

STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

General Operating Permit

In compliance with the Missouri Clean Water Law (Chapter 644 R.S. Mo. as amended, hereinafter, the Law) and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No. MO-G870000

Owner:
Address:

Continuing Authority:
Address:

Facility Name:
Facility Address:

Legal Description: 1/4, 1/4, 1/4, Sec. xx, TxxN, RxxW, < county > County
UTM Coordinates: X = , Y =

Receiving Stream: < receiving stream > < (C, P, L1, L2, L3) >
First Classified Stream and ID: < 1st classified stream > <(C, P, etc.)> <(ID number)> 303(d) List
USGS Basin and Sub-watershed No.: < (USGS HUC14 #) >

is authorized to discharge to waters of the state as described herein, in accordance with the all limitations and monitoring requirements as set forth herein:

FACILITY DESCRIPTION

All Outfalls- including but not limited to: SIC Codes: 0851, 4959, 8999

This permit authorizes point source discharges of pesticides to waters of the state for the specific pesticide use patterns as defined in this permit. The permit requires that applicators implement site specific control practices and other pest management strategies that are designed to minimize discharges of pesticides to waters of the State.

This permit authorizes only pesticide related discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with RSMo Section 621.250, 640.013, and 644.051.6; 10 CSR 20-1.020 and 20-6.020 of the Law.

January 1, 2017
Effective Date

Harry Bozoin
Harry Bozoin, Director, Department of Natural Resources

December 31, 2021
Expiration Date

David J. Lamb
David J. Lamb, Acting Director, Water Protection Program

APPLICABILITY

1. This permit provides coverage under the National Pollutant Discharge Elimination System (NPDES) regulations found in 40 CFR Part 122 and coverage under the Missouri Clean Water Law and regulations found in 10 CSR 20-Chapter 6 for point source discharges related to the application of a pesticide in the State of Missouri, including but not limited to permittees with the primary Standard Industrial Classification (SIC) Codes:
 - SIC 0851 – Forestry Services
 - SIC 4959 – Sanitary Services, Not Elsewhere Classified
 - SIC 8999 – Services Not Elsewhere classified

2. Pesticide Use Activities Covered. This permit provides coverage to pesticide application activities which fall within one or more of the following pesticide use patterns:
 - (a) 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.
 - (b) Aquatic Weed and Algae Control – to control invasive or other nuisance weeds, algae or pathogens in water and at water's edge, including irrigation ditches and/or irrigation canals.
 - (c) Aquatic Nuisance Animal Control – to control invasive or other nuisance animals in water and at water's edge. Aquatic nuisance animals in this use category include, but are not limited to fish, lampreys, and mollusks.
 - (d) Forest Canopy Pest Control – aerial or ground application of a pesticide to a 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 into water.

3. A pesticide operator is the entity that is the: (1) the administrator or manager with control over the management and decision making to perform pesticide applications in a pest management area, and (2) the applicator who physically conducts pesticide applications and/or who has the daily operational control of pesticide applications in the pest management area.

4. Pesticide Permit Threshold – The threshold listed in Table A will determine whether this permit is required. An operator's annual treatment amount is determined based on the expected yearly cumulative acres or linear feet of surface water that an operator treats, or has management over, within the included pesticide use patterns. A pesticide operator must obtain coverage under this permit if its annual treatment amount exceeds the thresholds during a calendar year.

Please note that the timing of an operator's determination of the exceedance of thresholds is based on when an operator becomes aware or reasonably should have been aware through consideration of past experience, planned activities, planning, and other analyses, that it will exceed an annual treatment area threshold during the calendar year, not on the time when the threshold is actually exceeded. For example, many operators may have exceeded the threshold the last several years and have no reason to believe activities will change such that they will not exceed these thresholds in the future. For those operators, coverage under this permit is required prior to commencement of any discharge after the effective date of this permit.

5. This permit applies only to requirements under the Missouri Clean Water Law and the Federal Clean Water Act (CWA) and their effective regulations and does not apply to other environmental laws and regulations.

6. This permit neither supersedes nor removes liability for compliance with county and local ordinances or other applicable federal and state laws.

7. Any pesticide operator that applies pesticides within one of the four pesticide use categories in Table A and meets or exceeds thresholds must obtain authorization under this permit. To obtain authorization, a pesticide operator must submit a completed Form E – Application for General Permit, Form--MO 780-0795 found at <http://dnr.mo.gov/forms/780-0795-f.pdf> to the department prior to conducting covered pesticide activities. The permit application will provide the department notice of an operator's intent for discharges from its pesticide application activities.

8. Except for discharges from pesticide applications made to restore or maintain water quality or to protect public health or the environment that either do not degrade water quality or only degrade water quality on a short-term or temporary basis, operators are not eligible for coverage under this permit for discharges to waters designated as Outstanding National Resource Waters¹ (ONRW) or Outstanding State Resource Waters¹ (ONSW) for antidegradation purposes under 10 CSR 20-7.015(6)(A)3 and 40 CFR 131.12(a)(3).
9. Some proposed projects could encounter sites of conservation concern, including those that have not been recorded. To determine the potential for species of concern within or near a project, please visit:
- Department of Conservation’s “Natural Heritage Review” website at <http://mdcgis.mdc.mo.gov/heritage/newheritage/heritage.htm>; and
 - United States Fish and Wildlife Service’s “Information, Planning and Conservation” website at <http://ecos.fws.gov/ipac/>.
- If the proposed project encounters and will potentially affect a species of concern, please report it to the Department of Conservation and the United States Fish and Wildlife Service.

TABLE A.	APPLICABILITY THRESHOLDS	
If the thresholds set forth in this table are met, this General Permit is required. Determination of the exceedance of thresholds is based on when an operator becomes aware or reasonably should have been aware through consideration of past experience, planned activities, planning, and other analyses, that it will exceed an annual treatment area threshold during the calendar year.		
Pesticide Use		Permit Threshold
Mosquitoes and Other Flying Insect Pests ¹		6,400 or more surface acres of treatment area
Aquatic Weed and Algae Control:		
- In Water ²		80 or more surface acres of treatment area
- At Water’s Edge ³		20 or more linear surface miles of treatment area at water’s edge
Aquatic Nuisance Animal Control:		
- In Water ²		80 or more surface acres of treatment area
- At Water’s Edge ³		20 or more linear surface miles of treatment area at water’s edge
Forest Canopy Pest Control ⁴		More than 6,400 surface acres of treatment area

- ¹ This number is the sum of the treatment acres of actual surface water for each application event in a calendar year. In other words, a given one acre of water may receive ten treatments each year so this would be ten acres total for the year. Treatment areas only include the area for which the pesticide is being applied and treated. For example if pesticides are applied to treat 10 acres of a 100 acre lake, the treatment area would be 10 acres not 100 acres.
- ² This number is calculated based on the area of actual surface water treatment (not water conveyances) in a given year. Treatment areas only include the area for which the pesticide is being applied and treated. For example if pesticides are applied to treat 10 acres of a 100 acre lake, the treatment area would be 10 acres not 100 acres. Unlike the requirements for mosquito control, multiple treatments are not summed; a given area is only counted once per year regardless how many times it’s treated.
- ³ Treatment linear miles is calculated by measuring the “stream miles” treated in a given year. This is not a cumulative count; a given length of stream channel should only be counted once per year if treated. Do not count each side of the steam individually, just the linear feet of the stream channel regardless of whether each side is treated.

