallon Solo® backpack sprayers. Large treatment areas may occasionally require the use of a 25 gallon ATV sprayer where driving

conditions permit. All spraying equipment is furnished with shut-off valves to prevent any accidental spraying while transporting equipment or searching for target species. Before the start of any pesticide applications (near the end of every winter, before the onset of spring) all backpack, hand pump, and ATV sprayers are inspected for proper function. This includes all mechanical pieces not limited to; spray nozzles, filters, piston pumps, seals, pumping wands, safety locks, and backpack straps. Extra parts are kept in the warehouse in order to ensure the sprayers can be fixed at the time of diagnosis to prevent the accidental use of faulty equipment. Sprayers that are unable to be fixed are clearly labeled and set aside for further examination. A tool kit including extra parts and the respective tools necessary is brought with each application crew to address any equipment concerns that may arise on site. At each site careful consideration is taken to prepare the minimum amount of pesticide solution needed to adequately control the target species while reducing the amount of excess solution left over in packs. All spraying equipment is clearly labeled with a chemical warning to alert applicators of what chemical was last used in the equipment (in case of any residues), the concentration of these chemicals, and emergency contact information. Unless thoroughly cleaned the only chemicals that should be put into spraying equipment is that which is listed on the respective chemical warning label. All equipment is thoroughly cleaned at the close of each application season, usually shortly after the start of fall, to make sure there are no pesticide residues setting in the tanks for extended periods of time. With this maintenance schedule the integrity of all spraying equipment should not be compromised. This should help prevent any unwanted leaks or spills from faulty equipment, minimizing unnecessary pesticide discharges.

2. Operations:

Application equipment must be calibrated annually to confirm the Volume Median Diameter is according to the label of the pesticide being used.

A visual inspection of spray equipment for leaks or wear in the lines, tanks and nozzle is done prior to the start up of spray equipment.

Routine cleaning and maintenance of the spray system must be performed to ensure system is operating properly.

3. Maintenance:

Daily Checks - Visually check the fog generator each day before use and make any necessary adjustments and /or repairs. Before making any repairs ensure that required PPE is worn.

a. Check all gasoline hoses, insecticide lines and fittings for cracks, leaks or wear. Replace if needed.

b. Check all bolts and fasteners and tighten as necessary.

c. Ensure that pesticide tanks have sufficient chemicals for assigned spray mission.

d. Check all nozzle parts for wear or physical damage. Replace damaged parts.

e. Inspect blower air filter for cleanliness and serviceability.

f. Check engine oil. Add oil as needed.

g. Check fuel level.

h. Start engine, listen for any unusual noises and watch for excessive smoke or any engine oil leaks.

4. Every 50 Hours

a. Check the flow rate calibration.

b. Check all gasoline hoses, insecticide lines and fittings for cracks, leaks or wear. Replace if needed.

c. Check all nozzle parts for wear or physical damage. Replace damaged parts as required.

Replace blower filter element and wing nut washer.

d. Change blower oil.

e. Grease blower.

f. Change Briggs and Stratton engine oil and filter.

g. Clean insecticide filter.

h. Check the battery for serviceability. Test the battery with a volt-ohmmeter. (Volt reading must be between 11.5 and 12 VDC.)

i. Replace the in-line gasoline filter.

j. Clean blower air vent.

5. Calibrating Sentinel Spray System - Note: 2 people are required for this operation.

a. Disconnect the insecticide discharge line from the nozzle. Do not allow insecticide to be discharged into the nozzle of an idle fog generator.

b. Connect plastic hose to chemical hose at elbow fitting on spray nozzle. (Plastic hose should be long enough to reach pesticide tank). Place other end of plastic hose in pesticide tank.

c. Connect battery charger to battery.

d. Place Control Panel pump switch to "FOG" position.

e. Place Control Panel GPS switch in "CAL" position. When GPS switch is set to "CAL" position this is simulating that the vehicle is running at 10 MPH.

f. Open pump box lid (ensure that plastic hose is connected and placed inside pesticide tank) place pump control switch in the "CONTROL BYPASS ON" position. Let pump run until no air can be seen going through plastic hose from nozzle to tank. If air is seen in plastic lines after 2 minutes while pump is running check all connectors for tightness.

g. When air is no longer seen in plastic hose place pump control switch in the "PRESSURE BYPASS ON" position.

h. Observe timer clock or times, and at appreciate time remove plastic hose from pesticide tank quickly placing it inside of measuring beaker.

i. Let pesticide run into the measuring beaker for one minute then place plastic hose back in pesticide tank.

j. Check for correct amount of pesticide in measuring beaker. Repeat steps g. through i. until desired amount of pesticide is present.

k. Place pump control switch in "OFF" position, also place control panel PUMP and GPS switches in "OFF" positions.

6. Repairs and Services - Repairs and services on ULV equipment will be performed by an appointed mechanic only.

[11] **Describe the procedure(s) for pest surveillance**

Discuss how the pest surveillance programs assess the pest treatment area, to determine when the action threshold(s) is met. The discussion should include surveillance method(s) selected.

