

Environmental Management Newsletter

A Quick Update on Nutrient Management

VOLUME NO 1, ISSUE NO 5. MAY/JUNE 2008

IN THIS ISSUE

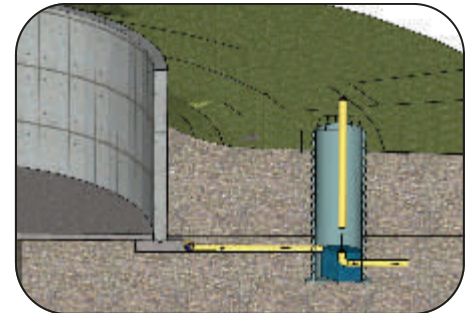
- OBSERVATION AND SHUT OFF STATION REQUIREMENTS
- OSCIA REGIONAL NUTRIENT MANAGEMENT OUTREACH GRANT
- NUTRIENT MANAGEMENT BMP DEMONSTRATION GRANT
- IS MINIMUM DISTANCE SEPARATION (MDS) CALCULATION REQUIRED AS PART OF A NUTRIENT MANAGEMENT STRATEGY?
- NEED TO KNOW INFORMATION...
- DATES TO REMEMBER...

OBSERVATION AND SHUT OFF STATION REQUIREMENTS NUTRIENT MANAGEMENT ACT, 2002 AND REGULATION 267/03, AS AMENDED

Richard Brunke—Engineer, Nutrient Management

Under the Nutrient Management Act, 2002 and Regulation 267/03, as amended, all new or expanding permanent liquid nutrient storage facilities must have two levels of groundwater protection. These two levels of protection are achieved by:

- the construction of the floor and walls of the tank or earthen storage, and
- either the native soil below and around the tank or earthen storage, or if found inadequate, a compacted soil or synthetic liner.



Professional engineers are responsible for ensuring that the design of nutrient storages meet the required two levels of protection.

Nutrient storage facilities constructed below or partly below ground level normally require a perimeter foundation drain. The foundation drain minimizes the hydrostatic pressure (water pressure) pushing in on the storage walls and/or upward on the footings and floor.

While perimeter foundation drains are effective in reducing hydrostatic pressure, they can drain away nutrients if a leak occurs in the storage structure. To manage this risk, the Regulation specifies that foundation drains around the perimeter of a permanent nutrient storage facility must be routed through an observation and shut-off station. This is a requirement for all new or expanding permanent nutrient storages regardless of size, or whether the nutrient stored is in a liquid or solid form.

An observation and shut-off station, shown in Fig. 1, is a chamber with a shut-off mechanism to intercept the flow of liquids from a perimeter drain. It is used to monitor the quality of the liquid collected in the drain before it is discharged to the environment. Should a liquid sample indicate the presence of nutrients contained in the storage facility, its discharge to the environment can be prevented using the shut-off mechanism. The contaminated liquid can either be pumped back into the storage facility or treated.

Remember, if surface water is allowed to enter an observation and shut-off station, a 50-metre flow path setback is required between the storage facility and observation and shut-off station.

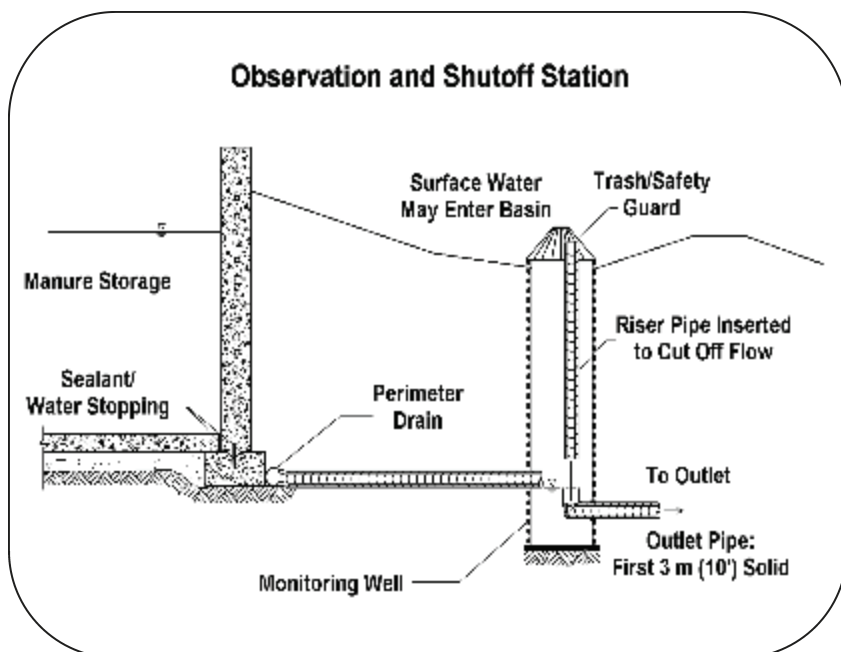


Figure 1. An observation and shutoff station is used to provide access to the discharge from a perimeter drain. Possible contaminated flow can be observed and blocked. Steps can then be taken to address the situation.

OMAFRA recommends that non-perforated pipes be used between the foundation drain and the observation and shut-off station. The outlet pipe of the observation station must be non-perforated within 15 metres from any nutrient storage facility, or at least a minimum of three metres past the station, whichever is the greatest.

