

Emergency Planning FOR THE FARM



**Agricultural pesticides,
fertilizers, fuels and
livestock manure can pose
risks to people and
the environment.**

Be prepared for emergencies by
developing your Emergency Farm
Plan (pages 8-18).

Discuss your Emergency Plan
with family members, employees,
and your local emergency
service provider (usually the
local fire department).

Keep your Emergency Plan
up-to-date by reviewing and
updating it annually.



**MICHIGAN STATE
UNIVERSITY
EXTENSION**



**Michigan
Groundwater
Stewardship
Program**

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Introduction

As part of Michigan's agricultural community, you can take basic precautions that will protect people, the food and water systems, and the environment from chemical and biological contamination.

Agricultural pesticides, fertilizers and fuels are used safely to help control pests and produce high quality products. Under certain circumstances, some of these products can be hazardous. In the wrong hands, these chemicals could pose a threat to public safety and the environment.

Livestock producers additionally need to be concerned with manure management, to prevent contamination of water resources, and biological threats to the food system.

Agricultural security measures are outlined in this updated version of Emergency Planning for the Farm. Please take the time to review and comply with these important regulations/guidelines for your agricultural operation.

Complete your Emergency Farm Plan by filling out pages 8-18. Inform your family, employees and your local fire department about the plan. Keep the plan up-to-date by reviewing and updating it annually.

You may request assistance in developing an Emergency Farm Plan from your local groundwater stewardship technician. He or she is located in your local Conservation District or Michigan State University Extension office.

Agricultural Chemical and Application Equipment Security

Producers need to increase their attention to farm security because of the 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. Please be vigilant for suspicious activity and be 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 indications 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.

The goal should be to make it as difficult as possible for potential troublemakers to obtain chemicals or application equipment. Advise your family and employees of the following recommendations and implement those that apply to your operation.

- Keep chemical storage areas secure and locked where fire codes permit.
- Keep an updated and accurate inventory of all chemicals in your possession.
- Walk the perimeter of your chemical and equipment storage area on a regular basis, checking for any signs of suspicious activity.
- Report suspicious activity, vehicles, people, theft, sabotage and vandalism to your local law enforcement agency.
- Lock and/or secure all application equipment when it is not in use.
- Consider background checks for new employees.
- Restrict access of non-employees (delivery, maintenance, etc.) to your facilities.
- Have a list of emergency numbers (see page 8) prominently posted, and be sure that family members and employees are aware of it.

Reporting Agricultural Chemicals 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. Anhydrous ammonia is also an EHS.

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 by law to notify the Michigan SARA Title III Program and your Local Emergency Planning Committee that you are subject to SARA Title III section 302 emergency planning notification.

Table 1 on page 22 is a list of currently available agricultural products that contain EHS. If you have the listed amount of product on your farm, then you are subject to emergency planning notification under section 302 of SARA Title III.

Use the postcards on the back page of the bulletin to notify officials. This one-time notification must be made within 60 days after bringing an EHS onto your farm in an amount that equals or exceeds the TPQ.

After receiving your postcard, your Local Emergency Planning Committee (LEPC) may contact you for additional information needed to develop an off-site emergency response plan for your farm.

If you have questions about this requirement, you can contact your Local Emergency Planning Committee or the Michigan SARA Title III Program at 517-373-8481.

On-farm Bulk Liquid Fertilizer Storage

MDA 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.

The new 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 will be phased in over a five-year period and allow for farm-specific designs that will meet requirements in a cost-effective manner.

New farm storage facilities that were placed in service after 8/13/03 had to comply with the regulation immediately. Facilities that were in service before the effective date of this regulation have until 8/13/08 to comply.

The full text of regulation 642 can be accessed at the Michigan Department of Agriculture Web site: www.michigan.gov/mda.

Regulation 642 addresses general tank requirements, liquid level gauges and security, water well and surface water setbacks, secondary containment, operational area containment, and emergency plans and record keeping. The emergency plan outlined in this publication meets the requirements of the regulation.

If you think you might be subject to regulation 642, you can contact the MDA Pesticide and Plant Pest Management Division at 517-373-1087 for more information.

Reporting Pesticide Spills and Other Agricultural Releases

According to the Michigan Department of Environmental Quality, chemical releases are potentially reportable under one or more of 27 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 (MDA) Agriculture Pollution Emergency Hotline: **1-800-405-0101**, OR

- The Michigan Department of Environmental Quality (DEQ) 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**.

Details of the release reporting requirements can be found at www.michigan.gov/deqrelease, or contact the Michigan SARA Title III Program at 517-373-8481.

Spill or release response procedures

These procedures refer to accidental spills or releases of all chemicals used on the farm, including pesticides, fertilizers, manure and petroleum products such as fuel oil and gasoline.

- 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. You should have these numbers posted by all phones. Use the form on page 8 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.
- 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 be very costly to clean up.
- 4. Communicate** details to local, state and federal authorities. Use the form on page 19 to record important details about the spill or release.
- 5. Cleanup** and follow-up requirements. All releases must be cleaned up. With some releases, the chemical can be easily cleaned up and disposed of using commonly available farm resources (loader, shovel, manure spreader and 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.

MDA or DEQ spill response staff members will help you determine the appropriate cleanup actions and what follow-up reporting requirements are required for the specific release.

Agrichemical spill kits

MDA Regulation 637 states: "Every person who mixes, loads, or otherwise uses pesticides shall have immediate access to a spill kit." A spill kit is designed to contain, absorb and provide for the safe and proper disposal of a 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.

Suggested spill kit contents

- Personal protective equipment (chemical-resistant gloves, boots, protective suit, safety glasses).
- Absorbent materials, such as absorbent clay, sawdust, pet litter, activated charcoal, vermiculite, paper or spill pillows to soak up liquid spills.
- Sweeping compound to keep dry spills from drifting during cleanup.
- Shovel, broom and dustpan.
- Heavy-duty detergent.
- Fire extinguisher rated for all types of fires.
- Other spill cleanup items specified on the labels of products used regularly.
- Closable, sturdy plastic container (labeled "Spill Kit").
- Emergency telephone numbers (page 8).

Anhydrous Ammonia Fertilizer Security and Safety

Anhydrous ammonia can be extremely dangerous to human health. It is also a target for theft by illegal drug makers. Even though it is a fertilizer and not a pesticide, it is classified as an extremely hazardous substance (EHS) and subject to SARA Title III reporting requirements for storage and spills/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 irritation and irritation to the respiratory tract. 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 Material Safety Data Sheet (MSDS) for anhydrous ammonia provides a complete list of the health hazards and may be obtained from anhydrous ammonia dealers and manufacturers.

Anhydrous ammonia security and theft

Anhydrous ammonia is a key ingredient in the illegal production of methamphetamines. Illegal drug makers often steal anhydrous ammonia from agricultural areas where it is stored and used. When stolen, the toxic gas can be unintentionally released, potentially causing injuries or death to emergency responders, law enforcement personnel, the public, livestock and the criminals themselves. For more information, see “Anhydrous Ammonia Theft and Methamphetamines” at www.msue.msu.edu/emergency.

To report suspicious activities, contact the Michigan Meth Hotline: 1-866-METH-TIP (1-866-638-4847) or your local police department.

Farmers can help keep anhydrous ammonia secure by taking the following precautions:

- Use tank or valve locks.
- Be alert for suspicious persons and activities around the farmstead. Report any incidents to the local police. Look for signs of suspicious activities, including:
 - Partially opened tank valves and/or leaking valves.
 - Common items associated with and often left behind after theft, including small propane tanks, buckets, coolers, gas cans, duct tape, garden hoses and bicycle inner tubes.
- Don't leave tanks unattended for long periods of time. Return tanks to the dealer immediately after use.
- When storing tanks, position tanks in well-lit open areas where they can be easily seen from the road.
- Consider the use of dyed anhydrous ammonia to make the fertilizer less attractive to drug makers.

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 have on site or store this amount or more at any time during the year, you are required to report it to the Michigan SARA Title III Program and the Local Emergency Planning Committee. There is no exemption for short-term storage. You must report quantities at or above the threshold planning quantity even if the substance is on the site only during application. Fulfill your reporting requirements by returning the postcards on the back cover of this publication. Only one notification is required even if the ammonia is located on different parcels of land, as long as these locations are under your ownership or control.

If you do not know how to contact your Local Emergency Planning Committee, please call the Michigan SARA Title III Program at 517-373-8481 for assistance.

Anhydrous ammonia spills or releases

In the event of a spill or release, the reportable quantity (RQ) for anhydrous ammonia is 100 pounds or approximately 18 gallons. If 18 gallons or more is accidentally released (e.g., the nurse tank malfunctions or the hose disconnects and the contents of the tank are released), you must immediately (within 15 minutes) contact 911, the Agriculture Pollution Emergency Hotline and the National Response Center. Telephone numbers are found on page 9. A follow-up written report (use the Spill or Release Report, page 19) must be submitted to the Local Emergency Planning Committee and the Michigan SARA Title III Program.

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

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

Ammonium Nitrate Fertilizer Security

Ammonium nitrate is a common agricultural fertilizer that provides a concentrated source of nitrogen. Though it is not widely used in Michigan, it is used on some specialty crops. Unfortunately, it is also a key component in many explosives, including the bomb that killed 168 people in the April 1995 federal building bombing in Oklahoma City.

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 or picture ID number.
- Purchaser's name, address and phone number.
- Relationship between purchaser and person picking up or accepting delivery of the ammonium nitrate fertilizer, if applicable.

If you use and/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, people, theft, sabotage and vandalism to your local law enforcement agency.
5. Lock and/or secure all application equipment when it is not in use.
6. Consider background checks for new employees.
7. Restrict access of non-employees (delivery, maintenance, etc.) to your facilities.
8. Have a list of emergency numbers (see page 8) prominently posted, and be sure that family members and employees are aware of it.

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 generates ideas and awareness that lead to accident prevention and quick response if a spill does occur.

A manure discharge that reaches surface water must be reported to the Michigan Department of Environmental Quality (DEQ) Pollution Emergency Alerting System (PEAS): 1-800-292-4706.

An emergency action plan is a basic, yet thorough, commonsense plan that will help you make the right decisions during an emergency. Your emergency plan (complete pages 8-18) 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 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 setbacks from environmentally sensitive areas.
- Keeping appropriate records.
- Monitoring tile line outlets before and after manure applications.
- Calibrating the spreader.
- Keeping current with the spreading plan.
- Maintaining the spreader.

This employee will need training to be familiar with the locations of setbacks and tile line outlets, and the paperwork needed for record keeping. Likely he or she will need training in spreader calibration and the farm's spreading plan, and additional training to be familiar with the farm's emergency plan.

Additional Emergency Issues for Livestock Farms (cont.)

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 or veterinarians, feed sales people or equipment dealers making professional visits. The common thread among visitors is that they may unknowingly bring harmful agents onto an operation. The risk is increased with visitors who regularly go from farm to farm as part of their profession.

The following guidelines can be used when hosting farm visitors:

- No farm visit should be allowed without careful consideration for biosecurity risks.
- Park visitor vehicle(s) away from livestock production areas to reduce contamination risks.
- Visitors should have or be provided clean clothing and footwear if visiting livestock production areas.
- Contact with animals, livestock waste and feedstuff should be minimized whenever possible.
- See Extension bulletin E-2842, "Biosecurity Guide for Livestock Farm Visits," for more detailed information.

Producers who participate in livestock exhibitions also risk introducing disease pathogens to their herds and industry. MSU Extension publications E-2841 and E-2843 discuss biosecurity management recommendations to reduce disease risks. MSU Extension publications can be viewed and printed at www.msue.msu.edu/portal/.

In the case of any unexplainable or suspicious animal deaths, immediately contact the Michigan Department of Agriculture Animal Industry Division 517-373-1077 (517-373-0440 after regular business hours). Rapid detection and containment of biological threats is important for Michigan's livestock industry.

Developing Your Emergency Farm Plan

All farm owners should develop emergency plans before an emergency occurs on their farms (or before the next emergency). The information in the plan will help ensure the safety of the responders, minimize property damage, protect family members and employees, and protect the environment.

Producers should assess possible events, man-made or natural, that may strike your operations, and consider the potential impacts. Your assessment will help identify and prioritize the types of events that you want to be prepared to address and lays the foundation for emergency response planning.

The plan, designed by you, will include an overview of your property, highlighting storage areas, buildings, utilities and sensitive areas such as wells and surface water. It will also include a listing of emergency contact telephone numbers, information on hazardous and flammable substances stored on the farm and manure handling information for livestock farms. An Emergency Farm Plan should be developed for each separate operation.

The emergency plan should be reviewed and updated annually or whenever significant changes occur on the farm. Examples of changes on the farm when an updated plan is needed include building a new farm building, changing the gates and fences at the farmstead, adding a new silo, installing a new well, etc.

Your emergency plan should be discussed with family members, employees and local emergency providers. Invite your local fire department representative or other emergency service providers to your farm to review your plan. You can show them details listed in the plan. They may have suggestions on how to improve your 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 the delivery of emergency services.

The Michigan Emergency Tube

The purpose of the Michigan Emergency Tube is to make available on the farm site a copy of your emergency plan for emergency responders, if they ever need to be on your property.

The emergency tube is weather-resistant and 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. There is no charge for the emergency tube.

To determine if your community is participating in the Michigan Emergency Tube project, contact your Groundwater Technician, located in either the Conservation District or Michigan State University Extension office.

Important Emergency Numbers DATE: _____

Complete this page, make copies and post next to each telephone on the farm.

Local emergency assistance telephone numbers:

Fire department

EMERGENCY: 911 GENERAL: _____

Local police

EMERGENCY: 911 GENERAL: _____

County sheriff

EMERGENCY: 911 GENERAL: _____

State police

EMERGENCY: 911 GENERAL: (517) 336-6605

Ambulance

EMERGENCY: 911 GENERAL: _____

Local hospital

Family doctor

Agrichemical dealer

Veterinarian

Local emergency management coordinator

County road commissioner

County drain commissioner

Electric company

EMERGENCY: _____ GENERAL: _____

Gas company

EMERGENCY: _____ GENERAL: _____

Equipment dealer/mechanic

FBI field office (Detroit)

EMERGENCY: (313) 965-2323

Farm information:

Name of farm _____

Address of farm _____

County _____

Township _____

Section _____

Directions to farm: Help can come from any direction. Be sure to write down exact, simple and accurate directions to the farmstead.

State and federal agency telephone numbers:

Agriculture Pollution
Emergency Hotline, MDA **1-800-405-0101**

Pollution Emergency
Alerting System (PEAS), DEQ **1-800-292-4706**

National Response Center **1-800-424-8802**

Michigan Poison Control System **1-800-222-1222**

Michigan Meth Hotline **1-866-638-4847**

I. Facility Information

Complete one form for EACH site.

SITE: _____ **DATE:** _____

Name of farm:

Farm address:

Township/section/quarter:
 _____ / _____ / _____

Storage site address or location (if different from above):

Crossroads and township/section/quarter:

 _____ / _____ / _____

Fire department (name and phone):

Primary contact	Alternate contact	Owner, if different
<p>Name: _____</p> <p>Address: _____ _____ _____</p> <p>Phone and fax numbers:</p> <p>Days: _____</p> <p>Evenings: _____</p> <p>Fax: _____</p> <p>Pager: _____</p> <p>Cell phone: _____</p>	<p>Name: _____</p> <p>Address: _____ _____ _____</p> <p>Phone and fax numbers:</p> <p>Days: _____</p> <p>Evenings: _____</p> <p>Fax: _____</p> <p>Pager: _____</p> <p>Cell phone: _____</p>	<p>Name: _____</p> <p>Address: _____ _____ _____</p> <p>Phone and fax numbers:</p> <p>Days: _____</p> <p>Evenings: _____</p> <p>Fax: _____</p> <p>Pager: _____</p> <p>Cell phone: _____</p>

Map Information

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

IIa.

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

Buildings/structures location

Barns, houses, shops, outbuildings, silos, grain bins, manure storage/pits, etc. Indicate sizes and locations of doors.

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).

Chemical/fertilizer storage

Identify where chemicals, fertilizers and the spill kit are stored.

Fire concerns

Use these symbols to show location for each building, also.

- G** Main gas shutoff
- E** Main electrical shutoff
- AST** Aboveground fuel storage tank
- UST** Underground fuel storage tank
- LP** Liquid propane
- CG** Compressed gas (oxygen, acetylene)

Livestock or special concerns

- Manure storages (liquids and solids)
- Upright and bunker silos

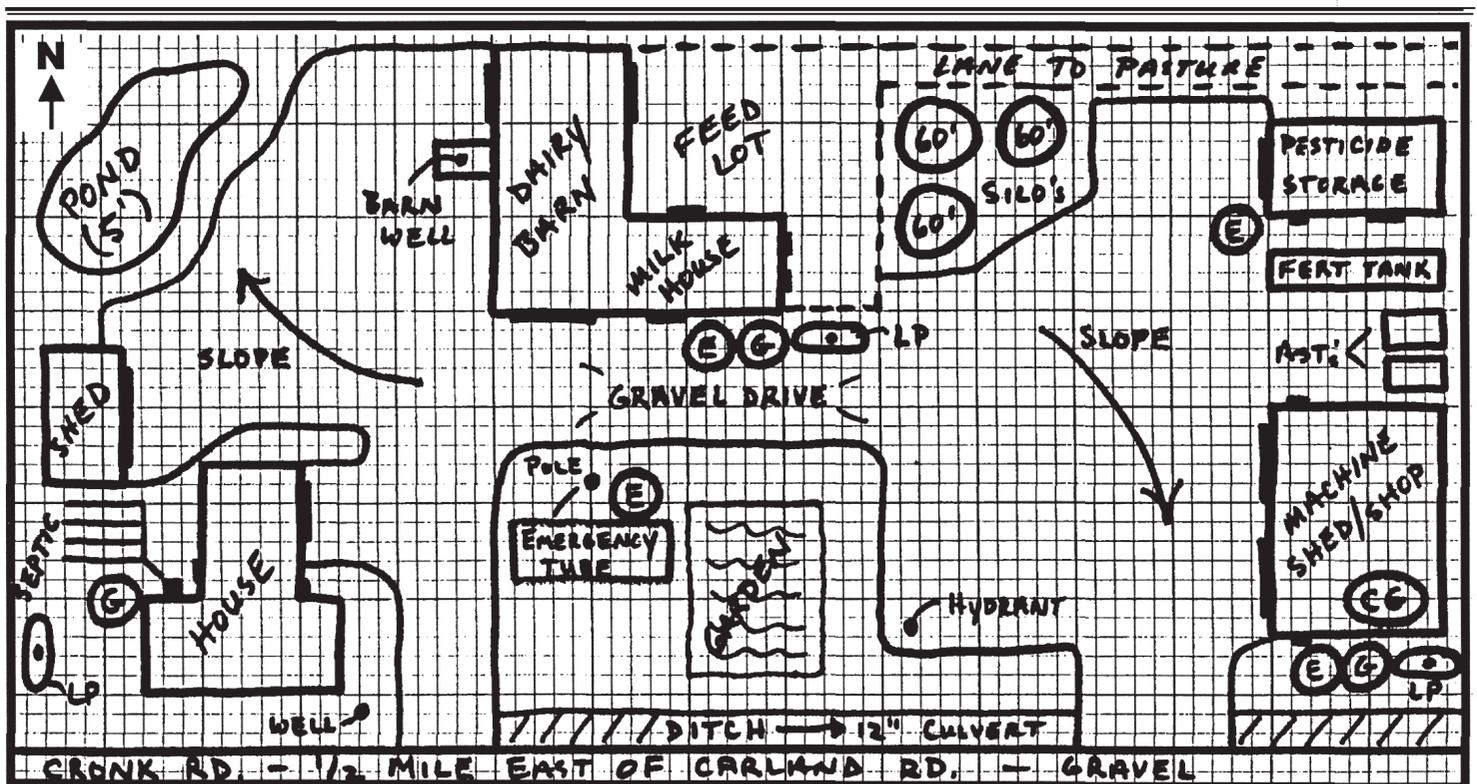
Michigan Emergency Tube site

IIb.

Aerial view map

Identify nearby off-property buildings, land features and uses, and sensitive areas (e.g., churches, parks, daycare centers, surface water, drainage ditches, etc.). Label nearby facilities with name, contact person and telephone number.

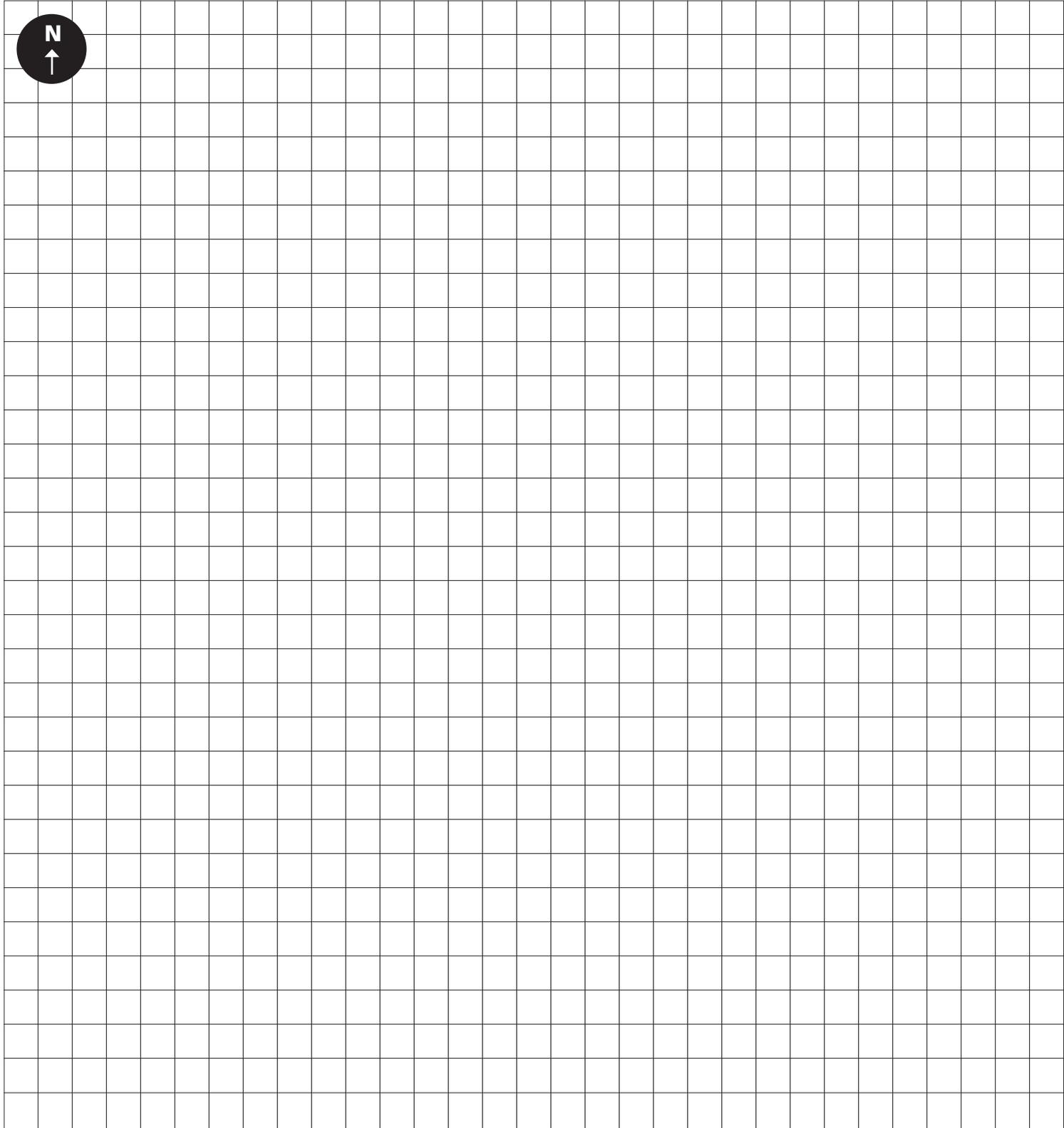
Farmstead site example:



Ila. Farmstead Map

SITE ADDRESS: _____

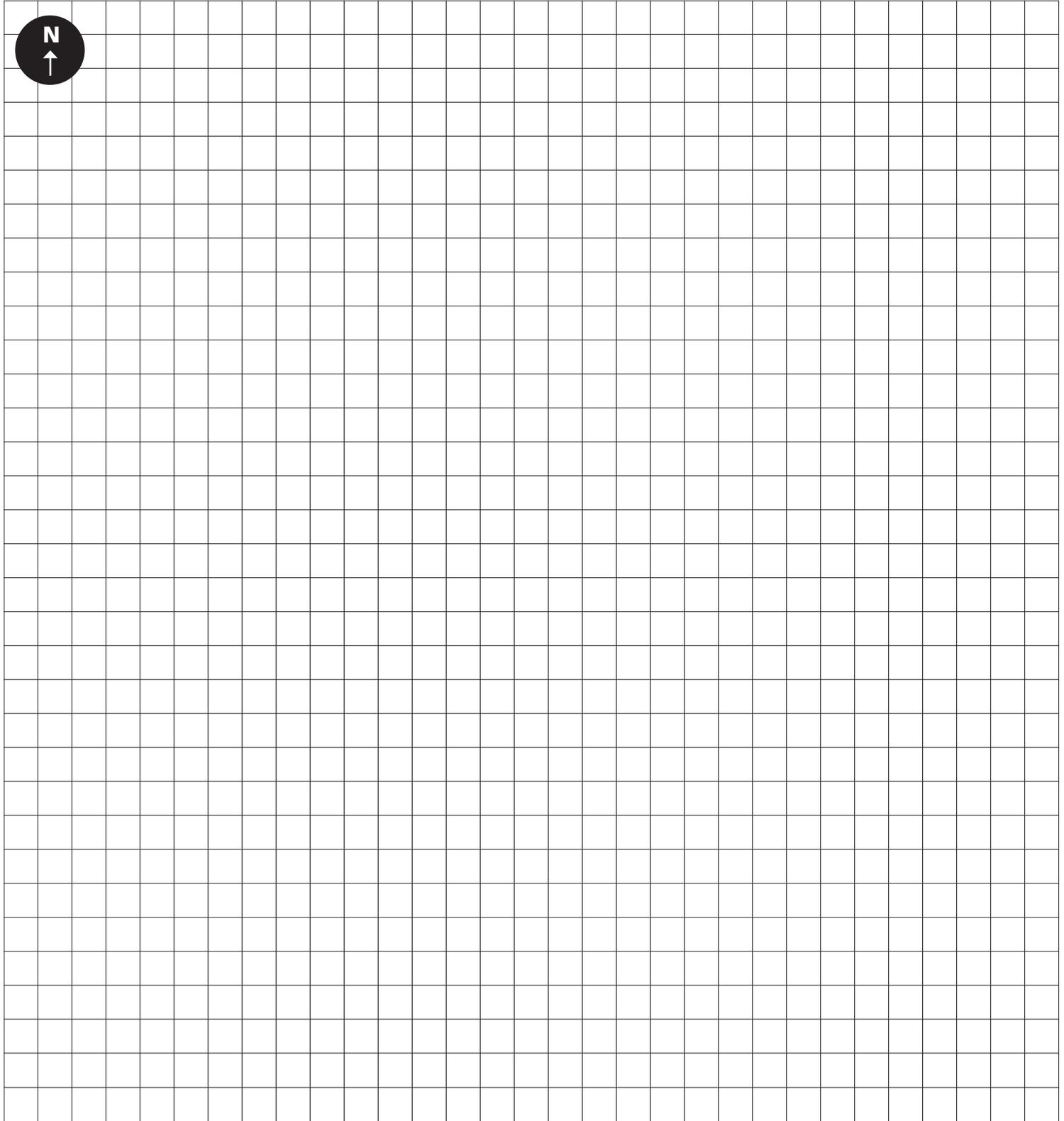
DATE: _____



IIb. Aerial View Map

SITE ADDRESS: _____

DATE: _____



III. Chemical Information, cont.

SITE: _____ **DATE:** _____

EHS (✓)	Product name (formulation)	CAS number	Maximum pounds or gallons	Season(s) on hand	Area or building where stored

Farm Flammables	Maximum pounds or gallons	Season(s) on hand	Area or building where stored
Diesel fuel <hr style="border-top: 1px dotted black;"/> Gasoline <hr style="border-top: 1px dotted black;"/> Fuel oil <hr style="border-top: 1px dotted black;"/> New oil (motor and hydraulic) <hr style="border-top: 1px dotted black;"/> Used oil <hr style="border-top: 1px dotted black;"/> Propane <hr style="border-top: 1px dotted black;"/> Oxygen, acetylene <hr style="border-top: 1px dotted black;"/> Kerosene			

Agricultural Chemical and Application Equipment Security Plan

Agricultural chemical and equipment storages, and application equipment stored outdoors will be inspected: (indicate frequency)

Any evidence of suspicious activities will be reported to local law enforcement officials: (telephone) _____

IV. Farm Response Resources

SITE: _____ **DATE:** _____

Resource	Locations
Water sources	
Shovels	
Fire extinguisher	
Tractor (and/or other large equipment)	
Spill kit	
Medical kit	
Flashlights/electric generator	
Absorbent material	
Personal protective equipment (chemical-resistant suits, goggles, chemical-resistant gloves, boots)	
Manure pumping equipment/contractor	
Empty tanks or containers (to hold manure, liquids, and/or water, absorbent material or contaminated material)	
Material Safety Data Sheets (MSDS) file/notebook*	
Other (please specify)	

* All employers are required to have a Material Safety Data Sheets (MSDS) for each hazardous chemical stored or used in the workplace, and to make them available to employees. MSDSs can be obtained from dealers, manufacturers and various Internet sites. Keep MSDSs with pesticide labels.

Confined spaces emergency entrance procedure

Farmers die every year in confined spaces such as manure pits, silos, tank spreaders, belowground storage pits, grain bins, dryers and other confined spaces. **Do not enter a confined space without proper training and equipment.**

Animal death loss

Immediately contact the Michigan Department of Agriculture (MDA) Animal Industry Division (AID) at (517) 373-1077 to report any unexplainable or suspicious animal deaths. After hours and on weekends, please use the MDA emergency number: (517) 373-0440.

V. Additional Emergency Planning Requirements/Recommendations

THIS SECTION TO BE COMPLETED BY YOUR LEPC

If you have an Extremely Hazardous Substance (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 Local Emergency Planning Committee (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:

a. Primary hazard to response personnel:

b. Response precautions/suggested PPE:

c. 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.

- a. Access control points
- b. 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:

VI. Emergency Action Plans for Potential Manure Spills

Breach of manure storage

GENERAL ACTION STEPS: Stop flow into storage, build containment dams, add soil to berm, pump manure from storage to field, and remove manure from discharge area. Utilize prearranged additional storage with neighbor. You must call the Pollution Emergency Alerting System (PEAS) if manure reaches surface water. Prepare summary report.

YOUR PLAN:

Manure spill on roadway

GENERAL ACTION STEPS: Human injuries, if present, take precedence. Stop any additional spill, build containment dams and remove manure, contact road commissioner and drain commissioner, wash manure from road under advisement. Prepare summary report. You must call the county sheriff if manure is spilled in a roadway and the Pollution Emergency Alerting System (PEAS) if manure reaches surface water.

YOUR PLAN:

Manure irrigation emergency

GENERAL ACTION STEPS: Stop pumps, close valves, separate pipes, build containment dams, remove manure from discharge area, plug tiles leading to surface water. You must call the Pollution Emergency Alerting System (PEAS) if manure reaches surface water. Prepare summary report.

YOUR PLAN:

Manure spilled in field

GENERAL ACTION STEPS: Stop manure application, build containment dams and collect manure. Apply collected manure at agronomic rates. You must call the Pollution Emergency Alerting System (PEAS) if manure reaches surface water. Prepare summary report.

YOUR PLAN:

Runoff of manure from field

GENERAL ACTION STEPS: Stop application, plow a diversion trench and remove manure, if necessary. You must call the Pollution Emergency Alerting System (PEAS) if manure reaches surface water. Prepare summary report.

YOUR PLAN:

Tile discharge of manure from field application

GENERAL ACTION STEPS: Stop manure application, build containment dams in drainage ditch or plug tile outlet(s), incorporate applied manure. Apply collected manure at agronomic rates. You must call the Pollution Emergency Alerting System (PEAS) if manure reaches surface water. Prepare summary report.

YOUR PLAN:

Silage leachate containment plan

GENERAL ACTION STEPS: Utilize sawdust, lime or other material to contain and/or neutralize leachate. Collect leachate in designed containment; utilize grass filter strip to treat pad runoff. You must call the Pollution Emergency Alerting System (PEAS) if leachate reaches surface water. Prepare summary report.

