

Update on Nutrient Management NASM Framework

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- Non-agricultural source materials (NASM) include residual materials from municipal sewage treatment plants, pulp and paper mills, septage treated to meet standards and off-farm food processing. These are a source of nutrients and can be used as a valuable fertilizer.
- The initiative is intended to address overlapping approval requirements under the EPA and NMA.
 - ❖ Stage 1 (completed) – extended phase-in date for NASM generators required to have nutrient management strategies by two years to December 31, 2008 and December 31, 2009. Decision notice was posted on the EBR in October 2006.
 - ❖ Stage 2 –The revised regulatory framework has been posted on Environmental Registry for comment. It outlines proposed standards for the application of these materials based on the quality of the material.

Update on Nutrient Management NASM Framework cont'd

- Currently, in cases where NASM is considered a waste (such as sewage biosolids), there are overlapping approval requirements under the *Nutrient Management Act, 2002* and the *Environmental Protection Act*.
- The goal of the proposed framework is to eliminate the overlap and develop and revise existing standards for NASM to include greater detail and a wider range of alternatives.
- The proposed framework would cover application of all nutrients on all the agricultural land in the province.
- The proposed framework would create 6 categories of NASM (e.g. sewage biosolids are classified in Category 5, treated septage would be either Category 5 or Category 6).



Update on Nutrient Management NASM Framework cont'd

- Each proposed category determines the level of approval required for nutrient management strategies and plans for the materials in the category. For instance, Categories 5 and 6 would require an approved nutrient management strategy and approved nutrient management plan.
- In addition to the basic categorization, NASM is also sub-categorized based on the concentration of metals, pathogen content and odour annoyance potential. The standards for land application and storage of NASM are based on these characterizations.
- The framework also introduces the requirement for a field nutrient management plan prepared by a certified person. The plans will identify all farm fields that will receive NASM and will provide details on how the NASM is to be applied to optimize the nutrient benefit and minimize adverse environmental impact.

Update on Nutrient Management NASM Framework cont'd

Proposed Requirements for Category 5 material

- Sampling and analysis would be required to determine the level of metals and pathogens.
- Other parameters such as ammonia, nitrates and total volatile solids would also have to be tested.
- In addition, determination of the odour annoyance potential would be required (for liquid/solids) which relates to the amount of dissolved oxygen and how solids have been dewatered, respectively.
- Requirements for setbacks from surface water and wells, minimum depth to bedrock, winter application, depth of unsaturated soil, pre-harvest grazing and separation distances are dependent on the outcomes of the analysis of metals, pathogens and odour annoyance potential.

Update on Nutrient Management NASM Framework cont'd

Proposed Requirements for Category 6 material

- Category 6 captures materials not specifically listed in other categories or where materials from different categories are mixed together.
- Land application standards of these materials can be addressed through the technical requirements of an OMAFRA approved nutrient management strategy and an OMAFRA approved nutrient management plan.
- The OMAFRA director would set parameters and sampling and analysis requirements which would be represented in the nutrient management strategy.
- The maximum application rate would be based on the maximum application rate of the material calculated for nitrogen, phosphorous and metals, and depending on the NASM, sodium, boron and fat, oil and grease.

Update on Nutrient Management NASM Framework cont'd

The proposed framework is currently posted as a plain language document on the Environmental Registry for public comment. Comments can be received until January 5, 2008.

Website:

www.ontario.ca/environmentalregistry EBR Registry #: 010-1436

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