

P&R 8.260 JRCC P-707.01

Parmalat Canada Inc. **Environment Act Proposal Milk Processing Facility** 



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July 2015





#### **ACKNOWLEDGMENTS**

To prepare this report various sources of information were investigated and researched. JR Cousin Consultants Ltd. (JRCC) wishes to thank Parmalat Canada Inc., the City of Winnipeg and Manitoba Conservation who contributed to the data and content of this study. In addition, we wish to commend the Parmalat Canada for their fortitude in addressing the need for a new milk processing facility to service their manufacturing needs.

#### **REMARKS**

JR Cousin Consultants Ltd. has conducted this environment act proposal in accordance with generally accepted professional engineering principles and practices for the purpose of identifying conditions that may have an environmental impact on the site. The findings and recommendations reached in this report are based on information made available to JRCC during the investigation and conditions at the time of the site investigation. Conclusions derived in this report are intended to reduce, but not wholly eliminate the uncertainty regarding potential environmental concerns on the site, and recognizes reasonable limitations with regards to time, accuracy, work scope and cost. It is possible that environmental conditions may change from the date of this report. If conditions appear different from those encountered and expressed in this report, JRCC should be informed so that mitigation recommendations can be reviewed and adjusted as required. Historical data and information obtained from personal communication used in this report, are assumed to be correct, however JRCC has not conducted further investigations into the accuracy of this data. JRCC has produced this report for the use of the client, and takes no responsibility for any third party decisions or actions based on information contained in this report.

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Letter of Intent to Purchase Land - Draft

Service Needs from the City of Winnipeg

Crown Lands & Property Agency - Lands Branch, June 4, 2015 Email Correspondence

## Appendix B

Manitoba Conservation and Water Stewardship - Wildlife and Ecosystem Protection Branch, June 5, 2015 Email Correspondence

Manitoba Tourism, Culture, Heritage, Sport and Consumer Protection – Historic Resources Branch, June 4, 2015 Memorandum

## Appendix C

Wastewater Sampling Results Milk Processing Flow Diagram

## Appendix D

Facility Location Plan
Lot Layout Plan
Lot Grading Plan
Proposed Site Layout Plan

# **Environment Act Proposal Form**



Name of the development:					
Parmalat Milk Processing Facility					
Type of development per Classes of Development Regulation (Manitoba Regulation 164/88):					
Class 1					
Legal name of the applicant:					
Parmalat Canada Inc					
Mailing address of the applicant: 25 Rakely Court					
Contact Person: Mr. Clovis Capitar	ni				
City: Toronto	Province: Ontario	Postal Code: M9C 5G2			
Phone Number: (416) 641-2981	Fax: (416) 622-0106	email: clovis_capitani@pap			
Location of the development: St. Boniface					
Contact Person: Mr. Clovis Capitani					
Street Address:					
Legal Description: Lots 9 to 17, Block 3, Pt. Lot 230, Roman Catholic Mission					
City/Town: Winnipeg	Province: Manitoba	Postal Code: R2J 3V9			
Phone Number: (416) 641-2981	Fax: (416) 622-0106	email: clovis_capitani@par			
Name of proponent contact person for p	•	ssessment:			
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Date: July 6/15	Signature of proponent, or corp proponent.  Printed name:				
	Printed name:	OUSIN			

#### **EXECUTIVE SUMMARY**

#### General

Parmalat Canada Inc. is proposing to replace the existing milk processing facility in St. Boniface, Winnipeg, with a new milk processing facility, also in St. Boniface, Winnipeg. An Environment Act Licence will be required from Manitoba Conservation for the construction and operation of the proposed milk processing facility. JR Cousin Consultants Ltd. (JRCC) was retained for the engineering services related to the Environment Act Proposal.

### **Description**

Parmalat produces milk products which service Manitoba, Saskatchewan and parts of Ontario and Alberta. The existing Parmalat milk processing facility is being operated at capacity, due to limited space and concerns with the structural loading on the building, which is restricting future growth to production. The existing facility is also located in a residential area, which has lead to noise issues with surrounding residents. Therefore, the facility requires replacement and the most feasible option considered was the construction of a new facility in an industrial park, in St. Boniface, Winnipeg. The proposed facility would allow for 40% more milk production capacity and would allow for additional expansion in the future.

#### Wastewater

Wastewater from the proposed facility will be pre-treated for pH only and will be discharged into the City of Winnipeg wastewater collection system. The facility is estimated to have an average hydraulic flow rate of 31,000 L/hr, while the peak flow will be 55,000 L/hr, at initial start up. The organic loading is estimated to be 1.3 kg COD/m³. The flow rate will be regulated with an equalization tank and the pH will be buffered with chemical addition. Parmalat will require an Overstrength Dishcarge Licence issued by the City, which will allow for the discharge of effluent with parameters over the specified limits, at a surcharge rate. The wastewater will be monitored and tested by the City of Winnipeg regularly.

#### **Solid Waste**

The proposed Parmalat facility is estimated to continue to produce domestic waste, plastic, paper, cardboard, and milk by product waste. The domestic waste, plastic and paper will continue to be hauled to the Progressive Waste Solutions waste disposal ground (WDG), while the cardboard will continue to be collected by Kernel Cartons Ltd. The milk by-product waste is currently being sent to the Progressive Waste Solutions WDG, however, Parmalat is in discussions with the hog industry on possibly using this milk by product as hog feed.

## **Potential Concerns and Mitigation Measures**

From discussions with the client and a review of the current site operations, the potential concerns identified with the new Parmalat facility and associated mitigation measures include:

Potential Concern	Mitigation Measure
Noise from the milk production floor	Site designed for noise level below 85 dBA
Noise from the mink production hoof	Employees required to wear hearing protection



Potential Concern	Mitigation Measure
Chemical spills on production floor	Chemicals will have double walled containment or will have floors constructed for containment
Loss of vegetation	Clearing will be limited to the area of development
Spills or leaks during construction	Contractor to have emergency spill kit on site     Hazardous materials and fuel to be handled in accordance with all federal and provincial regulations
Discharge of wastewater	Wastewater will be discharged to the City of Winnipeg wastewater collection system
Storm water flow	Storm water will be discharged to a retention pond in the industrial park and then to the City of Winnipeg LDS
Health and safety	Employees will be required to adhere to safety program which includes utilizing personal protective equipment while on site

## Schedule, Funding and Approvals

Parmalat would like to begin construction in the summer/fall of 2015, with operation of the facility beginning in the fall of 2016. This project is expected to be privately funded by Parmalat Canada Inc. Construction permits will be required from the City of Winnipeg, along with an Overstrength Discharge Licence for wastewater discharge.



#### 1.0 INTRODUCTION AND BACKGROUND

The development described herein is for construction of a new milk processing facility for Parmalat Canada Inc., in St. Boniface, Winnipeg.

#### 1.1 Introduction

Parmalat Canada Inc. is proposing to construct a new milk processing facility to replace the existing Parmalat milk processing facility in St. Boniface, Winnipeg (see Facility Location Plan in Appendix D). A new facility is required, as the existing facility is restricting growth to the production process, due to the limited space and structural problems in the building. The existing building would require extensive upgrades for continued operation. An Environment Act Licence is required from Manitoba Conservation for the construction and operation of a new milk processing facility. JR Cousin Consultants Ltd. (JRCC) was retained for the related engineering services related to the Environment Act Proposal.

### 1.2 Contact Information

Mr. Jerry Cousin, P.Eng. JR Cousin Consultants Ltd. 91A Scurfield Boulevard Winnipeg, Manitoba R3Y 1G4

Phone: (204) 489-0474, Fax (204) 489-0487

Mr. Clovis Capitani Parmalat Canada Inc. 25 Rakely Court Toronto, Ontario M9C 5G2

Phone: (416) 641-2981, Fax (416) 622-0106

## 1.3 Background Information

The existing Parmalat Canada milk processing facility is located at 738 St. Joseph Street in St. Boniface, Winnipeg. This facility produces liquid milk products that are distributed throughout Manitoba, Saskatchewan, western Ontario, and parts of Alberta. The building that Parmalat is located in is over 100 years old and has been experiencing structural and environmental problems for several years, which has lead to portions of the building requiring additional structural support, and being condemned and abandoned. As a result, the milk processing capacity has been reduced and expansion at the site is not possible without extensive upgrades. Therefore, Parmalat Canada has decided to re-locate to a new, and larger, facility in St. Boniface, Winnipeg, to increase process capacity.

The existing milk processing procedures will remain similar in the new facility, however, the layout of the facility will be more efficient for the process. The existing wastewater from the facility is currently sent to a buffering tank in which pH is adjusted and the flow is then sent to the City of Winnipeg wastewater



collection system, under the requirements of an over strength discharge licence issued by the City of Winnipeg.

The construction of a new dairy processing facility would be considered a Class 1 development by Manitoba Conservation under the *Classes of Development Regulation* (*MR 164/88*) and would therefore require an Environment Act Licence for construction and operation.

## 1.4 Description of Previous Studies

There were three reports reviewed for the existing and proposed Parmalat processing facilities.

A preliminary geotechnical investigation report by AMEC Foster Wheeler (May 2015) was provided. The report indicated that a subsurface site investigation was conducted at the proposed Parmalat facility to determine the soil and groundwater conditions and to provide recommendations on building foundation construction.

A Phase 1 Environmental Site Assessment report by Dillon Consulting (April 2015) was provided. The report indicated that no actual environmental impacts or human health concerns were apparent at the proposed development site. Potential environmental concerns included:

- Soil or groundwater impacts at the CN Symington Railway Yard, located south of the subject site
- Soil or groundwater impacts at the Greater Winnipeg Water District Aqueduct and Railway line, located north of the subject site.

A noise assessment report by Protec Hearing Inc (May 2014) was provided. Sound levels were determined in various areas of the Parmalat facility by measuring with a hand held sound level meter. Sound levels ranged from 58 to 106 dBA. Any work environment with a sound level above 85 dBA should have employees wearing hearing protection.



#### 2.0 DESCRIPTION OF THE DEVELOPMENT

For each heading there is an information request from the Environment Act Proposal Form. These requests are repeated herein in italics followed by the pertaining response.

#### 2.1 Land Title/Location

Certificate of Title showing the owner(s) and legal description of the land upon which the development will be constructed; or, in the case of highways, rail lines, electrical transmission lines, or pipelines, a map or maps at a scale no less than 1:50,000 showing the location of the proposed development:

The proposed parcel of land for the development is located in the City of Winnipeg, on lots 9, 10, 11, 12, 13, 14, 15, 16 and 17 in Block 3, Pt. Lot 230, Roman Catholic Mission property (see Lot Layout Plan in Appendix D). The land is currently owned by the City of Winnipeg under land title numbers 2503345/1, 2350419/1 and 53237. Parmalat Canada has had discussions with the City of Winnipeg and they have an intent to purchase the land (see letter of intent attached in Appendix A).

## 2.2 Owner of Land and Mineral Rights

Owner of land upon which the development is intended to be constructed, and of mineral rights beneath the land, if different from surface owner:

The Crown Lands & Property Agency was contacted regarding the location of the proposed development for comment on the ownership of the mineral rights. According to the Crown Lands & Property Agency, the mines and minerals are owned by the Crown (Province of Manitoba), while the sand and gravel are owned with the surface title. Refer to the Crown Lands & Property Agency's email correspondence, attached in Appendix A.

### 2.3 Existing Land Use

Existing land use on the site and on land adjoining it, as well as changes that will be made in such land use for the purposes of the development:

This site is located at the corner of Prairie Trail West (proposed) and Mazenod Road, between the Greater Winnipeg Water District (GWWD) Aqueduct and Railway and the Canadian National (CN) Railway Symington Yard. This site is located within an industrial park. The site is approximately 7 hectares in size and is currently vacant grassland and forested land. The site does not currently have a designated access road. The site does not currently have adjacent businesses, however future business development is planned adjacent to the proposed development site. The surrounding land description is as follows:

- North GWWD Aqueduct and Railway followed by undeveloped grassland
- South Undeveloped grassland followed by the CN Railway Symington Yard
- West Undeveloped grassland and forest
- East Dirt access road, followed by undeveloped grassland.



## 2.4 Land Use Designation/Zoning Designation

Land use designation for the site and adjoining land as identified in a development plan adopted under The Planning Act or The City of Winnipeg Act, and the zoning designation as identified in a zoning by-law, if applicable:

The proposed development site is zoned as M3 - Heavy Industrial zoning district, based on zoning designations by the City of Winnipeg. The proposed development would be consistent with the surrounding zoning and land use in the area.

## 2.5 Description of Development

Description of proposed development and schedule for stages of the development, including proposed dates for planning, design, construction, commissioning, operation, and decommissioning and/or termination of operation (if known), identifying major components and activities of the development as applicable (e.g. access road, airstrip, processing facility, waste disposal area, etc.).

### 2.5.1 Project Schedule

Parmalat would like to begin construction on a new milk processing facility in the summer or early fall of 2015, upon receipt of the Environment Act Licence. Parmalat would like to commission and begin operation of the facility in the fall of 2016, upon completion of construction and after approval for use is obtained from Manitoba Conservation. No date for decommissioning has been set for the new milk processing facility, however the existing facility and land will attempt to be sold by Parmalat.

#### 2.5.2 Basis for Proposed Facility Site Selection

The location for the proposed facility was chosen based on land availability in the area that was located in an industrial district, and separation distance from surrounding residential areas. Also, the proposed site required access to City of Winnipeg infrastructure (i.e. roads, water and wastewater), City of Winnipeg services (i.e. garbage collection) and provincial utility services (Manitoba Hydro, Natural Gas and MTS). Parmalat indicated that the site required enough land area for future expansion of the facility.