YOUR PLAN:



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

SPILL OR RELEASE REPORT

NOTE: Agricultural releases, including spills or releases of pesticides, fertilizers, fuel or other petroleum products, and manure must be immediately reported to 9-1-1, PEAS at 1-800-292-4706 or MDA at 1-800-405-0101, and the NRC at 1-800-424-8802. Some regulations also require a written follow-up report. This form can be used to record the initial notification. It also serves as the written follow-up report when required. The Michigan SARA Title III Program (517-373-8481) or the MDA (1-800-405-0101) can help you determine if a written follow-up report is required and to whom it should be submitted. When written follow-up reports are required, they must be submitted within 7 days after the incident.

See the DEQ Web site www.michigan.gov/deqrelease for more reporting information.

Please print or type all information.

Form section for NAME AND TITLE OF PERSON SUBMITTING WRITTEN REPORT, TELEPHONE NUMBER, NAME OF BUSINESS, STREET ADDRESS, CITY, STATE, ZIP CODE, BUSINESS TELEPHONE NUMBER, RELEASE LOCATION, COUNTY, TOWNSHIP, TIER/RANGE/SECTION.

RELEASE DATA. 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.

Form section for RELEASE DATA including DATE & TIME OF RELEASE, DATE & TIME OF DISCOVERY, DURATION OF RELEASE, TYPE OF INCIDENT, MATERIAL RELEASED, CAS NUMBER, ESTIMATED QUANTITY RELEASED, PHYSICAL STATE RELEASED.

Form section for FACTORS CONTRIBUTING TO RELEASE and SOURCE OF LOSS.

Form section for TYPE OF MATERIAL RELEASED, MATERIAL LISTED ON or DEFINED BY, IMMEDIATE ACTIONS TAKEN.

Form section for RELEASE REACHED including Surface waters, Drain connected to sanitary sewer, Groundwater, Soils, Ambient Air, Spill contained on impervious surface.

EXTENT OF INJURIES, IF ANY <hr/>	WAS ANYONE HOSPITALIZED? <input type="checkbox"/> Yes NUMBER _____ HOSPITALIZED: _____ <input type="checkbox"/> No	TOTAL NUMBER OF INJURIES TREATED ON-SITE: <hr/>																																																					
<small>DESCRIBE THE INCIDENT, THE TYPE OF EQUIPMENT INVOLVED IN THE RELEASE, HOW THE VOLUME OF LOSS WAS DETERMINED, ALONG WITH ANY RESULTING ENVIRONMENTAL DAMAGE CAUSED BY THE RELEASE. IDENTIFY WHO IMMEDIATELY RESPONDED TO THE INCIDENT (own employees or contractor — include cleanup company name, contact person, and telephone number). ALSO IDENTIFY WHO DID FURTHER CLEANUP ACTIVITIES, IF PERFORMED OR KNOWN WHEN REPORT SUBMITTED</small> <input type="checkbox"/> CHECK HERE IF DESCRIPTION OR ADDITIONAL COMMENTS ARE INCLUDED ON ATTACHED PAGE <hr/> <hr/> <hr/> <hr/> <hr/>																																																							
<small>ESTIMATED QUANTITY OF ANY RECOVERED MATERIALS AND A DESCRIPTION OF HOW THOSE MATERIALS WERE MANAGED (include disposal method if applicable)</small> <input type="checkbox"/> CHECK HERE IF DESCRIPTION OR ADDITIONAL COMMENTS ARE INCLUDED ON ATTACHED PAGE <hr/> <hr/>																																																							
<small>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.)</small> <input type="checkbox"/> CHECK HERE IF DESCRIPTION OR ADDITIONAL COMMENTS ARE INCLUDED ON ATTACHED PAGE <hr/> <hr/>																																																							
MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY NOTIFIED: 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: 1-800-292-4706 Log Number Assigned _____ <input type="checkbox"/> DEQ District or Field Office Divisions or Offices Contacted: <input type="checkbox"/> Baraga <input type="checkbox"/> Gwinn <input type="checkbox"/> Air Quality <input type="checkbox"/> Bay City <input type="checkbox"/> Jackson <input type="checkbox"/> Land & Water Management <input type="checkbox"/> Cadillac <input type="checkbox"/> Kalamazoo <input type="checkbox"/> Office Geological Survey <input type="checkbox"/> Crystal Falls <input type="checkbox"/> Lansing <input type="checkbox"/> Remediation and <input type="checkbox"/> Detroit <input type="checkbox"/> Newberry Redevelopment <input type="checkbox"/> Gaylord <input type="checkbox"/> Warren <input type="checkbox"/> Waste and Hazardous <input type="checkbox"/> Grand Rapids <input type="checkbox"/> Wyoming Materials DEQ Office locations are subject to change <input type="checkbox"/> Water Bureau	OTHER ENTITIES NOTIFIED: <table style="width:100%; border: none;"> <thead> <tr> <th style="text-align: left;"></th> <th style="text-align: left;">Date:</th> <th style="text-align: left;">Time:</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> National Response Center (NRC): 1-800-424-8802</td> <td>_____</td> <td>_____</td> </tr> <tr> <td><input type="checkbox"/> US Coast Guard Office:</td> <td>_____</td> <td>_____</td> </tr> <tr> <td style="padding-left: 20px;"><input type="checkbox"/> Detroit <input type="checkbox"/> Grand Haven <input type="checkbox"/> Sault Ste. Marie</td> <td></td> <td></td> </tr> <tr> <td><input type="checkbox"/> US Department of Transportation</td> <td>_____</td> <td>_____</td> </tr> <tr> <td><input type="checkbox"/> US Environmental Protection Agency</td> <td>_____</td> <td>_____</td> </tr> <tr> <td><input type="checkbox"/> 911 (or primary public safety answering point)</td> <td>_____</td> <td>_____</td> </tr> <tr> <td><input type="checkbox"/> Local Fire Department</td> <td>_____</td> <td>_____</td> </tr> <tr> <td><input type="checkbox"/> Local Police and/or State Police</td> <td>_____</td> <td>_____</td> </tr> <tr> <td><input type="checkbox"/> Local Emergency Planning Committee</td> <td>_____</td> <td>_____</td> </tr> <tr> <td><input type="checkbox"/> State Emergency Response Commission via MI SARA Title III Program</td> <td>_____</td> <td>_____</td> </tr> <tr> <td><input type="checkbox"/> Wastewater Treatment Plant Authority</td> <td>_____</td> <td>_____</td> </tr> <tr> <td><input type="checkbox"/> Hazmat Team</td> <td>_____</td> <td>_____</td> </tr> <tr> <td><input type="checkbox"/> Local Health Department</td> <td>_____</td> <td>_____</td> </tr> <tr> <td><input type="checkbox"/> Department of Labor & Economic Growth MIOSHA</td> <td>_____</td> <td>_____</td> </tr> <tr> <td><input type="checkbox"/> Department of Labor & Economic Growth Fire Safety</td> <td>_____</td> <td>_____</td> </tr> <tr> <td><input type="checkbox"/> Michigan Department of Agriculture: 1- 800-405-0101</td> <td>_____</td> <td>_____</td> </tr> <tr> <td><input type="checkbox"/> Other _____</td> <td>_____</td> <td>_____</td> </tr> </tbody> </table>		Date:	Time:	<input type="checkbox"/> National Response Center (NRC): 1-800-424-8802	_____	_____	<input type="checkbox"/> US Coast Guard Office:	_____	_____	<input type="checkbox"/> Detroit <input type="checkbox"/> Grand Haven <input type="checkbox"/> Sault Ste. Marie			<input type="checkbox"/> US Department of Transportation	_____	_____	<input type="checkbox"/> US Environmental Protection Agency	_____	_____	<input type="checkbox"/> 911 (or primary public safety answering point)	_____	_____	<input type="checkbox"/> Local Fire Department	_____	_____	<input type="checkbox"/> Local Police and/or State Police	_____	_____	<input type="checkbox"/> Local Emergency Planning Committee	_____	_____	<input type="checkbox"/> State Emergency Response Commission via MI SARA Title III Program	_____	_____	<input type="checkbox"/> Wastewater Treatment Plant Authority	_____	_____	<input type="checkbox"/> Hazmat Team	_____	_____	<input type="checkbox"/> Local Health Department	_____	_____	<input type="checkbox"/> Department of Labor & Economic Growth MIOSHA	_____	_____	<input type="checkbox"/> Department of Labor & Economic Growth Fire Safety	_____	_____	<input type="checkbox"/> Michigan Department of Agriculture: 1- 800-405-0101	_____	_____	<input type="checkbox"/> Other _____	_____	_____
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Transporting Agricultural Supplies Classified as Hazardous

Farmers routinely transport agricultural supplies that are classified as hazardous materials: gasoline, diesel fuel, anhydrous ammonia, pesticides, fertilizers and others. You, your family members and employees that transport hazardous materials must be cautious to prevent accidents and unauthorized access to the supplies. Any suspicious incident should be reported to local law enforcement personnel.

