

SUMMARY OF COMMENTS / RECOMMENDATIONS

PROPONENT: Ranchers Choice Beef Co-op Ltd.
PROPOSAL NAME: Ranchers Choice Beef Processing Facility
CLASS OF DEVELOPMENT: Class 1
TYPE OF DEVELOPMENT: Meat Processing and Slaughter Plant
CLIENT FILE NO.: 5173.0

OVERVIEW:

On January 31, 2006, MB Conservation received an Environment Act Stage 1 Proposal, dated January 16, 2006, from Ranchers Choice Beef Co-op Ltd, respecting the proposed construction of a beef slaughtering and processing facility designed for slaughtering and boning 1,650 cattle per week on a one shift basis, incorporating: a livestock barn; and a DAF (dissolved air flotation) unit for the pretreatment of the process wastewater. The pretreated wastewater, and any sanitary sewage generated within the plant, would thereafter be separately directed into a proposed on-site wastewater equalization basin that would be lined and also equipped with an insulated cover, from which facility the overall mixed and equalized wastewater would be pumped via a forcemain to the R.M. of Dauphin's industrial wastewater treatment facility (I-WWTF), (which is also presently being proposed for construction under a separate Proposal filed by the R.M. of Dauphin). Additional groundwater protection is incorporated into the proposed processing plant by means of synthetic membrane liners being proposed under the concrete floor of the barn area and under the concrete pad of the truck clean-out area. Blood and inedible organic wastes are proposed to be shipped to Saskatoon for rendering. All other solid wastes are proposed to be deposited Dauphin's landfill site, except for specified risk material that would be shipped to a secure landfill site. With regards to the R.M. of Dauphin proposing to accept the pretreated wastewater from the Ranchers Choice beef processing plant for further treatment in the R.M. of Dauphin's proposed I-WWTF, that arrangement is expected to be formalized through an Industrial Services Agreement to be signed by both parties.

Ranchers Choice proposes to construct the beef processing plant on land owned by the Ranchers Choice, zoned as an Industrial Park, and specifically located on the N/E 1/4 of Sec.16, Twp 25, Rge. 19 WPM., within the R.M. of Dauphin.

The Proposal was advertised in the Winnipeg Free Press on March 4, 2006, as well as in the Dauphin Herald on March 7, 2006. Also, copies of the Proposal were placed in Public Registries at: the Union Station (Main Floor) in Winnipeg; the Winnipeg Public Library; Manitoba Eco-Network; and the Dauphin Public Library. The closing date for the receipt of public comments was specified as April 11, 2006.

Copies of the Proposal were as well sent to the applicable members of the interdepartmental Technical Advisory Committee, and to interested federal departments, via the Canadian Environmental Assessment Agency (CEAA), for their review and comment by no later than April 11, 2006. The CEAA subsequently requested, on behalf

of Environment Canada and the Department of Fisheries and Oceans, to have the response period extended to April 25/06. That request was granted.

On June 12, 2006, MB Conservation learned by way of information obtained from the CEAA, that PFRA will likely be providing funding assistance to the proponent. This information initiated a trigger under the CEAA, and resulted in the CEAA having to initiate their own review of the project late into the provincial review of the project under the Environment Act. This federal review is presently ongoing.

COMMENTS FROM THE PUBLIC:

In response to the advertisement of the Stage 1 Proposal, a response in support of the Proposal was received from a Ms. Marion Kruhmin. As well, a petition signed by about 124 persons was received in support of the Stage 1 Proposal.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Agriculture, Food and Rural Initiatives commented that they support the proposed Development.

Manitoba Transportation and Government Services commented that:

- permits for the Development would be required from their Department for any changes to the access and any construction or placement of structures within the control area adjacent to Provincial Road PR362, within 125 feet from the edge of the highway right-of-way;
- whereas a traffic study for the operation of the Development is intended to be undertaken as part of the next Stage 2 Proposal, they wish to bring to the attention of the proponent that the Dauphin Economic Development Corporation, as part of an approval for a new public road to be constructed between PR 362 and the Dauphin Industrial Park, are already under obligation to have a qualified professional to undertake such a traffic study;
- During the construction phase the proponent must provide appropriate traffic control for access to the highways (as per their Departmental Traffic Control Guidelines, and to approach their department for additional safety advice.

Disposition

The Proponent responded that the required permits will be obtained, and that a traffic study will form part of the Stage 2 submission.

Historical Resource Branch commented that they had no concerns.

Sustainable Resource Management Branch commented that:

- they have concerns respecting how odours are addressed in the Proposal by relying on dilution in the atmosphere;
- MB Conservation's odour nuisance management policy promotes pollution prevention, that is, designing a facility so that potential odours are reduced as much as possible before the facility is constructed and operated;

- trying to retrofit pollution control equipment, or changing processes, can be much more difficult and expensive than proactively addressing odorous emissions in the design stage; and that
- as a minimum, the proponent should provide a description of design measures incorporated into the facility, other than dilution, that will reduce odorous emissions from the operation.

