MISSISSIPPI-RIDEAU SOURCE PROTECTION REGION

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MINUTES

Mississippi-Rideau
Source Protection Committee February 3, 2011 #2/11

Meeting Location:	Rideau Valley Conservation Authority 3889 Rideau Valley Drive, Manotick, Ontario	
Present:	Scott Berquist	George Braithwaite
	Scott Bryce	Carol Dillon
	Drew Lampman	Patricia Larkin
	Randy Malcolm	Peter McLaren
	Beverly Millar	Eleanor Renaud
	Janet Stavinga (Chair)	
	Ken Graham	(Source Protection Authority Liaison)
	Jean-Guy Albert	(Medical Officer of Health Liaison)
	Angelune Des Lauriers	(Ministry of the Environment Liaison)
Staff:	Sommer Casgrain-Robertson	Allison Gibbons
	Michelle Paton	Brian Stratton
	Derek Matheson	
Guests:	Christian Grothe (MOE)	Benoit Lebeau (OMAFRA)
Regrets:	Richard Fraser	Paul Knowles
	Tammy Rose	

1.0 Welcome and Introductions

Chair Stavinga welcomed everyone to the meeting and asked all participants to introduce themselves.

Chair Stavinga acknowledged Derek Matheson, Rural Clean Water Program Manager at the Rideau Valley Conservation Authority, and his extraordinary efforts in mastering the various requirements of the Ontario Drinking Water Stewardship Program. Mr. Matheson was invaluable in securing Early Response funding for our source protection region and in fostering partnerships with the municipalities of Merrickville-Wolford and North Grenville who were successful in securing Special Projects funding.

a) Agenda Review

Chair Stavinga reviewed the purpose of the meeting and the Agenda.

b) Notice of Proxies **None**

c) Adoption of the Agenda

Motion 1-2/11

That the Agenda be approved as presented.

Carried

d) Declarations of Interest **None**

e) Approval of Minutes

Motion 2-2/11

That the minutes of the Mississippi-Rideau Source Protection Committee meeting of January 6, 2011 be approved as presented.

Carried

f) Status of Action Items

Motion 3-2/11

That the Mississippi-Rideau Source Protection Committee receive the Status of Action Items Report for information.

Carried

g) Correspondence

Motion 4-2/11

That the Mississippi-Rideau Source Protection Committee receive the correspondence for information.

Carried

2.0 *Non-Agricultural Source Material* Presentation

Sommer Casgrain-Robertson introduced Benoit Lebeau, a non-agricultural source material (NASM) specialist with the Ontario Ministry of Agriculture, Food, and Rural Affairs. He gave a presentation on the management of NASM in Ontario (presentation slides are attached).

In response to questions from a member, Mr. Lebeau explained that biosolids that do not meet NASM quality standards are often directed to local landfills. He confirmed that treated septage can be applied to agricultural land but raw septage cannot unless it is applied under a Certificate of Approval issued by the Ministry of the Environment. He added that there are two septage receiving facilities in the Renfrew area that treat septage. Mr. Lebeau advised that there are currently no tests required for pharmaceuticals but the issue is being looked at.

Washwater or wastewater that does not meet the nutrient value can still be used for irrigation on agricultural land but only during specific times in the summer months to help alleviate drought/low water conditions.

Sommer Casgrain-Robertson, on behalf of Committee Members, thanked Benoit Lebeau for his presentation.

3.0 ***Nutrient Management Act*** **Implementation Presentation**

Sommer Casgrain-Robertson introduced Christian Grothe, an Agricultural Enforcement Officer with the Ontario Ministry of the Environment. He gave a presentation outlining how requirements under the *Nutrient Management Act* are implemented and enforced (presentation slides are attached).

In response to questions from members regarding the handling of spills, Mr. Grothe explained that spills must be stopped, the spread of the spill reduced, and the Spills Action Centre must be notified as soon as possible.

Christian Grothe explained that the City of Ottawa has more stringent standards than the Ontario Ministry of the Environment regarding the application of biosolids on agricultural land.

Mr. Grothe stated that there are 16 Agricultural Enforcement Officers in the province and added that these officers each conduct 12 inspections annually. Mr. Grothe then explained the inspection process.

In response to questions from members about inspection checklists, Chair Stavinga recommended that available information from OMAFRA and MOE should be compiled and distributed provincially to all Source Protection Committees. Angelune Des Lauriers advised that OMAFRA is working on best management practice guidelines that are intended to be shared. She agreed to follow-up and give the information to Mary Wooding to bring back to the Committee. Ms. Des Lauriers added that Assessment Report results would likely become a factor in the prioritization and scheduling of future inspections.

Sommer Casgrain-Robertson, on behalf of Committee Members, thanked

Christian Grothe for his presentation.

4.0 Source Protection Plan

Sommer Casgrain-Robertson explained that staff revisited the policy development process presented on January 6, 2011. Ms. Casgrain-Robertson gave an overview of a revised work plan and schedule to develop Source Protection Plan policies by August, 2012. The Committee asked staff to change “Policy Ideas” and “Policy Concepts” to “Draft Policy Ideas” and “Draft Policy Concepts” on the revised work plan.

Ms. Casgrain-Robertson advised that staff would be providing Committee members with a comprehensive resource binder that would consolidate general information, provincial and local information, sections relating to threats, and a section on policy tools.

Ms. Casgrain-Robertson confirmed that Conservation Ontario’s working group was set up to maximize the resources of the 19 Source Protection Committees as well as to share policy development information. She added that the next two-day Chair/Project Manager meeting has been moved up to early March to facilitate progress on policy development.

A member asked if the potential cost of policies was being determined for Committee consideration. Staff explained that while there is not time or resources to undertake a full scale comprehensive cost-benefit analysis of all the policy options available, cost of implementing a policy will be a key decision making factor for Committees when choosing policies. It is anticipated that valuable feedback regarding the possible cost of implementing policies will be provided by affected property owners during early consultation on draft policy concepts. The Evaluation Framework developed by the Committee in January 2011 to aid in the selection of policy tools is comprised of four categories, one being cost.

