FACT SHEET FOR NDPDES PERMIT NDG870000

GENERAL PERMIT FOR PESTICIDE DISCHARGE

DATE OF THIS FACT SHEET – September 2022

INTRODUCTION

The Federal Clean Water Act (CWA, 1972, and later amendments in 1977, 1981, and 1987, etc.) established water quality goals for the navigable (surface) waters of the United States. One mechanism for achieving the goals of the CWA is the National Pollutant Discharge Elimination System (NPDES), which the US Environmental Protection Agency (EPA) oversees. In 1975, the State of North Dakota was delegated primacy of the NPDES program by EPA. The North Dakota Department of Environmental Quality, hereafter referred to as "department", has been designated the state water pollution control agency for all purposes of the Federal Water Pollution Control Act, as amended [33 U.S.C. 1251, et seq.], and is authorized to take all action necessary or appropriate to secure to this state the benefits of the act and similar federal acts. The department's authority and obligations for the wastewater discharge permit program is in the North Dakota Administrative Code (NDAC) 33.1-16 which was adopted under North Dakota Century Code (NDCC) chapter 61-28. In North Dakota, these permits are referred to as North Dakota Pollutant Discharge Elimination System (NDPDES) permits.

The following rules or regulations apply to NDPDES permits:

- Procedures the department follows for issuing NDPDES permits (NDAC chapter 33.1-16-01),
- Standards of Quality for Waters of the State (NDAC chapter 33.1-16-02.1).

These rules require any treatment facility operator to obtain an NDPDES permit before discharging wastewater to state waters. They also define the basis for limits on each discharge and for other requirements imposed by the permit.

According to NDAC section 33.1-16-01-08, the department must prepare a draft permit and accompanying fact sheet and make it available for public review. The department must also publish an announcement (public notice) during a period of thirty days, informing the public where a draft permit may be obtained and where comments regarding the draft permit may be sent (NDAC section 33.1-16-01-07). For more information regarding preparing and submitting comments about the fact sheet and permit, please see **Appendix A – Public Involvement**. Following the public comment period, the department may make changes to the draft NDPDES permit. The department will summarize the responses to comments and changes to the permit in **Appendix D – Response to Comments.**

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BACKGROUND INFORMATION

General Information

The current permit issued for this class of discharges expires on December 31, 2022. This will be the third issuance of the pesticide general permit, effective January 1, 2023. According to Part 40 of the Code of Federal Regulations (CFR), section 122.28, general permits issued for a class of discharges in place of individual permits for specific facilities benefits both the department and the permit holder by reducing administrative tasks and making the requirements for similar facilities. As provided in the NDPDES Rules (NDAC 33.1-16-01), the department may issue general permits for a class of point source discharges that meet the following criteria: discharge the same types of wastes, employ similar or equivalent types of treatment, require the same effluent limitations, and require the same or similar monitoring. The pesticide discharges described in this permit meet these criteria and can be appropriately regulated under a general permit. The general permits require baseline control practices aimed at minimizing the impact of pesticide discharges to waters of the state.

Permit Number:	NDG870000
Permit Type:	General Permit
Discharge / Activity Type:	Pesticides applied to water bodies or having the ability to end up in water bodies.
Applicable Area:	State of North Dakota
Type of Treatment:	Best Professional Judgment (BPJ); and Best Management Practices (BMPs)
Discharge Location:	Waters of the State of North Dakota

Regulatory Background

On November 1, 2011, the department issued the first NDPDES permit for the application of a pesticide to target a pest that is present in or over, including near, the waters of the state. Prior to November 1, 2011, EPA and the state had been regulating these types of applications through the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). EPA regulates the sale, distribution, and use of pesticides under FIFRA to ensure that when used in conformance with FIFRA labeling directions, pesticides will not pose unreasonable risks to human health and the environment. The North Dakota Department of Agriculture (NDDA) is the state agency which regulates the sale, distribution, and use of pesticides in North Dakota.

Several courts addressed the question of whether the Clean Water Act (CWA) requires NPDES permits for pesticide applications. These cases resulted in some confusion about the applicability of the CWA to pesticides applied to state surface waters.

In the 2006 NPDES Pesticides Rule, EPA noted that the rule did not cover “spray drift.” To be consistent with the rule this permit does not cover spray drift resulting from the application of pesticides. Instead, to address spray drift, EPA is actively engaged in several initiatives to help minimize pesticide drift problems such as: (1) evaluating potential for drift as a routine part of pesticides risk assessments; (2) in collaboration with experts, improving scientific models and methods for estimating drift and risks from drift; (3) strengthening labeling for new pesticides

and when re-evaluating older pesticides; (improving the clarity and enforceability of product label directions and drift management restrictions; and (4) promoting applicator education and training programs. More information on EPA's work on reducing pesticide drift is available at:

https://www.epa.gov/reducing-pesticide-drift.

On November 27, 2006, EPA issued a final rule ("2006 NPDES Pesticides Rule") clarifying two specific circumstances in which an NPDES permit was not required to apply pesticides to or around water. They were: 1) the application of pesticides directly to water to control pests; and 2) the application of pesticides to control pests that are present over, including near, water where a portion of the pesticides will unavoidably be deposited to the water to target the pests, in both instances provided that the application is consistent with relevant FIFRA requirements.

On January 9, 2009, the Sixth Circuit vacated EPA's 2006 NPDES Pesticides Rule under a plain language reading of the CWA. *National Cotton Council of America v. EPA*, 553 F.3d 927 (6th Cir., 2009). The Court held that the CWA unambiguously includes "biological pesticides" and "chemical pesticides" with residuals within its definition of "pollutant." On June 8, 2009, the Sixth Circuit granted EPA a two-year stay. At the end of the stay, on April 9, 2011, NPDES permits will be required for discharges to state surface waters of biological pesticides, and of chemical pesticides that leave a residue after preforming its intended purpose.

This general permit does not apply to the application of pesticides to areas which are exempt from department permitting. The CWA specifically excludes from the definition of point source, "agricultural stormwater discharges and return flow from irrigated agriculture." Also, applications that do not reach waters of the State of North Dakota do not need permit coverage. Nothing in this permit changes the effect of those statutory exemptions. Thus, for example, the application of a pesticide to an agricultural crop for the control of terrestrial pests that later runs off the field, either as irrigation return flow or stormwater runoff, is exempt from permit coverage even if that discharge to a water of the U.S. is known to contain pesticide residuals. Agricultural runoff is classified as a non-point source discharge which is not required to have NPDES permit coverage.

COVERAGE UNDER THIS PERMIT

Applicability of General Permit

This permit authorizes the discharge to surface waters of the state from the handling, use or application of pesticides provided the activity is in accordance with state laws and regulations, the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the pesticide labeling.

This permit is available to operators for the application of biological pesticides and chemical pesticides which leave a residue (hereinafter collectively "pesticides") that result in a discharge to waters of the state. Permit coverage includes the following pesticide use patterns:

Mosquito and Other Flying Insect Pest Control - management of all public health/nuisance pests which develop or are present during a portion of their life cycle in standing or flowing water, when applying pesticides in or over standing or flowing water. Public health/nuisance pests in this use category include but are not limited to mosquitoes and black flies.

Weed and Algae Pest Control - management of weeds, algae, and pathogens in water and at the water's edge using pesticides, including but not limited to lakes, rivers, streams, wetlands, irrigation canals, and drainage systems.

Animal Pest Control - management of invasive or other nuisance species in water and at the water's edge, including but not limited to lakes, rivers, streams wetlands, irrigation canals, and drainage systems. Animals in this use category include but are not limited to fish, lampreys, and mollusks.

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

Request for Authorization – Notice of Intent (NOI)

Persons subject to this permit are not required to submit a Notice of Intent (NOI) and are automatically covered upon the effective date of this permit. Coverage under a general permit without submitting a notice of intent is allowed under 40 CFR 122.28(b)(2)(v) for discharges other than from publicly owned treatment works, combined sewer overflows, municipal separate storm sewer systems, primary industrial facilities and stormwater discharges associated with industrial activity. The department believes that allowing coverage without a notice of intent would be appropriate since the pesticide applications are short duration and may require short response times for proper and effective pesticide applications. In addition, pesticide use is regulated by other programs which establish prerequisites for pesticide applicators.

