

PESTICIDE HANDLING AND DISCHARGE RESPONSE PLAN

Commercial applicators are required to conduct pesticide operational area activities through utilization of a written pesticide handling and discharge plan as of February 1, 1995. This plan will help facilities establish and utilize procedures that aid in preventing discharges during daily handling and use of pesticides, as well as strategies that will expedite actions necessary to minimize adverse effects on themselves, others, and the environment in the event of a discharge incident or mechanical failure. In case of an emergency incident, a written plan will provide guidance to facility employees and emergency assistance individuals.

Under the authority of SDCL 38-21-15, ARSD 12:56:17:03 requires a copy of the plan to be kept at either the operational area, the applicator's nearest local office, or the location from which the operational area is administered; and, must be made available for employee use and for inspection by the South Dakota Department of Agriculture. It is recommended that the operator provide a current copy of the plan to local fire departments, police departments, emergency medical services, and county emergency management directors.

All employees of the facility should be trained to identify an emergency response incident (i.e., major or minor spills, potential for fire, etc.), who to call for remediation assistance, and/or evacuation routes. If employees are to participate in the remediation (i.e., firefighting, etc.), those employees must be trained to perform the necessary tasks. Employees must also know which personal protective equipment to use as well as when and how to use it.

This document is intended to provide guidelines for development of your plan. We encourage you to add details to the plan to satisfy conditions at your facility. It may be beneficial to put your plan in a binder so that pages can be added as changes occur. Although the South Dakota Department of Agriculture may occasionally review your plan to ensure it meets the provisions of ARSD 12:56:17:03, the department makes no claims, implied or otherwise, as to the suitability of the personal protective equipment, release remediation equipment, release remediation procedures, fire fighting procedures, or first aid procedures outlined herein for preventing or eliminating human exposure or damage to the environment.

The department is prepared to respond to all agricultural incidents in a timely fashion, and to apply appropriate and effective procedures to contain and control agricultural chemicals involved in emergency incidents. The Department of Agriculture works cooperatively with the Department of Environment and Natural Resources, Department of Health and other local, state and federal agencies in coordinating assistance and technical support.

At this time, is not required for applicators who conduct fertilizer operational area activities to have a written fertilizer handling and discharge response plan. However, spaces have been provided within this plan for your own use in developing plans which will be utilized to minimize and mitigate the adverse effects of fertilizer discharges on the environment.

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I. EMERGENCY RESPONSE LIST

FACILITY PERSONNEL EMERGENCY RESPONSE LIST

(Title should list responsibility of individual in the event of an incident.)

➤ If facility is required to submit Section 302 Report under SARA Title III, the Facility Emergency Coordinator designated therein should be listed first.

NAME _____
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PHONE _____
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I. EMERGENCY RESPONSE LIST (continued)

EMERGENCY ASSISTANCE

NAME	CONTACT	TELEPHONE NUMBER
Fire Department	_____	911 or _____
Police	_____	911 or _____
Sheriff's Department	_____	911 or _____
Ambulance	_____	911 or _____
State Patrol	_____	_____
Doctors	_____	_____
Hospitals	_____	_____
Emergency Contractor (Excavation, Crane, Etc.)	_____	_____

REPORT AGRICULTURAL CHEMICAL INCIDENTS TO:

Emergency Management Services	605-773-3231 (24 Hours)
South Dakota Department of Agriculture	605-773-4432 (Business Hours)
Department of Environment and Natural Resources	605-773-3153 (Business Hours)
National Response Center – Federal	1-800-424-8802
CHEMTREC	1-800-424-9300
Poison Control Center	1-800-POISON1 (SD) 1-800-843-0505 (IA, MN, NE)
Utilities	
Buried Utilities Telephone Company _____	
Cable TV Company _____	
Gas Company _____	
City Water System _____	
Rural Water System _____	
Other: _____	

NOTE:

- National Response Center number must be called if a spill above the reportable quantity occurs.
- CHEMTREC and Poison Control Center numbers are provided for informational purposes only.
- Contact the Local Emergency Response Planning Committee (LEPC) to ensure your plan is compatible with their Local emergency Response Plan and in compliance with the Superfund Amendments & Reauthorization Act of 1986 (SARA) and Comprehensive Emergency Response, Compensation & Liability act of 1980 (CERCLA) regulations.
- There may be other federal, state, and local agencies that need to be contacted. Become familiar with all contacts in your area and record their numbers in the space below.

