

**Pesticide General Permit**  
**MPDES Permit Number MTG870000**  
**Response to Public Comment**

The Montana Department of Environmental Quality (DEQ) issued Public Notice MT-16-15 on June 27, 2016. The Public Notice provided the tentative determination to issue a state-wide wastewater discharge permit renewal for the Pesticide General Permit (PGP), under the Montana Pollutant Discharge Elimination System (MPDES) permit MTG870000. The notice included the draft Permit, Fact Sheet, and draft Environmental Assessment (EA).

The public notice required that all written comments be received or postmarked by July 29, 2016, in order to be considered in formulation of the final determination and issuance of the permit. In addition, DEQ held a public hearing on July 28, 2016. DEQ received no verbal comments at the hearing, and received one set of written comments: Guy Alsentzer, Executive Director, on behalf of Upper Missouri Waterkeeper.

A synopsis of the submitted comments and DEQ's responses are included below. A copy of the 17-page comment letter is available from DEQ upon request. This Response to Comments is an addendum to and supersedes portions of the Fact Sheet.

1. **Comment #1** –

There is no explanation of how the treatment area annual thresholds were determined or whether the annual thresholds are reasonable for requiring additional protections. The Dept. should revise its Draft Permit to include a general requirement that *all* pesticide dischargers develop, maintain and implement a Pesticide Discharge Management Plan (PDMP).

**Response to Comment #1**

Montana and EPA commonly differentiate between the size of entities for environmental permitting such as major and minor classifications of MPDES discharging facilities [see ARM 17.30.201(1) and ARM 17.30.1304(39)], which can subsequently result in different levels of requirements. The thresholds in both Montana's and EPA's PGP utilize the same rationale. EPA's 2016 PGP Fact Sheet discusses the differentiation between small entities and large entities for determining which permittee is required to prepare a PDMP:

“EPA's NPDES program has historically considered “major” municipal NPDES permits as those that serve greater than 10,000 persons (*i.e.*, with a wastewater treatment plant design of greater than one million gallons a day). ‘Major NPDES’ permittees have increased recordkeeping and public notice obligations over ‘minor NPDES,’ which is consistent with EPA's intent for the draft 2016 PGP to impose additional recordkeeping and reporting information only on these larger communities.”

Montana incorporates the same rationale in our PGP, but Montana's permit is more careful with its thresholds. In Montana, *any* pesticide application (*i.e.* threshold of “zero”) to state surface waters requires submittal of a Notice of Intent (NOI) for coverage under the PGP. By contrast, EPA uses two independent criteria to trigger submittal of a NOI: “zero” threshold for certain decision-makers (agencies with pest management responsibilities and mosquito, irrigation, and weed control districts) or annual treatment area thresholds for local government or other agencies. EPA automatically authorizes any other activities (see EPA's 2016 PGP Part 1.2.3 and Table 1-1). In essence this makes Montana's PGP permit notification requirements more inclusive than the federal PGP.

As explained in EPA's 2010 and 2016 PGP Fact Sheets:

“To determine the appropriate annual treatment area thresholds that would trigger the NOI requirement, EPA's Office of Water, Office of Chemical Safety and Pollution Prevention (formerly the

Office of Pesticides, Pollution, and Toxic Substances) and the ten EPA Regional Offices engaged in discussions with USDA, states as co-regulators, and representatives from industry including pesticide registrants, applicators, and land managers. EPA also solicited and received some comments on the draft 2011 PGP on appropriate threshold values to use for NOI submission. Based on these discussions, the comments received, and EPA’s best professional judgment, EPA developed annual treatment area thresholds that establish NOI requirements for applications to larger areas, which are believed to have the greatest potential for impact to waters of the United States” [quoted from 2016 Fact Sheet].

In Montana, if the applicant requests coverage for annual pesticide applications in areas greater than annual pesticide use pattern thresholds listed in Table 1 of the PGP, they are classified as above-threshold (or “Tier II”) facilities and are subject to additional requirements -- including the development of the PDMP-- that reflect different size impacts.

