



Steve Troxler
Commissioner

North Carolina Department of Agriculture and Consumer Services

July 19, 2010

Water Docket
U.S. Environmental Protection Agency
Mail Code: 2822T
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Subject: Comments – Draft NPDES Pesticide General Permit

EPA-HQ-OW-2010-0257

The North Carolina Department of Agriculture and Consumer Services offers the following comments related to the draft Pesticide General Permit (PGP). The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), the North Carolina Pesticide Law of 1971, and North Carolina Pesticide Board regulations have been very effective at protecting North Carolina surface waters from unreasonable adverse effects due to the labeled use of registered pesticide products. No North Carolina waters are listed as impaired for pesticides or their residues. Since 2004, the North Carolina Department of Agriculture and Consumer Services (NCDA&CS) has received only 3 complaints that involved an alleged detrimental effect on aquatic organisms following the application of a pesticide on or near the waters of North Carolina:

- Pesticides could not be confirmed as the causative agent in two of the cases
- The third incident involved an off-label application of a herbicide to an entire pond instead of treating no more than 50% of surface area at a time. Decaying weeds likely caused the oxygen levels to become significantly low, resulting in a fish kill.

Although the proposed Pesticide General Permit addresses a problem that may be relevant to other states; pesticides are not among the gravest threats to water quality in North Carolina. We do not believe that expanding the NPDES program to include pesticide applicators will yield any tangible benefits. In fact, the additional and unfunded program expansion will dilute the resources available to the state's Division of Water Quality (DWQ) and Structural Pest Control & Pesticides Division (SPC&PD) that would yield greater impact elsewhere.

However, North Carolina appreciates the dilemma facing EPA with respect to the ruling of the Sixth Circuit Court and appreciates the progress that has been made in developing the Draft PGP. DWQ and SPC&PD collaborated on responses to the specific questions in the Federal Register Notice (attached), but overall the Federal PGP will be very useful in guiding the development of the North Carolina PGP.



It is essential that EPA allows considerable flexibility with respect to the specific thresholds in state permits. The Southeast USA is characterized by high annual rainfall and extended warm seasons that impacts pests, non-target organisms, control practices, seasonal flow rates and conditions that influence the degradation rate of pesticides. The environmental conditions in North Carolina are very different from many of the states that will be regulated by the Federal PGP and we recommend that significant changes be allowed in the following areas:

The Notice of Intent (NOI) thresholds must be raised considerably. North Carolina's program should focus our limited resources on the largest applicators in a context appropriate for North Carolina.

- The aquatic weed and algae area threshold is proposed at 20 acres. This level is unreasonably low, and we believe the threshold should be increased to at least 200 acres in water and at least 50 miles at the water's edge. With an abundance of ponds, lakes, and streams in North Carolina, we have many citizens applying general-use pesticides to control aquatic-related pests. These treatment areas are very small; however, the 20-acre threshold would force the permit process upon many currently unregulated individuals who are not commercial applicators or certified farm applicators. The only contact these citizens have with pesticide regulations is the pesticide label. It is unreasonable to expect these 'operators' to have a copy of the PGP on file as we have no mechanism for assuring that every single citizen has been informed of NPDES requirements. Full compliance with the pesticide product label is the only reasonable expectation for operators that do not meet an NOI threshold.
- North Carolina has a nine-month period that is favorable for the proliferation of various aquatic-related pests. Multiple applications may be required for adequate control in some situations. However, we are not aware of any surface water monitoring efforts conducted in NC (including U.S. Geological Survey programs) that have demonstrated cumulative residual buildup due to the use of pesticides pertinent to this permit process.
- North Carolina has a statutory requirement that NPDES permits must cover "waters of the state" which is a broader category than "waters of the United States". We need to have higher NOI thresholds to accommodate the marginal waters that would not be pertinent to the EPA PGP. North Carolina's DWQ has no employees permanently assigned for wastewater General Permits; staff are assigned General Permits tasks on an as-needed basis. Due to budget reductions, DWQ has indicated that no additional staff can be made available for the issuance of the PGP. The low NOI thresholds in the EPA PGP would burden a system that is already operating at capacity.

The North Carolina PGP must focus on the documentation of operator Integrated Pest Management (IPM) programs rather than dictate specific practices. The EPA PGP devotes almost six pages to suggested IPM components and the corresponding section in the NC PGP would be considerably longer if the same approach were followed. With an abundance of pest species, an extended pesticide use season, and a diversity of aquatic habitats (from mountain streams to coastal estuaries) it is impractical to list mandatory components of an IPM program in a PGP that will be appropriate for all scenarios. For example, mosquito control in the aftermath

of hurricane flooding is dictated more by resource availability than insect thresholds. Control of many invasive aquatic weeds is often based on eradication rather than population density.