Disposition

The Proponent responded that air filtration systems to reduce odours will be installed in the barn, that odours from the equalization basin will be reduced through the addition of normal industrial systems, and that a manure management system will be identified as part of the Stage 2 submission.

MB Conservation – Western Region commented that:

- to reduce the solid waste loads being proposed for disposal into the City of Dauphin’s landfill site, at least the manure and straw from the trucks and the barns should be managed through an approved manure management plan, possibly involving off-site composting based on an approved compost management plan for subsequent land application, but which would at least utilize the manure as a resource rather than reduce the capacity of the landfill site;
- off-site cattle staging areas, capable of housing 300 cattle or more, would be subject to the Manure and Mortalities Management Regulation;
- Table 4:1 strangely identifies discharge requirements for P and N as 10 mg/l and 1 mg/l whereas the effluent is only being pretreated;
- the changes made to Ranchers’ original EIA suggest indicate that it is unnecessary to provide secondary containment for the pretreatment building due to the improbability of a spill, whereas they have occurred at the Maple Leaf plant in Brandon, and given the proximity of the Ranchers plant to the Vermilion River, consideration should be given to the containment of potential spills from the pretreatment building and other liquid contaminant sources such as the parking lot;
- provisions should be made for clean water run-off from the site;
- Rancher’s Proposal indicates that analytical data will be provided to MB Conservation on a quarterly basis, whereas the norm is to provide it on a monthly basis, and a good communication protocol should be established between the Ranchers’ plant and Dauphin’s I-WWTF;
- dust control should be provided by the Proponent within the Ranchers’ Choice site;
- whereas used compressor oil is proposed to be burned on-site, Ranchers Choice will be required to register as a hazardous waste generator for waste oil, or have the waste oil directed to an approved oil recycling depot;
- consideration should be given to an alternative means of disposal of the condensate water such as recycling it to the cooling tower; and that
- the proponent should secure a confirmation from the City of Dauphin as to the availability of the required water supply to meet the demand of the proposed Development, considering as well the future city and rural increases in water use.

Disposition:

The Proponent responded that:

- a manure management plan will be submitted as part of the Stage 2 submission.
- composting, as a method of management at the landfill site, is being considered;

- no staging of cattle will occur on site, and off-site staging areas will be third party facilities that will be expected to be in compliance with the manure management regulations;
- Ranchers' original Proposal was corrected by Earth Tech in a separate document (which formed part of the over-all submission) to reflect the revisions that were made to the pretreatment and the subsequent final treatment of Ranchers Choice wastewater;
- roof drains will be directed to splash pads and then to ditches;
- parking lot drainage will be accommodated by ditches sized to accommodate the flow; and
- reporting requirements data will be undertaken as required by the Licence.

Water Stewardship commented that:

- since the kill plant will be connected to a potable water supply line, proper backflow prevention devices should be installed, coupled with caution to prevent cross connections;

Disposition:

The proponent responded that cross connection protection will be provided.

- no information was offered on the existence of any drinking water sources being used within the interviewed area;

Disposition:

The proponent responded that outside of the City's water supply network 35 registered wells exist for domestic use, but they exist in a region where a usable aquifer is not considered to exist. There are no known public water supply systems in the vicinity of the project area, and there are licensed withdrawals and 3 applications for water withdrawal from the Vermilion River, at locations upstream of upstream of the proposed I-WWTF.

- the Public Health Act MB regulation 331/88R requires the approval of water distribution line extensions of more than 300m, and also sewer line extensions to be approved before construction;

Disposition:

The proponent responded that the approvals will be acquired as required.

- section 11.1.5 of the EIA indicates that routine monitoring will be provided for groundwater. A subsequent report by Earth Tech Inc. proposed some changes for the membrane installation. Without any monitoring methods it is unclear how someone will be able to verify that no contamination is taking place during the proposed operation;

Disposition:

(The proponent's response suggests that the question was misunderstood.) The matter will be addressed in the Stage 1 Licence.

- no information was provided in the assessment on potential impacts to surface water quality during construction of the proposed facility, nor any intended mitigation measures to be employed;

Disposition:

The proponent responded that Ranchers' proposed facility is 870 metres from the nearest waterway.

- the project will result in approximately a 10% increase in water use from Dauphin's water supply, which may impact the water availability to protect and maintain the aquatic resource (both in the channel and the fishery that exists in the reservoir, as well as the water quality impacts from the effluent generated and treated through the proposed Industrial Wastewater Treatment Facility (IWWTF);

Disposition:

The proponent responded that Ranchers' water demands have been compensated for through repairs to the City of Dauphin's water supply system, and that the I-WWTF discharge will serve to partially mitigate some negative effects of the municipal lagoon discharge as well as including nitrate and ammonia concentrations.

