

PGP Comment Response Scope Essay

EPA received numerous comments and questions on the activities covered or not covered under the PGP as well as questions of whether certain activities require coverage under an NPDES permit even if not eligible for coverage under the PGP. Following is a discussion of the activities covered under the PGP and considerations for selecting the four pesticide use patterns included in the final permit. We received comments requesting that we clarify these four use patterns. The final PGP clarifies the scope of the use patterns. The companion Economic Analysis, a copy of which is available in the administrative record for the PGP, has been updated to reflect these minor changes (see Part 1.1 of that document).

The Sixth Circuit *National Cotton Council* decision stated that chemical pesticides that leave a residue and biological pesticides are required to obtain NPDES coverage; the PGP merely provides one option for obtaining NPDES coverage for the discharges. Questions about whether activities not included in the final PGP require NPDES permit coverage are outside the scope of today's action. Only Operators meeting the eligibility requirements outlined in the PGP may be covered under the permit. If an Operator does not meet the eligibility provisions described in Part 1.1 of the PGP, the Operator's point source discharges to Waters of the United States from the application of pesticides will be in violation of the CWA, unless the Operator has obtained coverage under another permit or the Clean Water Act exempts these discharges from NPDES permit requirements. Activities not eligible for coverage under the PGP may be eligible for coverage under an individual permit within the terms or conditions of the NPDES regulations. EPA expects that the vast majority of discharges from the application of pesticides in the areas of the United States where this permit is available will be eligible for coverage under the PGP (i.e., few individual permits will be required). Also, the PGP does not prohibit any type of pesticide application; it merely provides a mechanism for discharges from certain types of activities to be covered under an NPDES general permit. So, comments submitted on the draft PGP stating that EPA's issuance of the PGP will prohibit pesticide spraying for mosquitoes are incorrect.

We received comments concerning how flexible unauthorized states could be with their NPDES permits. States that are authorized to issue NPDES permits for the control of discharges to Waters of the United States from the application of pesticides will be developing their own NPDES permits to cover such discharges. Nothing in the federal regulations precludes a state from adopting or enforcing requirements that are appropriate to address discharges in their state or are more stringent or more extensive than those required under the NPDES regulations. In fact, the Clean Water Act is meant to serve as a baseline for state environmental protection. The Clean Water Act and corresponding NPDES regulations require that permits, at a minimum, include the requirements detailed in Part 122.44 (but not necessarily in the same way as in this permit). States are free to incorporate additional or different requirements that they feel are necessary to adequately protect water quality. Similarly, how EPA and states interpret information from which permit requirements are developed may differ. For example, the regulations, as written at 122.44(i) specify that monitoring requirements be included to assure compliance with permit limitations. One permit writer may make a best professional judgment (BPJ) determination that monitoring of discharges reasonably should occur during pesticide application while a second permit writer may make a BPJ determination that monitoring of

discharges should reasonably be performed after pesticide application. It is reasonable that the two different permit writers may come to different conclusions about how best to incorporate this requirement into the permit.

As noted above, the CWA requires dischargers to obtain NPDES permit coverage for point source discharge of pollutants to Waters of the United States. Except when specifically exempted in the Act, any such discharge requires NPDES permit coverage. EPA does not have the authority to exclude certain types of discharges from the need to obtain permit coverage such as small “*de minimus*” or short-term discharges, discharges from emergency situations (except in very limited circumstances as described in 40 CFR 122.3), hand applications of pesticides, or discharges to “small” Waters of the United States. Also, permit coverage is required for discharges of pollutants; pollutants may or may not be toxic and these pollutants may or may not be found to be causing water quality impairments. Regardless, NPDES permit coverage is required for point source discharges of pollutants to Waters of the United States.

An operator is ineligible for coverage under this permit because of coverage under another permit. These include discharges currently covered under an NPDES permit and discharges from activities where the associated NPDES permit has been or is in the process of being denied, terminated, or revoked by EPA (although this last provision does not apply to the routine reissuance of permits every five years). Coverage under another permit should include any technology-based or water-quality based effluent limitations (and associated monitoring, reporting, and recordkeeping) as deemed appropriate by the NPDES permit writer.

