

Open House

Environmental Assessment

New Waste Management Capacity

Alternatives To

Thursday, February 21st
3:00 p.m. to 7:00 p.m.
Riverside Place
55 Riverside Drive

Project History



- **2009:** The City's Draft Waste Management Master Plan (WMMP) promotes increased recycling and waste diversion and identifies need for new landfill capacity
- **2009:** New Liskeard Landfill site operation is suspended (Site reached capacity)
- **2009/10:** City's feasibility study proposes New Liskeard Site expansion
- **2011/12:** City's Terms of Reference for the Environmental Assessment (EA) developed and approved by Ministry of the Environment
- **2013/2014:** Undertake studies and consultation for completion of the EA
- **2018 to 2020:** Haileybury Landfill Site expected to reach capacity

Current Waste Management Practice

Recycling Waste Diversion

- Material Recovery Facility (MRF)
- Collection of recyclable materials

Solid Waste Collection

- Residential waste
- Industrial, commercial and institutional solid waste
- Special waste
- Hazardous waste (at landfill , e.g. old/used paint, oils, batteries, etc.)

Waste Disposal

- New Liskeard Landfill (operation suspended in June 2009)
- Haileybury Landfill has serviced the entire City and Town of Cobalt since 2009

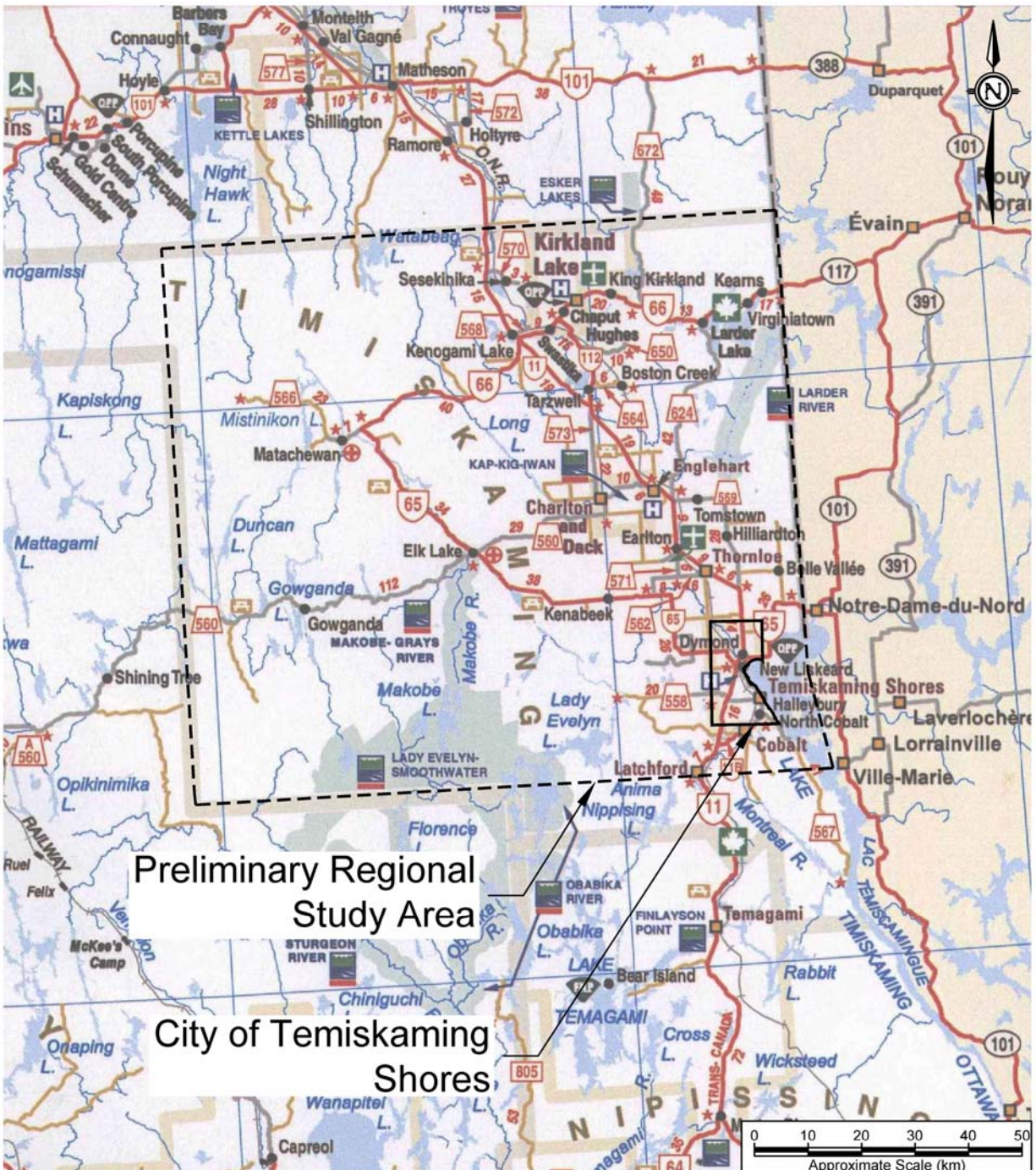
Current Waste Management Practice

The New Liskeard Landfill

- Used for waste deposition since about 1916
 - Landfilling was suspended in June 2009
- Located approx. 3 km west of the former Town of New Liskeard
 - Total property area is 32 hectares
 - Approx. 5 hectares have been landfilled
- Contaminants managed through natural attenuation
- On-going groundwater monitoring – no contamination off site
- Potential opportunity for new landfill capacity through site expansion



Preliminary Regional Study Area



Environmental Assessment

Regulatory Requirements

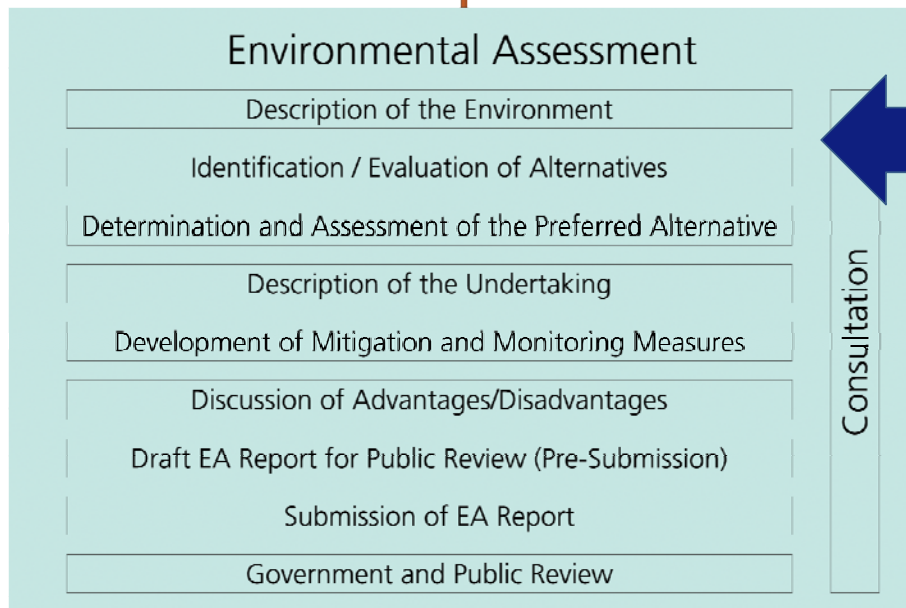
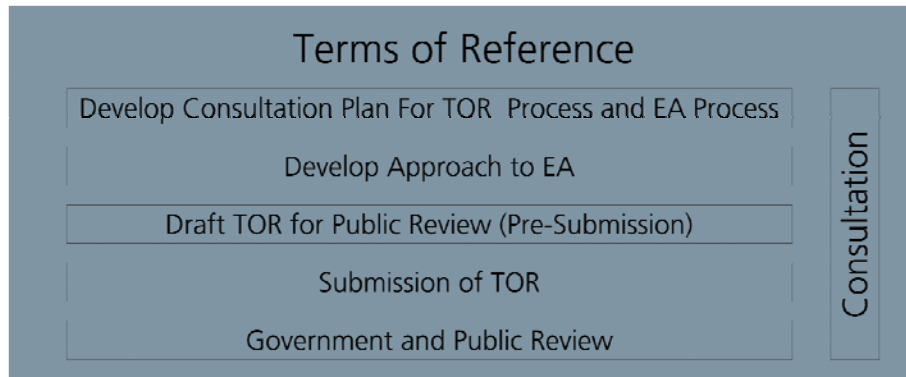
- Environmental assessments are required under Ontario Regulation 101/07 (Waste Management Projects) for new landfill sites and landfill expansions exceeding 100,000 m³
 - Under certain conditions, this requirement also applies to thermal waste treatment facilities
- Ontario *Environmental Assessment Act* requires
 - Terms of Reference (Approved November 2012)
 - Environmental Assessment (Notice of Commencement issued January 2013)

