



# Emergency Planning for the Farm



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## Introduction

All farm owners should develop emergency plans to help ensure the safety of the responders, minimize property damage, protect family members and employees, and protect the environment. Farm owners should develop an emergency plan for each separate operation or separate site, reviewing and updating annually or whenever significant changes occur on the farm. This bulletin contains information on preparing your emergency farm plan. It also contains a template (pages 4-14) for you to complete your own emergency plan.

### Developing Your Emergency Farm Plan

As the farm owner, you should assess possible events, caused by humans or caused by nature, that may strike your operation, and consider the potential impacts. This assessment will help identify and prioritize the types of events that you want to be prepared to address and will lay the foundation for emergency response planning.

Discuss the emergency plan with family members and employees, and post it in a central and secure location on the farm for reference in an emergency.

Invite your local fire department representative or other emergency service providers to your farm to review your plan and show them details listed in the plan. Invite them to make suggestions on how to improve your plan.

# Introduction

## File Your Emergency Plan

Your emergency farm plan should be filed in at least three locations:

- Local Emergency Planning Committee (LEPC) or local fire department
- Farm office
- Tractor cab(s)
- Michigan Emergency Tube (optional)

When you update your emergency plan, remember to destroy copies of the old plan and replace them with the new plan in all locations. An outdated plan could delay emergency services.

## The Michigan Emergency Tube

The Michigan Emergency Tube makes a copy of your emergency plan available to emergency responders should they ever need to be on the farm site. Weather-resistant, the emergency tube includes a reflective label for quick detection at night. The emergency plan in the tube will provide first responders the initial information they may need on the presence and location of chemicals and other hazards on your property. The emergency tube is free but not required.

To determine if your community is participating in the Michigan Emergency Tube project, contact your local Michigan Agriculture Environmental Assurance Program (MAEAP) technician, located at either the County Conservation District or at the Michigan State University Extension office.

## Farm Spill Kits

Every farm should have a spill kit designed to contain, absorb and provide for the safe and proper disposal of spilled product. Spill kits on your sprayer and in the mixing and loading area can protect groundwater and surface water from pesticide and fertilizer contamination. You can make an inexpensive spill kit or buy one from commercial agricultural suppliers.

### Spill kit contents:

- Personal protective equipment (PPE): chemical-resistant gloves, boots, protective suit, safety glasses
- Absorbent material, such as absorbent clay, sawdust, pet litter, activated charcoal, vermiculite, paper or spill pillows to soak up liquid spills
- Fire extinguisher rated for all types of fires
- Other spill cleanup items specified on the labels of products used regularly
- Emergency telephone numbers (see page 5)
- Non-sparking shovel (for fuel spills), broom and dustpan
- Closeable, sturdy plastic container labeled "Spill Kit"
- Sweeping compound for dry spills and heavy-duty detergent for liquid spills (Properly dispose any collected materials.)
- Also consider a first-aid kit and a change of clothes in the event clothing becomes contaminated.

## Reporting Agricultural Spills

All agricultural spills or releases should be promptly reported (within 15 minutes) to three levels of government:

1. Local authorities (by calling 911)
2. State authorities:
  - The Michigan Department of Agriculture and Rural Development (MDARD) Agriculture Pollution Emergency Hotline: 1-800-405-0101
  - OR
  - MDEQ Pollution Emergency Alerting System (PEAS): 1-800-292-4706.
  - Note:** *PEAS must be called if the release reaches waters of the state.*
3. Federal authorities.
  - The National Response Center (NRC) at 1-800-424-8802 (not for manure spills)

See page 15 for additional information.

# Your Emergency Farm Plan

Farm Name \_\_\_\_\_

Date \_\_\_\_\_

## Section Ia. Farm Emergency Contact Information

*Place copies of this completed form near each farm phone.*

Smart911 services may be available in your county. For information, go to [Smart911.com](http://Smart911.com) or contact your county 911 dispatcher.

### Owner Emergency Contacts

**Primary Contact** \_\_\_\_\_

Phone \_\_\_\_\_

Cell \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Alternative Contact** \_\_\_\_\_

Phone \_\_\_\_\_

Cell \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Alternative Contact** \_\_\_\_\_

Phone \_\_\_\_\_

Cell \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### Farm Information

Name of Farm \_\_\_\_\_

Address of Farm \_\_\_\_\_  
\_\_\_\_\_

Directions to farm \_\_\_\_\_  
\_\_\_\_\_

Storage Site(s) address/location (if different)  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### Neighbors Contacts

Name \_\_\_\_\_

Phone \_\_\_\_\_

Cell \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Name \_\_\_\_\_

Phone \_\_\_\_\_

Cell \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Name \_\_\_\_\_

Phone \_\_\_\_\_

Cell \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# Your Emergency Farm Plan

Farm Name \_\_\_\_\_  
Date \_\_\_\_\_

## Section Ib. Agency Emergency Telephone Numbers

Place copies of this completed form near each farm phone.

Smart911 services may be available in your county. For information, go to Smart911.com or contact your county 911 dispatcher.

### Fire/Police/Medical Central Dispatch

Emergency phone ..... 911  
General phone \_\_\_\_\_

### Hospital

Name \_\_\_\_\_  
Phone \_\_\_\_\_

### Fire Department

Name \_\_\_\_\_  
Phone \_\_\_\_\_

### Electrical Company

Emergency \_\_\_\_\_  
General \_\_\_\_\_

### Gas Company

Emergency \_\_\_\_\_  
General \_\_\_\_\_

### Agrichemical Dealer

Name \_\_\_\_\_  
Phone \_\_\_\_\_

### State and Federal Agency Telephone Numbers:

Agriculture Pollution Emergency Hotline,  
Michigan Department of Agriculture and  
Rural Development (MDARD)..... 800-405-0101  
  
Pollution Emergency Alerting System (PEAS),  
Michigan Department of Environmental  
Quality (MDEQ)..... 800-292-4706  
  
National Response Center (NRC)... 800-424-8802  
  
Michigan Poison Control ..... 800-222-1222  
  
Michigan Meth Hotline ..... 866-638-4847

### Veterinarian

Name \_\_\_\_\_  
Phone \_\_\_\_\_

### Family Doctor

Name \_\_\_\_\_  
Phone \_\_\_\_\_

### County Road Commission

Name \_\_\_\_\_  
Phone \_\_\_\_\_

### County Drain Commissioner

Name \_\_\_\_\_  
Phone \_\_\_\_\_

### Equipment Dealer/Mechanic

Name \_\_\_\_\_  
Phone \_\_\_\_\_

### Emergency Management Coordinator/LEPC

Name \_\_\_\_\_  
Phone \_\_\_\_\_

### FBI Field Office (Detroit)

313-965-2323 \_\_\_\_\_

### Environmental Cleanup Company

Name \_\_\_\_\_  
Phone \_\_\_\_\_

# Your Emergency Farm Plan

## Section II. Map Information

Complete two maps for each site (farmstead and neighborhood maps).