Example of schedule and procedure for pest surveillance

1. During every site visit, regardless of season or purpose of visit, maintenance reports are filled out detailing observations. All invasive species found during these visits are documented including the species identified, date found, priority level, and approximate location of the species when applicable. All wetland mitigation sites maintained by our company undergo vegetation monitoring during Years 1,2,3,5,7,and 10 after construction has been completed. During the vegetation monitoring any noxious species discovered are reported to this company's Ecosystem Management Department in order for best management practices to be implemented. Detailed record keeping allows employees to locate areas of concern from previous years and monitor the propagation, size, and reaction of the target species to previous pesticide treatments. Before the any pesticide application proceeds the entire site must first be surveyed for target species locations and densities. Sites that have been recently treated are given 1-2 weeks to allow chemicals to take full effect before monitoring of treated areas is repeated, to ensure the minimal amount of pesticide necessary is being used.

2. Adult Mosquito Surveillance

a. Service request inspections are taken during normal working hours and from telephone messages or emails outside of the normal work day. Many of these are simple requests for treatments, although occasionally such calls lead to finding problems needing attention. Technicians generally will check for mosquito larvae and determine if adult populations warrant treatment during these inspections from observed densities.

b. Gravid trap collections are paramount to our west nile virus (WNV) surveillance. This trap type is particularly effective in catching gravid Culex quinquefasciatus, which is our primary WNV vector. Twenty-six gravid traps are deployed throughout the jurisdiction each week during the mosquito season.

c. Center for Disease Control (CDC) light trap collections are used for both nuisance mosquito census and EEE surveillance. Currently, 25 CDC light traps are deployed on a weekly basis.

d. Exit traps were developed by our staff to aid in earlier detection of any possible eastern equine encephalitis (EEE) threat in the county. An exit trap is a passive funnel type trap attached to the tops of our sentinel chicken cages that collect some of the mosquitoes exiting the cage. All Culiseta melanura captured from these traps are pooled based on location and tested for virus.

[12] Twenty-four hour adverse incident notification.

If the operator observes or is otherwise made aware of an adverse incident that may have resulted from a discharge from the operator's pesticide application, the operator shall immediately notify the Department. This notification must be made within 24 hours (phone (DEQ regional office phone numbers below) or online at http://www.deq.virginia.gov/Programs/PollutionResponsePreparedness/MakingaReport.aspx) of when the operator becomes aware of the adverse incident and must include at least the following information:

(1) The caller's name and telephone number;

(2) Operator's name and mailing address;

(3) The name and telephone number of a contact person if different than the person providing the 24-hour notice;

(4) How and when the operator became aware of the adverse incident;

(5) Description of the location of the adverse incident;

(6) Description of the adverse incident identified and the EPA pesticide registration number for each product that was applied in the area of the adverse incident; and

(7) Description of any steps the operator has taken or will take to correct, repair, remedy, cleanup, or otherwise address any adverse effects.

If the operator is unable to notify the Department within 24 hours, notification shall be made as soon as possible and the rationale for why the notification was not possible within 24 hours shall be provided.

The adverse incident notification and reporting requirements are in addition to what the operator is required to submit under FIFRA § 6(a)(2) and its implementing regulations at 40 CFR Part 159.

Reporting of adverse incidents is not required under this permit in the following situations:

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

(2) The operator has been notified in writing by the Board that the reporting requirement has been waived for this incident or category of incidents.

(3) The operator receives notification of a potential adverse incident but that notification and supporting information are clearly erroneous.

(4) An adverse incident occurs to pests that are similar in kind to pests identified as potential targets.

[13] Five-day adverse incident written report.

Within five days of a reportable adverse incident, the operator shall provide a written report of the adverse incident to the appropriate DEQ regional office. The adverse incident report must include at least the following information:

(1) Information required to be provided above for 24 hour reporting (above);

(2) Date and time the operator contacted DEQ notifying the Department of the adverse incident, and whom the operator spoke with at DEQ, and any instructions the operator received from DEQ;

(3) Location of incident, including the names of any waters affected and appearance of those waters (sheen, color, clarity, etc);

(4) A description of the circumstances of the adverse incident including species affected, estimated number of individuals, and approximate size of dead or distressed organisms;

(5) Magnitude and scope of the affected area (e.g., aquatic square area or total stream distance affected);

(6) Pesticide application rate, intended use site, method of application, and name of pesticide product, description of pesticide ingredients, and EPA registration number;

(7) Description of the habitat and the circumstances under which the adverse incident occurred (including any available ambient water data for pesticides applied);

(8) If laboratory tests were performed, indicate what tests were performed, and when, and provide a summary of the test results within five days after they become available;

(9) If applicable, explain why it is believed the adverse incident could not have been caused by exposure to the pesticide;

(10) Actions to be taken to prevent recurrence of adverse incidents; and

(11) Signed and dated in accordance with the signature section certification of the PDMP.

[14] Adverse incident to threatened or endangered species or critical habitat.

