

Minute No. 52

**Report - Standing Policy Committee on Infrastructure Renewal and Public Works –
November 10, 2009**

**Item No. 1 Brady Landfill – Landfill Gas and Resource Recovery Project
 eFile WT-3**

COUNCIL DECISION:

Council concurred in the recommendation of the Standing Policy Committee on Infrastructure Renewal and Public Works and adopted the following:

1. That the issuance of a Request For Proposals for a landfill gas and resource recovery project at the Brady Landfill site, according to the conditions outlined in the report of the Director of Water and Waste dated October 26, 2009, be approved.

2. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

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November 10, 2009**

DECISION MAKING HISTORY:

Moved by Councillor O'Shaughnessy,

That the recommendation of the Standing Policy Committee on
Infrastructure Renewal and Public Works be adopted by consent.

Carried

EXECUTIVE POLICY COMMITTEE RECOMMENDATION:

On November 18, 2009, the Executive Policy Committee concurred in the recommendation of the Standing Policy Committee on Infrastructure Renewal and Public Works and submitted the matter to Council.

STANDING COMMITTEE RECOMMENDATION:

On November 10, 2009, the Standing Policy Committee on Infrastructure Renewal and Public Works concurred in the recommendation of the Winnipeg Public Service and submitted the matter to the Executive Policy Committee and Council.

ADMINISTRATIVE REPORT

ISSUE: BRADY LANDFILL – LANDFILL GAS AND RESOURCE RECOVERY PROJECT

Critical Path: Standing Policy Committee on Infrastructure and Public Works – EPC - Council

AUTHORIZATION

| Author | Department Head | CFO | CAO |
|---|---|---------|---------------------------|
| D. Drohomerski, C.E.T. Manager of Solid Waste Services | B. D. MacBride, P. Eng. Director, Water and Waste | M. Ruta | A Robinson, Deputy CAO |

RECOMMENDATIONS

1. That Council approve issuance of a request for proposals (RFP) for a landfill gas and resource recovery project at the Brady Landfill site according to the conditions outlined in this report.
2. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of Recommendation 1.

IMPLICATIONS OF THE RECOMMENDATIONS

Financial: Funds have been requested in the Capital Estimates for this project in 2010. Additional funding may be required in the Current Estimates starting in 2011. Actual funding required for this project can only be ascertained once the proposals have been received and evaluated

Regulatory: The Province has advised that under The Climate Change and Emissions Reductions Act, the City will be required to mitigate landfill emissions at the Brady Landfill by December 31, 2010.

Environmental: From an environmental perspective, mitigating emissions from the Brady Landfill is the single most effective action the City can take to address the issue of climate change. While the Brady Landfill is not included in the City's corporate inventory, the estimated greenhouse gas (GHG) reduction of 97,000 tonnes per year represents more GHG than all other City operations combined. Moving ahead with this project will be a significant action to deal with climate change.

HISTORY

The Materials Management Division has advised that Council approval is required to issue a request for proposals for a term greater than five years.

On March 19, 2008, Council adopted the following recommendations contained in a report from the Water and Waste Department dated February 26, 2008:

1. That the Brady Road Landfill Gas Capture Program be approved as a new capital project in the amount of \$150,000 in 2008 to obtain environmental approvals, review project delivery models and to finalize a business case.
2. That the \$150,000 less any contribution from other governments be funded from retained earnings in the Solid Waste Disposal Utility.
3. That an agreement for cost sharing this project with other senior levels of government be negotiated and brought forward to Council for approval.
4. That the Winnipeg Public Service pursue opportunities to sell the captured landfill gas to a third party such as Manitoba Hydro and to investigate further the sale of greenhouse gas reduction credits.
5. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

Regarding Recommendation 1. above; Environment Act Licence No. 2890 dated July 22, 2009 has been issued by the Province for a landfill gas collection and flaring operation at the Brady Landfill. Any further licensing can only be dealt with once a specific use (other than flaring) has been identified through the recommended RFP process. Also, a report, "Brady Road Landfill Gas Utilization Project Delivery Model Analysis", was completed by Deloitte dated March 19, 2009. This report provided the basis for the business case principles for the RFP.

Regarding Recommendation 2. above; This funding has been utilized for the licensing process, the report by Deloitte and preparing technical information to be included in the RFP. Application will be made for reimbursement of these expenses from the Province, however the extent of reimbursement is not known at this time.

Regarding Recommendation 3. above; Cost sharing this project has been discussed with the Province and the City is awaiting the Province's decision.

Regarding Recommendation 4. above; Extensive negotiations have taken place regarding utilization of the landfill gas as a fuel to displace part of the needs for natural gas at the University of Manitoba, which involved the Province and Manitoba Hydro. However, it was ultimately decided that the best route for the City to follow is to issue an RFP. Thus far, the Province's position is that any greenhouse gas credits from a landfill gas (LFG) project will belong to the Province.

There has been unsolicited expressions of interest not only for the energy resources in the LFG at Brady, but also for other landfill/solid waste based resource recovery opportunities. According to the information received, there may be efficiencies and economic benefits available through integration of a LFG project with the recovery of material and/or energy resources from components in solid waste, including but not limited to compostable materials, wood, wood waste, cardboard, and other recyclables. Therefore in addition to LFG recovery and utilization, the proposed RFP will include the option of including other resource recovery proposals, provided that the mandatory LFG component is included.

