

ADDENDUM #1

Permit: General Surface Water Discharge Permit for Pesticide
Activities in South Dakota
Permit Number: SDGA10000
Permit Type: Response to Comments

DESCRIPTION

On January 21, 2011, the South Dakota Department of Environment and Natural Resources (SDDENR) provided public notice of a new permit for the discharge of a pollutant from a point source associated with the application of a pesticide into waters of the state. During the public notice period, the department received questions and comments from five sources: the city of Sioux Falls, David Richards, South Dakota Aviation Association, United States Department of the Interior – Fish and Wildlife Service, and Mike Larson with Larson Helicopters. The Administrative Rules of South Dakota (ARSD) Section 74:52:05:20 states the following:

Response to comments. At the time that any final permit is issued, the secretary shall issue a response to all written comments received during the period of public notice.

This addendum provides the department's response to each of the comments received.

COMMENTS

The city of Sioux Falls submitted the following comments and requests for clarification:

1. Will a letter of physical permit be sent to all City/County programs so that we have something on file or to hang on the wall to verify that we are working under the appropriate State regulations?

The general permit will provide automatic coverage to all applicators. It will be each permittee's responsibility to demonstrate compliance with the permit to SDDENR or the general public. Individual authorization letters and copies of the general permit will not be sent to each permittee. However, a final copy of the general permit will be available on SDDENR's webpage: <http://denr.sd.gov/des/ws/PesticidePermit.aspx> and will be available upon request from SDDENR.

2. Will we be required to write a summary or provide information to the State at the end of the season indicating the areas treated etc? Would the head of the program be the one to do that? Will there be a form or template for this information?

If a permittee meets one or more of the annual report thresholds in the Pesticide General Permit, the permittee will be required to submit a summary to SDDENR at the end of the year in the form of an annual report. This report must be submitted by either a principal executive officer, a ranking elected official (such as the mayor), or a duly authorized

representative, and is due by February 28th of the following year. An example form will be made available by SDDENR if applicators wish to use it; however, use of the form will not be required.

3. We did some work out in the County in the area surrounding the Sioux Falls city limits – if we did any treatments out there, would we need a separate permit?

No, the city would not need a separate permit. The Pesticide General Permit is written to cover the entity doing the pesticide application, in this case, the city of Sioux Falls. The permit will cover all city employees discharging pesticides into waters of the state, regardless of whether the work is done in the city limits or under contract with another agency. However, please be aware this work will also need to be counted towards the city's thresholds for annual reporting.

4. I am the coordinator for the mosquito control program for the City of SF and, as far as I know, am the only one overseeing a program or any staff in the application of pesticides to waters... therefore I would be the one responsible under the terms of the permit as I understand it. Do I personally need to do anything? If I do – I am assuming my affiliation with the City of Sioux Falls then would cover all other employees in the City for applications to water if they in fact did any, right?

As noted above, the Pesticide General Permit covers the entity doing the pesticide applications, such as the city of Sioux Falls. Any city staff responsible for pesticide applications into waters of the state, including supervisors, are expected to ensure compliance with the requirements of the general permit.

The city of Sioux Falls may want to develop a single standardized procedure for the recordkeeping and reporting requirements under the general permit. The city could also develop a single Pesticide Discharge Management Plan for all employees to use.

Please note all applicators will still be required to follow any other state or federal requirement, such as being certified by the Department of Agriculture for certain types of applications.

5. If we were to realize that we would exceed the area requirements, would the application for an additional permit then cover treatments on a per application basis? Any treatments up to a defined amount? How would that work. EXAMPLE: If it were August and we realized that we still have a good month or more of the program left before the end of the season and, according to our records we have hit the area limit as outlined in the permit, what would be specifically need to do to make sure that we could continue treating areas needed within the city limits through the seasons end....there would likely be several areas of different sizes and overall area that we wouldn't yet know about. Would we contact you and say...We approximate that we will need to treat an additional x amount of area for the remaining months of the season and you would then send us a permit ok'ing that additional area?

*The thresholds or “area requirements” in the permit are **not** limits on the amount of pesticide applied or the size of the application area. The thresholds simply trigger the requirement for a permittee to submit an annual report at the end of the calendar year. In your example, if you were to exceed the threshold, the city would still continue to treat for pests without the need to notify SDDENR or obtain permission. However, by February 28th of the following year, the city would then need to submit a report to DENR.*

The annual report and thresholds do not serve as a limit or penalty. Thank you for the opportunity to clarify this condition.

David Richards submitted the following comments:

1. The proposed rules are too long, they should be condensed to a couple of pages.

The use of pesticides is a complex issue and is already regulated by a number of state of and federal regulations. Unfortunately, the Sixth Circuit Court felt another level of regulation was necessary. In 2009, the court ruled anyone applying pesticides into waters of the United States must obtain a permit under the federal Clean Water Act. If pesticide applicators do not have a permit by April 9, 2011, they could face lawsuits from environmental groups or fines from the federal government. This general permit was drafted to meet the requirements laid out by the Sixth Circuit, the federal Clean Water Act, and the US Environmental Protection Agency. In addition, where possible, we tried to ensure consistency between existing state and federal requirements for pesticide applications.

It is always SDDENR’s goal to create permits that are as condensed and straight forward as possible. SDDENR made this permit as streamlined as we could while still fulfilling the requirements of state and federal law.

2. Landowners care about the environment. Treating them with respect and showing people how to do things in a better way is the best way to protect the earth. Seeking cooperation and working with them as partners will be far more effective.

The penalties imply that landowners are the enemy, potential criminals who have no concern for safe water or the welfare of their neighbors. That is untrue. People who live on the land have a great respect for the soil and water, their livelihood depends on healthy land and clean water, they also care deeply about the welfare of others. They want to do the right thing and you can show them how to do that.

Eliminate the penalties. Most people will heed a warning and maybe a \$100 fine for a second offense. We can accomplish a whole lot more by working together.

We agree South Dakota’s citizens care deeply about our natural resources. Hunting, fishing, agriculture, and tourism are South Dakota’s biggest industries, and all rely on clean water and fresh air.

In light of the court's decision referenced above, a permit is necessary for continued pesticide use into South Dakota's water bodies. SDDENR agrees we need to work together as partners to make this as smooth a process as possible. This general permit is a way to ensure South Dakota's landowners can continue to manage our resources in a safe way.

Throughout SDDENR's development of the general permit, we worked with the SD Department of Agriculture to ensure our requirements were consistent with existing state and federal requirements. The Department of Agriculture assisted SDDENR by sending emails and providing contact information to hundreds of South Dakota's pesticide applicators. SDDENR invited these applicators to review the permit and provide input prior to formally offering the permit for public comment. This informal comment period provided SDDENR with excellent feedback on the best approach for moving forward with the permit. Once SDDENR had a final draft prepared, these same applicators were invited to review and provide formal comments on the general permit. In addition, SDDENR provided notice in every daily paper in South Dakota, collaborated on articles for trade publications, and presented information to hundreds of people across the state. All of this outreach was intended to work with South Dakota's applicators to craft a permit that made sense for South Dakota.

As part of our authority to issue these types of permits, the federal government requires SDDENR have the ability to enforce the conditions of these permits and assess penalties. SDDENR has been granted authority by the Legislature to issue fines up to \$10,000 per day per violation. SDDENR does believe it is important to make permittees aware of their liability under these permits. Therefore, the provisions about fines and other enforcement language will be included in the final version of the permit.

However, SDDENR does have enforcement discretion and fines are only one tool we have available to us to ensure compliance. Fines are used as a last resort or in extreme cases. When a violation occurs, SDDENR determines what action to take. We consider if there was damage to human health or the environment or negligence on the part of the permittee. In addition, we consider any steps that have been taken to mitigate the impacts of the violation. Since this general permit is very new and unfamiliar to many, SDDENR will focus on compliance assistance and training to address minor violations of this permit.

The South Dakota Aviation Association (SDAA) submitted the following comments:

1. **Discrimination**

SDAA is questioning why aerial pest control as an application method is singled out for a cumulative thresholds (5.2)? Wouldn't it be fair if all application methods (ground irrigation, etc.) had the same thresholds? If not, why don't all other "activities covered" (2.1) have cumulative thresholds? Can aerial applications have a per application threshold like the other "activities covered"? Nearly all aerial applications in South Dakota are to agricultural lands "without water present at the time of applications" rather than to the "waters".

Aerial applications are typically used for larger or more inaccessible areas. The method of applying the pesticide is inherently different. As a result, SDDENR believes it is important to evaluate this method separately from ground applications. This is the reason aerial applications were listed as a separate and distinct application method under the permit.

When proposing the thresholds listed in the general permit, SDDENR did consider how best to address this issue. Ultimately, SDDENR proposed thresholds that matched those initially proposed by the US Environmental Protection Agency in their draft permit. SDDENR believes this offers a more consistent approach for applicators that work in different states or on reservations in South Dakota. SDDENR did consider modifying the proposed cumulative threshold to a per application threshold. However, this resulted in a significantly smaller annual threshold. In SDDENR's conversations with the President of the SDAA, Bryan Hauschild, Mr. Hauschild felt those changes would not be in the best interest of aerial applicators. Therefore, SDDENR is not proposing any further changes to the thresholds

Fact: Ground applications contribute to approximately 75 percent of drift complaints in South Dakota, leaving only 25 percent to aerial application. We hear these statistics each year in our required currency training from the Department of Agriculture. Aerial application is **not** more likely to have “pesticide ... unavoidably discharged into waters” as the draft suggest (2.1, 3).

Pesticide drift and other indirect releases of pesticides into water bodies, such as storm water runoff from a field, are nonpoint sources of pollution. As such, the federal Clean Water Act does not require a permit for these activities. The general permit does not cover discharges that, by law, are not required to obtain permit coverage. Therefore, this general permit does not address, authorize, or otherwise regulate pesticide drift. Any drift complaint, whether it was due to aerial or ground applications, will continue to be handled by the SD Department of Agriculture.