Map the farmstead site (or other part of the farm where agrichemicals are stored) and label the following:

### Buildings/structures location

Barns, houses, shops, outbuildings, silos, grain bins, manure storage/pits, livestock barns (*note if manure storage below*), refrigeration compressors, upright or bunker silos

### Land features

- Roads and crossroads, driveways and lanes, fences and gates
- Wells and/or municipal water supply, hydrants, ponds, streams, rivers, lakes and wetlands

- Septic tanks, wastewater systems, cisterns
- Drainage ditches, culverts, surface drains
- Slope of land (drainage direction)
- North direction

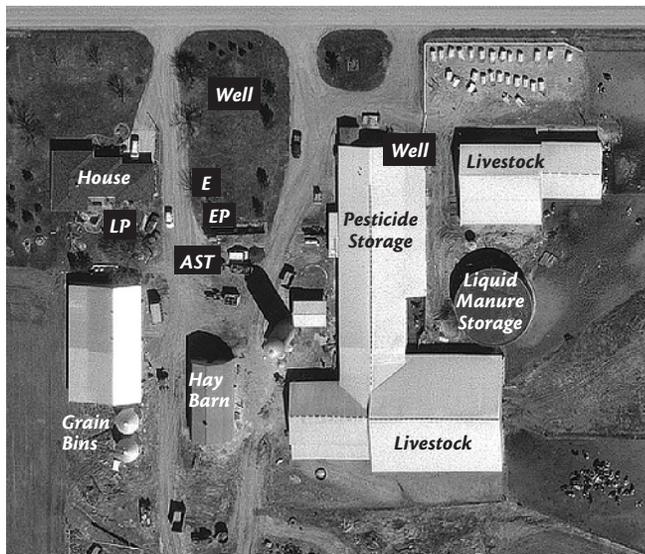
### Chemical/Fertilizer/Fuel storage

Identify where chemicals, fertilizers, and fuel are stored.

### Use these symbols to show locations:

- AST – Aboveground storage tank
- CG – Compressed gasses (oxy/acetylene)
- E – Main electrical shutoff
- EP – Emergency plan contained in Michigan emergency tube or key-box (see Glossary on page 27)
- G – Main gas shutoff
- LP – Liquid propane (note if buried)
- RU – Refrigeration units/compressors and coolant type
- UST – Underground storage tank
- Well – Farm water well

North ↑  
**Sample Farmstead Map**



North ↑  
**Sample Neighborhood Map**

# Your Emergency Farm Plan

Farm Name \_\_\_\_\_

Date \_\_\_\_\_

## Section IIa. Farmstead Map – CONFIDENTIAL

Place a map of your farmstead below. Clearly label buildings and special concerns at the farmstead facility.



<b>Key</b>	AST – Aboveground storage tank	EP – Emergency plan contained in Michigan emergency tube or key-box (see Glossary on page 27)	LP – Liquid propane (note if buried)	UST – Underground storage tank
	CG – Compressed gasses (oxy/acetylene)	G – Main gas shutoff	RU – Refrigeration units/compressors and coolant type	Well – Farm water well
	E – Main electrical shutoff			

# Your Emergency Farm Plan

Farm Name \_\_\_\_\_

Date \_\_\_\_\_

## Section IIb. Neighborhood Map – CONFIDENTIAL

Place a map of your neighborhood here. Identify and clearly label the farm, neighboring properties and special considerations in the neighborhood.



Make your own key.



# Your Emergency Farm Plan

Farm Name \_\_\_\_\_

Date \_\_\_\_\_

## Section IIIb. Farm Flammables and Refrigerants

Fuel Type	Total Capacity and Container Type	Seasons on Hand SP=Spring, S=Summer, F=Fall, W=Winter, YR=Year Round	Storage Location Description (e.g., <i>In front of pole barn</i> )
Diesel Fuel Gasoline			
Fuel Oil			
New Oil (motor and hydraulic)			
Used Oil (oil burner storage)			
Propane (home heat, forklift)			
Oxygen/Acetylene (cart tanks vs handheld tanks)			
Kerosene			
Anhydrous Ammonia for Refrigeration (See page 21 if you have this product.)			
(Other)			

# Your Emergency Farm Plan

Farm Name \_\_\_\_\_

Date \_\_\_\_\_

## Section IV. Farm Response Resources

To be used and reviewed with farm employees

Resource	Farm Location
Water Sources	
Shovels	
Fire Extinguishers (Employees trained in use)	
Excavation Equipment	
Spill Kits	
Medical Kits	
Flashlights/Generator	
Absorbent Materials	
Personal Protective Equipment: (chemical-resistant) suits, goggles, gloves, boots	
Manure Pumping Equipment/Contractor Empty Tanks or Containers (to hold manure, liquids, absorbent material or contaminated material/soil)	
Safety Data Sheets (SDSs): All employers are required to have a Safety Data Sheet (SDS) for each hazardous chemical stored or used in the workplace and to make SDSs available to employees.	
Other (Please Specify)	

# Your Emergency Farm Plan

Farm Name \_\_\_\_\_

Date \_\_\_\_\_

## Section V. Emergency Action Plans for Manure, Fertilizer and Pesticide Spills

### Breach of manure or commercial fertilizer storage

**General Action Steps:** Stop any flow into storage area, build containment dams, add soil to berms and apply manure/fertilizer from discharge to fields at agronomic rates. Utilize prearranged additional storage with neighbor. Prepare a Spill or Release Report.

**Your Plan/Resources:**

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### Spill on roadway

**General Action Steps:** Human injuries, if present, take precedence. Stop any additional spills, build containment dams, remove material and land apply at agronomic rates. Contact the road commission and drain commission. Do not wash material into roadside ditches or surface water. Prepare a Spill or Release Report.

**Your Plan/Resources:**

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### Manure/Fertilizer/Pesticide spill in the field

**General Action Steps:** Stop applications, build containment dams and collect material. Apply collected material at agronomic rates. Prepare a Spill or Release Report.

**Your Plan/Resources:**

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### Runoff of manure/fertilizer from the field

**General Action Steps:** Stop applications, plow a diversion trench and remove manure/fertilizer, if necessary. Prepare a Spill or Release Report.

**Your Plan/Resources:**

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### Manure storage volume enters the freeboard area

**General Action Steps:** Transfer manure to additional on-farm storage structure with adequate capacity if available. Utilize prearranged additional storage with neighbor. Land apply manure at agronomic rates to fields that are least likely to pose a discharge risk. Pump manure to an isolated area of a field with poor drainage to avoid berm overtopping and structure failure. Contact MDEQ, MDARD or both as appropriate. Prepare a Spill or Release Report.

