

MONTANA POLLUTANT DISCHARGE ELIMINATION SYSTEM (MPDES) PERMIT

FACT SHEET

Pesticide General Permit (PGP)

FACILITY: Pesticide Application To or Over State Surface Waters
PERMIT NO.: MTG870000
LOCATION: Statewide
(Except for within the Boundary of an Indian Reservation)
CONTACT: Applicant
RECEIVING WATER: Statewide

I. Status of Permit

This permitting action is the renewal of the Montana Pesticide General Permit (PGP) which authorizes the discharge of certain pesticides into state surface waters. The first PGP was issued April 9, 2011, became effective November 1, 2011, and expires October 31, 2016. The PGP provides a mechanism for owner/operators who apply pesticides into or over state surface water, including near (such that the pesticide is unavoidably discharged into the surface water) to obtain MPDES permit coverage.

There are no major changes proposed with this renewal. The following minor changes are proposed: the treatment area threshold for “other not classified” category was modified to 10 acres (from 1,000 acres) and the ‘greater than threshold’ (Tier II) category was clarified to include Outstanding Resource Waters (ORWs); clarification was made that the pesticide used must be labeled for use to control the target pest; all owner/operators will be required to keep records of the acreage treated annually (not only Tier II facilities); and the annual reporting requirements for Tier II facilities were streamlined.

A. Federal Background

The U.S. Environmental Protection Agency (EPA) historically considered the application of a pesticide into or over surface waters as regulated through the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). On January 9, 2009, the Sixth Circuit Court of Appeals held that the Clean Water Act (CWA) unambiguously includes biological pesticides and chemical pesticides with residuals within its definition of “pollutant.” In response to the Court’s decision, EPA released a draft Pesticide General Permit (EPA PGP) in 2010 to cover certain discharges resulting from pesticide applications. The EPA PGP was finalized and issued as effective November 1, 2011, with an expiration date of October 31, 2016. On January 26, 2016, EPA published the draft permit renewal package in the federal register, noting that the draft 2016 EPA PGP has the same requirements and conditions as the 2011 EPA PGP.

B. Montana Background

The Montana Department of Environmental Quality (DEQ) issued the first PGP on April 9, 2011, with an effective date of November 1, 2011. Historically, the Montana Water Quality Act required DEQ authorization for short-term exemptions from water quality standards for the application of a pesticide... ‘when it is used to control nuisance aquatic organisms or to eliminate undesirable and nonnative aquatic species.’ However, these activities are now covered under the PGP.

II. Description of Regulated Discharge

An owner/operator who applies pesticides to, over, or near state surface waters (such that pesticide is unavoidably discharged into state surface water) must either obtain coverage under the PGP or obtain another permit (including either an individual MPDES permit or a 308 Authorization); otherwise they will be in violation of the CWA. Owner/operator that apply pesticide to or over state surface waters in one of the *pesticide use patterns* identified in Part III of this Fact Sheet may request coverage under the PGP. However, pesticides that are prohibited from entering surface water by FIFRA cannot be covered under the PGP. Pesticide applications have varying degrees of impact on the state surface water body based on the application technique as outlined below:

- *Direct Chemical Pesticide Application*: For pesticides applied directly to waters, it is the pesticide residue, including excess pesticide that is present outside of the treatment area or within the treatment area once the target pests have been controlled, that is considered a “pollutant” under this permit.
- *Biological Pesticide Control*: The application of biological pesticides (also called biopesticides) include microbial pesticides, biochemical pesticides and plant-incorporated protectants (PIP). An example is the application of *Bacillus thuringiensis israelensis* (Bti) and *Bacillus sphaericus* (Bs) used against mosquito larvae.
- *Unavoidable Discharge of Chemical Pesticides*: The application of chemical pesticides to control pests that are present on or over surface water, including near such waters, where a portion of the pesticides will unavoidably be deposited into state surface waters. For example, while spraying target plants growing along a river’s edge, pesticides will unavoidably be deposited into the water. For this general type of pesticide application, the discharge of chemical pesticides into the water is not the intent but cannot be avoided.

Any pesticide or pesticide residue that is deposited in state surface waters ‘incidentally,’ since the intended purpose of the application is to target pests above the water, is considered a “pollutant.” The concentrations of “pollutants” will be no higher, and in many instances significantly lower, than the product concentrations considered by EPA when registering these products under FIFRA.

The discretion of the owner/operator (and/or applicator) is used to determine whether their pesticide application will be close enough to any surface water that pesticide will be considered “unavoidably discharged” to the water and require permit coverage. Non-point sources do not require MPDES permit coverage, such as application of pesticides to terrestrial agriculture crops or “spray drift” – the airborne movement of pesticide sprays away from the target application site into state surface waters.

Discharge of pesticides through agricultural stormwater runoff and irrigation return flows that are not returned to state surface waters do not require MPDES permit coverage. However, discharges from the application of pesticides to irrigation ditches and canals that are either state surface waters or convey to state surface waters do require MPDES permit coverage.

III. Coverage

A. Coverage Area

The PGP applies to all areas of the State of Montana, except for within the boundaries of Indian Reservations.

B. Regulatory Authority

The authority for DEQ to issue MPDES permits is contained in Montana Code Annotated (MCA) Section 75-5-101 *et seq.*, with implementing regulations in Administrative Rules of Montana (ARM) 17.30 Subchapter 13. Discharges of sewage, industrial wastes or other wastes to state waters are prohibited without a current permit from DEQ.

MPDES permits are issued for ‘point sources discharging pollutants into *state waters*.’

State waters means ‘any body of water, irrigation system, or drainage system ...’ It does not apply to ponds or lagoons used solely for treating, transporting, or impounding pollutants or to irrigation waters where the waters are used up within the irrigation system and said waters are not returned to any other state waters.

Specifically, the PGP covers the discharge of pollutants into state *surface waters*:

Surface waters means ‘any waters on the earth's surface including, but not limited to, streams, lakes, ponds, and reservoirs; and irrigation and drainage systems discharging directly into a stream, lake, pond, reservoir, or other surface water. Waterbodies used solely for treating, transporting, or impounding pollutants shall not be considered surface water.’ See Part IV.B of this Fact Sheet for a more detailed discussion on state surface water.

An owner/operator who wishes coverage under a General Permit shall complete a standard notice of intent (NOI) form.

C. Activities Eligible for Coverage under this General Permit

An owner/operator who applies pesticides to, over, or near state surface waters (such that pesticide is unavoidably discharged into state surface water) must have permit coverage either under the PGP or through an individual MPDES permit. The PGP is available to owner/operators who apply pesticide either (1) directly into or over state surface waters in order to control pests in or over the water, or (2) near water in which pesticides will make unavoidable contact with the water. The owner/operator must request coverage based on the six Pesticide Use Patterns (see **Table 1**) and conform to the permit's requirements in order to be covered by the PGP.