A comparison of Montana’s thresholds with the EPA pesticide use pattern thresholds are as follows:

Pesticide Use Pattern	Annual Treatment Area Thresholds	
	EPA – Draft 2016	MT – Draft 2016
Piscicide (Animal Pest Control)	80 acres (or 20 linear miles)	10 acres
Weeds & Algae	80 acres (or 20 linear miles)	100 acres
Forest Canopy	6,400 acres	1,000 acres
Mosquito/Flying Insect		
Larval Chemical	NA	100 acres
Adulticide Chemical	6,400 acres	1,000 acres
Larval Biological Control	NA	6,400 acres
R&D	NA (automatic)	10 acres
Other not Classified	NA	10 acres

No changes will be made in response to this comment.

**2. Comment #2 –**

A PDMP is an “effluent limitation” because it does, in fact, establish restrictions on the authorized discharges.

**Response to Comment #2**

As discussed in Montana’s 2016 PGP Fact Sheet on page 25, the PDMP is a tool to assist the permittee in planning and documenting what pest management measures it is implementing to meet the effluent limits, and potentially to assist the permitting/compliance authority in determining whether the effluent limits are being met.

The PDMP does not contain effluent limits. The effluent limits are specified in Part II.B of the PGP. In response to your comment, DEQ has reformatted Part II. Effluent Limits, Monitoring Requirements & Other Conditions to clarify and merge all requirements for the Pesticide Discharge Management Plan in Part II.D.

DEQ developed the PDMP to parallel EPA’s PDMP. As discussed in EPA’s 2016 PGP Fact Sheet, the requirement to prepare a PDMP does not restrict quantities, rates, and concentrations of

constituents that are discharged. Further, as explained in EPA's 2016 PGP Fact Sheet and draft permit regarding the PDMP:

- *EPA 2016 Fact Sheet Part II.2 (page 5)*. "EPA has structured the draft 2016 PGP to conform to relevant court decisions. One of these cases held that because the terms of the Nutrient Management Plan (NMP) employed by concentrated animal feeding operations (CAFO) imposed restrictions on discharges, those restrictions amounted to effluent limitations that needed to be made part of the permit and to be subject to public and permit writer review. *Waterkeeper Alliance, Inc. v. EPA*, 399 F.3d 486 (2<sup>nd</sup> Cir. 2005). **In this respect, this permit is different from the CAFO requirements.** In this permit, EPA explicitly establishes effluent limitations in Parts 2 and 3 that are independent of any documentation and recordkeeping requirements regarding implementation of the limitations. In a separate part of the permit (Part 5) there is a requirement to develop a Pesticide Discharge Management Plan (PDMP). The PDMP is not a limitation and does not itself impose requirements on discharges. These are already imposed by the limitations in Parts 2 and 3. The PDMP is rather a tool for those Operators who are defined as Decision-makers to document, among other things, how Pest Management Measures will be implemented to comply with the permit's effluent limitations."
- *EPA 2016 PGP Fact Sheet Part II.2 (page 7)*: "The requirement to prepare a PDMP is not an effluent limitation because it does not restrict quantities, rates, and concentrations of constituents that are discharged. CWA section 502(11). Instead, the requirement to develop a PDMP is a permit "term or condition" authorized under sections 402(a)(2) and 308 of the Act. Section 402(a)(2) states, "[t]he Administrator shall prescribe conditions for [NPDES] permits to assure compliance with the requirements of paragraph (1) of this subsection, including conditions on data and information collection, reporting, and such other requirements as he deems appropriate." The PDMP requirements set forth in the permit are terms or conditions under the CWA because the Operator is documenting information on how it is complying with the effluent limitations (and inspection and evaluation requirements) contained elsewhere in the permit. Thus, the requirement to develop a PDMP and keep it updated is no different than other information collection conditions, as authorized by section 402(a)(2), in other permits. Failure to have a PDMP, where required, is a violation of the permit."
- *EPA 2016 PGP Part 5.0* "The PDMP does not contain effluent limitations; the effluent limitations are specified in Parts 2 and 3 of the permit. The PDMP documents how Decision-makers will implement the effluent limitations in Parts 2 and 3 of the permit, including the evaluation and selection of Pest Management Measures to meet those effluent limitations in order to minimize discharges."