Members discussed a staff recommendation that would provide an opportunity for Committee members to meet voluntarily as an informal working group to learn about threats and discuss preliminary policy ideas. This group would meet in the morning prior to regularly scheduled SPC meetings. Staff would then present draft policy ideas to the full Committee for discussion and consideration at subsequent regular meetings. A member asked that the full rationale (pros and cons) for policy ideas being brought to the Committee for consideration be included in the background information of Agenda packages. Chair Stavinga recommended that the Source Protection Committee Working Group meet from 10 am to noon on regularly scheduled Source Protection Committee meeting days for a trial period of three to four months. The need for these pre-meetings can be reevaluated at that time. Staff will develop and distribute a monthly threats topic schedule.

Motion 5-2/11

That the Mississippi-Rideau Source Protection Committee approve the Source Protection Plan Work Plan as amended.

Carried

5.0 Assessment Report

a) Comments Received on Proposed Assessment Reports

Sommer Casgrain-Robertson reviewed the summary of comments received on the Proposed Assessment Reports.

Chair Stavinga asked staff to add an additional column to the table before it is posted on the website. This column would indicate how the comment had been addressed or why it could not be addressed.

Motion 6-2/11

Moved by: Carol Dillon
Seconded by: George Braithwaite

That the Mississippi-Rideau Source Protection Committee direct staff to add a column to the summary of comments indicating how the comment was addressed.

Carried

Motion 7-2/11

That the Mississippi-Rideau Source Protection Committee receive the summary of comments on the Proposed Assessment Reports as amended.

Carried

b) Updated Assessment Report Workplan

Sommer Casgrain-Robertson reviewed the five Assessment Report updates that staff had requested on October 1, 2010 and the responses provided by the Ministry of the Environment in December, 2010.

1. Future Lanark Water Supply

Members discussed staff's response to the Future Lanark Water Supply. They amended the response to indicate that the Source Protection Committee would recommend, not suggest, that the municipality include the Wellhead Protection Area (WHPA) study in their Official Plan and/or Zoning by-laws to alert current and future property owners about the possible designation and potential future land use policies.

5 Possible Significant Threat Reductions as a Result of ODWSP Program

Ms. Casgrain-Robertson advised that staff are now recommending that a unique version of the Notice of Commencement notice be provided to property owners in those parts of the Merrickville and Kemptville Wellhead Protection Areas that could be amended upon successful completion of

deepening the municipal well casings. This unique notice would explain that these two municipalities received funding through the Ontario Drinking Water Stewardship Program to deepen their well casings and if the projects are successfully completed their property would no longer be in an area where certain land uses could be considered a significant drinking water threat.

Motion 8-2/11

That the Mississippi-Rideau Source Protection Committee approve the Updated Assessment Report Workplan staff report as amended and direct staff to respond to the MOE accordingly.

Carried

6.0 2011 Meeting Schedule

Sommer Casgrain-Robertson presented a meeting schedule for 2011 that added an August meeting and confirmed all meeting locations.

Motion 9-2/11

That the Mississippi-Rideau Source Protection Committee approve the following meeting schedule for 2011:

- Thursday, January 6
  - 1 pm, RVCA
- Thursday, February 3
  - 1 pm, RVCA
- Thursday, March 3
  - 1 pm, RVCA
- Thursday, April 7
  - 1 pm, RVCA
- Thursday, May 5
  - 4 pm, Merrickville
- Thursday, June 2
  - 4 pm, Perth
- Thursday, July 7
  - 4 pm, Carleton Place
- Thursday, August 4
  - 4 pm, Almonte
- Thursday, September 1
  - Montague
- Thursday, October 6
  - 1 pm, RVCA
- Thursday, November 3
  - 1 pm, RVCA
- Thursday, December 1
  - 1 pm, RVCA

Carried

7.0 Community Outreach

Sommer Casgrain-Robertson advised that the Ministry of the Environment plans to provide additional detail and guidance on both the Risk Management Official position and on how to conduct pre-consultations with implementers.

The new Minister of the Environment, John Wilkinson, attended the Chairs' meeting and participated in a question and answer period. The Minister was asked many questions about implementation funding and he confirmed that the Assessment Reports would aid in understanding the number and scope of significant threats across the province but that policy selection will dictate how much implementation will cost. He cautioned that governments will be practicing fiscal restraint over the coming years as the economy recovers so he challenged Committees to develop cost-effective, workable policies to address significant threats. He explained that once he can present a clearly defined price tag to the Ministry of Finance the MOE can ask for implementation funding but without a cost estimate it is impossible for the government to commit future funding.

Brian Stratton advised that, during the next few weeks, he will be visiting with municipal staff to discuss significant threats pertaining to municipal land uses and how they should be addressed. Staff will also meet with municipal councils at a later date.

Drew Lampman extended an invitation to members to attend Omya's Annual Public Meeting on February 16, 2011.

Chair Stavinga extended her thanks to all members who have been attending the Municipal Working Group.

Motion 10-2/11

That the Mississippi-Rideau Source Protection Committee receive the Community Outreach staff report for information

Carried

8.0 Other Business

In response to a question from a member, a financial update will be provided following the Source Protection Authority's fiscal year end on March 31, 2011.

Ken Graham provided an update on recent changes to the Rideau Valley Conservation Authority's Board governance structure. Following municipal input, a structure was adopted wherein all member municipalities are represented on the Board. These changes also apply to the Source Protection Authority Board. Alan Arbuckle and Ken Graham were re-elected as Chair and Vice-Chair respectively.

9.0 Member Inquiries **None**

10.0 Next Meeting

March 3, 2011, 1pm
Rideau Valley Conservation Authority (Monterey Boardroom)
3889 Rideau Valley Drive, Manotick

A voluntary, informal working group session will be held on March 3, 2011 at 10:00 am.

11.0 Adjournment

The meeting was adjourned at 5:10 pm.

.....	**.....**
Janet Stavinga	**Michelle Paton**
Chair	**Recording Secretary**

Management of NASM in Ontario

Benoit Lebeau, M.Sc., P.Eng.
Engineer, NASM Specialist
OMAFRA

February 3, 2011

A New NASM Regulatory Framework

- On September 18, 2009, the Ministry of the Environment (MOE) and the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) jointly announced a new regulatory framework for applying NASM to farmland.