Although North Carolina bears the responsibility for developing a state PGP, we hope EPA will pay close consideration to the attached suggestions concerning the Federal PGP, which has been developed in close collaboration with DWQ. It seems unlikely that the agricultural diversity of all the states could be captured by one Federal PGP. State PGPs may vary from the national PGP as a result of this diversity. The basic permit structure, however, will not. Conformity between local and national PGPs will facilitate alignment of compliance assistance programs, enable the sharing of outreach materials and minimize public confusion with respect to implementation requirements. We remain responsive to the citizens of North Carolina in working closely with DWQ to develop a PGP process that is fully compliant with the ruling of the Sixth Circuit Court while making efficient use of available resources, minimizing pest proliferation and maintaining a high level of environmental quality.

Sincerely,

A handwritten signature in black ink, reading "Steven W. Troxler", with a long horizontal flourish extending to the right.

Steven W. Troxler
Commissioner of Agriculture
NCDA&CS

Enclosure: North Carolina Department of Agriculture and Consumer Services responses to Docket ID No. EPA-HQ-OW-2010-0257

**North Carolina Department of Agriculture and Consumer Services
responses to the following:**

Docket ID No. EPA-HQ-OW-2010-0257

FRN – NPDES Pesticide General Permit (PGP)

(July 19, 2010)

List of Specific Comments (Paraphrased) Solicited by EPA

Threatened and Endangered Species (FRN page 31781-column c):

1. What are appropriate measures to protect endangered and threatened species?

Comply with the pesticide product label and information on EPA's website Bulletin's Live. The mitigation measures that are incorporated on the label and Bulletin's Live have been scientifically evaluated to determine the types of additional measures that will protect endangered and threatened species. Furthermore, aquatic risk assessment models are used by EPA during the registration and re-registration processes that provide protection to the aquatic species with built-in conservative safety factors.

Under the NOI form, section III.5.c., it is unreasonable to expect the operator to determine where the protected species or critical habitat is located. There needs to be a reference on the label as to where to find specific information on the species or habitats. Thus, this section needs to be removed from the NOI Form.

In General (31782-c):

2. Seeking comment on all aspects of draft general permit & fact sheet.

We believe the readability of the PGP is not suitable for individuals that have a reading level that is much less than the ones who wrote the PGP. A more user friendly PGP is needed to greatly improve the comprehension of what is expected of individuals who are trying to comply with this new requirement.

In section 1.1.1 Activities Covered, it states the following: This permit is available to operators who discharge to waters of the US from the application of (1) biological pesticides or (2) chemical pesticides that leave a residue (hereinafter collectively "pesticides").... To address the issue of other ingredients that are in pesticide products, it would be more inclusive to say "biological pesticide products" and "chemical pesticide products."

Number of Entities Covered Under This Permit (31782-c):

3. Provide information on numbers, types and sizes of entities applying pesticides for covered use patterns as detailed in this paragraph.

The table below provides info that is from NC. Most of the commercial aquatic weed control businesses have only one or a few employees. A couple of businesses have several to maybe 20 employees. The counties and cities that treat for mosquito control mostly have one or a few employees making the applications.

Persons Licensed under the NC Pesticide Law

Category	Consultant	Pesticide Applicator
Aquatic	6	701 commercial ground 227 federal/state 148 county/city 9 public utility 5 aerial
Forestry	17	13 aerial
Public health	0	167 commercial ground 37 federal/state 320 county/city 6 public utility 12 aerial

Also, there are nearly 16,000 certified farmers that could be treating some of the areas that would be under the PGP. Furthermore, there are farmers that are not certified pesticide applicators and the general public that may be treating in or near water to control mosquitoes and aquatic pests. We do not have names and addresses for those individuals that are mentioned in the previous sentence.

If the thresholds are too low, as is the case with the proposed EPA permit, there could be as many as 700 individuals that will have to submit NOI's and do all the other things that would be required of NOI submitters.

Activities Covered (31782-c through 31783-a):

4. Are there pesticide uses (other than the covered use patterns) that involve point-source discharge to waters of the U.S.?

No.

5. If so, should PGP coverage be extended to cover any of these activities?

N/A

6. Are the effluent limitations in the PGP applicable to any of these additional uses?

N/A

7. Are there different effluent limitations appropriate for the additional uses?

N/A

8. Should PGP coverage be excluded in general for waters that are listed as impaired for a pesticide or only for the discharge of that specific pesticide?

The PGP coverage should only be excluded for a specific pesticide that has been identified as impairing the water quality in a designated area.

Limitations on Coverage (31783-a):

9. Should discharges to Tier 3 waters be excluded from PGP coverage or can the PGP be modified to address these situations?

Currently, NC does not have any pesticide impaired waters. The PGP should be modified to include discharges to Tier 3 waters that are compliant with FIFRA and state regulations.

Sharing of Responsibilities (31783-b):

10. Does the approach outlined by EPA clearly define the shared responsibilities of parties involved with the implementation of the PGP?

No. There may be some situations where someone will want the applicator to provide all the info on IPM and the applicator does not want to be responsible for that. Some applicators may be willing to provide IPM info. Also, consultants may be involved in some situations and another company may be responsible for the pesticide application.

Notices of Intent (31783-b through 31783-c):

11. Does the described NOI framework balance the need to capture information from operators involved with large annual discharges while avoiding unreasonable burdens on operators whose applications affect smaller areas?

No.

12. Are the sizes of the thresholds appropriate and does this result in NOI's from desired operators?

The thresholds are definitely too low for North Carolina. The proposed thresholds will capture too many smaller applicators that are one person operations that will not be able to handle all of the additional paperwork requirements of the PGP. The aquatic weed and nuisance animal thresholds need to be increased to at least 200 acres in water and at least 50 miles at water's edge. Also, if someone is treating in a ditch or canal, the distance treated should not be doubled because both sides were treated. The mosquito and other flying insect and forestry canopy thresholds should be increased to at least 1,000 acres. These thresholds may need to be adjusted even higher if we obtain additional information that indicates that many more people will have to submit NOI's and do other additional things. An aquatic weed scientist at North Carolina State University said that around 350 of the 701 commercial ground aquatic weed applicators in the state would exceed the 20 acre threshold. Some of these applicators are re-treating aquatic sites because the first treatment was not effective in doing the job. This will result in an applicator exceeding an NOI threshold sooner even though the applicator is treating an area that is smaller than the threshold. A North Carolina Department of Agriculture and Consumer Services employee said that there are around 50 commercial fish farms in the state that will exceed the 20 acre threshold. A Natural Resources and Conservation Services USDA employee said that probably 30 farmers in the two counties that he serves would exceed the 20 linear mile threshold for treating ditch or canal banks. North Carolina is a large state that has many aquatic sites that need treatment each year. Additionally, tens of thousands of acres of aquatic sites are treated whenever a hurricane or tropical storm strikes the state. Thus, more applicators are

impacted by the PGP requirements. Furthermore, some states have statutory requirements that NPDES permits must cover 'waters of the state' which may be a broader category than 'waters of the United States'. These states need to have higher NOI thresholds in their state permits to accommodate the marginal waters that would not be pertinent to the EPA PGP. A North Carolina NPDES PGP will provide protection to the Waters of North Carolina, which is much more restrictive than Waters of the US. Thus, more individuals would exceed the thresholds and would have to submit NOI's, develop PDMP's, document IPM practices, submit annual reports and maintain much more recordkeeping. Furthermore, by exceeding the thresholds in North Carolina, each individual who submits an NOI's would have to pay a \$100 fee, which is a requirement in the state statute for NPDES permits. These are folks that don't need additional expenses with all the inflation in prices for goods and services in growing crops. The state has only one employee that handles all the duties involved with NPDES permits. These new requirements will over burden a system that is already stretched to the limit.

EPA should recognize that NOI thresholds for state NPDES permits should be flexible to accommodate the pesticide use, dilution and degradation conditions that can vary between states. NOI thresholds should be higher in areas which are not conducive to the persistence of some pesticide residues. Some pesticide residues may persist longer in cold waters of a state in a dry, northern climate relative to the same treatment applied to warmer waters in a high rainfall state (i.e. rapid degradation and dilution). Rigid NOI thresholds applied uniformly to all states may put states in the Southeastern U.S. at an unfair disadvantage. The wet and warm climate that lends itself to an extended pest control season (and the need for multiple treatments) is also conducive to enhanced microbial decomposition of some pesticides. EPA should also be mindful that NOI thresholds that are arbitrarily established at low levels may encourage the use of high rate - single application pest programs instead of low rate - multiple application programs that may have less impact on some non-target species.

13. Is it appropriate to allow operators the option of identifying specific waters for discharges or requesting coverage for all waters within a general area.

It is more appropriate to say all waters within a general area because a commercial applicator is not going to know every water body that will be treated in the 5 year period. Without this approach, an amended NOI would be required many times for some of the applicators.

Technology-Based Effluent Limitations (TBEL) (31783-c through 31784-a):

14. What government agencies are involved with covered use patterns pest control? Comment on IPM requirements and actual IPM practices utilized.

- A. *NC Dept of Agriculture and Consumer Services, NC Dept of Environment and Natural Resources, NC Dept of Transportation, North Carolina State University, and US Dept of Agriculture are involved.*
- B. *The IPM requirements are being met by most of the applicators. Some applicators may have to conduct some additional practices that may create problems especially for the one person operations.*

15. Is it appropriate to use NOI thresholds to establish TBEL? Are there private commercial operators that apply pesticides below the NOI thresholds that should be expected to implement IPM and what practices should be required? Are there operators below the NOI thresholds that already use IPM?

- A. *Yes.*
- B. *No. These operators are already using IPM practices that are stated on pesticide labels.*
- C. *Yes. Many citizens that apply general use pesticides in NC will be unaware of their coverage under a NPDES PGP if it is not stated on pesticide product labels. Furthermore, they will not know that with some incidents as a result of a pesticide application that an adverse incident report must be filed. This type of information needs to be on product labels. Otherwise, there will be tens of thousands of applicators in NC that are unaware of the requirements in section 7.1 of the PGP.*

16. Are there more specific IPM procedures that should be incorporated in the PGP, what should be included, would an EPA template be helpful and do such templates already exist?

- A. *No.*
- B. *N/A*
- C. *Templates would be very useful for everyone.*

17. Will requiring additional IPM practices force any entities to go out of business or opt out of pest control services at the expense of public health or the environment?

Comments have already been made that some applicators will not be able to meet all the requirements that EPA has in the proposed permit. Thus, it will drive some applicators out of business and mosquito control is one of the use patterns that will take a big hit with the new permit at the expense of public health with significant threats from West Nile virus and EEE. Also, aquatic weed and algae control, which reduces habitats for mosquito populations that create more problems for public health and animals, will suffer as some of the one person operations will be driven out of business due to the increased requirements of IPM practices that will limit the amount of time that one could be making applications or exploring other opportunities for application services. More profitable terrestrial pesticide applications may entice applicators to limit the amount of aquatic sites they treat so they don't exceed the thresholds.

18. What is the cost of IPM procedures required by the PGP?

It is variable and dependent on the type of pesticide use pattern and the complexity of the treatment site. Applicators that are treating many sites will probably have greater expenses with these additional permit requirements. Applicators that remain in the aquatic application business will increase the cost of their custom application services in order to pay for the additional work involved in all the requirements of the permits.

19. Are entities that exceed the NOI thresholds already using IPM? What are the incremental costs of practices not already in use?

A. Some of the entities are using more IPM practices than others. Furthermore, applicators are using all types of IPM tools to reduce the cost of treatments because pesticides are expensive. Also, there is no valid reason to make treatments at excessive rates because of the increased propensity to harm the environment, which exposes applicators to liability lawsuits.

B. That is going to be variable depending on many factors.

Water Quality Based Effluent Limitations (WQBEL) (31784-a):

20. Are the WQBEL in the PGP appropriate and should anything be added or changed?

The proposed PGP does not require operators to conduct a chemical monitoring program and we concur with the uncertainties of this approach as described in the PGP fact sheet.

Monitoring (31784-a):

21. What is the value, feasibility and safety of visual monitoring during application and of post application surveillance monitoring?

There is minimal value in having additional requirements for visual monitoring. With respect to large applications that exceed the NOI thresholds, clients and stakeholders are already conducting visual inspections to verify product performance.

22. If a category of a large operators is defined that is required to provide ambient sampling data, what should be the size limitations for the categorization and should these ambient data be used by EPA to generally assess the value of BMPs or to establish baselines for compliance?

We do not envision that any chemical monitoring program by operators would provide information that would be useful for establishing baselines, compliance verification or enforcement actions due to methodology limitations, the paucity of appropriate standards for a variety of situations and a widespread inability to link a detected residue to a particular source. In addition, National standards are inadequate to account for regional/state/local variations in climate/pests/existing regulations.

23. What types of monitoring are appropriate for each of the four covered use patterns?

Current visual monitoring practices.

24. What would be the cost of a chemical monitoring program?

Considerable. Applicators and their staffs would require training in sample collection / storage / chain of custody procedures. Analytical costs would be in addition to training costs.

25. What sampling approaches best accommodate issues of safety and accessibility?

Visual inspections after application with sample collection only if adverse impact is observed.

Annual Reports (31784-a):

26. Is the scope of operators required to submit annual reports and the requested content appropriate/practical?

No. It would generate mountains of reports that would never be read. It's environmentally irresponsible to waste all that paper. The court decision requires EPA only to issue a permit; the annual report was EPA's idea.