Owner/operator means 'a person who owns, leases, operates, controls, or supervises a point source.' This could include:

- Entities with control over the financing and/or decision-making to perform pesticide applications, or
- Entities with day-to-day control (pesticide applicators).

DEQ typically requires the *operator* to be the responsible party when there are separate owners and operators. However, in the case of the PGP, DEQ recognizes that it could be either the financing/decision-maker (such as a mosquito control district) or the pesticide applicator's role to be the primary responsible party. It will be up to the regulated community to determine, through contractual and other arrangements, whether it will be the owner (financial and/or decision-making control) or operator (pesticide applicator) who will carry primary responsibility. The entity carrying the primary responsibility will be listed in Section C of the NOI form.

Approximately 90 individuals are licensed as aquatic pest control applicators by Montana's Department of Agriculture (MDA). In addition, the following is an overview of the types of districts and other organizations potentially responsible for implementing pest control, which may be subject to the PGP:

- Mosquito Control: 32 Mosquito Districts and 24 Mosquito Areas (ranging from 17 acres to 2.6 million acres);
- Weed Control: 56 County Weed Coordinators and various Extension Agents and Conservation Districts (Montana Weed Control Association list);
- Irrigation Canals: at least 50 irrigation districts (per 2008 US Census, but a January 2009 DNRC report included 229 Ditch & Canal Companies);
- Water Supply; any municipality that treats reservoirs or other surface water (for instance the addition of copper sulfate to control algae) prior to water treatment and distribution; and
- State and Federal Land Managers including Bureau of Land Management (BLM), and US Forest Service (USFS).

Pesticide use patterns:

As stated above, the intent of the PGP is to regulate all pesticide applications made either (1) directly into or over state surface waters in order to control pests in or over the water, or (2) applications to control pests near water in which pesticides will make unavoidable contact with the water.

The resulting pesticide use patterns and thresholds were developed to include discharges that are similar in type and nature and therefore represent the type of discharges and expected nature of the discharges covered under this permit.

The applicable pesticide use patterns are:

1. *Piscicides and Other Nuisance Animal Control*

This use pattern includes the application of pesticides into waters for purposes such as fisheries management, including invasive species eradication, as well as to control a range of other animals. Piscicide applications are usually made over an entire waterbody as the target pests are mobile. Other nuisance animal control could include non-fishery invasive species eradication or equipment maintenance (such as zebra mussel control). Applications of this nature are usually made in more discrete areas, although they may be made over an entire waterbody.

2. *Weed and Algae Control*

This use pattern includes the application, by any means, of contact or systemic herbicides to control vegetation and algae in water and at water's edge where the pesticide would be unavoidably discharged, including irrigation ditches and/or irrigation canals unless the irrigation water is exempt because it is used and not returned to waters of the state. Routine maintenance of irrigation channels is exempt from permitting if the activities do not result in an exceedence of a water quality standard in any receiving water outside the irrigation canal. Applications of this nature may be single spot treatments or staged large scale treatments intended to clear several acres of waterway. Treatments may be singular or occur several times a year.

3. *Aerial Pest Control*

This use pattern includes aerial pest control projects, typically in and over forest canopies and possibly other widespread areas where there are waters of the state below the pesticide application. Applications of this nature usually occur over large tracts of land, and are typically made in response to specific outbreaks. Note: mosquito adulticides are not included under the aerial pest use pattern; they are classified under use pattern #4.b.

4. *Mosquito and Other Flying Insect Pest Control*

This use pattern includes three main methods for controlling mosquitoes and other flying insects: larval chemical control, chemical adulticide, and biological control.

a. Larval Chemical Control

This use pattern includes the application, by any means, of chemical larvicides into water to control insects that breed or live in, over, or near water. Applications of this nature usually involve the use of granular larvicides discharged over large swaths of mosquito breeding habitat and may occur several times a year.

b. Chemical Adulticide

This use pattern includes the application, by any means, of chemical insecticides into or over water to control insects that breed or live in, over, or near water. Applications of this nature usually involve the use of ultra low volume sprays discharged over large swaths of mosquito breeding habitat and may occur several times a year.

c. Biological Control

This use pattern includes the application, by any means, of biological insecticides and larvicides into or over water to control insects that breed or live in, over, or near water.

5. *Research & Development*

This use pattern includes application, by any means, of pesticides into or over water to control an invasive species or some other pest that is currently an unknown. Since it is important to eradicate invasive species as soon as practicable, this pattern use is designed to be flexible.

6. *Other not Classified*

There may be unique circumstances that do not fit the above use patterns. This use pattern provides flexibility for performing pesticide applications that do not fit the above use patterns.

Thresholds for Additional Requirements

The PGP includes universal requirements that apply to all owner/operators (Tier I).

The PGP also includes additional requirements for owner/operators that apply pesticides to an area greater than the following treatment area annual thresholds (Tier II, see **Table 1**).

Pesticide Use Pattern		Treatment Area Annual Threshold^(1,2)
1.	Piscicides and Other Nuisance Animals (i.e. zebra mussels)	10 acres
2.	Weeds and Algae	100 acres
3.	Aerial Pest Control (i.e. Forest Canopy)	1000 acres
4.	<i>Mosquito and Other Flying Insect Pests</i>	
4a.	Larval Chemical Control	100 acres
4b.	Chemical Adulticide	1000 acres
4c.	Biological Control	6,400 acres
5.	Research & Development	10 acres
6.	Other not classified	10 acres
<p>1) Calculations should include the area of the applications made to state surface waters <i>that contain water at the time of pesticide application</i>, and conveyances with a hydrologic surface connection to state surface water <i>at the time of pesticide application</i>. 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 should be counted as twenty acres of treatment area.</p> <p>2) Any pesticide discharge into waterbodies classified as either A-closed or Outstanding Resource Waters is automatically subject to Tier II requirements.</p>		

For each pesticide use pattern, the *owner/operator* must determine the area where pesticide application can be expected to enter surface water (either directly or unavoidably discharged) for each application expected in a calendar year. If the pesticide application activity for any one use pattern exceeds the annual thresholds, or occurs in waterbodies classified as either A-closed or Outstanding Resource Waters, the authorized facility is considered a Tier II source.

