

ON RESERVE LANDFILL COMPLIANCE & REGULATIONS

CHRIS PRICE

TECHNICAL SERVICES OFFICER

BIMOSE TRIBAL COUNCIL

GUIDELINES FOR SOLID WASTE

PLANNING

ROLES & RESPONSIBILITIES

REGULATIONS AND CODES



PLANNING

THERE ARE MANY OPTIONS AND
VARIABLES FOR SOLID WASTE

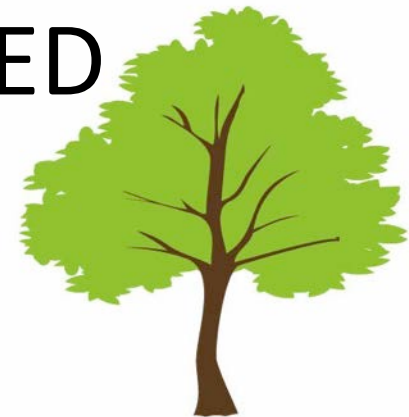
- ENVIRONMENT
- POPULATION



PLANNING

PUBLIC CONSULTATION

- TOWN HALL MEETINGS – MAPS, OPEN DISCUSSION, PRESENTATIONS, ATTENDANCE DEPENDANT
- DOOR TO DOOR - PAPER
- SOCIAL MEDIA - UNFILTERED



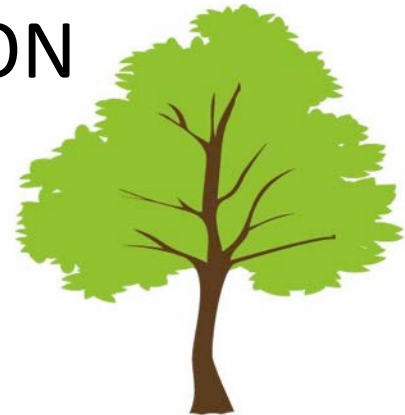
PLANNING - QUESTIONNAIRE

- HOW MANY PEOPLE LIVE IN YOUR HOUSEHOLD?
- HOW DID YOU HEAR ABOUT THIS EVENT?
- WOULD YOU LIKE TO SEE THE CURRENT METHOD OF MANAGING WASTE IN YOUR COMMUNITY CHANGE?
- WHAT TYPES OF MATERIALS DO YOU THINK ARE MOST IMPORTANT TO DIVERT FROM THE LANDFILL?



PLANNING - QUESTIONNAIRE

- WOULD YOU BE WILLING TO SEPARATE OUT MATERIALS SO THAT THEY WOULD NOT BE DISPOSED OF IN THE LANDFILL?
- WHAT FACTORS DO YOU THINK SHOULD BE MOST IMPORTANT WHEN LOOKING FOR A LOCATION FOR A LANDFILL SITE?
- HOW CAN WE BEST PROVIDE ADDITIONAL INFORMATION TO KEEP YOU INFORMED ON THE ENVIRONMENTAL SCREENING PROCESS?



ROLES & RESPONSIBILITIES

CHIEF & COUNCIL

Aboriginal Affairs & Northern
Development Canada - AANDC





CHIEF & COUNCIL'S RESPONSIBILITIES



- Undertake an Environmental Assessment;
- Obtain a permit from AANDC;
- Constructing, operating and monitoring of site with agreed codes and regulations;
- Assist with inspections and audits
- Cleaning up and closing of existing sites
- Provide training
- Developing waste diversion programs



AANDC'S RESPONSIBILITIES



- To issue permits;
- Under capital management provide funding towards design, construction and operation of community waste management sites;
- Ensures that the 'Indian Reserve Waste Disposal Regulations' are enforced;



AANDC'S RESPONSIBILITIES



- Allocates funding for design, construction and operation;
- If issuing a Permit, as Responsible Authority under CEAA;
- If funding a site, must render a EA screening decision, prior to release of funding;



REGULATIONS AND CODES



Indian Reserve Waste Disposal Regulations

AANDC Land Use Permits

Canadian Environmental Assessment Act

Health Canada

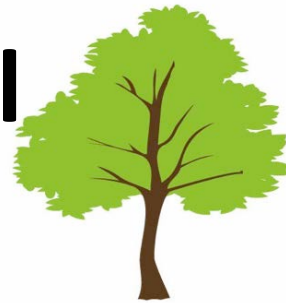
Ministry of the Environment

Department of Fisheries & Oceans

Province of Ontario



Indian Reserve Waste Disposal Regulations



Pursuant to the Indian Act

<http://laws->

[lois.justice.gc.ca/eng/regulations/C.R.C., c. 9](http://laws-)

[60/](http://laws-)



AANDC Land Use Permits



https://www.aadnc-aandc.gc.ca/DAM/DAM-INTER-HQ/STAGING/texte-text/50-019_1100100037477_eng.pdf



AANDC Land Use Permits



Territorial Lands Act 22(2)(b)

Application for a Permit, The approximate location of all:

- (i) existing lines, trails, rights-of-way and cleared areas proposed to be used in the land use operation,
- (ii) new lines, trails, rights-of-way and cleared areas proposed to be used in the land use operation,



AANDC Land Use Permits



Territorial Lands Act 22(2)(b)

Application for a Permit, The approximate location of all:

(iii) buildings, campsites, air landing strips, air navigation aids, fuel and supply storage sites, waste disposal sites, excavations and other works and places proposed to be constructed or used during the land use operation, and



AANDC Land Use Permits



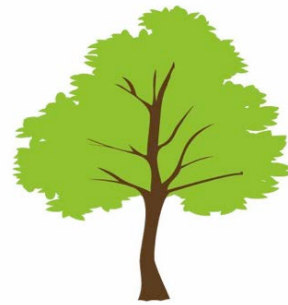
Territorial Lands Act 22(2)(b)

Application for a Permit, The approximate location of all:

(iv) bridges, dams, ditches, railroads, highways and roads, transmission lines, pipelines, survey lines and monuments, air landing strips, streams and all other features, structures or works that, in the opinion of the applicant, may be affected by the land use operation.