**Your Plan/Resources:**

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*Report any pesticide, fertilizer or manure spills to:*  
 Michigan Department of Agriculture and Rural Development (MDARD)  
**AGRICULTURE POLLUTION EMERGENCY HOT LINE**  
**1-800-405-0101**  
 General agriculture information questions should be directed to MDARD's general information number  
**1-800-292-3939**

# Your Emergency Farm Plan

Farm Name \_\_\_\_\_

Date \_\_\_\_\_

## Section V. Emergency Action Plans for Manure, Fertilizer and Pesticide Spills

### Tile discharge of manure from field

**General Action Steps:** Stop manure application, build containment dams in drainage ditch or plug tile outlet(s); incorporate applied manure. Field apply collected manure at agronomic rates. Prepare a Spill or Release Report.

**Your Plan/Resources:**

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### Silage leachate containment plan

**General Action Steps:** Utilize sawdust, hay, straw or other material to contain leachate. Collect leachate in designed containment; utilize grass filter strip to treat pad runoff. Prepare a Spill or Release Report.

**Your Plan/Resources:**

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### Chemigation/Fertigation/Irrigation applied manure emergency

**General Action Steps:** Stop pumps, close valves, separate pipes, build containment dams and plug tiles leading to surface water. Remove material from discharge area and land apply at agronomic rates. Prepare a Spill or Release Report.

**Your Plan/Resources:**

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### Other manure/fertilizer/pesticide emergencies

**Your Plan/Resources:**

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### Release of Anhydrous Ammonia Fertilizer or Refrigerant

**General Action Steps:** Move upwind from release immediately. Do not enter downwind area. Immediately contact downwind neighbors and local authorities. Prepare a Spill or Release Report.

**Your Plan/Resources:**

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*Report any pesticide, fertilizer or manure spills to:*

Michigan Department of Agriculture and Rural Development (MDARD)

**AGRICULTURE POLLUTION  
EMERGENCY HOT LINE**

**1-800-405-0101**

General agriculture information questions should be directed to MDARD's general information number

**1-800-292-3939**

# Your Emergency Farm Plan

Farm Name \_\_\_\_\_

Date \_\_\_\_\_

## Section VI. LEPC Planning Page

*(This section is to be completed by your LEPC.)*

**If your farm stores extremely hazardous substances (EHS) or is a SARA (Superfund Amendments and Reauthorization Act) Title III site, submit a copy of your emergency plan to your Local Emergency Planning Committee (LEPC).**

If you have an EHS on your farm in an amount that is at or above the threshold planning quantity (TPQ), you are required by law to notify your LEPC and the Michigan SARA Title III Program.

The LEPC will complete the following additional emergency planning requirements and recommendations to develop an off-site emergency response plan for your farm.

A. This plan has been developed for (check all that apply):

- SARA Title III Off-site response plan purposes
- Michigan Firefighter Right-to-know purposes
- MIOSHA HAZWOPER purposes

B. Describe method used to determine vulnerable zone:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

1. Primary hazard to response personnel:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2. Response precautions/suggested PPE:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

3. Evacuation routes, including primary/alternative routes out of vulnerable zone:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

C. Fire department response procedures for this site:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

D. Site security control procedures:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Other emergency planning recommendations (optional):

A. Establish access control procedures and maps.

- 1. Access control points
- 2. Traffic rerouting within the vulnerable zone

B. Identify shelters in the event an evacuation is needed:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

C. Identify where chemical-specific toxicological information can be found:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

# Agricultural Spill Response Plans

According to the Michigan Department of Environmental Quality (MDEQ), chemical releases are potentially reportable under one or more of 26 state and federal regulations. Releases include those that are not allowed or that are due to accidents or theft. Chemicals include pesticides, fertilizers, petroleum products and manure. To simplify the reporting requirements for agricultural releases, the following general guideline has been developed.

## All agricultural releases should be promptly reported (within 15 minutes) to three levels of government:

1. Local authorities (by calling 911)
  2. State authorities:
    - The Michigan Department of Agriculture and Rural Development (MDARD) Agriculture Pollution Emergency Hotline: 1-800-405-0101
- OR
- MDEQ Pollution Emergency Alerting System (PEAS): 1-800-292-4706. **Note:** PEAS must be called if the release reaches waters of the state.

**Waters of the state:** Groundwaters, lakes, rivers and streams, and all other watercourses and waters, including the Great Lakes, within the jurisdiction of this state. Additional examples include bogs, catch basins, creeks, drainage ditches, drainage wells, ponds, sewer drains, storm drains, surface risers, swamps and wetlands.

## 3. Federal authorities.

- The National Response Center (NRC) at 1-800-424-8802 (not for manure spills)

You can find details of the release reporting requirements at [www.michigan.gov/chemrelease](http://www.michigan.gov/chemrelease) or contact the MDEQ Environmental Assistance Center at 800-662-9278.

Release and spill reporting is important. Always develop a Spill or Release Report (page 16) after an incident. File the report with your farm records and with the appropriate agency, if required. Your file record is needed in the event of a complaint or lawsuit concerning the spill or release incident.

## Spill or release response procedures

1. **Caution!** Always assess the dangers of spill or release response first. If you cannot control and/or contain the spill without endangering your health or safety, then immediately call 911. If 911 service is not available in your area, call the fire department or state police directly. Post these numbers by all phones. Use the form on page 5 (Section Ib: Agency Emergency Telephone Numbers) to record emergency phone numbers.
2. **Control** the source of the spill or release, if possible. For example, shut off valves or pump, plug holes or set container upright. If there is a fire, be aware that spraying water on some chemicals can cause a chemical reaction that can make the situation worse. For small fires involving chemicals, use a fire extinguisher rated

for all types of fires. For any fire that you cannot easily control, call 911 or the fire department. Make sure you indicate what chemicals are involved when reporting the fire.

3. **Contain** the spill to a small area, away from groundwater or surface water. The spill could reach groundwater or surface water if it soaks into the soil or if it gets into a drainage ditch, wetland or open water such as a pond or stream. Spills that reach the water can contaminate wells, kill fish and wildlife, and create high clean-up costs.
4. **Communicate** details to local, state and federal authorities. Use the form on page 16 (Spill or Release Report) to record important details about the spill or release. MDARD or MDEQ spill response staff members will help you determine the appropriate agency that may require the Spill or Release Report.
5. **Clean up and follow up on requirements.** All releases must be cleaned up. With some releases, you can easily clean up and dispose of the chemical using commonly available farm resources (such as a loader, a shovel or a manure spreader using a suitable field area for distribution of contaminated soil). In other cases, a professional remediation company may be required to safeguard the community and the environment. MDARD or MDEQ spill response staff members will help you determine when a professional remediation company is required.