In general, entities under the following Standard Industrial Classification (SIC) Codes may be subject to the PGP:

Category	SIC	NAICS	Examples
Agricultural parties – general agricultural interests, farmers/producers, forestry, and irrigation	01 - 08	111 Crop Production	Producers of crops mainly for food and fiber
	0811	113110 – Timber Tract Operations	Operating timber tracks for selling standing timber
	0831	113210 – Forest Nurseries Gathering of Forest Product	Growing trees for reforestation and/or gathering forest products
Public Health Parties (includes mosquito or other vector control districts & commercial applicators)	4971	221310 – Water Supply for Irrigation	Operating irrigation systems
	9431	923120 – Administration of Public Health Programs	Government establishments
Resource Management Parties (includes FWP, environmental agencies, and universities)	9511	924110 – Administration of Air, Water Resource, and Solid Waste Management Programs	Government establishments
Public Health Parties	9431	923120 – Administration of Public Health Programs	Government Establishments
	9512	924120 – Admin. of Conservation Prgrm	Government Establishments
Utility Parties	41 - 49	221 – Utilities	Provide electric power, natural gas, steam supply, water supply, and sewage removal through a permanent infrastructure

D. Activities Ineligible for Coverage under this General Permit

The following activities are ineligible for coverage under the PGP:

1. The PGP does not allow authorization of pesticide that is not labeled for use in water by the Federal Insecticide, Fungicide, Rodenticide Act (FIFRA).
2. The PGP does not allow authorization of pesticide that is not labeled for use to control the pest targeted by the owner/operator.
3. The PGP does not allow authorization of pesticide application to water that is impaired for that specific pesticide or breakdown products of that pesticide. In such a case, the owner/operator would have to choose between requesting coverage under an individual permit or selecting some other means of pesticide management (e.g., using mechanical means or some other pesticide product).

Impaired waters are those which have been identified pursuant to Section 303(d) of the CWA as not meeting applicable water quality standards. Impaired waters include both waters with Total Maximum Daily Loads (TMDL) and those for which a TMDL is not yet established (see discussion in this Fact Sheet Section IV.B.2.b.).

In addition, DEQ may deny a PGP request for discharge, including:

- a. The specific source applying for authorization appears unable to comply with the following requirements:
 - effluent limits or other terms and conditions of the permit;
 - water quality standards; or
 - discharges that the EPA Region VIII regional administrator has objected to in writing.
- b. The discharge is different in degree or nature from discharges reasonably expected from sources or activities within the categories described in the PGP.
- c. An MPDES permit or authorization for the same operation has previously been denied or revoked.
- d. The discharge is also included within an application or is subject to review under the Major Facility Siting Act, 75-20-101, *et seq.*, MCA.
- e. The discharge will be located in an area of unique ecological or recreational significance. Such determination must be based upon considerations of Montana stream classifications, impacts on fishery resources, local conditions at proposed discharge sites, and designations of wilderness areas under 16 USC 1132 or of wild and scenic rivers under 16 USC 1274.

E. Other Permitting Requirements

Submittal of the NOI and receipt of an authorization letter from DEQ does not eliminate a permittee's obligation to obtain other necessary permits. Specifically, any pesticide applicator must ensure pesticide use is in conformance with the requirements of the Montana Pesticides Act. That act authorizes MDA to adopt rules incorporating regulations adopted by EPA under FIFRA, which generally prescribe methods of registration, application, and the sale or use of pesticides.

F. Renewing Coverage for Existing Activities

The 2011 PGP expires on October 31, 2016. As of April 2016, there were 72 PGP authorizations, which were characterized as follows:

- 66 Tier I facilities and six (6) Tier II facilities.
- 55 single-county authorizations and 15 multi-county authorizations.
- 38 weed authorizations, 18 mosquito authorizations, 5 weed & mosquito authorizations, and three piscicide.

All existing authorizations under the 2011 PGP expire upon the permit's expiration date of October 31, 2016, and to continue coverage the owner/operator must submit a complete renewal application package by this date. An existing permittee is authorized to discharge under the 2016 General Permit, beginning its' effective date of November 1, 2016, after submitting a complete renewal application package, consisting of:

- Completed form NOI-87 (revised 2016); and
- Fee (renewal permit fee).

If there are deficiencies with the NOI package, DEQ may deny authorization under the permit or contact the applicant for additional information necessary to ensure the application package meets requirements. If the request is denied, DEQ may process the request as an individual permit (with additional fees); the applicant may withdraw the request; or the applicant may modify the operation to meet the conditions of the 2016 PGP and re-apply for coverage under the General Permit with a new application fee.

After receipt of a complete renewal application package, DEQ will issue an authorization letter to these facilities confirming coverage under the 2016 General Permit beginning November 1, 2016. The owner/operator is required to comply with all requirements contained in the PGP until they are required to renew or they request to modify or terminate their PGP authorization.

G. New Dischargers seeking coverage under the PGP

A new discharger, including a discharger who allowed previous coverage to lapse, must submit a complete NOI package for coverage under the 2016 PGP prior to the discharge of any pesticide. The owner/operator is immediately authorized to discharge under the 2016 General Permit, after its effective date of November 1, 2016, after submitting a complete application package consisting of:

- Completed form NOI-87 (revised 2016); and
- Fee (includes both permit application fee and first annual fee).

If there are deficiencies with the NOI package, DEQ may contact the applicant for additional information or deny authorization under the permit. If the request is denied, DEQ may process the request as an individual permit (with additional fees); the applicant may withdraw the request; or the applicant may modify the operation to meet the conditions of the 2016 PGP and re-apply for coverage under the General Permit with a new application fee.

After receipt of a complete application package, DEQ will issue an authorization letter to these facilities confirming coverage under the 2016 General Permit. The owner/operator is required to comply with all requirements contained in the PGP until they are required to renew or they request to modify or terminate their PGP authorization.

H. Termination of Permit Coverage

Once covered, permittees are authorized to operate for the duration of the 2016 PGP (until the General Permit has expired) or until DEQ receives a request to terminate coverage. To terminate coverage, the permittee must submit a Notice of Termination (NOT) form indicating the pesticide activity has ceased and they no longer require permit coverage. The written request must be signed and certified by the responsible signatory.

After the first year, annual fees will be invoiced in arrears for an authorization open during any part of the previous calendar year. To avoid the accrual of inappropriate annual fees, the permittee should request to terminate coverage once the application of pesticides has been completed.

In addition to the ability to request a termination, the owner or operator of a facility covered under the PGP may request to be excluded from coverage under this General Permit by applying for and obtaining an individual MPDES permit. If an individual MPDES permit is issued to the owner or operator of the facility, coverage under this General Permit is terminated on the effective date of the final individual MPDES permit.

I. Transfer of Coverage

Upon request, DEQ may transfer a pesticide authorization to a new owner or operator in conformance with Part V.M of the 2016 General Permit. To request a transfer of permit coverage, the permittee must submit a complete Permit Transfer Notification (PTN) Form to DEQ, including the PTN fee.

The PTN constitutes written notice to the DEQ that the new owner or operator assumes responsibility and liability for all the terms and conditions in the permit, including permit fees. The PTN form may not be used to transfer permit coverage to a new or different site or to modify the terms and conditions of the permit.

IV. Rationale for Permit Conditions

The control of pollutants is established through effluent limits and other requirements in an MPDES permit. There are two principal bases for effluent limits: technology-based effluent limits (TBELs) that specify the minimum level of treatment or control; and water quality-based effluent limits (WQBELs) that attain and maintain applicable numeric and narrative water quality standards. TBELs are based on implementing available technologies to reduce or treat pollutants while WQBELs are designed to protect the beneficial uses of the receiving water.