South Dakota's definition of waters of the state is listed in statute at the South Dakota Codified Laws at Section 34A-2-2. The definition includes, in part, streams, lakes, ponds, waterways, irrigation and drainage systems, and other bodies or accumulations of water. SDDENR believes it would be difficult for an aerial applicator to determine if “waters of the state” exist from the air. It may also be difficult for aerial applicators to determine if water is present during an application. In these cases, it would be unavoidable that some of the pesticides will be deposited into water to effectively target the pests.

If SDDENR removes aerial application from coverage under the general permit, aerial applicators would be required to obtain an individual permit. Any discharge of pesticides without a permit could be subject to enforcement and possible penalties. It is therefore, in the best interest of applicators for SDDENR to provide coverage under a general permit to avoid liability for unpermitted discharges and unnecessary delays for individual permits.

2. **Categories**

The “Activities Covered” (2.1) is confusing because you have aerial application categorized with mosquito and other flying insects, weed and algae, ditch and stream bank, and declared pest emergency. We can see how aerial application would be in a category with like forms of application such as ground or irrigation application but not in a common category with targeted pest as are the others.

When developing this general permit, SDDENR determined the five categories included in the general permit would best encompass the majority of pesticide applications that would result in point source discharges to waters of the state. These uses are similar to the uses addressed by EPA’s 2006 rule (which has now been vacated). However, SDDENR also considered how best to develop this permit to meet the types of pesticide applications typically seen in South Dakota. Ultimately, SDDENR proposed the approach outlined in the general permit. However, SDDENR did not offer much explanation for the approach used. In response to the comment provided by the SD Aviation Association, SDDENR determined it would be best to provide more details on the department’s rationale for the uses detailed in the general permit.

Mosquitoes and Other Flying Insects:

There are over 2,500 different species of mosquitoes throughout the world, with approximately 150-200 species occurring in the United States. Mosquitoes can be a source of annoyance in work and leisure activities and a factor in decreased agricultural productivity (e.g., animal weight loss/death and decreased milk production). However, the primary concern with mosquitoes is the spread of disease such as malaria, encephalitis, and West Nile Virus. Therefore, control of mosquitoes is an important public health issue.

Numerous strategies exist to reduce the impact of mosquitoes. A comprehensive approach using a variety of controls is necessary for any mosquito control program. It is important to note that all mosquitoes must have water in which to complete their life cycle. Therefore, a key component to any control strategy involves targeting mosquitoes in and above water bodies.

To effectively control mosquitoes in these circumstances, it is necessary to place pesticides in or over water bodies. Other flying insects are targeted in a similar manner. This practice results in the discharge of pesticides into waters of the state, triggering the need for a permit based on the Sixth Circuit Court’s ruling. There are several methods for managing mosquitoes and other flying insects. To control these insects early in the life cycle, larvicides such as briquettes or tablets are placed into water bodies. If it becomes necessary to control adult mosquito populations, adulticides are often applied by aircraft or with truck-mounted sprayers.

While each of these methods of control is unique, the common practice is to control insects that spend much of their life cycle in or near water. Therefore, EPA proposed to consider this type of control as one use. SDDENR adopted a similar approach in its draft permit.

Weed and Algae Control:

Aquatic weeds and algae can negatively affect water systems and human health and can have negative economic impacts. Aquatic weeds and algae can prevent the growth of certain aquatic species and cause unbalanced aquatic populations and species development. The presence of weeds or algae in irrigation waters can increase costs or reduce crop production. The recreational value of a water body can be reduced by algae or weeds. In some cases, aquatic weeds have been declared an invasive species, and the spread of the weed must be managed and controlled. Some types of algae have been identified as a human health concern.

Therefore, it often becomes necessary to control weeds and algae. In many cases, it is necessary to target the pest species in the water, which would result in a discharge of pesticides into waters of the state, triggering the need for a permit under the Sixth Circuit Court's decision.

South Dakota's general permit applies to pesticide discharges associated with management of weed and algae into waters of the state. This includes, but is not limited to, lakes, ponds, rivers, streams, irrigation canals, and drainage systems. In addition to these aquatic pests, the general permit also applies to the application of pesticides to control other types of weeds, if pesticides may be unavoidably discharged into waters of the state.

Weed and algae control is a unique and separate method of controlling pests. Both the methods of control and the pests targeted are different from the other uses detailed in the general permit, warranting a separate use category. SDDENR chose to adopt an approach similar to that outlined by EPA. However, as noted above, this is not specific to just aquatic pests or aquatic pesticides. The control of pests not otherwise identified in the general permit is covered by this use category.

Ditch and Stream Bank Control:

South Dakota's statutes protect drainage systems as waters of the state. This can include ditches and other dry drainages, as they do accumulate, store, and convey water to larger water bodies, such as streams and lakes, during certain times of the year. When water is present, livestock, wildlife, migratory birds, and other animals will often use the water. Therefore, South Dakota provides a level of protection to these drainage systems.

Weeds or other pests can be present in the ditches or along the bank of a stream. While the targeted pests are not necessarily aquatic pests, pesticides may still be unavoidably discharged into waters of the state as a consequence of these pest control activities. Therefore, SDDENR believes it is important to include this type of pesticide application in the general permit.

Declared Pest Emergency Situation:

At times, it may be necessary for a public entity to declare a pest emergency. This could be in response to an insect infestation, flooding concerns, or other economically significant events. In these cases, it may be necessary for public entities and applicators

to act quickly to respond to the situation, especially in light of human health concerns related to the emergency.

SDDENR does not want the requirement to obtain a Clean Water Act permit to be a burden or delay in responding to a declared pest emergency. Therefore, SDDENR has included this category of pesticide application in its general permit. Providing coverage under the general permit for the discharge of pesticides into waters of the state during an emergency will ensure the Clean Water Act requirements are clearly outlined ahead of time and will not result in unnecessary delays.

Aerial Pest Control:

Most of the pesticide applications outlined above deal with either a common pest and/or a common application method. Three of the uses – control of flying insects, control of algae and weeds, and control of weeds in ditches and near streams – all have a high potential for pesticides to be placed into waters of the state. In fact, in most cases, the pesticides will be intentionally applied to waters of the state.

Aerial application is a little different. Aerial application includes the application of a variety of pesticides targeting a variety of pests, not just pests in water. Therefore, SDDENR determined it needed separate consideration. First of all, the application method is different than most of the applications outlined above, as the pesticides are exclusively applied by aircraft. Second, it may be difficult to avoid waters that are considered by statute to be “waters of the state.” In this case, SDDENR felt aerial applicators may be vulnerable to third party lawsuits and decided to include this use under the general permit.

Aerial applicators have stated they have the technology to avoid water bodies. SDDENR believes this to be true when the water bodies are easily identified from the air, such as the Big Sioux River or the Missouri River. However, smaller water bodies, such as drainage ways, prairie potholes, etc., may be more difficult to identify and avoid. In some cases, these areas may be actively farmed. Another issue would be in heavily forested areas. It may not be possible for an aerial applicator to see the exact location of water bodies beneath the forest canopy.

EPA and the courts have stated that if pesticides from any type of aerial application are directly deposited into or over waters of the state, a permit is required. Therefore, SDDENR has included this use under the general permit. There is no way for SDDENR to exempt aerial applications from permit coverage as things currently stand. The only other option would be to obtain an individual permit, which could result in substantial delays for the applicators and the landowners.

If an aerial applicator does not apply pesticides into any water body that would meet the statutory definition of waters of the state, the permit is not needed. If the applicator does apply pesticides to waters of the state but water is not present at the time of the application, the pesticide application would not count towards the thresholds listed in the

permit. The general permit is simply intended to cover the aerial application of pesticides into or over waters of the state.

3. **Communication**

SDAA offered unsolicited input from the aerial application industry near the middle of January 2010. Were other stake holders allowed input and not aerial applications? We were not contacted by your office about the web cast either. In the January 18, 2011 letter from SD DENR, it states, **“For more information, including ... frequently asked questions and answers, and PowerPoint slides about the permit, please visit our website ...”** The FAQ’s and PowerPoint became available 2-16-11. We would like to see the comment period extended because of that fact.

On January 9, 2009, the Sixth Circuit Court ruled in the lawsuit National Cotton Council of America v. EPA, 553 F.3d 927 (6th Cir., 2009). The Court determined that “chemical pesticides” with residuals and “biological pesticides” meet the definition of “pollutant.” The intentional application of these “pollutants” to water bodies was considered a point source of pollution. Therefore, the Sixth Circuit Court ruled that a Clean Water Act permit was required. EPA requested a delay in implementing these permitting requirements, which the court granted on June 8, 2009. As a result, the court said a permit was needed by April 9, 2011.

Since that time, EPA has been working to develop a general permit, which EPA intended to be a template or guidance for states to use. On June 2, 2010, EPA offered a draft of its pesticide general permit for public review and comment. To date, EPA has not finalized its general permit.

Although EPA has not finalized its general permit, SDDENR began moving forward to ensure applicators in South Dakota would have a permit available prior to April 9, 2011. Unfortunately, the delay in issuing the national permit has left states with little time to develop their own general permit.

Since the Sixth Circuit Court’s decision, SDDENR has received questions and input about the permitting issue. However, SDDENR did not formally seek input until our draft general permit was ready for review on December 1, 2010. SDDENR believed we needed to have a draft permit available for review to better facilitate a discussion about the requirements. To that end, SDDENR held a public meeting on December 1, 2010, over the state’s digital videoconference network. During the meeting, SDDENR explained the proposed draft and accepted questions and comments from the public. SDDENR also placed a draft of the permit on its website at that time and invited feedback.

