

# 6

## Emergency Response

Once you have completed Element 6, you will have:

- Identified potential disasters or emergency situations.
- Created and tested an emergency response plan.
- Communicated the emergency response plan to everyone working on, visiting or living on your farm.



# Introduction

A serious emergency (such as an entrapment, injury, explosion, fire or structural failure) could seriously affect the operation of your farm and put the health, safety and livelihood of employees and family in jeopardy. The best health and safety management system cannot protect your operation from all natural or unexpected disasters; however, having a good emergency response plan (ERP) in place can reduce the severity and risk of loss. The action taken in the first few minutes of an emergency situation is critical. Knowing what to do and who to contact can save lives and reduce costs if disaster should strike.

## OCCUPATIONAL HEALTH AND SAFETY LEGISLATION

The Occupational Health and Safety Code requires an employer to:

- Establish an emergency plan.
- Involve affected workers in establishing the plan.
- Ensure the plan is current.

## Building an Emergency Response Plan (ERP)

The types of emergencies to which a farming operation may be vulnerable can be influenced by the nature of the business, the location, the type of work, the weather patterns in the area, or even the nature of neighboring operations.

### Identify Potential Emergencies

Begin building the ERP by identifying all potential disasters or emergency situations the business may face. Identify any emergencies that could occur, such as a chemical spill, machinery or livestock injury, someone collapsed in a confined space, bad weather, fire, explosion, etc. This can be done by reviewing hazard assessment documents and incident investigations, and considering the potential for hazards around the operation. Assess the potential for harm to people, property, equipment and the environment for each potential emergency situation.

The types of hazards to be addressed by an ERP need to include both work related hazards and hazards that may be introduced onto the work site by one of the following sources:

- Natural disasters
- Man-made events
- Technological (mechanical) failures

Make sure plans fit the worst case scenario. Once you have identified all potential emergencies, develop, communicate and test your plans to deal with them.



Use Worksheet 6.1 “Preparing for Potential Emergencies” to help you identify and plan for possible emergencies.

*Many workplaces contain spaces that are considered “confined” because their configurations hinder the activities of employees who must enter, work in and exit them. A confined space has limited or restricted means for entry or exit, and it is not designed for continuous employee occupancy. Confined spaces include, but are not limited to, underground vaults, tanks, storage bins, manholes, pits, silos, process vessels and pipelines.*

# Basic Components of an Emergency Response Plan

## COMMUNICATION PROCEDURES

Ensure that everyone working, living on or visiting your farm is aware of your procedures and what to do in the event of an emergency. This can be achieved by the following:

- At least once a year hold a drill and go over the details of your emergency plan with everyone who is typically on your farm. Always ensure this training is documented.
- Post emergency contact numbers and names of people that must be notified in the event of an emergency situation.
- Routinely test communications systems, whether you rely on alarms, two-way radios, cell phones or landlines to ensure that persons working in any location on the operation can call for help or be reached to be advised of an emergency situation.

## EMERGENCY PHONE NUMBERS

Develop specific communication systems for use in the event of an emergency, and post emergency contact numbers where they are most likely to be needed.

## LIST OF RESPONSIBLE EMERGENCY RESPONSE PERSONNEL

Ideally, everyone on the farming operation should be trained in the farm's ERP and emergency first aid, as a minimum. Consider this: if only one person is trained in first aid and he or she becomes injured or has a health event, who will help this person? It is important to have a contact list of all farm employees so that they can be notified in an emergency.



*See Worksheet 6.2 "List of Emergency Contacts".*

## EVACUATION PROCEDURES

As you are developing your emergency response plan, take into consideration how to ensure that everyone in a building or field location will get out of harm's way quickly and safely. How will you, or someone acting on your behalf, account for everyone?

You will need to rely on your remote communications systems, alarms, routine emergency training sessions and feedback from everyone working on your operation to ensure that your system works.

A final thought for completing your evacuation procedures is to consider how emergency responders might get into a remote location such as a muddy field or hilly range to treat and bring out an injured or sick worker.