Generally, pesticide discharges from industrial operations where those pesticides are applied within a facility/structure rather than to the environment, were not part of the National Cotton Council lawsuit or Sixth Circuit Court decision. Those types of pesticide discharges have been required to obtain NPDES permit coverage since the inception of the permitting program. For example, prior to the Court’s decision, discharges to Waters of the United States from the application of pesticides for the control of zebra mussels within a piped cooling system required NPDES permit coverage. Such is still the case. EPA notes that discharges from anti-foulant hull coatings, biofouling prevention, and residuals from ballast water treatment technologies are already covered under the Vessels General Permit and do not require coverage under this general permit (see EPA NPDES Vessels General Permit at <http://www.epa.gov/NPDES/vessels>).

Other non-pesticidal activities that result in discharges to waters of the United States are not eligible for coverage under the PGP and as such, are outside the scope of this action. This includes various products (e.g., fertilizer, alum and flocculating agents) identified by commenters that are used for maintaining the health of the water and not for the purpose of controlling pests. For example, alum can be used as an algaestat, not an algaecide, to control phosphorus levels in the water as a way to inhibit algae growth. This non-pesticidal activity is not eligible for coverage under the PGP. Similarly, non-point source discharges of pollutants to waters of the United States do not require permit coverage.

This permit does not cover, nor is permit coverage required, for pesticides applications for the purpose of controlling pests on agricultural crops, forest floors, or range lands where there will be no point source discharge of pollutants into Waters of the United States resulting

from that pesticide application. However, the application of herbicides in Waters of the United States and the control of pests on plants grown in Waters of the United States, such as perennial obligate hydrophytes, is within the scope of coverage of this permit. The fact sheet does not identify every activity which may involve a point source discharge of pesticides to Waters of the United States that would require a permit; rather, the fact sheet focuses on the activities for which coverage under the PGP is available. The existence of this general permit does not alter the requirement that discharges of pesticides to Waters of the United States that are not covered by this permit be covered by an individual permit or another general permit.

EPA may require an individual permit (in accordance with 40 CFR 122.28(b)(3)(ii)) or coverage under an alternative NPDES general permit instead of the PGP. The regulations also provide that any interested party may petition EPA to take such an action. The issuance of the individual permit or alternative NPDES general permit is in accordance with 40 CFR Part 124 and provides for public comment and appeal of any final permit decision. The circumstances in which such an action would be taken are set forth at 40 CFR 122.28(b)(3). The Permit also includes a number of statements limiting eligibility for permit coverage under specific circumstances. In some cases, the Operator considering permit coverage may need to seek an individual pesticide permit under this program (e.g., for discharges to certain impaired waters). In other cases, the Operator will not need to be covered under any type of NPDES pesticide permit.

Additionally, discharges from anti-foulant hull coatings, biofouling prevention, and residuals from ballast water treatment technologies are already covered under the Vessels General Permit and do not require coverage under this general permit (see EPA NPDES Vessels General Permit at <http://www.epa.gov/NPDES/vessels>).

Coverage under the PGP is only available with this general permit for certain discharges to impaired waters. Discharges to waters which are impaired for a substance which is not an active ingredient in that pesticide or a degradate of such an active ingredient are eligible for coverage. Discharges to waters impaired for temperature or some other indicator parameter, or for physical impairments such as “habitat alteration” are also eligible for PGP coverage, unless otherwise notified by EPA. Conversely, the permit is not available for the discharge of any pesticide to water that is impaired for a substance that is an active ingredient in that pesticide or a degradate of such an active ingredient. For example, application of the pesticide copper sulfate to a waterbody impaired for either copper or sulfates would not be eligible for coverage under this permit, because copper sulfate can degrade into these two substances. In this instance, the Operator would have to choose between obtaining coverage under an individual permit for such a discharge or selecting some other means of pest management, e.g., using mechanical means or a different pesticide active ingredient.

