Permitting for Pesticide Discharges into Navigable Waters: Issues and Legislation in the 117th Congress

Permitting requirements for using registered pesticides in or around the nation’s waters has been a long-standing issue. Under the Clean Water Act (CWA; 33 U.S.C. §1251 et seq.), discharges of pollutants into navigable waters are unlawful unless specifically authorized by a permit. For decades following the enactment of the CWA, the U.S. Environmental Protection Agency (EPA) did not consider registered pesticides used in compliance with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA; 7 U.S.C. §136 et seq.) as pollutants that required permitting for their discharge into waters. However, in 2009, the U.S. Sixth Circuit Court of Appeals ruled that (1) the statutory definition of pollutant in the CWA encompasses biological pesticides and chemical pesticides that leave a residue in navigable waters, and (2) discharges of such pollutants require permitting. In response to the ruling, EPA issued a general discharge permit to cover the majority of pesticide applications resulting in point source discharges. States with delegated authority to issue their own discharge permits issued similar general discharge permits.

Certain public health and environmental organizations have argued that discharge permits under the CWA allow states and EPA to regulate pollutants, such as residual pesticides, in local navigable waters based on site-specific situations. However, pesticide manufacturers and applicators have argued that the federal evaluation and registration of a pesticide under FIFRA, which governs proper use, is sufficiently protective of water quality nationwide and that permitting for pesticide discharges is unnecessary. Legislation proposed in the 117th Congress would prohibit EPA and states from requiring discharge permits under the CWA for pesticides registered under FIFRA by EPA or residues resulting from the application of such pesticides, with certain exceptions.

**FIFRA Pesticide Registration Process**

Prior to distribution or sale of a pesticide, FIFRA requires EPA to have issued a registration for the pesticide after an evaluation of the terms and conditions for its use. Registration approval requires a finding that the pesticide will not pose “unreasonable adverse effects on the environment” when used in conformance with labeling directions. To inform such a finding, EPA assesses the ingredients of the pesticide, its intended uses, and relevant scientific and technical information to characterize the properties of the pesticide (e.g., environmental fate) and the risk it may pose to human health or the environment (e.g., effect on nontarget organisms). To ensure pesticide registrations continue to satisfy the criteria for registration, FIFRA directs EPA to periodically reevaluate existing pesticide registrations. Reevaluation is referred to as registration review.

Use of a pesticide in a manner inconsistent with its labeling is unlawful under FIFRA, subject to civil and criminal penalties. FIFRA generally does not require prior approval for each application of a registered pesticide. However, applicators must be trained and certified to use pesticides classified by EPA as “restricted use.” Certified applicators must comply with recordkeeping, reporting, and other requirements promulgated by EPA. Reporting is intended for the evaluation of compliance with pesticide registrations and not for purposes of applying for approval to use a restricted use pesticide.

Under FIFRA, the authority to enforce use violations and to certify applicators is delegated to states that meet the statutory criteria for delegation (e.g., adequate laws and procedures). EPA is responsible for enforcing use violations and certifying applicators for states that do not meet the criteria or, do not request, delegated authority. CRS Report RL31921, *Pesticide Law: A Summary of the Statutes* provides more information on the federal pesticide regulatory framework.

**CWA National Pollutant Discharge Elimination System Permitting**

CWA Section 402 establishes the National Pollutant Discharge Elimination System (NPDES) permitting program for regulating the discharge of any pollutant from any point source into navigable waters. The CWA defines pollutant to include several broad categories of materials and wastes, including chemical wastes and biological materials discharged into water. The act defines point source as “any discernible, confined and discrete conveyance ... from which pollutants are or may be discharged.” Aerial applications of pesticides, for example, are considered point sources. However, in defining point source, the CWA excludes “agricultural stormwater discharges and return flows from irrigated agriculture,” so such sources are not subject to NPDES permitting.

NPDES permits specify limits on what pollutants may be discharged and in what amounts. Permits also include monitoring and reporting requirements. There are two types of NPDES permits: (1) individual permits for a specific discharger and (2) general permits covering categories of point sources that have common elements and discharge similar pollutants. General permits are issued in advance of discharges and allow the permitting authority to allocate resources efficiently—especially when a large number of permittees exist—and to provide timely permit coverage. NPDES permits may be issued for a period not exceeding five years. Regulations governing NPDES permits are codified at 40 C.F.R. Part 122.

https://crsreports.congress.gov
Under the CWA, the authority to issue NPDES permits to regulated sources and enforce permits is delegated to states that meet the statutory criteria for delegation (e.g., adequate laws and procedures), and the law allows states to adopt water quality requirements more stringent than federal requirements. EPA has authorized 47 states and one territory to administer the permit program. The agency issues discharge permits in states and territories not authorized to administer such program.