DEQ incorporates these responses into Montana's PGP.

As stated above, DEQ has reformatted Part II. Effluent Limits, Monitoring Requirements & Other Conditions to clarify and merge all requirements for the Pesticide Discharge Management Plan in Part II.D.

3. **Comment #3** –

All NOIs and PDMPs must be made available for public comment *prior* to authorization to discharge. The Department should require NOIs and associated PDMPs to be submitted electronically, or if submitted in hardcopy, at minimum to be made electronically available for public review and comment prior to authorization.

**Response to Comment #3**

Federal and state rules allow general permits to be written to cover categories of point sources having common elements. In Montana, DEQ develops and issues the state's general permits, and Montana's rules allow dischargers to obtain activity-specific coverage under the general permits. These general permits, including the PGP, contain effluent limits, monitoring, and reporting requirements and *are subject to public comment prior to issuance*. The public notice for the 2016 PGP renewal, including a public hearing and 32-day comment period, was conducted in conformance with ARM 17.30.1341(3). Any authorizations under the 2016 PGP (and the previous PGP) through submission of a NOI [ARM 17.30.1341(4)] are available for public review. Also, interested persons can request a copy of the PDMP from DEQ.

As explained in the response to comment #2, the PDMP is a tool to document how pest management measures will be implemented for the permittee. The PGP requires regular review, evaluation, and adaptation; in fact, the PGP includes a requirement for the PDMP to be kept up-to-date. The PGP requires that the permittee retain a copy of the current PDMP at the address listed on the NOI and it must be immediately available at the time of an onsite inspection or upon request.

Lastly, the annual report (AR3) for Tier II permittees for this permit cycle will require the signatory to certify when the PDMP was last updated, report the dates the pesticide application equipment was inspected and calibrated in accordance with the PDMP, and provide a summary of adverse impact monitoring and results.

No change will be made in response to this comment.

**4. Comment #4 –**

The law requires that a discharge not cause or contribute to a violation of water quality standards. DEQ's proposed permit fails to meet the federal and state standards for discharge permits to ensure authorized discharges comply with water quality standards and, therefore, must be revised.

**Response to Comment #4**

DEQ finds that each owner/operator is required to control its discharge as necessary to meet applicable water quality standards as an effluent limit in the PGP. Given that in the PGP the regulated *discharge* from pesticide application to water is the residual *remaining after the pesticide is no longer serving its intended purpose*, DEQ determined that compliance with the other terms of the permit does not result in a reasonable potential to cause or contribute to an exceedance of applicable water quality standards. DEQ conducted a qualitative analysis in the Fact Sheet Part IV.B.2 to determine whether additional site-specific WQBELs would be needed. Specifically:

- FIFRA requirements –based on the label-use restrictions, the discharge of residuals and degenerates are minimized. EPA has determined that proper pesticide application in conformance with the FIFRA label will not cause adverse effects on the environment;
- List of impaired waterbodies – the PGP does not authorize pesticide application to water that is impaired for that specific pesticide or degenerates of that pesticide. As part of the 2016 PGP renewal, DEQ has implemented a new requirement for every owner/ operator to confirm that the water body that they will be treating is not listed as impaired for the relevant pesticide or degenerates on the 303(d) list. This will be part of the request for authorization (see the NOI Section F). If so, the applicant would need to choose between applying for coverage under an individual MPDES permit at which time DEQ would require additional information, or selecting a different means of pest management;
- TBELs – in addition to the above, activities that are greater than threshold are required to take additional precautions including properly maintain and calibrate the pesticide application equipment, which are required to minimize improper pesticide application; and
- Biological pesticides do not work through a toxic mode of action, and will not cause or contribute to a violation of water quality standards.

