

Step 10. PLAN FOR THE UNEXPECTED

You need to be prepared for the unexpected. The best way to do that is to think ahead and plan “what you would do if...?”

A contingency plan is a written document that sets out actions to be taken in the event that a nutrient management plan or strategy cannot be followed. For example, a manure storage may become filled with rainwater before the contained manure can be applied. Another example is a spill or unanticipated release of nutrients. Preparing a contingency plan in advance speeds up your ability to take corrective action on short notice.

Identify potential scenarios. The contingency plan answers questions, such as:

1. What procedure will I follow if a spill occurs?
2. What steps will I take to contain, eliminate and clean up a spill – at the storage, at the transfer site, in the field?
3. What will I do if my operation has more nutrients than planned, e.g., livestock must be held for longer than planned, thus increasing the volume of manure?
4. If wet weather delays application of nutrients and storage is nearing capacity, where will I transport the nutrients?
5. If excess rainfall fills the nutrient storage to capacity, where would I transfer or spread the nutrients/manure?
6. If soil conditions are not compatible with planned spreading operations, what are my alternatives and how will I compensate?

Next, identify the resources required in case the plan must be put in place. Some of these could include:

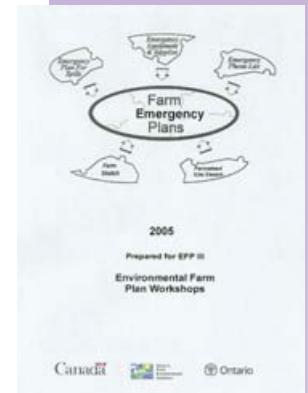
- ▶ finding a local custom applicator with a vacuum tanker
- ▶ locating tile outlets for monitoring
- ▶ making a list of the telephone numbers required and remembering the list’s location.

Communicate the contingency plan to all those involved in the operation.

It’s important that all farm help, family members, custom applicators, etc. are aware of the details of the contingency plan and the location of the emergency list(s). And of course they must also be able to execute the required actions.

Document what was done when an emergency occurred. Detailed reports of what was done, when, who was called, and what was discussed will help in case of complaint or spills follow-up.

When a situation has required that a contingency plan be put into effect, the plan should be evaluated to determine if improvements are needed and changes made accordingly.



The EFP Emergency Plan should be completed as part of your NMP contingency plan.

A contingency plan will provide step-by-step actions to address nutrient-related emergencies such as a manure spill.



WHY HAVE A CONTINGENCY PLAN?

- ▶ to protect the environment, your family, your livestock and your business (may help minimize potential liability)
- ▶ to demonstrate that you are prepared for emergencies
- ▶ so that you can react when there's an emergency – and not panic!

It's an offence under the provincial Environmental Protection Act and the federal Fisheries Act to pollute a stream and kill fish.







WEATHER OR EQUIPMENT CONDITIONS IMPEDING PLANNED STORAGE OR APPLICATION

Timing change

When the timing of manure application must be changed:

- ▶ adjust commercial nutrients applied to reflect the change in timing (e.g., when changing from fall to spring application, adjust commercial N to reflect higher N availability from the manure)
- ▶ adjust subsequent applications of nutrients to accommodate the change in timing of the nutrient application
- ▶ record the change in your nutrient management plan.

LONG-TERM FORECAST

	THURSDAY	FRIDAY	SATURDAY	SUNDAY	MONDAY	TUESDAY
						
	Cloudy periods	Mainly sunny	Mainly sunny	Mainly sunny	Cloudy periods	Scattered showers
HIGH	29°C	32°C	32°C	30°C	26°C	25°C
LOW	17°C	21°C	20°C	22°C	15°C	16°C
P.O.P.	0%	20%	0%	0%	10%	40%
PRECIP ACCUM	–	–	–	–	–	close to 10 mm
WIND	SW 10 km/h	W 10 km/h	SW 10 km/h	SW 15 km/h	SW 25 km/h	NE 5 km/h

Source:
www.farmzone.com
 (weathernetwork.com)

Crop change

Nutrient amounts and fertilizer formulation should be adjusted (where possible) to account for a change in crop. If the nutrients have already been applied, the amount and formulation should be adjusted for the next crop where possible, to account for the nutrient needs and removal of the current crop. In the big picture, a change in crop grown won't have that much impact on a plan over the whole crop rotation.



When changing crops during the growing season, adjust your fertility program as needed.

CONTINGENCIES FOR MORE MANURE THAN PLANNED

If the application rates for nutrients in a NMP are at the maximum, you must be prepared to set up alternative destinations for the nutrients. Some possibilities include:

- ▶ finding a broker who can take the excess nutrients
- ▶ finding a neighbour (e.g., cash cropper) who may be looking for manure nutrients and will accept the excess nutrients, or
- ▶ locating an intermediate processor – such as a commercial compost operation for excess solid manure.

CONTINGENCIES FOR MORE NUTRIENTS THAN STORAGE CAPACITY

In some cases, generally due to adverse weather conditions, manure storages may be in danger of overtopping.

If a manure tank is overflowing, and the manure cannot be land-applied due to weather or a lack of available land, the preferred option is to transfer the manure to another storage facility.

A broker may also be used to take the excess manure.

If the conditions for land application are suitable, additional land may be used to apply the manure. However, this change should be recorded and incorporated into your nutrient management plan.

CHECKLIST FOR AN EMERGENCY PLAN FOR SPILLS

A properly developed emergency plan has the following components.

- ✓ A list of preventative best management practices and routine equipment inspection
- ✓ A list of contingency measures
- ✓ A step-by-step procedures list for eliminating the source
- ✓ A list – near each phone – of all necessary emergency call numbers
- ✓ A map of the facilities indicating areas of risk and location of clean-up equipment and supplies – you should have a secure location for the map and your emergency plan
- ✓ A list of who is responsible for what
- ✓ Staff and family training plus documentation of any preventative measures taken
- ✓ An account of how the spill will be cleaned up
- ✓ A formatted blank form to be completed after a spill is dealt with

IN THE EVENT OF A SPILL

This is an important issue due to the potential adverse effects. The emergency plan should outline the required equipment, who to notify, contacts and safety precautions. The idea is to minimize the potential for a spill, and if one does occur, to ensure that the operator and the employees know what actions to take.

For more information about how the Ontario Ministry of the Environment defines a “spill,” see the textbox on the next page.

To avoid a spill

Spread the nutrient according to your NMP or contain it in an adequate nutrient storage for later application. In addition:

- ▶ calibrate your manure application equipment regularly so that you can follow the rate specified in your plan
- ▶ follow setbacks to surface water required by the NMP for the site
- ▶ mark all tile outlets and catch basins for nutrient application and inspection purposes
- ▶ use two people with a radio link or an automatic shutdown system for a direct-flow system
- ▶ avoid spreading before rain events.

To stop a spill

1. Immediately stop the cause of the spill if possible.
2. Shut down the appropriate pumps and valves.
3. Ensure the system cannot be restarted.
4. Contact the 24-hour Spills Action Centre at 1-800-268-6060 or your local Ontario Ministry of Environment office.

To contain a spill

- ▶ minimize opportunity for manure to enter tile drain or plug the tile in the event that flow appears to be contaminating the tile drains
- ▶ if the spill is moving over the ground surface, build an earthen berm with farm or commercial equipment, such as backhoes or dump trucks
- ▶ use a vacuum tanker to apply contained manure
- ▶ notify downstream users

In the event of a spill, stop it and contain it.



Numbers at hand

The following contacts should be posted by all phones for immediate access in case of a spill:

- ▶ Spills Action Centre (1-800-268-6060)

Other phone numbers that should be readily accessible:

- ▶ local Ontario Ministry of the Environment office
- ▶ bulldozer or backhoe operator
- ▶ custom applicator (preferably one that has a vacuum tanker)
- ▶ municipality
- ▶ neighbours
- ▶ neighbour with a vacuum tanker

THE SPILL RESPONSE NETWORK (<http://www.nuhn.ca/spillsubmit.html>)

The Spill Response Network is designed to be part of a nutrient management contingency plan.

The website contains a list of individuals and organizations with vacuum spreaders, including those equipped with a loading arm. These persons are willing to assist another producer in cleaning up in the event of a manure spill. The equipment can quickly and effectively suck spill from fields and ditches, etc. This listing is open to any brand of equipment.

If a producer can show that all reasonable action has been taken to prevent and alleviate environmental contamination, a defence of diligence may be used. The existence of this network shows diligence on the part of the agricultural community as a whole and may help in any liability issues. It may even result in a lower insurance premium.

Payment for service is an initial fee plus an hourly rate for cleanup time.

WHAT IS A SPILL?

The Ontario Ministry of the Environment (MOE) defines spills as releases of pollutants into the natural environment originating from a structure, vehicle, or other container that are abnormal in light of all circumstances.

There is a legal obligation to report a spill immediately to the Ministry of the Environment through the Spills Action Centre (SAC) at 1-800-268-6060 and also to the local municipality, if the spill causes one or more of the following adverse effects:

- ▶ impairment to the quality of the natural environment – air, water, or land
- ▶ injury or damage to property or animal life
- ▶ adverse health effects
- ▶ safety risk
- ▶ making property, plant, or animal life unfit for use
- ▶ loss of enjoyment of normal use of property, OR
- ▶ interference with the normal conduct of business.

The person who caused the spill and the person who had control of a material at the time it was spilled (if different from the person who caused the spill) both have the responsibility to report the spill. In addition to reporting the spill, when a farm-related spill occurs it is the responsibility of the owner of the material and the person who had control of the material at the time it was spilled to clean up and dispose of the material in a timely manner.