During this informal comment period, SDDENR received a number of good questions, comments, and feedback. As a result, SDDENR made changes to the general permit and offered it for formal public comment on January 21, 2011.

There are a large number of individual applicators, private entities, and public agencies potentially impacted by the provisions of the permit. SDDENR made every effort to solicit

input and notify people of the availability of the draft permit. In addition, since December 1, 2010, SDDENR has provided additional presentations and attended meetings with a wide variety of applications and groups in an effort to make the public aware of the proposed general permit. Unfortunately, due to the large number of potential permittees and the relatively short time available to develop this permit, SDDENR was not able to personally solicit input from every agency, entity, or individual impacted.

SDDENR did not extend the comment period on the general permit, as the South Dakota Aviation Association requested. The original comment period ended on January 20, 2010. Under the Administrative Rules of South Dakota, Section 74:52:05:19, SDDENR must notify all commenters of its final permit decision and allow 30 days to contest the issuance of the permit. SDDENR needed time to carefully consider any comments received. There was not adequate time to extend the comment period, respond to comments, and issue a final permit decision prior to the April 9, 2011, deadline. Therefore, SDDENR closed the comment period on January 20, 2011, as originally planned.

4. **Interpretation**

SDAA believes this draft, as written, will create misinterpretations of the permit. This will increase our legal vulnerability to anti-pesticide groups and 3rd party lawsuits. If the applicator is given an order to cease and desist while a legal challenge evolves, it would put them out of business regardless of fault.

The South Dakota Aviation Association did not provide any specific details on which aspects of the general permit might create misinterpretations. SDDENR does acknowledge there is a potential for citizen lawsuits for violations of this permit. However, the federal Clean Water Act and South Dakota statutes give SDDENR the primary authority to act on violations of this general permit. A citizen group or other third party can not pursue a lawsuit under this general permit without first notifying SDDENR of their intent to file a suit and providing the state with the opportunity to investigate, and if necessary, act on any violations. SDDENR has designed this permit with a goal of allowing pesticide applicators to continue applying pesticides in South Dakota and protect applicators under the Clean Water Act.

Without this general permit, pesticide applicators are at a much greater risk of lawsuits from third party groups and SDDENR would be unable to provide protection to the applicators.

5. **“Waters” Fine Line**

SDAA would appreciate a fine line designation between water standing on an agricultural field and “waters of the state” or “water present at the time of application.” If a rain wet agricultural field is not “waters of the state” or “water present at the time of application” then we have little to fear from the Clean Water Act and requirements of the NPDES permit. But if interpreted as such, it will dramatically increase our record keeping requirements. We ask that you add a link to your site or provide SDAA with maps or other information showing these “waters” so we can look at them before the application

begins. It is not a welcome sight to be in a loaded aircraft and get to the application site and find out you cannot make the application. If there are GIS maps (shape files) available, many of us can incorporate those into our onboard GPS systems and have the “waters” show up on our moving maps, allowing us to avoid them. They could also be incorporated into our mapping software so when we print an application map it will show up on there.

*SDDENR would like to first provide a clarification in response to this comment. This permit does **not** prevent the application of pesticides to waters of the state. In fact, the Pesticide General Permit authorizes a pesticide applicator to discharge pesticides into waters of the state of South Dakota, provided the applicator complies with the conditions and requirements set forth in the permit.*

There are two issues in this comment that SDDENR wishes to respond to and clarify. First, the definition of “waters of the state.” South Dakota has adopted a legal definition of “water of the state” in both statute and rule. The definition of waters of the state is found in South Dakota Codified Law at 34A-2-2 and in the Administrative Rules of South Dakota, Section 74:52:01:01 (54). Based on these statutes and rules, the following definition was included in the Pesticide General Permit:

*“**Waters of the state**” all waters within the jurisdiction of this state, including all streams, lakes, ponds, impounding reservoirs, marshes, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private, situated wholly or partly within or bordering upon the state, but not waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA other than cooling ponds as defined in 40 C.F.R. § 423.11(m) (July 1, 1991).*

While this definition seems very broad, SDDENR has been consistently applying this definition in our implementation of the state’s water quality programs. If we have any question about the presence of “waters of the state,” SDDENR relies on the National Wetland Inventory maps developed the U.S. Fish and Wildlife Service. SDDENR will make the National Wetland Inventory GIS shapefile map of South Dakota available for download to assist in determining if an area meets the definition of “waters of the state”.

The second issue involves the presence of water in areas that are waters of the state. If something meets the definition of waters of the state, the next “test” is whether water is actually present. Oftentimes, drainage systems, dry draws, prairie potholes, etc. do not contain water at all times. While the permit covers the discharge of pesticides into all waters of the state in South Dakota, the thresholds and other conditions of the permit only apply if water is present at the time of the application. If pesticides are applied into waters of the state AND water is present, the permittee is required to record the surface acres or linear miles to determine if the thresholds have been exceeded.

6. **Priorities**

In aerial application, flight safety is a priority. We prioritize these safety issues in this order:

1. First and foremost, the health of the pilot is paramount. Adding the NPDES permit requirements to an already heavily work-loaded environment is a dangerous proposition. Each regulation added to the pilot's workload increases the distraction from the basic flight skills and increases the risk of accidents. It also makes for shorter sleep periods that the pilots need to retain his/her alertness for the following day.
2. Second is the airworthiness of the aircraft. Many times to prepare the aircraft for the following days work can take an hour or two after the pilot has already flown a long day during the peak application season.
3. Third is the required Department of Agriculture paperwork for that day's work. This can take one to two hours to complete as well.
4. Finally, to prepare a game plan for the following day's workload by checking weather forecasts and organizing those maps that will work best for that days' weather, and ensure you have enough product on hand for the following day. Also, you will have customers who are expecting return phone calls.

If you are an owner operator you are dealing with all of these issues without the aid of an employee. More paperwork means less time for the owner operator to be able to apply products in an efficient manner. In the last three years, we have had the added task of looking out for unmarked MET towers which are being built at a rapid pace and are major aviation safety flight hazard.

Our point is, at some point the operator or pilot has to give up doing one of these operations to ensure the safety of the flight.

SDDENR understands the challenges and level of regulation involved with safe pesticide application. As noted above, we have no other option but to issue a permit at this time. Throughout the development of the permit, SDDENR made every effort to ensure consistency with existing pesticide regulations, while still meeting our requirements for issuing an effective NPDES permit. Much of the required recordkeeping can be incorporated with existing state or federal requirements.

United States Department of the Interior – Fish and Wildlife Service submitted the following comments:

1. In section 3.1, "General Technology-Based Effluent Limits," we recommend that SDDENR, the South Dakota Department of Game, Fish and Parks (SDDGFP), and the U.S. Fish and Wildlife Service (Service) coordinate to include a general permit condition to evaluate whether State or Federal natural resources of concern may be unintentionally exposed as a result of pesticide application. Natural trust resources of concern would include State and/or federally listed species of concern, other rare non-listed species, and key habitats. The South Dakota Natural Heritage Program was developed by the

SDDGFP in coordination with the Service and includes a listing of at-risk species of concern that are globally or nationally most at-risk of extinction and which occur in South Dakota. Applicators could be directed to check an online list of federally listed species by county (<http://www.fws.gov/southdakotafield> office) or other online resources. Contact information for the Service's South Dakota Field Office and the SDGFP's Wildlife Diversity Program could also be provided for the applicator to obtain more detailed information on whether species of concern are within the application area.

SDDENR will provide a link to this information on its website prior to the effective date of the general permit.

2. In section 5.4, "Adverse Incident Reporting," we request that the SDDENR's or the South Dakota Department of Agriculture's notification of a suspected non-target pesticide die-off results in prompt notification to the Service's South Dakota Ecological Services Field Office. We can be contacted in office at (605) 224-8693, Extension 232, or by mobile telephone at (605) 222-2994. Notification should also include State and Federal law enforcement.

SDDENR will also include this information on its website.

Mike Larson with Larson Helicopters out of Perham, MN submitted the following questions:

In regards to the Permit we must obtain for applying pesticides to and near state waters. I think the responsibility[s] for the reporting should fall in the hands of the person or public entities that hire the applicator to apply pesticides since they are the ones that deem it necessary [sic] to be sprayed, and are the ones that would be the closest to the waters or land to see the effects of the application. Records from the applicator for the application would be sent to the person or entity that hired the application. We as applicators already do our part for reporting with our application records that we keep on file for the Department of Ag.

As Mr. Larson notes, applicators are already charged with the primary responsibility for compliance, recordkeeping, and reporting under state and federal law. SDDENR gave a great deal of consideration to how best to craft this permit and who to actually permit. Ultimately, SDDENR believed it provided the most consistent approach to regulate the applicators.

FINAL PERMIT DECISION

SDDENR will make the wetlands shapefile from the National Wetlands Inventory available from SDDENR's webpage. In addition, SDDENR will also provide links to information regarding the presence of endangered species and contact information for the US Fish and Wildlife Service on its webpage.

On March 6, 2011, EPA requested the U.S. Court of Appeals provide an extension to the permitting deadline to allow more time for pesticide operators to obtain permits for pesticide discharges into U.S. waters. EPA requested the deadline be extended from April 9, 2011, to

October 31, 2011. During the period while the court is considering the extension request, EPA has stated permits for pesticide applications will not be required under the Clean Water Act.

SDDENR has completed the process to issue a general permit for the discharge of pollutants from a point source associated with pesticide applications. The court may deny EPA's request, at which point, the state would be required to issue a permit by the original April 9, 2011, deadline.

Therefore, with this addendum to the Statement of Basis and response to comments, SDDENR is notifying all commenters, potential permittees, and the general public of its final decision to issue a general permit for the discharge of pollutants from a point source associated with pesticide applications by the deadline that is ultimately set by the court. If the court denies EPA's request for an extension, the permit will be promptly issued with an effective date of April 9, 2011.

