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DEVELOPMENT OF A SOLID WASTE ENVIRONMENTAL MANAGEMENT SYSTEM

The Solid Waste Management Committee recommends the adoption of the recommendation contained in the following report, May 28, 2007, from the Director, Solid Waste Management:

1. RECOMMENDATION

It is recommended that Regional Council endorse the attached Solid Waste Environmental Policy.

2. PURPOSE

This staff report outlines the development of an Environmental Management System, demonstrating the Region's commitment to the operation of efficient, environmentally sustainable waste facilities and processes and the development of an Environmental Management System document. This document represents standardization of processes and directions to staff and contractors delivering waste services. An Environmental Policy (*See Attachment 1*) will demonstrate York Region's commitment to the principles of prevention of pollution; meeting or exceeding regulatory and statutory requirements and continuous improvement in the operation of its solid waste facilities and processes.

3. BACKGROUND

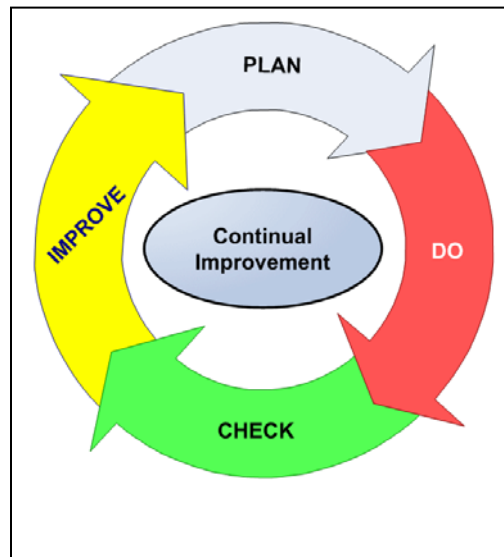
York Region's standard Solid Waste Services contracts generally contain some requirement for the contractor to develop partial or complete environmental management plans to demonstrate their ability to respond to emergency situations and have plans for appropriate handling of materials to avoid environmental impact.

Within the Transportation and Works Department, the Water and Wastewater Section has developed a complete ISO 14001 system for facilities and operations under their control.

4. ANALYSIS AND OPTIONS

The Solid Waste Environmental Management System will follow the most recent ISO Environmental Management Guideline, 14001:2004. It will be supplemented with Standard Operating Procedures, Checklists and Work Instruction documents designed to achieve these goals. Fundamental to all documents is the Plan – Do – Check – Improve planning principle. (*See Figure 1*).

Figure 1
Plan – Do – Check – Improve
Planning Principle



4.1 ISO Format Description

The ISO 14001:2004 system categorizes activities and processes that contribute to sound environmental management (*see Figure 2*).

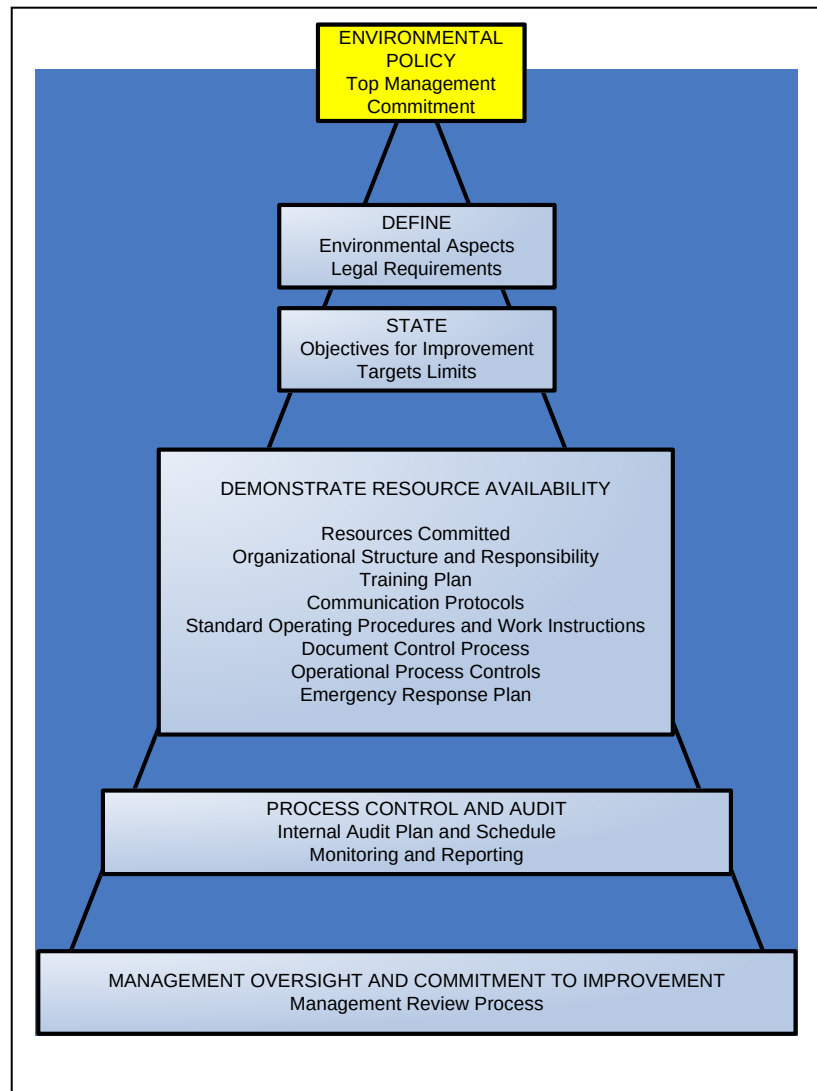
Development of an Environmental Management System starts with a commitment by the owner and top management to the process. ISO recognizes adoption of an Environmental Policy as a statement of corporate commitment to the three fundamental principles of ISO 14001:2004 which are:

1. Pollution Prevention
2. Obeying the Law
3. Commitment to Continuous Improvement

York Region's proposed Environmental Policy includes additional principles which are:

1. Pursuit of a diversion rate of 65 % by 2010.
2. Development of clear implementation procedures to assure environmental protection.
3. Setting measurable environmental objectives and targets.
4. Recognize that staff are our most important resource and create a staff culture of environmental awareness.

Figure 2
ISO 14001:2004 Process Diagram



Commitment by top management is indicated by production of this staff report and commitment of the owner is indicated if Council approves the Environmental Policy (See Attachment 1).

Environmental Management Systems are already in place for Water and Wastewater Operations. Every effort has been made to improve on these earlier systems and to develop a new Environmental Management System that is compatible with them. Where feasible, activities including hiring of external auditors will include both the Solid Waste and the Water and Wastewater Environmental Management Systems. Coordination of

effort in this manner, will optimize expenditures, improve consistency of the auditor's report and allow continuous improvement of both systems.

4.2 Operational Control

To assure consistency in appearance of facility specific documents, Solid Waste Management will develop a generic Environmental Management System document to be used as a template. Staff will work with contractors' staff to develop facility specific documents. Standardized questionnaires, document control lists, sheets for identification of Environmental Aspects, Standard Operating Procedures, Checklists, Factsheets and Work Instructions will also be developed. A large number of these standardized documents will apply to all operations and facilities. Rigorous document control procedures will be employed to ensure relevant up-to-date documents are maintained at each facility and the facility specific Environmental Management Systems are kept current and are consistent with the master document.

Contractors will be ultimately responsible for the Environmental Management System that applies to their contract. Contractors will be expected to include an Environmental Policy statement that complements York Region's.

4.3 Environmental Management System will be Requirement for New Processes

All contractors providing waste management services in the future will be required to be aware of existing Environmental Management Systems and revise them appropriately to accommodate any proposed operational changes. New processes or facilities will require an Environmental Management System specific to that operation prior to start-up. The system will provide a basis for auditing, reporting and documentation of ongoing process improvements.

4.4 Relationship to Vision 2026

The recommended actions are consistent with the Vision 2026 objective of managing and minimizing waste that forms part of the "Infrastructure for a Growing Region" goal and of the Promoting Conservation and Ensuring Clean Water and Air objectives that are part of the Enhanced Environment, Heritage and Culture goal.

5. FINANCIAL IMPLICATIONS

Development of the Environmental Management System represents a significant development for York Region Solid Waste Management Branch. The production of the documentation and implementation of the Environmental Management System process will demonstrate the Region's commitment to environmentally sound solid waste management practices. The system will illustrate the Region is a responsible operator and will facilitate the acceptance of new technologies including Energy from Waste.

The project is a significant undertaking involving the Program Manager of Waste and Quality Assurance and one Operations Coordinator for about 60% of their time in 2007. Ongoing commitments of 20% to 30% of a FTE will be required to maintain the systems. Funds have been committed in the budget for the 2007 costs and will be included in budget planning for 2008.

6. LOCAL MUNICIPAL IMPACT

Development of Environmental Management Systems will improve communications on waste related matters between local municipalities and York Region. Local municipalities may elect to adopt the Environmental Management System model for their waste collection and waste related activities. Regional staff will be available to assist as required.

7. CONCLUSION

Staff recommends endorsement of the York Region Solid Waste Management Environmental Policy. Endorsement of the policy will signal that York Region is committed to excellence and continued improvement in the area of Solid Waste Management.

For more information on this report contact Alec Scott, Program Manager, Waste Disposal and Quality Assurance of the Solid Waste Management Branch at extension 5712 in the Transportation and Works Department.

The Senior Management Group has reviewed this report.

(The attachment referred to in this clause is attached to this report.)