- Many of the announced regulatory changes take effect January 1, 2011

Today's Agenda

- What is NASM?
- Changes to Regulatory Framework
- Approvals and Notifications
- Roles and Responsibilities
- Questions and Answers

What is NASM?

What is NASM?

- NASM are materials from non-agricultural sources that can be applied to agricultural land to provide valuable nutrients for crop production.

- Examples of NASM are leaf and yard waste, fruit and vegetable peels, food processing washwater, pulp and paper biosolids and municipal sewage biosolids.

NASM Pre-Requirements

- **Demonstrate beneficial value**
  - Organic Matter
  - Fertilizer value
  - pH value
  - Irrigation water
  - Must meet quality standards
    (regulated metals, pathogens, odours)

Changes to Regulatory Framework

Nutrient Management Act, 2002

And

Ontario Regulation
267/03
Amended to O.Reg 338/09
Filed September 18, 2009
Gazetted October 3, 2009

And

Ontario Regulation
230/07
Filed June 6, 2007
Gazetted June 23, 2007

Ontario Regulation
106/09
Filed March 25, 2009
Published in E-laws March 27, 2009

With Protocols:
Nutrient Management Protocols, September 14, 2009
Sampling and Analysis Protocol, September 14, 2009
Nutrient Management Tables, September 14, 2009
NASM Odour Guide, September 14, 2009

New NASM Regulatory Framework

- Removes overlapping approvals to reduce regulatory burden;
- Enhances environmental protection by strengthening and clarifying the rules;
- Extends the scope of the regulation to include **all** agricultural land where NASM is applied;
- Introduces NASM Plans; and

New NASM Regulatory Framework

- New NASM categories and standards:
  - 3 categories of NASM, which determine requirements for:
    - NASM Plan
    - Sampling and Analysis
  - Land Application Standards based on NASM quality for:
    - Pathogen (CP1, CP2)
    - Regulated metals (CM1, CM2)
    - Odour (OC1, OC2, OC3)

NASM Categories

Category	Examples
1	• Unprocessed leaf and yard waste, • Culled fruit and vegetables (other than cole crops and onions) that have not been processed with chemicals (other than food grade)
2	• Bakery washwater • Organic waste matter that contains no meat or fish from food processing
3	• Pulp and paper biosolids • Sewage biosolids and NASM mixed with human body waste • NASM not on the lists for Category 1, 2 or 3

Sampling and Analysis Requirements

Category	Sampling and Analysis Requirements
1	• Assumed CM1/CP1 • No test, unless want to apply at >20 tonnes/ha
2	• Assumed CP1 • Must test for metals to determine if CM1 or CM2, nutrients and other parameters, if applicable
3	• Assumed CP2; could test to demonstrate CP1 • Must test for metals to determine if CM1 or CM2, nutrients and other parameters, if applicable • Sewage biosolids – must test for e-coli

Odour

Odour Category	Examples
OC1	• Liquid anaerobically digested sewage biosolids (Cat 3) • Washwaters from bakery (Cat 2) • Culled fruit and vegetable other than cole crops (Cat 1)
OC2	• Liquid aerobically digested sewage biosolids (Cat 3) • Sewage biosolids dewatered by means other than a centrifuge operated at ≥ 2000 rpm (Cat 3) • Cole crops and washwaters from meat processing plants (Cat 2)
OC3	• Grease trap waste (Cat 3) • Sewage biosolids dewatered by a centrifuge operated at ≥ 2000 rpm (Cat 3) • Sewage biosolids dewatered and stored for 30 days (Cat 3)

Land Application Standards

- Maximum application rates
- Setbacks to:
  - Surface water
  - Wells
  - Neighbours (dwelling, residential, commercial, etc)
- Depth to saturated soil, bedrock
- Waiting periods

Winter and Frozen Ground

- No sewage biosolids between Dec. 1 & Mar. 31 or when ground frozen or snow-covered
- Same restrictions on any prescribed material on land prone to flooding or where water ponds and discharges to surface water
- A variety of restrictions exist depending on site conditions and material, and generally include:
  - Increased setbacks
  - Requirement material be injected or incorporated

New NASM Plans

- Same principle as a Nutrient Management Plan
- Based on agronomic rates
- Only covers the area where NASM will be land applied and stored (if in a NASM storage)
- Prepared by a certified NASM Plan Developer
- Valid for a period of 1 to 5 years

NASM Plan Contents

- Farm Unit
- NASM Plan Area
- NASM Application Area
- NASM storages
- NASM applications for the past five years
- Sensitive features
- Material description and analyses
- Beneficial use
- Soil analyses
- Application rates
- Crop rotations

NASM Storages

NASM can be stored in:

- NASM storages as defined under the NMA, or in
- Storages permitted in a Certificate of Approval under the EPA

NASM Storages
Construction Standards and Siting

- Applies if a strategy, plan or NASM plan required
  - Small permanent solid storages are exempt except for siting and runoff management
- Applies to new or expanded storages
- Not within:
  - 100 m of municipal well
  - 15 m of drainage tile
  - Mapped 100 year flood line
- Must have a flow path of 50 m or more
- Liquid storages must have soils characterized by engineer or geoscientist

New or Expanding NASM Storages

- All storages, except for “small” permanent solid nutrient storage facility, must be designed and construction reviewed by an engineer
- Liquid storages must have two layers of protection
- Solid storages must have runoff management
- Siting & management requirements for temporary field storages