Commercial and public applicators must be certified as outlined in state law (NDCC 4.1-33-07). The statute also requires that private applicators be certified in order to use any restricted use pesticide (NDCC 4.1-33-12). Another consideration for not requiring a notice of intent is that a notification for the application of aquatic pesticides is required under the state water quality standard regulations (NDAC 33.1-16-02.1-11). The notification requirement outlined in the state water quality standards has been included in the general permit. The notification requirement is as follows:

The department must be notified at least twenty (20) days prior to the application of any pesticide (herbicide, insecticide, biocide, piscicide, algaecide) to surface waters of the state for control of aquatic pests as provided in state water quality regulations (NDAC 33.1-16-02.1-11). The notification must include the following:

1. Chemical name and composition.
2. Map which identifies the area of application and aerial extent (e.g., acres or square feet).
3. A list of target species of aquatic biota the applicant desires to control.
4. The calculated concentration of the active ingredient in surface waters immediately after application.
5. Name, address, and telephone number of the certified applicator.

The department shall provide clarification on the information requested above in item four (4) in lieu of submitting, “the calculated concentration of the active ingredient in surface waters immediately after application,” the department suggests submitting the following:

- The planned quantity and rate of the application of pesticide(s).
- The number of planned of applications of pesticide(s) to the target area.

The department through the use of BPJ, determined that submission of the above listed information gathers more relevant information to pesticide application and aligns with information the EPA requests in a notification for coverage under a pesticide general permit.

In the case of a declared pest emergency situation or other circumstances that precludes notification prior to the pesticide application; the notice outlined above shall be provided within twenty (20) days after the pesticide application.

Discharges Not Covered

This general permit does not apply to the following:

Discharges of a pesticide to waters of the state identified in the state's section 303d list of impaired waters needing Total Maximum Daily Loads (referred to as the TMDL list) as impaired for that pesticide or pesticide degrades, unless a Total Maximum Daily Load (TMDL) has been established for the receiving waters and the TMDL establishes a waste load allocation for the discharge consistent with this permit. The state's most recent *Integrated Section 305(b) Assessment Report and Section 303(d) List of Impaired Waters Needing TMDLs* can be viewed at:

https://deq.nd.gov/wq/3_Watershed_Mgmt/2_TMDLs/TMDLS_IR.aspx

Discharges which have limits assigned to them in another NDPDES permit or a TMDL has been approved with a waste load allocation which may be different from the limits contained in this permit.

Wastewater discharges (such as sanitary wastewater, equipment, or vehicle wash) to waters of the state.

The department may deny or revoke coverage under this permit and require submittal of an application for an individual NDPDES permit based on a person's compliance record, ambient water quality data, or any other information relative to the application of pesticides. This department reserves the right to issue such persons an individual NDPDES permit with more specific limitations and conditions.

This general permit does not substitute for obligations under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), National Environmental Policy Act (NEPA), Endangered Species Act (ESA), or National Historic Preservation Act (NHPA), it is your responsibility to ensure the project and resulting discharges comply with the respective requirements.

Threatened and Endangered Species

Coverage under this permit is available only for discharges and discharge-related activities that are not likely to result in any short- or long-term adverse effects (adverse incidents) to species that are federally listed as endangered or threatened ("listed") under the ESA or habitat that is federally designated as critical under the ESA ("critical habitat"). The department recognizes

that there are three (3) species with critical habitat located throughout the state which are listed as endangered or threatened. The three species in are Charadrius melodus known as the piping plover, Hesperia dacotae known as the Dakota skipper, and Oarosma poweshiek known as poweshiek skipperling. If the department determines that pesticide application is not likely to result in any short- or long-term adverse effects, then operators must comply with all permit conditions and/or requirements to ensure that there are not likely any adverse incidents. Appendix E provides a map of the extent of critical habitat for listed species in the state.

AUTHORIZATION TO DISCHARGE

All persons are authorized to apply pesticides under this general permit provided they fulfill any applicable pesticide applicator certification requirements.

NOTICE OF TERMINATION (NOT)

Permittees are not required to submit a notice of termination to end coverage under this permit. Coverage under this permit ends when the pesticide application resulting in discharge to waters of the state is completed.

The department may, by written notice, revoke the authorization to discharge in accordance with this general permit as it applies to any person and/or require such person to apply for and obtain an individual permit if:

The covered source or activity is a significant contributor to pollution or creates other environmental problems;

The permittee is not in compliance with the terms and conditions of this general permit;

Conditions or standards have changed so that the source or activity no longer qualifies for this general permit; or

The discharge limitations contained in this permit are not sufficient to meet the water quality standards applicable to a water body.

PROPOSED PERMIT LIMITS

The discharge from pesticide applications to surface waters is not regulated by national effluent limitations guidelines, which establish technology-based effluent limitations for various industries. In the absence of a federal standard, limitations may be determined using Best Professional Judgment (BPJ) [40 CFR 125.3(c)]. In addition, the department must consider and include limitations necessary to protect water quality standards applicable to the receiving waters.

Technology-Based Effluent Limitations

Summary and Basis for Effluent Limitations

Effluent Parameters and Practices	Basis
No pesticide may be applied unless that pesticide is registered or otherwise authorized for use by the NDDA.	NDCC 4.1-33-13, BPJ, 40 CFR 125.3(c)
No person shall apply a pesticide unless in accordance with state pesticide laws, NDDA regulations and the pesticide labeling.	NDCC 4.1-33-13, NDAC 60-03-01-06, BPJ, 40 CFR 125.3(c)
No person shall apply a restricted use pesticide unless that person is certified as outlined in NDDA regulations or that person is under the direct supervision of someone who is a certified pesticide applicator.	NDCC 4.1-33-12, NDAC 60-03-01-05.2, BPJ, 40 CFR 125.3(c)
No commercial or public applicator shall apply pesticide unless they are certified as outlined in NDDA regulations or that person is under the direct supervision of someone who is a certified pesticide applicator.	NDCC 4.1-33-07, NDAC 60-03-01-05.1, BPJ, 40 CFR 125.3(c)
Use only the amount of pesticide and frequency of pesticide application necessary to control the target pest using equipment and application procedures appropriate for the task.	NDCC 4.1-33-13, NDAC 60-03-01-06, BPJ, 40 CFR 125.3(c)
Perform regular maintenance activities on equipment to minimize the potential for leaks, spills, and unintended release of pesticides to waters of the state.	NDCC 4.1-33-13 NDAC 60-03-01-06, BPJ, 40 CFR 125.3(c)
Maintain application equipment in proper operating condition by calibrating, cleaning, and repairing such equipment on a regular basis to ensure effective pesticide application and pest control. Properly calibrate equipment (i.e., nozzle choice, droplet size, etc.) to deliver the appropriate application rate for the task.	NDCC 4.1-33-13 NDAC 60-03-01-06, BPJ, 40 CFR 125.3(c)

The handling, use or application of pesticides is regulated under the FIFRA. In addition, the State of North Dakota has enacted laws and promulgated rules to implement portions of FIFRA to regulate pesticide sale, distribution, storage and use within the state. State laws and rules pertaining to pesticides referred to in this permit include: NDCC 4.1-33 & 4.1-34 and NDAC 60-03, Pesticide Rules.

In North Dakota, the Pesticide Control Board administers the NDCC Chapter 4.1-33, Pesticide Control, and may adopt rules to implement this chapter. The Pesticide Control Board consists of the Agriculture Commissioner, who is chairman of the board; the director of the North Dakota State University Extension Service; and the director of the Agricultural Experiment Station at North Dakota State University. The North Dakota State University Extension Service is responsible for the pesticide applicator certification program. The Agriculture Commissioner is responsible for the enforcement of the NDCC 4.1-33 and related rules. The lead agency in the state for pesticide regulations is the NDDA, as the office and staff for the Agriculture Commissioner.

