Regulating Biosolids and Biosolids Management in Canada

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Abstract: Canada's governing structure can lead to confusion regarding the roles of the various levels of government when dealing with biosolids management and other environmental protection issues. The Federal Government has legislation aimed at protecting Canadians from harmful products and the environment from specific contaminants. The provinces and territories each have independent legislation aimed at protecting air and water quality. For biosolids, some jurisdictions have regulations that target specific contaminants that may be present in biosolids while others have regulatory means to address the methods that biosolids can be used. In some cases, there may be both federal and provincial/territory regulatory requirements that apply to the same application. The role of each level of government in managing biosolids in Canada is not always clearly understood. This presentation will explore the governing structure in Canada and the division of powers between the provincial/territorial and federal levels of government and review the roles and rationale of the various levels of government in regulating biosolids management.

Keywords: Federal, provincial, territorial, legislation, regulation, management, laws

Responsibility for Environmental Protection in Canada
• Three levels of government exist in Canada.
  - Federal
  - Provincial/Territorial
  - Municipal
• Each level has a role in ensuring the environment is protected from human activities in Canada

Governing Structure of Canada
• Canada, being a Federation, has a system of government in that divides authority between the federal government and the provinces and territories.
• The federal government governs with respect to the whole country and the provinces with respect to their jurisdiction.
• The general legal division of powers is found the Constitution Act, 1867.

Division of Powers
• The powers of the provinces are specifically listed in the Constitution Act.
• Federal government claims most remaining constitutional powers under the residual power of Peace, Order and Good Governance.
• The constitutional division of powers is generally based on the principle of subsidiary, in which the government closest to the issue governs it.
• There are some areas of shared jurisdiction.

Roles in Protecting the Environment
• Water resource management in Canada is governed by both provincial and federal statutes.
• Federal legislation on water and water-related activities relates to those activities over which the federal government has jurisdiction.
• Provinces exercise proprietary rights over the water resource and, therefore, have the authority to legislate on all aspects of water.
Federal Powers
• Water and water-related activities relates to those activities over which the federal government has jurisdiction such as:
  - both inland and ocean fisheries
  - the protection of navigable waters and shipping,
  - some specific aspects of environmental protection,
  - drinking water in areas of federal jurisdiction,
  - international water management,
  - and federal-provincial-territorial cooperation in water resources planning and management.
• The federal government has proprietary rights regarding federal lands and water in the territories, national parks, and First Nation reserves.
• The federal government is responsible for conducting relations with other countries in relation to water resources that are in boundary water basins.

Federal Oversight of Biosolids
• Federal legislation may apply to:
  - Biosolids produced from federally owned facilities,
  - Biosolids produced from facilities serving aboriginal communities,
  - Biosolids applied to or used on federally owned land,
  - Biosolids management that may impact fish habitat, fish health, or inter-jurisdictional water quality.

Other Federal Instruments
• The National Pollutant Release Inventory (NPRI) provides Canadians with access to information on the releases and transfers of key pollutants in their communities.
• CEPA 1999 provides for the assessment and/or management of the environmental and human health impacts of new and existing substances.
• CFIA is responsible for the regulation and registration of fertilizer and supplement products.

Federal Legislation and Biosolids
• Biosolids used for land application may be subject to review and approval under the Fertilizer Act.
• Products that discharge to sewers that can negative impact biosolids quality and/or pose significant environmental concern can be subject to CEPA.
• Biosolids generators may be required to report the release of contaminants to NPRI.

Provincial Powers
• Provinces have authority to legislate in areas of:
  - domestic and industrial water supply,
  - pollution control,
  - non-nuclear thermal and hydroelectric power development,
  - irrigation,
  - and recreation.
• Some of this responsibility has been delegated to local government bodies.

Provincial Oversight of Biosolids
• As Provinces exercise proprietary rights over the water resource, they have the lead in regulating water protection.
• Provinces set the minimum standards for biosolids management within their province.
  - Some provinces have specific regulations governing biosolids management.
  - Some manage through regulatory permits.
  - Others have guidelines for specific management options.

**Provincial Legislation and Biosolids**

• Untreated biosolids would meet the regulated definition of a waste product in most jurisdictions.
• Treated biosolids that meet certain criteria may then become a product and be exempt from provincial regulatory oversight (i.e. compost).
• Other treated biosolids may be managed as a resources with regulatory oversight (i.e. land application).

**CCME**

• The Canadian Council of Ministers of the Environment (CCME) is comprised of environment ministers from the federal, provincial and territorial governments.
• Works to promote effective inter-governmental cooperation and coordinated approaches to inter-jurisdictional issues.
• Has developed Guidelines for Compost Quality (2005) that allows for the unrestricted use of compost that meets the Category A criteria.

**Provincial & Federal Roles**

• To verify that biosolids are managed in a manner that conforms to legislation.
• Evaluate environmental risks of chemicals compounds associated with release pathways.
• Evaluate risks associated with biosolids management options in the development of new or updated legislation.
• Identify preferred management practices.

**Municipal Governments**

• Municipal authority given by the provincial legislation.
• Are generally a body corporate.
• Can make decisions on behalf of the community it serves.
• Enact by-laws.
• Provide local services (ie: sewage treatment).
• Need to ensure that Federal and Provincial legislation is followed.

**Goals of All Levels of Governments**

• Communicate the benefits of biosolids reuse and recycling.
• Harmonize regulatory requirements to facilitate biosolids reuse and recycling.
• Invest in biosolids management infrastructure that creates a high quality product.
• Consider the use of source control to address new contaminants in biosolids when appropriate.

**CONCLUSION**

• General public needs to be assured that biosolids are managed in a responsible manner.
• Provincial and federal governments must be and be seen to be, objective in fulfilling their role as regulators.
• Good communication between all levels of government is essential to ensuring that biosolids continue to be managed in the most environmentally beneficial manner.