¹ Identified or described in 10 CSR 20-7. These regulations are available at many libraries and online at www.sos.mo.gov/adrules/csr/current/10csr/10csr.asp, or may be purchased from the department by calling the department’s Water Protection Program.

⁴ This number is the sum of the treatment acres of forest canopy for each application event in a calendar year. In other words, a given one acre of canopy may receive ten treatments each year so this would be ten acres total in a year.

10. An operator's coverage under this permit includes coverage for the operator's employees, contractors, subcontractors, and other agents. It is the responsibility of the operator to ensure that the application submitted is complete. If the application is submitted with deficiencies, or is otherwise incomplete or inaccurate, the operator and the operator's employees or contractors may not have proper coverage under this permit.
11. Operators commencing discharge in response to a declared pest emergency situation, as defined in Appendix A, must submit their application no later than 30 days after commencement of said discharge.
12. Upon review of an application and/or other information, the department reserves the right to determine that additional technology-based and/or water quality-based effluent limitations are necessary and may deny coverage under this general permit to an individual operator. In this event, the department will notify the applicant of such decision and require subsequent submittal of an application for a site-specific NPDES permit.

PERMIT REQUIREMENTS

1. For the purpose of this permit the term "Waters of the State" is defined in Appendix A. The term "waters of the state" does not include:
 - (a) Manmade treatment systems neither created in waters of the state nor resulting from an impoundment of waters of the state:
 - (b) Manmade stormwater control technologies and structural Best Management Practices (BMPs) including but not limited to sediment basins, wet and dry detention basins, bioremediation cells, rain gardens, and bioswales where such structures are not created in waters of the state.
2. The permittee is authorized to discharge pesticide in accordance with the requirements in this permit. Such discharges shall be managed, controlled, limited and monitored by the permittee in accordance with the conditions in this permit.
3. A leak, spill or other release of a hazardous substance where into waters of the state containing a substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, must be reported to the department in accordance with 10 CSR 24-3.010. A record of each reportable spill shall be retained with the annual report (as detailed under Reporting Requirements in this document) and made available to the department upon request. The department may also require the submittal of a written or electronic report detailing measures taken to clean up the spill within five (5) days of the spill. Such a report must include the type of material spilled, volume, date of spill, date clean-up was completed, clean-up method, and final disposal method. If the spill occurs outside of normal business hours, or if the permit holder cannot reach regional office staff for any reason, the permit holder is instructed to report the spill to the department's 24 hour Environmental Emergency Response hotline at (573) 634-2436 at the earliest practicable moment after discovery. Leaving a message on a department staff member's voice-mail does not satisfy this reporting requirement. This requirement is in addition to the Noncompliance Reporting requirement found in Standard Conditions Part I.
4. The occurrence of an adverse incident may constitute a violation of the permit. Taking corrective action, while required, shall not absolve the permittee of liability for any original violation. Failure to comply with corrective action measures may constitute an additional permit violation. The department will consider the appropriateness and promptness of corrective action in determining enforcement responses to permit violations.
5. Exemptions and Exclusions:
 - (a) Spray drift resulting from pesticide application is not covered under this permit. To address spray drift, EPA established a multi-stakeholder workgroup under the Pesticides Program Dialogue Committee (PPDC), an advisory committee chartered under the Federal Advisory Committee Act (FACA) to explore policy issues relating to spray drift. The recommendations from this committee can be viewed on the www.epa.gov website.
 - (b) Irrigation return flow and agricultural stormwater runoff do not require an NPDES permit.
 - (c) Pesticide applications on engineered conservation structures, in a crop field or grassy swales, vegetative filter strips and other land management structures that may direct or channel flows and in agricultural fields are exempt from the requirements of this permit.

However, application of herbicides into streams, ditches or canals that are themselves waters of the state and control of pests on plants grown in waters of the state, such as perennial obligate hydrophytes, are not exempt and may require NPDES permit coverage.

EFFLUENT LIMITATIONS

1. **Technology Based Effluent Limitations** (TBEL): Pesticide operators must minimize the discharge of pollutants resulting from the application of pesticides in the following manner:
 - (a) In accordance with state pesticide law and the pesticide label, use only an amount and frequency of pesticide product per application that is necessary to control the target pest and that is consistent with reducing the potential for development of pest resistance; and
 - (b) Maintain pesticide application equipment in proper operating condition by adhering to any manufacturer's conditions and industry practices, and by calibrating, cleaning, and repairing such equipment on a regular basis to ensure effective pesticide application and pest control. You must ensure that the equipment's rate of pesticide application is calibrated to deliver the intended quantity of pesticide in accordance with manufacturer's directions.

2. **Control Practices**: Prior to the first pesticide application and at least once each calendar year thereafter during which a permittee will have a discharge, the permittee shall develop and implement written control practices and procedures to comply with the non-numeric effluent limitations in this permit for each pest management area and pesticide use pattern which address the following:
 - (a) Identify target pests;
 - (b) Establish target pest densities that serve as action threshold(s) for implementing pest control strategies;
 - (c) Identify procedures to determine target pest densities;
 - (d) For Vegetation and Algae Control and Nuisance Animal Control: Identify possible factors causing or contributing to the target pest problem (e.g., nutrients, invasive species, etc); and identify areas with target pest problems. Where possible, characterize the extent of the problems including, for example, water use goals not attained for wildlife habitat, fisheries, vegetation, and recreation.
 - (e) For Mosquito and Other Nuisance Insect Pest Control: Identify known breeding sites for source reduction, larval control, and habitat management; and analyze existing surveillance data to identify new or unidentified sources of mosquito or other nuisance insect pest problems as well as sites that have recurring pest problems
 - (f) For Area-Wide and Forest Canopy Pest Controls: Identify current distribution of the target pest and assess potential distribution in the absence of control practices; and develop a species-specific control strategy based on developmental and behavioral considerations for each target pest.
 - (g) In the event of an adverse incident, the permittee must review and, as necessary, revise the evaluation and selection of control practices to ensure that such situations are eliminated and will not be repeated in the future; and
 - (h) If it is determined that control practice revision is necessary, such changes must be made before the next pesticide application that results in a discharge if practicable, or as soon as possible thereafter. Certain situations may require the revision of Control Practices, including but not limited to:
 - (1) The permittee becomes aware or the department concludes that control practices are not adequate/sufficient for the discharge to be protective of water quality; or
 - (2) An inspection or evaluation of the permittee's activities by the department reveals that modification to control practices is necessary to meet non-numeric effluent limits of the permit.

3. **Pest Management Strategies**: The permittee shall evaluate, select and implement one or more of the following management strategies that successfully minimizes discharges of pesticides, while considering effectiveness and efficiency, impact to water quality, impact to non-target organisms, pest resistance, feasibility, and cost effectiveness:
 - (a) No action;
 - (b) Prevention;
 - (c) Mechanical or physical methods;
 - (d) Cultural methods;
 - (e) Biological control agents; and/or
 - (f) Pesticide application.

