

REQUEST FOR PROPOSAL (RFP):
Organics Processing Facility - Technology and Site Selection Review
August 2009

1 Statement of Purpose

The Municipality of Jasper is undertaking a study to assess the technical, environmental and economic dimensions of constructing a new organics processing facility. Implementation of the study results will increase the rate of diversion of the community's waste stream through advanced composting technology. Site and technology options will be evaluated and a life-cycle analysis will be applied including transportation impacts; land use impacts; greenhouse gas emissions; and air quality impacts. The overall goal of the study is to determine the most effective solution for diverting organic waste from the regional landfill thereby reducing Jasper's landfill disposal costs, associated transportation costs and greenhouse gas emissions.

The study will thoroughly investigate new and potential technologies for composting including but not limited to the feasibility of co-composting wastewater biosolids with municipal organic wastes to produce a Class A compost. The study will examine the costs (capital, operational and maintenance) for hauling and processing organic materials, and the potential options and costs for an organics processing facility.

In order to increase Jasper's waste diversion, a new compost collection and processing system should be considered that can accept all types of organics, as well as address the existing issues of cold weather composting and process time.

The scope of this RFP is focused on a) processing technologies and b) site selection.

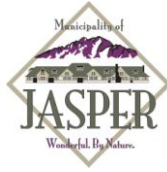
2 Description and Background

With solid waste disposal and fuel costs on the rise, the Municipality of Jasper wants to increase waste diversion and minimize the amount of waste transported to the regional landfill. A system that efficiently processes organic waste is a possible solution.

Jasper's 2007 Waste Audit identified a number of areas where improved separation is necessary to achieve the municipal goal of a 50% diversion rate by 2011 (excluding biosolids). Present diversion performance is approximately 29% (excluding biosolids).

About 27% of Jasper's waste going to the landfill is organic matter that could be composted within our existing composting system (Jasper Waste Audit, 2007). An additional 11% of the landfilled material is organic matter that could be composted with an improved composting system. Together, this large quantity of material could be diverted from the landfill. Jasper needs to look at increasing the collection of organic materials both residentially and commercially in order to attain its goal of 50% waste diversion.

In 2005 the Municipality of Jasper conducted a kitchen organics pilot project. Through this project the Municipality of Jasper Request for Proposal



Municipality determined that residents were in favor of an organics program to reduce solid waste. Since the completion of the study, the Municipality has been taking steps to improve the accessibility of bear-proof containers for composting in town. This desire, coupled with the data from the 2007 Waste Audit, indicate the potential opportunities inherent in a full scale organics diversion program.

If 70% of the currently accepted organics in the MSW were captured, over 600 additional tonnes of material would have to be composted at the Jasper Transfer Station. This amount would stress the existing system, requiring more windrow space than is available. There are also concerns that portions of the compost windrows may not achieve adequate pathogen kill due to the use of open windrows in cold winters and poor mixing (some areas of the pile don't reach high enough temperatures). The existing compost process is inefficient, with most compost spending 2 to 5 months in windrows.

Lack of convenience is a major factor contributing to low participation in residential composting. To increase participation, it is proposed to place wildlife proof compost bins beside every residential garbage bin (approximately 45 bins in total) throughout town. The goal is to make dropping off compost as convenient as dropping off garbage.

Current composting methods

Kitchen organics and biosolids are composted separately at the Jasper Transfer Station:

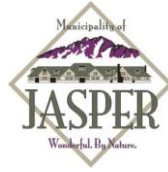
Kitchen organics

Since the early 1990s, Parks Canada has operated a windrow organics composting program at the Jasper Transfer Station. To date windrow composting has been an adequate method of processing the volume of organics collected. In the future, in order to operate a full scale municipal organics program, a long term solution for composting is needed. With a community program in place, the volume of organics will exceed the capacity of the current windrow method. Further, the open windrow composting operation is an attractant for birds and other wildlife outside of the fenced area. This issue needs to be resolved in order to comply with *Canada National Park Act and Regulations* and national park values.

Compost in Jasper is currently collected from 10 residential bins, 2 collection depots, and approximately 15 businesses in town. In 2007, we collected 40% of the organics in the waste stream that are accepted by the present compost system.

After the compostable materials are taken to the Transfer Station, they are mixed with sawdust and piled in open windrows for processing and curing. Windrows are turned every 2 days for roughly 4 months, or until test samples meet Class A composted soil requirements.

Parks Canada staff at the Jasper Transfer Station are responsible for processing the kitchen organics compost at the transfer station.



Biosolids

Biosolids from the Jasper Wastewater Treatment Plant (WWTP) are composted in aerated windrows at the Jasper Transfer Station. When the curing process is complete the Class B compost is used for rehabilitation projects throughout Jasper National Park. Biosolids are mixed with woodchips at the WWTP and then transported to the Transfer Station to be composted. The biosolids are treated in static, aerated windrows for at least 45 days, and are then moved to a curing pile until test samples meet Class B compost requirements. This may take as long as 4 months.

United Water (the contract WWTP operator) is responsible for WWTP operations including processing of biosolids compost at the Jasper Transfer Station.