Environmental Assessment

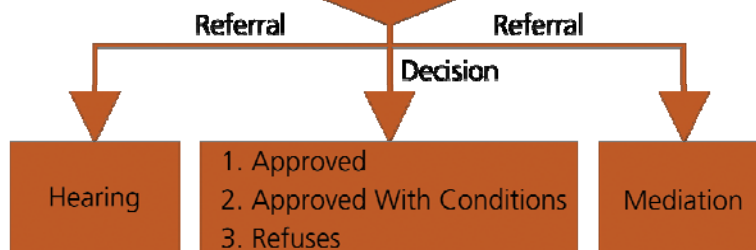
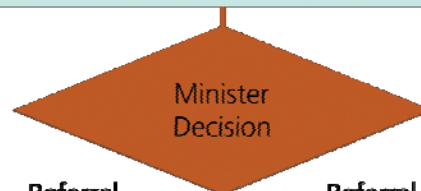
Key Elements of the Environmental Assessment

- Establish the need/rationale for the undertaking
- Description of the Project
- Environmental characterization of the Project area
- Identification/evaluation of alternatives
- Assessment of environmental effects
- Development of mitigation and monitoring measures
- Consultation and engagement (public, stakeholders, government agencies, Aboriginal communities)

EA Process



**We
are
here**



Project Schedule and Next Steps

Project Schedule

Year	2011			2012				2013				2014				2015	
Activities / Quarter Year	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd
Terms of Reference																	
Environmental Assessment																	
Design and Engineering																	
Permits and Approvals																	
Construction (Start)																	

Alternative To

- Different alternatives to address the need; for this Project, the following Alternatives To have been identified:
 - Do nothing (status quo)
 - Landfilling
 - Energy from Waste
 - Thermal waste treatment facility
 - Waste Export
 - Waste Import
- ***Do you have any other Alternatives To that should be considered?***

Alternative Methods

- Refers to the different ways of implementing the preferred Alternative To
- This can include:
 - Alternative Site locations
 - Alternative Designs

Alternatives To: Do Nothing

“Do nothing”

- Considered the status quo, where waste from the City is continued to be landfilled at the Haileybury Landfill Site
- This scenario is proposed only for the purpose of providing a comparison to any other Alternative To
- This is not a real alternative for the City as the current landfill will reach capacity sometime between 2018 and 2020



Typical Concerns

- Non-Compliance with Permits
- Adverse environmental effects
- Potential for waste management service disruptions

Mitigation Measures

- Not applicable

Alternatives To: Landfilling

Landfilling

- Involves the disposal of waste in an engineered landfill facility, designed and operated to handle the various types of waste generated by the City in accordance with Ontario's Landfill Regulation 232/98.
 - Could involve the development of a new landfill site or the expansion of an existing site.
- Typical features include measures to collect and manage gas and leachate generated in the landfill. Operational features would involve daily cover, groundwater monitoring, and the implementation of a capping and closure scenario when the approved capacity is reached.