Owners/operators must comply with all applicable statutes, regulations and other requirements including, but not limited to requirements contained in the labeling of pesticide products

approved under FIFRA ("FIFRA labeling"). Although the FIFRA label and labeling requirements are not effluent limitations, it is illegal to use a registered pesticide inconsistent with its labeling. The department considers many provisions of FIFRA labeling -- such as those relating to application sites, rates, frequency, and methods, as well as provisions concerning proper storage and disposal of pesticide wastes and containers -- to be requirements that protect water quality. The application rates and other conditions for pesticide use serve to limit the concentration of pesticides discharged to water. If a pesticide is applied at a rate higher than specified on the label or in a manner inconsistent with any relevant water-quality related FIFRA labeling requirements, the department will consider the discharge to be noncompliant with the effluent limitation under the NDPDES permit.

Pesticide product registration provides a level of protection for water quality, human health, and the environment. In general, FIFRA authorizes EPA to register each pesticide product intended for distribution or sale in the U.S. To register a pesticide, the Agency must determine that its use in accordance with the label will not cause "unreasonable adverse effects on the environment" (see, e.g., FIFRA § 3(c)(5)). In making decisions on whether to register a pesticide, EPA considers the use directions on proposed product labeling and evaluates data on product chemistry, human health, ecological effects, and environmental fate to assess the potential risks associated with the use(s) proposed by the applicant for registration and expressed on the labeling. Among other things, the Agency evaluates the risks to human health and the environment (including water quality) posed by the use of the pesticide.

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, or the application methods may be restricted to limit off-site transport. 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.

To minimize the total amount of pesticide discharged, operators must use the amount of pesticide and frequency of pesticide application necessary to control the target pest using equipment and application procedures appropriate for the task. Using the optimal effective rate ensures maximum efficiency in pest control with the minimum quantity of pesticide. It also 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. To minimize discharges of pesticide, owners/operators should base the rate and frequency of application on what is known to be effective against the target pest.

The appropriate pesticide application rate and frequency for managing the target pest is also important in reducing the potential for pesticide resistance. Some pests can develop resistance to pesticides unless resistance management techniques are adopted by pesticide users. 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. When resistance occurs, users may increase rates and frequency of application in an attempt to maintain pesticide effectiveness. This can lead to the loss of efficacy and increased exposure to the pesticide. 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.

Pesticide applicator certification programs provide instruction to applicators on proper pesticide handling and use. The pesticide certification program in North Dakota is administered by the North Dakota State University Extension Service. The program establishes standards, including testing, for persons to become certified to use or handle pesticides. Persons who successfully complete the pesticide applicator training and testing receive certification and are deemed competent to use pesticides. Pesticide certification is required for persons who sell, purchase or use restricted use pesticides. In addition, North Dakota requires commercial and public applicators to be certified to use general use pesticides.

Proper maintenance of pesticide application equipment reduces the potential for unintended discharges of pesticides to waters of the state. To minimize discharges of pesticide, operators must ensure that the rate of application is calibrated (i.e., nozzle choice, droplet size, etc.) to deliver the appropriate quantity of pesticide needed to achieve greatest the efficacy against the target pest. Improperly calibrated pesticide equipment may cause either too little or too much pesticide to be applied. This lack of precision can result in excess pesticide being available or result in ineffective pest control. When done properly, equipment calibration can assure uniform application to the desired target and result in higher efficiency in terms of pest control and cost.

Non-numeric limitations or Best Management Practices (BMPs) may be used to control or abate the discharge of pollutants when numeric effluent limitations are infeasible as provided in 40 CFR 122.44(k)(3). Numeric limitations would not be feasible for the activity covered by this permit. The discharges from the application of pesticides can be highly intermittent with those discharges not practically separable from the pesticide application itself. The discharges from the application of pesticides are often short duration, highly variable, and may occur from many different locations. This variability makes setting numeric effluent limitations for pesticide applications extremely difficult. In this case, the use of narrative conditions (based on existing requirements), provides a reasonable approach to control pesticides discharges.

SELF-MONITORING REQUIREMENTS

It is not feasible to routinely sample discharges from pesticide applications. As such, the permit does not include sample-based monitoring requirements. However, the permit includes narrative monitoring requirements.

Monitoring

Operators and/or applicators must monitor all pesticide application activities to ensure proper equipment operation and to obtain the information identified under the recordkeeping requirements. The pesticide application records provide a measure of pesticide potentially discharged to waters.

Operators and/or applicators must visually monitor the pesticide application area, where practical, for possible and observable adverse impacts caused by the pesticide application. If an adverse impact is observed a report must be made as outlined in the incident reporting requirements of the permit.

Recordkeeping

Pesticide applicators are required to keep is records of pesticide applications under state pesticide rules (NDAC 60-03-01-07). The permit identifies records that must be kept by commercial and public applicators under the pesticide rules. The record must be made within twenty-four (24) hours of the pesticide application or the use or disposal of the pesticide rinsate. The department believes the majority of pesticide applications subject to this permit will be made by commercial and public applicators. The records must include the following information:

1. Name and address of the person for whom the pesticide was applied.
2. Legal description of the land or other description of where the pesticide was applied.
3. Pest or pests controlled.
4. Starting and completion time the pesticide was applied (month, day, year, and hour).
5. Person who supplied the pesticide that was applied, if other than the person making the application or that person's employer.
6. Specific trade name and EPA registration number of the pesticide applied.
7. Direction and estimated velocity of the wind and the estimated temperature of the outdoor air at the time the pesticide was applied. This requirement shall not apply to seed treatment applications or if a bait is used to attract the pest or pests or if the application is made indoors.
8. Amount of pesticide used, including:
   - Pounds [kilograms] or gallons [liters] per acre [.40 hectare] of formulated product.
   - Pounds [kilograms] or gallons [liters] of tank mix applied per acre [.40 hectare].
9. Specific crops, commodities, and total acreage [hectarage] or other common identifying unit of measure to which the pesticide was applied.
10. Description of equipment used in application.
11. Certification number of applicator, if any, and signature.
12. Right-of-way applicators must record weather conditions and geographic location in two-hour increments.

The permit also indicates that a copy of these records shall be provided to any employee of the department upon request at a reasonable time during normal working hours. The department intends to coordinate any request to review records with the NDDA.

The permit does not in any way change the recordkeeping requirements for other pesticide applicators and pesticide dealers. To reinforce that fact the permit includes a statement that the recordkeeping requirements for pesticide dealers, and private applicators using restricted use pesticides are also outlined in NDDA rules (NDAC 60-03-01-07).

SURFACE WATER QUALITY-BASED EFFLUENT LIMITS

In addition to restrictions on discharges in the event that a water body becomes impaired or a TMDL is established for a pesticide, the permit contains the following in regard to water quality-based limitations:

> Your discharge must be controlled as necessary to meet applicable numeric and narrative state water quality standards. If at any time you or the department becomes aware that your discharge causes or contributes to an excursion of applicable water quality standards, you must take corrective action.

The State Water Quality Standards (WQS) (NDAC 33.1-16-02.1) describe the numerical and general narrative criteria that apply to all “waters of the state”. Numeric and narrative criteria are elements of the water quality standards which set limitations on the permissible amounts of a substance or other characteristics for waters of the state. The general narrative criteria, as described in the State Water Quality Standards, limit discharges to maintain aesthetics, color, turbidity, the biologic and aquatic community integrity, and many other elements in the receiving water body. Any noncompliance with the numerical or general narrative criteria is not authorized under this permit.

The department has made the determination that the application of pesticides in accordance with controls required by this permit, NDDA regulations, and the pesticide labeling will comply with State Water Quality Standards. However, any pesticide application which results in a long-term or permanent impact on a water use may be subject to enforcement action and/or be required to obtain an individual permit under the NDPDES program.

Section 401, Water Quality Certification applies to federal licenses and permits including Clean Water Act § 402 NPDES permits in states where EPA administers the permit program. The North Dakota Department of Environmental Quality administers the Clean Water Act § 402 Permit Program. The state assumes authority for issuing § 401, Water Quality Certification on § 402, NDPDES Permits. The central feature of Clean Water Act § 401 is the state’s ability to grant, grant with conditions, deny, or waive certification. The state cannot issue § 401, Water Quality Certification if the permit is not in compliance with EPA approved Water Quality Standards.