REGULATIONS AND CODES



Canadian Environmental Assessment Act

<http://ceaa.gc.ca/default.asp?lang=En&n=9EC7CAD2-1>

<http://www.nofnec.ca/PDF/Presentations/Dekker-CEAA.pdf>



Province of Ontario



Ontario Regulation 232/98 made under Part V of the Environmental Protection Act took effect on August 1, 1998 and contains detailed requirements for the design, operation, closure and post-closure care of municipal (i.e. non-hazardous) waste landfilling sites.



Province of Ontario



<https://dr6j45jk9xcmk.cloudfront.net/documents/1110/66-landfill-standards-en.pdf>

- For sites larger than $40,000\text{m}^3 = 200\text{m} \times 200\text{m} \times 1\text{m}$ deep



Province of Ontario



Ontario Regulation 232/98 Landfilling Sites

http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_980232_e.htm



Province of Ontario Landfill Standards Summary



- design specifications for groundwater protection including a **site specific design**
- option and two generic design options,
- mandatory **air emissions control** for sites larger than 3 million cubic metres,
- the assessment of groundwater and surface water conditions;



Province of Ontario Landfill Standards Summary



- 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,



Province of Ontario Landfill Standards Summary



- requirements for a leachate **contingency plan**,
- site closure and post-closure care provisions; and
- **financial assurance** requirements for private sector landfills.



Province of Ontario Landfill Standards Summary



[https://www.youtube.com/watch?v=s-
ps_0UFmfl](https://www.youtube.com/watch?v=s-ps_0UFmfl)



Province of Ontario Landfill Standards Summary



Buffer Area

- Minimum of 100m at every point
- sufficient to ensure that potential effects of the landfilling operation do not have any unacceptable impact outside the site such as surface runoff, litter, vectors, vermin, leachate, subsurface migration of landfill gas and aesthetic effects



Province of Ontario Landfill Standards Summary

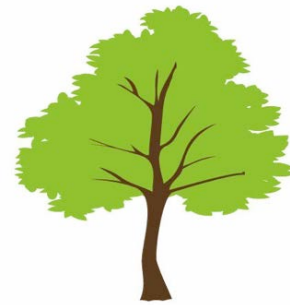


Hydrogeological Assessment – Ground Water

- potential for past, current, and proposed activities to affect groundwater quality and protected beneficial uses
- extent and degree of existing contamination



Province of Ontario Landfill Standards Summary



Hydrogeological Assessment – Ground Water

- transport and fate of groundwater contaminants
- risk that groundwater contamination poses to human health and/or the wider environment.



Province of Ontario Landfill Standards Summary



Hydrogeological Assessment – Ground Water

- A field investigation may include: drilling, water sampling, water level measurement, hydraulic testing



Province of Ontario Landfill Standards Summary

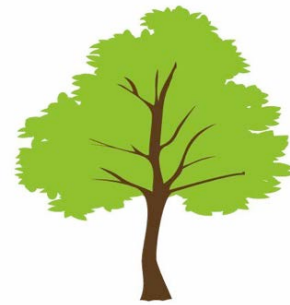


Surface Water Assessment

- plans, specifications and descriptions of the surface water features on the site, the surface water features that will receive a direct discharge from the site and the surface water features of the area in which the site is located



Province of Ontario Landfill Standards Summary



Ground Water Protection

- Measures taken into the design to mitigate the maximum concentration of contaminate into the ground water



Province of Ontario Landfill Standards Summary

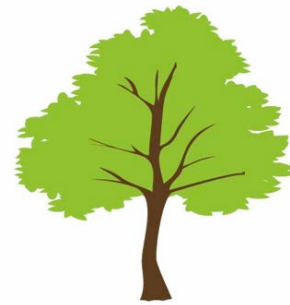


Operations

- Records kept on weights, monthly, annual
- No burning unless it is wood during daylight hours and controlled
- Surface water is to be controlled – maintain very little ponding and surface runoff
- Monitor ground water through annual test



Province of Ontario Landfill Standards Summary



Operations

- Monitor ground water through annual test
- Waste is covered each working day with either soil, sand, wood chips or compost



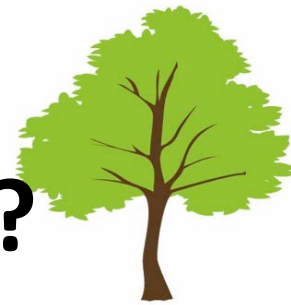
Environmental Protection Act



http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90e19_e.htm



What if your Landfill is on Crown Land without Approval?



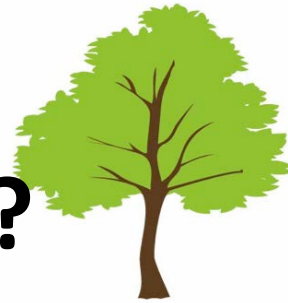
- Crown Lands Act

<http://nslegislature.ca/legc/statutes/crownland.htm>

- Deemed an offence as a dumper.
- “Minister” = Minister of Natural Resources
- Crown has agreed in writing to the use of the land for that purpose.



What if your Landfill is on Crown Land without Approval?



- Need to apply for a work permit to do work on Crown Land