Typical Concerns

- Adverse environmental effects
- Adverse impacts on water (ground and surface)
- Increases in odour
- Increases in noise levels
- Increase in local truck traffic and related dust, noise, traffic safety
- Landfill gas generation

Mitigation Measures

- Siting facility away from sensitive receptors
- Minimize size of landfill
- Limit operating hours and haul routes
- General housekeeping
- Implement air pollutant and noise control systems
- Landfill gas management plan

Alternatives To: Thermal Technology

Thermal waste treatment facility (incineration)

- Involves the development and operation of a waste incinerator, where waste would be incinerated at a high temperature in a controlled facility using fossil fuel (e.g., natural gas)
 - Any such facility would be equipped with air emission controls and would be closely monitored with respect to its compliance with applicable air quality standards
 - Typically this involves a small landfilling component for disposal of residues
- This Alternative To has been included as it offers a potential approach to future waste management that minimizes the need for additional landfill capacity



Typical Concerns

- Adverse environmental effects
- Adverse impacts from air emissions
- Adverse impacts on water (ground and surface)
- Loss of habitat for plants and wildlife
- Odour and noise levels
- Local truck traffic and related dust, noise, traffic safety
- Cost effectiveness
- Schedule (design and approvals)
- Management of the ash (hazardous and non hazardous landfilling)

Mitigation Measures

- Siting facility away from sensitive receptors
- Implement air pollutant and noise control systems
- Air quality monitoring
- Limit operating hours
- Prescribe haul routes
- For landfill component : see “Landfilling”

Alternatives To: Energy from Waste

Energy from Waste (EFW)

- Principally the same approach as “Thermal Technology” but this alternative allows for generating energy from the waste management process
 - Offers an economically attractive approach for managing the waste in combination with the utilization of its value as an energy source



Typical Concerns

- Adverse environmental effects
- Adverse impacts from air emissions
- Adverse impacts on water (ground and surface)
- Loss of habitat for plants and wildlife
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- Cost effectiveness
- Schedule (design and approvals)
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Mitigation Measures

- Siting facility away from sensitive receptors
- Implement air pollutant and noise control systems
- Air quality monitoring
- Limit operating hours
- Prescribe haul routes
- For landfill component : see “Landfilling”

Alternatives To: Waste Export

Waste Export

- Involves the export of waste into another jurisdiction outside of the City
 - Waste would be disposed of or otherwise processed in a facility, licensed to manage the various types of waste generated by the City. The City would ensure long-term acceptance of its waste in a contractual agreement with the facility's owner
- Included as it has the potential to address the need for additional waste management capacity without the City becoming owner/operator of an existing or new management facility.



Typical Concerns

- Likely requires transfer stations
- Increase in local truck traffic
- Adverse environmental effects related to factor such as, ground- and surface water (at transfer station)
- Increases in noise, odour, vermin, litter (at transfer station)
- Makes City dependent on other jurisdiction
- Tipping fees/ overall cost

Mitigation Measures

- Siting transfer facility away from sensitive receptors
- Limit operating hours and prescribe haul routes
- Developing one or more transfer stations
- Landfill gas management plan

Alternatives To: Waste Import

Waste Import

- Involves the import of waste by the City and its management together with the City's own residual waste
- Waste imports could provide additional funds that could help to cover the cost for the development and operation of the City's own management system (e.g., landfill or incinerator)



Typical Concerns

- Adverse environmental effects dependent on the technology chosen to manage the waste
- Increased adverse effects due to increased volume to be managed
- Increase in truck traffic related to waste import

Mitigation Measures

- Dependent on technology chosen to manage imported waste (see other Alternatives To)

Evaluation Criteria

Environmental Considerations

- Natural environment (e.g., air, water, land, species at risk)
- Social environment (e.g., transportation, other infrastructure, noise)
- Cultural environment (e.g., heritage and archaeological resources)
- Economic environments (e.g., land use, land values)

Economic Considerations

- Relative approval cost (cost implications of required planning and approval processes and associated time implications)
- Relative cost (construction operation, maintenance)
- Cost effectiveness and financial risks

Technical Considerations

- How well does the alternative address the stated problem or need?
- Complexity of the technology?
- Reliability of technology – is this a proven technology?
- Flexibility regarding changes in waste volumes)

Municipal Policy Considerations

- How well does the alternative meet relevant municipal policies (e.g., Waste Management Master Plan objectives; sustainable development policies)
- Long-term operating principles and objectives; dependency on other jurisdictions

Contact Us



How to get involved in the Environmental Assessment Process?

- Attend public open houses
- Join our Project mailing list to be kept up-to-date
- Watch for Public Notices in local newspapers and on the City's website
- Check out the Project web site:
www.temiskamingshores.ca
- Review and comment on draft reports as they are released
- Contact Dave Treen for further information.

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