

Saskatchewan Ministry of Environment
Environmental Protection Branch

Solid Waste Management

Where are Saskatchewan Landfills at?

Co-Create Conference May 2017

saskatchewan.ca



Overview

- The past/ - *where are we now –transition is occurring!*
- The present – transition to the future
- What does the Future Look Like?

The Past Into Transition Fires



The Past Into Transition

Cover and Compaction



The Past Into Transition

Leachate Management



The Past Into Transition

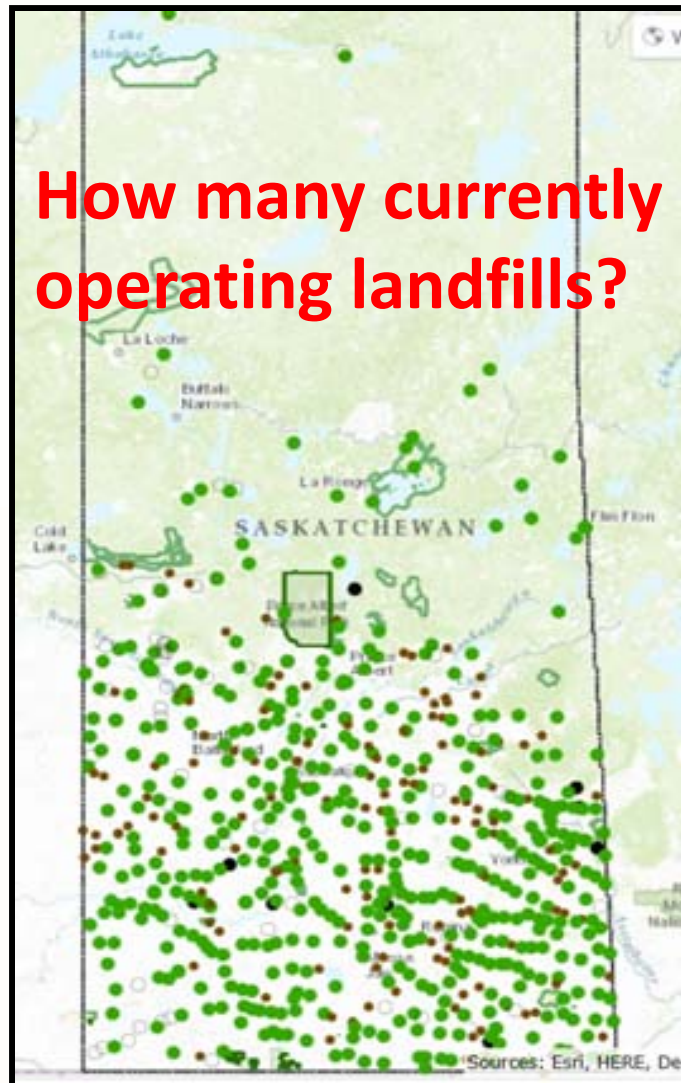
Unauthorized Construction



☹️Down in the Dumps?☹️
Or is this Cute?.....Not so much!



Present - Transition to the Future



Present – Transition to the Future

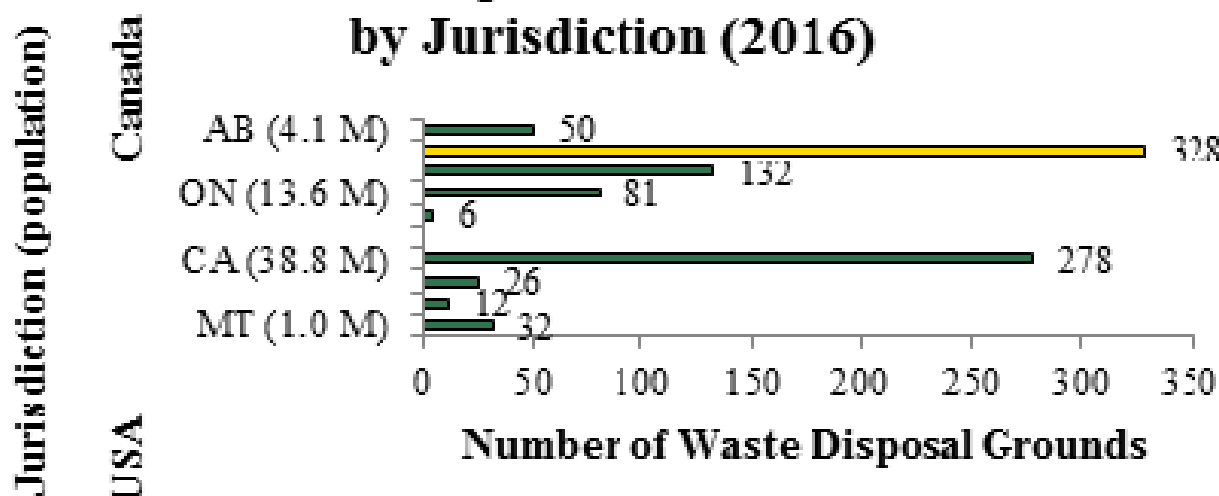
Saskatchewan 2016

Status	Municipal Landfills	Transfer Stations	Industrial Landfills	Total
Open	328	155	15	498
Closed	350	4	2	356
Total	678	159	17	854