A list of the mandatory and optional requirements for the RFP are as follows:

Mandatory Requirements

1. Base case project to include design, build, operate and finance a LFG collection and flaring Project
2. Project life of 20 years
3. Base case system capacity of 1000 cfm of LFG
4. City not obligated to award a contract for all or any portion of the work
5. Bidder responsible for all approvals additional to the existing LFG collect and flare Environment Act Licence
6. Proposal(s) with the highest financial benefit to the City will be selected for negotiation
7. Must meet all regulatory requirements including but not limited to LFG collect/flare Environment Act Licence and any energy-related requirements
8. Indemnification/Insurance requirements
9. Regulatory requirements take precedence over utilization requirements
10. Landfill operational requirements take precedence over utilization requirements
11. City does not warrant quality and quantity of landfill gas
12. City does not warrant the quantity or composition of waste received at the Brady Road Landfill
13. Developer/Operator is responsible for any environmental impairment or other damages arising from implementation and operation of its system(s) and any fines levelled against the City from any such events
14. City will provide certain lands for project use
15. Proposals must be based on demonstrated technology
16. Bidders must demonstrate comparable successful project history
17. Financial analysis to be based on no availability of GHG emission offsets
18. System(s) to be owned by the Developer with the disposition if abandoned by the Developer specified in the project contract
19. The City will be responsible for any regulatory compliance LFG system modifications required that are not included in the RFP

20. Future financial benefits not now defined to be based on a 50/50 share arrangement
21. Financial offering must include all costs/revenues to the City over the project life. If applicable, the revenue sharing structure with the City must be specified, and must include the proposed structure (e.g. performance premium) for remuneration in the event LFG quantities exceed the annualized base case capacity.
22. Construction of base case project must begin by September 1, 2010 and be operational within 12 months
23. Developer must identify any risks additional to the ones identified in the RFP that are to be assumed by the City

Optional Requirements

1. Bidders may propose expansion(s)/enhancement(s) to the base case project identified in the Mandatory Considerations
2. Bidders may propose LFG utilization and other landfill/solid waste based resource recovery projects. For example, in addition to LFG utilization, the City would be interested in utilization of the resource value in other components of the waste stream including but not limited to compostable materials, wood, wood waste, cardboard, and other recyclables.

Funding of \$8,900,000 has been requested in the Capital Estimates for this project in 2010. This budget would only be sufficient to design and construct a LFG collection and flaring system. It is anticipated that there will be a contribution by the Province towards this project.

However, the energy value of the LFG may offset all or a portion of these costs or even result in a net royalty to the City. Furthermore, there may be other financial benefits with other resource recovery opportunities. The proposals will be evaluated on the basis of greatest quantifiable financial benefit to the City.

A further report would be submitted to Council for award of a project once the bids have been evaluated.

FINANCIAL IMPACT

Financial Impact Statement

Date: **October 2, 2009**

Project Name:

First Year of Program

2010

Brady Road Landfill Gas and Resource Recovery

| | <u>2010</u> | <u>2011</u> | <u>2012</u> | <u>2013</u> | <u>2014</u> |
|--|---------------------|-------------|-------------|-------------|-------------|
| Capital | | | | | |
| Capital Expenditures Required | \$ 8,900,000 | \$ - | \$ - | \$ - | \$ - |
| Less: Existing Budgeted Costs | 8,900,000 | - | - | - | - |
| Additional Capital Budget Required | <u>\$ -</u> | <u>\$ -</u> | <u>\$ -</u> | <u>\$ -</u> | <u>\$ -</u> |
| Funding Sources: | | | | | |
| Debt - Internal | \$ - | | \$ - | \$ - | \$ - |
| Debt - External | 4,450,000 | - | - | - | - |
| Grants (Provincial Funding) | 4,450,000 | - | - | - | - |
| Reserves, Equity, Surplus | - | - | - | - | - |
| Other - Enter Description Here | - | - | - | - | - |
| Total Funding | <u>\$ 8,900,000</u> | <u>\$ -</u> | <u>\$ -</u> | <u>\$ -</u> | <u>\$ -</u> |
| Total Additional Capital Budget Required | <u>\$ -</u> | | | | |
| Total Additional Debt Required | <u>\$ 4,450,000</u> | | | | |
| Current Expenditures/Revenues | | | | | |
| Direct Costs | \$ - | \$ - | \$ - | \$ - | \$ - |
| Less: Incremental Revenue/Recovery | - | - | - | - | - |
| Net Cost/(Benefit) | <u>\$ -</u> | <u>\$ -</u> | <u>\$ -</u> | <u>\$ -</u> | <u>\$ -</u> |
| Less: Existing Budget Amounts | | | | | |
| Net Budget Adjustment Required | <u>\$ -</u> | <u>\$ -</u> | <u>\$ -</u> | <u>\$ -</u> | <u>\$ -</u> |
| Additional Comments: The costs shown are for the mandatory base case option for landfill gas collection and flaring only. The actual cost will not be known until the proposals are received and evaluated. Contribution from the Province may be adjusted. | | | | | |

"Original signed by D. Capp, C.G.A."

Darlene Capp, C.G.A.

Acting Manager of Finance & Administration

CONSULTATION**In preparing this Report there was consultation with:**

Legal Services Division

Corporate Finance, Materials Management Branch

SUBMITTED BY

Water and Waste Department

Solid Waste Services Division

Prepared by: Tony Kuluk, P. Eng.

Date: October 26, 2009

File No. 011-15-04-07-00