



Nutrient Management Act, 2002

UNDERSTANDING AND RESOLVING NUTRIENT MANAGEMENT CONCERNS AND COMPLAINTS

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INTRODUCTION

Rural communities are the home of Ontario's thriving and dynamic agricultural industry. As it is with *any* industry, be it an automotive plant or a shopping complex—agricultural operations may give rise to loud noises, unpleasant odours and lots of hustle and bustle associated with the business at hand.

This Factsheet will:

- consider a number of frequently voiced concerns about the use of manure and other nutrients in the agricultural industry; and
- identify the resources and processes in place to address nutrient related concerns and complaints.

THE CHANGING FACE OF AGRICULTURAL INDUSTRY AND THE RURAL POPULATION

Over the last 50 years, the public has come to expect high quality food at low prices from the agricultural industry. Faced with decreasing profit margins, many farmers have expanded the scale of their operations. Some members of the public have expressed concerns about the increased size of livestock operations in particular and have adopted the term “factory farm” to describe high density or intensive livestock operations. Meanwhile, changing demographics have resulted in an increase of non-farming residents in rural areas.

NUTRIENT MANAGEMENT CONCERNS VS. NUISANCE CONCERNS

“Nutrient management concerns” and “nuisance concerns” are two very different concerns relating to practices involving the storage, transfer or application of nutrients. Not surprisingly, each type of concern requires a distinct course of action.

A *nutrient management concern* is generally a practice that is contrary to a public law or by-law and can involve either agricultural or non-agricultural source material. Generally, these concerns deal with practices that may put the public or the environment at risk. Examples of nutrient management concerns might include improper disposal of manure near or into a watercourse, contamination of ground water due to faulty manure storage facilities, or the application of nutrients to the land at rates much beyond what is required by a crop. These types of nutrient practices could be a violation of various provincial and federal laws, including:

- Ontario's Nutrient Management Act, 2002, S.O. 2002, c. 4;
- Ontario's Environmental Protection Act, R.S.O. 1990, c. E.19, as amended (http://192.75.156.68/DBLaws/Statutes/English/90e19_e.htm);
- the Ontario Water Resources Act, R.S.O. 1990, c. O.40, as amended, (<http://www.e-laws.gov.on.ca>)
- the Canadian Environmental Protection Act, 1999, S.C. 1999, c.33 (<http://laws.justice.gc.ca>)

- Canada's Fisheries Act, R.S.C. 1985, c. F-14, as amended (<http://laws.justice.gc.ca>).

A **nuisance concern** generally involves a practice that is "normal" or acceptable in the context of a farm but may be an annoyance or inconvenience to an individual. Nuisance concerns do not violate any legislation. They often arise due to a misunderstanding of the intent of a practice or as a result of a breakdown in communication between involved parties. The majority of nuisance concerns arise because of odours at the time of manure application.

OMAF CONTACTS

There are two OMAF hotlines where resource agents can answer questions about agricultural practices in general, as well as practices related specifically to nutrient management.

Agricultural Information Contact Centre: 1-877-242-1300
Nutrient Management Information Line: 1-866-242-4460

Learning from what others have asked

Some of the calls received at these two phone centres are about nuisance complaints. The following is a list of frequently asked questions relating to nuisance complaints and typical responses to them:

- *Why does a farmer spread manure?* Land application of manure is more than just a method of manure disposal. Manure is an excellent source of nitrogen, phosphorus and potassium, all nutrients needed for crop growth. The organic matter in manure also improves the condition of the soil, which can reduce soil erosion and watercourse pollution.
- *How often do farmers apply manure?* A farmer might spread manure 2 or 3 times a growing season. Manure is spread in the spring before planting, in the summer after a cutting of hay, or in the fall after a crop has been harvested. Each spreading event could be a single day or a few days, depending on the amount of manure to be applied and the size of the area of land it is being applied to.
- *When can a farmer apply manure?* The timing of manure application is often dictated by natural restrictions. The main restriction is weather. Manure should not be applied during the winter months or when the ground is frozen because the frozen soil increases potential for runoff. When the soil is too wet, manure cannot be applied because the heavy

machinery used to apply it will compact the soil. Crop cover also restricts the application of manure.

- *Why is the farmer spreading manure on the weekend?* A farmer's job is not 9 to 5, Monday to Friday. Sometimes the window of opportunity for spreading manure can be quite narrow and may fall on weekends or evenings. Factors limiting manure application include: wet conditions (heavy farm equipment will compact soil), crop cover, frozen ground, and access to application equipment.
- *Why does manure smell and is there something a farmer can do about it?* Sulfide compounds and ammonia, (NH₃ are 2 of the main components of manure) are associated with odour. Proper incorporation of manure into the soil helps to reduce odour and ammonia losses to the atmosphere. When ammonia losses are reduced, it means there is more nitrogen (N) available for the crop. However, it is not always possible for this practice to be followed. Incorporation may be limited by the presence of a cover crop, by tillage method or by lack of equipment. Agitating the contents of a liquid manure tank before application can also reduce odours during application. The direction of the wind also plays a large part in who will smell the manure during and after application, but there is not much a farmer can do about wind direction.
- *If there are puddles of manure in the field after a farmer has applied liquid manure, does that mean there has been "too much" applied?* It is hard to determine if "too much" manure has been applied by looking at the puddles. Temporary puddling will often occur before the manure is absorbed by the soil (see *Figure 1*). Soil type, the slope of the land and the condition of the soil will all affect how quickly absorption occurs.



Figure 1. Example of puddling after a manure application.

- *How does a farmer know how much manure to apply?* Manure application rates are based mainly on crop nutrient requirements, soil tests, and the nutrients in the manure itself. OMAF's computer program NMAN assists farmers in determining the balance between manure application rate, crop nutrient requirements and commercial fertilizer application. When farmers are implementing their NMP, they will follow the rates listed in their NMP. Manure application rates are estimated as a function of the application equipment's capacity (volume) and width (distance), and the time it takes to empty the applicator (time). It is a best management practice for a farmer to calibrate their manure application equipment.
- *How close to my house are farmers allowed to spread manure?* Under the NMA, farmers are under no legal obligation to avoid manure application next to your house. However, they are obliged to respect a 15 m setback distance from drilled wells, a 30 m setback from other wells, and 13m from the top of the nearest bank of most surface water bodies.
- *Should cattle or other livestock be allowed in streams?* Fencing livestock out of waterways is a best management practice. This prevents livestock manure from being deposited into the stream and minimizes stream-bank erosion. Farmers who run a operation with a permanent outdoor confinement area of greater than 300 NU or who manage a high-density permanent outdoor confinement areas are obliged under the NMA to keep their livestock out of surface waterways.
- *Can a farmer keep manure piled in his field?* The practice of storing solid manure in a field is called "in-field storage" as it is just piled on the soil rather than on a concrete pad. According to the NMA, in-field

storage should only be temporary and the location must meet specific requirements. For more information see OMAF Factsheet *Temporary Field Storage of Solid Manure or Prescribed Nutrients*, Order No. 03-105.

WHAT TO DO IF YOU HAVE A CONCERN OR COMPLAINT?

There are 3 steps you should follow when deciding what to do about a nutrient management or nuisance concern.

- Understand the issue and get additional information
- Communicate with others about your concern
- Consider what steps to take

Understand the Issue

If you are not familiar with what is "normal" when it comes to farming practices relating to nutrients, there are many resources available that can help you to become informed:

The Nutrient Management Act

The Nutrient Management Act, 2002 (NMA) and its Regulation, O. Reg. 267/03, govern many aspects of nutrient management. There are regulatory requirements and protocols pertaining to nutrient storage, transfer, or application practices. These include regulations for nutrient application rates and timing; nutrient setback distances; temporary in-field storage; and more.

The NMA requires some producers to have Nutrient Management Strategies (NMS) and/or nutrient Management Plans (NMP) currently, not all producers are required to have a NMS/P. However, over time, the intent is for all farmers who generate or land apply nutrients to have some form of plan or strategy in place. For more information on the requirements of the Regulation regarding nutrient management strategies and plans, follow the links to the Nutrient Management Act, 2002 on the OMAF web site www.omaf.gov.on.ca.

Best Management Practices (BMPs) Publications

A series of publications called "Best Management Practices" (BMPs) is available through OMAF. These comprehensive publications describe a number of practical and affordable approaches to conserving a farm's soil, water and nutrient resources without sacrificing productivity. However, it should be emphasized that reasonably safe farming can be done without meeting the high standards of these BMP's. Although farmers are not required to follow these BMP's, many have voluntarily incorporated them into their

regular management practices. A list of all the BMP publications can be viewed at the OMAF web site.

Farming and Food Production Protection Act, 1998

The Farming and Food Production Protection Act, 1998 (FFPPA) is legislation designed to “conserve, protect and encourage the development and improvement of agricultural lands for the production of food, fibre and other agricultural or horticultural products”. In it, “normal” farming and food production procedures are outlined. For more information see the OMAF Factsheet *Farming and Food Production Protection Act and Nuisance Complaints*, Order No. 03-113.

Communicate

Perhaps one of the most important steps in addressing a concern is to talk to the farmer. Speaking with the individual could give you a different perspective as to why or how frequently a particular practice occurs. Also, the farmer may not have been aware that their activities were a source of concern and they may be able to do something about it.

For instance, if you are planning an outdoor party for the same weekend a farmer is planning to apply manure to the field next to your house, let the farmer know. The farmer may be able to delay application until after the party. If you are reasonable with your requests and questions about the concern, there is a better chance the outcome will be favourable for both parties. On the other hand, if your concern is about a spill or other serious occurrence, the farmer may have already notified the appropriate agencies and may appreciate an extra pair of hands to help with the cleanup.

Consider What Steps to Take

Unfortunately, there are some situations that cannot be resolved without external involvement — whether the situation is because of a nuisance concern or a nutrient concern. Where you have reason to suspect a spill, call the MOE Spills Action Centre at 1-800-268-6060. Alternately, where there is no imminent risk of a spill, the complainant may file an “incident report.”

FILING AN INCIDENT REPORT

You can file an incident report with the municipality, OMAF or the Ministry of the Environment (MOE). To determine whom you should contact, call the Nutrient Management Hotline and they will direct you to the appropriate agency. When making a complaint, people are asked to provide their name and telephone number. Anonymous calls will be dealt with on a case-by-case basis (See Figure 2, *Protocol for Handling Nutrient Management Incident Reports Chart*.)

Ministry of the Environment Provincial Officers

If an incident is suspected of being a spill or violation of legislation, it will be transferred to the Ministry of the Environment where a Provincial Officer will administer compliance.

Local Advisory Committees and the NMA

If an incident is not suspected of being a spill or violation of legislation, it may be referred to the Local Advisory Committee (LAC) for the municipality in question. An LAC is a committee that gives farmers and other community members an opportunity to resolve problems or disputes relating to nutrient management issues at a local level. Its main role is to provide mediation between involved parties in order to reach a solution. Not all municipalities currently have a LAC, but the NMA provides a model by which new LACs can be formed. Talk to your local municipality about establishing a LAC in your area if one doesn't exist already. For more information on LAC see the *Local Advisory Committee Protocol* in the Nutrient Management Act, 2002.

Normal Farm Practices Protection Board (NFPPB)

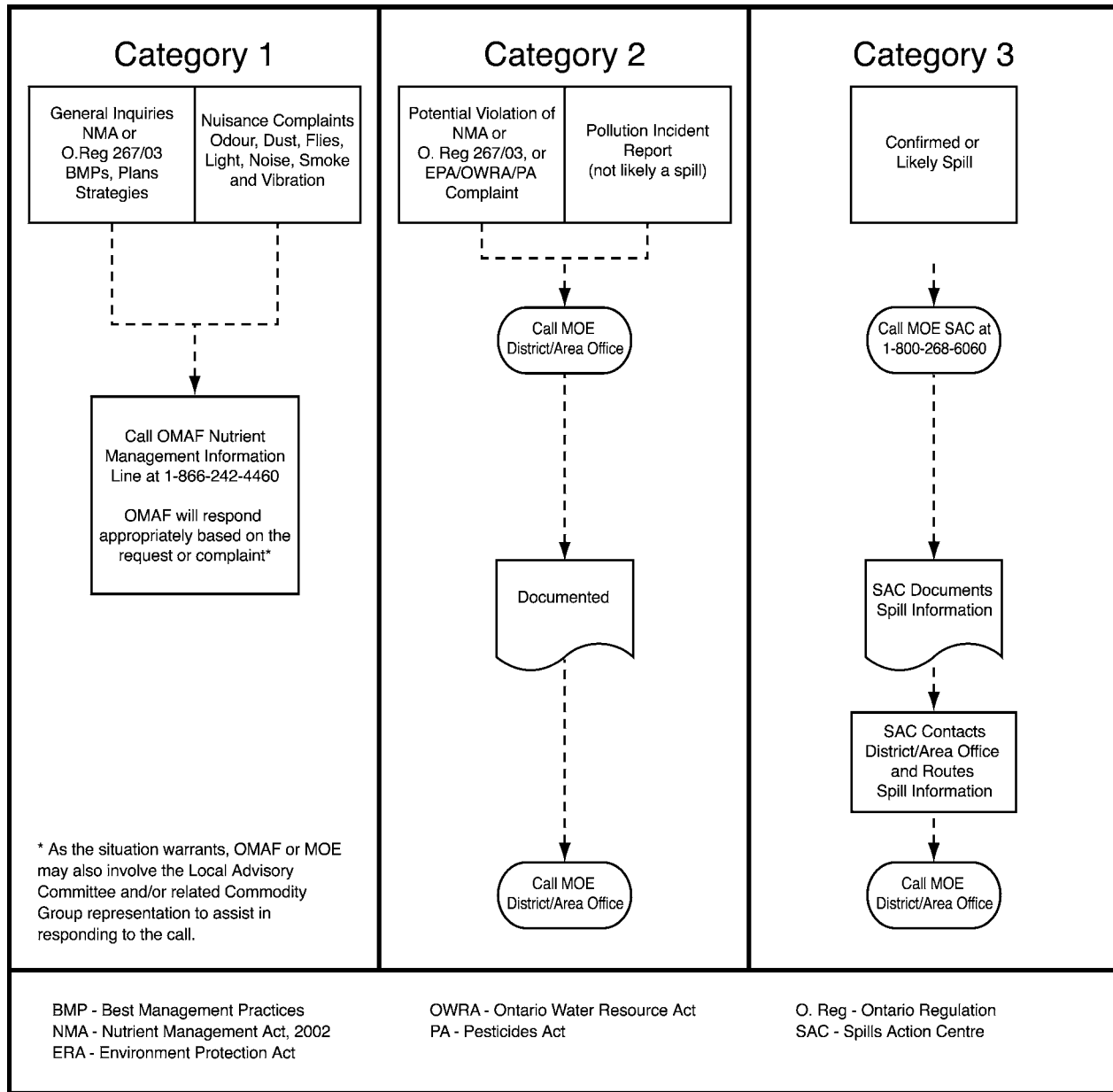
If no solution can be reached through the LAC, the complainant may request a hearing at the NFPPB. The board will listen to the case in order to determine if the complaint is about a normal farm practice or not. For more information on the NFPPB see the OMAF Factsheet *Farming and Food Protection Act and Nuisance Complaints*, Order No. 03-113.

SUMMARY

If you have a concern about a nutrient management practice, take the time to determine what follow-up action is required. Get educated about your concern and talk to the farmer involved. If your concern still persists after you've taken these steps, then should you consider taking further action. Whether you are a farmer or not, being able to arrive at a solution on a one-on-one basis is the best way to establish and maintain good neighbourly relations.

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FIGURE 2. Protocol for Handling Nutrient Management Incident Reports



FOR YOUR NOTES

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Do you know about Ontario's new Nutrient Management Act?

The provincial Nutrient Management Act (NMA) and the Regulation 267/03, as amended, regulates the storage, handling and application of nutrients that could be applied to agricultural crop land. The objective is to protect Ontario's surface and groundwater resources.

Please consult the regulation and protocols for the specific legal details. This Factsheet is not meant to provide legal advice. Consult your lawyer if you have questions about your legal obligations.

For more information on the NMA call the Nutrient Management Information Line at 1-866-242-4460, e-mail nman@omaf.gov.on.ca or visit www.omaf.gov.on.ca.

Factsheets are continually being updated so please ensure that you have the most recent version.

Agricultural Information Contact Centre
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