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Re: Draft Guide for the Beneficial Use of Non-Agricultural Source Materials on

Agricultural Land, November, 2004

EBR Number PA04E008

Comments Due January 29, 2005

The Canadian Environmental Law Association ("CELA") is a public interest law group founded in 1970 for the purpose of using and improving laws to protect the environment and public health and safety. Funded as a legal aid clinic specializing in environmental law, CELA lawyers represent individuals and citizens' groups in the courts and before tribunals on a wide variety of environmental protection and resource management matters.

Over the years, CELA has been particularly active in casework involving agricultural operations, environmental protection, and land use planning. For example, CELA has frequently represented farmers in civil actions and administrative hearings in order to protect the health, safety and livelihood of our farming clients. Similarly, CELA provides summary advice to numerous members of the public who contact CELA with concerns and questions about the environmental and public health impacts of intensive agricultural operations. In addition, CELA has participated in numerous land use hearings in order to protect agricultural lands and specialty crop lands against urbanization.

With respect to law and policy reform, CELA has submitted numerous briefs to the Ontario government on general land use planning matters, nutrient management proposals, farm legislation and water protection issues and the 2003 proposals for additional consultation and notification requirements for biosolids.

CELA counsel also sits on the province's Nutrient Management Advisory Committee and has just completed responsibilities as a member of the province's Watershed Based Drinking Water Source Protection Implementation Committee, including as chair of the Working Group of that Committee, as well as the previous Source Protection Advisory Committee.

Based on this experience and background, CELA has reviewed the Draft Guide for the Beneficial Use of Non-Agricultural Source Materials on Agricultural Land, November, 2004.

At the outset, it should be noted that CELA strongly supports the need for effective and enforceable legislation to address the environmental and public health impacts of agricultural operations in Ontario, including in relation to land application of non-agricultural source materials on agricultural land.

OVERVIEW COMMENTS

There are two over-riding concerns that CELA notes with respect to the Draft Guide. The first is that the document does not refer to Ontario's initiatives with respect to watershed based drinking water source protection at all. Land application of Non-Agricultural Source Materials (referred to hereinafter as "Biosolids") has been recommended in the Technical Experts' Committee Report to the Minister as one of the issues of provincial concern for drinking water source protection. Furthermore, the current proposals will require all provincially regulated activities such as land application of biosolids to become consistent with approved source protection plans. In addition, there will be a need for interim measures to protect vulnerable areas as defined in the source protection Technical Experts Report and as subsequently embodied in legislation. Biosolids application to land is one activity that could require more stringent provisions with respect to actual geographic areas where the application is permitted or not. Therefore it is essential that this proposed guide recognize the connections between the decisions made for land application of biosolids and watershed based drinking water source protection. Specifically, the generic setback tables do not provide for the level of protection that will be required by source protection nor are they geared to the specific geology of the place of application of the biosolids.

The second over-riding concern is that the emphasis in the Draft Guide is as to finding a place to put materials that the generators of the materials have difficulty in managing or disposing. Arguments are made that there is potential benefit of these materials to agriculture. It would be preferable to have an integrated policy solution that looks for the best ecological solutions for these materials from a multi-disciplinary approach. For example, energy utilization of some of the materials should be explored much more aggressively. Land application on agricultural lands should never be pursued as primarily a waste disposal option. Instead, land application on agricultural lands should be pursued only when the material is of definite and significant benefit to agriculture, with a much more stringent definition of benefit, along with, of course all of the necessary safeguards, conditions and site-specific considerations.

The remainder of this submission provides some specific comments with respect to the Draft Guide as proposed in this consultation. CELA would be pleased to meet with you and other staff of MoE and / or OMAF at any time to discuss our concerns.

Comments re Beneficial Use Criteria

CELA submits that the three beneficial use criteria are insufficient safeguards to ensure that all material to be land applied on agricultural land is of sufficient agricultural benefit. The first condition is the only one that should be applied. If material cannot meet this criteria which requires "appreciable amounts of organic matter, nitrogen, phosphorus, potassium and / or alkali to benefit soil quality or crop growth...", then there is no justification for accepting the material on agricultural land. In other words, without meeting this criteria, the other criteria amount only to a waste disposal option.

Proposed condition 2, is too vague and contains no parameters. In particular, since the two primary materials encompassed by this policy, sewage biosolids, and pulp and paper biosolids are both stated to meet this criteria only, it is incumbent on the Ministry to clearly delineate the circumstances in which this material would qualify and the parameters justifying same.

Proposed condition 3 is also too vague as well as being too general. Again, no parameters are specified and no rationale for this condition. This proposed condition does not demonstrate benefit to agricultural land.