4. Pesticide Use: When pesticide application is used as a pest management strategy for control or prevention, the permittee shall:
 - (a) Apply pesticide only when the action threshold(s) have been met which demonstrate that control or prevention is necessary;
 - (b) Reduce the impact on the environment and non-target organisms by evaluating the restrictions, application timing, and application methods in addition to applying the pesticide only when the action thresholds have been met;
 - (c) For Mosquito and Other Nuisance Insect, Area-wide and Forest Canopy Pest Controls: 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;
 - (d) For Mosquito and Other Nuisance Insect Pest Control: In situations or locations where practicable and feasible for efficacious control, use larvicides as a preferred pest control when the larval action thresholds have been met. In situations or locations where larvicide use is not practicable or feasible for efficacious control, use adulticides when adult action thresholds have been met;
 - (e) For Area-Wide and Forest Canopy Pest Controls: Use pesticides against the most susceptible developmental stage.

5. Water Quality-Based effluent limitations: Any unauthorized discharges to waters of the state shall not cause a violation of the state water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria. Water quality standards are stated under Standard Conditions (1.) beginning on page 8 of this permit.

6. Pesticide Discharge Monitoring Plan: Operators shall prepare a Pesticide Discharge Management Plan (PDMP) in accordance with Appendix B, which includes the monitoring and record keeping provisions stated herein. The PDMP may refer to or incorporate procedures in other documents to meet the requirements of this permit. A copy of any referenced or incorporated document should be kept with the PDMP. The operator shall retain a copy of the PDMP either onsite or at the address provided on the permit application. These documents must be made available to the department upon request.
 - (a) Each Pesticide Discharge Monitoring Plan shall include protocols to conduct visual evaluation consisting of spot checks in the treatment area to and around where pesticides are applied for possible and observable adverse incidence (defined in Appendix A) or adverse effects as listed within this permit.
 - (b) Prior to each pesticide application determine if the target pest action threshold(s) are met and weather conditions are conducive to proper application.
 - (c) Prior to each pesticide application for Mosquito and Other Nuisance Insect and Area-Wide Pest Control identify conditions (e.g., temperature, precipitation, and wind speed in the treatment area) that support development of pest populations and are suitable for control activities. This should be done during the application when considerations for safety and feasibility allow; and within a reasonable period of time after each pesticide application, not to exceed the time required for maximum effect indicated on the product label.

7. Record Keeping Requirements: PDMPs shall include records that are accurate, complete and sufficient to demonstrate compliance with the conditions of this permit. Operators can rely on other records and documents developed for other obligations, such as requirements under FIFRA, or state pesticide programs, provided all requirements of this permit are satisfied. Maintaining compliance with the record keeping requirements is a duty of the permittee. Written documentation of the records listed below must be kept for a period of 5 years with the PDMP at the owners address provided in the application. Records of equipment maintenance and calibration are to be maintained only by the entity performing the pest application activity (on behalf of self or client). Permittees shall keep the following written records as part of the PDMP:
 - (a) A copy of any adverse incident reports;
 - (b) A copy of spill or leak reports;
 - (c) A copy of the permit application submitted to the department along with any correspondence to or from the department specific to coverage under this permit;
 - (d) A copy of all annual reports, if applicable, and any other report(s) required to be prepared or filed under this general permit; and
 - (e) Pesticide Application Records. The following information must be recorded and kept with the PDMP for each treatment area as soon as practicable after implementing pest control practices:
 - (1) Pesticide applicator's name;
 - (2) Target pest(s) and pest density prior to application;
 - (3) Pest management strategies used;
 - (4) Date pest management strategy was conducted;
 - (5) Date of pre- and post-application surveillance and visual evaluations;

- (6) Name and total amount (in gallons or pounds) of pesticide product applied, including the product's EPA registration numbers;
 - (7) Concentration (%) of active ingredient in formulation;
 - (8) Description of treatment area, including the location and size (acres or linear feet)
 - (9) Identification of any waters, either by name or by location, to which there was a discharge of pesticide(s);
 - (10) Any observed toxic or adverse effects to non-target organisms;
 - (11) A copy of any modifications made to the PDMP during the term of the permit; and
 - (12) Date that application equipment was calibrated, cleaned, and repaired, if applicable.
8. **Reporting Requirements:** Permittees shall prepare an annual report for each calendar year. The annual report(s) shall be maintained by the permittee at the address provided on the application, be readily available for review, and will be submitted to the department annually via the department's eDMR system by January 28th for the previous calendar year. When a permittee terminates permit coverage, the permittee shall submit with the request for termination the annual report for the previous full calendar year. The annual report must contain the following information:
- (a) Identification of any waters or other treatment area either by name or by location, to which there was a discharge of a pesticide(s) including the size of the discharge area;
 - (b) The pesticide use pattern(s) (i.e., mosquito and other flying insects, aquatic weeds and algae, aquatic nuisance animals, or forest canopy);
 - (c) The target pest(s);
 - (d) The company name(s) and contact information for pesticide applicator technician(s), if different from the permittee;
 - (e) Total amount of each pesticide product applied for the reporting year by the appropriate EPA registration number(s);
 - (f) A statement of whether or not this pest control activity was addressed in your PDMP prior to pesticide application;
 - (g) A description of any corrective action(s), including spill responses, resulting from pesticide application activities and the rationale for such action(s); and
 - (h) A statement of whether or not the permittee provided written report(s) to the department of an adverse incident(s) and on what date it was reported.
9. Per 40 CFR Part 127 National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Rule, reporting of effluent limits and monitoring shall be submitted by the permittee via an electronic system to ensure timely, complete, accurate, and nationally-consistent set of data about the NPDES program. All general covered permitted facilities under this master general permit shall comply with the department's requirements for electronic permitting. Application to participate in the eDMR system is required as part of the application for general permit coverage in order to constitute a complete permit application.
10. The permittee must comply with all conditions set forth in this permit as well as those listed in Standard Conditions Part I dated August 01, 2014. At no time shall any discharge result in a violation of Water Quality Standards [10 CSR 20-7.031].
11. It is a violation of the Missouri Clean Water Law to fail to pay fees associated with this permit (Section 644.055, RSMo). The fees can be found at 10 CSR 20-6.011.
12. The permittee must take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
13. The permittee must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures.

APPLICATION REQUIREMENTS

Any pesticide operator that applies pesticides within one of the four pesticide use categories in Table A and meets or exceeds thresholds must obtain authorization under this permit. To obtain authorization, a pesticide operator must submit a completed Form E to the department prior to conducting covered pesticide activities. The permit application will provide the department notice of an operator's intent for discharges from its pesticide application activities.

1. A pesticide operator's coverage under this permit includes coverage for the operator's employees, contractors, subcontractors and other agents.
2. Permittees are authorized to operate under this permit 10 business days after the department's receipt of the application and will retain coverage until the permit expires or is terminated. While not required, applicants are encouraged to mail applications to the department using certified mail delivery confirmation with return receipt or other equivalent method. The department will respond with a letter documenting receipt of the application. It is the Permittee's responsibility to obtain a hard copy of the permit from the department's website. The permit will be posted at <http://dnr.mo.gov/env/wpp/permits/issued/wpcpermits-general.htm>.
3. Operators commencing discharge in response to a declared pest emergency situation, as defined in Appendix A, must submit their application no later than thirty (30) days after commencement of said discharge.
4. Upon review of an application and/or other information, the department reserves the right to determine that additional technology-based or water-quality based effluent limitation are necessary and may deny coverage under the general permit to an individual applicant. In this event, the department will notify the applicant of such decision and require submission of an application for a site-specific NPDES permit.