II. PRODUCT LABELS

INSERT LABELS FOR ALL PESTICIDE AND FERTILIZER PRODUCTS HANDLED OR STORED AT THE FACILITY.

III. PRODUCT MATERIAL SAFETY DATA SHEETS (MSDS)

INSERT PESTICIDE AND FERTILIZER PRODUCT MATERIAL SAFETY DATA SHEETS.
(OPTIONAL)

IV. FIRST AID INFORMATION

➤ Refer to product label and MSDS on pages _____ to _____ for first aid instructions. If in doubt about nature of material, get medical attention immediately.

NOTE: IF MEDICAL ATTENTION IS SOUGHT, TAKE LABEL(S) AND MSDS(S).

SYMPTOMS OF PESTICIDE POISONING MAY INCLUDE:	
1) Headaches	7) Nausea
2) Dizziness	8) Abdominal Cramps
3) Weakness	9) Diarrhea
4) Incoordination	10) Profuse Sweating
5) Muscle Twitching	11) Blurred Vision
6) Tremors	

MEDICAL TELEPHONE NUMBERS ARE LOCATED ON PAGE _____ (Section I) OF THIS PLAN.

LOCATION OF:

First Aid Kit _____

Eye Washer _____

Oxygen _____

Other _____

V. FIRE FIGHTING PROCEDURES

➤ Information regarding fire fighting procedures is not required to be provided to the South Dakota Department of Agriculture, and is included for informational purposes only.

A. PREFIRE PLANNING

1. The facility should be familiar with what the local fire department is willing and able to do in response to an incident at the facility.
2. Local fire department should visit the facility at least annually. They should be thoroughly familiar with the following:
 - a. Locations of hydrants and other water sources;
 - b. Location of normal and alternate access road, gates, fences, etc.;
 - c. Surrounding building occupancies and land use;
 - d. Precautions and tactics for fighting garden/agricultural chemical fires;
 - e. Day and night telephone numbers of the facility operators, physician familiar with products, and manufacturers of products;
 - f. Means of controlling drainage at and adjacent to the facility;
 - g. Symptoms of pesticide and fertilizer poisoning;
 - h. What to do in case of contact with toxic chemicals;
 - i. Use of self-contained breathing apparatus (Air Paks);
 - j. Means of ventilating warehouses.

B. GENERAL RULES TO FOLLOW IN CASE OF FIRE:

1. Call the fire department at _____ and clear all personnel from the building/area to a safe distance upwind from smoke and fumes. Isolate the area if necessary.
 - a. Have plan of burning facility and its contents ready for fire team when they arrive. This plan is on page ____ of this response plan. (Section VI)
 - b. Pay special attention to the location of particularly hazardous chemicals and containers.
 - c. Clarify a water use strategy. How much, if any, water will be used? Where will it be used? How much, if any, diking will be necessary to contain this water? What material will be used to form a dike?
 - d. PROVIDE LABELS AND MATERIAL SAFETY DATA SHEETS (MSDS). Labels and MSDS are located on pages ____ to _____. (Section II)

C. POST FIRE CLEANUP

1. Isolate and secure scene to keep people away; waste and run-off may be toxic.
2. Contact South Dakota Department of Agriculture for review and approval of contaminated material disposal plan.
3. Handle waste and run-off the same as for a product spill. Directions for handling spills are located on pages ____ to _____. (Section IX)

V. FIRE FIGHTING PROCEDURES (continued)

IMPORTANT NOTES:

- If the employer's own employees will be involved in firefighting activities, training according to 29 CFR 1910.156 must be provided. If employees are to evacuate and call the fire department or other responders, employee training should cover evacuation and fire department notification procedures. Under post-fire cleanup, people involved in such cleanup should be apprised of the proper personal protective equipment to be worn during the cleanup process (i.e., in some instances, respirators may be necessary).
- Should this facility become involved in a fire, the commanding fire officer at the scene should be in a position to let the facility burn if he determines that continued water application:
 - a) will result in extensive contaminated water run-off; or
 - b) could result in incomplete combustion into the air.

It would be desirable if he had advance written authority from the Facility Manager to do so if necessary or appropriate. This eventually should be discussed with insurers of the establishment.

I hereby authorize the Fire Department to make necessary decisions in handling any fire at the facilities covered by this document.