If the U.S. Court of Appeals grants the request for an extension, the effective date of South Dakota's permit will coincide with the new date issued by the court. Although the permit is final and ready for issuance, SDDENR will hold the terms and conditions in abeyance until such time as the Court of Appeals sets a date for compliance.

In addition to the uncertainty with regard to the deadline for obtaining a permit, the United States Congress is also considering legislation to address the issue of NPDES permits for pesticide applications. This legislation, if passed, may alter the need for a permit. If Congress passes legislation stating NPDES permits are no longer needed, SDDENR intends to revoke the general permit and eliminate any permitting requirements for discharges to waters of the state resulting from the application of pesticides.

PERMIT EXPIRATION

A five-year permit is recommended.

PERMIT CONTACT

Any questions pertaining to this response to comments or the pesticide general permit can be directed to Jonathan Hill, Natural Resources Project Engineer for the Surface Water Quality Program, at (605) 773-3351.

March 10, 2011

STATEMENT OF BASIS

Permit Type: General Surface Water Discharge Permit for Point source application of pesticides to waters of the state in South Dakota – New

Permit Number: SDGA10000

This document is intended to explain the basis for the requirements contained in the proposed South Dakota General Permit for Surface Water Discharges Associated with the application of pesticides into waters of the state (“General Permit”). This document provides guidance to aid in complying with the permit regulations. This guidance is not a substitute for reading the proposed General Permit and understanding its requirements.

BACKGROUND

This General Permit is being proposed to authorize point source discharges to waters of the state from the application of pesticides as defined in Part 2 of the proposed General Permit and in section “Coverage under the General Permit” later in this statement of basis. The Clean Water Act (CWA) requires that any discharge of a pollutant into waters of the United States must be covered by a National Pollutant Discharge Elimination System (NPDES) permit. On December 30, 1993, the United States Environmental Protection Agency delegated the permitting authority under the NPDES program to the state of South Dakota. The South Dakota Department of Environment and Natural Resources (SDDENR) refers to its NPDES permits as Surface Water Discharge permits. Under these authorities, SDDENR is proposing the issuance of a Surface Water Discharge General Permit for the discharge of pesticides from point sources into waters of the state of South Dakota.

This General Permit is available to applicators of pesticides and covers multiple activities within the specific category of point source application of pesticides to waters of the state.

History of Pesticide Application Regulation

In the more than 30 years the Environmental Protection Agency (EPA) has administered the CWA, EPA has never issued an NPDES permit for the application of a pesticide in or over waters of the United States. Instead, EPA has been regulating these types of applications through the Federal Insecticide, Fungicide, and Rodenticide Act (“FIFRA”).

EPA regulates the sale, distribution, and use of pesticides in the U.S. under the statutory framework of FIFRA to ensure that when used in conformance with FIFRA labeling directions, pesticides will not pose unreasonable risks to human health and the environment. All new pesticides must be registered by EPA under FIFRA. EPA assesses a variety of potential human health and environmental effects associated with use of the product. Under FIFRA, EPA is required to consider the effects of pesticides on the environment by determining, among other things, whether a pesticide “will perform its intended function without unreasonable adverse effects on the environment,” and whether “when used in accordance with widespread and commonly recognized practice [the pesticide] will not generally cause unreasonable adverse effects on the environment.” In performing this analysis, EPA examines the ingredients of a

pesticide, the intended type of application site and directions for use, and supporting scientific studies for human health and environmental effects and exposures. The applicant for registration of the pesticide must provide specific data from tests done according to EPA guidelines.

When EPA approves a pesticide for a particular use, it imposes restrictions through labeling requirements governing such use. The restrictions are intended to ensure the pesticide serves an intended purpose and avoids unreasonable adverse effects. It is illegal under Section 12(a)(2)(G) of FIFRA to use a registered pesticide in a manner inconsistent with its labeling. States have primary authority under FIFRA to enforce “use” violations, but both the States and EPA have ample authority to prosecute pesticide misuse when it occurs.

Court Decisions leading to the CWA regulation concerning Pesticide Applications

Over the past ten years, several courts addressed the question of whether the CWA requires NPDES permits for pesticide applications. These cases resulted in confusion about the applicability of the CWA to pesticides applied to waters of the United States. The U.S. Court of Appeals for the Ninth Circuit held that an applicator of herbicides was required to obtain an NPDES permit (Headwaters, Inc. v. Talent Irrigation District, 2001). The Talent decision caused considerable confusion among public health authorities, natural resource managers, and others who rely on pesticides regarding their potential obligation to obtain a Surface Water Discharge permit when applying a pesticide consistent with FIFRA.

In 2002, the Ninth Circuit determined the application of pesticides to control Douglas Fir Tussock Moths in National Forest lands required an NPDES permit (League of Wilderness Defenders et al. v. Forsgren, 2002). The court in Forsgren did not analyze the question of whether the pesticides applied were pollutants; it assumed the parties agreed they were. In fact, the U.S. expressly reserved its arguments on that issue in its brief to the District Court. However, the court did analyze the question of whether the aerial application of the pesticide constituted a point source discharge and concluded that it did.

Since the Talent and Forsgren decisions, the states of California, Nevada, Oregon, and Washington, all of which are within the jurisdiction of the Ninth Circuit Court of Appeals, have issued NPDES permits for the application of certain types of pesticides (e.g., products to control aquatic weeds and algae and products to control mosquito larvae). Other states have continued the longstanding practice of neither requiring nor issuing permits to people who apply pesticides to waters of the United States.

The Second Circuit Court of Appeals also addressed the applicability of the NPDES permit requirements to pesticide applications. The court held that the Town of Amherst was not required to obtain an NPDES permit to spray mosquitocides over waters of the state (Altman v. Town of Amherst, 2002). In its opinion, the Second Circuit stated that “[u]ntil the EPA articulates a clear interpretation of current law – among other things, whether properly used pesticides released into or over water of the U.S. can trigger the requirement for NPDES permits – the question of whether properly used pesticides can become pollutants that violate the CWA will remain open.”

In Fairhurst v. Hagener (2005), the Ninth Circuit again addressed the CWA’s applicability to pesticide applications. The court held that pesticides applied directly to a lake in order to

eliminate non-native fish species, where there are no residues or unintended effects, are not “pollutants” under the CWA because they are not chemical wastes.

2006 EPA Rulemaking Excluding Pesticides from the Surface Water Discharge Permitting Program

To help clarify the confusion over the applicability of NPDES permitting requirements to pesticide use, EPA issued a final rule on November 27, 2006, clarifying two specific circumstances in which an NPDES permit was not required to apply pesticides to or around water. They were:

- 1) The application of pesticides directly to water to control pests; and
- 2) The application of pesticides to control pests that are present over, including near, water where a portion of the pesticides will unavoidably be deposited to the water to target the pests.

The rule also stated that in both instances, the application must be consistent with the relevant requirements of the Federal Insecticide, Fungicide and Rodenticide Act. The rule became effective on January 26, 2007.

Legal Challenges to the 2006 NPDES Pesticides Rule and Court Decision

On January 19, 2007, EPA received petitions for review of its 2006 NPDES Pesticides Rule from environmental and industry groups. Petitions were filed in eleven circuit courts. The case, National Cotton Council of America, et al., v. EPA, was assigned to the Sixth Circuit Court of Appeals.

On January 9, 2009, the Sixth Circuit vacated EPA’s 2006 NPDES Pesticides Rule (National Cotton Council of America, et al. v. EPA, 2009). The Court held that the CWA unambiguously includes biological pesticides and chemical pesticides with residues within its definition of “pollutant.” Therefore, chemical pesticide excess and residues are pollutants and are required to obtain an NPDES permit if they are discharged from a point source into waters of the United States. Biological pesticides, on the other hand, are always considered a pollutant under the CWA, regardless of whether the application results in residues or not. Therefore, the application of biological pesticides to waters of the United States requires an NPDES permit for all discharges from a point source.

In response to this decision, on April 9, 2009, EPA requested a two-year stay of the mandate to provide time to develop a general permit, to assist NPDES-authorized states to develop their own permits, and to provide outreach and education to the regulated community. On June 8, 2009, the Sixth Circuit granted EPA the two-year stay of the mandate.

As a result of the Court’s decision to vacate the 2006 NPDES Pesticides Rule, NPDES permits will be required for discharges of chemical pesticides that leave a residue and of biological pesticides to waters of the United States by April 9, 2011. As an NPDES-authorized state, the state of South Dakota is required to issue these permits. Therefore, SDDENR is proposing this General Permit to cover certain discharges resulting from pesticide applications. SDDENR may issue additional General Permits or individual permits if needed.

On November 2, 2009, industry petitioners of the Sixth Circuit Case petitioned the Supreme Court to review the Sixth Circuit's decision. On February 22, 2010, the Supreme Court denied the request to hear industry's petition, leaving the April 9, 2011 effective date unchanged.

ISSUANCE OF A GENERAL PERMIT

Due to the nature of the scheduling of these pesticide application activities, obtaining an individual Surface Water Discharge permits would significantly impact the timing of a pesticide activity. The general permit regulations within the Administrative Rules of South Dakota (ARSD) §74:52:02:46 provide for the issuance of general permits. Therefore, SDDENR is proposing to issue a general permit for these pesticide application activities in an effort to:

1. Facilitate the scheduling of these activities by reducing the administrative delays in their authorization;
2. Establish uniform criteria for management practices and effluent limits for discharges from these activities; and
3. Promote consistent permitting with respect to these activities.

SCOPE OF PERMIT

Chemical Pesticides

As stated above, the Sixth Circuit Court 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. For purposes of this permit, SDDENR is following EPA guidance by assuming that all chemical pesticides will leave a residue once the product has performed its intended purpose. SDDENR is adopting the following guidance (as developed by EPA) with respect to the application of chemical pesticides.

1. ***The application of a chemical pesticide over waters of the state to control pests located over the water:*** Any amount of the pesticide that falls into waters of the state is "excess" pesticide and would require a Surface Water Discharge permit. SDDENR expects that some portion of every application of a pesticide made over waters of the state will fall directly into the waters, and therefore assumes such applications will trigger the need for a Surface Water Discharge permit.
2. ***The application of a chemical pesticide into waters of the state to control a pest located in waters of the state:*** Once the pesticide no longer provides any pesticidal benefit, any amount of the pesticide remaining in the water is a "residual" and would require a Surface Water Discharge permit. SDDENR expects that some portion of every application of a pesticide made into waters of the state will leave a residual in the water and therefore assumes every application will trigger the need for a Surface Water Discharge permit.

Biological Pesticides

The Sixth Circuit Court found that, unlike chemical pesticides, the biological pesticide itself is considered a pollutant, regardless of any residue and excess quantities of a biological pesticide. Therefore, the application of any biological pesticide into waters of the state will trigger the need for a Surface Water Discharge permit.

Obtaining Authorization to Discharge Under the Proposed General Permit

To obtain authorization under the permit, the applicator's pesticide activities must fall in one of the five categories listed below in the subsection labeled "Pesticide Activities Covered." Pesticide applicators discharging a pollutant from a point source associated with the application of a pesticide will automatically be covered under the proposed General Permit upon the effective date of the General Permit. These applicators are subject to all applicable requirements contained within the General Permit.

Coverage under this General Permit is required if water is present at the time and location of the pesticide application. If water is not present at the time and location of the pesticide application, a Surface Water Discharge permit is not required and the application does not contribute to any annual reporting thresholds in this proposed General Permit. Compliance with this provision must be documented by recording the presence or absence of water at the date, time, and location of application.

Pesticide Activities Covered

SDDENR is proposing to include the following pesticide activities in the General Permit. SDDENR believes this encompasses the majority of pesticide applications that would result in point source discharges to waters of the state.

1. **Mosquito and Other Flying Insect Pest Control.** This use category includes the application, by any means, of chemical and biological insecticides and larvicides into or over waters of the state to control insects that breed or live in, over, or near water. Flying insect pests in this use category include, but are not limited to, mosquitoes and black flies.
2. **Weed and Algae Control.** This use category includes the application, by any means, of contact or systemic herbicides to control vegetation and algae in water and at water's edge, including irrigation ditches and/or irrigation canals. Applications of this nature may be single spot treatments of infestations or staged large scale treatments intended to clear several acres of waterway. Treatments may be singular or occur several times per year.
3. **Aerial Pest Control.** This use category is for the aerial application of a pesticide to control the population of a pest (e.g., insect or pathogen) where to target the pests effectively, a portion of pesticide will be unavoidably discharged into waters of the state. These pests are not necessarily aquatic (e.g., airborne non-aquatic insects) but are detrimental to industry, the environment, and public health. **Note:** If mosquito adulticides are applied aerially, the application would be covered under the "Mosquito and Other Flying Insect Pest Control" use category.

4. **Ditch and Stream Bank Pest Control.** This use category includes the management of a diverse pest spectrum where pesticides are deposited into ditch or along stream banks to target the pests effectively and may result in a discharge to waters of the state.
5. **Declared Pest Emergency Situation.** This use category is for a publicly declared emergency by a federal agency, state, or local government.

These use categories do not directly mirror Pesticide General Permit proposed by EPA. The use categories for South Dakota's Pesticide General Permit were chosen because they more accurately define the activities found in South Dakota and ensure a consistent and streamlined approach to permitting these activities.

1. SDDENR chose to include a category "Area-wide Pest Control" instead of simply "Forest Canopy Pest Control." Many applications of pesticides in the South Dakota are over large areas of land with water bodies that are not necessarily part of a forest canopy. If water is present during these area-wide applications, a permit is necessary. SDDENR did not want to limit or hinder this type of pesticide applications by requiring individual permits for each landowner. Therefore, this category is included in the proposed General Permit.
2. SDDENR chose to add "Declared pest Emergency Situation" to the use categories to ensure an applicator can be covered in the case of a publicly-declared pest emergency.
3. SDDENR did not include aquatic nuisance pest; see "Activities not covered" below for more details.

Activities Not Covered

An applicator is not eligible for coverage under the proposed General Permit for the activities listed below. An individual permit or alternative general permit would be required for any of the following discharges into waters of the state:

1. Discharges of a pesticide to waters of the state identified in the 303(d) list or Integrated Report as impaired for that pesticide or its degrades, unless a total maximum daily load has been established for the receiving waters and the total maximum daily load establishes a wasteload allocation for the discharge: The proposed General Permit allows SDDENR to deny coverage under the proposed General Permit or require an applicator covered under the proposed General Permit to apply for an individual permit.

Please Note: In some instances, the application of a pesticide to waters of the state can improve the overall quality of an impaired water body (e.g. the use of a pesticide to control algae growth that is depleting oxygen levels). SDDENR recognizes this use of pesticide is often necessary. However, the applicator must ensure the pesticide that is used in these cases will not further contribute to an impairment.

2. Management of invasive or other nuisance animals in water, including, but not limited to lakes, ponds, rivers, and streams: Aquatic nuisance animals in this activity include, but are not limited to fish, lampreys and mollusks. Aquatic nuisance pest control was not included in the proposed General Permit because this activity already requires individual approval by

The CWA specifically exempts irrigation return flows and agricultural storm water runoff from requiring Surface Water Discharge permits, even if they contain pesticides or pesticide residues. The proposed General Permit does not change in any way change this approach or require these activities to obtain permit coverage.

This permit does not cover terrestrial applications for the purpose of controlling pests on agricultural crops or forest floors. SDDENR does not anticipate these activities will result in a discharge of pollutants to waters of the state.

RECEIVING WATERS

Beneficial Uses

The South Dakota Surface Water Quality Standards designate beneficial uses for all waters of the state. These classifications designate the minimum quality at which the surface waters of the state are to be maintained and protected. All waterbodies in South Dakota have been assigned one or more of the following beneficial uses:

1. Domestic water supply waters;
2. Coldwater permanent fish life propagation waters;
3. Coldwater marginal fish life propagation waters;
4. Warmwater permanent fish life propagation waters;
5. Warmwater semipermanent fish life propagation waters;
6. Warmwater marginal fish life propagation waters;
7. Immersion recreation waters;
8. Limited contact recreation waters;
9. Fish and wildlife propagation, recreation, and stock watering waters;
10. Irrigation waters; and
11. Commerce and industry waters.

The proposed General Permit was developed to ensure these beneficial uses are maintained and protected.

Total Maximum Daily Load

A Total Maximum Daily Load (TMDL) is a calculation of the maximum amount of a pollutant a waterbody can receive and still meet water quality standards. TMDLs include wasteload allocations from point sources, load allocations from non-point sources, and natural background conditions. Wasteload allocations are defined as the portion of a water body's loading capacity allocated to point source dischargers. TMDLs are established at levels necessary to attain and maintain the state's surface water quality standards. TMDLs include seasonal variations and margins of safety to take into account any lack of knowledge about the relationship between the effluent limits and instream water quality.

TMDLs are developed on a pollutant- and waterbody-specific basis. In some instances, TMDLs may combine multiple pollutants into one set of TMDL documents. However, the specific TMDL wasteload and load allocations are pollutant-specific. States are responsible for establishing TMDLs, which EPA approves. Once approved by EPA, TMDLs are implemented through water quality management plans and through Surface Water Discharge permits.

The proposed General Permit is a Surface Water Discharge permit that requires best management practices to ensure the surface water quality standards are met and maintained. However, if SDDENR determines a specific site or application has the potential to cause or contribute to an impairment of the surface water quality standards, SDDENR can require the permittee to implement additional controls and/or obtain an individual discharge permit.

EFFLUENT LIMITS

Under the federal Clean Water Act, dischargers shall comply with both technology-based and water quality-based effluent limits. Where EPA has not yet issued a technology-based effluent limitation guideline, states are expected to determine the appropriate technology-based level of control based on Best Professional Judgment. The federal Clean Water Act allows states and EPA to meet the requirement for technology-based limits using non-numeric, or “narrative,” effluent limits in permits where appropriate. EPA has developed regulations allowing the use of narrative best management practices as effluent limits (40 CFR §122.44(k)). EPA has not yet developed specific technology-based effluent limits for pesticide applications. Therefore, the proposed General Permit includes non-numeric effluent limits based on best professional judgment, including best management practices, to ensure state and federal requirements are met.

The non-numeric effluent limits are expected to minimize environmental impacts by reducing the discharge of pesticides to waters of the state, thereby protecting the receiving waters and all applicable water quality standards. SDDENR believes if the permittee follows the effluent limits in the proposed General Permit, the beneficial uses of South Dakota’s waters will be maintained. Therefore, numeric water quality-based effluent limits have not been included in this proposed General Permit. However, if beneficial uses are impacted, SDDENR could reopen and modify the proposed General Permit or could require the permittee to obtain an individual permit or alternative General Permit. Violation of any of the effluent limits constitutes a violation of the permit.

The effluent limits in this proposed General Permit are expressed as specific pollution prevention requirements for minimizing the pollutant levels in the discharge. The combination of pollution prevention approaches and management practices required by these limits are the most environmentally sound way to control the discharge of pesticide pollutants to meet the effluent limits. Pollution prevention continues to be the cornerstone of the Surface Water Quality program.

Effective immediately and lasting through the life of the proposed General Permit, all permittees shall comply with the effluent limits below, which are based on best management practices to meet the South Dakota Surface Water Quality Standards and Best Professional Judgment (BPJ).

All permittees are expected to meet the following effluent limits to minimize the chance of a discharge of pesticides into waters of the state.

1. General Technology-Based Effluent Limits for all Pesticide Activities

These limits apply to all applications:

1. Permittees who apply pesticide as part of a declared pest emergency or have been certified for (1) aquatic pest control or for (2) public health pest control must prepare a Pesticide Discharge Management Plan (PDMP).
2. If an activity selected for managing pests will result in a discharge of pollutants to waters of the state, the permittee shall:
 - a. Assess environmental conditions prior to each pesticide application (e.g. temperature, precipitation, and wind speed in the treatment area) to identify if conditions are suitable for control activities; and
 - b. Evaluate the management options, considering impact to water quality, impact to non-target organisms, pest resistance, feasibility, and cost effectiveness.
3. If any of the following situations occur, the permittee shall review and, as necessary, revise the control measures to ensure that the situation is eliminated and will not be repeated in the future:
 - a. If pesticide application results in adverse impacts to water quality or non-target organisms, the permittee shall review and revise its application methods and control measures to reduce such impacts;
 - b. The permittee has an unauthorized release or discharge (e.g., spill, leak, or discharge not authorized by this or another surface water discharge permit);
 - c. An inspection or evaluation by EPA, SDDENR, or SDDA determines that modifications to the control measures are necessary to meet the non-numeric effluent limits in this General Permit, or
 - d. The permittee observes or is otherwise made aware of an adverse incident as a result of the normal treatment.
4. If the permittee determines that changes to the pesticide discharge management plan are necessary to eliminate any situation identified above, such changes shall be made before the next pesticide application that results in a discharge.

2. Technology-Based Effluent Limits for Mosquito and Other Flying Insect Pest Control

These limits apply to discharges to waters of the state from the application of pesticides for mosquito and other flying insect pest control as stated in Section 2.1 of the proposed General Permit.

Prior to the first pesticide application and at least once each year thereafter the permittee shall do the following:

- a. Determine densities of larval and adult populations in order to implement pest management controls for each treatment area;
- b. Develop a pest-specific control strategy based on developmental and behavioral considerations for each pest;
- c. Identify known and potential breeding sites for source reduction, larval control program, and habitat management; and,
- d. Analyze existing data to identify sources of nuisance insect production, including sites that have recurring pest problems.

3. Technology-Based Effluent Limits for Weed and Algae Control

These limits apply to discharges to waters of the state from the application of pesticides for weed and algae control as stated in Section 2.1 of the proposed General Permit.

- a. Prior to the first application and at least once each year thereafter the permittee must do the following:
 - i. Identify areas and characterize the extent of the pest problem; and
 - ii. Identity target weed and algae pests as necessary for pest control.
- b. If a pesticide selected to manage weeds or algae and application of the pesticide will result in a discharge to waters of the state, the permittee shall:
 - i. Inspect and evaluate the treatment area prior to application in order to implement BMPs and pest management controls; and,
 - ii. Inspect and evaluate the treatment area after each pesticide application to determine if impact on the environment or non-target organisms has occurred.

4. Technology-Based Effluent Limits for Aerial Pest Control

These limits apply to discharges to waters of the state from the application of pesticides for aerial pest control as stated in Section 2.1 of the proposed General Permit.

- a. Prior to the first application and at least once each year thereafter, the permittee shall do the following for each treatment area:
 - i. Identify areas with aquatic pest problems and characterize the extent of the problems in order to implement BMPs;
 - ii. Identify target aquatic pest as necessary for pest control; and
 - iii. Establish past or present pest densities which serve to determine pest management strategies.
- b. If a pesticide is selected for managing area-wide pests and application of the pesticide will result in a discharge to waters of the state, the permittee shall:

- i. Inspect and evaluate the treatment area prior to each application to properly implement pest management controls; and
- ii. Inspect and evaluate the treatment area after each pesticide application to determine effectiveness of the treatment and determine if the application adversely affected the environment or non-target organisms.

5. Technology-Based Effluent Limits for Ditch and Stream Bank Pest Control

These limits apply to discharges to waters of the state from the application of pesticides for ditch and stream bank pest control as stated in Section 2.1 of the proposed General Permit.

- a. Prior to the first application and at least once each year thereafter the permittee shall:
 - i. Establish target pest densities for each treatment area for implementing BMP's and pest management controls;
 - ii. Identify target pests to develop a pest-specific control strategy based on developmental and behavioral considerations for each pest; and
 - iii. Identify current distribution of the target pest and assess potential distribution in the absence of control measures.
- b. If a pesticide selected to manage ditch bank pests and application of the pesticide will result in a discharge to waters of the state, the permittee shall:
 - i. Inspect and evaluate the treatment area prior to each application to assess the treatment area and to properly implement BMPs and pest management controls;
 - ii. Assess and record environmental conditions to identify known and potential sites which support target pest development and are conducive for treatment activities;
 - iii. Use pesticides during the most susceptible developmental stage when possible.

6. Technology-Based Effluent Limits for Declared Emergency Situation

These limits apply to discharges from the application of pesticides for Declared Emergency Situations as defined in Section 2.1 of the proposed General Permit.

The problem is identified when a federal agency, the State of South Dakota, or local government has publicly declared an emergency situation requiring the application of a pesticide.

Once the public declaration has been made, the permittee shall:

- a. Take reasonable steps during the pesticide application to minimize the impact on the environment and non-target organisms by considering site restrictions, application timing, and application method; and,

- b. Inspect and evaluate the treatment area after each pesticide application to determine effectiveness of the treatment and determine if the application adversely effected the environment or non-target organisms; and

PESTICIDE DISCHARGE MANAGEMENT PLAN

The proposed General Permit requires certain applicators to prepare a Pesticide Discharge Management Plan (PDMP) to document the inspection, maintenance, monitoring, and corrective actions being used to comply with the effluent limits. All Pesticide Applicators who apply pesticide because of a declared pest emergency, or have been certified for either (1) aquatic pest control or for (2) public health pest must prepare a Pesticide Discharge Management Plan (PDMP) for each pesticide application that requires coverage under this proposed General Permit. One PDMP can be used for multiple applications under a single use category.

In general, Part 4.0 of the proposed General Permit requires that the following be documented in the PDMP: (1) pesticide discharge management team information; (2) pest management area description; (3) control measure description; (4) schedules and procedures pertaining to control measures used to comply with the effluent limits in Section 3.0 of the proposed General Permit (e.g., application rate and frequency, spill prevention, pesticide application equipment, pest surveillance, and assessing environmental conditions) and pertaining to other actions necessary to minimize discharges (e.g., spill response procedures, adverse incident response procedures, and pesticide monitoring schedules and procedures); and (5) documentation to support eligibility considerations under other federal and state laws. The PDMP must be kept up-to-date and modified whenever necessary to document any corrective actions as necessary to meet the effluent limits in this permit.

When required, a Pesticide Discharge Management Plan (PDMP) shall be prepared for discharges from all treatment areas covered under this proposed General Permit. One PDMP may cover one or more treatment areas for each use category. The PDMP is intended to document the evaluation and selection of control measures. The PDMP may reference procedures in other documents, such as a pre-existing integrated pest management (IPM) plan. If so, the permittee shall keep a copy of relevant portions of those documents with the PDMP.

The PDMP must include the following:

1. The name and title of the persons responsible for implementing the PDMP and their personnel responsibilities;
2. Pest Problem Description;
3. Pest Management Controls;
4. Schedules and Procedures (see below);
5. Pesticide Inspection and Evaluation Procedures (see below);
6. Best Management Practices; and
7. Any modifications to the Pesticide Discharge Management Plan.

The permittee shall identify and document the following schedules and procedures:

1. **Equipment Maintenance Schedules and Procedures.** The permittee shall develop and document procedures for maintaining the application equipment in proper operating condition, including calibrating, cleaning, and repairing the equipment. These procedures shall include schedules for completing the required maintenance, as well as employee training, where necessary.
2. **Handling Procedures.** The permittee shall develop and document procedures for proper handling and storage of pesticides to prevent or minimize the potential for discharges to waters of the state.
3. **Response Procedures.** The permittee shall identify and document the following procedures for preventing and responding to spills and leaks, and for responding to an adverse incident:
 - a. Detailed steps for responding to any incident, including steps to minimize and mitigate the adverse effects of discharges on water quality or non-target species;
 - b. Chain of command notification for any incident, including both internal and external contacts;
 - c. Name and telephone number for state contacts including SDDENR at (605) 773-3351, and the South Dakota Department of Agriculture (SDDA) at (605) 773-3375;
 - d. Name, location, and telephone of nearest emergency medical facility, the nearest hazardous chemical responder (including police and fire department), and the National Pesticide Telecommunications Network at (800) 858-7378.

The permittee shall document the following procedures in the PDMP:

- a. The procedures and methods for conducting both pre- and post-application inspection and evaluation of the treatment area;
- b. The person (or position) responsible for conducting treatment area inspections and evaluations; and
- c. Procedures for documenting any incidents of permit noncompliance.

Best Management Practices (BMP)

SDDENR is not requiring applicators perform regular sampling and monitoring, instead SDDENR is requiring applicators to use Best Management Practices. Just as there is variability in the pesticide applications described above, there is variability in the BMPs that can be used to meet the effluent limits. Therefore, SDDENR is not mandating the specific control measures applicators must implement to meet the limits. A given BMP may be acceptable and appropriate in some circumstances but not in others.

BMPs can be actions (including processes, procedures, schedules of activities, prohibitions on practices and other management practices), or structural or installed devices to prevent or reduce water pollution. The key is determining what practice is appropriate for each situation in order to

minimize the discharge of pollutants. In this proposed General Permit, applicators are required to implement site-specific control measures to meet these limits. Permittees must tailor these to their individual situations as well as improve upon them as necessary to meet permit limits. The examples emphasize minimization over treatment.