Therefore, under § 401 of the CWA, the department hereby certifies this NDPDES General Permit will not violate any provisions of the Standards of Quality for Waters of the State if all conditions specified in the permit are adhered to.

The department conducts ambient water quality monitoring at thirty-one (31) river and stream sites in ND. Sites are sampled six (6) times from April through October. In cooperation with the NDDA, samples are also collected and analyzed for pesticides. Results will be compared to criteria established in the North Dakota Water Quality Standards for acute and chronic exposure limits. In the event an exceedance is detected, application records required in the permit will be reviewed and appropriate action will be initiated. In 2021, a total of 174 river and stream samples were tested for 102 different pesticides and pesticide degradates. The NDDA publishes a report on pesticide sampling results on an annual basis. The most recent pesticide monitoring report (*2021 Pesticide Surface Water Monitoring Report)*; can be viewed online at:

https://www.nd.gov/ndda/pesticide-program/pesticide-water-quality-program

Currently, there are no waters listed as impaired due to pesticides or pesticide residuals in the state as provided in the *North Dakota 2018 Integrated Section 305(b) Water Quality Assessment Report and Section 303(d) List of Waters Needing Total Maximum Daily Loads;* the report can be viewed online at:

https://deq.nd.gov/wq/3_Watershed_Mgmt/2_TMDLs/TMDLS_IR.aspx.

Since available monitoring data indicates that water quality standards are not being routinely exceeded for pesticide residuals, the department contends that this is further evidence that

owner/operators should be able to meet water quality standards when complying with FIFRA and the PGP.

Surface Water Quality Standards

The WQS (NDAC 33.1-16-02.1) are designed to protect existing water quality and preserve the beneficial uses of North Dakota's surface waters. Wastewater discharge permits must include conditions that ensure the discharge will meet the surface water quality standards. Water quality-based effluent limits may be based on an individual waste load allocation or on a waste load allocation developed during a basin wide total maximum daily load (TMDL) study. TMDLs result from a scientific study of the water body and are developed in order to reduce pollution from all sources.

Stream reaches that receive effluent from facilities covered under this permit were reviewed for applicable TMDLs. Any waste load allocations (WLAs) resulting from these TMDLs required meeting end-of-pipe concentrations consistent with applicable water quality criteria and are therefore eligible for coverage under this permit.

Permittees covered under this general permit include discharges to Class I Lakes or Reservoirs, and Class I or IA, Class II, Class III streams throughout the state, and without excluding any other water of the state[1]. The quality of waters in these classes are described below:

- Class I Lake or Reservoir: Cold water fishery – waters capable of supporting growth of cold water fish species (e.g., salmonids) and associated aquatic biota.
- Class I streams: The quality of the waters in this class shall be suitable for the propagation or protection, or both, of resident fish species and other aquatic biota and for swimming, boating, and other water recreation. The quality of waters shall be suitable for irrigation, stock watering, and wildlife without injurious effects. After treatment consisting of coagulations, settling, filtration, and chlorination, or equivalent treatment processes, the water quality shall meet the bacteriological, physical, and chemical requirements of the department for municipal or domestic use.
- Class IA streams: The quality of waters in this class shall be the same as the quality of class I streams, except that where natural conditions exceed class I criteria for municipal and domestic use, the availability of softening or other treatment methods may be considered in determining whether ambient water quality meets the drinking water requirements of the department.
- Class II streams: The quality of waters in this class shall be the same as the quality of class I streams, except that additional treatment may be required to meet the drinking water requirements of the department. Streams in this classification may be intermittent in nature which would make these waters of limited value for beneficial uses such as municipal water, fish life, irrigation, bathing, or swimming.
- Class III streams: The quality of waters in this class shall be suitable for agricultural and industrial uses. Streams in this class generally have low average flows with prolongs

[1] Added for clarification in response to EPA comment 2.

periods of no flow. During periods of no flow, they are of limited value for recreation and fish and aquatic biota. The quality of these waters must be maintained to protect secondary contact recreation uses (e.g., wading), fish and aquatic biota, and wildlife uses.

Numerical Criteria for the Protection of Aquatic Life and Recreation

Numerical water quality criteria are listed in the WQS (NDAC 33.1-16-02.1). They specify the maximum levels of pollutants allowed in receiving water to protect aquatic life and recreation in and on the water. The department uses numerical criteria along with chemical and physical data for the wastewater and receiving water to derive the effluent limits in the discharge permit. When surface water quality-based limits are more stringent or potentially more stringent than technology-based limits, the discharge must meet the water quality-based limits.

Numerical Criteria for the Protection of Human Health

Numerical water quality criteria for the protection of human health are listed in the WQS (NDAC Chapter 33.1-16-02.1). These criteria are designed to protect humans from exposure to pollutants linked to cancer and other diseases, based on consuming fish and shellfish and drinking contaminated surface waters. The water quality standards also include radionuclide criteria to protect humans from the effects of radioactive substances.

The human health-based criteria must be considered when writing NDPDES permits. These criteria were established in 1992 by the U.S. EPA in its National Toxics Rule (40 CFR 131.36). The National Toxics Rule allows states to use mixing zones to evaluate whether discharges comply with human health criteria. The department determined the applicant's discharge is adequately regulated to protect human health. The department will re-evaluate this discharge for impacts to human health at the next permit reissuance.

Narrative Criteria

Narrative water quality criteria (NDAC Section 33.1-16-02.1-08) limit concentrations of pollutants from exceeding applicable standards of the receiving waters. The department adopted a narrative biological goal solely to provide an additional assessment method that can be used to identify impaired surface waters.

Antidegradation

The purpose of North Dakota's Antidegradation Policy (NDAC Chapter 33.1-16-02.1, Appendix IV) is to:

- Provide all waters of the state one of three levels of antidegradation protection.
- Determine whether authorizing the proposed regulated activity is consistent with antidegradation requirements.

The department's fact sheet demonstrates that the existing and designated uses of the receiving water will be protected under the conditions of the proposed permit

Mixing Zones

The department's WQS contain a Mixing Zone and Dilution Policy and Implementation Procedure, NDAC Chapter 33.1-16-02.1 (Appendix III). This policy addresses how mixing and dilution of point source discharges with receiving waters will be addressed in developing chemical-specific and whole effluent toxicity discharge limitations for point source discharges. Depending upon site-specific mixing patterns and environmental concerns, some pollutants/criteria may be allowed a mixing zone or dilution while others may not. In all cases, mixing zone and dilution allowances shall be limited, as necessary, to protect the integrity of the receiving water's ecosystem and designated uses.

MONITORING REQUIREMENTS

The department requires monitoring, recording, and reporting (NDAC Section 33.1-16-01-21 through 23 and 40 CFR 122.41) to verify that the treatment process is functioning correctly and that the discharge complies with the permit's limits. This permit does not include sample-based monitoring requirements. However, should the department require monitoring to determine the effect of a particular discharge; the monitoring, recording, and reporting must conform to the requirements outlined in the permit.

Test Procedures

The collection and transportation of all samples shall conform to EPA preservation techniques and holding times. All laboratory tests shall be performed by a North Dakota certified laboratory in conformance with test procedures pursuant to 40 CFR 136, unless other test procedures have been specified or approved by EPA as an alternate test procedure under 40 CFR 136.5. The method of determining the total amount of water discharged shall provide results within ten (10) percent of the actual amount.