# Steps for Building Your Emergency Response Plan

## STEP 1: PLAN FOR ACTION

Write out a plan for each potential incident, clearly noting the role of each person. Because injured workers won't be able to do their part, make sure everyone knows the process so they can step in to take over any of several roles in the plan. For example, does everyone know how to shut off machinery and how to drive a vehicle? Do they know the address or location of the farm, including the best access routes? Does everyone know where to meet to be accounted for?

*For an example of an emergency response plan for offsite emergency personnel, go to: [www.ruralemergencyplan.com](http://www.ruralemergencyplan.com)*

Think about ways emergency medical service providers may need to reach and evacuate a seriously injured person in the following areas:

- Muddy, remote or crop-filled fields
- Bio-secure areas
- Chemically contaminated areas
- Pens with aggressive livestock
- Confined spaces

## STEP 2: IDENTIFY RESOURCES

List everything needed to deal with possible emergencies in all areas of the farm, for example, the location of fire extinguishers and neutralizers for chemical spills. Ensure adequate first aid supplies and restock them periodically in all work locations and field vehicles. Provide a surefire way to call for emergency help. Train more than one worker in first aid and CPR, and make sure others know who has the training. Ideally, all workers should be trained in first aid, with that training kept up to date.

Fully functional emergency resources are critical to the effectiveness of your plan. Routine maintenance checks for your first aid kits, fire extinguishers, spill kits and other emergency resources is as important as the routine maintenance provided for field equipment and facilities — without it you can't farm effectively.

## STEP 3: TRAIN WORKERS IN FIRST AID

Ensure that as many people as possible involved in your farming operation have current first aid training. Knowing what to do in an emergency situation may be the difference between an injured person living or dying.

## STEP 4: TEST YOUR PLAN

The most effective way to learn what to do and evaluate whether your system works is to conduct a drill. At least once a year test your plan — pick a location and situation and create a mock emergency. By conducting a drill, you will be able to confirm whether the people working on your operation know how to respond to an emergency situation. If it goes smoothly and all your procedures are followed, congratulations. If there is confusion, it is an opportunity to do additional training and make modifications to your plan, so that should a real emergency situation arise, it will be handled effectively.

## STEP 5: KEEP GOOD RECORDS

Throughout this planning manual, you have been reminded about the importance of record keeping.

## BENEFITS OF DOCUMENTING YOUR PLAN, TRAINING AND TESTING

- A baseline against which you can evaluate your effectiveness.
- A basis from which to build and improve upon.
- Documentation to demonstrate the protocols you had in place should an incident occur and if there are questions about your due diligence in protecting individuals on your operation.

## STEP 6: REVIEW AND UPDATE YOUR EMERGENCY RESPONSE PLAN

- Review and revise the emergency response plan on a regular basis.
- Check phone numbers and contacts to note any changes.
- Review emergency response records for any deficiencies in the response.
- Take corrective action if required.

# Conclusion

You should now have an understanding of the components of an emergency response plan. You should also have taken the steps to build your own emergency response plan, including how to test and revise it as needed.

The next element looks at how to conduct an incident investigation to determine the cause of the incident and take steps to rectify the problem.

Use the checklist on the next page to determine what you have done and what still needs to be done before you move on to Element 7.

Answer the following questions. If you answer “No” to a question, consider how you might change your practices in order to answer “Yes”.