If the operator becomes aware of an adverse incident to threatened or endangered species or critical habitat that may have resulted from a discharge from the operator's pesticide application, the operator shall immediately notify the:

(1) National Marine Fisheries Service (NMFS) and the Virginia Department of Game and Inland Fisheries (DGIF) in the case of an anadromous or marine species;

(2) U.S. Fish and Wildlife Service (FWS) and the DGIF in the case of an animal or invertebrate species; or

(3) FWS and the Virginia Department of Agriculture and Consumer Services in the case of plants or insects.

Threatened or endangered species or critical habitats include the following:

(1) Federally listed threatened or endangered species;

(2) Federally designated critical habitat;

(3) State-listed threatened or endangered species;

(4) Tier I (critical conservation need), or Tier II (very high conservation need) species of greatest conservation need (SGCN) as defined in Virginia's Wildlife Action Plan (http://www.bewildvirginia.org/wildlifeplan/).

This notification must be made by telephone immediately upon the operator becoming aware of the adverse incident and must include at least the following information:

(1) The caller's name and telephone number;

(2) Operator's name and mailing address;

(3) The name of the affected species, size of area impacted, and if applicable, the approximate number of animals affected;

(4) How and when the operator became aware of the adverse incident;

(5) Description of the location of the adverse incident;

(6) Description of the adverse incident, including the EPA pesticide registration number for each product the operator applied in the area of the adverse incident;

(7) Description of any steps the operator has taken or will take to alleviate the adverse impact to the species; and

(8) Date and time of application.

A listing of threatened and endangered species in Virginia is in the pesticide general permit fact sheet. If needed, additional information on federally listed threatened or endangered species and federally designated critical habitat can also be found at www.nmfs.noaa.gov for anadromous or marine species or www.fws.gov for terrestrial or freshwater species. Also, state-listed threatened or endangered wildlife species is available through the Virginia Fish and Wildlife Information

Service (www.dgif.virginia.gov). Listing of state threatened or endangered plants and insects can be found in §§ 3.2-1000 through 3.2-1011 of the Code of Virginia and 2VAC5-320-10 of the Virginia Administrative Code.

[15] Five-day spill, leak, or other unauthorized discharge report.

Within five days of the operator becoming aware of a spill, leak, or other unauthorized discharge triggering the spill, the operator shall submit a written report to the appropriate DEQ regional office. The report shall contain the following information:

(1) A description of the nature and location of the spill, leak, or discharge;

(2) The cause of the spill, leak, or discharge;

(3) The date on which the spill, leak, or discharge occurred;

(4) The length of time that the spill, leak, or discharge continued;

(5) The volume of the spill, leak, or discharge;

(6) If the discharge is continuing, how long it is expected to continue and what the expected total volume of the discharge will be;

(7) A summary of corrective action taken or to be taken including date initiated and date completed or expected to be completed; and

(8) Any steps planned or taken to prevent recurrence of such a spill, leak, or other discharge, including notice of whether PDMP modifications are required as a result of the spill or leak.

Discharges reportable to the Department under the immediate reporting requirements of other regulations are exempted from this requirement.

The Board may waive the written report on a case-by-case basis for reports of noncompliance if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

[16] DEQ regional office addresses.
(to see counties of the regional service area see

http://www.deq.virginia.gov/Programs/PollutionResponsePreparedness/Contacts.aspx)

(1) Blue Ridge Regional Office - Roanoke (BRRO-R)
901 Russell Drive
Salem, VA 24153
(540) 562-6700

(2) Northern Virginia Regional Office (NVRO)
13901 Crown Court
Woodbridge, VA 22193
(703) 583-3800

(3) Piedmont Regional Office (PRO)
4949-A Cox Road
Glen Allen, VA 23060
(804) 527-5020

(4) Southwest Regional Office (SWRO)
355 Deadmore St.
P.O. Box 1688
Abingdon, VA 24212
(276) 676-4800

(5) Tidewater Regional Office (TRO)
5636 Southern Blvd.
Virginia Beach, VA 23462
(757) 518-2000

(6) Valley Regional Office (VRO)
4411 Early Road
Mailing address: P.O. Box 3000
Harrisonburg, VA 22801
(540) 574-7800

[17] Signature of responsible party

For a corporation: by a responsible corporate officer. For the purpose of this subsection, a responsible corporate officer means: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-making or decision-making functions for the corporation, or the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions that govern the operation of the regulated activity including having the explicit or implicit duty of making major capital investment recommendations and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

For a partnership or sole proprietorship: by a general partner or the proprietor, respectively.

For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this subsection, a principal executive officer of a federal agency includes the chief executive officer of the agency, or a senior executive officer having responsibility for the overall operations of a principal geographic unit or the agency.

A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described above;

(2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated activity such as the position of superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or any individual occupying a named position; and

(3) The signed and dated written authorization is included in the PDMP. A copy of this authorization must be submitted to the Department if requested.

All other changes to the PDMP, and other compliance documentation required under this permit, must be signed and dated by the person preparing the change or documentation.