OTHER PERMIT CONDITIONS

Incident Reporting

The permit includes standard conditions for noncompliance reporting. The conditions have been adjusted in this permit for reporting the occurrence of an adverse incident as a result of pesticide handing or application. The state has existing rules for reporting pesticide accidents (NDAC 60-03-01-09). It appears that the reporting requirement under the state rules would include the conditions described in the definition for an adverse incident. The department has incorporated the information required for pesticide accident reports made to the NDDA into reporting requested under this permit. The incident reporting is as follows:

Twenty-Four (24) Hour Incident Notification. Any person who is involved in or causes a pesticide incident that results in adverse effects on humans, animals, or the environment shall file a report to the NDDA commissioner. The report must be made within twenty-four (24) hours after the incident. The report may be filed by letter, telephone, or electronic mail. A telephone report is acceptable if followed within twenty-four (24) hours with either a letter or electronic mail report at

the North Dakota Department of Agriculture, 600 E Boulevard Ave, Bismarck ND 58505-0020; 701.328.2231; ndda@nd.gov. The report must contain:

1. The name of the pesticide.
2. The amount of pesticide or tank mix, or both.
3. The location of the pesticide incident.
4. The time of incident (month, day, year, and hour).
5. The direction and estimated velocity of the wind and estimated temperature at the time of the incident, if outdoors.
6. Actions taken to remedy the adverse effects on animals and the environment.
7. The name of and contact information for the person making the report.

For adverse incidents as defined in this permit (Appendix B - Glossary) include the following:

1. Contact information including the operator name, address and phone number; and
2. A description of the adverse incident including affected area size and any impacted water bodies.

Adverse incidents and spills which may seriously endanger health or the environment must be reported as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of the circumstances. The report shall be made to the North Dakota, Department of Emergency Services at 1.800.773.3259.

Five (5) Day Adverse Incident Written Report**.** Within five (5) days of becoming aware of an adverse incident, the permittee may be required to provide a written report of the adverse incident to the NDDEQ. The written report must include the following information:

1. The information listed for the 24-hour notice listed above;
2. Contact information including name, address and phone number;
3. A description of the adverse incident and its cause;
4. The period of the adverse incident, including dates and times;
5. The estimated time the incident is expected to continue if it has not been corrected;
6. The size and scope of the affected area (e.g., aquatic area or total stream distance affected);
7. A description of the environmental impact of the adverse incident including species affected, estimated number and size of affected organisms;
8. Steps taken or planned to prevent recurrence of the incident.

The written reports shall be submitted to the North Dakota Department of Environmental Quality, Division of Water Quality, 4201 Normandy St., Bismarck ND 58503. The department may waive the written report on a case-by-case basis, if the oral report has been received within 24 hours by the NDDA or the NDDEQ at 701.328.5210.

Since this permit does not require the submittal of monitoring result reports at least annually, 40 CFR 122.44 requires that the permittee report all instances of noncompliance not reported under 40 CFR 122.41(l)(1),(4),(5), and (6) at least annually. As such, the permit includes the following for reporting other noncompliance not covered by the reporting outlined above or elsewhere in the permit.

Reporting for Noncompliance. The permittee shall report all instances of noncompliance with the permit effluent limitations which are not subject to the twenty-four (24) hour reporting described above within twenty (20) days of becoming aware of the noncompliance. The report may be made by phone to the NDDEQ at (701) 328-5210 or sent to the NDDEQ. The report must include:

1. Operator name, address and phone number;
2. A description of the noncompliance and its cause;
3. The period of noncompliance, including dates;
4. The estimated time the noncompliance is expected to continue if it has not been corrected
5. Steps taken or planned to prevent recurrence.

Pest Management Measures

The department assumes, when practicable, that many operators may deploy various appropriate pest management measures to manage pests and optimize pesticide applications including Integrated Pest Management and Best Management Practices. The department expects operators to continue to consider information on the target pest and available control methods in selecting and implementing their pest management strategies.

Operators should consider including the following steps, when practicable, into their pest management measures: 1) identify the pest problem; 2) evaluate and properly implement pest management strategies; and 3) conduct pest surveillance. The management measures should be revised, as needed, to respond to changing pest control needs and the following situations: noncompliance with the conditions of this permit, pesticide accidents and adverse incidents. A description of the management measures and any supporting documents must be made available to the department upon request. Appendix C provides additional information on pest management measures for the pesticide use patterns covered by this permit.

PERMIT ISSUANCE PROCEDURES

Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. This includes the establishment of limitations or prohibitions based on changes to water quality standards, the development and approval of waste load allocation plans, the development or revision to water quality management plans, changes in sewage sludge practices, or the establishment of prohibitions or more stringent limitations for toxic or conventional pollutants and/or sewage sludges. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Proposed Permit Issuance

This proposed permit meets all statutory requirements for the department to authorize a wastewater discharge. The permit includes limits and conditions to protect human health and aquatic life, and the beneficial uses of waters of the State of North Dakota. The department proposes to issue this permit for a term of five (5) years.

APPENDIX A – PUBLIC INVOLVEMENT INFORMATION

The department proposes to issue a general permit for pesticide discharges within the State of North Dakota. This permit includes limitations and other conditions based on state and federal requirements for the handling and application of pesticides. This fact sheet describes the type of activities covered under this general permit and the department's reasons for requiring permit conditions.

The department will place a Public Notice of Draft on **October 31, 2022**, in the state regional papers to inform the public and to invite comment on the proposed draft North Dakota Pollutant Discharge Elimination System permit and fact sheet. The notice will also be mailed to the department's public notice mailing list.

The Notice –

- Indicates where copies of the draft Permit and Fact Sheet are available for public evaluation.
- Offers to provide assistance to accommodate special needs.
- Urges individuals to submit their comments before the end of the comment period.
- Informs the public that if there is significant interest, a public hearing will be scheduled.

You may obtain further information from the department by telephone, 701.328.5210, or by writing to the address listed below.

North Dakota Department of Environmental Quality
Division of Water Quality
4201 Normandy Street
Bismarck, ND 58503

The primary author of this permit and fact sheet is Montana Kruske.

North Dakota Department of Environmental Quality Public Notice
Issue of an NDPDES Permit

Public Notice Date: 10/31/2022 Public Notice Number: ND-2022-019

Purpose of Public Notice
The Department intends to issue the following North Dakota Pollutant Discharge Elimination System (NDPDES) Discharge Permit under the authority of Section 61-28-04 of the North Dakota Century Code.

Permit Information
Application Date: 7/1/2022 Application Number: NDG87

Applicant Name: General Permit NDG870000-Pesticide Applications to Surface Waters

Mailing Address: ND Dept of Env Quality, Div of Water Quality, 4201 Normandy Street, Bismarck ND 58503-1324

Telephone Number: 701.328.5172

Proposed Permit Expiration Date: 12/31/2027

Description
The Department intends to reissue NDPDES General Permit, NDG870000, to authorize the discharge from pesticide applications made to waters of the state. Coverage under the General Permit is limited to applicators that meet the criteria specified in the permit. Authorization to discharge under this permit begins on the permit effective date. The permit does include a requirement to notify the Department prior to pesticide applications to waters of the state for control of aquatic pests as provided in state water quality regulations (NDAC 33.1-16-02.1-11).

Tentative Determinations
Proposed effluent limitations and other permit conditions have been made by the Department. They assure that State Water Quality Standards and applicable provisions of the FWPCAA will be protected.

Information Requests and Public Comments
Copies of the application, draft permit, and related documents are available for review. Comments or requests should be directed to the ND Dept of Env Quality, Div of Water Quality, 4201 Normandy Street, Bismarck ND 58503-1324 or by calling 701.328.5210.

All comments received by December 09, 2022 will be considered prior to finalizing the permit. If there is significant interest, a public hearing will be scheduled. Otherwise, the Department will issue the final permit within sixty (60) days of this notice.

The NDDEQ will consider every request for reasonable accommodation to provide an accessible meeting facility or other accommodation for people with disabilities, language interpretation for people with limited English proficiency (LEP), and translations of written material necessary to access programs and information. To request accommodations, contact Jennifer Skjod, Acting Non-discrimination Coordinator at 701-328-5226 or jskjod@nd.gov. TTY users may use Relay North Dakota at 711 or 1-800-366-6888.

APPENDIX B – DEFINTIONS, ABBREVIATIONS, AND ACRONYMS

DEFINITIONS Pesticide Permit BP 2022.10.04

"**Action Threshold**" means a point at which pest populations or environmental conditions indicate that pest control action must be taken. Action thresholds help determine both the need for control actions and the proper timing of such actions.