For this permit, EPA determined that it does not have information warranting a limitation for all impaired waters regardless of the impairment. In fact, the application of a pesticide to water in some instances actually improves the quality of the water, such as when used to control algae growth that can deplete oxygen levels in water. It is important to note that this permit allows EPA, based on additional information, to opt not to approve coverage under the PGP, or

at a later date to require an Operator covered under the PGP to apply for coverage under an individual permit.

For purposes of this permit, impaired waters are those that have been identified by a State, Territory, Tribe, or EPA pursuant to Section 303(d) of the CWA as not meeting applicable water quality standards. Impaired waters for purposes of this permit include both waters with EPA-approved and EPA-established Total Maximum Daily Loads (TMDLs), and those for which EPA has not yet approved or established a TMDL. (A list of impaired waters, along with the pollutants or pollution identified as the cause of the impairment is available at www.epa.gov/owow/tmdl). While, it is EPA's opinion that the 303(d) list is not a final determination of impairments, it is the best available information and Operators should use it when deciding whether their discharges meet the eligibility requirements regarding waterbodies impaired for specific pesticides. Thus, these requirements will further ensure protection of water quality.

Also, several states have listed waters as impaired for "pesticides" but have not identified the specific pesticide for which the waterbody is impaired. Without additional information suggesting that the waterbody is impaired for a specific active ingredient or degradate of that active ingredient, EPA is providing coverage under this permit for discharges of pesticides to waters that are impaired generally for "pesticides." The Agency expects that as these impaired waters are further assessed, specific pesticides or classes of pesticides will be identified as the cause of the impairment, at which point dischargers will no longer be eligible to obtain permit coverage under the PGP for discharges of those named pesticide active ingredients or degradates of such

States and tribes provide the most stringent level of antidegradation protection, i.e., Tier 3 protection, to outstanding national resource waters. These waters are often regarded as the highest quality Waters of the United States, but the Tier 3 designation also provides special protection for waters of exceptional ecological significance, i.e., those which are important, unique, or sensitive ecologically. Except for certain temporary changes, Tier 3 protection means that water quality cannot be lowered in such waters. In broad terms, EPA's view of "temporary" is weeks and months, not years. States and tribes make the decision of which water bodies to designate as Tier 3. A list of Tier 3 waters in areas where the PGP is available can be accessed on the Internet at www.epa.gov/npdes/pesticides. EPA proposed in the draft PGP that Tier 3 waters not be eligible for coverage; rather, such discharges would be required to obtain coverage under an individual permit.

Irrigation return flow (which includes runoff from a crop field due to irrigation of that field) and agricultural stormwater runoff do not require NPDES permits, as exempted by the CWA. Nothing in this permit changes the effect of those statutory exemptions. For example, runoff into engineered conservation measures on a crop field such as grassy swales and other land management structures that direct flow from the crop field is considered either irrigation return flow or agricultural stormwater. However, discharges from the application of pesticides, which includes applications of herbicides, into irrigation ditches, canals, and other waterbodies that are themselves Waters of the United States, are not exempt as irrigation return flows or agricultural stormwater, and do require NPDES permit coverage. This is because such pesticide

discharges are not only point sources, but also that these pesticides are now defined as “pollutants” under the CWA due to the Sixth Circuit Court’s decision. Some irrigation systems may not be Waters of the United States and thus discharges to those waters would not require NPDES permit coverage.

Neither the 2006 NPDES Pesticides Rule, the Sixth Circuit Court vacatur of that rule, nor this PGP have changed in any way the determination of whether certain types of stormwater runoff are required to obtain permit coverage, or under which permit coverage is required. This is true whether the runoff contains pesticides or pesticide residuals resulting from the application of pesticides. In particular, non-agricultural stormwater runoff that may contain pesticides would not be eligible for coverage under this permit, and is not required to obtain NPDES permit coverage (unless it was already required to do so prior to the Sixth Circuit decision or EPA designates it as a type of discharge for future stormwater permitting). Existing stormwater permits for construction, industry, and municipalities already address pesticides in stormwater. Thus, stormwater runoff is either: (a) already required to obtain NPDES permit coverage as established in section 402(p) of the CWA or (b) classified as a discharge for which NPDES permit coverage is not currently required. Thus, unless previously required to obtain NPDES permit coverage, any pesticide application that would not result in a discharge to Waters of the United States but for the action of stormwater, are not required to obtain NPDES permit coverage. The regulations that specify what types of stormwater require NPDES permits can be found in 40 CFR §122.26.