# Spill or Release Report



*Issued by authority of the Michigan Department of Environmental Quality.*

**NOTE:** Some regulations require a specific form to use and procedures to follow when reporting a release. Those forms and procedures **MUST** be used and followed if reporting under those regulations. This report form is to aid persons reporting releases under regulations that do not require a specific form. This report form is not required to be used. **To report a release, some regulations require a facility to call the PEAS Hotline at 800-292-4706 (or the MDEQ District Office that oversees**

**the county where it occurred) and other agencies and provide information that is included in this form. A written follow-up report might be required. This form may be used for the written follow-up report and to document the initial report. If you prefer to submit this report electronically by FAX or e-mail, contact the regulating agency for the correct telephone number or e-mail address. Go to [www.michigan.gov/chemrelease](http://www.michigan.gov/chemrelease) for more information.**

*Please print or type all information.*

Name and Title of Person Submitting Written Report		Telephone Number (provide area code) (        )		
Name of Business		<b>RELEASE LOCATION</b> (Provide address if different than business, if known, and give directions to the spill location. Include nearest highway, town, road intersection, etc.)		
Street Address				
City, State, ZIP				
Business Telephone Number (provide area code) (        )				
SITE IDENTIFICATION NUMBER AND OTHER IDENTIFYING NUMBERS (if applicable)		County	Township	Tier/Range/Section (if known)
<b>RELEASE DATA:</b> Complete all applicable categories. Check all the boxes that apply to the release. Provide the best available information regarding the release and its impacts. Attach additional pages if necessary.				
DATE & TIME OF RELEASE (if known) ____/____/____ ____ am/pm	DATE & TIME OF DISCOVERY ____/____/____ ____ am/pm	DURATION OF RELEASE (if known) ____ days ____ hours ____ minutes		TYPE OF INCIDENT <input type="checkbox"/> Explosion <input type="checkbox"/> Fire <input type="checkbox"/> Leaking container <input type="checkbox"/> Other _____ <input type="checkbox"/> Loading/unloading release <input type="checkbox"/> Pipe/valve leak or rupture <input type="checkbox"/> Vehicle accident
<b>MATERIAL RELEASED</b> (chemical or trade name) <input type="checkbox"/> Check here if additional materials listed on attached page.		<b>CAS NUMBER OR HAZARDOUS WASTE CODE</b>	<b>ESTIMATED QUANTITY RELEASED</b> (indicate unit e.g. lbs, gals, cu ft or yds)	<b>PHYSICAL STATE RELEASED</b> (indicate if solid, liquid, or gas)
_____		_____	_____	_____
_____		_____	_____	_____



# Spill or Release Report *(continued)*

Estimated quantity of any recovered materials and a description of how those materials were managed (include disposal method if applicable) <input type="checkbox"/> CHECK HERE IF DESCRIPTION OR ADDITIONAL COMMENTS ARE INCLUDED ON ATTACHED PAGE																																																																															
Assessment of actual or potential hazards to human health (Include known acute or immediate and chronic or delayed effects, and where appropriate, advice regarding medical attention necessary for exposed individuals.) <input type="checkbox"/> CHECK HERE IF DESCRIPTION OR ADDITIONAL COMMENTS ARE INCLUDED ON ATTACHED PAGE																																																																															
<b>MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY NOTIFIED:</b>  <input type="checkbox"/> INITIAL CONTACT BY: <input type="checkbox"/> Telephone <input type="checkbox"/> FAX <input type="checkbox"/> Email <input type="checkbox"/> Other DATE/TIME INITIAL CONTACT: _____ <input type="checkbox"/> PEAS: 800-292-4706 Log Number Assigned _____ <input type="checkbox"/> DEQ District or Field Office Divisions or Offices Contacted: <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;"><input type="checkbox"/> Bay City</td> <td style="width: 50%; border: none;"><input type="checkbox"/> Gwin</td> <td style="width: 50%; border: none;"><input type="checkbox"/> Air Quality</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Cadillac</td> <td style="border: none;"><input type="checkbox"/> Jackson</td> <td style="border: none;"><input type="checkbox"/> Remediation &amp; Redevelopment</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Calumet</td> <td style="border: none;"><input type="checkbox"/> Kalamazoo</td> <td style="border: none;"><input type="checkbox"/> Office of Oil Gas &amp; Minerals</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Crystal Falls</td> <td style="border: none;"><input type="checkbox"/> Lansing</td> <td style="border: none;"><input type="checkbox"/> Water Resources</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Detroit</td> <td style="border: none;"><input type="checkbox"/> Newberry</td> <td style="border: none;"><input type="checkbox"/> Office of Waste Management</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Gaylord</td> <td style="border: none;"><input type="checkbox"/> Warren</td> <td style="border: none;"><input type="checkbox"/> &amp; Radiological Protection</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Grand Rapids</td> <td style="border: none;"></td> <td style="border: none;"><input type="checkbox"/> Office of Drinking Water &amp; Municipal Assistance</td> </tr> </table> <p><b>NOTE: DEQ Office locations are subject to change</b></p> NAME AND TITLE OF PERSON MAKING INITIAL REPORT:  PERSON CONTACTED & TELEPHONE NUMBER:  DEQ STAFF CONTACTED & TELEPHONE NUMBER: _____ _____	<input type="checkbox"/> Bay City	<input type="checkbox"/> Gwin	<input type="checkbox"/> Air Quality	<input type="checkbox"/> Cadillac	<input type="checkbox"/> Jackson	<input type="checkbox"/> Remediation & Redevelopment	<input type="checkbox"/> Calumet	<input type="checkbox"/> Kalamazoo	<input type="checkbox"/> Office of Oil Gas & Minerals	<input type="checkbox"/> Crystal Falls	<input type="checkbox"/> Lansing	<input type="checkbox"/> Water Resources	<input type="checkbox"/> Detroit	<input type="checkbox"/> Newberry	<input type="checkbox"/> Office of Waste Management	<input type="checkbox"/> Gaylord	<input type="checkbox"/> Warren	<input type="checkbox"/> & Radiological Protection	<input type="checkbox"/> Grand Rapids		<input type="checkbox"/> Office of Drinking Water & Municipal Assistance	<b>OTHER ENTITIES NOTIFIED:</b> <table style="width: 100%; border: none;"> <thead> <tr> <th style="width: 80%;"></th> <th style="width: 10%; text-align: center;">Date:</th> <th style="width: 10%; text-align: center;">Time:</th> </tr> </thead> <tbody> <tr><td><input type="checkbox"/> National Response Center (NRC): 800-424-8802</td><td style="text-align: center;">_____</td><td style="text-align: center;">_____</td></tr> <tr><td><input type="checkbox"/> US Coast Guard Office:</td><td style="text-align: center;">_____</td><td style="text-align: center;">_____</td></tr> <tr><td style="padding-left: 20px;"><input type="checkbox"/> Detroit <input type="checkbox"/> Grand Haven <input type="checkbox"/> Sault Ste. 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# Additional Emergency Issues for Livestock Farms

## Manure Discharges

Preventing and properly responding to a manure spill or discharge on a farm is everyone's concern. Communication between the farm owner, supervisors and employees can generate ideas and awareness that lead to accident prevention and quick response in a spill emergency.