"**Active Ingredient**" means:

- In the case of a pesticide other than a plant growth regulator, defoliant or desiccant, an ingredient which will prevent, destroy, repel, or mitigate pests.
- In the case of a plant growth regulator, an ingredient which, through physiological action, will accelerate or retard the rate of growth or rate of maturation or otherwise alter the behavior of ornamental or crop plants or the produce thereof.
- In the case of a defoliant, an ingredient which will cause the leaves or foliage to drop from a plant.
- In the case of a desiccant, an ingredient which will artificially accelerate the drying of plant tissue. [NDCC 4.1-34-01]

"**Adverse incident**" means an undesirable unexpected event caused by the use of a pesticide that adversely affects man or the environment, or is reasonably likely to suffer a delayed or chronic adverse effect in the future. The phrase "adverse effects" includes effects on non-target plants, fish, or wildlife that are unusual or unexpected as a result of exposure to a pesticide residue, and may include:

- Distressed or dead fish;
- Stunted, wilting, or desiccation of non-target submerged or emergent aquatic plants; or
- Other dead or visibly distressed non-target aquatic organisms (amphibians, turtles, or invertebrates, etc.)

The phrase "adverse effects" also includes any adverse effects to domesticated animals or humans related to exposure to a pesticide residue.

"**Algaecide**" means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any algae.

"**Applicator**" means any person who applies pesticide to land or, for the purpose of this permit, surface waters of the state.

- *Certified applicator* means any individual who is certified under NDCC 4.1-33 to purchase or use a restricted use pesticide.
- *Commercial applicator* means a person who by contract or for hire engages in the business of applying pesticides for compensation. [NDCC 4.1-33-01]
- *Private applicator* means an individual who is required to be a certified applicator to buy or use a restricted use pesticide on property owned or rented by the applicator or the applicator's employer or, if applied without compensation other than trading of personal services between producers of agricultural commodities, on the property of another person. [NDCC 4.1-33-01]

- *Public applicator* means an applicator who applies pesticides, other than ready to use pesticides, as an employee of:
  a. A governmental agency, municipal corporation, or public utility; or
  b. A hospital, privately owned golf course, nursery, or greenhouse. [NDCC 4.1-33-01]

"**Best Management Practices**" (BMPs) means schedules of activities, practices (and prohibitions of practices), structures, vegetation, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the U.S. BMPs also include treatment requirements, operating procedures, and practices to control spillage or leaks, or drainage from raw material storage. [40 CFR 122.2]

"**Biocide**" means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating viruses, bacteria, or other micro-organism, except viruses, bacteria, or other micro-organisms on or in living humans or other living animals.

"**Biological Pesticides**" (also called biopesticides) - include microbial pesticides, biochemical pesticides and plant-incorporated protectants (PIP).

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

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

"**Control Measure**" means any BMP or other method used to meet the effluent limitations to minimize the discharge of pollutants to waters of the state.

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

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

- Significant risk to human health;

- Significant economic loss; or
- Significant risk to endangered species, threatened species, beneficial organisms, or the environment. [40 CFR 166]

"**Department**" means the North Dakota Department of Environmental Quality, Division of Water Quality.

"**Discharge**" – when used without qualification, means the "discharge of a pollutant."

"**Discharge of a pollutant**" and "**discharge of pollutants**" each means any addition of any pollutant to the waters of the state from any source, including the disposal of pollutants into wells. [NDAC 33.1-16-01]

"**Facility or Activity**" means any NDPDES "point source" (including land or appurtenances thereto) that is subject to regulation under the NDPDES program.

"**Fungicide**" means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any fungi. [NDCC 4.1-34-01]

"**Handling**" means the mixing, loading, application, repackaging, storage, transportation, distribution, sale, purchase, or disposal of pesticides. [NDAC 60-03-01-02]

"**Hazardous condition**" means any situation involving the actual, imminent or probable spillage, leakage, or release of a hazardous substance onto the land, into a water of the state or into the atmosphere which, because of the quantity, strength and toxicity of the hazardous substance, its mobility in the environment and its persistence, creates an immediate or potential danger to the public health or safety or to the environment.

"**Hazardous substance**" means any substance or mixture of substances that presents a danger to the public health or safety and includes, but is not limited to, a substance that is toxic, corrosive, or flammable, or that is an irritant or that, in confinement, generates pressure through decomposition, heat, or other means. The following are examples of substances which, in sufficient quantity, may be hazardous: acids; alkalis; explosives; fertilizers; heavy metals such as chromium, arsenic, mercury, lead and cadmium; industrial chemicals; paint thinners; paints; pesticides; petroleum products; poisons; radioactive materials; sludges; and organic solvents.

"**Herbicide**" means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any weed. [NDCC 4.1-34-01]

"**Impaired Water**" for purposes of this permit, means a water(s) of the state that has been identified by the department as not meeting applicable state water quality standards. Impaired waters include both waters with approved or established TMDLs, and those for which a TMDL has not yet been approved or established.

"**Inert Ingredient**" means an ingredient that is not an active ingredient. [NDCC 4.1-34-01]

"**Insect**" means any of the numerous small invertebrate animals generally having the body more or less obviously segmented, for the most part belonging to the class insecta, comprising six-

legged, usually winged forms, as for example, beetles, bugs, bees, flies and to other allied classes of arthropods whose members are wingless and usually have more than six legs, as for example, spiders, mites, ticks, centipedes and wood lice. [NDCC 4.1-34-01]

"**Insecticide**" means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any insects that may be present in any environment whatsoever. [NDCC 4.1-34-01]

"**Integrated Pest Management**" means a holistic approach to managing pests by combining biological, cultural, physical, and chemical tools in a way that balances economic, health, and environmental risks and benefits.

"**Label**" means the written, printed, or graphic matter on, or attached to, the pesticide or device, or any of its containers or wrappers. [NDCC 4.1-34-01]

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

a. Upon the pesticide or device or any of its containers or wrappers;
b. Accompanying the pesticide or device at any time; or
c. To which reference is made on the label or in literature accompanying the pesticide or device, except when accurate, nonmisleading reference is made to current official publications of a state or federal agency, state agricultural experiment station, or state agricultural college. [NDCC 4.1-34-01]

"**Mechanical/Physical Methods**" means mechanical tools or physical alterations of the environment for pest prevention or removal.

"**Minimize**" means to reduce and/or eliminate pesticide discharges to waters of the state through the use of control measures and to the extent technologically available and economically practicable and achievable.

"**Non-target Organism**" means to include the plant and animal hosts of the target species, the natural enemies of the target species living in the community, and other plants and animals, including vertebrates, living in or near the community that are not the target of the pesticide.

"**Operator**" for the purposes of this permit, means any entity involved in the application of a pesticide that results in a discharge to a water of the state that meets either of the following two criteria:

- The entity has operational control over the financing for, or the decision to perform pesticide applications that result in discharges, including the ability to modify those decisions; and/or
- The entity has day-to-day operational control of activities which are necessary to ensure compliance with the permit (e.g., they are authorized to direct workers to carry out activities required by the permit).

"**Person**" means any individual, partnership, association, corporation, limited liability company, or organized group of persons whether incorporated or not. [NDCC 4.1-34-01] This includes any corporation, limited liability company, individual, partnership, association, or other public or private entity, including any state or federal agency or entity responsible for managing a state or federal facility, and includes any officer or governing or managing body of any such entity. [NDCC 61-28-02]

"**Pest**" means any insect, rodent, nematode, fungus, or weed; or any other form of terrestrial or aquatic plant or animal life, viruses, bacteria, or other micro-organism, except viruses, bacteria, or other micro-organisms on or in living humans or other living animals. [NDCC 4.1-34-01]

"**Pesticide**" means:

a. Any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest; and
b. Any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant. [NDCC 4.1-34-01]
    - *Defoliant"* means any substance or mixture of substances intended to cause the leaves or foliage to drop from a plant, with or without causing abscission. [NDCC 4.1-34-01]
    - *Desiccant*" means any substance or mixture of substances intended to artificially accelerate the drying of plant tissue. [NDCC 4.1-34-01]
    - *Plant regulator"* means any substance or mixture of substances intended, through physiological action, to accelerate or retard the rate of growth or rate of maturation, or to otherwise alter the behavior of plants or the produce thereof, but does not include substances to the extent that they are intended as plant nutrients, trace elements, nutritional chemicals, plant inoculants, and soil amendments. [NDCC 4.1-34-01]

"**Pesticide Residue**" for the purpose of determining whether an NPDES permit is needed for discharges to waters of the state from pesticide application, means that portion of a pesticide application that is discharged from a point source to waters of the state and no longer provides pesticidal benefits. It also includes any degradates of the pesticide.