NASM Storages

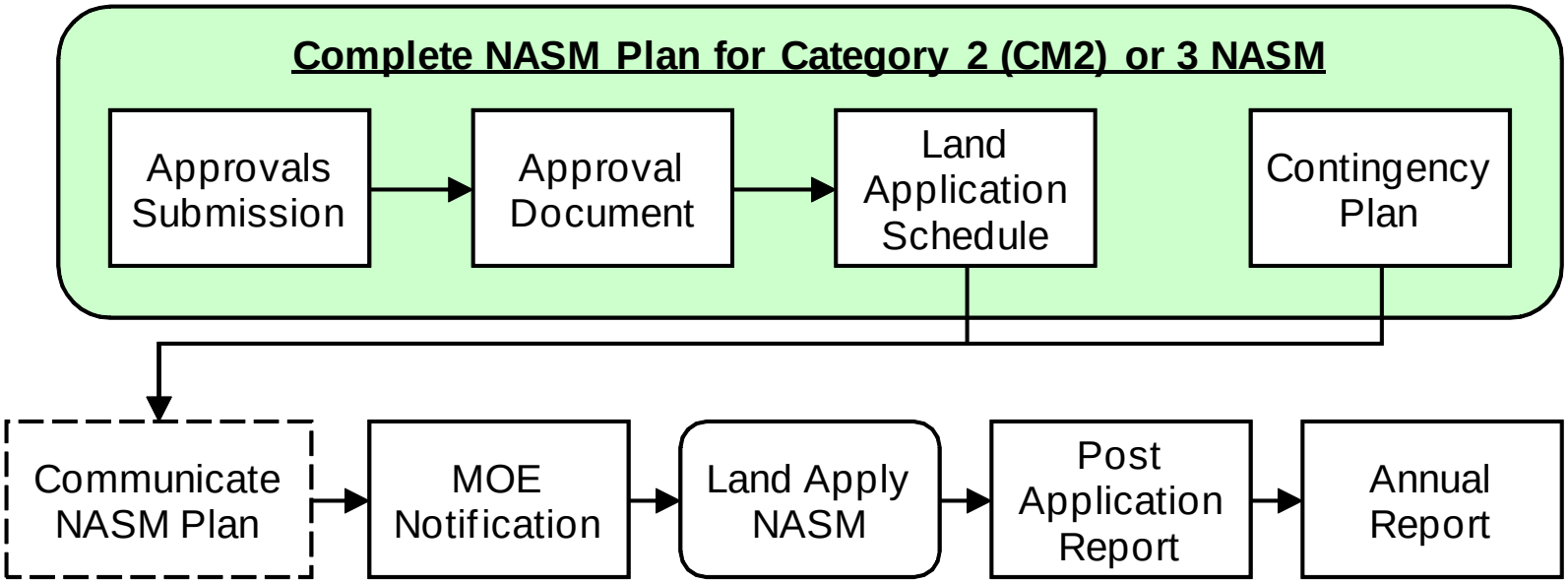
- All NASM material, except OC3 NASM (e.g. sewage biosolids dewatered by high speed centrifuge), can be stored on farm provided the storage meets the requirements of the regulation
- OC3 NASM transferred to a farm must be applied by midnight on the day it is received
- OC1or OC2 dewatered sewage biosolids CANNOT be stored in:
  - a permanent NASM storage for more than 30 days, or
  - a temporary field storage site for more than 10 days

NASM Plans
Approval and Notification

Approval of NASM Plans

Category	NASM Plan
1	NASM Plan is not required
2	NASM Plan must be prepared by a certified planner but does not require Approval if metals meet CM1. Registration of the agricultural operation is required . Approved NASM Plan if metals exceed CM1 but meet CM2 Approved NASM Plan if stored on farm
3	Approved NASM Plan required

NASM Approval and Application Process



NOTE: Dashed Box indicates optional or best management practice but not required by Regulation.

Notifications

For land application of Category 3 NASM or Category 2 NASM that is CM2:

- the local MOE District Office must be given written notice at least 24 hrs and not more than 7 days before application

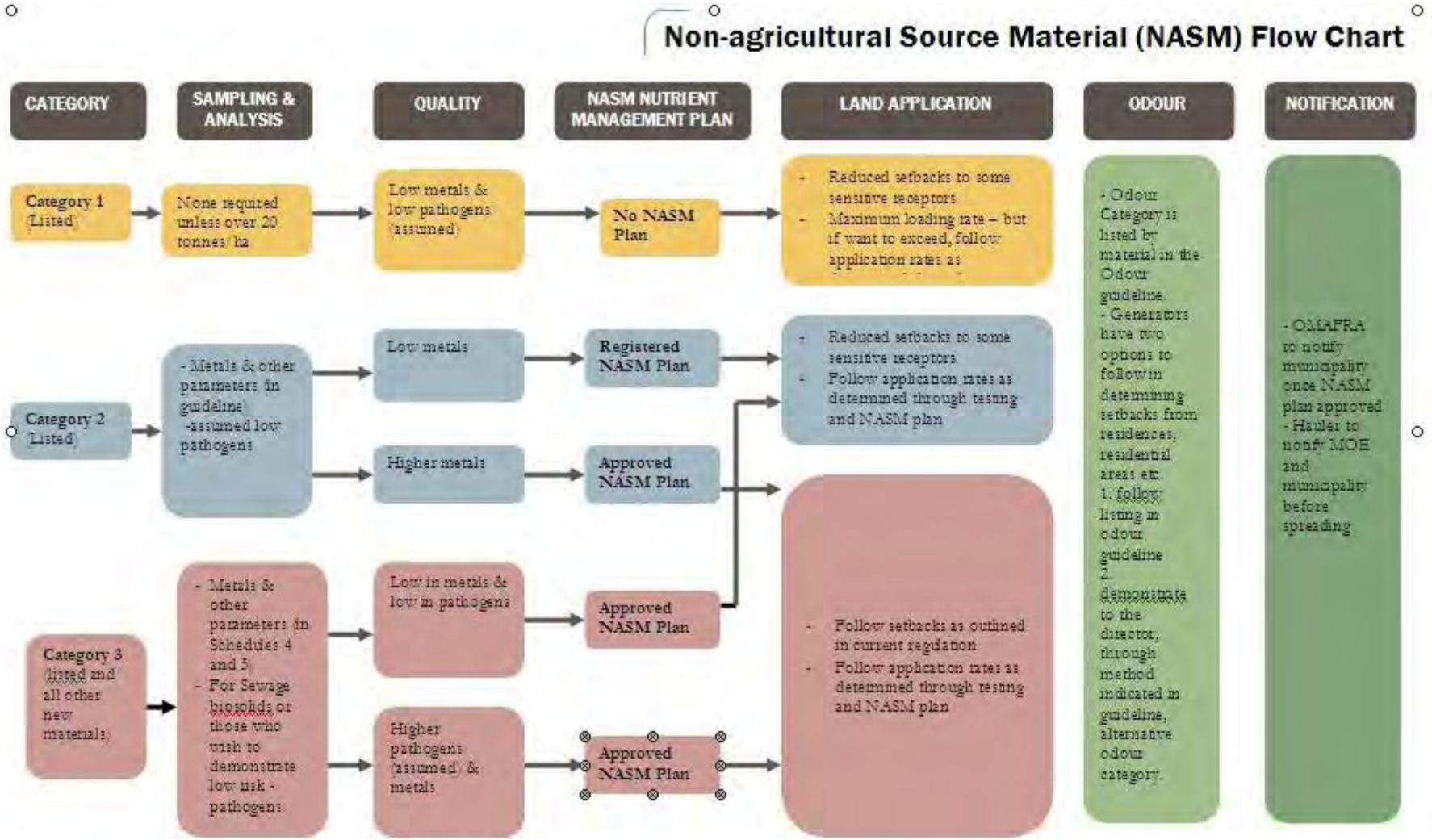
- the notice must specify either the specific application day or days of the week during which application will occur