- the Vermilion River has experienced zero flow periods in March as well as August and September. Since 2002, the City of Dauphin began using the Vermilion River reservoir as a sole source of raw drinking water. In dry years, as experienced in 2003, the outflow can be turned off completely. This indicates the potential for an increased frequency of zero flows in the river that may be further exacerbated by the need to supply Ranchers Choice facility with potable water; and
- there is concern that meeting these potable water demands could lead to further dewatering of the reservoir which has an established recreational fishery, and that more withdrawal in the winter would probably lead to winterkill.

Disposition:

The proponent responded that:

- Dauphin's Water Rights Licence allows for the diversion of 17.1 ML/day, whereas the City's treatment plant has a capacity to treat 8.8 ML/day but is presently only treating a water demand of 4.1 ML/day;
- Ranchers Choice Development will require 3,158 m³ per week which would cause a 13% increase in the water demand on Dauphin's water treatment plant. Furthermore a recent leak repair in the distribution system reduced the overall City's water demand by 0.5 million litres per day. Also, the affect on aquatic fauna would be unchanged, or even improved, in that the water removed from the Vermilion Reservoir would be returned to the Vermilion River via the R.M. of Dauphin's proposed I-WWTF's outfall while also providing a continuous discharge;
- With respect to risk of drawdown of the reservoir, the City of Dauphin's Water Rights Licence allows for supplementing the Vermilion River with water from Edwards Creek. The information collected as part of the proposed river monitoring study could be expanded to include the reservoir such that operating guidelines could be developed to invoke the use of Edwards Creek once a certain critical elevation of water in the Vermilion Creek is reached;

Water Stewardship responded:

- they acknowledge and concur with the points made by the Consultant but stressed that they remain with the concern that the Vermilion River watercourse does not currently have sufficient in-stream flows to sustain the aquatic ecosystem;

- Whereas the City of Dauphin holds a Water Rights Licence that allocates enough water for current and future needs, the Minister of Water Stewardship now has the responsibility to consider in-stream flows that are necessary to ensure that aquatic ecosystems are protected and maintained. The in-stream flow needs for fish habitat protection also falls within the jurisdiction of the federal Fisheries Act. In that regard the City of Dauphin can manage its water withdrawals between Edwards Creek and Vermilion River reservoirs in a manner that minimizes the impact on in-stream flows. Further, the positive effect on flow volume of the I-WWTF discharges to a reach of river downstream of the reservoir is noted, but in the long term, the Intermountain Conservation District, in partnership with the R.M. and City of Dauphin and the Department of Water Stewardship, should develop an integrated watershed management plan that includes identification of water demand management initiatives and alternative sources for a sustainable water supply for the City of Dauphin. As part of this work, the CD and the City of Dauphin, together with the Province, should carry out an assessment of the in-stream flows that are necessary to maintain aquatic ecosystem health in the Vermilion River and Edwards Creek watershed.
- Regarding water quality, the current effluent from Dauphin's sewage lagoons has been and continues to be a concern from a fisheries perspective.
- Monitoring the water quality of the Vermilion River upstream and downstream of the combined effluent discharge outfall is critical.
- As to thermal effects within the Vermilion River, the proponent should conduct one or more thermal plume delineation studies, and have temperature monitoring stations installed upstream and downstream of the outfall.

Canadian Environmental Assessment Agency (CEAA) coordinated federal responses to Ranchers Choice Proposal, and received comments from Health, Environment Canada and DFO.

Health Canada commented that:

- pretreatment and storage of sanitary sewage within the plant may not be permissible in a federally registered food plant. Also human health hazards to the workers and to the food plant may exist in the handling of sewage screenings and servicing of pumps, valves, screens, tanks, etc.;
- similarly, wastewater sampling procedures may present a biological hazard to staff and the food plant environment, especially if the process water is combined with the sanitary sewage;
- additional sampling of the groundwater is recommended to confirm the baseline quality especially in consideration of exceedance inconsistencies of some microbiological and chemical results reported in the proposal;
- plant schematics indicate extensive use of screw augers, some with raised catwalks, which pose a potential safety hazard;
- the Proposal states that traffic along PR 362 will increase slightly when the plant is in operation. This seems to contradict Appendix 11 of the same document that shows the increase in traffic to increase by 351.8%;
- daytime and nighttime noise measurements at the site and at the nearby residents should be provided to verify any impact from noise emissions from the project.

Disposition:

The proponent responded that:

- the Proponent is designing the plant to comply with the requirements of the Canadian Food Inspection Agency.