STANDARD CONDITIONS

In addition to specified conditions stated herein, this permit is subject to the attached Standard Conditions Part I dated August 01, 2014 and hereby incorporated as though fully set forth herein. Definitions are listed in Appendix A and within state regulations 10 CSR 20-2.

1. Water Quality Standards:
 - (a) To the extent required by law, discharges to waters of the state shall not cause a violation of Missouri Water Quality Standards (10 CSR 20-7.031), including both specific and general criteria.
 - (b) General Criteria. The following water quality criteria shall be applicable to all waters of the state at all times, including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
 - (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits, or prevent full maintenance of beneficial uses;
 - (2) Waters shall be free from oil, scum, and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor, or prevent full maintenance of beneficial uses;
 - (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal, or aquatic life;
 - (5) There shall be no significant human health hazard from incidental contact with the water;
 - (6) There shall be no acute toxicity to livestock or wildlife watering;
 - (7) Waters shall be free from physical, chemical, or hydrologic changes that would impair the natural biological community;
 - (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment, and solid waste as defined in Missouri Solid Waste Law, Section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to Section 260.200-260.247, RSMo.
2. Changes in Discharges of Toxic Substances:

The operator shall notify the department as soon as they know or have reason to believe:

 - (a) That an activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the following notification levels:
 - (1) One hundred micrograms per liter (100 µg/L);
 - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile;

- (3) Five hundred micrograms per liter (500 µg/L) for 2,5-dinitrophenol and for 2-methyl-4, 6-dinitrophenol;
 - (4) One milligram per liter (1 mg/L) for antimony;
 - (5) Five (5) times the maximum limit reported for the pollutant in the permit application; or
 - (6) The notification level established by the department in accordance with 40 CFR 122.44(f).
- (b) That the operator has begun or is expected to begin to use a product, by-product or waste product of any toxic pollutant which was not reported in the permit application. Toxic pollutants shall consist of, but are not limited to pollutants listed in 10 CSR20-7.031 Table A or 40 CFR 122 Appendix D.
3. This permit may be reopened and modified or alternatively revoked and reissued to:
- (a) Comply with any applicable effluent standard or limitation issued or approved under Section 301(b)(2)(C) and (D), 304(b)(2)(A) and (B), and 307(a)(2) of the CWA, if the effluent standard or limitation issued or approved:
 - (1) Contains different conditions or is otherwise more stringent than any effluent limitation in this permit; or
 - (2) Controls any pollutant not limited in this permit.
 - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a wasteload allocation study, toxicity test, or other information indicates changes are necessary to assure compliance with Missouri Water Quality Standards (10 CSR 20-7.031).
 - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, an effluent limitation derived from a TMDL is developed for the receiving waters, which would then be included in a list of waters of the state not fully achieving Missouri Water Quality Standards.

The permit, as modified or reissued under this paragraph, shall also contain any other requirements of the CWA then applicable.

PERMIT RENEWAL

Unless terminated, the permittee shall submit an application for the renewal of this permit by submitting *Form E-Application for General Permit Under Missouri Clean Water Law* <http://dnr.mo.gov/forms/780-0795-f.pdf> no later than thirty (30) days prior to the permit's expiration date if they wish to continue an activity regulated by this permit after permit expiration. If a renewal application is not received 30 days prior to the expiration date of the permit, the permittee may be required to apply for and obtain a new permit. As part of the complete application and as required by the federal NDPEs eReporting rule, participation in the department's Electronic Discharge Monitoring Report Submission System (eDMR) will be required. Facilities already participating in eDMR need not re-apply upon renewal. More information can be found at: <http://dnr.mo.gov/env/wpp/edmr.htm>. Failure to apply for renewal of a permit may result in termination of this permit and enforcement action to compel compliance with this condition and the Missouri Clean Water Law.

PERMIT TERMINATION

The permittee shall apply for permit termination when activities covered by this permit have ceased and no significant materials (as defined by 10 CSR 20-6.200(1)(C)27.) remain on the property or if on the property, are stored in such a way as to have no potential for pollution. Proper closure of any storage structure is required prior to permit termination. In order to terminate this permit, the permittee shall notify the department's appropriate regional office by completing and submitting *Form H- Request for Termination of a General Permit* <http://dnr.mo.gov/forms/780-1409-f.pdf>. The regional office may require inspection of the premises prior to granting termination of a permit. When a permittee terminates permit coverage, the permittee shall submit with the request for termination the annual report for the previous full calendar year.

PERMIT TRANSFER

Transfers and changes to Authorization. Permit coverage is not transferable to any other person. Where an operator wants to transfer coverage under the permit to a new operator, the original permittee (the first operator) must request Termination. (See Termination of Permit requirements, above.) The new operator must submit a new application for coverage. If permit authorization is no longer accurate because the application activities have been purchased by a different entity, a new application must be submitted to the department. If the only change that has occurred is a change in contact information or a change in the operator's address, the operator need only provide written notification and any appropriate fees to the department for said modification.

DUTY OF COMPLIANCE

The facility shall comply with all conditions of this permit. Any noncompliance with this permit constitutes a violation of Chapter 644, Missouri Clean Water Law, 10 CSR 20-6, and 10 CSR 20-7. Noncompliance may result in enforcement action, termination of this permit, or denial of the facility's request for renewal.

DUTY TO MITIGATE

The permittee shall take all reasonable steps to minimize or prevent any discharge or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. The permittee is responsible for proper cleanup and mitigation of environmental damages as a result of any permit violations.

Appendix A.

DEFINITIONS

Action Threshold – The point at which pest populations or environmental conditions can no longer be tolerated triggering the need for control actions or prevention measures to be taken based on economic, human health, aesthetic, or other effects. Sighting a single pest does not always mean control is needed. Action thresholds help determine both the need for control actions and the proper timing of such actions.

Active Ingredient – The individual component(s) of a pesticide mixture, product or formulation that will prevent, destroy, repel or mitigate any pest, or that functions as a plant regulator, desiccant, or defoliant.

Adverse Incident – An incident related to a pesticide discharge to waters of the state that you have observed upon inspection or of which you otherwise become aware, in which:

- (1) A person or non-target organism may have been exposed to a pesticide residue, and
- (2) The person or non-target organism suffered a toxic or adverse effect.

Toxic or Adverse Effects – Effects that occur within waters of the U.S. on non-target plants, fish or wildlife that are unusual or unexpected (e.g., effects are to organisms not otherwise described on the pesticide product label or otherwise not expected to be present) as a result of exposure to a pesticide residue, and may include:

- (1) Distressed or dead juvenile and small fishes;
- (2) Washed up or floating fish;
- (3) Fish swimming abnormally, erratically;
- (4) Fish that are lying lethargically at water surface or in shallow water and/or or nonresponsive to disturbance;
- (5) Stunting, wilting, or desiccation of non-target submerged or emergent aquatic plants;
- (6) Other dead or visibly distressed non-target aquatic organisms (amphibians, turtles, invertebrates, etc.);
- (7) Skin rashes or other indications of exposure to humans; and/or
- (8) Vomiting, lethargy or other signs and symptoms in humans or domestic animals that occur directly or indirectly from a discharge to waters of the state related to exposure to pesticide residue

Control Practice – Any Best Management Practice (BMP) or other method used to meet the effluent limitations. Control practices must comply with manufacturer specifications, industry standards and recommended industry practices related to the application of pesticides, and relevant legal requirements. Additionally, control practices could include other actions that a prudent operator would implement to reduce and/or eliminate pesticide discharges to waters of the state to comply with the effluent limitations of this permit.

