Colorado Department of Public Health and Environment
Water Quality Control Division
Request for Information Report - Supplement
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, 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 became 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 has been and will continue to 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 two types of operators, decision makers and applicators, covered by the general permit are outlined in Attachment 1.

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 other new regulatory requirements, such as stormwater permitting, 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, initially, the number of non-filers is relatively high, but that this number decreases over time through outreach efforts and broad-based education. The number of permitted pesticide 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 outbreak variability, and agricultural crop dynamics.

The exact number of entities and thus the number of discharges which may be covered by both the state and federal permit is unknown. In developing this report, the Division evaluated multiple sources of information and developed estimates where possible of the universe of operators subject to the permit. These are included in Attachment 1. The Division was able to develop estimates for certain types of decision makers and applicators, where records exist on the numbers of entities and survey results provided usable estimates regarding the number

of applications expected to result in a discharge to waters of the state. The Division was unable to develop estimates for many private entities subject to permitting requirements, particularly private entities that are decision makers that do not exceed annual treatment area thresholds. These entities are not currently registered or licensed by CDA for general use pesticide applications, and information available from other states is limited. The Division expects that over time as this new regulatory requirement continues to be implemented and is more broadly understood, better information will become available. The various sources of information evaluated are discussed further below.

In December 2012, the Division conducted a survey to estimate the number of decision makers and applicators subject to the final permit, including the requirement to submit a compliance certification. The survey was developed and implemented using some of the FTE funding provided by EPA/FIFRA, and was distributed to stakeholders on December 3, 2012. Survey submissions were requested by January 3, 2013. The survey was distributed to approximately 150 contacts, 120 of which had been assembled for a previous survey conducted by CDA (described further below). The contacts included 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. The Division supplemented this list with approximately 30 additional contacts representing irrigation districts, trade associations, and contacts who had attended pesticide permit meetings or expressed interest in the permit. The trade associations indicated a preference of forwarding the survey to their membership rather than provide the Division with contact information. The Division does not have a final tally of the total distribution of the survey but an assumption was made that by using the same list as that used by CDA, in addition to additional contacts obtained, the Division would be able to expect approximately the same, if not a better, return. This did not turn out to be the case. Actual rates of return on the survey were disappointing as a total of only 59 respondents linked to the survey. Of those 59, only 29 individuals actually completed the survey in its entirety. All other records were either blank (indicating someone looked at the survey and then chose not to fill it out) or incomplete. The Division has attempted to contact stakeholders through opportunities at speaking engagements and individually by phone in order to confirm receipt and distribution of the survey. By show of hands at conferences, it is estimated that half of the approximately 300 people at two separate meetings were aware of the survey. Phone calls to individual distributors to confirm distribution of the survey have been inconclusive.

On January 24, 2013 the survey was reopened and redistributed to attempt to solicit a higher response rate. The survey was redistributed to the same list of 150 contacts, plus an additional list of approximately 700 licensed and registered applicator contacts provided by CDA. Trade associations were specifically contacted and asked to forward and promote the survey. The survey closed on January 29, 2013. Results from the survey indicate an improved response rate. This is likely due to the wider distribution of the survey by using the additional CDA list, as well as further prompting by the Division of trade association heads to more aggressively promote survey completion. Upon closing the survey, 207 individuals had looked at the survey with 111 of those people filling it out completely. The other 96 either answered select questions or left the survey blank. From the data received, 47% of respondents indicated that their applications would result in discharges to waters of the state. Another 23% were unsure if their applications would result in discharges to waters of the state. 58% of respondents (61 of 104 who answered) consider themselves to be both decision makers and applicators, and 60% of respondents (60 of 99 who answered) indicated that the PGP would apply to them. Of the 65 individuals who answered the question, "Do you expect that you will submit a Compliance Certification," 34 respondents (52%) indicated that they would not. The remaining 31 said they would need to submit. Additional points to be drawn from the survey include the fact that the vast majority of applicators use ground-based techniques to apply pesticides (76/82) as opposed to aerial applications (1/82), though some use both techniques (5/82). Also, weed and algae treatments