The four pesticide use patterns covered under the PGP are summarized below:

Mosquito and Other Flying Insect Pest Control

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

Weed and Algae Pest Control

This use pattern includes the application, by any means, of pesticides to control vegetation and algae (and plant pathogens such as fungi) in Waters of the United States and at water’s edge, including ditches and/or canals. Applications of this nature typically are single spot pesticide applications to control infestations or staged large scale pesticide applications intended to control pests in or near waters. Pesticide applications in a treatment area may be performed one or more times per year to control the pest problem. Pests being treated may or may not be “aquatic” pests (e.g. may be present in water or at water’s edge, including near the water) but to control the pest, pesticides will unavoidably be discharged to Waters of the United States.

Animal Pest Control

This use pattern includes the application, by any means, of pesticides into Waters of the United States to control a range of animal pests for purposes such as fisheries management, invasive species eradication or equipment operation and maintenance. Applications of this nature are often made over an entire or large portion of a waterbody as typically the target pests are mobile. Multiple pesticide applications to a waterbody for animal pest control are often made several years apart. Similar to the weed category, pests being treated may or may not be “aquatic” pests (e.g. may be present in water or at water’s edge, including near the water) but to control the pest, pesticides will unavoidably be discharged to Waters of the United States.

Forest Canopy Pest Control

This use pattern includes pest control projects in, over, or to forest canopies (aerially or from the ground) to control pests in the forest canopy where Waters of the United States exist below the canopy. Applications of this nature usually occur over large tracts of land, and are typically made in response to specific pest outbreaks. EPA understands that for this use pattern pesticides will be unavoidably discharged into Waters of the United States in the course of controlling pests over a forest canopy as a result of pesticide application. These pests are not necessarily aquatic (e.g., airborne non-aquatic insects) but are detrimental to industry, the environment, and public health. Control of pests under a forest canopy (e.g., to control competing ground vegetation) that results in a discharge to Waters of the United States is not included in this use pattern but are addressed under another PGP use pattern (e.g., weed and algae pest control). Note: EPA recognizes that mosquito adulticides are applied to forest canopies, and this application is covered under the “Mosquito and Other Flying Insect Pest Control” use pattern. EPA intends that this can include both mature and immature forest canopies, including canopies that may not be continuously connected, where control of pests associated with the canopy (i.e., branches and leaves of the trees) may unavoidably involve point source discharges of pesticides to Waters of the United States.

Prior to initiating the 2006 NPDES Pesticides Rule, the Agency had interpreted the Clean Water Act and its implementing regulations as not requiring an NPDES permit for forest pest control activities. The rule stated that pesticides applied consistently with FIFRA do not require an NPDES permit in certain circumstances, including the application of insecticides to a forest canopy. 71 Fed. Reg. at 68,482. In vacating the 2006 NPDES Pesticides Rule, the Sixth Circuit Court of Appeals held that “dischargers of pesticide pollutants are subject to the NPDES permitting program in the Clean Water Act.” National Cotton Council, 553 F.3d 927, 940. Therefore, the holding of National Cotton Council has overtaken the 2003 General Counsel Memorandum as well as the 2006 rule. Other Courts have issued decisions consistent with National Cotton Council. Northwest Env’tl Def. Ctr. v. Brown, 617 F.3d 1176, 1191 (9th Cir. 2010) (“the [silviculture] exemption ceases to exist as soon as the natural runoff is channeled and controlled in some systematic way through a ‘discernible, confined and discrete conveyance’ and discharged into Waters of the United States”); Peconic Baykeeper v. Suffolk Cty., 600 F.3d 180, 189 (2nd Cir. 2010) (holding that trucks and helicopters that spray pesticides are point sources under the CWA.) Thus, point source discharges to Waters of the United States from pesticides applied for forest pest control activities need to obtain an NPDES permit.