Declared Pest Emergency Situation – An event defined by a federal, state, or local government of a pest problem determined to require control through application of a pesticide beginning less than ten days after identification of the need for pest control. This public declaration may be based on:

- (1) Significant risk to human health;
- (2) Significant economic loss; or
- (3) Significant risk to: endangered or threatened species, beneficial organisms or the environment.

Non-target Organisms – Other plants and animals, including vertebrates, living in or near the community that are not the target of the pesticide including the plant and animal hosts of the target species and the natural enemies of the target species living in the community.

Pest – Any insect, snail, slug, rodent, nematode, fungus, weed; or any other form of terrestrial or aquatic plant or animal life or virus, bacterium, or other microorganism, except viruses, bacteria, or other microorganisms on or in living man or other living animals, which is normally considered to be a nuisance.

Pest Management Area – The area of land, including any water, for which you are conducting pest management activities covered by this permit.

Pesticide – Insecticides, herbicides, fungicides, rodenticides, and various other substances used to control pests. May be any substance or mixture of substances intended for preventing, destroying, repelling or mitigating any pest; or any substance or mixture of substances intended for use as a plant regulator, defoliant or desiccant. This definition encompasses all uses of pesticides authorized under the Missouri Pesticide Use Act and does not include drugs used to treat or control disease in humans or animals regulated by the Food and Drug Administration. Fertilizers, nutrients and other substances used to promote plant health and survival are not considered to be plant growth regulators and are

thus not pesticides. Biological control agents, except for certain microorganisms, such as ladybugs, parasitic wasps, fish, etc. are exempted from regulation under FIFRA. Pesticide refers to the pesticide as applied. Specific chemicals within the pesticide product with pesticidal qualities are referred to as active ingredients.

Pesticide Product – A pesticide in the particular form (including composition, 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 – Activities undertaken on a systematic basis to gain new knowledge (research) and/or the application of research findings or other scientific knowledge for the creation of new or significantly improved products or processes (experimental development). These types of activities are generally categorized under the four-digit code of 5417 under the 2007 North American Industry Classification System (NAICS).

Target Pest – The organism toward which pest control practices are being directed.

Treatment Area – The area of land including any waters, or the linear distance along water's edge, to which pesticides are being applied. Multiple treatment areas may be located within a single "pest management area" including the entire area over land and water where the pesticide application is intended to provide prescribed benefits. In some instances, the treatment area will be larger than the area where the pesticides are 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.

Waters of the State - All rivers, streams, lakes and other bodies of surface and subsurface water lying within or forming a part of the boundaries of the state which are not entirely confined and located completely upon lands owned, leased or otherwise controlled by a single person or by two (2) or more persons jointly or as tenants in common. The term "waters of the state" does not include manmade waste treatment systems neither created in waters of the state nor resulting from impoundment of waters of the state; or manmade stormwater control technologies and structural Best Management Practices (BMPs) including but not limited to sediment basins, wet and dry detention basins, bioremediations cells, rain gardens and bioswales where such structures are not created in waters of the state.

APPENDIX B

PESTICIDE DISCHARGE MANAGEMENT PLAN (PDMP)

Each operator must prepare, maintain and implement a PDMP. You must keep the plan up-to-date thereafter for the duration of coverage under this general permit, even if your discharges subsequently fall below the applicable threshold. You must develop a PDMP consistent with the schedule outlined in Table 3 below. PDMP documents detail how the permittee will implement the effluent limitations, including the evaluation and selection of control practices to meet those effluent limitations and minimize discharges. In the PDMP, the permittee may incorporate by reference any procedures or plans in other documents that meet the requirements of this permit. If relying upon other documents to describe how the permittee intends to comply with the effluent limitations in this permit, such as a pre-existing integrated pest management (IPM) plan, you must attach to your PDMP a copy of any portions of any documents that you are using to document your implementation of the effluent limitations. All operators subject to the effluent limitations described above must implement control practices to satisfy the effluent limitations in this permit. This includes the permittee as well as any employees, contractors, subcontractors, or other agents. The control practices implemented must be documented and the documentation must be kept up-to-date.

Table 3. Pesticide Discharge Management Plan Deadline	
Category	PDMP Deadline
Discharges that do not exceed permit thresholds.	Not applicable
Operators who know or should have reasonably known, prior to commencement of discharge, that they will exceed an annual treatment area threshold identified in Table A. on page 3 of this permit for that year.	Prior to first pesticide application covered under this permit.
Operators who do not know or would reasonably not know until after commencement of discharge, that they will exceed an annual treatment area threshold identified in Table A. on page 3 of this permit for that year.	Prior to exceeding an annual treatment area threshold.
Operators commencing discharge in response to a <u>declared pest emergency situation</u> as defined in Appendix A that will cause the operator to exceed an annual treatment area threshold.	No later than 90 days after responding to declared pest emergency situation.

CONTENTS OF PESTICIDE DISCHARGE MANAGEMENT PLAN (PDMP)

Your PDMP must include the following elements:

- (1) Pesticide Discharge Management Team – Identify all persons including name and contact information that compose the team as well as each person’s responsibilities. Include who is responsible for managing pests in the pest management area; who develops and revises the PDMP; who is responsible for corrective action development, revision and implementation; and who conducts pesticide applications. If the pesticide applicator is unknown at the time of PDMP development, indicate whether or not a for-hire applicator will be used and when you anticipate that you will identify the applicator.
- (2) Control Practice Description – Outline control practices as described in this permit. Document the control practices implemented and include active ingredient(s) evaluated for use.
- (3) Schedules and Procedures
 - (a) Pertaining to control practices used to comply with the effluent limitations
 - (1) Application Rate and Frequency Procedures for determining the lowest effective amount of pesticide product per application and the optimum frequency of applications necessary to control the target pest consistent with reducing potential for development of pest resistance.