Down
from
over
500 in
2013

Figure 3: Number of Operating Waste Disposal Grounds by Jurisdiction (2016)



Present – Transition to the Future



Present - Transition to the Future



Present - Transition to the Future



Regional Landfill and Recycling Center

16-43 Waste Management Corporation

- *Innovative concept* – using an former intensive livestock operations site –convert to a landfill and recycling waste transfer facility.
- lagoon converted to landfill cell
- outbuildings/offices and storage facility

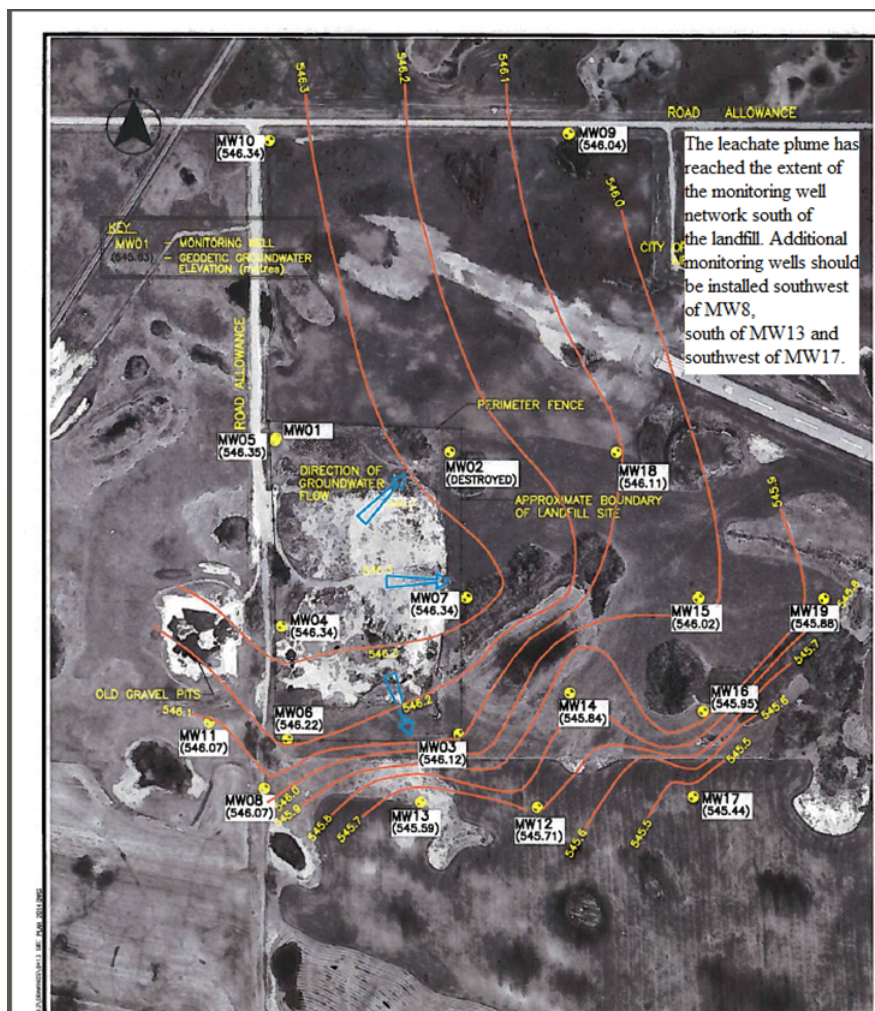
Present – Transition to the Future Regulation

- Modernization of legislation
 - To be consulted with the SWMS
 - *Municipal Refuse Management Regulations* are up for Red Tape Review to be done with SWMS consultation
- Code Chapters
 - No plans for landfill chapter (or any waste management) to move forward at this time
 - Could codify lower risk waste activities prior to landfills (transfer stations, compost facilities, recycling facilities)
- Best Management Practice
 - Most common is Alberta

Regulatory Update *new in 2016*

- New updated **permit to operate** being issued.
- Notable changes:
 - - requirements for site assessments and recommended groundwater monitoring
- Requirements for Emergency Response Plans and Operations plans.
- Requirements for decommissioning plans and process no written onto permits for clarity.

Present - Transition to the Future



“The test results indicate that **elevated concentrations** of selected MSW leachate indicator parameters were detected in nine of the piezometer locations. **Leachate from the landfill is impacting the water quality of the underlying aquifer.** Elevated leachate parameters were detected in the groundwater in piezometers GE 101, GE 102, GE 106,..... It is evident that the **leachate plume has migrated offsite** to the west. The limit of the leachate plume has not yet been determined.”