# Element 6

## Self Evaluation Checklist

	Yes	No
I have a written emergency response plan that addresses all possible emergencies and reflects the hazards at the work site(s).	<input type="checkbox"/>	<input type="checkbox"/>
It includes:		
• Communication procedures.	<input type="checkbox"/>	<input type="checkbox"/>
• Emergency phone numbers.	<input type="checkbox"/>	<input type="checkbox"/>
• List of responsible emergency response personnel.	<input type="checkbox"/>	<input type="checkbox"/>
• Evacuation procedures.	<input type="checkbox"/>	<input type="checkbox"/>
I give employees emergency response training appropriate to their individual responsibility.	<input type="checkbox"/>	<input type="checkbox"/>
I conduct emergency response drills annually, or more often, as required.	<input type="checkbox"/>	<input type="checkbox"/>
I keep emergency response records.	<input type="checkbox"/>	<input type="checkbox"/>
I post all emergency procedures and contact information.	<input type="checkbox"/>	<input type="checkbox"/>
I ensure employees at the site understand their responsibilities under the plan.	<input type="checkbox"/>	<input type="checkbox"/>
I review all records of emergency responses (including drills) to correct deficiencies.	<input type="checkbox"/>	<input type="checkbox"/>
I ensure an appropriate number of employees are trained in first aid as required by legislation.	<input type="checkbox"/>	<input type="checkbox"/>
I ensure first aid supplies and facilities meet legislated requirements.	<input type="checkbox"/>	<input type="checkbox"/>
I have the following resources ready for immediate response:		
• Communications system.	<input type="checkbox"/>	<input type="checkbox"/>
• First aid supplies.	<input type="checkbox"/>	<input type="checkbox"/>
• Fire suppression.	<input type="checkbox"/>	<input type="checkbox"/>
• Chemical spill containment equipment.	<input type="checkbox"/>	<input type="checkbox"/>
• People trained in first aid.	<input type="checkbox"/>	<input type="checkbox"/>
• Eye wash station.	<input type="checkbox"/>	<input type="checkbox"/>
• SCBA/respiratory protection.	<input type="checkbox"/>	<input type="checkbox"/>
• Food/shelter/water.	<input type="checkbox"/>	<input type="checkbox"/>
• Evacuation support.	<input type="checkbox"/>	<input type="checkbox"/>





# Appendix 6.1

## Example Communication and Evacuation Procedure

Use this form as an example to build your own communication and evacuation procedure. Circle or highlight the concepts you will include in your own FarmSafe plan.

### GENERAL

In case of emergency;

A. **GET HELP**

Get help as soon as possible and, if required, enlist the aid of other people working in your area.

B. **GIVE HELP**

If there are injured persons on site, administer first aid and arrange for transport to a medical facility as soon as practical.

C. **MINIMIZE DAMAGE ON SITE**

If the potential for more injury or damage exists, assess the nature of the threat and, if possible, take immediate action to minimize those dangers.

D. **NOTIFY THE OWNER**

The owner will assist you with further notifications.

### FARM SITE MAP

All workers must familiarize themselves with the farm site map to ensure they are aware of the location of safety equipment and possible hazards should an emergency occur. These maps are updated on a regular basis and posted in buildings throughout the farm.

### FIRE

In case of fire, call 911.

1. Don't place yourself, your family or employees at risk — stay out of burning buildings.
2. Eliminate the source of the fire, if possible.
3. Assess extent of fire.
4. Notify attending fire department of location, type and extent of the fire.
5. Attempt to contain or eliminate the fire, provided you can do this safely.
6. If necessary, evacuate to [pre-designated safe location] or the emergency services shelter.

### FLOODS

If we must evacuate in the event of a flood:

1. Always follow the instructions of local emergency officials.
2. Shut and lock doors and windows, including barn doors and gates. Shut off water supply, natural gas and power to all buildings, barns, etc. as identified on farm map.
3. Shut off gas valve at the meter.
4. If necessary, evacuate to [pre-designated safe location] or the emergency services shelter.

## PETROLEUM SPILL

In case of spills:

1. Eliminate the source of the spill.
2. Small spills can contaminate water — clean them up!
3. Large spills — spills over 100 litres must be reported to the local fire department.
4. Containment — construct berms or divert flow to prevent spread of fuel.
5. Apply, as required, absorbent material. On this farm, it is kept in the \_\_\_\_\_ [Location] \_\_\_\_\_
6. Assess extent of spill:
  - Did the petroleum reach surface water?
  - How much was released and for what duration?
  - Did any damage occur to property, fish or wildlife or their habitat, or an employee?
  - Did the spill leave the property?
  - Can the spill potentially reach surface waters?
  - Could a future rain event cause the spill to reach surface waters?
  - Are potable water sources (wells or surface water) in danger?
7. Contact the **Alberta 24-Hour Environmental Hotline** at **1-800-222-6514** for recommendations on disposal options for any material, soil or liquid contaminated with petroleum and for further direction.