Composted soil is currently used by Parks Canada for reclamation projects throughout the park, and to a much lesser degree by residents for home gardening. Because finished compost is spread throughout Jasper National Park, it's essential that it also be weed free. Both compost streams contribute to odor problems, attract wildlife and take up considerable space at the site.

Volumes:

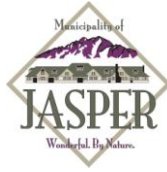
| Category | 2002/03 | 2003/04 | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 |
|------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Food Waste | 368,010 | 365,160 | 369,310 | 341,880 | 318,950 | 269,120 | 338,275 |
| Yard Waste | 269,049 | 199,923 | 201,920 | 282,515 | 195,842 | 167,466 | 121,122 |
| Compost for sale | 140,490 | 238,200 | 72,800 | 12,900 | 94,500 | 2,100 | 15,800 |
| Totals | 777,549 | 803,283 | 644,030 | 637,295 | 609,292 | 438,686 | 475,197 |

| Biosolids from WWTP | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|---------------------|------------------|-----------|-----------|-----------|-----------|-----------|
| sludge | | 1,391,000 | 1,661,000 | 1,798,000 | 2,133,000 | 1,591,000 |
| amendment | | 1,391,000 | 1,180,000 | 1,585,000 | 965,000 | 620,000 |
| | 1,500,000 | | | | | |
| | finished compost | | | | | |

Note: All weights are in kilograms

Yard waste includes both Commercial and Residential

Records for delivery and finished product transfer do not reconcile, but we believe delivery weights to be



relatively inaccurate.

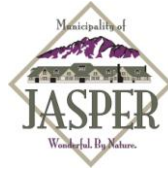
There may also be opportunities to process organics from surrounding communities, *e.g.* Hinton. Discussions with the Town of Hinton are ongoing.

3 Scope of Work

The intent of the study is to produce a report with recommendations on technology and site selection. The successful applicant will provide the Municipality of Jasper with the information required to determine the most appropriate processing technology and the most appropriate location based on that technology, local land use and environmental and social constraints, for construction of a new compost processing facility for the community.

The following specific objectives are to be achieved:

1. **Technical evaluation of available composting systems and recommendation of which is most suitable for Jasper to produce Class A compost**, including:
 - a. Study of the mix of local feedstocks (including meat and dairy) to determine process requirements for control of carbon/nitrogen ratio, moisture, oxygen and temperature factors.
 - b. Study the range of amendment options, including but not limited to, recycling streams, *e.g.* newsprint, mixed paper, ground clean C/D waste and wood waste.
 - c. Control of public health and other identified nuisance factors.
 - d. Capacity-technology-manpower options analysis.
 - e. Identification of finished compost quality based on applicable CCME standards.
 - f. Capital cost ranges for preferred options.
 - g. Operating and maintenance costs for preferred options.
 - h. Design must be energy efficient and capitalize on opportunities to increase the energy efficiency of the entire operation.
 - i. Opportunities to harness the energy (*e.g.* the generation and use of bioenergy to power processing equipment or other systems).
 - j. Opportunities to recover heat.
 - k. Ability to monitor fuel and electricity use associated with the system, *i.e.* measure the GHG emissions emitted as a result of the composting operation.
 - l. Opportunities to lower and capture GHG emissions (CO₂, SF₆, CH₄, N₂O, HFCs PFCs).
 - m. Ability to weigh tonnages (feedstock and finished compost).
 - n. Mechanisms to control leachate/runoff.
 - o. Mechanisms to control emissions.
 - p. Mechanisms to control odour.
 - q. A mechanism to ensure finished compost is weed free.



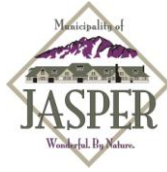
- r. Must comply with Alberta Environment *Composting Guidelines* (draft 2009).
 - s. Must comply with Alberta Environment *Standards for Composting Facilities in Alberta* (2007).
 - t. Must comply with *Canada National Parks Act and Regulations* and its spirit and intent.
 - u. Allows participation in composting offset programs developed by Alberta Environment.
2. **Review of potential sites and recommendation of which site is most appropriate for the chosen technology**, including:
- a. Evaluate and choose an appropriate location (two candidate locations are proposed – the Jasper Waste Transfer Station and the Jasper Waste Water Treatment Plant).
 - b. Determine the space requirement for the chosen system.
 - c. Determine the zone of influence for the chosen system.
 - d. Determine impacts to surrounding land use and land users.
 - e. Identify manpower and equipment requirements; identify synergies with existing on site operations.
 - f. Identify costs (capital, operational and maintenance) associated with each location.
 - g. Identify GHG emissions associated with each candidate location and identify opportunities for reduction.
 - h. Must comply with Alberta Environment *Composting Guidelines* (draft 2009).
 - i. Must comply with Alberta Environment *Standards for Composting Facilities in Alberta* (2007).
 - j. Must meet or exceed all provincial and federal regulations for the operation of compost facilities.
 - k. Must comply with *Canada National Parks Act and Regulations* and its spirit and intent.
3. **Identify market opportunities for finished compost.**
- a. Consider and present feasibility of selling finished product, *ie.* compost.