- (2) Spill Prevention Procedures including a schedule of maintenance activities for preventing spills and leaks of pesticides associated with the application of pesticides covered under this permit.
 - (3) Pesticide Application Equipment Procedures including schedules and procedures for maintaining pesticide application equipment in proper operating condition. Document calibrating, cleaning and repairing equipment.
 - (4) Pest Surveillance Procedures and methods for conducting pre-application pest surveillance.
 - (5) Assessment of Environmental Conditions Procedures describing methods for assessing environmental conditions in the treatment area.
- (b) Pertaining to other actions necessary to minimize discharges
- (1) Spill Response Procedures documenting procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases. Employees who may cause, detect, or respond to a spill or leak must be trained in these procedures and have necessary spill response equipment available. When possible, one of these individuals should be a member of your PDMP team. Include procedures for notification of appropriate personnel, emergency response agencies and regulatory agencies.
 - (2) Adverse Incident Response Procedures including responding to any incident both internal and external. Notification procedures for both internal, within the permittees organization, and external, including contact information for state/federal permitting agency, nearest medical facility and nearest hazardous chemical responder, must be in a location that is readily accessible and available in case of an incident.
 - (3) Pesticide Monitoring Schedules and Procedures documenting procedures for conducting monitoring consistent with the requirements of this permit including the process for determining the location of any monitoring, a schedule for monitoring, the person(s) responsible for conducting monitoring and procedures for documenting any observed impacts to non-target organisms resulting from pesticide discharge.
- (4) Signature Requirements – The permittee must sign, date and certify the accuracy of the PDMP.
- (5) PDMP Availability – The permittee must retain a copy of the PDMP along with all supporting maps and documents at the address provided on the permit application. The PDMP and all supporting documentation must be readily available upon request by the department. The department may provide copies of the PDMP or other information related to this permit that is in its possession to members of the public.

Missouri Department of Natural Resources
Fact Sheet
MO-G870000 Pesticides

The Federal Water Pollution Control Act [Clean Water Act (CWA)] Section 402 of Public Law 92-500 (as amended) established the National Pollution Discharge Elimination System (NPDES) permit program. This program regulates the discharge of pollutants from point sources into the waters of the United States, and the release of stormwater from certain point sources. All such discharges are unlawful without a permit (Section 301 of the CWA). After a permit is obtained, a discharge not in compliance with all permit terms and conditions is unlawful. Missouri State Operating Permits (permit) are issued by the Missouri Department of Natural Resources (department) under an approved program, operated in accordance with federal and state laws (Federal CWA and Missouri Clean Water Law Section 644 as amended). Permits are issued for a period of five (5) years unless otherwise specified.

Per 40 CFR 124.56, 40 CFR 124.8, and 10 CSR 20-6.020(1)(A)2., a Fact Sheet shall be prepared to give pertinent information regarding the applicable regulations, rationale for the development of effluent limitations and conditions, and the public participation process for the permit. A Fact Sheet is not an enforceable part of a MSOP.

This Fact Sheet is for a:

- Major
- Minor
- Industrial Facility
- Variance
- Master General Permit
- Permit with widespread public interest

Part I – Facility Information

Facility Type: Commercial Pesticide Application

Facility SIC Code(s): Includes but not limited to: SIC # 0851, 4959, 8999

Facility Description: This Master General Permit authorizes the discharge of biological or chemical pesticides resulting from the application of a pesticide made into or over, including immediately adjacent to waters of the State when conducted in accordance with the effluent limitations and monitoring requirements as set forth in this permit. The final effluent limitations shall become effective upon issuance and remain in effect until such time this permit is no longer effective. Discharges shall be controlled, limited and monitored by the permittee as specified in this permit.

Part II – Receiving Stream Information

APPLICABLE DESIGNATIONS OF WATERS OF THE STATE:

Per Missouri Effluent Regulations (10 CSR 20-7.015), the waters of the state are divided into seven (7) categories. Each category lists effluent limitations for specific parameters, which are presented in each outfall's Effluent Limitation Table and further discussed in the Derivation & Discussion of Effluent Limitations section. This permit applies to facilities discharging to the following water body categories:

- Missouri or Mississippi River [10 CSR 20-7.015(2)]
- Lakes or Reservoirs [10 CSR 20-7.015(3)]
- Losing Streams [10 CSR 20-7.015(4)]
- Metropolitan No-Discharge Streams [10 CSR 20-7.015(5)]
- Special Streams [10 CSR 20-7.015(6)]
- Subsurface Waters [10 CSR 20-7.015(7)]
- All Other Waters [10 CSR 20-7.015(8)]

Missouri Water Quality Standards (10 CSR 20 7.031) defines the Clean Water Commission water quality objectives in terms of "water uses to be maintained and the criteria to protect those uses." The receiving stream and/or 1st classified receiving stream's beneficial water uses shall be maintained in accordance with 10 CSR 20-7.031(4). A general permit does not take into consideration site-specific conditions.

MIXING CONSIDERATIONS

This permit applies to receiving streams of varying low flow conditions. Therefore, the effluent limitations must be based on the smallest low flow streams considered, which includes waters without designated uses. As such, no mixing is allowed.

- Not Applicable: Mixing Zone [10 CSR 20-7.031(5)(A)4.B.(I)(a)]
- Not Applicable: Zone of Initial Dilution [10 CSR 20-7.031(5)(A)4.B.(I)(b)]

RECEIVING STREAM MONITORING REQUIREMENTS:

There are no receiving water monitoring requirements recommended at this time.

Part III – Rationale and Derivation of Effluent Limitations & Permit Conditions

303(d) LIST & TOTAL MAXIMUM DAILY LOAD (TMDL):

Section 303(d) of the Federal CWA requires that each state identify waters that are not meeting Water Quality Standards and for which adequate water pollution controls have not been required. Water Quality Standards protect such beneficial uses of water as whole body contact, maintaining fish and other aquatic life, and providing drinking water for people, livestock, and wildlife. The 303(d) list helps state and federal agencies keep track of waters that are impaired but not addressed by normal water pollution control programs.

- Not Applicable: This facility does not discharge to a 303(d) listed stream

ANTI-BACKSLIDING:

A provision in the Federal Regulations [CWA Section 303(d)(4); CWA Section 402(c); 40 CFR Part 122.44(I)] that requires a reissued permit to be as stringent as the previous permit with some exceptions.

- Not Applicable: All effluent limitations in this permit are at least as protective as those previously established.

ANTIDEGRADATION:

In accordance with Missouri WQS [10 CSR 20-7.031(3)], the department is to document by means of Antidegradation Review that the use of a water body's available assimilative capacity is justified. Degradation is justified by documenting the socio-economic importance of a discharging activity after determining the necessity of the discharge. Facilities that were constructed or expanded prior to August 30, 2008 are not subject to the requirements of Missouri's Antidegradation Implementation Procedure because these procedures were not promulgated and effective prior to that date.

- Not Applicable: No degradation proposed and no further review necessary. Facility did not apply for authorization to increase pollutant loading or to add additional pollutants to their discharge.

PUBLIC NOTICE OF COVERAGE FOR AN INDIVIDUAL FACILITY:

Public Notice of reissuance of coverage is not required unless the facility has been found to be in significant noncompliance [10 CSR 20-6.020(1)(C)4.]. The need for an individual public notification process shall be determined and identified in the permit [10 CSR 20-6.020(1)(C)5.].

- Not Applicable: Public Notice is not required for issuance of coverage under this permit to individual facilities for the first time.

SCHEDULE OF COMPLIANCE (SOC):

A schedule of remedial measures included in a permit, including an enforceable sequence of interim requirements (actions, operations, or milestone events) leading to compliance with the Missouri Clean Water Law, its implementing regulations, and/or the terms and conditions of a permit.

- Not Applicable: This permit does not contain a SOC.

SETBACKS:

Setbacks are common elements of permits and are established to provide a margin of safety in order to protect the receiving water from accidents, spills, unusual events, etc.