A. Technology-based Effluent Limits

TBELs represent the minimum level of control that must be imposed by a permit issued under the MPDES program. Technology-based requirements may be national standards established by the EPA pursuant to the CWA, or, in some cases, standards established by the permit writer on a case-by-case basis. Since EPA has not promulgated an ELG for this activity, TBELs are based on best professional judgment (BPJ) of the permit writer.

TBELs contained in the PGP are non-numeric and constitute the level of control that reduce the area and duration of impacts caused by the discharge of pesticides to state surface waters. Non-numeric effluent limits are authorized in lieu of numeric limits, where “[n]umeric effluent limits are infeasible.” The TBELs in this permit are non-numeric based on the following:

- It may not be possible to determine exactly *when* a numeric effluent limitation would apply. For example, a “discharge” from direct chemical application to water is the residual remaining after the pesticide is no longer serving its intended purpose -- after the pesticides have performed their intended function for pest control, dissipated in the waterbody, and broken down into other compounds to some extent. This discharge also will have combined with any other discharges to that waterbody. Given this situation, it is not clear what would be measured for a numeric limit, or when.

- It is not clear *where* a numeric effluent limitation would apply. Discharges from the application of pesticide are different from discharges of process wastewater from a stationary facility where the effluent is more predictable and easily identified as an effluent from a conveyance (e.g., pipe or ditch).
- There are often many short duration, highly variable, pesticide discharges to surface waters from many different locations for which it would be difficult to establish a numeric discharge limitation at each location.
- Information needed to develop numeric effluent limits is not available at this time. To develop numeric TBELs, factors must be fully evaluated, such as the age of equipment and facilities involved, the process employed, the potential process changes, and non-water quality environmental impacts. In addition, more than 400 pesticide active ingredients contained in over 3,500 pesticide products may be covered under this permit.

Therefore, the PGP requires owner/operators to implement appropriate site-specific control measures as a non-numeric TBEL. Control measures are actions (including processes, procedures, schedules of activities, prohibitions on practices and other management practices) to prevent or reduce water pollution. Use of the term ‘control measure’ is intended to describe the range of pollutant reduction practices that may be employed, and includes Best Management Practices (BMPs) as one of the components. This includes properly managing the application of pesticide, consistent with both minimizing discharge and reducing the potential for development of pest resistance.

The PGP emphasizes effective “low-tech” approaches, including accurately identifying the pest problem, selecting optimal pest management strategy(s), using the optimal effective amount of pesticide product, applying at appropriate frequencies, and performing regular equipment maintenance and calibration. DEQ has determined that control measures are the most appropriate strategy to minimize and/or eliminate pesticide pollutants. DEQ recognizes that not all of these control measures will be applicable to every site. The key is determining what measure is appropriate for the specific pesticide application. In recognition that some operations have the potential for greater environmental impact than others, the PGP includes two tiers of requirements: universal requirements for all owner/operators (Tier I), with additional requirements for larger owner/operators that are ‘greater than threshold’ or discharging to A-closed or ORW waterbodies (Tier II).

1. Universal TBEL Requirements for all Owner/Operators (Tier I)

All owner/operators must comply with all applicable statutes, regulations and other pesticide requirements including, but not limited to requirements contained in the labeling of pesticide products approved under FIFRA (“FIFRA labeling”). It is illegal to use a registered pesticide inconsistent with FIFRA labeling. Many of the labeling provisions – 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 – are requirements that could affect water quality.

In consideration of TBELs, the PGP requires all authorized owner/operators of pesticide applications that discharge into state surface water to:

Apply pesticides within labeled rates and/or in accordance with pesticide use directions under FIFRA and other state pesticide requirements. The pesticide must be designated for use in controlling the target pest.

In order to demonstrate that the pesticide application is within labeled rates and are designed to control the target pest, all owner/operators must document the type and amount of pesticide used by having the pesticide label available, which is required as a monitoring condition.

2. Additional TBEL requirements for ‘Greater than Threshold’ Owner/Operators (Tier II)

The PGP requires the subset of owner/operators with application areas greater than the threshold levels in **Table 1** to achieve Tier II requirements, in addition to the universal requirements:

- a. *Ensure pesticide application equipment is maintained in proper operating condition by inspecting, cleaning, and repairing such equipment on a regular basis.*
- b. *Ensure pesticide application equipment is calibrated in order to have effective pesticide application and pest control by adhering to any manufacturer’s conditions and industry practices.*
- c. *Develop and maintain a written Pesticide Discharge Management Plan (PDMP) in conformance with the Special Conditions of the PGP. This includes conducting appropriate visual monitoring to determine if any pesticide use practices need to be revised, and to ensure that avoidable adverse impacts to the environment do not occur.*

The above Tier II TBELs are based on the following considerations:

- Common-sense and good housekeeping practices should enable pesticide users to save time and money and reduce the potential for unintended discharges of pesticides to state surface waters.
- Pesticide application efficiency and precision can be adversely affected by a variety of mechanical problems that can be addressed through regular calibration such as:
 - 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.

Proper management reduces the amount of pesticide available that is not performing a specific pest-control function, and can result in cost and time savings to the user.

- Integrated Pest Management (IPM) is encouraged. To minimize discharges of pesticide, owner/operators should base the rate and frequency of application on what is known to be effective against the target pest or necessary for resistance management. Resistance can result in the loss of effectiveness of a pesticide with relatively favorable environmental and human health risks, and increase reliance on riskier pesticides. Pesticide applicators should be aware of the potential for pest resistance to develop by considering the pest, the pesticide and its mode of action, the number of applications and intervals, and application rates.

Pest resistance develops because intensive pesticide use kills the susceptible individuals in a population, leaving only the resistant ones to reproduce. Several pest management tactics help prevent or delay the occurrence of pesticide resistance. See *National Pesticide Applicator Certification Core Manual, Chapter 1 – Pest Management* for information on pesticide resistance (National Association of State Departments of Agriculture Research Foundation).

B. Applicable Water Quality Standards

In addition to TBELs, MPDES permits must include, if necessary for a specific discharge, water quality-based effluent limits (WQBELs) that ensure compliance with state-adopted water quality standards. Permits must include WQBELs when DEQ determines a discharge has the reasonable potential to exceed any state water quality standard. Unlike individual permits that include requirements tailored to site-specific considerations, general permits often do not contain site-specific WQBELs.

The Board rules must allow the issuance of a permit only if DEQ finds that operation consistent with the limits of the permit will not result in pollution of any state waters, except that the rules may allow the issuance of a temporary permit under which pollution may result if DEQ ensures that the permit contains a compliance schedule designed to meet all applicable effluent standards and water quality standards in the shortest reasonable time.

1. Description of Receiving Waters and Applicable Standards

The PGP applies to state surface water. As previously defined, *surface water* means any waters on the earth's surface, except water bodies used solely for treating, transporting, or impounding pollutants are excluded from the definition

of surface water. Irrigation waters where the waters are used up within the irrigation system and are not returned to any other state waters are also excluded from this definition. Surface waters include ephemeral, intermittent, and perennial waterbodies.