An emergency action plan is a basic, yet thorough, common-sense plan that will help you make the right decisions during an emergency. Your emergency plan on pages 12-13 will address potential spill scenarios that can occur on or nearby your farm. Post your emergency plan or file in a highly visible location. All employees must be aware of the location of the plan and its contents.

## Employee training for a manure discharge

Developing an emergency plan is the first step toward implementing a sound environmental management plan on a livestock farm. In reality, a plan cannot be implemented if employees are not aware of the plan's contents. All too often, a good plan remains on the shelf and is never implemented because employees lack training and direction.

Employee training may vary from operation to operation. Some producers set up formal classroom-style training for employees; others work one-on-one with individuals. Whatever your training approach, be sure to convey the appropriate information to all employees.

For example: Employee A is in charge of manure applications. In your plan, this employee is responsible for:

- Maintaining setback from environmentally sensitive areas.
- Calibrating the spreaders.
- Keeping manure application records.
- Keeping current with the spreading plan.
- Monitoring tile line outlets before and after manure applications.
- Maintaining the spreaders.

This employee will need training to be familiar with the locations of setbacks and tile line outlets, and the recordkeeping system for manure application. Likely, he or she will need training in spreader calibration and the farm's spreading plan, as well as additional training to be familiar with the farm's emergency plan.

## Biosecurity for Livestock Operations

Biosecurity can be defined as those practices designed to prevent the introduction of a harmful agent into a defined setting. In livestock operations, this means preventing harmful agents such as viruses, bacteria, parasites or toxins from coming in contact with livestock. Highly visible livestock disease outbreaks, such as foot-and-mouth disease in the United Kingdom, have focused our attention on biosecurity. It is important to realize, however, that many diseases commonly found in the United States can be spread from farm to farm and result in significant animal sickness, death and economic losses.

Biosecurity protocols should be part of every farm's management plan and should include protocols for farm visitors. Visitors may include neighbors and friends making casual visits as well as veterinarians, feed sales people or equipment dealers making professional visits. The common thread among visitors is that they may unknowingly bring harmful agents to an operation. The risk is increased with visitors who regularly go from farm to farm as part of their professions.

### Use the following guidelines when hosting farm visitors:

- Include careful consideration for biosecurity risks with every farm visit.
- Park visitor vehicles away from livestock production areas to reduce contamination risks.
- Provide clean clothing and footwear for visitors to the livestock production areas.
- Minimize contact with animals, livestock waste and feedstuff whenever possible.

See the Michigan State University (MSU) Extension bulletin *Biosecurity Guide for Livestock Farm Visits* (E2842) for more detailed information. Producers who participate in livestock exhibitions should see the MSU Extension bulletin *Biosecurity for Livestock and Poultry Exhibitions* (E2843) for recommendations.

In the case of any unexplainable or suspicious animal deaths, immediately contact the MDARD Animal Industry Division at 517-284-5769. Rapid detection and containment of biological threats is important for Michigan's livestock industry.

# Security and Safety

## Anhydrous Ammonia Fertilizer Security and Safety

Anhydrous ammonia can be extremely dangerous to human health. Classified as an extremely hazardous substance (EHS), it's subject to SARA Title III reporting requirements for emergency planning and releases.

Anhydrous ammonia is a colorless gas with a penetrating, pungent odor that can be detected at levels as low as 5 parts per million. Both the vapor and the liquid are dangerous. Contact with a low concentration of vapor can cause eye and respiratory tract irritation. High concentrations of vapor can cause eye inflammation, laryngitis, a feeling of suffocation and fluid buildup in the lungs that can be fatal. Contact with the liquid can cause skin irritation or severe skin or eye burns. If exposed, flush skin and eyes with water immediately. The Safety Data Sheet (SDS) for anhydrous ammonia provides a complete list of the health hazards. You can obtain one from anhydrous ammonia dealers and manufacturers.

## Anhydrous Ammonia Security and Theft

Anhydrous ammonia can be a key ingredient in the illegal production of methamphetamines. The Michigan Commission of Agriculture established the Anhydrous Ammonia Safety and Security Practices (AASSPs), standards that constitute safe and secure anhydrous ammonia storage and handling.

Sellers and end users that maintain anhydrous ammonia fertilizer in compliance with the AASSPs are exempt from tort liability as explained in Michigan Public Act (PA) 417 of 2006.

To comply with AASSPs, sellers or end users shall implement any two of the following anhydrous ammonia practices:

- a. Storage in a tank that is properly equipped with a functioning tank or valve lock that is used at all times except when the seller or end user is taking anhydrous ammonia from the tank or filling the tank.
- b. Storage with a substance added to the anhydrous ammonia that is or that contains a dye that will, on release from the container that holds the anhydrous ammonia, stain objects that it comes in contact with, including skin and clothing, in a highly visible manner. The tank shall have decal stickers or other signage indicating the dye is present.
- c. Nurse tank storage with an inhibitor that will, when used in the illegal production of methamphetamine, reduce the purity or usability of the drug.
- d. Security cameras or other video surveillance equipment with recording capability that provides for the identification of trespassers and other persons on the property within the vicinity of the storage tank(s).
- e. Storage in a tank that is located within locked security fencing at all times, except when the seller or end user is taking anhydrous ammonia from the tank or filling the tank.

- f. Storage in a tank that is visible by lighting, motion detector lighting or motion detector alarms.
- g. Nurse tank stewardship that includes all of the following:
  - i. Removing tank hoses when not in use.
  - ii. Parking tanks downwind of sensitive areas.
  - iii. Not leaving tanks sitting in a field overnight.
  - iv. Not keeping full tanks on site any longer than absolutely necessary.

To report suspicious activities involving anhydrous ammonia, contact the Michigan Meth Hotline at 866-METH-TIP (866-638-4847) or your local police department.

### **Anhydrous ammonia tank safety**

If you have a stationary anhydrous ammonia tank that holds 500 gallons or more, you must have an air permit and you must comply with the Michigan Occupational Safety and Health Administration (MIOSHA) safety standards for Storage and Handling of Anhydrous Ammonia. These standards address tank specifications including safety relief valves and restrictions on the tank location, and they require an inspection and maintenance program. For information on the safety standards, go to [www.michigan.gov/miosha](http://www.michigan.gov/miosha) or call 517-322-1809. For assistance with the air permit, call the MDEQ Environmental Assistance Center at 800-662-9278.

*(Continued on next page.)*

## Security and Safety (continued)

### Anhydrous Ammonia – Sara Title III Reporting Requirements

#### Reporting requirements for storage and use

The threshold planning quantity (TPQ) for anhydrous ammonia is 500 pounds or approximately 91 gallons (a typical nurse tank contains 1,000 gallons). If you ever have this amount or more on site, even if only during application, include the anhydrous ammonia on the Agrichemical Information table (Section IIIa on page 9) and follow the instructions for reporting agrichemicals on your farm in Agricultural Spill Response Plans on page 23.

#### Anhydrous ammonia releases

In the event of a release, the reportable quantity (RQ) for anhydrous ammonia is 100 pounds or approximately 18 gallons. If 18 gallons or more is accidentally released (for example, the nurse tank malfunctions, or the hose disconnects and the contents of the tank are released), you must contact 911, the Agriculture Pollution Emergency Hotline and the National Response Center within 15 minutes. You can find the telephone numbers in Section Ib: Agency Emergency Telephone Numbers on page 5. You must write a follow-up report using the Spill or Release Report found on page 16 and submit it to your Local Emergency Planning Committee (LEPC) and the Michigan SARA Title III Program within 30 days after the release.

Because it is difficult to quickly determine the amount of a release, every release should be reported. There is no penalty for overreporting!

Routine agricultural application of anhydrous ammonia is not considered a release.

To find contact information for your LEPC, visit [www.michigan.gov/sara](http://www.michigan.gov/sara) and select “SARA Title III,” or call the Michigan SARA Title III Program at 517-284-SARA (517-284-7272).

#### Anhydrous ammonia for refrigeration

Fruit and vegetable operations with refrigerator rooms or cold storages that utilize ammonia as the refrigerant must comply with a number of state and federal regulations.

Anhydrous ammonia is a toxic gas under normal conditions. Many parts of a refrigeration system contain ammonia liquefied under pressure. Releases of ammonia have the potential for harmful effects on workers and the public. Ammonia under pressure increases the risk of human exposure because larger quantities of the refrigerant have the potential for rapid release into the air.

#### Emergency planning

Facilities that have ammonia at 500 pounds or more must report to their LEPC and the Michigan SARA Title III Program, and comply with certain requirements for emergency planning. Use the form on page 26 to make this notification.

#### Emergency release notification

Facilities that release 100 pounds or more of ammonia must immediately report the release as described in the Spill/Release guidelines on page 15.

#### Hazardous chemical reporting

Facilities that have ammonia at 500 pounds or more must submit a Tier II Emergency and Hazardous Chemical Inventory form to the Michigan SARA Title III Program, their LEPC and their local fire department. For additional information, contact your LEPC or visit the Michigan SARA Title III Program website at [www.michigan.gov/sara](http://www.michigan.gov/sara). You can also email questions to [deq-sara@michigan.gov](mailto:deq-sara@michigan.gov).

### Ammonium Nitrate Fertilizer Security

Ammonium nitrate is a common agricultural fertilizer that provides a concentrated source of nitrogen. Not widely used in Michigan, it may be used on some specialty crops. Unfortunately, it is also a key component in many explosives. It was involved in the tragic fertilizer plant explosion in April 2013 in West, Texas, and in the bombing of the federal building in Oklahoma City that killed 168 people in April 1995.

Ammonium nitrate security legislation (Public Act 68) was signed into Michigan law on July 11, 2005. Among other requirements, the act requires retailers to obtain certain information about the ammonium nitrate sale and purchaser:

- Date of sale
- Quantity purchased
- Purchaser's driver's license number or picture ID number
- Purchaser's name, address and phone number
- Relationship between purchaser and person picking up or accepting delivery of the material

## Security and Safety (continued)

If you use or store ammonium nitrate fertilizer:

1. Keep the storage areas secure and locked where fire codes permit.
2. Keep an updated and accurate inventory of all ammonium nitrate in your possession.
3. Walk the perimeter of your storage area on a regular basis, checking for signs of suspicious activity.
4. Report suspicious activity, vehicles and people, as well as theft, sabotage and vandalism to your local law enforcement agency.
5. Lock or secure all application equipment when not in use.
6. Consider background checks for new employees.
7. Restrict access of nonemployees to your facility such as people making deliveries or doing maintenance.
8. Prominently post a list of emergency numbers; ensure family members and employees are aware of it.

**Note:** The security requirements apply only to ammonium nitrate as a single nutrient fertilizer (33 to 34 percent nitrogen). Use of ammonium nitrate fertilizer in blends such as 12-12-12 is not included.

### Agricultural Chemical and Application Equipment Security

Producers need to increase their attention to farm security due to threats we now face as a nation. Producers should implement security measures to protect agricultural chemicals and application equipment as part of a comprehensive farm-wide security strategy. They should be vigilant concerning suspicious activity and proactive in security measures. Examples of situations that should be reported as soon as possible include:

- Unusual sickness among staff or unusual numbers of sick or dead animals, birds or insects in your immediate vicinity
- Signs of break-ins, theft, tampering or indication of possible attempt to harm or damage a vital or sensitive facility
- Unexpected spraying activities whether via aircraft, trucks or individuals with hand-held sprayers in areas where such activity would not be customary or appropriate, or evidence that such unexplained activity recently occurred

### Fuel Safety and Storage

All fuel tanks should be equipped with crash posts and should be stored more than 40 feet from buildings unless the tanks were constructed to be fire protected. For details, please review the MSU Extension bulletin On-Farm Fuel Storage (WQ59). If total petroleum capacity exceeds

1,320 gallons combined, including gasoline, diesel, new oil and waste oil, a Spill Prevention Control and Countermeasure Plan (SPCC Plan) is required. MAEAP Technicians are trained and knowledgeable in SPCC Plans and can assist growers with the completion of these plans.

### On-Farm Bulk Liquid Fertilizer Storage

The Michigan Department of Agriculture and Rural Development (MDARD) Regulation 642, "On-Farm Fertilizer Bulk Storage," became effective on August 13, 2003. These rules establish a statewide standard for storing and handling liquid fertilizer on the farm. Similar rules have been in place since October 1999 for commercial facilities. Uniform standards for both the commercial and private sectors of agriculture help ensure the protection of surface water and groundwater and safe product storage.

These rules apply to farms storing liquid fertilizer for more than 30 days in tanks greater than 2,500 gallons or a combined total greater than 7,500 gallons. These regulatory requirements allow for farm-specific designs that meet requirements in a cost-effective manner. Access the full text of Regulation 642 at the MDARD website: [www.michigan.gov/mda-bulkstorage](http://www.michigan.gov/mda-bulkstorage).

