



**Magino Project  
Environmental Impact Statement  
Technical Support Document 20-5  
Waste Management Plan**

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**Table of Contents**

SECTION 1.0 – PURPOSE OF THE PLAN ..... 1

SECTION 2.0 – REGULATORY FRAMEWORK AND GUIDANCE DOCUMENTS..... 1

    2.1 LANDFILL..... 1

    2.2 BURNING ..... 1

SECTION 3.0 – SOURCES OF WASTE ..... 2

SECTION 4.0 – WASTE SEGREGATION ..... 2

SECTION 5.0 – RECYCLABLE WASTE ..... 2

SECTION 6.0 – BURNING ..... 3

SECTION 7.0 – LANDFILL..... 3

## **SECTION 1.0 – PURPOSE OF THE PLAN**

The purpose of this plan is to provide guidance to Prodigy personnel and Contractors on management of miscellaneous non-hazardous waste generated on the Magino Site during the Life of the Project.

Prodigy's waste management approach focuses on the implementation of the three "R"s (Reduce, Reuse and Recycle) as defined by the Ministry of Environment.

## **SECTION 2.0 – REGULATORY FRAMEWORK AND GUIDANCE DOCUMENTS**

The basic legislative framework for waste management is defined in the *Environmental Protection Act* Part V and the regulatory requirements for the design and operation of waste disposal sites are included in Regulation 347. For new or expanding landfilling sites, these regulatory requirements are superseded by Regulation 232/98.

Regulation 347 provides definitions of waste management terms, defines different classes of waste, and provides standards for the design and operation of landfilling sites (other than new or expanding landfilling sites now covered by Regulation 232/98) and other waste management facilities.

### **2.1 LANDFILL**

The landfill standards contained in Regulation 232/98 include requirements for design, operation, closure, post-closure care and financial assurance. The standards apply to all new (i.e. non-hazardous) waste landfilling sites larger than 40,000 cubic metres. The standards cover issues such as:

- design specifications for groundwater protection including a **site specific design** option and two generic design options;
- the assessment of groundwater and surface water conditions;
- design requirements for buffer areas, final cover design, surface water and landfill gas control, and the preparation of a **site design report**;
- operation and monitoring requirements for site preparation, groundwater and surface water **monitoring**, daily cover, record keeping and reporting, requirements for a leachate **contingency plan**;
- site closure and post-closure care provisions; and
- **financial assurance** requirements for private sector landfills.

Regulation 232/98 requires that a design report be prepared for a landfilling site. This report will be provided once approvals for the Magino Project are obtained.

### **2.2 BURNING**

The burning of municipal waste at a landfilling site is prohibited except for the controlled burning of small quantities of clean wood and brush at some sites. Guidance on burning is provided in Ministry Guideline C-7 "Burning at Landfill Sites".

### SECTION 3.0 – SOURCES OF WASTE

Sources of non-hazardous solid waste are:

- Construction waste consisting of formwork and debris;
- Packaging for material and supplies received at the site during both construction and operation;
- Containers (glass, metal, plastic);
- Metals scraps;
- Used equipment and machinery;
- Clean wood and stumps;
- Lumber used for construction;
- Accommodation complex (organic waste, kitchen waste)
- Sewage treatment plant sludge;
- Paper and cardboard products; and
- Used tires.

### SECTION 4.0 – WASTE SEGREGATION

**Waste Segregation:** Segregation of all waste streams by type or category will avoid potentially undesirable combined effects and will facilitate the reuse, recycling, recovery and/or disposal of the various wastes. All waste categories will be evaluated and the principle of the following four R's applied:

- **Reduction Initiatives:** Reducing the raw material consumption is the first step to reduce waste generation. To practice this principle all processes and material used will be evaluated on the basis of possible reduction in raw material usage;
- **Reuse Initiatives:** Reuse of the material in other applications and /or by other parties is routinely examined by using the waste materials exchange;
- **Recycling Initiatives:** Recycling is the next option considered for the successful management of the waste streams;
- **Recovery Initiatives:** Recovery of usable material or energy as a by-product is a part of the four R's of the waste minimization process. For example, redistributing waste heat from generators to heat buildings is a process of recovery of energy from waste; and
- **Disposal:** Disposal is the final option when the four R's are no longer applicable or practical.

To the extent practicable, sorting will take place at the source and the sorted waste will be stored at the site's waste transit station.

Contractors at the site are required to manage the waste generated from their activities in a manner compatible with Prodigy's waste management plan. Instructions on waste management are provided to Contractors in the Construction Environmental Protection Plan (TSD 20-6).

### SECTION 5.0 – RECYCLABLE WASTE

Recyclable waste consists mostly of metal containers, glass products, scrap metal, used equipment and machinery. Quantities of these materials shipped off site for recycling will be recorded. Handling of recycled waste will include:

- 1) Used Equipment – will be returned to vendor or given to a salvage contractor;
- 2) Scrap Metal Recycling – will be stockpiled at the waste transit station until a sufficient quantity is available for a scrap metal recycling contractor to pick up;
- 3) Metal and plastic containers (bins and drums) will be cleaned and reused for storage of waste chemical products, lubricants or oils. (refer to HazMP); and
- 4) Used tires will be sent to the tire supplier for recycling and disposal in accordance with the Ontario Used Tire Program.

#### **SECTION 6.0 – BURNING**

Only clean wood waste and stumps from grubbing and clearing will be disposed of at the burn pile.

A control burn, under the supervision of Prodigy's environmental coordinator will be made whenever sufficient combustible waste is accumulated and weather conditions are favorable.

#### **SECTION 7.0 – LANDFILL**

Prodigy will operate its own landfill site in accordance with the requirements of O.Reg 232/98. The landfill operation manual will be prepared once Project approval is obtained.