Signed _____ Date _____
Authorized Facility Representative

Signed _____ Date _____
Authorized Facility Representative

Signed _____ Date _____
Authorized Facility Representative

Signed _____ Date _____
Authorized Fire Department Representative

VI. MAPS

A. MAP OF FACILITY

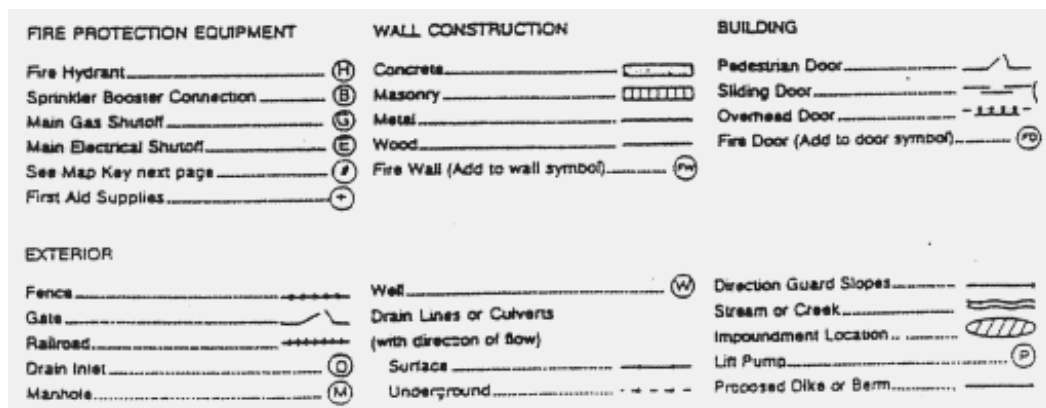
1. Accurately diagram the:^{**}
 - a. current facility property (if previously established);
 - b. the proposed facility property (if new).
2. Indicate the following areas on the map:
 - a. All buildings (indicate distance between buildings);
 - b. All pesticide/fertilizer/anhydrous ammonia bulk tank storage areas, and all non-bulk (packaged goods) pesticide/fertilizer storage area;
 - c. All pesticide/fertilizer mixing, loading, and rinsate recycling areas;
 - d. All pesticide/fertilizer vehicle parking and washing areas;
 - e. All sanitary sewer inlets, storm sewer inlets and outlets, tile inlets and outlets;
 - f. All wells. For wells within 150 feet of any existing or proposed pesticide/fertilizer loading (rinse pad) and secondary containment (diked) areas, include the year installed and the depth;
 - g. All water supplies (fire hydrants, water supply tanks, water sources, etc.);
 - h. Indicate areas and directions of runoff from the facility;
 - i. OSHA requires an employer to designate safe places of refuge in case evacuation of employees becomes necessary.

B. MAP OF SURROUNDING AREA

1. Attach a detailed copy of a county plat book/map, a detailed city/village map, or a combination of maps, photographs, and diagrams which accurately describe the location of the facility, and include only the following:^{**}
 - a. County
 - b. City/Village
 - c. Township
 - d. Range
 - e. Section
 - f. 1/4 Section
 - g. Fraction/Lot
 - h. Distance and direction to cropland (be specific), residences (single family or multi-family dwelling), schools, hospitals, and businesses (type) within one-quarter mile of facility. Use standard compass directions and give exact distance measurements.
 - i. Distance and direction to surface water (creeks, streams, rivers, lakes, ponds, wetlands, etc.), drainage ditches (county and others), and down gradient storm sewers within one-quarter mile of the facility;
 - j. Distance and direction to any municipal water supply well within one-quarter mile of the facility. Use standard compass directions and give exact distance measurements.

^{**} Copies of the facility map and surrounding area map prepared for the facilities' permit application may be inserted here - cut and paste as needed.

Use the appropriate symbols shown below on your facility and surrounding area maps.



VII. PROCEDURES FOR USE/HANDLING OF PESTICIDE/FERTILIZER AT FACILITY

A. FILLING APPLICATION EQUIPMENT

1. Describe fill methods, specify equipment and procedures used to prevent spills and incidents, for all transfer, loading, unloading, mixing, repackaging, and refilling operations for containers and application equipment at all loading areas (be specific).

Pesticides: _____

Fertilizer: _____

- a. Describe area(s) used for loading application equipment - (i.e., concrete, metal gravel, scale, pit, etc.):

PRODUCT TYPE	TYPE OF LOADING AREA
Small packaged pesticide - (<56 gal.)	_____
Minibulk pesticides - (56-499 gal.)	_____
Bulk pesticide - (>500 gal.)	_____
Dry bulk pesticides	_____
Bulk liquid fertilizer	_____
Dry bulk fertilizer	_____
Pesticide impregnated fertilizer	_____
Other: _____	_____
_____	_____

VII. PROCEDURES FOR USE/HANDLING OF PESTICIDE/FERTILIZER AT FACILITY
(continued)

2. Indicate type of backflow prevention devices are installed/used on water supplies when:
a. Filling application equipment - be specific

Pesticide: _____

Fertilizer: _____

- b. Rinsing pesticide containers - be specific

Pesticide: _____

Fertilizer: _____

- c. Cleaning application equipment (tanks) - be specific

Pesticide: _____

Fertilizer: _____

3. Describe overflow prevention procedures and structures.

Pesticides: _____

Fertilizer: _____

VII. PROCEDURES FOR USE/HANDLING OF PESTICIDE/FERTILIZER AT FACILITY
(continued)

4. Describe procedures for, frequency of, and individual responsible for inspections of equipment and appurtenances, including secondary containment and mixing/loading pad structures.

Pesticide: _____

Fertilizer: _____

5. Describe strategy used to repair equipment found to be defective.

Pesticides: _____

Fertilizer: _____

VII. PROCEDURES FOR USE/HANDLING OF PESTICIDE/FERTILIZER AT FACILITY
(continued)

B. HANDLING AND USING RINSATES

1. Address the generation, handling, and use of rinsates, rainwater, washwater, sludge, etc., from:
- a. Load/unload pads;

Pesticides: _____

Fertilizer: _____

- b. Secondary containment structures;

Pesticides: _____

Fertilizer: _____

- c. Transportation and application equipment for all products;

Pesticides: _____

Fertilizer: _____

VII. PROCEDURES FOR USE/HANDLING OF PESTICIDE/FERTILIZER AT FACILITY
(continued)

d. Rinsing/cleaning containers, including small packages, minibulks, and bulk containers;

Pesticides: _____

Fertilizer: _____

e. Application equipment parking and product storage areas; and,

Pesticides: _____

Fertilizer: _____

f. Scale pits.

Pesticides: _____

Fertilizer: _____

VII. PROCEDURES FOR USE/HANDLING OF PESTICIDE/FERTILIZER AT FACILITY
(continued)

2. Describe procedures used to reduce the amount of rinsate generated.

Pesticides: _____

Fertilizer: _____

C. USE OF RINSATE AND SLUDGE

➤ Whenever possible, rinsate and sludge should be used as originally intended. When reuse is not possible either because of excessive contamination or cross-contamination with an incompatible material, the material must be disposed of in accordance with South Dakota Department of Agriculture requirements. Depending upon the chemical involved, disposal options may include a local landfill permitted to accept the material or a hazardous waste landfill. Do not begin disposal until the South Dakota Department of Agriculture has granted approval.

1. Recovered pesticide or fertilizer rinsates:

a. Rinsate resulting from daily operations should be (of the following, prioritized appropriate options and delete choices inappropriate for your operation):

____ Used as make-up water in the present or future outgoing pesticide/fertilizer loads of the same pesticide/fertilizer, or same use-site compatible pesticides/fertilizers. Approximate concentration of rinsate should be accounted for when intended application is near maximum label rate. Rinsate should never exceed 5% of the total load. All customers receiving rinsate as makeup water should be informed in advance and provide approval. If a customer does not approve _____.

____ Applied as-is to a labeled site at a labeled rate as directed by:

_____.
(place name of facility contact here)

1. The approximate analysis of material must always be known before use.
2. These sites must be used in the current and following season for a crop:
 - a) Specified by the pesticide label(s) **[the rinsate applied cannot exceed label rates]**;
 - b) Only when the fertilizer can be uniformly applied at a rate not exceeding normal nutrient needs for the present or intended crop.
3. Location where rinsate application records are kept:

____ Disposed of according to label directions and as directed by South Dakota Department of Agriculture.

____ Other acceptable procedures outlined below:

VIII. EMERGENCY EQUIPMENT & SUPPLIES

A. PERSONAL PROTECTION EQUIPMENT & LOCATIONS

➤ This list is the minimum types of personal protective equipment recommended by the South Dakota Department of Agriculture. Check all pesticide and fertilizer labels to ensure adequate personal protective equipment is available for use at your facility.

EQUIPMENT	ON SITE	OTHER	LOCATION
Pesticide & Fertilizer			
Rated Respirators			
Rubber or Neoprene Boots			
Disposable Boots			
Rubber Gloves			
Chemical Suits			
Rubber Raincoats			
Face Shield/Similar Protection			
Safety Goggles			
Hard Hats			
Soap			
Other:			
Other:			

B. LOCATION OF EMERGENCY REPAIR EQUIPMENT & SUPPLIES

(available 24 hours/day; include location, description and phone numbers)

Beveled wooden stakes & mallet: _____

Rubber strips, plastic tape & duct tape: _____

Assorted bolts, machine screws & hand tools: _____

Rain gutter or plywood for overflow control: _____

Caulking material: _____

Other: * _____

Additional release remediation equipment may be needed as the situation demands.

VIII. EMERGENCY EQUIPMENT & SUPPLIES (continued)

C. LIQUID RECOVERY EQUIPMENT

Liquid recovery equipment: _____

Liquid transfer pumps: _____

Gasoline for pumps: _____

Hoses & fittings for pumps: _____

Emergency electrical generating equipment: _____

Other: * _____

D. OTHER EMERGENCY EQUIPMENT

Leak proof drums with lid for collection of absorbed material from cleanup of minor spills (available from drum recyclers/vehicle painters): _____

Tanks (of adequate capacity for holding recovered material): _____

Portable storage tanks (i.e., tanker truck, nurse tank, etc.): _____

Traffic control equipment (to prevent vehicles and persons from entering incident site): _____

E. EXCAVATION EQUIPMENT

Front end loaders: _____

Bulldozers: _____

Dump trucks: _____

Backhoe: _____

Other: * _____

* Additional release remediation equipment may be needed as the situation demands

VIII. EMERGENCY EQUIPMENT & SUPPLIES (continued)

F. PESTICIDE DECONTAMINANTS

- Depending on the pesticide involved, chlorine bleach, caustic soda (lye, sodium hydroxide), or lime can sometimes be used to effectively decontaminate spills.
- Some pesticides cannot be effectively decontaminated and should only be treated with detergent and water to assist in removal.

Pesticide Decontaminants		
<u>Lye or Lime</u>	<u>Chlorine Bleach</u>	<u>Do Not Use Chemicals</u>
Abate	Calcium cyanide	Alachlor
Atrazine	Calcium cyanamide	Amiben
Baygon	Dyfonate	Chlordane (chlorinated hydrocarbons)
Bromex	Folex	Diuron
Captan	Lethane	Maneb
Cyanazine		Methoxychlor
Cygon		Pentachlorophenol
Dalapon		Tordon
Dichlorvos or Vapona		Toxaphene
Dursban		Trifluralin
EPN		2,4-D
Malathion		
Orthene		
Rotenone		
Sevin		
Silvex		
Sodium flouride		
TCA		
2,4,5-T		

Guide to Applying Decontaminants

<u>% Active Ingredient</u>	<u>Amount of Decontaminant Required</u>
1 - 10	Use decontaminate in amount equal to the quantity of spilled pesticide
11 - 79	Use decontaminate in amount equal to 1.5 times the quantity of spilled pesticide
80 - 100	Use decontaminant in amount equal to 2 times the quantity of spilled pesticide

VIII. EMERGENCY EQUIPMENT & SUPPLIES (continued)

1. Decontamination solutions can be used on surfaces and materials contaminated by dust, granular, wettable powder, or liquid pesticides.
2. Application of decontaminants
 - a. Liquid - mix and apply to spill area with watering can
 - b. Dry - spread thinly and evenly over the spill area then lightly sprinkle the area using a watering can to activate the decontaminant
3. Allow the appropriate decontamination solution to react for 1 to 6 hours before removal with absorbent material.

<p>Nonporous Surface: Thoroughly work the appropriate amount of decontamination solution into the surface using a long-handled broom, scrub brush, or other equipment. Use absorbent material to soak up the solution. Collect the contaminated absorbent material and store it in a labeled, leak-proof container until it can be properly disposed of.</p>	<p>Soil: Remove all soil to depth of at least 3 inches below the wet surface line. Store and cover soil with plastic until it can be properly disposed of.</p> <p>Note: If you plan to land apply the contaminated soil, you must first contact the Department of Agriculture for approval.</p>
<p>Porous Surface: It may not be possible to adequately decontaminate these materials, such as wood. If clean-up is not adequate, properly dispose of the material.</p>	<p>Tools, Vehicles, Equipment, Metal and Other Nonporous Objects: These can generally be decontaminated using detergent and appropriate decontamination solution. Smaller quantities of the solution may be required, depending upon the situation.</p>

4. When employing decontamination procedures, there is potential of creating toxic by-products. In critical situations, samples of affected components (soil, sediment, water, etc) should be taken and sent to a laboratory for analysis to determine if the decontamination effort was successful.

VIII. EMERGENCY EQUIPMENT & SUPPLIES (continued)

5. Lye or Lime
 - a. Can be used in dry form or liquid solution to decontaminate pesticides acceptable to this treatment
 - For liquid solution, combine .75 pounds of lye or lime in 3.5 quarts of water to make 1 gallon of 10% solution
 - b. Lye (caustic soda) can cause severe eye damage to persons not properly protected. Wear unventilated goggles, long-sleeved work clothes with coveralls, neoprene gloves, and a respirator to protect yourself from contact.
 - c. Do not use lye on aluminum surfaces.

6. Bleach treatment
 - a. Liquid or powder form of bleach (sodium hypochlorite) can be used
 - In general, 1 gallon of liquid household bleach (5% solution) should be used per pound or gallon of spilled pesticide.
 - For bleaching powder, mix 1 gallon of water per pound or gallon of bleach and add a small amount of liquid detergent.
 - b. Run a preliminary test, using a small amount of bleach, to make sure the reaction is not too vigorous as a fire could result.
 - c. Do not store chlorine bleach in close proximity to, or mix it with, amine-containing pesticides.

IX. SPILL OF PESTICIDES AND FERTILIZERS - PROCEDURES



REPORT AGRICULTURAL CHEMICAL INCIDENTS TO APPROPRIATE FEDERAL, STATE, AND LOCAL AGENCIES

- Telephone numbers are found on page _____. (Section I)
- Components listed are South Dakota Department of Agriculture recommended procedures only. Additional procedures may be required to control, contain, and clean up releases.

A. MINOR SPILLS

1. A minor spill is a spill small enough to be controlled, contained and cleaned up using readily available equipment and materials. The most likely sources of minor spills are:

Pesticide: _____

Fertilizer: _____

2. Our most commonly recommended procedure for containing minor spills would be to first contain the spill using:

Pesticide: _____

Fertilizer: _____

IX. SPILL OF PESTICIDES AND FERTILIZERS - PROCEDURES (continued)

3. Determine whether it is appropriate to stop the source of the spill or to limit the flow.
 - Protect yourself before proceeding. Wear appropriate personal protective equipment.
 - Do not allow anyone to walk in spilled material. Prevent vehicles from driving over spilled material. For traffic control materials, see page _____. (Section VIII)
 - a. **CONTROL SPILL:** Location of beveled stakes, a mallet, rubber strips, plastic tape and duct tape is listed on page _____. (Section VIII)
 - b. **CONTAIN:** If the material starts to spread, contain by diking with sand, soil or absorbent clay. Do not allow material to enter storm sewers, waterways, etc., or pool at well heads.
 - Our nearest source of sand is listed on page _____, where we have access to about _____ yards of sand. (Section VIII)
 - Our nearest source of soil is listed on page _____, where we have access to about _____ yards of soil. (Section VIII)
 - Tools for moving these materials are listed on page _____. (Section VIII)
 - Location of our front end loader is listed on page _____. (Section VIII)
 - For larger spills which go beyond the capacity of our own equipment and personnel, move to the following section on **MAJOR SPILLS**.

B. MAJOR SPILLS

- A major spill is one which involves a significant quantity of material from both product value and substantial environmental standpoints. A major spill demands your **immediate** attention and **immediate** notification of both company personnel and appropriate authorities.
- What might be a minor spill at your own facility quickly becomes a major spill if it occurs on Main Street, during rush hour, 15 feet from a storm sewer that empties directly into a river, stream or lake.

1. FOR ANY MAJOR SPILL, BEFORE RESPONDING:

QUESTION	RESPONSE
a. Am I equipped to respond safely?	a. Notify others of the situation. See page _____ for phone numbers. (Section I) Do not allow anyone to walk or drive in the spilled material. See page _____ for traffic control supplies. (Section VIII) Get needed protective gear. See page _____ for listing. (Section VIII)
b. Does the spilled material have any special properties to consider (i.e., flammable, acid, high toxicity, reactions with other stored products)?	b. Be certain you and all responding are aware and consider these properties. See page _____ for product information locations. (Section II and Section III)
c. Are any electrical components wet or submerged?	c. Shut down <u>all</u> power until it is determined what can be safely used.

IX. SPILL OF PESTICIDES AND FERTILIZERS - PROCEDURES (continued)

Other pre-response considerations for this facility are:

_____	_____
_____	_____
_____	_____

➤ Refer to **MINOR SPILLS** for more general guidelines for control, containment and cleanup procedures with regard to spills.

2. FOR A SPILL WITHIN ANY SECONDARY CONTAINMENT:

d. Are tanks sufficiently anchored?

d. Pump water or spilled product into stable tanks. For location of liquid transfer equipment, see page _____. (Section VIII)

Remove or restrain small tanks.

Other:

e. Are other materials being contaminated?

e. Remove or transfer material to another storage area. For location of liquid transfer equipment, see page _____. (Section VIII)

Other:

f. Can the leak be easily stopped?

f. Check valves. Plug holes with wood stakes or replace parts. See page _____. (Section VIII)

Tape or strap over leak. See page ____ for materials. (Section VIII)

Transfer to another tank. See page ____ for location of other tanks. (Section VIII)

Other:

3. OTHER SOURCES OF SPILLS

a. Other response procedures include:

Pesticide: _____

Fertilizer: _____

IX. SPILL OF PESTICIDES AND FERTILIZERS - PROCEDURES (continued)

4. HIGHWAY, FIELD, OR OTHER SPILLS NOT WITHIN SECONDARY CONTAINMENT:
 - a. If a spill occurs on a highway, call the State Highway Patrol _____ or the local sheriff's office _____ and South Dakota Department of Agriculture for assistance.
 - Do not leave the area until responsible assistance arrives
 - b. Do not walk in spilled pesticide or fertilizer. Prevent vehicles from driving over spilled material. See page ____ for a listing of traffic control materials. (Section VIII)
 - c. Do not handle leaking containers or go into a vehicle without appropriate personal protective equipment.
 - d. Do not allow anyone to smoke near the spilled pesticide or fertilizer, or provide any other source of ignition.
 - e. Dike the spill to prevent runoff of pesticide or fertilizer into any nearby waterways, ditches, streams, ponds, storm sewers, tile lines, etc.

5. FOR ANY MAJOR SPILL:
 - a. Pump into storage as much spillage as possible and hold for analysis, and use or reprocessing.
 - b. Follow minor spill procedures after initial recovery.
 - c. If a cleanup job appears too big to handle, or if there is any doubt about the correct procedure, telephone _____ and the _____ for assistance.

WHEN DEALING WITH SPILLS, REMEMBER...

- **When an incident results in a pesticide/fertilizer release of any amount, notify Emergency Management, agriculture, or environment & Natural Resources immediately upon gaining control of the spill. The agencies will provide assistance and guidance regarding proper procedure, based upon the amount and type of substance involved.**

- **Whenever possible, spilled material should be used as originally intended. When reuse according to the product label is not possible either because of excessive contamination or cross-contamination with an incompatible material, the material must be disposed of in accordance with South Dakota Department of Agriculture requirements. Depending upon the chemical involved, disposal may be a local landfill permitted to accept the material, a hazardous waste landfill, or land application of the contaminated soil.**

- **Do not begin use/disposal of spilled or contaminated material until the South Dakota Department of Agriculture has granted approval.**

IX. SPILL OF PESTICIDES AND FERTILIZERS - PROCEDURES (continued)

- 6. Describe specific procedures to be used to transfer, handle, store, and dispose of materials recovered from discharges that occur within your operational area containment and secondary containment structures. Reference appropriate pages within this plan, as needed.

Pesticide: _____

Fertilizer: _____

- 7. Describe methods, procedures, materials, and equipment to be used to contain, recover, store, transport, and dispose of discharges which occur outside of your operational area containment. Reference appropriate pages within this plan, as needed.