Regulation 642 addresses general tank requirements, liquid level gauges and security, water well and surface water setbacks, secondary containment, operational area containment,

## Security and Safety *(continued)*

and emergency plans and record keeping. The emergency plan outlined in this publication meets the requirements of the regulation.

If you think you may be subject to Regulation 642, contact your MAEAP technician, or the MDARD Pesticide and Plant Pest Management Division at 800-292-3939 for more information.

### Reporting Agrichemicals On Your Farm

Under Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA Title III), also known as the Emergency Planning and Community Right-to-Know Act, the U.S. Environmental Protection Agency has identified 355 chemicals that are classified as extremely hazardous substances (EHS). The active ingredients in some commonly used pesticides are EHSs.

Every EHS has an associated threshold planning quantity (TPQ). **If you have an EHS on your farm in an amount that is at or above the TPQ, you are required to notify the Michigan SARA Title III Program and your LEPC that you are subject to SARA Title III Section 302 Emergency Planning Notification.** The formula used to determine if an EHS meets the TPQ can vary depending on the formulation of the product.

Table 1: Common Agrichemical Extremely Hazardous Substances found on page 24 is a list of EHSs that might be found on a farm. The list includes some of the agricultural products that contain these EHSs. If you ever have any of the listed EHSs on your farm, submit the form on page 26 (SARA Title III Section 302 Emergency Planning Notification) along with the chemical information (Section IIIa: Agrichemical Information and Section IIIb: Farm Flammables

and Refrigerants) to the Michigan SARA Title III Program. They will let you and your LEPC know if your farm is subject to the offsite emergency planning requirements in SARA Title III. If it is, you will need to provide a copy of your farm plan to the LEPC.

The LEPC is required to complete Section VI in that plan.

If you have questions about this requirement, you can contact your MAEAP technician, your LEPC or visit [www.michigan.gov/sara](http://www.michigan.gov/sara).

## Table 1. Common Agrichemical Extremely Hazardous Substances

Common pesticides and fertilizer that require SARA Title III reporting when listed threshold planning quantities (TPQs) are met or exceeded.  
Report to the LEPC and the Michigan SARA Title III Program using the form on page 26.

Agricultural Chemicals Classified as Extremely Hazardous Substances (EHS)			Example Products and Threshold Planning Quantities (TPQs) to Report Storage on the Farm			
Active Ingredient (EHS)	Chemical Abstracts Service (CAS) Number	Threshold Planning Quantity* (TPQ) lbs	Product Name/Description	Formulation	Percent active ingredient (A.I.)	Approx. TPQ product
Acrolein	107028	500	MAGNACIDE B MICROBIOCIDE / biocide	READY TO USE	95	55 gal
Aldicarb	116063	100/10,000	TEMIK15G / insecticide	GRANULAR	15	varies
Aluminum phosphide	20859738	500	/ fumigant	VARIOUS	varies	varies
Anhydrous ammonia	7664417	500	NH3 / fertilizer 82-0-0	LIQUID UNDER PRESSURE	100	91 gal
Azinphos-methyl	86500	10/10,000	Guthion Solupak 50% WP	WETTABLE POWDER	50	varies
Carbofuran	1563662	10/10,000	FURADAN 4F / insecticide-nematicide	FLOWABLE CONCENTRATE	44	varies
Chlorine	7782505	100	CHLORINE / disinfectant	VARIOUS	varies	varies
Chloromequat chloride	999815	100/10,000	CYCOCEL / plant growth regulator	SOLUBLE CONCENTRATE	11.8	varies
Chlorophacinone	3691358	100/10,000	/ Rodenticide	VARIOUS	varies	varies
Coumaphos	56724	100/10,000	/ Insecticide	VARIOUS	varies	varies
Dichlorvos	62737	1000	VAPONA CONCENTRATE	EMULSIFIABLE CONCENTRATE	40.2	249
Dicrotophos	141662	100	BIDRIN / insecticide	SOLUTION-READY TO USE	82	12.5 gal
Dimethoate	60515	500/10,000	DIMETHOATE 4E / insecticide	EMULSIFIABLE CONCENTRATE	43.5	varies
Diphacinone	82666	10/10,000	/ rodenticide	VARIOUS	varies	varies
Disulfoton	298044	500	DI-SYSTON 15% / insecticide	GRANULAR	15	3333 lb
Endosulfan	115297	10/10,000	THIONEX 3EC / insecticide	EMULSIFIABLE CONCENTRATE	33.7	varies
Ethoprop	13194484	1000	MOCAP 15G / sterilant-fumigant	GRANULAR	15	6667 lb
Ethylene oxide	75218	1000	/ sterilant fumigant	PRESSURIZED GAS	varies	varies

*(Continued on next page.)*

\* For some solid chemicals, there are two TPQs (e.g., 10/10,000). the lower TPQ applies to solid EHSs that are a fine powder or are in solution. If the EHS is in solution, multiply the amount by 0.2 and compare to the lower TPQ value.

## Table 1. Common Agrichemical Extremely Hazardous Substances *(continued)*

Agricultural Chemicals Classified as Extremely Hazardous Substances (EHS)			Example Products and Threshold Planning Quantities (TPQs) to Report Storage on the Farm			
Active Ingredient (EHS)	Chemical Abstracts Service (CAS) Number	Threshold Planning Quantity* (TPQ) lbs	Product Name/Description	Formulation	Percent active ingredient (A.I.)	Approx. TPQ product
Formaldehyde	50000	500	FORMALDEHYDE / disinfectant	PRESSURIZED GAS	varies	varies
Formetanate hydrochloride	23422539	500/10,000	CARZOL / miticide-insecticide	WETTABLE POWDER	92	varies
Methamidophos	10265926	100/10,000	MONITOR / insecticide	EMULSIFIABLE CONCENTRATE	40	varies
Methidathion	950378	500/10,000	SUPRACIDE 25WP / insecticide-miticide	WETTABLE POWDER	25	varies
Methiocarb	2032657	500/10,000	MESUROL / insecticide-miticide-molluscicide	WETTABLE POWDER	75	varies
Methomyl	16752775	500/10,000	LANNATE / insecticide	SOLUBLE POWDER	90	varies
Methyl isothiocyanate	556616	500	OSMOSE / soil contact non-fumigant	SOLUTION-READY TO USE	97	57 gal
Methyl parathion	298000	100/10,000	METHYL 4EC / insecticide	EMULSIFIABLE CONCENTRATE	43.4	varies
Oxamyl	23135220	100/10,000	VYDATE / insecticide-nematicide	SOLUBLE CONCENTRATE	24	varies
Paraquat dichloride	1910425	10/10,000	GRAMOXONE / herbicide	EMULSIFIABLE CONCENTRATE	43.2	varies
Peracetic acid	79210	500	OXIDATE / pesticide, sanitizer	SOLUBLE CONCENTRATE	2	2726 gal
Phenol	108952	500/10,000	/disinfectant	VARIOUS	varies	varies
Phorate	298022	10	THIMET 20G / insecticide	GRANULAR	20	50 lb
Phosphine	7803512	500	VAPORPHOS PHOSPHINE / fumigant	PRESSURIZED GAS	99.3	540 lb
Strychnine	57249	100	GOPHER BAIT 50 / rodenticides	GRANULAR	50	200 lb
Sulfuric acid	7664939	1000	/ sanitizer	VARIOUS	varies	varies
Terbufos	13071799	100	COUNTER 15G / insecticide-nematicide	GRANULAR	15	667 lb
Warfarin	81812	500	/ rodenticides	VARIOUS	varies	varies
Zinc phosphide	1314847	500	/ rodenticides	VARIOUS	varies	varies