The Scope of Work shall be considered complete when the above objectives are met and presented in a final report.

4 Requirements for Proposal Preparation

Proposals must include, but are not limited to, the following information:

- Company name;
- Company address;



- Brief description of the company's area of expertise, and how it relates to the Municipality of Jasper and this project;
- Description of the proposed workplan required to accomplish the Scope of Work;
- Project schedule and time-line, including proposed start date;
- Detailed budget illustrating all costs, and differentiating between fees and expenses or disbursements. Budget must illustrate daily or hourly personnel charge-out rates and estimated project time required;
- Separate costing for, and description of, on-going technical support offered;
- Samples of work done in similar communities;
- Three (3) current professional references; and
- Three (3) current client references.

Please ensure that your fee quotation for any additional services is separate and independent from the fee quotation for the services required.

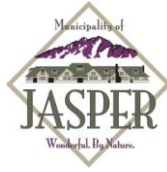
Firms that are interested in bidding on this Request for Proposal are invited to submit any additional information which they feel would assist the selection committee in their decision.

To be considered, proposals must be received no later than 3:00 pm MDST, Friday September 11, 2009.

Emailed submissions are both acceptable and expected. A signed paper copy should follow:

Lori Rissling Wynn
Environmental Stewardship Coordinator
Municipality of Jasper
#3 Compound Rd.
Box 520
Jasper, Alberta
T0E1E0

The envelope or subject line should state: **Organics Processing Facility - Technology and Site Selection Review.**



The proposal with the lowest bid will not necessarily be chosen.

5 Evaluation and award process

The Municipality of Jasper will appoint an evaluation team that will review and evaluate the Proposals. The evaluation of Proposals will be based solely on the contents of Proposals, and any clarifications provided in writing in response to questions asked by the Evaluation Team.

Proposals are due by 3:00 pm MDST, Friday September 11, 2009, and will be evaluated on the basis of a 100-point rating system with points distributed as follows:

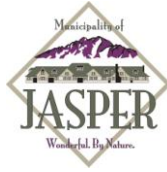
- Experience of consultant, for example:
 - compost facility design and operation
 - new technology research and development
 - assessment experience
 - combined stream optimization
 - innovation and commitment to sustainability
- Technical and management capabilities 50%
- Methodology
 - work plan, including budget allocation 30%
- Cost 20%

It is assumed that travel costs will be no more than 15% of the overall budget.

Evaluation of Proposals

All submissions received in response to this RFP will be evaluated and the Proponent judged by the Municipality of Jasper to have the "best overall Proposal" will be selected as the Preferred Proponent to enter into negotiations leading to a Contract with the Municipality of Jasper for this Project.

The Municipality of Jasper reserves the right, in its absolute discretion, to accept the Proposal which it deems most advantageous to itself and the right to reject any or all Proposals, in each case without giving any notice. The lowest or any Proposal will not necessarily be accepted. In no event will the Municipality of Jasper be responsible for the costs of preparation or submission of a Proposal other than those noted within this document;



Proposals which contain qualifying conditions or otherwise fail to conform to the instructions to Proponents may be disqualified or rejected. The Municipality of Jasper may, however, in its sole and absolute discretion, reject or retain for its consideration Proposals, which are non-conforming because they do not contain the content or form required by the Instructions to Proponents or for failure to comply with the process for submission set out in these Instructions to Proponents.

Clarifications of Proposals

If the Municipality of Jasper evaluation team decides that a Proposal is unclear or deficient in some aspects, but that these deficiencies are capable of being clarified, the Evaluation Team may invite a Proponent to provide clarifications, by written submission or by presentation to the Evaluation Team. No clarifications will be received except on invitation from the Municipality.

Right Not to Award

The Proposal that scores the highest, or any Proposal, will not necessarily be accepted. The Municipality of Jasper reserves the right to reject any or all of the Proposals. If it is determined that all of the Proposals are unacceptable, or the Municipality decides in its sole and absolute discretion that it does not, for any reason, wish to continue with this RFP process, then the Municipality may reject all of the Proposals. In the event that all of the Proposals are rejected, the Municipality reserves the right to call for tenders or call for proposals for the same or similar Work.

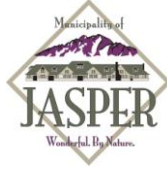
6 Contacts

The Municipality of Jasper representatives responsible for this project are:

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780-852-1562
780-852-8589 (cell)

7 Proponent Responsibilities



The Proponent is responsible for the following:

- a) The Proponent must be able to start the work no later than October 31, 2009.
- b) Providing all labour, materials, supplies and transportation necessary to complete the work.
- c) Submission of one electronic copy (Word) and one hard copy of the proposal.
- d) Safekeeping and return of all materials loaned by Municipality of Jasper and Parks Canada if required.

8 *Municipality of Jasper Responsibilities*

Municipality of Jasper is responsible for the following:

- a) Providing the Proponent with all relevant materials, in its possession, pertaining to this project.
- b) Reviewing, in conjunction with the Municipal Staff, the proposal within fourteen (14) days of receipt from the Proponent.