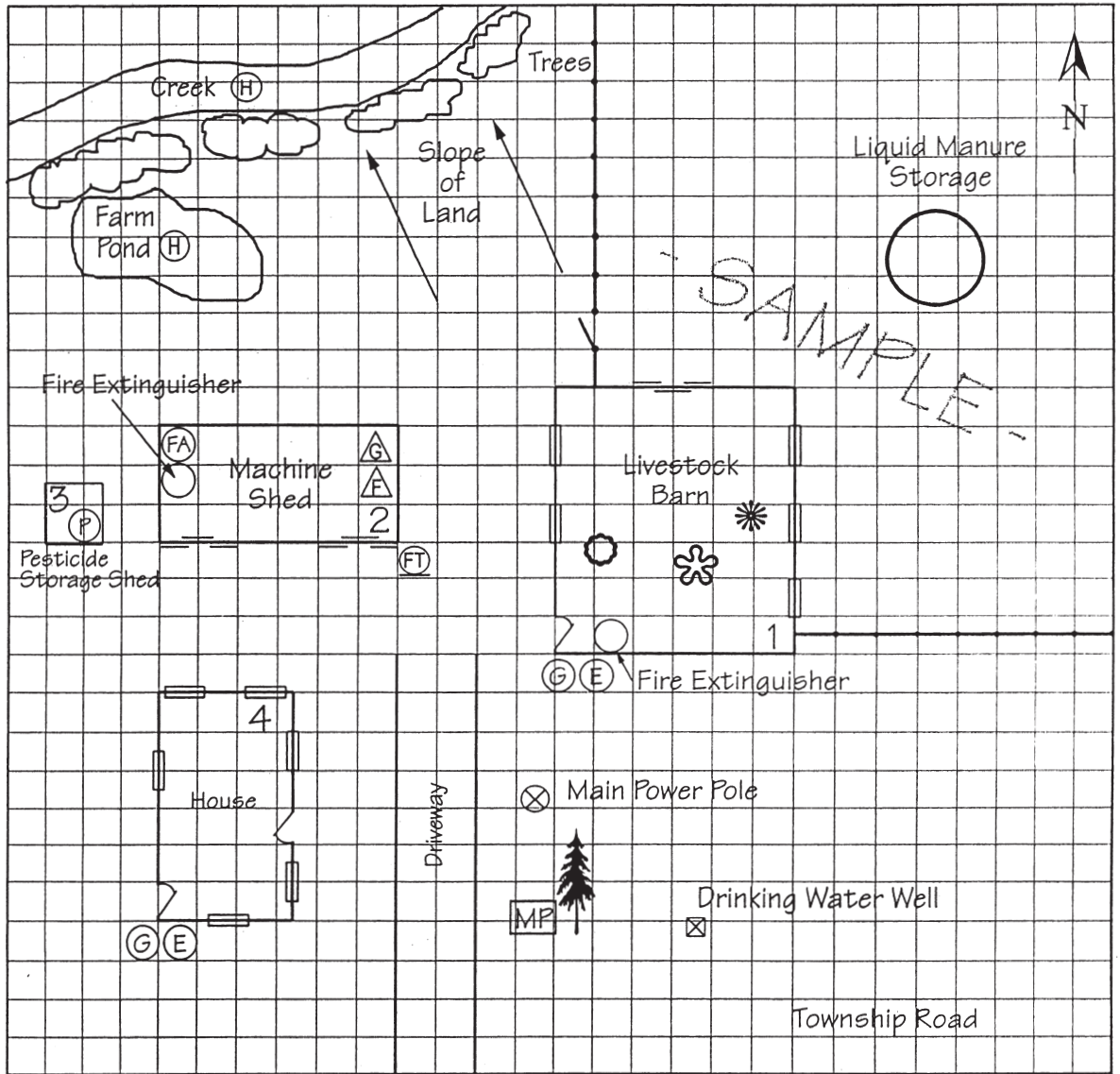
## FERTILIZER SPILL

In case of spills:

1. Eliminate the source of the spill.
2. Report spills over 50 kilograms or 50 litres to the local fire department.
3. Put on appropriate personal protective clothing. On this farm, it is located in the \_\_\_\_\_ [Location] \_\_\_\_\_
4. Contain fertilizer using berms to prevent the spread of liquid fertilizer.
5. Assess extent of spill:
  - Did the fertilizer reach surface water?
  - How much was released and for what duration?
  - Did any damage occur to property, fish or wildlife or their habitat, or an employee?
  - Did the spill leave the property?
  - Can the spill potentially reach surface waters?
  - Could a future rain event cause the spill to reach surface waters?
  - Are potable water sources (wells or surface water) in danger?
6. Clean up site by removing both fertilizer and soil from the site. This mixture of soil and fertilizer could be spread on crop land as a fertilizer.
7. Contact the **Alberta 24-Hour Environmental Hotline** at **1-800-222-6514** for recommendations on disposal options for any material, soil or liquid contaminated with fertilizer and for further direction.

# Farmstead Site

## SAMPLE Farmstead Site Map



Date Prepared: \_\_\_\_\_ Approximate Scale: \_\_\_\_\_

Contact Name: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Alternate Number: \_\_\_\_\_

- North
- Pedestrian Door
- Sliding Door
- Overhead Door
- Windows
- Fans
- Floor Drains
- Sprinkler System

- Fences
- Gates
- Compressed Gas
- Flammable Liquids
- Oxidizing Materials
- Poisonous Materials
- Corrosive Materials
- Fertilizer

- Pesticide
- Water Source For Fire Hydrant
- Main Gas Shutoff
- Main Electrical Shutoff
- Above Ground Fuel Tank
- Below Ground Fuel Tank
- First Aid
- Fire Extinguisher
- Meeting Place
- Septic System (Label on map)
- Manure System (Label on map)



# Worksheet 6.2

## List of Emergency Contacts

Use this worksheet to record emergency contact information. A list like this should be posted in highly visible locations near landline phones, emergency equipment, first aid kits and in machinery. Available online at: [www.agriculture.alberta.ca/farmsafety](http://www.agriculture.alberta.ca/farmsafety)

**Municipal Address:** \_\_\_\_\_

**Legal Land Description:** \_\_\_\_\_

Emergency Response	Phone Number	Contact Person
Fire		
Ambulance		
Police/RCMP		
Disaster Services		
Hospital		
Doctor		
Poison Control Centre	<b>1-800-332-1414</b>	
Alberta Health Link	<b>1-866-408-5465 (LINK)</b>	
<b>On-Farm</b>		
Senior Manager		
Safety Coordinator		
Employees Trained in First Aid		
<b>Other</b>		
OHS Contact Centre	<b>1-866-415-8690</b>	
Power Company		
Telephone Company		
Gas Company		
Insurance		
<b>Alberta 24-Hour Environmental Hotline</b>	<b>1-800-222-6514</b>	

**Last updated on:** \_\_\_\_\_ **by:** \_\_\_\_\_

Note: In your own community there may be other numbers that need to be added to this list.

# Worksheet 6.3

## Evacuation Report

Available online at: [www.agriculture.alberta.ca/farmsafety](http://www.agriculture.alberta.ca/farmsafety)

Date of Evacuation:	Time of Evacuation:
Area(s) Involved:	
Was the alarm sounded properly?	Did all areas hear the alarm?
Was the facility manager or designated safety representative present?	
Name:	Title:
Emergency Response Team involved:	
Name:	Duty:
Name:	Duty:
Name:	Duty:
Name:	Duty:
Deficiencies noted:	
Recommended corrective measures:	
Overall results of emergency evacuation:	
Signed:	Dated: