

Water Quality Control Division

2012 Request for Information Report

Implementation of Pesticide Permitting Requirements

1.0 Background

The need to permit discharges associated with pesticide applications evolved from national litigation. The courts decided that an exemption EPA had adopted in 2006 was invalid in that only Congress has the authority to exempt pesticides from Federal Clean Water Act (CWA) permitting. The court decision required discharges associated with pesticide applications to have CWA permit coverage beginning October 31, 2011.

Because the state of Colorado has delegated authority to issue CWA permits in Colorado, the Colorado Department of Public Health and Environment (CDPHE) Water Quality Control Division (the Division) is the agency that can provide permit coverage. The Division issued a state permit on November 4, 2011. The permit is a temporary, short-term 2 year permit (through December 31, 2013). In the meantime, the department hopes that either Congress will clarify that pesticide permits appropriately belong under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) or appropriate resources can be obtained to implement a state permitting program for pesticides. Necessary elements of a program include permitting, data management, compliance assistance, and compliance assurance including enforcement capabilities.

Due to limited resources, for the first year of the program the Division could provide only minimal compliance assistance related to the new pesticide permit. Assistance was limited to responding to inquiries, maintaining information on the Division web site, and coordinating with the Colorado Department of Agriculture (CDA), the delegated authority for implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

The Division funds the implementation of the CWA and Colorado Water Quality Control Act permitting programs through fee revenue. The Colorado General Assembly has the sole authority to revise fees and establish new fee categories. The Colorado Water Quality Control Act does not identify either a pesticide program or a fee to support such a program. As such, the department put together a minimal program that attempts to meet the basic needs of those permitted while a dialogue with the Colorado General Assembly could occur. During the 2012 legislative session, there was dialogue between pesticide operators, CDPHE, the Colorado Department of Agriculture (CDA), JBC staff and members of the General Assembly to discuss issues surrounding this new program. Subsequently, the General Assembly sent a legislative request for information and directed CDPHE to report on this issue.

Both CDPHE and CDA have had ongoing dialogue with EPA regarding the challenges associated with implementing this new permitting program in the absence of new revenue and resources. EPA was able to provide one time funding to help bridge the gap in pesticide permitting implementation in Colorado, using discretionary funding available through FIFRA. No equivalent discretionary funding is available through the CWA, and no base-building funding is available in either federal program. The CDA applied for and received \$80,000 in federal EPA discretionary FIFRA funding for the sole purpose of passing those funds through to CDPHE for development of CWA permitting implementation capacity in Colorado. The funds from EPA are available for the period of October 1, 2012 through September 30, 2013. This has made it possible for the Division to fund a temporary part time (0.7 FTE) for 1 year. This FTE will do the following:

- Estimate the universe of permittees (i.e., the number of decision makers and applicators)

- Provide program implementation services, including permitting, outreach and assistance, receiving and responding to complaints and third party lawsuits, conducting inspections, and conducting enforcement as appropriate.
- Prepare this Legislative Request for Information by November 1, 2012 and follow up with additional information and details by February 1, 2013.

2.0 Information Needed to Consider Establishment of a Permit Fee

2.1 Estimate of the Universe of Permittees

All point source discharges of pollutants to waters of the United States and waters of the State are required to obtain permit coverage, except for those discharges exempted by the Federal CWA and State Water Quality Control Act. Exempt discharges include agricultural runoff and irrigation return flow. In accordance with state and federal permitting regulations “operators” are responsible for achieving permit compliance.

EPA had promulgated a regulatory exemption for discharges associated with pesticide applications, which the courts overturned. EPA has determined and the Division agrees that existing stormwater permits for construction, industry, and municipalities authorize the discharge of pesticides in stormwater. Entities who may have been unclear regarding whether pesticides were a pollutant source necessary to be addressed should update their stormwater management programs and plans (SWMPs) to clearly address the pollutant source and the associated control measures to be applied. In accordance with these permits, the permitted entity that conveys and discharges stormwater is responsible for implementation measures that may require education and/or coordination with other entities, such as tenants, contractors, and citizens.

For non-stormwater discharges from pesticide applications, both the state and federal pesticide general permits were developed with the understanding that there may be more than one responsible entity for a given discharge. As structured, the permits provide for sharing of responsibilities to meet the end goal of discharges being in compliance with permit requirements. These permitting and operator concepts are important to understanding the universe of entities covered, and possible models for structuring permit fees. The types of operators covered by the general permit are outlined in Table 1 on the following page.

Table 1: Operators Responsible for Permit Coverage for Non-Stormwater Pesticide Applications that Result in a Discharge to Surface Waters of the State

Entity	Definition	Key Groups	Examples
Decision Maker	Any entity with control over the decision to perform pesticide applications	Decision Makers <u>Required</u> to Submit a Compliance Certification	<ul style="list-style-type: none"> ▪ Agencies for which pest management for land resource stewardship is an integral part of the organization’s operations (e.g., Colorado State Parks) ▪ Mosquito control districts (or similar pest control districts, such as vector control districts) ▪ Weed control districts (or other similar special purpose districts created with a responsibility of pest control) ▪ Irrigation control districts (or other similar public or private entities supplying irrigation waters) ▪ Public and Private entities (e.g. municipalities, agricultural producers) exceeding annual treatment area thresholds

		Decision Makers <u>Not Required</u> to Submit a Compliance Certification	<ul style="list-style-type: none"> ▪ Agencies for which pest management for land resource stewardship <u>is not</u> an integral part of the organization's operations (e.g., municipalities, water and sewer districts, school districts) ▪ Public and Private entities (e.g. municipalities, agricultural producers, private households) <u>that do not exceed</u> annual treatment area thresholds
Applicator	Any entity who performs the application of a pesticide or who has day-to-day control of the application	For-Hire Applicators	<ul style="list-style-type: none"> ▪ Private for-hire applicators that apply pesticides for the purpose of raising an agricultural commodity and are licensed by CDA ▪ Private for-hire applicators that apply pesticides for nuisance control or public health protection and are not licensed by CDA
		Self-Applicators	<ul style="list-style-type: none"> ▪ Public and for profit private entities that use in-house staff to apply pesticides ▪ Private households that apply pesticides

The exact number of entities and thus the number of discharges which may be covered by both the state and federal permit is unknown. As documented in the final EPA permit, EPA estimates 365,000 pesticide applicators and more than 5 million pesticide applications annually will require NPDES permit coverage nationally. EPA has direct permitting authority in 4 states, the District of Columbia, the Commonwealth of Puerto Rico and several US territories, which are areas where the federal permit directly applies. EPA assumed approximately 10 percent of pesticide applications would occur in the those areas of the country covered under EPA's general permit based on the fact that approximately 10 percent of the population lives in those areas. Using this same methodology, approximately 6,000 pesticide applicators and 80,000 applications annually would be expected in Colorado for discharges to waters of the U.S., based on the estimate that 1.6% of the U.S. population lives in Colorado.

In March 2010, CDA conducted a survey to estimate the number of entities in Colorado affected by the pesticide permitting requirement. CDA sought out readily identifiable state and local municipalities (city and county personnel having responsibilities in different areas), pest districts, applicators applying to appropriate categories, golf courses, weed control districts, and other relevant entities using internet searches and local CDA contact lists. In distributing the survey, emphasis was placed on gathering information from those entities CDA felt would likely be decision makers that might be subject to permitting requirements either internally or through contracting. It should be noted that the survey did not necessarily account for irrigation districts, ditch applicators, Colorado Department of Transportation, or other programs that do some form of pesticide applications to, above, or near water, implying that the overall universe numbers are larger than those resulting from the CDA survey. The CDA survey did not attempt to account for individuals or associations that apply pesticides to their own properties in or near waters of the United States or waters of the state. The results of the CDA survey indicated that one thousand four hundred thirteen (1413) entities would be effected by the state's pesticide permitting requirement: two hundred seventy-one (271) municipalities, sixty-four (64) county pest programs, seventy-five plus (75+) weed districts, an estimated sixty-four (64) mosquito programs, forty-four (44) state parks, three hundred six (306) private and public golf courses and five hundred eighty-nine (589) commercial applicators.

The Division intends to use some of the EPA FIFRA funding and associated FTE that became available on October 1, 2012 to generate additional estimates of the universe of permittees covered under the state pesticide general permit. This approach will include a follow-up survey to the CDA survey, with a focus on identifying those entities now operating in accordance with the state pesticide general permit, and generating estimates from states with

longer pesticide permitting experience (some states located in the U.S. District Court of Appeals 9th circuit have been permitting pesticides for over 10 years due to earlier litigation in that district). The following milestones and timeline are proposed for this survey and supplement other estimation methodologies available to further inform any permit fee decision that could be contemplated during the 2013 legislative session.

