

## Municipal Solid Waste Disposal

### Issue:

Current Bluff Road MSW Landfill is projected to reach capacity in less than 20 years (e.g., 2032).

### Major Options:

- 1) Expand on City-owned property to the east of currently permitted site
- 2) Develop landfill at new location in the County

### Implementation issues/considerations:

- 1) Expand on City-owned property to the east:
  - a. Incorporating land into landfill permit boundary
  - b. Take necessary actions to prevent conflicting development near the landfill boundary
  - c. Determine feasibility of acquiring adjacent properties
- 2) Develop landfill at new location in the County
  - a. Risk of failure
  - b. Complexity and opposition to siting new facility
  - c. Additional Costs

### Other Considerations:

- 1) Possible use of Bioreactor/Bio-stabilization technology in the operation of the landfill, if technically and economically feasible.

## Municipal Solid Waste Disposal (Excerpts from Technical Paper)

- While considered least preferred on the USEPA management hierarchy it is often the lowest cost per ton option to manage the solid waste that is not otherwise diverted from disposal by source reduction, recycling, composting or other resource recovery alternatives.
- Currently the City's role in providing a MSW disposal site is based on fulfillment of state law and LMC as well as LPlan 2040
- it was assumed the continued City ownership and operations of the MSW landfill will remain cost competitive with other disposal facilities in the region (currently the lowest published tipping fee).
- The current baseline projections for MSW disposal indicate that the existing Bluff Road MSW Landfill will reach capacity in approximately 2032 and as such additional disposal capacity will be required before the end of the Planning Period.
- Well before the City's Bluff Road Landfill reaches capacity it will be necessary to identify a suitable disposal site for landfilling waste generated in the Planning Area.
- Because of the real and perceived issues associated with MSW landfills, it is often quite costly and difficult to establish (site/permit) a new MSW landfill.
- Among the principal concerns with landfills is that the waste placed in these facilities is a heterogeneous mix of organic and inorganic materials that may, to varying degrees, be chemically or biologically active and as such, if not properly managed represent a risk to human health and the environment (short- and long-term).
- The technology utilized for modern landfills is considered reliable and has been deemed protective of the environment by the USEPA.
- LPlan 2040 also identifies that:

*“planning for expansion of the Bluff Road Landfill on City owned property just east of the existing site is anticipated... The expansion into this additional landfill area has not been permitted by the State of Nebraska Department of Environmental Quality.”*

One of the LPlan 2040 “Strategies for Solid Waste Management” is to:

*“Discourage future urban acreage developments in the area around the Bluff Road landfill and LES power generating operations, which are located between N. 56th and N. 84th Streets. Acreage development could impact the current and future landfill and LES operations.”*

- Unless these policies, guiding principles and strategies change a new City owned and operated MSW landfill has been determined to be the option of choice.
- The issues that will need to be addressed in undertaking the development of a new MSW landfill (including on land adjacent to the existing site) in the future may include:

- Siting/location restrictions
- Permitting requirements and restrictions
- Infrastructure requirements
- Cost of services and funding mechanism
- Implementation schedule
- To protect the City's investment in the City owned land east of the existing landfill and ensure solid waste management and disposal capacity for the Planning Area beyond 2040 (the planning period), the City will likely need to consider the following pro-active measures.
  - Obtain all zoning and land-use approvals available or necessary to allow construction and ensure the future use of land east of the existing Bluff Road MSW landfill as a landfill or solid waste management site (landfill, solid waste processing, or solid waste management systems and facilities).
    - Obtain the local land-use (siting) approval, if necessary, to allow for permitting of the City owned land east of the existing Bluff Road MSW Landfill as a solid waste facility (landfill or solid waste processing and management).
    - Once such land-use approval is obtained, consider incorporating the City owned land east of the existing Bluff Road MSW Landfill into the next solid waste permit renewal or as a permit modification.
  - Evaluate options in land-use plans and zoning rules to prevent conflicting development near the landfill boundary....Effective land-use/planning designations would minimize both the likelihood of off-site nuisance issues and future pressure to increase performance standards, both of which would help control long-term costs of solid waste facilities operations.
  - Acquire land adjacent to the currently permitted disposal area and City owned land, especially on the north side, to ensure that no other conflicting development can occur on these lands.
- If the overall quantities of municipal solid waste sent to landfill disposal (in the County or exported) decreases the revenue generated by the Occupation Tax will also decrease (assuming the rate remains unchanged); significant reductions in Occupation Tax revenues will result in less funds available to subsidize/incentivize other non-disposal or waste diversion programs.