If you transport hazardous materials in excess of the thresholds listed in Table 2, the load must have a placard and you are required to develop a Transportation Security Plan – unless you qualify for an agricultural exemption.

Agricultural exemptions from transportation security plans include:

- Farmers who generate less than \$500,000 annually in gross receipts from the sale of agricultural commodities and products; transport hazardous materials in direct support of their farming operations; and transport hazardous materials by highway or rail within 150-mile radius of their farming operation.
- Farmers who only transport hazardous materials from the farmstead to the field, from field to field, or from field to the farmstead.

If you do not ship or transport hazardous materials in amounts that require placards, you do not need a transportation security plan. Also, if suppliers deliver hazardous materials to your operation, it is their responsibility to have a plan.

Even if you are exempt from having a transportation security

Table 2. Hazardous materials and quantities that require placards and a transportation security plan (unless exempt).

Indicate (✓) materials transported	Material	Quantity	Placard required
	Gasoline	More than 119 gallons in a single container	
	Anhydrous ammonia	OR,	
	Pesticides	More than 1,000 pounds in multiple containers	
	Ammonium nitrate fertilizer		
	Propane/LP gas		
	Diesel fuel	More than 119 gallons in a single container	
	Dynamite	Any amount	
	Detonators	More than 1,000 pounds	

*Placards are diamond-shaped signs that are used to identify shipments of hazardous materials. When required, placards must be placed on both ends and both sides of trucks that carry hazardous materials. They are coded by color and contain symbols and numbers that designate the hazard class or division of the hazardous material that is being shipped. Placards are available from your suppliers.

plan, you are required to display appropriate placards if you transport hazardous materials in excess of the threshold quantities. Michigan authorities enforce hazardous material transportation requirements.

Transportation Security Plan

If the security plan requirement applies to your operation, the plan must include measures to address (1) personnel security, (2) unauthorized access and (3) security during transportation.

1) Personnel security: To the extent feasible and practical, references, employment history and immigration status will be checked for persons hired after September 25, 2003, who will be responsible for transporting these listed hazardous materials from any supplier to this operation.

Persons responsible for transporting the listed hazardous materials from any supplier to this agricultural operation will be instructed on how to adhere to this security plan.

2) Unauthorized access: If it is necessary to stop during transportation of the listed hazardous materials, authorized personnel of this agricultural operation (operation personnel) will, to the extent practical, prevent unauthorized persons from gaining access to the shipment by monitoring the shipment during the stop, locking the shipment inside the transport vehicle, securing the shipment to the transport vehicle, and/or securing closures on the container(s) or package(s).

If it is necessary to stop during transportation of the listed hazardous materials, operation personnel will check the vehicle and the shipment after the stop to evaluate whether tampering or illegal activity has taken place.

Operation personnel will report suspicious incidents or events to local law enforcement officials and/or the FBI as soon as is practical, using the contact information supplied in this emergency farm plan.

3) Security in transit: Operation personnel will, to the extent practical, minimize transit time for the listed hazardous materials by going directly from the supplier to the operation.

Operation personnel will report suspicious incidents or events to local law enforcement officials or the FBI as soon as is practical, using the contact information supplied in this emergency farm plan.

Remember:

- For your records and personnel use, keep a copy of this plan in an accessible but secure location at the agricultural operation.
- Your plan will not be collected by or kept on file at state or federal DOT offices.
- Your plan will be enforced by State or Federal DOT as part of the general enforcement program for the HAZMAT carrier and shipper community but not as part of any roadside stop inspections.

Prepared by: _____

Date: _____

Revised/edited/reviewed by: _____

Date: _____

Table 1. Agricultural chemicals classified by SARA Title III as extremely hazardous substances (EHS).

Active ingredient	CAS number	Percent active ingredient (A.I.)	Formulation	TPQ A.I. (lbs.)	Approx. TPQ product	Product name
Acrolein	107028	95	SOLUTION-READY TO USE	500	55 gal	MAGNACIDE B MICROBIOCID
Aldicarb	116063	15	GRANULAR	100	667 lb	TEMIK ALDICARB PESTICIDE 15% GRANULAR
Aluminum phosphide	20859738	57	VARIOUS	500	various	FUMIGANT
4-Aminopyridine	504245	25	DUST	500	2000 lb	AVITROL CONCENTRATE
4-Aminopyridine	504245	50	DUST	500	1000 lb	AVITROL POWDER MIX
Anhydrous ammonia	7664417	100	LIQUID UNDER PRESSURE	500	91 gal	NH ₃ FERTILIZER 82-0-0
Azinphos-Methyl	86500	50	WETTABLE POWDER	10	20 lb	GUTHION SOLUPAK 50% WP
Azinphos-Methyl	86500	22.2	EMULSIFIABLE CONCENTRATE	10	5 gal	GUTHION 2L
Azinphos-Methyl	86500	50	WETTABLE POWDER	10	20 lb	GUTHION SOLUPAK 50% WP
Azinphos-Methyl	86500	50	WETTABLE POWDER	10	20 lb	SNIPER 50 PVA AZINPHOSMETHYL INSECTICIDE
Azinphos-Methyl	86500	50	WATER DISPERSIBLE GRANULES	10	20 lb	AZINPHOSMETHYL 50W SOLUBLE
Bromadiolone	28772567	various	VARIOUS	100	various	VARIOUS RODENTICIDES
Carbofuran	1563662	44	FLOWABLE CONCENTRATE	10	2.5 gal	FURADAN 4F INSECTICIDE-NEMATICIDE
Carbofuran	1563662	15	GRANULAR	10	67 lb	FURADAN 15 GRANULES INSECTICIDE-NEMATICIDE
Chlorine	7782505	99.5	TECHNICAL CHEMICAL	100	*	CHLORINE
Chlorine	7782505	100.0	PRESSURIZED GAS	100	*	CHLORINE
Chlorine	7782505	99.5	FORMULATION INTERMEDIATE	100	*	CHLORINE LIQUEFIED GAS
Chlormequat chloride	999815	11.8	SOLUBLE CONCENTRATE	100	94 gal	CYCOCEL PLANT GROWTH REGULANT
Chlorophacinone	3691358	various	VARIOUS	100	various	VARIOUS RODENTICIDES
Chloropicrin	74839	33	PRESSURIZED GAS	1000	212 gal	67-33 PREPLANT SOIL FUMIGANT
Coumaphos	56724	11.6	EMULSIFIABLE CONCENTRATE	100	96 gal	CO-RAL EMULSIFIABLE LIVESTOCK INSECTICIDE
Coumaphos	56724	6.15	EMULSIFIABLE CONCENTRATE	100	181 gal	CO-RAL FLY AND TICK SPRAY
Dichlorvos	62737	various	VARIOUS	1000	various	INSECTICIDE
Dicrotophos	141662	82	SOLUTION-READY TO USE	100	12.5 gal	INJECT A CIDE B (CONTAINS TECHNICAL BIDRIN)
Dimethoate	60515	23.4	EMULSIFIABLE CONCENTRATE	500	233 gal	DRAGON CYGON 2E SYSTEMIC INSECTICIDE
Dimethoate	60515	23.4	EMULSIFIABLE CONCENTRATE	500	233 gal	PROZAP RESIDUAL INSECT SPRAY 2EC
Dimethoate	60515	43.5	EMULSIFIABLE CONCENTRATE	500	125 gal	DIGON 400
Dimethoate	60515	44.8	EMULSIFIABLE CONCENTRATE	500	124 gal	DIMETHOATE 4EC SYSTEMIC INSECTICIDE
Dimethoate	60515	8	EMULSIFIABLE CONCENTRATE	500	681 gal	ORNAMENTAL AND EVERGREEN SPRAY
Dimethoate	60515	44.74	EMULSIFIABLE CONCENTRATE	500	124 gal	DIMATE 4E
Dimethoate	60515	43.5	EMULSIFIABLE CONCENTRATE	500	125 gal	DREXEL DIMETHOATE 4EC
Dimethoate	60515	43.5	EMULSIFIABLE CONCENTRATE	500	125 gal	CLEAN CROP DIMETHOATE 400
Dimethoate	60515	43.5	EMULSIFIABLE CONCENTRATE	500	125 gal	DIMETHOATE 400
Dimethoate	60515	43.5	EMULSIFIABLE CONCENTRATE	500	125 gal	CHEMINOVA DIMETHOATE 4E
Dimethoate	60515	43.5	EMULSIFIABLE CONCENTRATE	500	125 gal	DIMETHOATE 4E

Table 1. (continued) Agricultural chemicals classified by SARA Title III as extremely hazardous substances (EHS).