The permittee shall use best management practices to ensure compliance with the conditions of the proposed General Permit. These practices shall include, but are not limited to the following:

1. Follow all applicable state and FIFRA label instructions.

EPA regulates the use of pesticides under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). In general, FIFRA authorizes EPA to register each pesticide product intended for distribution or sale in the U.S. To register a pesticide, EPA must determine its use in accordance with the label will not cause “unreasonable adverse effects on the environment” (e.g., FIFRA sec. 3(c)(5)). FIFRA defines that phrase to mean, in part, “any unreasonable risk to man or the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide” (FIFRA sec. 2(bb)). The “unreasonable adverse effects” standard requires EPA to balance the human health and ecological risks of using a pesticide against its economic, social, human health, and ecological benefits. Pesticides are registered for sale and distribution only if EPA determines that the benefits outweigh the risks. In making decisions on whether to register a pesticide, EPA considers the use directions on proposed product labeling and evaluates data on product chemistry, human health, ecological effects, and environmental fate to assess the potential risks associated with the use(s) proposed by the applicants for registration and expressed on the labeling. Among other things, EPA evaluates the risks to human health and the environment (including water quality) posed by the use of the pesticide.

2. The permittee shall make efforts to be aware of other pesticide applications that are occurring in the same treatment area. If the applicator is aware of other pesticide applications occurring in the same treatment area, the applicators shall coordinate the applications to minimize discharge into waters of the state due to over application.
3. Use only the amount of pesticide and frequency of pesticide application necessary to control the target pest using equipment and application procedures appropriate for the task

To minimize the total amount of pesticide discharged, applicators must consider lower application rates, frequencies, or both to accomplish effective control keeping in mind pesticide resistance. This ensures maximum efficiency in pest control with the minimum quantity of pesticide. This also reduces the amount of pesticide available that is not performing a specific pest-control function. Using this BMP can result in cost and time savings to the user. To minimize discharges of pesticide, applicators should base the rate and frequency of application on what is known to be effective against the target pest or necessary for resistance management.

Applicators must also consider pest resistance to pesticides when reducing discharges from application of pesticide. Resistance management is an important part of pest control. Some pests can develop resistance to pesticides unless resistance management techniques are

adopted by pesticide users. Resistance can result in the loss of effectiveness of pesticides with relatively favorable environmental and human health risks and increase reliance on riskier pesticides. When resistance occurs, users may increase rates and frequency of application in an attempt to maintain pesticide effectiveness. This can lead to the loss of efficacy and increased exposure to the pesticide, as well as increased levels of pesticides in waters of the state. Pesticide applicators should be aware of the potential for pest resistance to develop by considering the pest, the pesticide, and its mode of action, the number of applications and intervals, and application rates.

4. Maintain equipment to minimize leaks, spills, or other unintended discharges of pesticides by adhering to any manufacturer's conditions and industry practices, and by calibrating, cleaning, and repairing such equipment on a regular basis.

Common-sense and good housekeeping practices enable pesticide users to save time and money and reduce potential for unintended discharges of pesticides to waters of the state. Regular maintenance activities should be practiced and improper pesticide mixing and equipment loading should be avoided. When preparing the pesticides for application be certain that you are mixing them correctly and preparing only the amount of material that you need. Carefully choose the pesticide mixing and loading area and avoid places where a spill will discharge into waters of the state. Some basic factors applicators should consider are:

- a. Inspect pesticide containers at purchase to ensure proper containment;
- b. Maintain clean storage facilities for pesticides;
- c. Regularly monitor containers for leaks;
- d. Rotate pesticide supplies to prevent leaks that may result from long term storage; and
- e. Promptly deal with spills following manufacturer recommendations.

To minimize discharges of pesticide, applicators must ensure the rate of application is calibrated (i.e. nozzle choice, droplet size, etc.) to deliver the appropriate quantity of pesticide needed to achieve greatest efficacy against the target pest. Improperly calibrated pesticide equipment may cause either too little or too much pesticide to be applied. This lack of precision can result in excess pesticide being available or result in ineffective pest control. When done properly, equipment calibration can assure uniform application to the desired target and result in higher efficiency in terms of pest control and cost. It is important for applicators to know that pesticide application efficiency and precision can be adversely affected by a variety of mechanical problems that can be addressed through regular calibration. Sound calibration practices to consider are:

- a. Choosing the right spray equipment for the application.
- b. Ensuring proper regulation of pressure and choice of nozzle to ensure desired application rate.

- c. Calibrating spray equipment prior to use to ensure the rate applied is that required for effective control of the target pest.
 - d. Cleaning all equipment after each use and/or prior to using another pesticide unless a tank mix is the desired objective and cross contamination is not an issue.
 - e. Checking all equipment regularly (e.g., sprayers, hoses, nozzles, etc.) for signs of uneven wear (e.g., metal fatigue/shavings, cracked hoses, etc.) to prevent equipment failure that may result in inadvertent discharge into the environment.
 - f. Replacing all worn components of pesticide application equipment prior to application.
5. Develop and implement procedures to minimize and mitigate the adverse effects of discharges on water quality and non-target species.
6. All releases or spills within and outside of operational area containment shall be immediately recovered using absorbent materials, pumps, or similar means. Excess materials shall be properly disposed of or reused.
- a. Operational area containment surfaces exposed to concentrated and diluted pesticides shall be periodically cleaned and all rinsates shall be recovered and stored in accordance with SDCL chapter 38-21 and article 12:56.
 - b. Recovered substances may be used in accordance with the applicable pesticide product labels.

SELF-MONITORING REQUIREMENTS

The permittee must keep records and submit reports to SDDENR upon request. All records including the PDMP must be maintained and made available to SDDENR or SDDA.

Recordkeeping Requirements

Applicators who are required to develop a PDMP shall keep a copy of the PDMP for review by SDDENR as well as the following records for each application:

- 1. The name and address of the person or entity for whom the pesticide was applied;
- 2. The location of the land or property where the pesticide was applied;
- 3. The pest(s) to be treated;
- 4. The size of the treatment area;
- 5. The dates and times the pesticide was applied;
- 6. The person or firm who applied the pesticide;

7. The trade or brand name and common name of the pesticide applied, the EPA pesticide registration number for each product, and the company name appearing on the product label;
8. The weather conditions at the time of application, including direction and estimated velocity of the wind and the temperature at the time the pesticide was applied (this requirement does not apply to application of baits in bait stations or pesticide applications in or immediately adjacent to structures);
9. Amount of the pesticide applied and the application rate;
10. Specific crop or designated site or commodity to which pesticide application was made; and
11. Name and address of the applicator.

The permittee shall give advance notice to SDDENR of any planned changes in the permitted facility or activity that may result in noncompliance with the proposed General Permit requirements.

Annual Report

The permittee shall submit an Annual Report to SDDENR if one or more of the annual treatment area thresholds were exceeded in the calendar year. This report is due by February 28th of the following year.

Table 1: Annual Treatment Area Thresholds

Pesticide Use Category	Threshold¹
Mosquitoes and Other Flying Insect Pests	6,400 surface water acres of treatment area annually ²
Weed and Algae Control:	
<ul style="list-style-type: none"> • In Water • At Water’s Edge: 	<ul style="list-style-type: none"> • 80 surface water acres of treatment area, per application ³ • 20 linear miles of treatment area at water’s edge ⁴, per application
Ditch and Stream Bank Control:	
<ul style="list-style-type: none"> • In Water • At Water’s Edge: 	<ul style="list-style-type: none"> • 80 surface water acres of treatment area, per application ³ • 20 linear miles of treatment area at water’s edge, per application ⁴
Aerial Pest Control	6,400 surface water acres of treatment area, annually ²

¹ The thresholds are calculated based on the areas treated when water is present. If water is not present at the time of the application, these areas should not be included in the calculation of the annual threshold areas.

² This threshold is cumulative. To calculate the annual treatment totals over calendar year, add the surface water acres for each pesticide application to waters of the state (when water is present). If that total is greater than the stated threshold, an annual report is required to be submitted. For example, treating 5,000 surface water acres for mosquitoes two times in a calendar year would count as 10,000 acres and an annual report would be required to be submitted.

³ This threshold is not cumulative and is determined simply by the surface water acres receiving pesticides, regardless of the number of applications in a calendar year. For example, if the permittee applies pesticides to the same 40 surface water acres (and water is present) five times in a calendar year, the threshold has not been exceeded and an annual report is not required.

⁴ This threshold is not cumulative and is determined simply by the linear miles of stream banks receiving pesticides, regardless of the number of applications in a calendar year. For example, if the permittee applies pesticides to 18 miles of stream bank (and water is present) and applies to both banks, the threshold has not been exceeded and an annual report is not required.

The annual report shall contain the following information:

- a. The permittee's name;
- b. South Dakota Certified Pesticide Applicator number if applicable;
- c. The total surface water treatment area in acres or linear miles as appropriate for each pesticide use category;
- d. Whether or not the permittee applied pesticides because of a declared pest emergency. If yes, then list the dates and times this occurred, the target pest, and what government entity declared the pest emergency.
- e. For each threshold that was exceeded list the target pest(s) and pesticides used.

SDDENR's focus is on the largest applications of pesticides to water of the state. SDDENR has based the annual report thresholds on the Notice of Intent thresholds developed by EPA (see Appendix A of this statement of basis). When EPA analyzed the regulatory considerations provided in 40 CFR 122.28(b)(2)(v), it gave particular weight to the expected volume of the discharges and the estimated number of discharges to be covered by the permit. After considering the universe of entities in light of the regulatory considerations, EPA found a logical break between entities applying pesticides to larger areas versus smaller areas.

Forty-Eight (48) Hour Adverse Incident Notification

The permittee shall notify SDDENR as soon as possible of an adverse incident that may have resulted from a discharge from the permittee's pesticide application. SDDENR shall receive the report no later than forty-eight (48) hours after the permittee becomes aware of the circumstances.

Thirty (30) Day Adverse Incident Written Report

Within thirty days of becoming aware of an adverse incident, the permittee shall provide a written report of the adverse incident to SDDENR.