\* For some solid chemicals, there are two TPQs (e.g., 10/10,000). the lower TPQ applies to solid EHSs that are a fine powder or are in solution. If the EHS is in solution, multiply the amount by 0.2 and compare to the lower TPQ value.

# SARA Title III Section 302 Emergency Planning Notification

If your farm never has EHSs on site and was never subject to Emergency Planning, you do not need to complete this form.

Name of farm: \_\_\_\_\_

Name of farm contact: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone number where contact can be reached during business hours:

City: \_\_\_\_\_ Zip code: \_\_\_\_\_

(\_\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_, Ext. \_\_\_\_\_

Email address: \_\_\_\_\_

Location of EHS if different from above: \_\_\_\_\_

County: \_\_\_\_\_

Type of farm (Ex: Asparagus farm): \_\_\_\_\_

Please check one box:

- This farm is NO LONGER subject to Emergency Planning.
- This farm IS subject to Emergency Planning.
- Please evaluate and tell me if this farm is subject to Emergency Planning.

Submit this form and the "list of Agrichemicals used or stored" (sections IIIa and IIIb) to: [deq-sara@michigan.gov](mailto:deq-sara@michigan.gov)

Or you may mail to:

Michigan SARA Title III Program  
Department of Environmental Quality  
PO Box 30457  
Lansing, MI 48909-7957

You and your LEPC will be notified by email when this form is received and if any follow-up is needed. Call 517-284-SARA (517-284-7272) if you have any questions.

## Glossary

**Active Ingredient (AI)** – The component of a product or pesticide that controls the target pest.

**Agrichemical** – Agricultural chemical: pesticides and fertilizers, including any agents and adjuvants.

**EHS** – Extremely Hazardous Substance (EHS): a chemical listed by EPA. When a specified quantity of an EHS is on site, authorities must be notified as part of the SARA (Superfund Amendments and Authorization Act) Title III, also known as the Emergency Planning and Community Right-to-Know Act.

**Formulation** – Mixtures of active and inert ingredients. Formulations may make an active ingredient safer to handle, more effective and easier to measure, mix and apply.

**Key-Box** – A secure locked container commonly used by fire departments and police departments. Items such as facility keys and maps are locked inside the container by the key-box owner so that first responders can access them via master key in the event of an emergency.

**Leachate** – A byproduct of the silage storing process. Moisture from harvested crops that leave the silage media carrying nutrients and organic matter that can then pool or run off.

**LEPC** – The Local Emergency Planning Committee (LEPC) develops the community response plans for all sites within its jurisdiction that store extremely hazardous substances in quantities that require a plan. In most cases, the local emergency management coordinator is on the LEPC.

**MAEAP** – The Michigan Agriculture Environmental Assurance Program (MAEAP) is an innovative, proactive program that helps farms of all sizes and all commodities voluntarily prevent or minimize agricultural pollution risks. MAEAP's mission is to develop and implement a proactive environmental assurance program ensuring that Michigan farmers are engaging in cost-effective pollution prevention practices and working to comply with state and federal environmental regulations.

**Michigan Emergency Tube** – An optional water resistant container that contains a farm emergency plan. If chosen to store the Emergency Plan, the emergency tube is generally mounted near the electrical shutoff to the farm for first responders to easily access.

**National Fire Protection Association 704 Rating** – The National Fire Protection Association (NFPA) system for indicating the health, flammability, reactivity and special hazards for many common chemicals.

**North American/DOT Guidebook Number** – The Department of Transportation 4-digit identification number (preceded by the letters UN or NA) that provides vital information when responding to a hazardous-materials or dangerous-goods incident.

**NRC** – The U.S. Coast Guard National Response Center must be contacted at 800-424-8802 when chemicals including agrichemicals and petroleum products are released to the waters of the state.

**PEAS** – Pollution Emergency Alerting System is operated by the Michigan Department of Environmental Quality. It should be called at 800-292-4706 when there is a chemical release to the environment including a release of agrichemicals, petroleum products and manure.

**Release** – Spill, leak, pump, pour, emit, empty, discharge, inject, escape, leach, dump or dispose. Normal agricultural application is NOT a release.

**RQ** – Reportable quantity: A release of a chemical equal to or exceeding the RQ must be reported to local, state and federal authorities.

**Safety Data Sheet (SDS)** – Data sheets that contain specific information on toxicity, first aid, personal protection equipment, storage and handling precautions, spill and leak cleanup and disposal practices, transportation, physical data and reactivity data. SDSs are available from manufacturers. By June 1, 2015, all Material Safety Data Sheets (MSDSs) will be replaced with Safety Data Sheets (SDSs).

**Smart911** – An emergency planning service offered by the county dispatch that allows homeowners to build a profile of their residence to better prepare first responders. Smart911 profiles include names and ages of family members, photos of the home and descriptions of pets in the home.

*(Continued on next page.)*

## Glossary (continued)

**Toxic Chemical** – The EPA published a list of 682 toxic chemical and chemical categories that are subject to Toxic Chemical Release Inventory (TRI) reporting.

**TPQ** – Threshold Planning Quantity. A quantity for each chemical on the EPA's list of EHSs. If the active ingredient (AI) in an agrichemical is on EPA's list of EHSs, then you must notify your LEPC and the Michigan SARA Title III Program if the amount of the AI in pounds is equal to or greater than its TPQ listed in Table 1: Common Agrichemical Extremely Hazardous Substances.

**Waters of the State** – Groundwaters, lakes, rivers and streams, and all other watercourses and waters, including the Great Lakes, within the jurisdiction of this state. Additional examples include bogs, catch basins, creeks, drainage ditches, drainage wells, ponds, sewer drains, storm drains, surface risers, swamps and wetlands.