Active ingredient	CAS number	Percent active ingredient (A.I.)	Formulation	TPQ A.I. (lbs.)	Approx. TPQ product	Product name
Dimethoate	60515	43.5	EMULSIFIABLE CONCENTRATE	500	125 gal	DIMATE 4EC
Dimethoate	60515	30.5	EMULSIFIABLE CONCENTRATE	500	182 gal	DIMETHOATE 267
Diphacinone	82666	various	VARIOUS	10	various	VARIOUS RODENTICIDES
Disulfoton	298044	15	GRANULAR	500	3333 lb	DI-SYSTON 15%
Disulfoton	298044	85	EMULSIFIABLE CONCENTRATE	500	65 gal	DI-SYSTON 8 EMULSIFIABLE SYSTEMIC
Endosulfan	115297	3	DUST	10	333 lb	DRAGON THIODAN VEGETABLE AND ORNAMENTAL DUST
Endosulfan	115297	9.9	EMULSIFIABLE CONCENTRATE	10	11 gal	DRAGON THIODAN INSECT SPRAY
Endosulfan	115297	34.4	EMULSIFIABLE CONCENTRATE	10	3 gal	THIODAN 3EC INSECTICIDE
Endosulfan	115297	34.4	EMULSIFIABLE CONCENTRATE	10	3 gal	PHASER 3EC INSECTICIDE
Endosulfan	115297	50	WETTABLE POWDER	10	20 lb	PHASER 50WSB INSECTICIDE
Endosulfan	115297	50	WETTABLE POWDER	10	20 lb	THIODAN 50 WP INSECTICIDE
Endosulfan	115297	50	WETTABLE POWDER	10	20 lb	THIONEX (ENDOSULFAN) 50W
Endosulfan	115297	33.7	EMULSIFIABLE CONCENTRATE	10	3 gal	THIODAN 3 E.C. INSECTICID
Endosulfan	115297	33.7	EMULSIFIABLE CONCENTRATE	10	3 gal	THIONEX (ENDOSULFAN) 3EC
Endosulfan	115297	49.6	WETTABLE POWDER	10	20 lb	THIODAN WSB INSECTICIDE
Endosulfan	115297	49.6	WETTABLE POWDER	10	20 lb	THIONEX (ENDOSULFAN) 50WSB
Endosulfan	115297	15	IMPREGNATED MATERIALS	10	67 lb	FULEX THIODAN INSECTICIDAL SMOKE
Endosulfan	115297	96	GRANULAR	10	10 lb	AGRIBROM GRANULES
Endosulfan	115297	1	WETTABLE POWDER/DUST	10	1000 lb	HI-YIELD THIODAN GARDEN DUST
Endosulfan	115297	34	EMULSIFIABLE CONCENTRATE	10	3 gal	DREXEL ENDOSULFAN 3EC
Endosulfan	115297	50	WETTABLE POWDER	10	20 lb	ENDOSULFAN 50W
Endosulfan	115297	50	WETTABLE POWDER	10	20 lb	MICRO FLO ENDOSULFAN 50W SOLUBLE
Endosulfan	115297	33.7	EMULSIFIABLE CONCENTRATE	10	3 gal	ENDOSULFAN 3EC
Ethoprop	13194484	15	GRANULAR	1000	6667 lb	MOCAP 15% GRANULAR LOCK 'N' LOAD
Ethoprop	13194484	15	GRANULAR	1000	6667 lb	MOCAP 15% GRANULAR NEMATICIDE-INSECTICIDE
Ethoprop	13194484	69.6	EMULSIFIABLE CONCENTRATE	1000	159 gal	MOCAP EC
Ethoprop	13194484	69.6	EMULSIFIABLE CONCENTRATE	1000	159 gal	MOCAP EC NEMATICIDE-INSECTICIDE
Ethoprop	13194484	10	GRANULAR	1000	10,000 lb	MOCAP BRAND 10% GRANULAR LOCK 'N' LOAD NEMATICIDE-INSECTICID
Ethoprop	13194484	10	GRANULAR	1000	10,000 lb	MOCAP 10% GRANULAR
Ethylene oxide	75218	8.5	PRESSURIZED GAS	1000	*	8.5% ETHYLENE OXIDE AND CARBON DIOXIDE STERILIZING GAS
Ethylene oxide	75218	100.0	PRESSURIZED GAS	1000	*	100% ETHYLENE OXIDE STERILIZING GAS
Ethylene oxide	75218	8.6	PRESSURIZED GAS	1000	*	OXYFUME 2000
Ethylene oxide	75218	10.0	PRESSURIZED GAS	1000	*	OXYFUME 2002

Table 1. (continued) Agricultural chemicals classified by SARA Title III as extremely hazardous substances (EHS).

Active ingredient	CAS number	Percent active ingredient (A.I.)	Formulation	TPQ A.I. (lbs.)	Approx. TPQ product	Product name
Fenamiphos	22224926	15	GRANULAR	10	67 lb	NEMACUR 15% GRANULAR
Fenamiphos	22224926	35	EMULSIFIABLE CONCENTRATE	10	3 gal	NEMACUR 3 EMULSIFIABLE SYSTEMIC
Fenamiphos	22224926	10	GRANULAR	10	100 lb	NEMACUR 10% TURF NEMATICIDE
Formaldehyde	50000	37	PRESSURIZED GAS	500	*	VINELAND FORMALDEHYDE SOLUTION
Formetanate hydrochloride	23422539	92	WETTABLE POWDER	50	543 lb	CARZOL SP WSP MITICIDE/INSECTICIDE
Formetanate hydrochloride	23422539	92	WETTABLE POWDER	500	543 lb	CARZOL SP WSP MITICIDE/INSECTICIDE
Lindane	58899	25	DUST	1000	4000 lb	AGRISOLUTIONS AGROX PREMIERE W/ APRON
Lindane	58899	25	DUST	1000	4000 lb	AGRISOLUTIONS AGROX PREMIERE W/ TALC
Lindane	58899	25	DUST	1000	4000 lb	KICKSTART-VITAVAX-DIAZINON-LINDANE SEED TREATMENT INSECTICIDE-FUNGICIDE
Lindane	58899	25	DUST	1000	4000 lb	GERMATE PLUS
Lindane	58899	25	DUST	1000	4000 lb	LINDANE 25 PLANTER BOX SEED TREATER
Lindane	58899	25	DUST	1000	4000 lb	KERNEL GUARD
Lindane	58899	16.6	DUST	1000	6024 lb	SORGHUM GUARD
Lindane	58899	25	DUST	1000	4000 lb	ISOTOX SEED TREATER (F)
Methamidophos	10265926	40	EMULSIFIABLE CONCENTRATE	100	28 gal	MONITOR 4 LIQUID INSECTICIDE
Methidathion	950378	25	WETTABLE POWDER	500	2000 lb	SUPRACIDE 25WP
Methidathion	950378	24.4	EMULSIFIABLE CONCENTRATE	500	2000 lb	SUPRACIDE 2E
Methidathion	950378	25	WETTABLE POWDER	500	2000 lb	SUPRACIDE 25W
Methiocarb	2032657	75	WETTABLE POWDER	500	667 lb	MESUROL 75-W
Methomyl	16752775	90	SOLUBLE POWDER	500	556 lb	DUPONT LANNATE SP INSECTICIDE
Methomyl	16752775	29	SOLUBLE CONCENTRATE	500	192 gal	DUPONT LANNATE LV INSECTICIDE
Methyl bromide	74839	98	PRESSURIZED GAS	1000	70.6 gal	BROM-O-GAS SOIL FUMIGANT
Methyl bromide	74839	100	PRESSURIZED GAS	1000	69.2 gal	METH-O-GAS 100 COMMODITY FUMIGANT
Methyl bromide	74839	98	PRESSURIZED GAS	1000	70.6 gal	TERR-O-GAS 98
Methyl bromide	74839	98	PRESSURIZED GAS	1000	70.8 gal	REDDICK FUMIGANTS BRO-MEAN C-2PRE
Methyl bromide	74839	67	PRESSURIZED GAS	1000	103.3 gal	TERR-O-GAS 67 PREPLANT SOIL FUMIGANT
Methyl bromide	74839	67	PRESSURIZED GAS	1000	105 gal	BRO-MEAN C-33 SOIL FUMIGANT
Methyl bromide	74839	75	PRESSURIZED GAS	1000	92.3 gal	TERR-O-GAS 75
Methyl bromide	74839	100	PRESSURIZED GAS	1000	69.2 gal	METH-O-GAS Q
Methyl bromide	74839	98	PRESSURIZED GAS	1000	71 gal	98-2
Methyl bromide	74839	98	PRESSURIZED GAS	1000	70.6 gal	98-2 CONTAINS 2% CHLOROPICRIN
Methyl bromide	74839	100	PRESSURIZED GAS	1000	69.4 gal	METABROM 100

Table 1. (continued) Agricultural chemicals classified by SARA Title III as extremely hazardous substances (EHS).

Active ingredient	CAS number	Percent active ingredient (A.I.)	Formulation	TPQ A.I. (lbs.)	Approx. TPQ product	Product name
Methyl bromide	74839	100	PRESSURIZED GAS	1000	69.2 gal	METABROM Q
Methyl bromide	74839	98	PRESSURIZED GAS	1000	70.6 gal	MBC CONCENTRATE SOIL FUMIGANT
Methyl bromide	74839	67	PRESSURIZED GAS	1000	103.3 gal	MBC-33 SOIL FUMIGANT
Methyl bromide	74839	57	PRESSURIZED GAS	1000	121.4 gal	TRI-CON 57/43
Methyl bromide	74839	50	PRESSURIZED GAS	1000	138.4 gal	TRI-CON 50/50
Methyl bromide	74839	89.5	PRESSURIZED GAS	1000	77.3 gal	METHYL BROMIDE 89.5%
Methyl isothiocyanate	556616	97	SOLUTION-READY TO USE	500	57 gal	OSMOSE MITC-FUME
Methyl parathion	298000	43.4	EMULSIFIABLE CONCENTRATE	100	25 gal	DECLARE EMULSIFIABLE INSECTICIDE CONCENTRATE
Methyl parathion	298000	20.9	MICROENCAPSULATED	100	53 gal	PENNCAP-M
Methyl parathion	298000	43.8	EMULSIFIABLE CONCENTRATE	100	25 gal	CHEMINOVA METHYL 4EC
Nicotine	54115	14	SOLUTION-READY TO USE	100	79 gal	FULEX NICOTINE FUMIGATOR
o-cresol	95487	various	VARIOUS	1000	various	VARIOUS DISINFECTANTS
Oxamyl	23135220	24	SOLUBLE CONCENTRATE	100	46 gal	DUPONT VYDATE L INSECTICIDE/NEMATICIDE WATER SOLUBLE LIQUID
Oxamyl	23135220	42	SOLUBLE CONCENTRATE	100	26 gal	DUPONT VYDATE C-LV INSECTICIDE/NEMATICIDE
Oxamyl	23135220	24	SOLUBLE CONCENTRATE	100	46 gal	DUPONT VYDATE L INSECTICIDE/NEMATICIDE WATER SOLUBLE LIQUID
Oxamyl	23135220	42	SOLUBLE CONCENTRATE	100	26 gal	DUPONT VYDATE C-LV INSECTICIDE/NEMATICIDE
Paraquat dichloride	1910425	43.8	EMULSIFIABLE CONCENTRATE	10	3 gal	GRAMOXONE MAX
Paraquat dichloride	1910425	37.3	SOLUBLE CONCENTRATE	10	2.5 gal	GRAMOXONE EXTRA HERBICIDE
Parathion	56382	56.24	EMULSIFIABLE CONCENTRATE	100	20 gal	ETHYL-METHYL PARATHION 6-3 EC
Parathion	56382	80.96	EMULSIFIABLE CONCENTRATE	100	14 gal	PARATHION 8 EC
Parathion	56382	56.24	EMULSIFIABLE CONCENTRATE	100	20 gal	ETHYL-METHYL PARATHION 6-3 EC
Phorate	298022	15	GRANULAR	10	67 lb	THIMET 15-G SOIL AND SYSTEMIC INSECTICIDE
Phorate	298022	15	GRANULAR	10	67 lb	THIMET 15-G LOCK 'N LOAD
Phorate	298022	20	GRANULAR	10	50 lb	THIMET 20-G LOCK 'N LOAD CLOSED HANDLING SYSTEM
Phorate	298022	20	GRANULAR	10	50 lb	THIMET 20-G SOIL AND SYSTEMIC INSECTICIDE
Phorate	298022	20	GRANULAR	10	50 lb	PHORATE 20G
Phorate	298022	20	GRANULAR	10	50 lb	PHORATE 20G, CLEAN CROP
Phosphine	7803512	99.3	PRESSURIZED GAS	500	*	VAPORPH3OS PHOSPHINE
Sodium arsenate	7631892	5.4	SOLUBLE CONCENTRATE	1000	2073 gal	HOLLOW HEART CONCENTRATE WOOD PRESERVING COMPOUND
Sulfuric acid	7664939	various	VARIOUS	1000	various	VARIOUS PESTICIDAL PURPOSES
Terbufos	13071799	15	GRANULAR	100	667 lb	COUNTER 15G LOCK 'N LOAD
Terbufos	13071799	15	GRANULAR	100	667 lb	COUNTER 15G SYSTEMIC INSECTICIDE-NEMATICIDE
Terbufos	13071799	20	GRANULAR	100	500 lb	COUNTER CR
Zinc phosphide	1314847	various	VARIOUS	500	various	VARIOUS RODENTICIDES

Glossary

Active ingredient (a.i.)	The component of a product/pesticide that controls the target pest.
Agrichemical	Agricultural chemical: pesticides and fertilizers, including any agents and adjuvants.
CAS number	Chemical Abstracts Service number found on the Material Safety Data Sheet (MSDS).
Chemical name	A simple name given to a chemical with a complex scientific name.
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.
LEPC	The Local Emergency Planning Committee develops the community response plan for all sites within its jurisdiction that store extremely hazardous substances in quantities that require a plan.
Material Safety Data Sheets (MSDS)	These data sheets 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. MSDSs are available from manufacturers.
NRC	The U.S Coast Guard Natural Response Center (1-800-424-8802) must be contacted when an agrichemical, fuel or oil is released to waters of the State.
Product name	Brand name used by the manufacturer to identify the product.
Release	Spill, leak, pump, pour, emit, empty, discharge, inject, escape, leach, dump or dispose. Normal agricultural, application is NOT a release.
RQ	Reportable quantity: chemical release equal to or exceeding the RQ must be reported to local, state and federal authorities.
PEAS	Pollution Emergency Alerting System: 1-800-292-4706, operated by the Michigan Department of Environmental Quality.
TPQ a.i.	Threshold planning quantity in pounds of active ingredient. If you have on site an amount of a.i. equal to or greater than its TPQ, you must notify the Michigan SARA Title III Program and your Local Emergency Planning Committee.
TPQ product	The calculated threshold planning quantity in pounds or gallons of product as formulated. If you have on site an amount of product equal to or greater than its TPQ, you must notify the Michigan SARA Title III Program and your Local Emergency Planning Committee.
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.

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Local Emergency Planning Committee Notification

This postcard is for notifying the Local Emergency Planning Committee that:

_____ I have a farm that is subject to SARA Title III section 302 emergency planning notification.

Chemicals: _____

_____ I have a farm that is NO LONGER subject to SARA Title III section 302 emergency planning notification.

Name of facility contact person

(_____) _____
Area code and telephone number

Street address, city, zip code

County or counties where chemicals are located

Signature

Date

State Emergency Response Commission Notification

This postcard is for notifying the Michigan SARA Title III Program that:

_____ I have a farm that is subject to SARA Title III section 302 emergency planning notification.

Chemicals: _____

_____ I have a farm that is NO LONGER subject to SARA Title III section 302 emergency planning notification.

Name of facility contact person

(_____) _____
Area code and telephone number

Street address, city, zip code

County or counties where chemicals are located

Signature

Date

Local Emergency Planning Committee

Michigan SARA Title III Program

Department of Environmental Quality

P.O. Box 30457

Lansing, MI 48909-7957