Pesticide discharges to state surface water are subject to surface water quality standards (WQS), including standards for approximately 170 active chemical pesticide ingredients (and their break-down products) contained in Circular DEQ-7. Whenever MDA monitoring results detect a new pesticide compound in state water, MDA is required to request DEQ develop standards for the protection of human health. MDA develops a specific agricultural chemical ground water management plan for any pesticide found at >50% of the WQS (80-15-212, MCA). It is important to note that review of the data shows that Montana did not exceed a pesticide WQS.

Beneficial water use classifications are developed in order to establish maximum allowable changes in surface water quality and to establish a basis for limiting the discharge of pollutants which affect prescribed beneficial uses, including:

- a. *Outstanding Resource Waters (ORW)*. State surface waters located wholly within the boundaries of areas designated as national parks or national wilderness areas as of October 1, 1995, are defined as Outstanding Resource Waters.

There are eight National Parks & 15 Wilderness areas within Montana that are considered ORW and may contain 'state surface waters located wholly within the boundaries.' DEQ may not grant an authorization to degrade outstanding resource waters or allow a new or increased point source discharge that would result in a permanent change in the water quality of an outstanding resource water. DEQ considers pesticide application to be a temporary change and therefore recognizes that discharges of pesticides to water bodies within the National Parks and Wilderness Areas are eligible for coverage under the PGP. DEQ finds that authorization for a pesticide application to ORW under the PGP as a Tier II facility satisfies this requirement.

- b. *A-Closed Classification Waters* – No increases of carcinogenic, bioconcentrating, toxic or harmful parameters, pesticides, and organic and inorganic materials, including heavy metals, above naturally occurring concentrations, are allowed. Montana has 15 waters in three drainages classified as A-Closed: Clark Fork Columbia River Drainage except the Flathead and Kootenai River at seven locations; Flathead River Drainage at four locations; and Missouri River Drainage at four locations.

Because of the requirement for “no increase,” the PGP does not contain a threshold for pesticide application that occurs in or over water within these areas. The Board allows DEQ to authorize short-term exemptions from the

water quality standards for application of a pesticide that is registered in the United States pursuant to 7 U.S.C. 136(a). DEQ finds that authorization for a pesticide application to an A-closed waterbody under the PGP *as a Tier II facility* satisfies this requirement.

- c. *Remaining Waters* – For all remaining waters, the owner/operator will be required to obtain authorization under the PGP. Pesticide application to ephemeral streams is only required to be permitted under the PGP when surface water is present during application. Since the discharge from the ephemeral waterbody with standing water has the capability to discharge to other waters of the state, this classification of waterbody will be treated as the receiving waterbody's classification.

2. Water Quality-Based Effluent Limits

DEQ will include a narrative requirement that addresses WQBELs for all owner/operators, as follows:

Control the discharge as necessary to meet applicable numeric and narrative water quality standards by complying with this permit.

The main permit requirement in the PGP is for pesticide applications to be conducted in accordance with the FIFRA label (see the TBEL discussion Part IV.A.1 of this Fact Sheet). DEQ determined that compliance with this TBEL is sufficiently stringent to protect water quality, based on the following considerations:

a. *FIFRA Compliance*

By complying with the pesticide label requirements, DEQ assumes that the owner/operator will meet water quality standards. It is a violation under FIFRA sec. 12(a)(2)(G) (FIFRA's "misuse" provision) to use a registered pesticide inconsistent with its labeling. EPA regulates the use of pesticides under FIFRA federally. In Montana, MDA regulates the use of pesticides.

In general, FIFRA authorizes EPA to register each pesticide product intended for distribution or sale in the U.S. To register a pesticide, EPA must determine that its use in accordance with the label will not cause "unreasonable adverse effects on the environment" (see, e.g., FIFRA sec. 3(c)(5)).

EPA also implements risk mitigation measures by placing use restrictions and warnings on labeling to ensure the use of the pesticide (under actual use circumstances and commonly accepted practice) will not cause any "unreasonable adverse effects on the environment." Mitigation measures may include limits on the amount and frequency that a pesticide may be applied. Mitigation may also limit the geographical areas to which a pesticide can be applied or may include mandatory buffer distances from sensitive habitats.

Mitigation measures are implemented through product labeling instructions, with which pesticide users are required to comply.

b. Ambient Monitoring & 303(d) List of Impaired Waterbodies

In 2006 the USGS released a national 10-year (1992-2001) study of 51 major river basins and aquifer systems at 186 stream sites. Overall, the assessment indicated that surface and ground water are generally not being adversely affected by pesticide applications.

All states, including Montana, are required by the EPA to identify waterbodies that are not attaining water quality standards under CWA Section 303(d). DEQ's database "Clean Water Act Information Center," or CWAIC, is accessible by the public and includes the most recent 303(d) lists of Montana's impaired waterbodies. Based on CWAIC (draft 2016) there are the following listed impairments that are relevant to pesticide applicators:

- **Copper** – impairments on 218 waterbodies (the vast majority attributed to mining sources);
- **Endosulfan Sulfate** – the only currently registered pesticide listed as a cause of 303(d) impairment in Montana (listed as affecting the 3,800 acres of Hauser Lake from c.1996 data); and
- **DDE, DDT, and Endrin Aldehyde** – these three other pesticides listed as causes of 303(d) impairment have had their uses banned: DDE and DDT were banned in 1972 and Endrin Aldehyde was banned in 1995.

The PGP does not authorize pesticide application to water that is impaired for that specific pesticide or degenerates of that pesticide. In such a case, the owner/operator would have to choose between requesting coverage under an individual permit or selecting some other means of pesticide management (e.g., using mechanical means or some other pesticide product).

DEQ recognizes that monitoring of pesticide levels in water has limits in its ability to identify whether use of specific pesticides may adversely affect water quality. The product monitoring data give only a "snap shot" of the concentration in a particular waterbody at a particular time, and collecting a sample when pesticide concentrations are at peak levels (or even present in the water) may not occur. Although monitoring data are limited and are often difficult to interpret, DEQ concludes from the available data that pesticides are not causing widespread impairment to water quality in Montana.

c. Technology-based effluent limits

The PGP already contains control measures as TBELs.

d. Biological pesticides do not work through a toxic mode of action.

Discharges from the application of both chemical and biological pesticides are covered under this PGP consistent with the Sixth Circuit Court's reading of the CWA term "pollutant" in *National Cotton Council v. EPA*. Discharges of biological pesticides require permit coverage regardless of whether or not a residue exists. Biological pesticides or biopesticides are certain types of pesticides derived from natural materials such as animals, plants, bacteria, and certain minerals.