Environment Canada commented that:

- they have no trigger under section 5 of the CEAA, but would like to participate in the provincial review of the proposed project;
- since the pretreated wastewater from the Ranchers Choice kill plant will be directed to the R.M. of Dauphin's proposed I-WWTF, the effluent quality from the kill plant will not be subject to the federal Meat and Poultry Products Plant Liquid Effluent Regulations; and
- the proponent makes a commitment to monitor and remediate odour concerns if they arise, but provides no detail as to what type of monitoring or type of remediation measures would be undertaken.

Disposition:

The proponent responded that:

- odors will be mitigated through good housekeeping and maintenance practices;
- the facility will be enclosed;
- manure will be managed on a daily basis; and
biofilters for the barn exhaust and pretreatment off-gasses may be considered for mitigation.

Fisheries and Oceans commented that:

- if the plants water supply requirement is controlled by the City of Dauphin's Water Rights Licence, is there enough water for both the City and the plant given that in 2003 the Vermilion Reservoir became dangerously low and had resulted in the interruption of overflow releases to the Vermilion River. Such circumstances affect the in-stream flow needs for fish and other aquatic fauna, as well as other users downstream.

Disposition:

The proponent responded that:

- Dauphin's Water Rights Licence allows for the diversion of 17.1 ML/day, whereas the City's treatment plant has a capacity to treat 8.8 ML/day but is presently only treating a water demand of 4.1 ML/day;
- Ranchers Choice Development will require 3,158 m³ per week which would cause a 13% increase in the water demand on Dauphin's water treatment plant. Furthermore a recent leak repair in the distribution system reduced the overall City's water demand by 0.5 million litres per day. Also, the affect on aquatic fauna would be unchanged, or even improved, in that the water removed from the Vermilion Reservoir would be returned to the Vermilion River via the R.M. of Dauphin's proposed I-WWTF's outfall while also providing a continuous discharge;
- With respect to risk of drawdown of the reservoir, the City of Dauphin's Water Rights Licence allows for supplementing the Vermilion River with water from Edwards Creek. The information collected as part of the proposed river monitoring study could be expanded to include the reservoir such that operating guidelines could be developed to invoke the use of Edwards Creek once a certain critical elevation of water in the Vermilion Creek is reached.

- Ranchers Choice is encouraged to work with the pertinent NGO's and government agencies to explore the development of an In-stream Flow Needs assessment of the Vermilion River to determine: the minimum in-stream flows required for species such as walleye and northern pike in the Vermilion River; to establish an operating plan for the Vermilion River and to explore the potential under-utilization of the existing water allocation from Edwards Creek, as a manner of offsetting impacts to the Vermilion River system.

PUBLIC HEARING:

The advertisement of the Proposal did not solicit a request for a public hearing.

RECOMMENDATION:

A draft Stage 1 Environment Act Licence, authorizing the construction of the proposed beef processing facility and an associated pretreated wastewater equalization basin is attached for the consideration of the Director of Environmental Assessment and Licensing. It is recommended that the Licence, if approved, be assigned to the Western Region for administration, surveillance, monitoring, ongoing compliance evaluation and enforcement responsibilities during the entire period of construction. At the request of the assigned regional Environment Officer, assistance can be provided, when necessary, by the assigned Environmental Engineer.

Due to the nature of this project, particularly with respect to the proposed future transfer of pretreated wastewater from Ranchers Choice to the R.M. of Dauphin's proposed industrial wastewater treatment facility, whereby it has been proposed to release the treated wastewater to the Vermilion River, the limited assimilative capacity that the river has to offer, and the potential threat to the fisheries that can develop under low in-stream flow conditions, as well as under winter conditions, it may be prudent to express a cautionary note in Rancher's Stage 1 Licence to the effect that in accepting the Stage 1 construction Licence, Ranchers Choice Beef Co-op must also accept the potential prospect that under future operating conditions, and in order for the R.M. of Dauphin to remain in compliance with the conditions of their operating Licence, operations at the Ranchers Choice beef processing plant might at times have to be curtailed, at the request of the R.M. of Dauphin, until the in-stream flow needs and/or the R.M. of Dauphin's IWWTF's effluent quality performance, are again suitable for sustaining the fish within the Vermilion River. This potential prospect may be less troublesome once the integrated watershed management plan, and the recommended studies on the Vermilion River's in-stream flow needs for sustaining the fish habitat are adequately addressed as per the recommendations of the Department of Water Stewardship and also the Department of Fisheries and Oceans.

It should be emphasized, however, that at present an Industrial Services Agreement between the R.M. of Dauphin and Ranchers Choice Beef Co-op is not yet signed, and the federal funding component for Ranchers Choice proposed beef processing plant is not yet secured.

PREPARED BY:

Clemens Moche, P.Eng.
Environmental Engineer
Municipal, Industrial and Hazardous Waste Approvals Section
June 26, 2006

telephone: (204) 945-7013
fax: (204) 945-5229
e-mail: cmoche@gov.mb.ca