Not Applicable: This permit does not contain setbacks.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP):

In accordance with 40 CFR 122.44(3)(k) Best Management Practices (BMPs), BMPs are implemented to control or abate the discharge of pollutants when: (1) Authorized under Section 304(e) of the CWA for the control of toxic pollutants and hazardous substances from ancillary industrial activities; (2) Authorized under Section 402(p) of the CWA for the control of stormwater discharges; (3) Numeric effluent limitations are infeasible; or (4) The practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA.

A SWPPP is a series of steps and activities to identify sources of pollution or contamination, then select and carry out actions which prevent or control the pollution of stormwater discharges. The plan may include, but is not limited to, treatment requirements, operating procedures, and practices to control facility site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Not Applicable: At this time, the facility is not required to develop and implement a SWPPP.

VARIANCE:

Per the Missouri Clean Water Law Section 644.061.4, variances shall be granted for such period of time and under such terms and conditions as shall be specified by the commission in its order. The variance may be extended by affirmative action of the commission. In no event shall the variance be granted for a period of time greater than is reasonably necessary for complying with the Missouri Clean Water Law Section 644.006 to 644.141 or any standard, rule, or regulation promulgated pursuant to Missouri Clean Water Law Section 644.006 to 644.141.

Not Applicable: This permit is not drafted under premises of a petition for variance.

WATER QUALITY STANDARDS:

Per 10 CSR 20-7.031(4), General Criteria shall be applicable to all waters of the state at all times, including mixing zones. Additionally, 40 CFR 122.44(d)(1) directs the department to include in each NPDES permit conditions to achieve water quality established under Section 303 of the CWA, including state narrative criteria for water quality.

WHOLE EFFLUENT TOXICITY (WET) TEST:

Per 10 CSR 20-7.031(1)(FF), a toxicity test conducted under specified laboratory conditions on specific indicator organism; and per 40 CFR Section 122.2, the aggregate toxic effect of an effluent measured directly by a toxicity test. A WET test is a quantifiable method of determining if a discharge from a facility may be causing toxicity to aquatic life by itself, in combination with, or through synergistic responses when mixed with receiving stream water.

Not Applicable: At this time the facility is not required to conduct a WET test.

Part IV – Effluent Limitations Determination

EPA PESTICIDE PERMIT

The EPA pesticide permit was used to research and support best professional judgment decisions made in establishing technology-based effluent limitations (TBELs) for this general permit that are consistent with national standards. While the EPA Pesticide General Permit is not identical to the Missouri Master General Permit, the department has utilized the federal permit as a guide and a technical basis during the development of this proposed permit. The permit writer determined that the standards established by the EPA Pesticide Permit are achievable and consistent with federal regulations. Monitoring will allow the facility to demonstrate compliance with established industry standards and will maintain water quality standards through required monitoring set forth herein and corrective actions.

FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT (FIFRA)

The Missouri Department of Agriculture, through the Missouri Pesticide Use Act, regulates the sale, distribution and use of pesticides in Missouri under the statutory framework of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) to ensure that when used in conformance with FIFRA labeling directions, pesticides will not pose unreasonable risks to human health and the environment. All new pesticides must undergo a registration procedure under FIFRA during which EPA assesses a variety of potential human health and environmental effects associated with use of the product. In performing this analysis, EPA examines the ingredients of a pesticide, the intended type of application site and directions for use, and supporting scientific studies for human health and environmental effects and exposures. The applicant for registration of the pesticide must provide specific data from tests done according to EPA guidelines. When EPA approves a pesticide for a particular use, the Agency imposes restrictions through labeling requirements governing such use. The restrictions are intended to ensure that the pesticide serves an intended purpose and avoids unreasonable adverse effects. It is illegal under Section 12(a)(2)(G) of FIFRA to use a registered pesticide in a manner inconsistent with its labeling. The Missouri Department of Agriculture has primary authority under FIFRA to enforce “use” violations, but both the State and EPA have authority to prosecute pesticide misuse when it occurs.

Part V – General Permit Applicability and Coverage

This permit does not cover, nor is permit coverage required, for pesticides applications that do not result in a point source discharge to waters of the states such as for the purpose of controlling pests on agricultural crops, forest floors, range lands or other terrestrial applications. As discussed later in the fact sheet, agricultural stormwater and irrigation return flow are exempt from NPDES permits. Also, applications that do not reach waters of the state do not need permit coverage. However, the application of herbicides in waters of the state and the control of pests on plants grown in waters of the state, such as perennial obligate hydrophytes, is within the scope of coverage of this permit.

PESTICIDE USE PATTERNS

The activities covered by this permit generally include the four use patterns and types of pest control activities described in EPA’s proposed Pesticide General Permit.

Mosquito and Other Flying Insect Pest Control: This use pattern includes the application, by any means, of chemical and biological insecticides and larvicides into or over water to control insects that breed or live in, over, or near waters of the state. Applications of this nature usually involve the use of ultra-low volume sprays or granular larvicides discharged over large swaths of mosquito breeding habitat and often are performed several times per year.

Weed and Algae Control: This use pattern includes the application, by any means, of contact or systemic herbicides to control vegetation and algae (and plant pathogens such as fungi) in waters of the state and at water’s edge, including ditches and/or canals. Applications of this nature typically are single spot pesticide applications to control infestations or staged large scale pesticide applications intended to control pests in several acres of waterway. Pesticide applications in a treatment area may be performed one or more times per year to control the pest problem.

Animal Pest Control: This use pattern includes the application, by any means, of pesticides into waters of the state to control a range of animal pests for purposes such as fisheries management, invasive species eradication or equipment operation and maintenance. Applications of this nature are often made over an entire or large portion of a waterbody as typically the target pests are mobile. Multiple pesticide applications to a waterbody for animal pest control are often made several years apart.

Forest Canopy Pest Control: This use pattern includes pest control projects in, over, or to forest canopies (aerially or from the ground) to control pests in the forest canopy where waters of the state exist below the canopy. Applications of this nature usually occur over large tracts of land, and are typically made in response to specific pest outbreaks. EPA understands that for this use pattern pesticides will be unavoidably discharged into waters of the state in the course of controlling pests over a forest canopy as a result of pesticide application. These pests are not necessarily aquatic (e.g., airborne non-aquatic insects) but are detrimental to industry, the environment, and public health. Note: EPA recognizes that mosquito adulticides are applied to forest canopies, and this application is covered under the “Mosquito and Other Flying Insect Pest Control” use pattern.

PERMIT THRESHOLDS

In addition to the four use patterns, the department is also using EPA's annual treatment thresholds for each use pattern. For this permit, the use thresholds will determine who must apply for the general permit. An operator's annual treatment amount is determined based on the expected yearly cumulative acres or linear feet of surface water that an operator treats, or has management over, within the included pesticide use patterns. A pesticide operator will obtain coverage under this permit if he or she exceeds, or plans to exceed, the thresholds during a calendar year. An operator, whether the decision maker, or applicator (or both), must account for all applicable treatment areas that are under its control.