(65/102) by some form of local government (41/80) emerged as the primary use-pattern and entity type. Mosquitos were second (18/102) and animal pest and forest canopy were the least often used (9 and 10/102, respectively). Nearly half of respondents (41/76) indicated that they would be affected, "in some way", 24% said they would be affected, in a major way (18/76) and 17% answered that it was unknown to what extent they would be affected (13/76). Finally, when asked what changes will be made to meet the requirements of the permit, record keeping came out as the biggest change dischargers would need to make (56/158) but that other changes would also come into play such as technological changes (27/158), legal changes (20/158), staffing (17/158) and product selection (26/158). Twelve respondents said that no changes would need to be made.

CDA's survey was conducted in March 2010. This was in a period following the January 2009 Sixth Circuit decision and was in advance of EPA's June 2010 publication of a draft general permit. The objective of the survey was to estimate the number of entities in Colorado affected by the pesticide permitting requirement. Some of the concepts EPA was considering for inclusion in the draft permit were known, such as having thresholds (in acres or linear miles) to differentiate requirements for large versus small entities. However other key concepts such as distinguishing responsibilities for decision makers from responsibilities for applicators were unknown. The survey was distributed to the same 120 contacts mentioned above and trade associations were asked to forward the survey to their membership. CDA received 401 total responses to the survey. 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 private 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.

EPA estimated that 365,000 pesticide applicators and more than 5 million pesticide applications annually would 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. EPA acknowledged that it was difficult to derive definitive estimates of the number of pesticide activities actually conducted and potentially covered under the permit. EPA stated that the estimates were derived from secondary sources of information and generalizing assumptions were sometimes made. EPA did not attempt to provide any detail regarding how many national pesticide applications would result in a discharge to Waters of the United States, and how many would not. EPA also did not attempt to derive estimates of the number of decision makers required to submit a permit application, or in the case of Colorado a compliance certification, and what the assemblage of entities would be in terms of federal and state agencies, local governments, and private entities.

The Division also solicited permitted universe information from two states located in the Ninth Circuit, OR and WA, since these states began permitting discharges associated with pesticide applications following earlier court

decisions in 2001 and 2002, and they are similar in size and population to Colorado. Information was not provided by OR. The following information was obtained from WA Dept. of Ecology:

Permit Name	Permittees	Avg New Coverages/Year	New Licenses/Year
Aquatic Plant and Algae Management General Permit	128	About 12	0
Aquatic Noxious Weeds General Permit	1	0	About 120
Irrigation Systems General Permit	17	0	0
Aquatic Mosquito Control General Permit	48	1	0
Aquatic Invasive Species Management General Permit	0	0	0
Fisheries Management General Permit	1	0	0
Invasive Moth Control Individual Permit	1	0	0
Oyster Growers Individual Permit	1	0	0

The Division also reviewed published permit application information for five states (AK, NH, MA, ID, and NM). The five states reviewed are operating under essentially the same permit as in Colorado. This information was used to derive estimates of the number of decision makers required to submit compliance certifications.

In conclusion, the Division survey did not provide quantifiable estimates of the number of decision makers and applicators subject to the final permit, including the requirement to submit a compliance certification. Conclusions drawn from the low response rate might indicate apathy of the part of dischargers or possibly distrust/anger at the prospect of this regulation. It may indicate a lack of awareness and subsequent desire to remain under the radar until a more forceful requirement is implemented. In contrast, the higher response rate for the CDA survey might be attributable to interest at the time in demonstrating that many entities would be affected by the pesticide permitting requirement, and as such to show support for a proposed Congressional exemption. A key factor in developing these estimates is the % of applications that will result in a discharge to waters of the state. A total of 47% of respondents to the Division survey indicated that their applications would result in discharges to waters of the state. Another 23% were unsure if their applications would result in discharges to waters of the state. A total of 73 % of entities that completed the March 2010 CDA survey indicated that they apply pesticides directly to water, above water or adjacent to water (ditch banks, anywhere along water). Based on those results, the Division determined that an estimate of 60% was reasonable. Reliable estimates of the number of pest control districts, irrigation districts, and local governments were available from the Department of Local Affairs (DOLA). The Division has provided its best estimate of the universe of entities subject to permit coverage; however some categories of entities could not be estimated and even with those categories that were estimated significant uncertainty remains. In summary, approximately 85-125 operators are expected to be decision makers required to submit a compliance certification (either because they are pest control entities or meet annual treatment thresholds). The number of decision makers not required to submit a compliance certification, and number of

applicators is more difficult to estimate, but the CDA estimate of 1413 affected entities and estimate of 6,000 affected entities derived from EPA's national estimate may serve as reasonable bounds of the potential permitted universe.

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 including data management and ambient monitoring.

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.

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. These outreach efforts are needed for all operators, decision makers and applicators, including those subject to permitting requirements and those not subject to permitting requirements, since a significant number of entities are unsure what requirements apply to their operations.

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 remedy non-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 expects that it will be most appropriate to focus inspection efforts on decision-makers, as the majority of substantive permit requirements apply to these entities. The Division estimates that a 10-20% inspection rate per year will likely be appropriate for decision makers, with higher rates appropriate for pest control entities and decision makers applying to larger areas, and lower rates appropriate for decision makers applying to smaller areas. The Division estimates that routine inspection may be unnecessary for the vast majority of applicators. The principal permit requirements that apply to applicators include the following: use only the amount necessary, maintain equipment,

and assess weather conditions consistent with federal requirements. These requirements conform to the requirement under FIFRA to conduct applications in accordance with labeling requirements. CDA provides routine inspection of licensed commercial applicators (approximately 33% per year) and the Division anticipates that CDA's compliance determinations regarding adherence to labeling requirements will be adequate to serve as compliance determinations for the permit requirements. The majority of self-applicators are not licensed and inspected by CDA. Self applicators are only licensed by CDA for application of restricted use pesticides, and there is no licensing requirement for the application of common use pesticides. However based on survey results information from CDA, the Division expects that self-applicators are also decision makers. As such compliance with label requirements can be assessed during an inspection of a decision maker who is also a self applicator, and separate self-applicator inspections are expected to be unnecessary. Some inspection capacity should be available to respond to citizen complaints received regarding pesticide applicators and to be able to identify the associated decision maker and coordinate with CDA for those applicators that are licensed by CDA (commercial applicators and restricted use applications).

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 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.

Ambient Monitoring

The Division does not currently conduct routine monitoring for pesticides in surface waters of the state. The CDA administers an agricultural chemicals groundwater protection program that was created through SB 90-126. One component of that program is groundwater monitoring and groundwater wells across the state are routinely analyzed for pesticides. The groundwater monitoring provides a baseline upon which to gauge trends in groundwater quality, and the Division works cooperatively with CDA to provide analysis and interpretation of the pesticide groundwater data. The Division recommends that a routine surface water monitoring program be developed and implemented, to provide baseline and the ability to gauge trends in surface water quality. The Division anticipates that additional operating funding would be needed to cover laboratory analysis costs, and additional FTE would not be needed for field based sampling presuming that samples would be collected at establish surface water monitoring locations.

Resource Estimates

The following resource estimates have been developed for the next 3 – 5 years of pesticide permitting implementation. The FTE estimates are based on EPS II level activities. Additional costs include SDS, indirect, standard operating and travel, and supplemental operating to enable ambient monitoring.

Resource Estimates for Pesticide Permitting Implementation, SFY 13/14 through SFY 17/18

Years	Resources	Tasks
1 through 5 SFY 13/14 SFY 14/15	1.0 EPS II FTE Travel Budget	<u>1.0 FTE based in Denver, Permit Writer Position.</u> Issue permit modification to extend the term Renew general permit with full stakeholder process Respond to inquires Provide outreach and assistance at conferences and workshops Develop guidance documents and compliance templates Receive and investigate citizen complaints Conduct field visits Receive compliance certifications Develop tracking database Receive and investigate adverse incident reports Develop progress reports For travel assume 7 trips per year at $167 per trip for a total of $1169. (Trip cost includes 2 days per diem at $46 per day and 1 night accommodations at $75)
3 through 5 SFY 15/16 SFY 16/17 SFY 17/18	2.0 EPS II FTE (additional, for a total of 3.0 EPS II FTE) Travel Budget	<u>Two, 0.5 FTE located in field offices (Grand Junction, Pueblo), Field Inspector Positions</u> Develop inspection procedures Conduct inspections (this level of FTE would provide capacity to conduct approximately 55 field based inspections per year) Respond to inquires Provide outreach and assistance at conferences and workshops Receive and investigate citizen complaints Conduct field visits Respond to pesticide related spills For travel assume 50% of inspections require an overnight stay resulting in 28 trips per year at $167 per trip for a total of $4676. (Trip cost includes 2 days per diem at $46 per day and 1 night accommodations at $75) <u>1.0 FTE based in Denver, Enforcement Specialist Position.</u> Review adequacy of self-reported data, including annual reports, adverse incident reports, and non-compliance notifications Conduct Enforcement, including actions evolving from 3rd party lawsuits
Years 1 through 5	$84,000 annually	<u>Ambient Monitoring Analytical Costs.</u> This is based on the collection of quarterly samples at 15 sites. Analytical cost per sample is $1400. Because these sites are established baseline monitoring locations that are routinely sampled by Division staff, no additional FTE are included to conduct ambient monitoring.

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 (completed 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 federal 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. The Division does not recommend that fees be established at a level to fully fund the resources recommended for pesticide permitting for years 1 through 5, with the goal of fully funding the program through fees in years 5 through 10, once the program has become more established. This would also allow the question of fees to be discussed during the full stakeholder process as part of the discussion of the range of entities that should be required to submit permit applications.
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)

13. Revisit permit fee structure for CDPHE or WQCC authorization (2018 – 2020).

In the event that funding is not provided for implementation of pesticide permitting in Colorado, CDPHE intends to allow the current short-term permit to expire on December 31, 2013. The current 0.7 FTE made available through EPA/FIFRA funding will end on September 30, 2013. After that time, the Division will not be able to provide the program implementation services that are currently being provided, including permitting, outreach and assistance, receiving and responding to complaints and third party lawsuits, conducting inspections, and conducting enforcement as appropriate.

Attachment 1: Operators Responsible for Permit Coverage and Universe Estimates[1]

Entity	Definition	Key Groups	Sub-Groups	Universe Estimate	Universe Estimate Source (estimates as of February 1, 2013)
Decision Maker	Any entity with control over the decision to perform pesticide applications	Decision Makers Required to Submit a Compliance Certification	Agencies for which pest management for land resource stewardship is an integral part of the organization's operations	3	Assumed to include: Colorado Division of Parks Wildlife and Colorado Department of Transportation, State Land Board[2]
			Mosquito control districts (or similar pest control districts)	7	Mosquito control districts on record with DOLA. All are assumed to have applications that result in a discharge to waters of the state.
			Weed control districts (or similar pest control districts)	19	County pest control districts on record with DOLA. All are assumed to have applications that result in a discharge to waters of the state.
			Irrigation control districts	16	Irrigation control districts on record with DOLA (16). All are assumed to have applications that result in a discharge to waters of the state.
			Local governments or other entities that exceed annual treatment area thresholds	Approx. 40 – 80	CDPHE and CDA survey results and information from other states [3]
			Total Estimated Decision Makers Required to Submit a Compliance Certification: **approximately 85-125**		
		Decision Makers Not Required to Submit a Compliance Certification	Agencies for which pest management for land resource stewardship is not an integral part of the organization's operations	0	Assumed that other state agencies who apply pesticides do not discharge to waters of the state other than via stormwater discharges which are separately authorized
			Local governments that do not exceed annual treatment area thresholds	Approx 190 to 380	Assumed that 25% - 50% of local governments conduct pesticide applications, and 60% of those applications result in a discharge to waters of the state at levels that do not exceed annual treatment thresholds. The total number of local governments (1268) includes the number of counties (64), municipalities (273) and metropolitan districts authorized to provide pesticide services (1059). [4]
			Other entities (primarily private entities) that do not exceed annual treatment area thresholds	Unknown May range from 1400 - 6000	This may include businesses such as golf courses, ditch companies, and agricultural producers, and private entities such as homeowners associations, that apply pesticides in a manner that results in discharges to waters of the state. This includes entities that use for-hire applicators and entities that self-apply pesticides. [5]
			Total Estimated Decision Makers Not Required to Submit a Compliance Certification: **approx. 1400-6000**		

Entity	Definition	Key Groups	Sub-Groups	Universe Estimate	Universe Estimate Source (estimates as of February 1, 2013)
Applicator	Any entity who performs the application of a pesticide or who has day-to-day control of the application	For-Hire Applicators	Private entities engaged in the business of applying pesticides; these entities hold commercial applicator licenses with CDA	262	CDPHE and CDA survey results and CDA database. Assumed 60% of about 438 licensed entities apply pesticides in a manner that results in a discharge to waters of the state.
		Self-Applicators	Private entities who in the course of conducting their business are engaged in applying restricted use pesticides on their property (e.g., golf courses); these entities are registered with CDA as limited commercial applicators.	5	CDPHE and CDA survey results and CDA database. Assumed 60% of 8 registered entities apply pesticides in a manner that results in a discharge to waters of the state.
			Governmental entities who in the course of conducting their operations are engaged in applying restricted use pesticides on their property (e.g., municipal parks); these entities are registered with CDA as public applicators	n/a	Governmental entities that apply pesticides are decision makers and as such are included in the estimates above. Only 67 governmental entities have public applicator licenses with CDA.
			Private entities who are engaged in applying restricted use pesticides on their property for the purpose of raising an agricultural commodity; these entities are registered with CDA as private applicators	2820	CDPHE and CDA survey results and CDA database. Assumed 60% of 4700 registered entities apply pesticides in a manner that results in a discharge to waters of the state. These entities are both decision makers and applicators
			Private entities that self- apply or use their own employees to apply general use pesticides to property they own or lease; these entities are not licensed or registered by CDA	Unknown May range from 1400 - 6000	This is a subset of the unknown number of private entities who are also decision makers, and are those that do not hire a commercial applicator and self-apply. Only a portion of these applications would result in discharges to waters of the state that would be authorized under CDPS Permit COG860000. These entities currently have no requirement for licensing, registration, or permit application.

[1] Includes operators whose activities result in a discharge to surface waters of the state that would be authorized under CDPS Permit COG860000. Excludes discharges from federal facilities and stormwater discharges which have separate permit coverage.

[2] The term agency is interpreted to apply to apply to federal and state government, and not apply to local government. This is supported by EPA's Q&A. Federal agencies would operate under the EPA permit and are not counted.

[3] Based on survey info from CDPHE and CDA surveys, and published application numbers for five states. The five states reviewed are operating under the same permit as in Colorado. Estimates were derived based on comparing application numbers to the size, population and numbers of counties in each of the states reviewed.

[4] Routine activities likely to result in a discharge include pest and algae control in lakes and reservoirs, mosquito control for public health protection, weed and algae control at parks, and channel and ditch maintenance.

[5] Routine activities likely to result in a discharge include pest and algae control in lakes and reservoirs, mosquito control for public health protection, weed and algae control at parks, and channel and ditch maintenance. For Colorado, it is assumed that most private household use would not result in a non-stormwater discharge to waters of the state. Stormwater discharges are separately authorized via MS4 permits issued to municipalities. The total number of entities is unknown. However results from a CDA February 2010 estimate (1400) and an estimate derived from EPA's national estimate (6,000) are used as possible bounds of the size of the universe.