Notifications cont'd

Municipalities will receive notification of approved NASM Plans in their jurisdiction from OMAFRA

- Notification sent to Clerk
- Clerk should circulate as deemed necessary
  - e.g. Biosolids Program Manager, Environmental Division Manager, etc.

Overview - New Standards



Roles & Responsibilities

Generator's Role

Municipalities (Sewage Treatment Plants)

- Follow C of A for the treatment process
- Complete sampling and testing of materials as detailed in the NM Regulation and associated "Sampling and Analysis Protocol"
- Provide analytical results to NASM Plan Developer
- Only allowing NASM that meet quality standards on farms
- Use certified/approved haulers, NASM plan Developers, farms
- Keep accurate records
- Develop contingency plan

Farmer's Role

Farmers receiving Category 2 or 3 NASM (including sewage biosolids):

- Must have a NASM Plan and are required to follow the Plan
- Must confirm that the MOE has been notified
- Must follow post application harvest and grazing waiting periods

Farmer's Role cont'd

Farmers receiving Category 2 or 3 NASM (including biosolids):

- Must keep the NASM Plan up-to-date and maintain required records
- Has the right to stop or refuse NASM application at any time, or request flexibility

Haulers and Land Applicators' Requirements

- A Waste Management System C of A under the EPA is required for hauling NASM
- Waste Management System C of A must be amended to haul to a site with a NASM Plan
- The person land applying nutrients on a farm that is required to have a NASM plan must have a valid licence issued by OMAFRA, unless he/she is the owner, operator or employee of the agricultural operation

Government's Role

OMAFRA

- Responsible for NASM plan approvals, training and certification
- Will notify the local municipalities of approved NASM Plan

MOE

- Responsible for enforcing compliance with the NMA
- Will do proactive inspections and respond to complaints

Resources

OMAFRA Nutrient Management webpages

www.omafra.gov.on.ca/english/agops/index.html

www.ontario.ca/nasm-omafra

eLaws—O. Reg. 267/03

www.e-laws.gov.on.ca/html/regs/english/elaws_regs_030267_e.htm

Best Management Booklets

- Nutrient Management
- Manure Management
- Biosolids


Thank You!
Questions?

Additional Slides

NASM Pre-Requirements

- **NASM must meet one of the following before being considered for land application:**
- **Organic Matter** – 15% of the total weight of the NASM is organic matter.
- **pH value** - NASM used to increase the soil pH value.
- **Nitrogen, Phosphate, and/or Potassium (Solid NASM)** - total concentration of plant available nitrogen, plant available phosphate and plant available potassium is more than 13,000 milligrams per kilogram of NASM.
- **Nitrogen, Phosphate, and/or Potassium (Liquid NASM) -** the total concentration of plant available nitrogen, plant available phosphate and plant available potassium is more than 140 milligrams per litre of NASM
- **Irrigation -** NASM that is more than 99% water by weight, and is used to irrigate crops between June 15 and September 30.

Restrictions

Type	CM1 and CP1		CM2 and/or CP2	
	Liquid	**Solid**	**Liquid**	**Solid**
Depth to Bedrock	**<30cm** • No application **30cm - 50cm** • No injection permitted • No application during restricted period • < 40m^3/ha/48 hr OR • < 60m^3/ha/48hr if land pretilled within 7 days **>50cm** • No restriction	**<30cm** • No application **30-50cm** • No application during restricted period • < 18 dry tonnes/ ha/48hrs OR • <27 dry tonnes/ha/48 hr if land pretilled within 7 days **>50cm** • No restriction	**<50cm** • No application **50 - 100cm** • No injection • < 40m^3/ha/48 hr OR • < 60m^3/ha/48hr if land pretilled within 7 days **>100cm** • No restriction	**<50cm** • No application **50-100cm** • < 18 dry tonnes/ ha/48hrs OR • <27 dry tonnes/ha/48 hr if land pretilled within 7 days **>100cm** • No restriction
Unsaturated soil	No application if on < 30cm		No application on <30cm 30cm-90cm - Based on risk of groundwater contamination	
Winter application	Standards revised to reflect low risk of CM1CP1 material New requirements for pulp and paper biosolids Prohibition on land application of sewage biosolids in winter remains in place			

Setbacks

Type	CM1 and CP1	CM2 and/or CP2
Wells	Municipal – 100m	Municipal – 100m
	Drilled (watertight casing) – 15m	Drilled (watertight casing) - 15m
	Other – 30m	Other - 90m
Surface water	Can apply up to the 3m buffer if: - Done by injection/placement in a band below soil surface - Incorporated within 24 hrs - Surface application on a living crop or field with at least 30% crop residue -If there is no Vegetated Buffer – 20m setback	20m
Odour **OC – Odour category**	<u>A Single Dwelling</u> OC1 – greater than 25m – no restriction OC2 – no application less than 25m; between 25-90 – injection or spreading & incorporation within 6 hours, greater than 90m – no restriction OC3 – no application within 100m, between 100m-450m – injection or if injection not possible, spreading & incorporation within 6 hours, greater than 450m injection or spreading & incorporation within 24 hrs.	
	<u>Residential areas, commercial community or institutional</u> OC1 – no restriction if greater than 50m OC2 – no application less than 50m; between 50-450 – injection or spreading & incorporation within 6 hours, greater than 450m – no restriction OC3 –no application less than 200m, between 200m-900m – injection or spreading or if injection not possible, incorporation within 6 hours, greater than 900m – injection or spreading & incorporation within 24 hrs.	