Biopesticides are usually inherently less toxic than conventional pesticides and generally only affect the target pests and closely related organisms. Often, they are effective in very small quantities and decompose quickly thereby resulting in lower exposures and largely avoiding the pollution problems caused by chemical pesticides. Since biochemical pesticides, by regulatory definition, do not work through a toxic mode of action they may be less likely to result in an exceedance of a water quality standard.

V. Final Effluent Limits

Effluent limits or conditions in reissued permits must be at least as stringent as those in the existing permit, with certain exceptions, and that permits contain the more stringent of applicable TBELs or WQBELs. DEQ finds that the proposed effluent limits in this renewal comply with these requirements. It is DEQ's position that the following limits and standards, in conjunction with the other terms and conditions of the PGP, represent the practices and prohibitions necessary in order to prevent discharges to state waters that would cause an exceedance of a Montana water quality standard.

The PGP includes two levels of requirements: universal requirements that apply to all owner/operators (Tier I), and additional requirements for larger owner/operators that are 'greater than threshold' or discharge into A-closed or ORW waterbodies (Tier II).

A. Universal Requirements for All Owner/Operators (Tier I)

Upon the effective date of this permit, and lasting for the duration of the permit, all owner/operators of pesticide applications authorized under this PGP must:

- 1. Control the discharge as necessary to meet applicable numeric and narrative water quality standards by complying with this permit; and*
- 2. Apply pesticides within labeled rates and/or in accordance with pesticide use directions under FIFRA and other state pesticide requirements. The pesticide must be labeled for use in water and designated for controlling the target pest.*

B. Additional Requirements for ‘Greater than Threshold’ Owner/Operators (Tier II)

In addition to the universal requirements in Section V.A, owner/operators that are greater than the threshold levels in **Table 1** must also achieve the following Tier II requirements:

- 1. Develop and maintain a written PDMP in conformance with the Special Conditions of the PGP. The PDMP is a tool to document, among other things, how Pest Management Measures will be implemented to comply with the permit’s effluent limits. The PDMP includes the specifications for maintaining and calibrating pesticide application equipment. The PDMP also includes the owner/operator’s plans for conducting appropriate visual monitoring to determine if any pesticide use practices need to be revised, and to ensure that avoidable adverse impacts to the environment do not occur.*
- 2. Ensure pesticide application equipment is maintained in proper operating condition by inspecting, cleaning, and repairing such equipment on a regular basis.*
- 3. Ensure pesticide application equipment is calibrated in order to have effective pesticide application and pest control by adhering to any manufacturer’s conditions and industry practices.*

VI. Monitoring

The monitoring requirements of this permit are narrative and demonstrate compliance with permit conditions by using currently established pesticide use routines for monitoring pest control. The testing procedures set forth in Part 136, Title 40 of the Code of Federal Regulations do not apply. The PGP includes the following monitoring requirements:

A. Universal Requirements for All Owner/Operators (Tier I)

In order to demonstrate that the pesticide application is within labeled rates and are designed to control the target pest, all owner/operators must have the pesticide label available. Specifically the permit requires that all owner/operators must:

- 1. Document the rationale for determining the type and amount of pesticide to be used for their specific application. This is satisfied by having the pesticide label available; and*
- 2. Maintain a log of each pesticide application, including county, pesticide use pattern, date, and acreage treated.*

B. Additional Requirements for ‘Greater than Threshold’ Owner/Operators (Tier II)

In addition to the universal requirements in Section VI.A, owner/operators that are greater than threshold must also conduct the following in accordance with their PDMP, and maintain a log of each activity:

1. *Ensure the integrity of application equipment by inspecting, cleaning, and repairing equipment on a regular basis;*
2. *Ensure the effectiveness of application by calibrating the pesticide equipment on a regular basis; and*
3. *Conduct appropriate visual monitoring in the area pesticides are applied to, or may impact, in order to determine if any pesticide use practices covered under this permit are causing avoidable adverse impacts and need to be revised.*

VII. Recordkeeping

All records required by this PGP must be prepared as soon as possible but no later than 14 days following completion of the associated activity. Copies of these documents must be available upon request, and must be maintained for a period of at least three years, or in the case of the PGP and NOI three years from the date the coverage under this permit expires or is terminated.

In the first PGP that was issued in 2011, DEQ recommended that all owner/operators keep records of acres treated each calendar year for all applicable use patterns covered under this general permit, whether or not they are ‘above threshold.’ For this renewal, DEQ is requiring that all owner/operators keep annual records of the acres treated for each pattern use, by county. This record will help owner/operators estimate when they will exceed the annual treatment area threshold and will assist DEQ in future planning.

A. Universal Requirements for All Owner/Operators (Tier I)

All permittees must maintain the following records:

1. A copy of the 2016-PGP (electronic access is sufficient);
2. A copy of the NOI submitted to DEQ, any correspondence exchanged with DEQ specific to coverage under the 2016-PGP, and a copy of the DEQ acknowledgment letter assigning the NOI number (MTG87xxxx); and
3. Annual records on the acres treated with pesticide for each pesticide use pattern, by county.

B. Additional Requirements for ‘Greater than Threshold’ Owner/Operators (Tier II)

In addition to the universal requirements in Section VII.A, owner/operators that are greater than threshold must also maintain the following records:

1. The current PDMP, including any modifications made to the plan during the term of this permit and records of the review and revision dates. Other existing plans (such as Integrated Pest Management (IPM), weed control, or mosquito control plans) can satisfy this requirement as long as all of the components for a PDMP required in this PGP (see Section IX.B) are met and the other plans are clearly referenced in the PDMP;

2. Information on pesticide applications, including copies of, or access to, the following required pesticide records:
 - Description of treatment area including: name of county, identification of waters treated, size of area treated (acres of water), pesticide trade name, and pesticide use pattern;
 - Pesticide applicator company or individual name;
 - Pesticide application equipment information, including equipment inspection, repair, and calibration records (required to be maintained by the entity performing the pest management activity on behalf of self or client); and
3. Pre- and post-application monitoring including date(s) and time(s) of any pre-application site monitoring, assessment of environmental conditions; and post-application visual or other monitoring. Post-application records must include any monitoring that resulted in unusual or unexpected findings, and a description of such effects identified to non-target organisms. Records must also include a summary of actions taken to address any adverse incidents observed; and a summary of any spill or leak responses.

As some of this information may be available on another record, it does not have to be duplicated, but the location of the record needs to be referenced and available.

VIII. Reporting

A. Universal Requirements for All Owner/Operators (Tier I)

There are no routine reporting requirements for Tier I owner/operators unless an adverse incident is observed (see Special Conditions Part IX.A).

B. Additional Requirements for ‘Greater than Threshold’ Owner/Operators (Tier II)

In addition to the universal requirements in Section VIII.A, owner/operators that are greater than threshold are required to submit annual reports that contain basic information on their pesticide discharges to state surface waters. The annual report form (AR-3) can be found on DEQ’s website at:
<http://deq.mt.gov/Water/WPB/mpdes/pesticides>.

The annual report must be postmarked by January 28th of each year. The annual report must include information for the previous calendar year, with the first annual report required to include activities for the portion of the calendar year after the effective date of the authorization.

When a Tier II owner/operator terminates permit coverage, they must submit an annual report for the portion of the year up through the date of the termination. The annual report must be postmarked no later than 30 days after the termination date, or January 28th of the following year, whichever is earlier.

The AR-3 annual report is a summary of the pest control activities for the previous year. The annual report must contain the following information:

- Date that the PDMP was reviewed and, if necessary, updated;
- Annual pesticide application information, including the county, trade name of the pesticide used, size of area treated (acres of water); and identification of waters treated *for each pesticide use pattern*;
- Summary of pesticide application equipment information, including the name of the pesticide applicator company or individual; the most recent date that each pesticide application equipment was inspected, cleaned, and repaired; the most recent date that each pesticide application equipment was calibrated; and confirmation that the frequencies met the specifications in the PDMP;
- Confirmation that the pesticide application rate and frequency, pre-application pest monitoring, assessment of environmental conditions, and post-application monitoring was conducted according to the PDMP and either implemented successfully or the PDMP was revised;
- Summary of actions taken to address any adverse incidents observed; and
- Summary of any spill or leak responses.

IX. Special Conditions

A. Adverse Incident Assessment, Documentation, and Reporting

The PGP requires all permittees to take specific actions in response to adverse incidents which may have resulted from the permittee's pesticide application.

Adverse incident is generally defined as any effect of a pesticide's use that is unexpected or unintended. This includes effects that occur within state surface waters 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:

- Distressed or dead juvenile and small fishes;
- Washed up or floating fish;
- Fish swimming abnormally or erratically;
- Fish lying lethargically at water surface or in shallow water;
- Fish that are listless or nonresponsive to disturbance;
- Stunting, wilting, or desiccation of non-target submerged or emergent aquatic plants; or

- Other dead or visibly distressed non-target aquatic organisms (amphibians, turtles, invertebrates, etc.).

Unexpected effects could also include any adverse effects to humans (e.g., skin rashes) or domesticated animals that occur either directly or indirectly from a discharge to state surface waters that are temporally and spatially related to exposure to a pesticide residue.

The following actions are required for all owner/operators:

1. Adverse Incident Assessment. Owner/operators are required 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.
2. Adverse Incident Documentation. 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). Records of all visual inspections, even for situations that do not require reporting, must be kept on site with the permittee.
3. Adverse Incident Reporting. In addition to other notifications that may be required, such as to the National Response Center (NRC), owner/operators are required to provide notice to DEQ. The PGP requires oral notice to DEQ within 24 hours and then follow-up with a written report within five days of becoming aware of an adverse incident.

Oral Notice

The owner/operator is required to call DEQ Water Protection Bureau staff soon as possible at (406) 444-3080, but no later than 24 hours of any identified adverse incident. Required information to be reported includes the date of the finding, a general discussion of the incident, and a review of the necessity for a corrective action.

The owner/operator is required to document the verbal notification information, including the date, time, and person you notified and a description of any deviations from notification requirements based on nuances of the adverse incident. For example, a permittee may decide to notify multiple contacts because of the severity of the adverse incident. This type of information should be included in the written documentation of the 24-hour notification as described below.

Written Notice

The owner/operator is also required to provide a written report of the adverse incident to DEQ within five (5) days of discovery, to the following address:

Montana Department of Environmental Quality
Water Protection Bureau
P.O. Box 200901
Helena, Montana 59620-0901

The adverse incident report must include the following information:

- Date, time, and person(s) (including Department(s)) to whom you orally reported the adverse incident;
- Responsible Party information;
- Location of incident, including the names and locations (latitude/longitude) of any waters affected and appearance of those waters (sheen, color, clarity, etc.);
- Date, time, and duration of incident;
- Pesticide involved (Product name, manufacturer, and EPA ID#), pesticide application rate, intended use site (e.g., banks, above, or direct to water), and method of application;
- A description of the circumstances of the incident including species affected, number of individual and approximate size of dead or distressed organisms;
- Magnitude of the effect (e.g., aquatic square area or total stream distance affected);
- Description of the habitat and the circumstances under which the incident occurred (including any available ambient water data for pesticides applied); and
- Actions taken immediately to remediate the incident, and actions to be taken to prevent recurrence of the incident.

Photo documentation is strongly recommended, when possible. Reporting of adverse incidents is not required under this permit in any of the following situations: facts are available that clearly establish that the adverse incident was not related to toxic effects or exposure from the pesticide application; notification has been received in writing from DEQ that the reporting requirement has been waived for this incident or category of incidents; the information regarding the adverse incident is clearly erroneous; or an adverse incident occurred to pests that are similar in kind to pests identified as potential targets on the FIFRA label.

B. Pesticide Discharge Management Plan for ‘Greater than Threshold’ (Tier II) Owner/Operators

‘Greater than Threshold’ (Tier II) owner/operators are required to develop and maintain a written Pesticide Discharge Management Plan (PDMP). The PDMP is a tool to document, among other things, how Pest Management Measures will be implemented to comply with the permit’s effluent limits. To the extent that an owner/operator follows an existing plan (i.e., weed control plan, mosquito control plan, or IPM) which already contains the information required for the PDMP, the owner/operator need only reference the existing plan.

The PDMP must be developed in accordance with the following timelines, which are based on when the owner/operator knows that the annual treatment for any given year will exceed an annual treatment area threshold in **Table 1**:

- Owner/operators who know or should have reasonably known prior to commencement of discharge, that they will exceed an annual treatment area threshold for that year, must develop a PDMP prior to the first pesticide application covered under this permit.
- Owner/operators who do not know or would reasonably not know until after commencement of discharge, that they will exceed an annual treatment area threshold for that year, must develop a PDMP prior to exceeding the annual treatment area threshold.
- Owner/operators commencing discharge in response to a declared pest emergency situation as defined in the PGP, that will cause the owner/operator to exceed an annual treatment area threshold, must develop a PDMP no later than 90 days after responding to the declared pest emergency.
- Owner/operators that were previously authorized as Tier II should have an up-to-date plan when they submit the NOI for renewal.

Once the owner/operator meets the requirement to prepare a PDMP based on the above timelines for development, they must maintain the plan thereafter for the duration of their coverage as a ‘greater than threshold’ Tier II facility. This means even if the annual treatment area subsequently falls below the annual treatment area threshold, the plan must be kept up-to-date. They must also evaluate their plan(s) at least once per calendar year and update as necessary.

At a minimum, the PDMP must include:

1. Pesticide management team. The PDMP must include an identification of an individual or group of individuals (names or titles) that are the pest management “team” and outline specific responsibilities.
2. Description of the pest problem. The PDMP must provide a framework for the pest problem:

- *pest identification* – identification of each target pest(s) that are in or over state surface water;
 - *general location map* – the map must identify the geographic boundaries of the entire area to which the plan applies. Additionally, the map (or a separate description) should include any sensitive resources in the area; and
 - *action thresholds* – the plan must include the level of pest prevalence (pest densities) or other trigger that will cause the owner/operator to initiate action to reduce the pest problem.
3. Description of control measures. The PDMP must include documentation on the evaluation and implementation of any pest management tools (no action, prevention, mechanical/physical methods, cultural methods, biological control agents, and pesticides) that could feasibly be taken to minimize pesticide discharge into state surface waters for the applicable pesticide projects.
4. Planning. The PDMP must include responsibilities, planning, and program information. Various agreements for some or all of the following requirements may be needed between responsible parties (such as decision-makers and for-hire applicators) and are the responsibility of the owner/operator:
- *Pesticide application equipment preventative maintenance (PM)* – the plan shall include the identification of who (name or title) is responsible for inspecting, cleaning, and repairing the application equipment prior to use, as well as the frequency of such PM.
 - *Pesticide application equipment calibration* – the plan shall include the identification of who (name or title) is responsible, the methods used, and how often the equipment will be calibrated.
 - *Pesticide application rate and frequency* – the plan shall include who will determine, and what is, the desired pesticide concentration and number of applications necessary to control each target pest. The application rate and frequency must meet pesticide label requirements.
 - *Pre-application pest monitoring* – the plan shall include a description of how the pest treatment area will be assessed before treatment to determine when the action threshold(s) are met, and in what geographical area. The plan must include who (employer and name or title) will make the determination and what basis they will use.
 - *Assessment of environmental conditions* – the plan shall include a description of who will assess and make the decision whether environmental conditions are satisfactory for pesticide application, and what factors will be used (wind speed, expected rain, temperature, etc.).

- *Post-application monitoring* – description of the process for post-pesticide application monitoring, if any. The PDMP should include determining the location and timing of any visual monitoring during or after the pesticide application, who will conduct the monitoring, and procedures for documenting any observed impacts to non-target organisms. This is not required if it is not part of expected business practice or if conditions make it infeasible or dangerous.
- *Adverse incident response procedures* – the plan must identify and document the course of action or response to any potential adverse incident that might be attributed to their pesticide application. It must include the identification of responsibilities for complying with notification requirements.

The plan must include a list of the chain of command notification both internally and externally, contact agencies and phone numbers, identification and contact information for nearest emergency medical facility and nearest hazardous chemical responder (including police and fire department).

- *Spill prevention program* – The plan must identify and document the course of action or response to any spills or releases that are part of the activities covered by this PGP.

The plan should also address any areas and activities that typically pose a high risk for spills during the preparation for and implementation of pesticide applications covered under this PGP. It should address appropriate material handling procedures, storage requirements, and containment or diversion equipment that will minimize the potential for spills, or in the event of a spill enable proper and timely response.

In addition, the plan must document procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases. It must include documentation of the procedures for notification for appropriate facility personnel, emergency response agencies, and regulatory agencies. The response to any spills or leaks that occur while covered under this permit must be documented.

5. Plan Updates. Owner/operators must review and, as necessary, revise the plan at least once a year. In addition, the plan must be reviewed and, as necessary, revised whenever any of the following triggering conditions for corrective action occur:
 - an unauthorized release or discharge;
 - the permittee becomes aware, or DEQ determines, that control measures are not stringent enough for the discharge to meet applicable water quality standards;

- an inspection or evaluation by a DEQ representative determines that modifications are necessary to meet the non-numeric effluent limits; or
- the permittee observes or is otherwise made aware (e.g., a third party notification) of an adverse incident for which symptoms are unusual or unexpected during the normal course of treatment.

The owner/operator must take follow-up actions to assess and correct problems including the above triggering conditions. They must ensure that corrective action be completed before the next pesticide application that results in a discharge, if practicable, or if not, as soon as practicable thereafter. The owner/operator must document what steps were taken to eliminate the problem.

6. Certification. The PDMP must be signed and certified by the responsible official or duly authorized representative, in accordance with the signatory requirements in the PGP. The signature requirement includes an acknowledgment that there are significant penalties for submitting false information.

X. Standard Conditions

Standard Conditions are included in Section III of the PGP. The Permittee must comply with all standard conditions and the additional conditions that are applicable to the Permittee.

XI. Mixing Zone

No mixing zone will be allowed under the PGP.

XII. Nondegradation

Discharges from pesticide activities authorized under the PGP are considered nonsignificant and, therefore, are not subject to review under Montana's nondegradation statute, § 75-5-303, MCA, for the reasons given below.

- Section 75-5-317(2)(c), MCA, categorically exempts the use of agricultural chemicals in accordance with a specific agricultural chemical ground water management plan, if applicable, or in accordance with an EPA-approved FIFRA label.
- Section 75-5-317(2)(u), MCA, categorically exempts "any other activity that is nonsignificant because of its low potential for harm to human health or to the environment," provided it conforms to the guidance in § 75-5-301(5)(c), MCA. Based on § 75-5-301(5)(c), MCA, DEQ has determined that pesticide application discharges regulated under the PGP are nonsignificant because: 1) potential for

harm to human health or the environment for all pesticides is regulated by FIFRA and by the Montana Department of Agriculture, 2) the quantity and strength of the pesticide applications are controlled by FIFRA labeling requirements, and 3) pesticide activities are generally short-term.

XIII. Sage Grouse Executive Order 12-2015:

Projects in proposed in core, general or connectivity sage grouse habitat, as designated by the Sage Grouse Habitat Conservation Program (Program) must comply with Executive Order 12-2015 and the Program's recommendations. However, the application of pesticides is an exempt activity under Attachment F of Executive Order 12-2015:

- i. Herbicide and pesticide use except for in the control of sagebrush and associated native forbs.

Since the PGP does not authorize pesticide use on sagebrush or associated native forbs, such activity would not be covered under this permit. Furthermore, the PGP is designed to provide MPDES permit coverage for owner/operators who apply pesticides into or over state surface water, including near (such that the pesticide is unavoidably discharged into the surface water); this is not the environment for sagebrush. Therefore, no documentation from the Sage Grouse Habitat Conservation Program is needed for this renewal or any potential authorizations under the renewed PGP.

XIV. Information Sources

Administrative record for MTG870000

Montana Water Quality Act, MCA 75-5-101 *et. seq.*

ARM Title 17, Chapter 30:

Subchapter 2 – Fee Rules

Subchapter 5 – Mixing Zones in Surface and Ground Water.

Subchapter 6 – Surface Water Quality Standards.

Subchapter 7 – Nondegradation of Water Quality.

Subchapter 13 – MPDES Permits

Federal Water Pollution Control Act, 33 U.S.C. 1251 *et seq.*

40 Code of Federal Regulations (CFR) 122, 125

Clean Water Act § 303(d), 33 USC 1313(d) Montana List of Waterbodies in Need of Total Maximum Daily Load Development, 2016 (draft).