SDDENR may waive the written report on a case-by-case basis if the oral report has been received within 48 hours by the Surface Water Quality Program, SDDENR, Pierre, (605) 773-3351.

Other Reporting Requirements

Other state and federal regulations require spills and leaks of pesticides to be reported. The SDDA has a website with reporting requirements for pesticide applicators. Information from this page can be found in Appendix B of this statement of basis.

Duty to Provide Information

The permittee shall submit any information to SDDENR, SDDA, or EPA upon request to determine whether cause exists for modifying, revoking and reissuing, or terminating coverage under this proposed General Permit, or to determine compliance with the General Permit. The permittee shall also submit to SDDENR, SDDA, or EPA, upon request, copies of records required to be kept by this permit.

Sampling Requirements

The proposed General Permit does not require effluent monitoring as a permit requirement. Adequate pesticide plans and best professional judgment should be sufficient to meet the effluent limits of the proposed General Permit. Therefore, sampling and testing for specific parameters is not required on a routine basis under the proposed General Permit. However, the Secretary reserves the right to require sampling and testing on a case-by-case basis, in the event there is reason to suspect noncompliance with the effluent limits or to measure the effectiveness of the BMPs in preventing the discharge of pollutants.

TERMINATION OF COVERAGE

Coverage under this permit is terminated if one or both of the following occur:

1. All discharges covered by the proposed General Permit have ceased and there will be no further discharges during the remainder of the permit term for any of the use categories as identified in Section 2.1 of the proposed General Permit; or
2. The permittee has obtained coverage under an individual permit or an alternative general permit for all discharges of pollutants to waters of the state.

REQUIRING AN INDIVIDUAL PERMIT

Based upon a number of different situations (e.g., applicable numeric effluent limits resulting from a TMDL, or a determination that the applicator has the potential to cause or contribute to a water quality standard excursion), SDDENR may determine that coverage under an individual permit is necessary. If a permittee is currently discharging under the proposed General Permit and SDDENR determines that individual coverage is required, SDDENR will notify the permittee of the reason for the required change and will provide the permittee an application form and a deadline for filing the application.

Additionally, any permittee may apply for an individual permit rather than applying for coverage under this proposed General Permit. An individual application shall be submitted for coverage under such a permit with reasoning supporting the request. SDDENR will review the request and will determine if individual permit coverage is appropriate. If SDDENR issues an individual permit to a permittee currently covered under this General Permit, or coverage under an

alternative general permit is obtained, coverage under the General Permit is terminated on the effective date of the new permit.

If a permittee, currently covered under the General Permit, requests an alternative permit and is denied, coverage under the General Permit may also be terminated on the date of such denial, unless otherwise specified by SDDENR.

ENDANGERED SPECIES

Compliance with the terms and conditions of this proposed General Permit will ensure no listed endangered species are impacted.

DRAINAGE ISSUES

The county in which the discharge will occur has the authority to regulate drainage. The permittee is responsible for obtaining any necessary drainage permits from the respective county prior to discharging, if applicable.

ANTIDegradation REVIEW

Antidegradation will not apply to this proposed General Permit due to the intermittent and temporary nature of most pesticide activities and the expected limited impact of the discharge.

GENERAL PERMIT DURATION

The proposed General Permit is recommended to be issued for five years. Periodically during the term of this proposed General Permit and at the time of renewal, the permittee may be requested to reaffirm the eligibility of the permitted site to discharge under this proposed General Permit.

The proposed General Permit specifies procedures for continued coverage if the proposed General Permit expires prior to a replacement permit being issued. In short, the expired proposed General Permit would remain in full force and effect until the earliest of:

1. The General Permit is reissued or replaced;
2. Issuance of an individual permit for the permittee's discharges; or
3. A formal decision by the Secretary of SDDENR not to reissue the General Permit, at which time all permittees shall seek coverage under an alternative general permit or an individual permit.

PERMIT CONTACT

Any questions pertaining to this Statement of Basis can be directed to Jonathan Hill, Natural Resources Project Engineer at (605) 773-3351.

January 21, 2011

Appendix A

EPA's rationale for the annual treatment area threshold for each pesticide activity

Mosquito Control and Other Flying Insect Pest Control

For Mosquitoes and Other Flying Insect Pest, the annual treatment area threshold has been set at 6,400 acres. EPA believes that the vast majority of mosquito control and abatement districts in the U.S. manage areas significantly larger than this threshold and may reasonably expect to exceed it during any given year. For instance, information from the state of Florida on 49 independent mosquito control districts shows that 48 of the 49 districts annually apply to more than 6,400 acres, which indicates that applications exceeding this area are quite typical. Similarly, data provided in EPA's draft *Economic Achievability Analysis of the Pesticide General Permit (PGP) for Point Source Discharges from the Application of Pesticides* and included in the administrative record for this permit show similar findings as for Florida. Furthermore, the effective control of other aquatic breeding, flying insects, such as the blackfly, necessitates an application approaching or exceeding this threshold. Therefore, EPA believes the threshold appropriately captures most operators engaging in this use category.

Weed and Algae Control

For Weeds and Algae, the annual treatment area threshold has been set at 80 acres or 20 linear miles of treatment on canals and irrigation system conveyances. This threshold has been set to capture operators treating relatively large portions of surface waters and watersheds, such as water management districts, wildlife and game departments, and some homeowner and lake associations. For example, Florida's South Florida Water Management District usually performs treatments of generally 60 acres at a time hundreds of times per year for various invasive plants on Florida's Lake Okeechobee. After reviewing the operations of major irrigation and flood control systems, EPA expects that generally, relatively large entities such as South Florida Water Management District or California Department of Water Resources or organizations with comparable resources are the types of entities that manage 20 or more miles of engineered irrigation system conveyances and that this is a reasonable limit to trigger the NOI requirement. The same rationale is applied to managers of ditch and canal banks. Therefore, EPA believes the threshold appropriately captures the relatively large applications but excludes a significant number of small applications.

Forest Canopy Pest Control (adapted for Aerial Pest Control)

Forest canopy pest suppression programs are designed to aerially blanket large tracts of terrain, throughout which operators may not be able to see waters of the U.S. beneath the canopy. EPA has set the annual treatment area threshold at 6,400 acres for this use category with the understanding that this will exclude only the smallest applications from the NOI requirement. These smaller applications generally occur on private lands. Therefore, EPA believes the threshold appropriately captures most operators engaging in this use category, particularly public agencies managing large tracts of land.

Appendix B

South Dakota Department of Agriculture Pesticide Spill Reporting Requirements

**TO REPORT A PESTICIDE SPILL CONTACT:
DIVISION OF EMERGENCY MANAGEMENT (24 HOURS) 605.773.3231**

When pesticides are spilled or released, there is a potential that surface water, groundwater, human health, or natural resources may be threatened.

When do I need to report a spill?

- Pesticide discharges in excess of 25 pounds active ingredients that occur at operational areas outside of operational area containment *must* be reported to the South Dakota Department of Agriculture (SDDA).
- The operator or manager of a bulk pesticide storage facility *shall* notify the SDDA or the Division of Emergency Management **within 3 hours** after a spill of more than 25 gallons of liquid or 500 pounds of dry pesticides outside the secondary containment area.
- The commercial carrier *shall* notify the SDDA or Division of Emergency Management **within 12 hours** after the spill of more than 5 gallons of liquid or 50 pounds of dry pesticide which occurs during transportation. The commercial carrier shall provide *written notice* of a spill to the SDDA *within 72 hours* after the spill.
- A release or spill of a regulated substance (includes petroleum and petroleum products) *must* be reported to [South Dakota Department of Environment and Natural Resources](#) **immediately** if any one of the following conditions exists:
 1. The discharge threatens or is in a position to threaten the waters of the state (surface water or ground water);
 2. The discharge causes an immediate danger to human health or safety;
 3. The discharge exceeds 25 gallons;
 4. The discharge causes a sheen on surface water;
 5. The discharge of any substance that exceeds the ground water quality standards of ARSD chapter 74:54:01;
 6. The discharge of any substance that exceeds the surface water quality standards of ARSD chapter 74:54:01;
 7. The discharge of any substance that harms or threatens to harm wildlife or aquatic life
- [Commercial Applicator Pesticide Handling and Discharge Response Plan](#) (pdf)
- [Private Applicator Pesticide Handling and Discharge Response Plan](#)(pdf)
- [County Emergency Managers Directory](#) (link)
- [Pesticide Program Brochure](#) (pdf)
- [What you should know if a spill occurs](#) (pdf)

[2001 - 2009 Maps - Number of Pesticide Spill Investigations by County](#)

Forms

- [Report of Pesticide or Fertilizer Discharge Use/Disposal](#) (pdf) [**Land Application Form**]

Poison Control Information

- [South Dakota Poison Control Home Page](#)
- If you have a poison question call 1-800-222-1222 Voice/TTY * 24 hours a day * 7 days a week

Laws and Regulations

South Dakota Codified Law

- [SDCL 34A-12](#)
- [SDCL 38-20A-36](#)
- [SDCL 38-21-15](#)
- [SDCL 38-21-16](#)
- [SDCL 38-21-51](#)

South Dakota Administrative Rules

- [ARSD 12:56:03](#) Pesticide Transportation Requirements
- [ARSD 12:56:13](#) Bulk Pesticide Storage
- [ARSD 12:56:15](#) Handling and Loading
- [ARSD 12:56:17](#) Operational Area Containment
- [ARSD 74:34:01](#) Regulated Substance List and Reporting of Discharges

[For more information contact SDDA Office of Agronomy Services](#)

This information was accessible at the following South Dakota Department of Agriculture website as of December 28, 2010:

http://sdda.sd.gov/ag_services/agronomy_services_programs/Pesticide_Program/pesticide_spills.aspx