"**Piscicide**" means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any fish.

"**Point source**" means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff. [40 CFR 122.2]

"**Pollutant**" means "wastes" as defined in subsection 2 of NDCC 61-28-02, including dredged spoil, solid waste, incinerator residue, garbage, sewage, sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into water. [NDAC 33.1-16-01-01]

"**Seriously endanger health or the environment**" means "Hazardous condition"

"**Spray drift**" means the airborne movement of pesticide sprays away from the target application site into waters of the state or applications of pesticides to terrestrial agricultural crops where runoff from the cop, either irrigation return flow or agricultural stormwater, discharges into waters of the state.

"**Take**" means to harass, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. [See Section 3 of the Endangered species Act, 16 U.S.C § 1532 (19).]

"**Target Pest**" or "**Target Species**" means the organism(s) toward which control measures are being directed.

"**Total Maximum Daily Loads (TMDLs)**" means a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL includes waste load allocations (WLAs) for point source discharges; load allocations (LAs) for nonpoint sources and/or natural background, and it must include a margin of safety (MOS) and account for seasonal variations.

"**Treatment Area**" means the entire area, whether over land or water, where a pesticide application is intended to provide pesticidal benefits within the pest management area. In some instances, the treat ears will be larger than the area where pesticides are actually applied.

"**Under the direct supervision**" means the act or process whereby the application of a pesticide is made by a competent person acting under the instructions and control of a certified applicator who is responsible for the actions of that person and who is available if and when needed, even though the certified applicator is not physically present at the time and place the pesticide is applied. The certified applicator must be able to arrive at the location of a supervised applicator within thirty minutes. [NDAC 60-03-01-02]

"**Unreasonable adverse effects on the environment**" means any unreasonable risk to humans or the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide. [NDCC 4.1-34-01]

"**Use of a pesticide in a manner inconsistent with its labeling**" means to use any pesticide in a manner that is not permitted by the labeling, except that the term does not apply to any of the following:

a. Applying a pesticide at any dosage, concentration, or frequency that is less than that specified on the label, unless the label specifically prohibits deviation from the specified dosage, concentration, or frequency.
b. Applying a pesticide against any target pest that is not specified on the label if the application is to the crop, animal, or site that is specified on the label.
c. Employing any method of application that is not prohibited by the label unless the label specifically states that the product may be applied only by the methods specified on the labeling.
d. Mixing a pesticide or pesticides with a fertilizer when the label does not prohibit such mixture.
e. Any use of a pesticide that is in compliance with section 5, 18, or 24 of the Federal Insecticide, Fungicide, and Rodenticide Act of 1947 [Pub. L. 104-170; Stat. 7 U.S.C. 136 et seq.]. [NDAC 60-03-01-02]

"**Waters of the state**" means all water included within the definitions given in subsection 6 of North Dakota Century Code section 61-28-02 or North Dakota Century Code section 61-01-01 as described below:

- 61-28-02. "Waters of the state" means all waters within the jurisdiction of this state, including all streams, lakes, ponds, impounding reservoirs, marshes, watercourses, waterways, and

all other bodies or accumulations of water on or under the surface of the earth, natural or artificial, public or private, situated wholly or partly within or bordering upon the state, except those private waters that do not combine or effect a junction with natural surface or underground waters just defined.

- 61-01-01. Waters of the state - Public waters. All waters within the limits of the state from the following sources of water supply belong to the public and are subject to appropriation for beneficial use and the right to the use of these waters for such use must be acquired pursuant to chapter 61-04:
    a. Waters on the surface of the earth, excluding diffused surface waters but including surface waters whether flowing in well-defined channels or flowing through lakes, ponds, or marshes which constitute integral parts of a stream system, or waters in lakes;
    b. Waters under the surface of the earth whether such waters flow in defined subterranean channels or are diffused percolating underground water;
    c. All residual waters resulting from beneficial use, and all waters artificially drained; and
    d. All waters, excluding privately owned waters, in areas determined by the state engineer to be noncontributing drainage areas. A noncontributing drainage area is any area that does not contribute natural flowing surface water to a natural stream or watercourse at an average frequency more often than once in three years over the latest thirty-year period.

"**Water Quality Impaired**" means 'Impaired Water'.

"**Water Quality Standards**" (WQS) are state regulations that define the water quality goals of a water body, or portion thereof, by designating the use or uses to be made of the water and by setting criteria necessary to protect the uses. Water quality standards also include an antidegradation policy and implementation procedures. North Dakota's Water Quality Standards are contained in NDAC 33.1-16-02.1.

"**Weed**" means any plant which grows where not wanted. [NDCC 4.1-34-01]

"**Wetlands**" means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. [40 CFR 122.2]

"**You and Your**" as used in this permit are intended to refer to the operator, or the discharger as the context indicates and that party's activities or responsibilities.

ABBREVIATIONS AND ACRONYMS

BMP – Best Management Practice
BPJ – Best Professional Judgment
CFR – Code of Federal Regulations
CWA – Clean Water Act (or the Federal Water Pollution Control Act, 33 U.S.C. §1251 et seq)
EPA – U. S. Environmental Protection Agency
ESA – Endangered Species Act
FIFRA – Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. 136 et seq.
FWS – U. S. Fish and Wildlife Service

IPM – Integrated Pest Management
LA – Load Allocation
MOS – Margin of Safety
NDDA – North Dakota Department of Agriculture
NDDEQ – North Dakota Department of Environmental Quality
NDPDES – North Dakota Pollutant Discharge Elimination System
NEPA – National Environmental Policy Act
NHPA – National Historic Preservation Act
NOI – Notice of Intent
NOT – Notice of Termination
NPDES – National Pollutant Discharge Elimination System
PGP – Pesticide General Permit
PIP – Plant-incorporated Protectants
TMDL – Total Maximum Daily Load
U.S.C. – United States Code
WLA – Waste Load Allocation
WQS – Water Quality Standard

APPENDIX C – PEST MANAGEMENT MEASURES

The following describes Pest Management Measures which when appropriate and practical should be deployed for the pesticide use patterns described in the permit for pesticide discharges.

1. Identify the Problem
   Operators should prior to the first pesticide application covered under this permit that will result in a discharge to waters of the state, and at least once each calendar year thereafter prior to the first pesticide application for that calendar year, consider the following for each pest management area:

   For mosquito and other flying or aquatic nuisance insect control:
   - Establish densities for larval and adult mosquito or other flying or aquatic nuisance insect populations which serve as action threshold(s) for implementing pest management;
   - Identify target mosquito or aquatic nuisance insect species and develop a species-specific control strategy based on developmental and behavioral considerations;
   - Identify known breeding sites for source reduction, larval control program, and habitat management; and
   - Analyze existing surveillance data to identify new/unidentified sources of mosquito or aquatic nuisance insect production as well as sites that have recurring pest problems.

   For the application of pesticides for aquatic weed and algae control:
   - Identify areas with weed or algae problems and characterize the extent of the problem, including, for example, water use goals not attained (e.g., wildlife habitat, fisheries, vegetation, and recreation);
   - Identity target weed species;
   - Identify possible sources of the problem (e.g., nutrients, invasive species, etc.); and
   - Establish past or present pest weed densities which serve as action threshold(s) for implementing pest management strategies.

   For discharges from the application of pesticides for aquatic nuisance animal control:
   - Identify areas with aquatic nuisance animal problems and characterize the extent of the problems, including water use goals not attained (e.g., wildlife habitat, fisheries, vegetation, and recreation);
   - Identify target aquatic nuisance animal species;
   - Identify possible sources of the problem (e.g., nutrients, invasive species); and
   - Establish past or present aquatic nuisance animal densities which serve as action threshold(s) for implementing pest management.