MOSQUITO CONTROL AND OTHER FLYING INSECT PEST CONTROL

For Mosquitoes and Other Flying Insect Pests, the annual treatment area threshold has been set at 6,400 acres. EPA believes that the vast majority of mosquito control and abatement districts in the United States manage areas significantly larger than this threshold and may reasonably expect to exceed it during any given year. For instance, information from the state of Florida on 49 independent mosquito control districts shows that 48 of the 49 districts annually apply to more than 6,400 acres, which indicates that applications exceeding this area are quite typical. Similarly, data provided in EPA's draft *Economic Achievability Analysis of the Pesticide General Permit (PGP) for Point Source Discharges from the Application of Pesticides* and included in the administrative record for this permit show similar findings as for Florida. Furthermore, the effective control of other aquatic breeding, flying insects, such as the blackfly, necessitates applications that approach or exceed this threshold.

AQUATIC WEED AND ALGAE CONTROL

For Weeds and Algae, the annual treatment area threshold has been set at 80 acres or 20 linear miles of pesticide application to canals and other waters of the state. 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. For example, Florida's South Florida Water Management District usually applies pesticides to 60 acres at a time hundreds of times per year for various invasive plants on Florida's Lake Okeechobee. After reviewing the operations of major irrigation and flood control systems, EPA expects that generally, relatively large entities such as South Florida Water Management District, California Department of Water Resources, or organizations with comparable resources are the types of entities that manage 20 or more miles of engineered irrigation systems, and that this is a reasonable limit to trigger the permit requirement. The same rationale is applied to managers of ditch and canal banks. Therefore, EPA believes the threshold appropriately captures the relatively large applications but excludes a significant number of small applications.

AQUATIC NUISANCE ANIMAL PEST CONTROL

Invasive and nuisance aquatic animals are 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 or 20 linear miles. The high mobility and prolific breeding abilities that necessitate control of aquatic animals usually means that pesticide applications most often occurs in the entirety or large portions of the water bodies they inhabit. For example, fishery management applications using rotenone often occur in the entire lake and thus, any similar application to a lake of more than 80 acres in area will trigger the annual treatment area threshold. EPA expects that for this reason, only spot applications to eradicate small emergent populations of sessile animals or applications to very small water bodies might be excluded from a permit requirement.

FOREST CANOPY PEST CONTROL

Forest canopy pest suppression programs are designed to blanket large tracts of terrain, throughout which Operators may not be able to see waters of the state beneath the canopy. EPA set the annual treatment area threshold at 6,400 acres for this use pattern with the understanding that this will exclude only the smallest applications from the permit requirement. These smaller applications generally occur on private lands.

GENERAL CONDITIONS

1. An operator's coverage under this permit includes coverage for the operator's employees, contractors, subcontractors, and other agents. It is the responsibility of the operator to ensure that the complete application is submitted. If the application is incomplete or inaccurate, the operator and the operator's employees or contractors may not have appropriate coverage.

2. Operators will be authorized to operate under this permit 10 days after receipt of the application. While not required, operators are encouraged to mail applications to the department using certified mail delivery confirmation, with return receipts, or other similar method. The department will respond to applications with a letter documenting receipt of an application. It is the operator's responsibility to obtain a hard copy of this permit on the department's webpage. The permit will be posted at: dnr.mo.gov/env/wpp/permits/index.html.
3. Operators commencing discharge in response to a declared pest emergency situation, as defined in Appendix A, must submit their application no later than 30 days after commencement of said discharge.
4. All operators must comply with all applicable state and federal statutes, regulations and requirements including, but not limited to requirements contained in the labeling of pesticide products approved under FIFRA and the Missouri Pesticide Use Act. Although the FIFRA label and labeling requirements are not effluent limitations themselves, it is nonetheless illegal to use a registered pesticide inconsistent with its labeling. If operators are found to have applied a pesticide in a manner inconsistent with any relevant water-quality related FIFRA labeling requirements, the department will presume that the effluent limitation to minimize pesticides entering the waters of the state has been violated under the NPDES permit. The department considers many provisions of FIFRA labeling – such as those relating to application sites, rates, frequency, and methods, as well as provisions concerning proper storage and disposal of pesticide wastes and containers to be requirements that affect water quality.
5. Pesticides shall be used only in the amount and frequency to control target pests in accordance with the state pesticide law and the pesticide label.
6. Pesticide application equipment shall be maintained in good working order according to manufacturer's conditions and industry practices. Regular calibration, cleaning and repairing equipment according to manufacturer's guidelines will be considered proper maintenance.

PESTICIDE DISCHARGE MANAGEMENT PLAN (PDMP)

The requirement to prepare a PDMP is a distinctly separate requirement from the technology-based or water quality-based effluent limitations in the permit. The purpose of the PDMP is to document the implementation of control practices being used to comply with the effluent limitations. The requirement to prepare a PDMP is not an effluent limitation. Instead, the requirement to develop a PDMP is a term and condition of the permit. The PDMP requirements in the permit allow for documentation of information on compliance with the effluent limitations contained elsewhere in the permit. Failure to develop a PDMP is a violation of the permit. The permittee must select control practices to meet the effluent limitations in this permit. The permittee is free to change control practices as appropriate to meet the effluent limitations contained in the permit. The permit also contains a recordkeeping condition within the PDMP that requires that the PDMP be updated with any such changes in the Operator's practices and that a copy of the PDMP be retained and readily available at the address listed on the application.

ADVERSE INCIDENTS AND CORRECTIVE ACTION

In the occurrence of an adverse incident or if a permittee knows, should have known or has been informed of an adverse incident, spill or leak that discharged to waters of the state, the permittee shall notify the appropriate department regional office within 24 hours of becoming aware of the potential adverse incident, spill or leak or call the DNR Environmental Emergency Response 24-Hour Hotline at 573-634-2436. Within fourteen (14) days of becoming aware of an adverse incident, or a spill or leak that discharged to waters of the state, the operator shall provide a written report of the incident to the appropriate department regional office. An adverse incident occurrence may constitute a violation of permit. Mitigating the situation through corrective action does not absolve the permittee from liability for any original violation. Failure to comply with corrective action measures may constitute an additional permit violation.

If an adverse incident occurs, or if the department determines that changes of control practices are necessary to eliminate the possibility of an adverse incident, 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.

Part VI – Administrative Requirements

On the basis of preliminary staff review and applicable standards and regulations, the department, as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions contained herein and within the permit. The proposed determinations are tentative pending public comment.

PUBLIC NOTICE

The department shall give public notice that a draft permit has been prepared and its issuance is pending. Additionally, public notice will be issued if a public hearing is to be held because of a significant degree of interest or because of water quality concerns related to a draft permit. No public notice is required when a request for a permit modification or termination is denied; however, the requester and facility must be notified of the denial in writing.

The department must give public notice of a pending permit or of a new or reissued Missouri State Operating Permit. The public comment period is a length of time not less than thirty (30) days following the date of the public notice, during which interested persons may submit written comments about the proposed permit.

For persons wanting to submit comments regarding this proposed permit, please refer to the Public Notice page located at the front of this draft permit. The Public Notice page gives direction on how and where to submit appropriate comments.

The Public Notice period for this permit was October 7, 2016 through November 7, 2016.

DATE OF FACT SHEET: October 1, 2016

COMPLETED BY:

SUSAN J. HIGGINS
ENVIRONMENTAL SPECIALIST III
MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
OPERATING PERMITS SECTION
(573) 526-1002
Susan.Higgins@dnr.mo.gov