Present – Transition to Future



Closure Plan

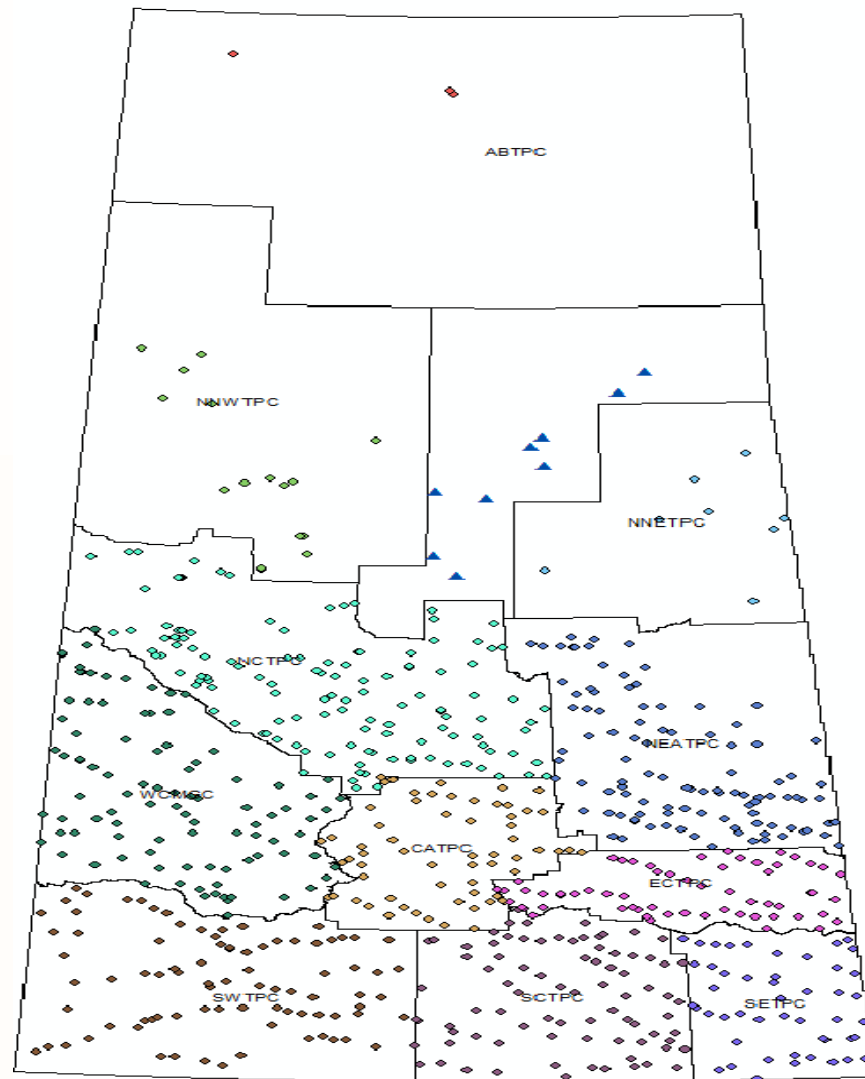
Once the owner receives written approval from the environmental project officer that the site may close, the owner should:

1. Determine if the site-information is sufficient for the ministry, otherwise conduct a site assessment.
2. Develop a corrective action plan to ensure long-term protection of the environment and the public.

Full Decommissioning/Reclamation

- can be done **in stages** as funds allow providing the Corrective Action Plan has been determined /provided to the Ministry in a reasonable time frame.
- initial closure and conversion to a transfer station most common.

What Does The Future Look Like?



What Does the Future Look Like?

- Yorkton....??? Rumor \$185
- Saskatoon - \$105/tonne
- Prince Albert - \$25-54/tonne
- **North Battleford - \$125/tonne**
- Many other Saskatchewan Landfills
(*typically very small sites*):
 - Free/\$0 - \$5
 - ***Wink/catch-ya-next-time....***
 - It's on our taxes.....

What Does the Future Look Like?

PARTNERSHIPS

- How do we work together
 - Regionalize closure/decommissioning work
 - INAC funding will be available for First Nation Solid waste opportunities in regional landfills and transfer stations.
- Feasibility studies will be completed that include 13 First Nations *both north and south* of Prince Albert.
- Partnership opportunities with neighboring municipalities expected and encouraged.
- Under Budget 2016, Indigenous and Northern Affairs Canada is investing \$409 million over five years for First Nation communities to improve how solid waste is managed on reserve.

http://www.aadnc-aandc.gc.ca/eng/1491490781609/1491490817399#Related_links

What Does the Future Look Like?

Economic Development

- New business opportunities
 - Landfill operators/private companies
 - Waste collection/transport
 - Recycling facilities/jobs
 - C&D recycling (?) back to innovation
 - Waste to energy –*future as technology develops.*

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