   For discharges from the application of pesticides for forest canopy pest control:
   - Establish target pest densities which serve as action threshold(s) for implementing pest management;
   - Identify target species to develop a species-specific control strategy based on developmental and behavioral considerations; and

- Identify current distribution of the target pest and assess potential distribution in the absence of control measures.

In the event site data are not available within the past year, operators should document why site data are not available and the data used to make determinations.

2. Pest Management
Operators should prior to the first pesticide application covered under this permit that will result in a discharge to waters of the state, and at least once each year thereafter during which an operator will have a discharge, operators should consider and implement control, when practicable, measures for each pest management area. These control measures should be an efficient and effective means of pest management and appropriately minimize discharges resulting from the application of pesticides. The selection of control measures should examine the use of pesticide and non-pesticide methods. In developing your pest management strategies, operators should consider the following management tools while considering pest resistance, feasibility, cost effectiveness, and the impact to water quality and non-target organisms. The management tools are:

- No action
- Prevention of the situation requiring pest management
- Mechanical/physical methods of pest management
- Cultural methods of pest management
- Biological control agents (e.g., predators)
- Available pesticides appropriate for the target pest.

3. Pesticide Use
If a pesticide is selected as a control measure and application of the pesticide will result in a discharge to waters of the state, operators should consider, when practical, the following for each pest management area, specific to the use pattern:

For mosquito and other flying or aquatic nuisance insect control:

- Conduct larval and/or adult surveillance prior to each application to assess the pest management area and to determine when the pest action thresholds are met which necessitate the need for pest management;
- Assess environmental conditions prior to each application (e.g., temperature, precipitation, and wind speed in the treatment area) to identify conditions which support development of pest populations and are suitable for control activities;
- Reduce the impact on the environment and non-target organisms by applying the pesticide only when the action thresholds have been met or disease is present;
- In situations or locations where practicable and feasible, use larvicides as a preferred pesticide for mosquito or flying or aquatic nuisance insect pest control when larval action thresholds have been met; and
- In situations or locations where larvicide use is not practicable or feasible, use adulticides for mosquito or flying or aquatic nuisance insect pest control when adult action thresholds have been met.

For the application of pesticides for aquatic weed and algae control:

- Conduct surveillance prior to each application to assess the pest management area and to determine when the pest action threshold is met that necessitates the need for pest management; and
- Reduce the impact on the environment and non-target organisms by applying the pesticide only when the action threshold has been met.

For discharges from the application of pesticides for aquatic nuisance animal control:

- Conduct surveillance prior to each application to assess the pest management area and to determine when the pest action threshold is met which necessitates the need for pest management; and
- Reduce the impact on the environment and non-target organisms by considering site restrictions, application timing, and application method in addition to applying the pesticide only when the action threshold has been met.

For discharges from the application of pesticides for forest canopy pest control:

- Conduct surveillance prior to each application to assess the pest management area and to determine when the pest action threshold is met which necessitates the need for pest management;
- Assess environmental conditions (e.g., temperature, precipitation, and wind speed in the treatment area) to identify conditions which support target pest development and are suitable for treatment activities;
- Reduce the impact on the environment and non-target organisms by considering the restrictions, application timing, and application method;
- Use pesticides against the most susceptible developmental stage; and
- Use pesticides only where the action threshold has been met.

APPENDIX D – RESPONSE TO COMMENTS

Comments were submitted by Region 8 EPA and received by the department on December 13, 2022. The department would like to thank EPA for their comments. Comments are identified below and the department's response to each comment follows:

1. **EPA Comment 1**: NDDEQ should include permit limitations in the permit related to the Endangered Species Act to reflect limitations described in the fact sheet.

   "Coverage under this permit is available only for discharges and discharge-related activities that are not likely to result in any short- or long-term adverse effects (adverse incidents to species that federally listed as endangered or threatened ("listed") under the ESA or habitat that is federally designated as critical under the ESA ("critical habitat").

   This paragraph appears to constitute a description of limitations on discharge activities which will be permitted under this general permit. This limitation is not included in the draft permit and should be included in permit section I.B. Limitations on Coverage.

   Department Response: Thank you for your comment. The department added the following language to the permit section I.B. Limitations on Coverage points 4 and 5 to provide clarification and reflect the limitations described in the fact sheet.

   "Discharges and discharge-related activities which have the potential to result in short- and long-term adverse effects (adverse incidents) to species and/or habitats that are federally listed or federally designated under the ESA."

   "This general permit does not substitute for obligations under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), National Environmental Policy Act (NEPA), Endangered Species Act (ESA), or National Historic Preservation Act (NHPA), it is your responsibility to ensure the project and resulting discharges comply with the respective requirements."

2. **EPA Comment 2**: NDDEQ should include permit limitations in the permit related to the classes of receiving waters to reflect limitations described in the fact sheet or clarify the fact sheet if there are no limitations on receiving water classifications.

   "Permittees covered under this general permit discharge to Class I Lakes or Reservoirs, and Class I or IA, Class II, and Class III streams throughout the state."

   The sentence above indicates activities covered by this general permit are limited to discharges to these classes of water. If this is the case, it should be noted that discharges to waters other than Class I Lakes or Reservoirs, and Class I or IA, Class II, or Class III streams will not be covered by this general permit in permit section I. B. Limitations on Coverage. If this is not the intent of the permit and discharges to other state water classes will be permitted, the fact sheet should be clarified.

Department Response: Thank you for your comment. It is not the intent of this permit or fact sheet to limit the state waters where applications of pesticides will be covered. The department will provide clarification on this intention, changing the wording from:

"Permittees covered under this general permit discharge to Class I Lakes or Reservoirs, and Class I or IA, Class II, and Class III streams throughout the state."

To:

"Permittees covered under this general permit include discharges to Class I Lakes or Reservoirs, and Class I or IA, Class II, Class III streams throughout the state, and without excluding any other water of the state."

3. **EPA Comment 3**: NDDEQ has not implemented North Dakota's Antidegradation Policy for Category 3 waters.

   The State of North Dakota has adopted, and EPA has approved an antidegradation policy and implementation procedures pursuant to 40 CFR 131.12 that apply to the issuance of all NPDES permits. As a result, any NPDES permits North Dakota issues must include a demonstration that the permit includes any more stringent limitations necessary to comply with the States's antidegradation Policy (NDAC Chapter 33.1-16-02.1, Appendix IV). On page 14 of the fact sheet states, "The department's fact sheet demonstrates that the existing and designated uses of the receiving water will be protected under the conditions of the proposed permit." There is no other discussion of how the requirements of North Dakota's Antidegradation Policy were met, and protection of existing uses is not the implementation criteria used in North's Dakota's Antidegradation Policy for Category 3 waters. The draft permit and fact sheet do not provide details demonstrating how the limitations and requirements of the draft permit were developed to comply with North Dakota's Antidegradation Policy for Category 3 waters.

   Department Response: Thank you for your comment. Currently the state of North Dakota does not have any listed water body as a Category Class 3 Waters. However, when a water body would obtain a listing under the Category Class 3 Waters the department would follow the "**Implementation process."** as written in NDAC 33.1-16-02.1, Appendix IV(III), Procedures for Category 3 Waters.

   The current process states… "Effects on category 3 waters resulting from regulated activity will be determined by appropriate evaluation and assessment techniques and best professional judgment. Any proposed regulated activity that would result in a new or expanded source of pollutants to a segment located in or upstream of a category 3 segment will be allowed only if there are appropriate restrictions to maintain and protect existing water quality. Reductions in water quality may be allowed only if they are temporary and negligible. Factors that may be considered in judging whether the quality of a category 3 water would be affected include: a) percent change in ambient concentrations predicted at the appropriate critical conditions; b) percent change in loadings; c) percent reduction in available assimilative capacity; d) nature, persistence,

and potential effects of the parameter; e) potential for cumulative effects; and f) degree of confidence in any modeling techniques utilized."

APPENDIX E – CRITICAL HABITAT FOR THREATENED AND ENDANGERED SPECIES