Waiting Periods

Pre-harvest	NASM that is CM1/CP1	NASM that is CM2 or CP2
Commercial sod	3 weeks before harvest	12 months before harvest
Hay and haylage	3 weeks before harvest	3 weeks before harvest
Tree fruits and grapes	3 weeks before harvest	3 months before harvest
Small fruits	3 weeks before harvest	15 months before harvest
Vegetables Tobacco	3 weeks before harvest	12 months before harvest

Pre-grazing	NASM that is CM1/CP1	NASM that is CM2 or CP2
Horses, beef or dairy cattle	3 weeks before grazing	2 months before grazing
Swine, sheep or goats	3 weeks before grazing	6 months before grazing

Certification Requirements

NASM Plan Preparers must hold a NASM Plan Development Certificate issued by OMAFRA

To obtain the Certificate, a person must:

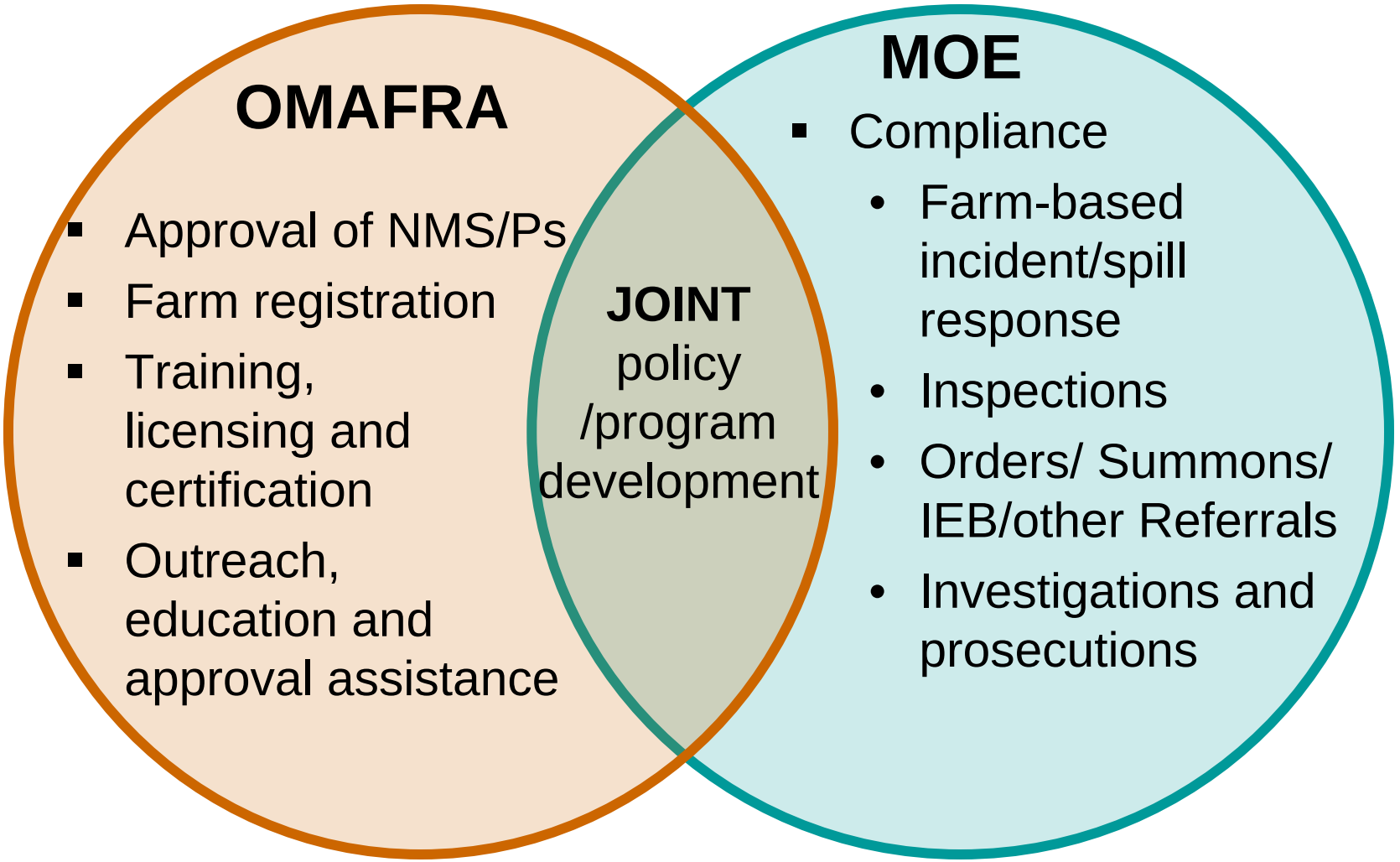
1. Take the following courses:
   - Introduction to Nutrient Management
   - NASM Plan Developer's Course
   - NMAN3 Training
2. Obtain passing grade on written exam
3. Successfully complete NASM Plans for two fictitious operations

Agriculture

Compliance and Enforcement

1. AgEOs and Compliance
   - Incident Reports
   - Inspections
   - Compliance Tools
2. Due Diligence
3. Inspections vs Investigations

NM Program Responsibilities



Agricultural Environmental Officers (AgEO)

- MOE's Agricultural Environmental Officers (AgEO) have been trained in environmental management and are knowledgeable about Ontario's agriculture industry.
- MOE is committed to working with agricultural operations to promote compliance with the NMA in a collaborative and cooperative fashion.

Agricultural Environmental Officers (AgEO)

- Respond to incidents, including spills and reports of agricultural pollution
- Perform compliance actions under NMA as well as EPA, OWRA, and PA if necessary
- Provide outreach, education and support
- Attend farm shows and agricultural industry events to provide information
- Perform other duties, such as assisting in program development and conducting biosolids site approvals and inspections

Agricultural Environmental Officers (AgEO)

- An AgEO may visit a farm for a number of reasons, including the following:
  - to perform an inspection to assess compliance with legislative requirements;
  - to respond to a complaint received by the Ministry either from the public or from a referral from another agency; or
  - to respond to a report of an environmental incident or spill.
- In all cases, when AgEOs visit farms, they will identify themselves and explain the purpose of their visit.