**NPDES and Pesticides**

In 2006, EPA promulgated a rule formalizing its long-standing position that pesticides applied in a manner consistent with FIFRA did not require NPDES permits (71 Federal Register 68483, November 27, 2006). EPA asserted that pesticides applied directly to navigable waters to control pests present in the water or applied to control pests that are over or near navigable waters are not pollutants as defined under the CWA.

Agricultural and environmental organizations challenged the EPA rule, and in 2009, the U.S. Sixth Circuit Court of Appeals vacated the rule, finding that biological pesticides—as well as chemical pesticides that leave a residue—are pollutants under the CWA. The court also ruled that the addition of such pollutants to navigable waters are point source discharges that require permitting under the CWA (National Cotton Council of America v. EPA, 553 F. 3d 927). For information on the rulemaking and court decision, see CRS Report RL32884, *Pesticide Use and Water Quality: Are the Laws Complementary or in Conflict?*

**Pesticide General Permit**

In responding to the 2009 ruling, EPA issued a pesticide general permit (PGP) covering the “majority of pesticide applications that would result in point source discharges” to navigable waters for states not authorized to issue their own NPDES permits in 2011. States and territories authorized to issue NPDES permits are to issue and administer their own general permits (i.e., a state PGP). Discharges not covered by a PGP may require an individual NPDES permit. In 2016 and 2021, EPA reissued a five-year PGP at the end of the five-year term. State PGPs may have different requirements than EPA’s PGP, though state PGPs must satisfy NPDES requirements, CWA, and relevant state law.

EPA’s 2021 PGP covers the discharge of biological pesticides and chemical pesticides that leave a residue in navigable waters resulting from the following four use patterns: (1) mosquito and other flying insect pest control, (2) weed and algae pest control (e.g., treatment in a ditch or at a water’s edge to control weeds or algae), (3) animal pest control (e.g., for invasive species eradication in navigable waters), and (4) forest canopy pest control (e.g., for airborne nonaquatic pest outbreaks). The PGP does not cover certain discharges determined by EPA or certain other federal agencies to warrant additional scrutiny, which, for example, include discharges of pesticides to waters impaired by that pesticide or related substances or certain pesticide applications to outstanding national resource waters. Based on EPA’s biological evaluation of the PGP, the agency expected that the most common use pattern covered by the PGP would be weed and algae control.

The PGP automatically covers certain discharges for which EPA has determined that a notice prior to the discharge would be inappropriate. Other discharges require the submission of a notice of intent (NOI) prior to the discharge to be covered. For example, NOIs are required for mosquito control districts that exceed annual treatment area thresholds defined in the PGP or for discharge into outstanding national resource waters or into waters with National Marine Fisheries Service Listed Resources of Concern (e.g., endangered and threatened species). The PGP also provides for modified requirements in instances of declared pest emergency situations (i.e., public health emergencies).

Discharges that do not require NOI submission still must comply with PGP requirements, which generally include compliance with effluent limitations, monitoring, recordkeeping, and reporting. The PGP tailors these requirements for those responsible for the discharge of pesticides in or around navigable waters, depending on the types of pesticide application activities and locations of those activities.

**Legislation in the 117th Congress**

Since the 109th Congress, bills have been introduced to prohibit EPA and states from requiring discharge permits under the CWA for pesticides registered under FIFRA with certain exceptions. In the 117th Congress, H.R. 1821 would amend the CWA to prohibit EPA or a state from requiring permits under the act for point source discharges of pesticides into navigable waters if the pesticide is registered under FIFRA. H.R. 1821 would provide exceptions to this prohibition, including (1) discharges that result from pesticide applications in violation of FIFRA and (2) discharges of stormwater discharges, manufacturing or industrial effluent, treatment works effluent, and discharges incidental to the normal operation of a vessel. H.R. 1821 would also amend FIFRA to prohibit EPA or a state from requiring a permit under the CWA for point source discharges of pesticides registered under FIFRA into navigable waters.

---

Laura Gatz, Analyst in Environmental Policy  
Jerry H. Yen, Analyst in Environmental Policy