OSCIA REGIONAL NUTRIENT MANAGEMENT OUTREACH GRANT

NEW! OSCIA REGIONAL GRANT

The Ontario Ministry of Agriculture Food and Rural Affairs (OMAFRA) has allocated funding to support new communication activities of regional Soil and Crop Improvement Associations that promote the adoption of Nutrient Management BMPs to the non – regulated (Nutrient Management Act) farm population.

For more information contact the OSCIA website www.ontariosoilcrop.org

NUTRIENT MANAGEMENT BMP DEMONSTRATION GRANT

DEADLINE FOR LETTER OF INTENT: OCTOBER 13, 2008

The Ontario Ministry of Agriculture Food and Rural Affairs (OMAFRA) has allocated funding to organizations supporting demonstration projects targeting any producers not regulated by the Nutrient Management Act. Up to \$20,000 of grant funds are available for innovative demonstration and validation field projects related directly to improving the management of nutrients on agriculture lands within Ontario.

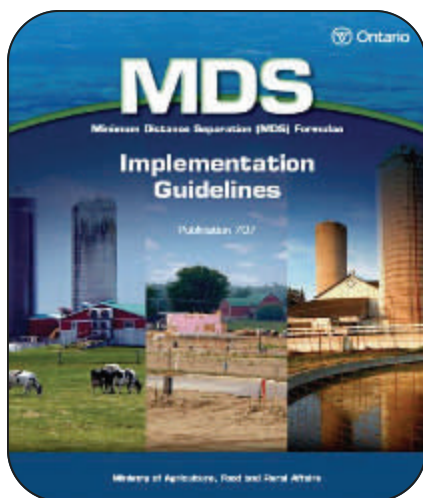
- These funds are administered through the Nutrient Management BMP Demonstration Grant. Ontario Soil

and Crop Improvement Association (OSCIA) will deliver the grant on behalf of OMAFRA. Grants are available to any agricultural organization, conservation authority, college or university.

- OSCIA has issued this Request for Proposal to solicit project proposals for funding consideration under the Nutrient Management BMP Demonstration Grant Program.
- The eligibility criteria, details of funding and templates required for application are available on the OSCIA website www.ontariosoilcrop.org

IS MINIMUM DISTANCE SEPARATION (MDS) CALCULATION REQUIRED AS PART OF A NUTRIENT MANAGEMENT STRATEGY?

Matt Wilson—Environmental Specialist



MINIMUM DISTANCE SEPARATION I (MDS I) is the minimum separation distance required between new development and existing livestock facilities or manure storages.

MINIMUM DISTANCE SEPARATION II (MDS II) is the minimum separation distance required between new or expanding livestock or manure storages facilities and property boundaries, houses, recreational areas and other land uses.

MDS II calculations are **not** part of the Nutrient Management Act. Therefore, the calculations are **not** part of a Nutrient Management Strategy (NMS).

MDS II is part of a municipality's by-laws and is it is the municipality's responsibility to verify and enforce. MDS II is a component of the building permit requirements for all new or expanding livestock or manure storage

facilities regardless of the size of the operation. The information used in the MDS II calculations needs to be consistent with the NMS if one is required.

The Nutrient Management Act is the Ontario government's responsibility to regulate. Any MDS II calculations included in a submitted NMS are not reviewed by the approvals unit in Guelph and should be forwarded to the municipality.

The MDS calculations were updated in 2006. The original NMAN program included the MDS II calculations. The new NMAN 2 program no longer includes the MDS II calculations. A standalone MDS computer software program has been developed to perform the calculations. The MDS computer program is available from OMAFRA at a cost of \$10.00 and can be purchased at any regional office or through Service Ontario at www.serviceontario.ca

NEED TO KNOW INFORMATION...

INFORMATION AVAILABLE ON THE AGRICULTURAL USE OF SEWAGE BIOSOLIDS

The OMAFRA Infosheet entitled “Understanding the Agricultural Use of Biosolids”, is a question and answer approach to assist you and your clients with general knowledge in the agricultural usage of sewage biosolids.

REVISED 2008 ENVIRONMENTAL FARM PLAN—BENEFICIAL MANAGEMENT PRACTICES

The Environmental Farm Plan consists of the following cost-share programs:

- Canada-Ontario Farm Stewardship Program (COFSP)
- Greencover Canada (GC)
- Canada-Ontario Water Supply
- Expansion Program (COWSEP)

For your information attached is the new *Environmental Cost-Share Opportunities for Ontario Farmers Revised for 2008 brochure and the 2008 Project Eligibility Guidelines*. The brochure and guidelines outline the general categories of eligible projects for 2008, the cost share available, and the funding caps in each category. Information on program eligibility and the application process is also included. **To make a claim, all approved projects must be completed and operational by December 15, 2008.** Ontario Soil and Crop Improvement Association (OSCIA) continues to deliver these programs.

WE WANT TO HEAR FROM YOU!

Do you have questions? Need more information? Have a comment about what you'd like to see in the next issue? Please contact us at:

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DATES TO REMEMBER...

June 1, 2008

The NMAN 2.0.2 software is now available at your local OMAFRA office or download the upgrade from our website at www.omafra.gov.on.ca/english/nm/nman/software

This fully bilingual software program features enhancements including updated interface models, expanded grazing functionality and a new transfer linking tool.

July 9 and 10... 14th Annual Southwest Crop Diagnostic Days (Ridgetown, Ontario 519-674-1690)

A co-operative effort between the Ontario Ministry of Agriculture, Food, and Rural Affairs and the University of Guelph, Ridgetown Campus. www.diagnosticdays.ca.

Nutrient Management Information Line: 1-866-242-4460
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www.ontario.ca/omafra