Incident Reports

- MOE receives approximately 500 incident reports regarding manure per year, of which between 20-30 are confirmed manure spills.
- Manure spills occur mainly in southwestern Ontario, frequently involving field tiles.
- High trajectory guns, now banned under the NMA, historically caused many incidents.

Incident Reports

- Frequently reported incidents include:
  - Odour (generally referred to OMAFRA)
  - Winter spreading of manure
  - Location of temporary manure piles
  - Concern about runoff control from storages
  - Contaminated runoff/spills involving field tile
- Spills must be reported to the Spills Action Centre (SAC) at 1-800-268-6060 and to the municipality.
- Other incidents may be reported to the MOE TIPS line at 1-866-MOE-TIPS (1-866-663-8477) or to local District/Area offices.

Incidents

- The MOE receives approximately 100 incident reports per year related to NASM
- These incidents are most commonly related to:
  - Spills
  - Odour
  - General Inquiries (on regulatory requirements and potential environmental impacts)
  - Non-compliance with standards (e.g. separation distances)

NM Inspection Goals

1. To encourage the adoption of management practices that will improve a farm's environmental performance and bring the farm into compliance with standards.
2. Environmental performance is a measure of the adoption of practices that reduce the overall risk of an adverse effect that may impact human health and the environment.

New Approaches for Inspections

- Modular framework for assessing and prioritizing based on risk factors
- Inspection format that identifies when inspection time would be better spent reviewing another part of the farm unit, or another farm entirely
- Inspection questions that assess environmental performance and what can be done to improve it
- Overall score that communicates to the operator how well they have done
- New reporting format based on a report card style

Inspections

- Visits prearranged at a time that is acceptable to the AgEO and the farmer
- Preparation includes review of NMS/P, air photos, maps and other materials
- Flexible approach adaptable to different types of farms
- Most inspected farmers comfortable with the inspection process
- Farmers generally agreeable to making the required changes, once they were explained

Inspections

Common issues found during previous inspections:

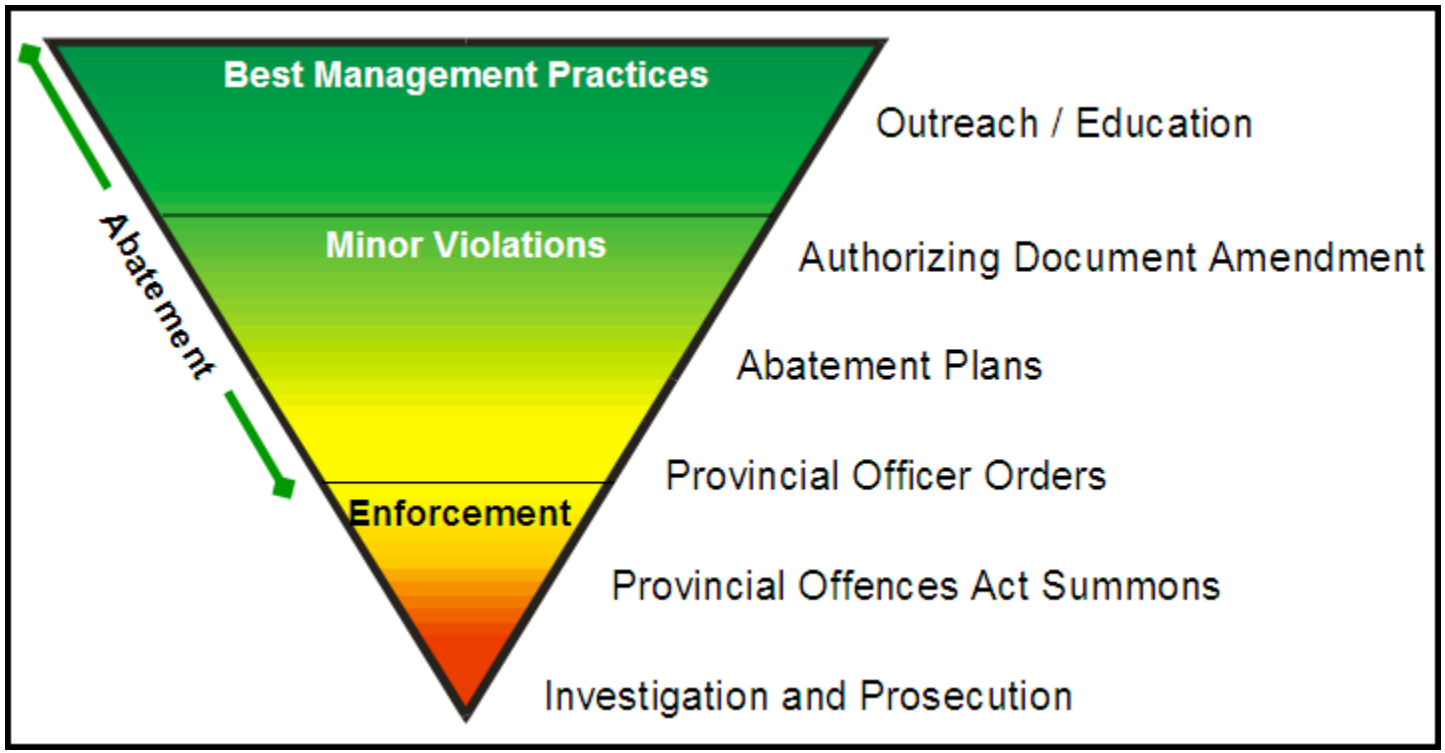
- Vegetated buffer zone establishment
- Well setbacks not maintained
- Missing features on field sketches
- Wells not maintained or properly decommissioned
- NMS and/or NMP not being prepared adequately, followed or updated

Compliance Tools

- When non-compliance with the NMA or other environmental legislation is found, AgEOs take into account
  - the risk to the environment and human health of the non-compliance issue;
  - the compliance history, if any, of the individual involved; and
  - the specific circumstances of the issue

  when determining an appropriate response.

Compliance and Enforcement Triangle



Compliance Tools

- Almost ½ of all reported incidents resulted in no issue found or no action required.
- Where an incident is verified and action needed, compliance approaches included:
  - Education/outreach – 36%
  - Referral to others – 32%
  - Voluntary compliance – 27%
  - Mandatory compliance (orders) – 5%
  - Resulted in prosecution – 0.5%

(based on 05-06 preliminary data)

Due Diligence

- The key to protecting yourself is by making sure you have performed and documented your “due diligence”.

- “Due diligence” is…

  reasonable steps that a person would take to prevent causing harm to others or the environment from an activity they are involved in.

Due Diligence

- Performing due diligence includes taking reasonable actions to:
  - prevent something bad from happening;
  - clean up and/or remediate the environment if something bad does happen; and
  - prevent a similar situation from happening again.
- Due diligence is unique to each situation and requires case-by-case actions.

Due Diligence

Farmers:

- Be familiar with your NMS/P. If a consultant prepared your NMS/P, review it with them to make sure you know what's in it.
- Understand and follow the NMS/P, especially the contingency plan.
- Make sure your workers are familiar with your NMS/P. Keep a copy handy for easy reference by everyone and review it with them.
- Ensure your NMS/P is up to date and reflects any significant changes to your operation since it was first prepared.
- Ensure your records are complete, accurate and organized.
- Ensure your operation is compliant with the NMA (for example, buffer strips are established where required).

Inspections vs. Investigations

- **Inspections:**
  - All Environmental Officers, including AgEOs, in District/Area Offices are inspectors
  - Purpose is to address non-compliance issues to protect the environment
- **Investigations:**
  - Investigators in MOE's Investigations and Enforcement Branch (IEB)
  - Conduct investigations for the purposes of prosecution
  - Investigations can occur at the same time as inspections

Compliance: Additional Resources

Infosheets:

- Compliance Tools for Nutrient Management
- Complying with Environmental Legislation On-Farm, including the Nutrient Management Act, 2002
- Farm-related Spills of Manure or Other Materials
- What to Expect When an Agricultural Environmental Officer Inspects Your Farm

- Available at:
  http://www.omafra.gov.on.ca/english/nm/approval.html

Ontario

Well maintenance still need outreach

A few Spills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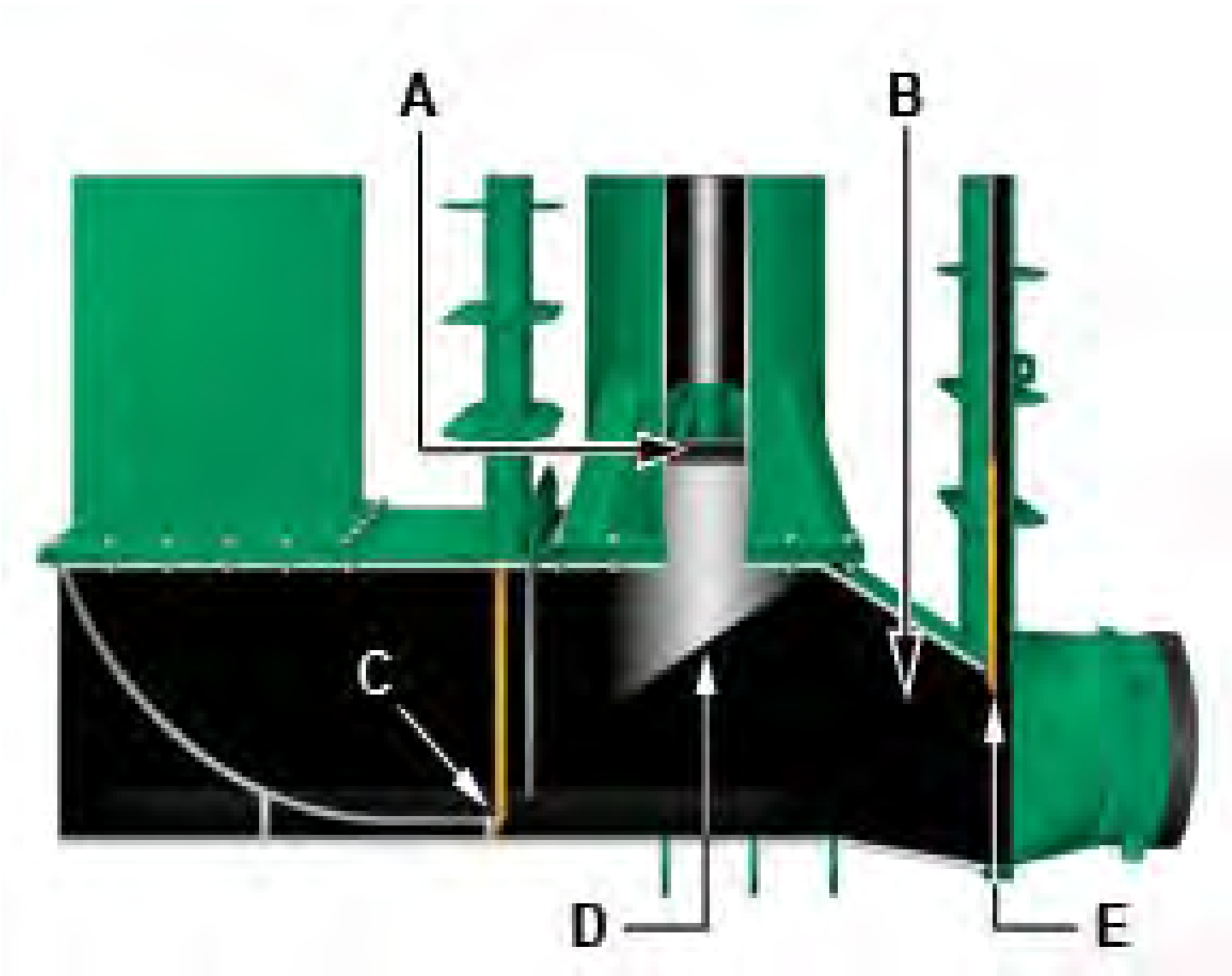
A
B
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E

Cattle access to water


BEACH AREA
NO LIFEGUARD
NO VEHICLES
NO PETS
NO GLASS CONTAINERS
NO BIKES


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