EPA reasoned in its 2006 NPDES Pesticides Rule that pesticide products were not “pollutants” because they served the beneficial purpose of controlling pests. In promulgating that rule, EPA expressly noted that the rule did not cover either “spray drift” – the airborne movement of pesticide sprays away from the target application site into Waters of the United States – or applications of pesticides to terrestrial agricultural crops where runoff from the crop, either as irrigation return flow or from stormwater, discharges into Waters of the United States.

Consistent with the 2006 NPDES Pesticides Rule, this PGP does not cover spray drift resulting from pesticide applications. Instead, to address spray drift, EPA established a multi-stakeholder workgroup under the Pesticides Program Dialogue Committee (PPDC), an advisory committee chartered under the Federal Advisory Committee Act (FACA) to explore policy issues relating to spray drift. The goals of the workgroup are to: (1) improve the understanding of the perspectives of all stakeholders regarding pesticide spray drift; (2) find common ground for further work toward minimizing both the occurrence and potential adverse effects of pesticide spray drift; (3) develop options for undertaking work where common ground exists; and (4) explore the extent of drift, even with proper usage, and the range and effectiveness of potential responses to unacceptable levels of off-target drift. On November 4, 2009, EPA issued a draft Pesticide Registration Notice (PR Notice) for public comment. The actions detailed in the PR Notice focus on improving the clarity and consistency of pesticide labels to reduce spray drift and prevent harm to human health and the environment. The draft PR Notice and related documents are available in Docket EPA-HQ-OPP-2009-0628 at www.regulations.gov and on EPA’s website at www.epa.gov/pesticides/factsheets/spraydrift.htm. EPA is currently reviewing the public comments received on the draft PR Notice.

The Sixth Circuit found that if a chemical pesticide leaves any excess or residue after performing its intended purpose, such excess or residue would be considered a pollutant under the CWA. The Court also found that, unlike chemical pesticides, not only would the residue and excess quantities of a biological pesticide be considered a pollutant, but so too would the biological pesticide itself under the CWA. For purposes of this permit, EPA identifies biological pesticides (also called “biopesticides” under FIFRA regulations) to include microbial pesticides [40 CFR 158.2100(b)], biochemical pesticides [40 CFR 158.2000(a)(1)] and plant-incorporated protectants [40 CFR 174.3]. EPA defines chemical pesticides to include all pesticides not otherwise classified as biological pesticides.

When using the term “pesticide” in the context of this PGP, EPA is referring to the pesticide as applied, including any degradates of that application. When referring to the pesticide as sold/purchased, EPA uses the term “pesticide product.” When referring to the chemical in the pesticide product with pesticidal qualities, EPA uses the term “active ingredient.” In addition to active ingredients, pesticides and pesticide products may contain inert ingredients which play a key role in the effectiveness of a pesticide, such as serving as a solvent, a preservative, or an adjuvant.

EPA offers the following guidance with respect to the use patterns of chemical pesticides covered by this general permit.

1. If the application of a chemical pesticide is made over Waters of the United States to control pests over the water, any amount of the pesticide that falls into Waters of the United States is “excess” pesticide and would require coverage by an NPDES permit. Based on field studies of pesticide applications, the Agency expects that some portion of every application of a pesticide made over Waters of the United States will fall directly into such waters and thus assumes that applications will trigger the requirement for an NPDES permit. A permit is not necessary if no portion of a chemical pesticide applied over Waters of the United States will fall into those waters.
2. If the application of a chemical pesticide is made into Waters of the United States to control a pest in such waters, once the pesticide no longer provides any pesticidal benefit, any amount of the pesticide that remains in those waters is a “residual” and would require coverage by an NPDES permit. Additionally, as the Sixth Circuit reasoned, the residual is discharged at the time of a pesticides initial application. Based on field studies of pesticides applied into water, the Agency expects that some portion of every application of a pesticide made into Waters of the United States will leave a residual in those waters and thus assumes every application will trigger the requirement for an NPDES permit. EPA expects that an entity applying pesticides with a discharge to Waters of the United States who wishes to dispute this assumption would be expected to provide scientific data supporting such a determination. Such data should show what level of the pesticide can be detected in water using the most sensitive analytical testing methods available to the public, and at what level in water the pesticide provides a pesticidal benefit. Such data should address the properties of the chemical pesticide under different water conditions (e.g., different pH, organic content, temperature, depth, etc.) that might affect the pesticide’s properties. A permit would not be necessary if it is determined that a residual did not enter Waters of the United States.
3. To the extent that activities that fall within the four use patterns require a permit, they can be authorized by this general permit if all eligibility requirements are met. For example, discharges to control pests in or near areas that are Waters of the United States, even when these areas are dry for much of the year, may be covered by this permit, if one is required. This would include discharges on forest or range lands to jurisdictional waters such as dry washes and ephemeral streams, to control pests that may be found in these occasionally wet areas, including pests that may also be found in upland areas. As such, these pesticide applications may be performed using pesticides labeled for terrestrial, seasonally dry, or aquatic use. Similarly, discharges of pesticides to Waters of the United States resulting from the control of pests along a right-of-way or similar linear feature (e.g., railroad, roadway, utility line) would be eligible for coverage for those portions of the pest control activities that result in discharges to said waters. So, for example, permit coverage is available for weed control along a right-of-way for those unavoidable discharges from controlling the

pest. For two of the categories, weed and algae pest control and animal pest control, the permit specifies that covered activities include applications to control pests “in water and at water’s edge.” EPA intends for the phrase “at water’s edge” to allow coverage of activities targeting pests that are not necessarily “in” the water but are near the water such that control of the pests may unavoidably involve a point-source discharge of pesticides to Waters of the United States.

Several commenters identified specific pesticide products (e.g., the “most dangerous pesticides”) that should not be eligible for coverage under the PGP, citing various information sources about the effects of these pesticides on the environment. EPA disagrees with these commenters’ recommendation to prohibit coverage of these pesticides under the PGP. The Agency believes that the permit, as written, is protective of water quality and the environment. The permit does require permittees to monitor and report any adverse effects of discharges covered under the PGP. In addition, many operators covered under the PGP will be required to submit annual report data on the nature and location of pesticide applications to waters that will provide useful data for EPA, states, and others to use to better assess whether these pesticide applications are causing water quality problems. Where problems are identified (either through this permit or other means, such as through EPA’s regular review and re-registration of pesticides), future EPA permit actions will address these concerns to ensure water quality is adequately protected.

EPA recognizes that there are many site-specific situations which will determine whether a pesticide application operation needs permit coverage. EPA is not attempting to define all such situations. Similarly, EPA is not defining “near” as this term does not dictate whether permit coverage is required. Rather, any application that results in an unavoidable discharge of a pesticide to Waters of the United States requires permit coverage. This includes the control of pests in water or near water (e.g., at water’s edge) such that in order to control the pest in that treatment area, discharges of pesticides to Waters of the United States are unavoidable. Additionally, any pesticide application activities that do not fall within the four use patterns covered by this permit will require coverage under some other NPDES permit if those activities result in point source discharges to Waters of the United States. However, the Agency does want to make it clear that to the extent pesticide application operations need permit coverage, this permit is available for the four pesticide use categories. Thus, to the extent that a permit is needed for discharges from pesticide applications to areas such as drinking water sources, rangelands, forestry, park lands, mine sites, golf courses, rights-of-way, wetlands and other areas, and the activity falls within one of the four use categories, coverage may be granted under this general permit. EPA expects to provide additional guidance for stakeholders to assess whether permit coverage is necessary for the different pesticide application activities. Stakeholders can check EPA’s NPDES Pesticides website periodically for updates at www.epa.gov/npdes/pesticides.