Furthermore, it is not acceptable to have the mere statement for both sewage biosolids and pulp and paper biosolids, that each has "proven over time that they meet Condition 2, i.e. they improve soil quality and plant growth in a significant way." If this is in fact true, then it should be straight forward to specifically build those circumstances and parameters into the criteria. On the other hand, if these materials don't meet proposed condition 1, then it is questionable whether the statements can be justified.

Comments re Criteria Relating to Material Quality

Stabilization

Again, the guide is too vague in stating that "In general, wastes may be considered as appropriately stabilized, if odours after spreading are no more objectionable than those produced from normal farming practices." Odour is one of the primary complaints associated with land application of biosolids and a much more rigorous set of odour criteria must be developed.

The pathogen indicator concentration may not be appropriate in all circumstances for the purposes of source protection. There must be recognition in the guide that source water protection plans and farm water protection plans may preclude application of biosolids containing pathogens or other contaminants in certain areas.

Comments re Beneficial Constituents

As indicated earlier, the guide should be qualified by the prospect that a particular source water protection plan and associated farm water protection plans may constrain, limit or prohibit the application of additional nitrogen in vulnerable or other areas because of historic or cumulative impacts from nitrogen in the watershed. Accordingly, the approvals for application of biosolids and other materials containing nitrogen should be affected.

Comments re Constituents of Concern

Although the proposed parameters for metals are expressed in terms of a maximum permissible metal addition to soil in kilograms per hectare per five years, there should be provisions for retesting of the soils for metal content both after addition of biosolids materials and prior to any reapplication. Furthermore, a one-time limit of application of NASM to land should be considered to prevent cumulative degradation of the soils and groundwaters. The province of Manitoba, for example, has such a limit.

There are no criteria specified regarding land that is tile-drained. This is a significant omission from the criteria to be considered and criteria for tile-drained land should be developed and included in the guide.

Contrary to the proposal, screening should be normally be required for glass, metals and plastics prior to application of the material.

Comments re Setback Distances

The setback distances are not reflective of differences from site to site of geological characteristics and pathways to ground and surface water. Accordingly, as noted, source protection plan requirements and the subsequent farm water protection plan requirements may provide constraints or prohibitions on biosolids application and the relevant approvals will have to be consistent with those approved plans. Furthermore, there is no indication that the selected setback distances are always or even generally protective of the watercourses, groundwater and wells that would be potentially impacted. Research and justification for these setbacks should be provided and demonstrate that these areas would not be impacted. Furthermore, criteria to determine whether there is potential impact in the particular setting should be developed and considered in the application process with the objective of ensuring no impact.

Comments re Other Prohibitions

The prohibition for "home lawns or vegetable gardens" should be expanded to include residential and recreational properties, not merely the lawns and vegetable gardens.

Comments re Temporary Field Storage

The provision regarding limiting the size of a nurse tank to "an amount not exceeding what will be applied in 24 hours at the site" is too vague.

Comments re Non Agricultural Source Materials

The proposed guide contains no provisions for criteria for other pathogens such as viruses or parasites, nor for potentially hormone disrupting chemicals. Such criteria should be developed and constraints developed accordingly along with relevant testing of the subject materials.

Comments re Record Keeping

Biosolids application records should be provided to source protection planning committees. In addition, biosolids application data should be aggregated by the Ministry of the Environment and publicly reported on a sub-watershed basis for the purpose of long term management of Ontario's ground and surface water resources.

Comments re Notification

The Ministry of the Environment has conducted consultation regarding improvements to the notification requirements regarding biosolids application to land. However, no such additional requirements are included in the draft guide. The proposed Consultation and Notification Requirements would require that municipalities are consulted and given an opportunity to present any relevant technical application. The Regulation also proposes that neighbours are notified before there is an approval for land application of biosolids. It was originally proposed that the amendment would require that municipalities be consulted effective December 1, 2003 and notice given to neighbours effective September 1, 2003. This proposed amendment was posted on the Environmental Bill of Rights Registry on April 25, 2003. The Ministry of the Environment should proceed expeditiously with these consultation and notification requirements.

In summary, it is our view that a considerable amount of work, including development of additional conditions and criteria, is still required in order to provide Ontario citizens sufficient assurances that there is no adverse impact to health or the environment from application of non-agricultural source materials on agricultural land. Thank you for the opportunity to submit these comments. As stated earlier, we would be pleased to meet with you at any time to discuss these concerns.

Yours truly, CANADIAN ENVIRONMENTAL LAW ASSOCIATION

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