Pesticide: _____

Fertilizer: _____

XI. DEFINITIONS

A. Related South Dakota Pesticide Law and Rule

Operational Area Containment, as defined by ARSD 12:56:17:01, by the authority of 38-21-15, is required after February 1, 1995, of **any person** when their operational area meets **any one or more** of the following conditions:

1. The operational area is the applicator's principal operational area; and
 - a. more than a total of 1500 pounds of pesticide active ingredients are transferred, loaded, unloaded, mixed, repackaged, or refilled during a calendar year; **or**
 - b. either concentrate or diluted pesticides are cleaned, washed, or rinsed from containers or from application, handling, storage, or transportation equipment for over 30 days accumulated during a calendar year.
 2. The operational area is within;
 - a. 150' of a lake, stream, streambed, or wetland;
 - b. 150' of a well;
 - c. 250' of populated buildings, wither commercial or residential premises, excluding the owner or operator's own residential or commercial buildings;
 - d. 500' of a well used as a public water supply.
- Two or more operational areas under common ownership and control within one-half mile of each other are calculated collectively to determine if the thresholds listed in subdivisions 1a or 1b above have been reached.
- Subdivisions 2c and 2d do not apply to mixing and loading operations conducted by pesticide applicators utilizing containers and equipment with holding capacities of 10 US gallons or less, or 50 pounds net dry weight or less.
- Subsections 1a and 1b do not apply to those operational areas located within or immediately adjacent to each pesticide application site, except for pressure wood preserving operational areas.

Spills During Transport are required, by ARSD 12:56:03:01.01 under the authority of SDCL 38-21-16, to be reported to the Department of Agriculture or Emergency Management Services within 12 hours after a spill of more than 5 gallons of liquid or 50 pounds of dry pesticides.

Spills Outside of Secondary Containment Area are required, by 12:56:13:10 under the authority of SDCL 38-21-16, to be reported to the Department of Agriculture or Emergency Management Services by the operator/manager within 3 hours after a spill of more than 25 gallons of liquid or 500 pounds of dry pesticides.

- According to ARSD 12:56:13:02, a person shall not construct a bulk pesticide storage facility, for the storage of permanent bulk pesticide storage containers, without a means of secondary containment.

Reporting Requirements for significant pesticide accidents or incidents are implemented by the secretary under SDCL 38-21-16. The following information should be reported: 1) Materials involved and quantity; 2) Environment involved; 3) Location and type of incident.

XI. DEFINITIONS (continued)

B. Related South Dakota Fertilizer Law and Rule

Spills Outside of Secondary Containment Area are required by ARSD 12:44:05:29 under the authority of SDCL 38-19, to be reported to the Department of Agriculture and Emergency Management Services by the operator/manager of a bulk commercial fertilizer storage facility within 3 hours after a spill of more than 25 gallons of liquid or 500 pounds of dry fertilizer.

➤ **ARSD 12:44:05:03**, by authority of SDCL 38-19, mandates a person may not construct a liquid bulk commercial fertilizer storage facility for the storage of permanent liquid bulk commercial fertilizer storage containers without a means of secondary containment.

➤ **ARSD 12:44:05:06**, by authority of SDCL 38-19, mandates all nonliquid fertilizer materials, unless stored in a totally enclosed building, must be covered and stored within a secondary containment structure. The building must be constructed so as to not allow seepage or spillage of fertilizer materials from the building under normal storage conditions.

➤ **ARSD 12:44:05:28**, by authority of SDCL 38-19, requires, by February 1, 1992, all washing of commercial fertilizer application equipment at liquid and nonliquid bulk commercial fertilizer storage facilities must be conducted within an area that complies with ARSD 12:44:05:27. No commercial fertilizer rinsates or wash waters from commercial fertilizer equipment may be disposed of through sanitary or storm sewer systems. Washing of commercial fertilizer equipment in the field is permissible, and encouraged if it is performed at the site of the final commercial fertilizer application on a given day and no runoff from the wash site occurs. Any accumulated liquid or material that contains a fertilizer within the containment area must be applied to a field or fields at normal fertilizer rates or used in a liquid mixing operation. This section also applies when a commercial fertilizer is combined with a pesticide. When the accumulated liquid or material contains a pesticide, the accumulated liquid or material must be applied to a field or fields at normal pesticide application rates or used in a liquid mixing operation.

SOUTH DAKOTA DEPARTMENT OF AGRICULTURE

Division of Agricultural Services
Office of Agronomy Services
Foss Building, 523 E Capitol
Pierre, SD 57501-3182
Phone (605) 773-4432
FAX (605) 773-3481