In situations where an owner/operator is requesting coverage for a discharge that does not match the analysis for the PGP, the NOI will be denied and the applicant will be required to modify their requested activity or apply for individual permit coverage.

No change will be made in response to this comment.

5. **Comment #5** –

DEQ must revise its permit to require a permittee to obtain water quality data on parameters it may discharge, and submit that information to DEQ prior to being authorized to discharge. DEQ should require the permittee to perform baseline and representative monitoring necessary to protecting receiving waterways.

**Response to Comment #5**

Part IV.B of the Fact Sheet states “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...[because]...monitoring data give[s] only a ‘snap shot’ of 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.” Ambient monitoring data for pesticides can be inconclusive because the presence of a pesticide does not provide the determination of pesticide source, possible lawful versus unlawful pesticide use, accidental spill or discharge, possible contamination from runoff, or the pesticide detected is still functioning for its intended purpose from proper application. Therefore, monitoring data with quantitative results is difficult to interpret. DEQ has concluded through qualitative analysis that pesticides are not causing widespread impairment to water quality in Montana.

No change will be made in response to this comment.

6. **Comment #6**–

No citation is provided to the alleged Board rule allowing DEQ to authorize discharges to A-closed waterways. We also do not understand the last sentence of the A-closed description paragraph, where DEQ apparently states that, if a discharger is a Tier II discharger, it can now discharge in, over, or

nearby A-closed waters. On similar grounds we are troubled by DEQ's apparent intent to allow pesticide dischargers, determined to be Tier II, authorization to discharge to, on, or near ORW waters.

**Response to Comment #6**

As explained in response to comment #1, DEQ uses thresholds with different levels of requirements for pesticide application based on annual treatment area. Tier II is a threshold category with additional requirements; as clarified in Table 1 *any* pesticide discharge into waterbodies classified as either A-closed or Outstanding Resource Waters (ORW) is automatically subject to the Tier II additional requirements. DEQ determined that the application of pesticides to A-closed or ORW is permissible if, no matter how small the actual acreage, such temporary pesticide application is considered "over the threshold" and the more stringent requirements apply. In other words, even if the pesticide application would have been regulated as a Tier I 'under threshold' for a different water use classification, the A-closed or ORW classification trips the activity into the more stringent category.

DEQ is allowed to authorize short-term exemptions from the water quality standards for application of a pesticide that is registered in the United States under Montana Code Annotated (MCA) 75-5-308. DEQ may not grant an authorization to degrade ORW under 75-5-303, MCA; 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 (75-5-316(2), MCA and ARM 17.30.638). 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. (Note that per 75-5-103, MCA, 'degradation' does not include nonsignificant activities; nonsignificant activities include short-term changes in existing water quality for pesticides authorized under 75-5-308(1)(b), MCA.)

No change will be made in response to this comment.

**7. Comment #7 –**

DEQ must require that, like applications to discharge to, on, or near intermittent and perennial waters, so too are ephemeral waters categorically protected and such discharges require a permit.

**Response to Comment #7**

The PGP is applicable for pesticide discharges to intermittent and ephemeral water bodies. No change will be made in response to this comment.

**8. Comment #8 –**

The Draft Permit fails to incorporate restrictions necessary to protect designated uses like aquatic life (fish).

**Response to Comment #8**

Beneficial uses, including aquatic life, are protected through water quality standards and the general provision included in ARM 17.30 Subchapter 6. The commenter did not provide any scientific or legal argument that the beneficial uses are unprotected by state standards. MPDES permits are based on those standards. See response to comment #4 for a discussion on how DEQ's proposed permit ensures authorized discharges comply with water quality standards.

No change will be made in response to this comment.

**9. Comment #9 –**

The Permit and Fact Sheet appear to rely on FIFRA regulations and blanket prohibitions on certain pesticide applications, but only to Tier II area uses.

**Response to Comment #9**

The PGP universally applies the following FIFRA-based requirement for *all* pesticide applicators covered under the PGP (see Part II for effluent limits, monitoring & other conditions):

*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.*

Tier II is not an area; it is the category for “over threshold” pesticide applicators that request coverage for the application of pesticides above the relevant annual threshold. No change will be made in response to this comment.

**10. Comment #10 –**

DEQ must consider synergistic effects when establishing effluent limits. DEQ could revise the existing language to also address – and prohibit – discharges to waterways that suffer from synergistic-based impairments.

**Response to Comment #10**

The MPDES permit is designed to implement effluent limits, monitoring, and other requirements for point source discharges, in order to protect the beneficial uses of the receiving waterbodies. Criteria are set to protect against synergistic effects; in addition, DEQ does not authorize pesticide application to water that is impaired for that specific pesticide or degenerates of that pesticide. No change will be made in response to this comment.

**11. Comment #11 –**

DEQ has provided zero explanation of how a NPDES permit that authorizes removal of riparian terrestrial plants can be consistent with the results of any applicable Total Maximum Daily Load (TMDL) for temperature, which in most cases require maximum riparian vegetation for maximum shade.

**Response to Comment #11**

TMDLs do not have permit requirements for riparian vegetation. TMDLs are a planning tool for impaired waterbodies. In the event that a TMDL establishes a Wasteload Allocation (WLA) for pesticides, it would be incorporated into the PGP requirements.

**12. Comment #12 –**

The Fact Sheet appears to suggest that the permit applies to pesticides other than the three identified pollutants known to impair waterways (in fact suggesting there are over 400 such pollutants known). Without reasonable potential analysis pursuant to antidegradation law, DEQ cannot authorize the discharge of pollutants.

**Response to Comment #12**

The five (5) pollutants listed on page 17 of the Fact Sheet are the only pesticide pollutants currently included as sources of impairment on the 303(d) list. Along with these specified

pollutants, the PGP does not authorize pesticide applications of any pollutants to waterbodies that are listed as impaired for that specific pesticide or degenerates of that pesticide.

See response to comments #4 and #8. No change will be made in response to this comment.

**13. Comment #13 –**

DEQ appears to believe that if it establishes, through permit-specific definitions, a distinction between “irrigation systems,” and other waters of the United States that it may then exempt such as “irrigation waters or land application disposal waters when the waters are used up within the irrigation or land application disposal system and the waters are not returned to state waters” from CWA requirements. DEQ may not, as a matter of law, exempt irrigation systems or parts thereof from the CWA’s protections.

**Response to Comment #13**

The Fact Sheet Page 3 states:

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.

This was based on definitions in 75-5-103, MCA and ARM 17.30.1304 and was not permit-specific. No change will be made in response to this comment.

**14. Comment #14 –**

It is unclear if DEQ is authorizing the discharge of a pollutant that may harm or eliminate existing and designated aquatic life uses other than fish.

**Response to Comment #14**

MPDES permits are designed to implement effluent limits, monitoring, and other requirements for point source discharges, in order to protect the beneficial uses of the receiving waterbodies. See responses to comments #4, #8, and #10. No change will be made in response to this comment.

**15. Comment #15 –**

The Draft Permit and Fact Sheet contain no meaningful discussion of the impact of authorized discharges on endangered or threatened species protected under the Endangered Species Act. DEQ must incorporate sufficient protections for threatened and endangered species as are necessary.

**Response to Comment #15**

A discussion of endangered species (species of concern) was included in the Environmental Assessment (EA) under Resource #6. DEQ may deny authorization under the PGP in accordance with ARM 17.30.1341(9) and require an individual permit. See responses to comments #4, #8, and #10. No change will be made in response to this comment.

**16. Comment #16 –**

Inadequate Fact Sheet.

**Response to Comment #16**

DEQ prepares a fact sheet for every draft permit, to ‘briefly set forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit’ (ARM 17.30.1371). The fact sheet is required to include, when applicable, ‘...(c) a *brief* summary of the basis for the draft permit conditions...’ Rationale for effluent limits, including water quality standards, is contained in Part IV. of the Fact Sheet. See also response to comment #4. No change will be made in response to this comment.

**17. Comment #17 –**

DEQ cites to the requirements of the antidegradation policy but fails to demonstrate that it has evaluated whether the discharge will result in full support of existing uses.

**Response to Comment #17**

As discussed in Part XII of the Fact Sheet, DEQ considers the discharges from pesticide activities authorized under the PGP as nonsignificant, and no further nondegradation evaluation is necessary. No change will be made in response to this comment.

**18. Comment #18 –**

DEQ does not know the impacts of its pesticide applications on water quality limited or other waterways. In addition, DEQ fails to apply mandatory criteria for known pesticide-related pollutants contributing to known impairments (e.g., copper, endosulfan sulfate).

**Response to Comment #18**

See responses to comments #4 and #5.

The PGP does not authorize pesticide applications of any pollutants to waterbodies that are listed as impaired for that specific pesticide or degenerates of that pesticide. Furthermore, Part I.C.3 of the PGP prohibits owners/operators discharging into impaired waters from using pesticides that contain that pollutant. The NOI supports this prohibition in Section F.

No change will be made in response to this comment.

**19. Comment #19 –**

DEQ has not evaluate[d] what effluent limitations are necessary to ensure full protection of designated uses, an effort that must start by evaluating, for example, what is meant by “aquatic life” and “wildlife.” There is no discussion of either of these uses in the Fact Sheet.

**Response to Comment #19**

See the Fact Sheet Part IV.B and responses to comments #4 and #8. No change will be made in response to this comment.

**20. Comment #20 –**

Despite the fact that temperature plays a significant role in both the efficacy of pesticides and the impact of toxic pollutants on beneficial uses, as discussed above, DEQ has not required temperature monitoring and reporting.

There must be an explicit visual monitoring component. DEQ should limit the discharge to daylight hours rather than discretionary to ensure adequate visual inspection.

**Response to Comment #20**

The use and application of pesticides must be consistent with FIFRA labeling, which results in environmental protection. If FIFRA labeling requires temperature and visual monitoring for a pesticide, the requirement does not need to be repeated in the PGP. DEQ finds that the effluent limits and monitoring requirements in the PGP Part II. are sufficient to protect beneficial uses.

No change will be made in response to this comment.

**21. Comment #21 –**

DEQ fails to consider the role of excess application of nutrients in growing all of the aquatic weeds that the pesticide users desire to kill.

DEQ fails to consider the effects on nutrient levels and dissolved oxygen levels in downstream waters from the discharge which is intended to kill aquatic plants, thereby both releasing nutrients and depressing dissolved oxygen levels. Monitoring, reporting, limitations, and effluent limits should be incorporated into the proposed permit to address these issues.

**Response to Comment #21**

The PGP authorizes the *discharge* of pesticide and pesticide degenerates as point sources, not the *use* of pesticides which is regulated by FIFRA. The PGP regulates pesticide residuals after the intended purpose of application to target pests and such discharge has no effect on nutrients and dissolved oxygen levels. Aquatic plants and algae naturally senesce and release nutrients, just like they would due to a pesticide. No change will be made in response to this comment.

**22. Comment #22 –**

DEQ has incorporated various limitations in its proposed permit including that it can revoke the general permit authorization if the permittee is a significant source, causes environmental problems, and is not in compliance with the permit terms. The problem with this limitation is that it is dependent upon a comparison between the activities of the permittee and the PDMP which DEQ will not make available to the public nor maintain in its offices.

**Response to Comment #22**

DEQ reviews NOIs for completeness and performs compliance inspections. DEQ has never been requested to supply the PDMP to any member of the public. Interested persons can request a copy of the PDMP or other public documents from DEQ. See response to comment #3 for a discussion on public availability.

No change will be made in response to this comment.

**23. Comment #23 –**

The proposed effluent limitations are inadequate.

**Response to Comment #23**

DEQ does not agree that the effluent limits are inadequate, see our discussion in the Fact Sheet Part IV. See responses to comments #3, #4, #8, and #13. No change will be made in response to this comment.