Milestone	Timeline
Prepare a Draft Survey, Design Survey Monkey or Similar Electronic Tool for Collecting Information	October 1, 2012 – October 31, 2012
Circulate the Draft Survey to Key Stakeholders, including trade associations, municipalities, CDA, EPA	November 1, 2012
Receive Input on Draft Survey	November 15, 2012
Revise Draft Survey	November 16, 2012 – November 30, 2012
Distribute Survey	December 1, 2012
Close Survey, Receive Input	January 3, 2013
Compile Results	January 4, 2013 – January 20, 2013

The number of operators, including decision makers and applicators, covered under the permit is expected to evolve and likely increase over time. The Division’s experience with stormwater permitting, and construction in particular, illustrates when a regulatory program is new it takes some time for the permitted universe to stabilize as entities become more aware of the requirements and better understand the permitting process. This illustrates the fact that for any regulatory program there is a fraction of entities which fail to comply with the requirement to submit an application and obtain permit coverage. These entities are considered “non-filers”. For new regulatory programs, the Division’s experience has been that the number of non-filers is relatively high, and that this number decreases over time through outreach efforts and broad-based education.

The number of permitted operators is also expected to vary over time due to the fact that pesticide applications are temporal in nature and tied to factors such as weather, weed and vector outbreaks and declines, and agricultural crop dynamics. The Division is also attempting to collect permitted universe data over time from states with longer pesticide permitting experience.

Anticipating variations in the permitted universe is a key factor to establishing a permitting fee structure that will be able to accommodate these variations and fund an appropriate level of service over time.

2.2 Identification of an Appropriate Level of Service and FTE estimates

The following core types of service are typically associated with implementation of a CWA or Colorado Water Quality Control Act permitting requirement: permitting, compliance assistance, and compliance assurance. Additional framework support will be needed such as data management.

Permitting

In accordance with the established permitting framework, permit coverage may be provided via individual or general permits. Stormwater discharges for which pesticides are a pollutant potentially present in the discharge are currently authorized under both individual and general permits. Non-stormwater or direct discharges of pesticides to waters of the state are currently covered by one state-wide general permit. This is an efficient permitting process for this type of discharge. General permits can be issued for a period of 5 years, after which the Division is directed to review the permit and update terms and conditions as appropriate. Typically under general permits, all entities operating under the permit apply for permit coverage, and then reapply every five years if

continued coverage is needed. New operators can apply and existing operators can terminate coverage at any time during the 5-year permit term. The Division has the following estimates of FTE needs.

Tasks	Estimated Demand (no of tasks)	Estimated Level of Effort per Task	Estimated Level of Effort	FTE Needed	FTE classification
Develop Master General Permit	Once every 5 years	524 hours per general permit ¹	0.06 FTE per year	0.06 FTE	EPS II
Receive applications, issue certifications, process terminations, change of contacts, modifications	TBD, estimated number of permittees to renew every 5 years, estimated number of other permit actions per year	0.5 hours per permit action task ²	TBD	TBD	AA II

¹ Includes the following sub-tasks which may be appropriate for this permit: review compliance information, review relevant scientific studies, review EPA permit and other state permits, conduct pre-public notice meeting, receive written input, conduct follow on dialogue, develop draft permit, prepare and issue public notice, conduct formal public meeting, conduct statewide outreach sessions, respond to specific questions, receive public comments, review comments and revise permit as needed prepare written responses to public comments, provide a pre-issuance copy of the response to comments document, conduct a pre-issuance meeting, revise documents, issue permit, receive and process any permit appeals. Estimate based on twice the level of effort (LOE) required for an average general permit, due to the expected level of interest and controversy on this permit.

² Based on LOE required for permit actions for construction stormwater including certification issuance, terminations, change of contacts, and modifications.

Compliance Assistance

The Division, along with CDA and EPA, has experienced a significant demand for assistance in understanding and complying with pesticide permit requirements. The Division anticipates that this demand will continue to exist for several years, until the program has evolved to the extent that there is a broad understanding of permit requirements. The demand is expected to vary in the future based on the extent to which permit requirements evolve. For the near term, the Division anticipates the need to respond to inquiries, and conduct focused efforts on outreach and compliance assistance through conference and classroom settings.

Tasks	Estimated Demand (no of tasks)	Estimated Level of Effort per Task	Estimated Level of Effort	FTE Needed	FTE Classification
Respond to Inquiries	TBD inquires per year	TBD ¹	TBD	TBD	EPS II
Outreach and Education	TBD presentations or classroom sessions per year	TBD ²	TBD	TBD	EPS II
Develop Guidance Documents and Compliance Templates	TBD documents,	TBD ³	TBD	TBD	EPS II

¹ Based on LOE required per inquiry from August – September 2012

² Based on LOE required per session for construction stormwater

³ Estimated based on LOE required to develop stormwater outreach documents plus additional complexity expected to address waters of the state and waters of the U.S.

Compliance Assurance

Core tasks related to measuring compliance rates and responding to non-compliance include receiving and responding to citizen complaints, conducting inspections, and conducting formal enforcement to promote

compliance. For other permitting programs, both EPA and the Division set inspection goals as a percent of the permitted universe. These goals are based on the size and complexity of the permit and the discharge. The goals of the Division and the goals of the EPA are typically the same for those permits issued pursuant to the federal Clean Water Act. For large domestic and industrial sources the goal is to inspect 30% to 50% of these facilities per year, depending on the facility compliance record. For complex stormwater municipal permits and continuous small domestic and industrial sources the goal is to inspect 20% of these sources per year. The goal for intermittent industrial sources (stormwater) and large construction sites is inspection of 10% of the sources per year, and the goal for small construction sites is 5% per year. For pesticide permitting, the Division estimates that a 10- 20% inspection rate per year will likely be appropriate. This estimate will be refined following the follow-on survey to be conducted in the next few months. The Division is directed to enforce the requirements of the Colorado Water Quality Control Act and conducts enforcement of CWA requirements on behalf of EPA as a delegated program. During the first 5 year term of the permit, the Division expects to focus efforts on compliance assistance and inspection, and less on formal enforcement. Other regulatory programs such as construction stormwater have followed a similar evolution in that in early implementation, formal enforcement responses were limited to situations where significant environmental impact occurred or enforcement was an appropriate tool to resolve 3rd party allegations, such as 3rd party lawsuits. Further out, additional enforcement may be appropriate as the compliance expectations of EPA and the public change.

Tasks	Estimated Demand (no of tasks)	Estimated Output per Task	Level of Effort	FTE Needed	FTE classification
Receive and Respond to Complaints	TBD	2 hours per complaint ¹	TBD	TBD	EPS II
Conduct Inspections	TBD, number of inspections per year, to be based on a % [10% - 20%] of the estimated number of permittees	34 hours per inspection ²	TBD	TBD	AA II
Conduct Enforcement, including actions evolving from 3 rd party lawsuits	TBD, number of cases per year, to be based on a % of the estimated number of complaints and inspections		TBD	TBD	EPS II

¹ Estimated based on LOE required to respond to complaints for stormwater construction

² Includes the following sub-tasks: identifying specific operators and sites based on targeting criteria, contacting and scheduling with the operator, records review in advance of the inspection, travel, records review of on-site documents field visit, travel, preparation of inspection report, comparison of inspection findings to enforcement response criteria preparation of enforcement referral. Estimated based on LOE required to conduct inspections for other permit types.

Estimated based on LOE required to conduct a construction stormwater enforcement case

2.3 Fee Considerations

The following considerations are key to establishing a permit fee structure.

1. Who should be subject to submitting a permit application? Both the federal and state permitting regulations allow general permits to include automatic authorization, or the ability for operators to be covered by the permit without submitting an application. EPA’s current pesticide permit includes this automatic authorization allowance, and uses annual treatment area thresholds to distinguish entities who must submit a permit application from those who are automatically covered. This is a key provision in the

pesticide permit where states can take their own approach in deciding who should submit an application. Some states followed EPA's thresholds, some established their own thresholds, and some require applications from all operators. Because receipt of a permit application is a practical way to have the information necessary to collect a fee from a regulated entity, this permit provision is a key consideration in establishing a permit fee structure. Some possible models for requiring a permit application follow below:

- a. Decision makers above thresholds in EPA's permit
 - b. All Decision makers
 - c. Certain Decision makers and certain applicators
 - d. All Decision makers and all applicators
2. Who should pay the fee?
 - a. All required to submit a permit application
 - b. All required to operate in accordance with the permit
 - c. Other
 3. What is the appropriate mix of fees?
 - a. Permit application fee
 - b. Fees for other types of permit actions (e.g., transfer, termination, modification)
 - c. Annual fee to fund ongoing services (e.g., compliance assistance and compliance assurance)
 - d. Additional and/or optional services, e.g., pesticide discharge management plan review and approval fee
 4. What method will be used to refine fees and resource levels over time as the permitted universe and required implementation services evolve?

3.0 Ongoing Coordination with Colorado Department of Agriculture

The Division and CDA are committed to ongoing coordination regarding implementation of FIFRA and CWA permitting in Colorado. The key area of overlap between FIFRA and CWA requirements is that the CWA permit requires applicators to apply pesticides in accordance with the product label, as does FIFRA. As a delegated program, CDA implements FIFRA requirements in Colorado. In particular, CDA has a licensure program for public and private applicators applying pesticides for the purpose of producing an agricultural commodity.

The key distinction between the FIFRA and CWA requirements is that the most significant requirements in the CWA permit are assigned to the decision maker, the entity making pesticide application decisions, including cities, counties, land management agencies, agricultural producers, irrigation companies, and mosquito and weed control districts. These entities are not regulated by CDA, as CDA solely regulates commercial applicators.

Informal coordination has been ongoing in the form of meetings and phone calls. The agencies expect to continue that level of coordination, and provide further structure to the coordination during the first full permit term, including the following specific tasks:

1. Conduct quarterly coordination meetings
2. Develop an interagency MOU to detail how coordination will take place and how referrals will be conducted
3. Develop complaint response templates
4. Develop referral processes
5. Share databases

4.0 Timeline and Next Steps

The following steps have been completed thus far:

1. Follow development of national permit, respond to inquiries, discuss with stakeholders and members of the Colorado General Assembly, develop draft permit (completed in advance of November 4, 2011)
2. Issue short term permit to provide coverage while resources can be obtained (completed November 4, 2011)
3. Provide limited assistance while resources can be obtained (November 4, 2011 through September 30, 2012)
4. Develop Interagency Agreement with CDA to receive EPA grant funding (completed September 28, 2012)
5. Develop request for information report due on November 1, 2012

The short-term permit currently in effect models EPA's permit, with a few notable changes such as no permit application and no annual report submittal. These changes were adopted to facilitate the permit being in place in the absence of Division resources. The Division relied heavily on EPA's analysis of appropriate permit terms and conditions, including EPA's responses to comments similar to those received on the draft Colorado permit. In contemplating a full permit term, it would be appropriate to conduct a general permit stakeholder process to determine what terms and conditions are appropriate for Colorado since as a delegated authority, the Division is allowed to deviate from the national general permit to the extent that regulatory requirements are adhered to. For example, comment was received on the draft permit that urged the Division to take a substantially different permitting approach in Colorado due to delegation, Colorado laws, and the semi-arid climate. These types of comments could be fully considered at permit renewal. A general permit stakeholder process can also be used to obtain input regarding the appropriate level of service to provide to the regulated community and Colorado citizens.

The Division estimates that it would take approximately 9-12 calendar months to conduct a permit renewal process including pre-public notice stakeholder dialogue, development of a draft permit, conducting public notice, responding to public comments and revising and issuing a final permit. The short term permit requires certain decision makers to submit a compliance certification by July 1, 2013 (see Table 1 for additional detail regarding who is required to submit the compliance certification). Once those compliance certifications have been received, an initial universe of entities (decision makers) operating under the permit will be identified.

The work plan for the EPA grant funds in place from October 1, 2012 through September 30, 2013 includes a task for extending the current permit term by one year, through December 31, 2014, to allow time for a general permit renewal stakeholder process and time to establish longer term funding source for the pesticide permitting program in Colorado.

Specifically, the following steps are suggested:

6. Provide permitting implementation services including compliance assistance and compliance assurance using federal EPA FIFRA funding (October 1, 2012 through September 30, 2013)
7. Provide information to the Colorado General Assembly for consideration of funding permitting implementation including permit renewal from July 1, 2013 through June 30, 2015 and authorizing longer term fees to be established by the CDPHE or the Water Quality Control Commission. Possible funding options for SFY 13-14 and SFY 14-15 include the following:
 - a. General Fund
 - b. Permit fees developed to be assigned to decision makers required to submit a compliance certification by July 1, 2013. Fee levels would be established based on estimates of the permitted universe generated through the pending follow on survey and level of service estimates provided in this report, and an expected February 1, 2013 supplement to the report.

8. Extend permit term to December 31, 2014 to allow time for permit renewal stakeholder process and identification of appropriate level of service. (Spring 2013)
9. Pesticide permitting implementation funding established for SFY 13-14 and SFY 14-15 through adopted legislation. (May 2013)
10. Compliance Certificates due. (begin receipt April 30, 2013 due July 1, 2013)
11. Renew permit for new 5 year term. Discuss who should file an application and who should fund ongoing implementation. (July 2013 – June 2014).
12. Create revised fee structure, for CDPHE or WQCC authorization. (late 2014)