The proposed facility would be located the following distances from the nearest residences:

- Approximately 1.1 km from the nearest resident to the southwest, beyond the CN Railway yard
- Approximately 1.3 km from the nearest resident to the west, beyond Lagimodiere Boulevard
- Approximately 1.4 km from the nearest resident to the north, beyond Dugald Road
- Approximately 1.5 km from the nearest resident to the east.



There is no standard setback distance from an industrial development to a residence established by the City of Winnipeg, however the City may require a certain buffer distance or sound attenuation in the building permits.

#### 2.5.3 Access Road

The proposed development site currently does not have an all weather access road, however it is intended that Mazenod Road will be developed along the east side of the facility and will provide access to the site.

## 2.5.4 Wastewater Discharge

Based on Part 7 or the City of Winnipeg Sewer By-Law (No. 92/2010) a generator of wastewater is not permitted to discharge wastewater into the wastewater collection system if limits of "Schedule B" are violated, unless the generator has an Overstrength Discharge Licence issued by the City of Winnipeg. This discharge licence may present limits or conditions on specific wastewater parameters.

#### 2.5.4.1 Existing Process

The existing milk processing facility currently discharges wastewater from the industrial processes into an equalization tank, where pH is adjusted with the addition of either sulphuric acid or sodium hydroxide. The pH of the process wastewater is adjusted to stay within the range outlined by the City of Winnipeg, which is between 5.5 and 11. The majority of the wastewater sent to the equalization tank consists of milk by products and cleaning by products. The flow into the wastewater collection system is balanced throughout the day. Parmalat currently has an Overstrength Discharge Licence with the City of Winnipeg, and the City manually tests the effluent on a weekly basis to determine whether the effluent concentrations meet the requirements of the City of Winnipeg sewer by-law limits. If concentrations exceed the sewer by-law limits, then Parmalat pays the City a surcharge, in accordance with the fee schedule, as determined by the City. The discharge effluent limits are described in the table attached in Appendix C, along with the sampling results for March 9, 2015. Parmalat indicated that the current wastewater produced has an average organic load of 1.56 kg COD/m³.

#### 2.5.4.2 Proposed Process

The proposed milk processing facility will operate with a similar process to the existing facility and the concentration of wastewater generated will also be similar. It is estimated that the proposed facility will generate approximately 1.3 kg COD/m³. As the proposed facility will be larger in size and will have a 40% greater processing capacity, the volume of wastewater generated will be higher than at present. It is estimated that when the proposed facility is operating at capacity it will generate an average wastewater flow of 50,000 L/hr, while the peak flow will be 150,000 L/hr. At start up the average flow is estimated to be 31,000 L/hr, while the peak flow will be



55,000 L/hr. A new Overstrength Discharge licence will be obtained by Parmalat, from the City of Winnipeg, prior to commissioning the new facility. This new licence will permit the discharge of effluent with concentrations above the sewer by-law limits at a specified surcharge rate. A new buffer tank and equalization tank will be installed outside of the proposed facility to collect wastewater, adjust pH and discharge to the City of Winnipeg wastewater collection system. The size of these tanks will be determined during final design. The City is discussing options with Parmalat as to the potential for installing automatic sampling equipment at the new facility.

## 2.5.5 Existing Facility Concerns

The following are environmental and health and safety concerns with the existing Parmalat milk processing facility.

#### 2.5.5.1 **Building**

The existing building, that Parmalat is currently located in, is over 100 years old and has been experiencing structural and environmental problems for several years. There are portions of the building that were determined to be structurally unsound therefore, structural support was added to the basement of the building several years ago as temporary shoring. A portion of the building was also condemned and abandoned due to structural instability and the presence of asbestos in the ceiling.

#### 2.5.5.2 Odour and Noise

Odour has typically not been a concern at the interior or exterior of the facility, as the milk processing is almost entirely contained in a closed system of tanks and pipes, and wastewater is sent to the City of Winnipeg wastewater collection system. Odour complaints have been minimal and during the site visit no offensive odours were detected throughout the facility or outside of the facility.

The Noise Level Hazard Assessment report indicated that noise levels inside the facility were in the range of 58 to 106 dBA. Any noise levels in the facility above 85 dBA would require employees to wear hearing protection. Employees are all required to wear hearing protection when on the production floor. Noise levels were detected outside of the building at a level of approximately 65 dBA from street level during the site visit. The site production manager indicated that they have had complaints from surrounding residents in the past regarding the noise, and since then they have installed a sound barrier fence along the perimeter of the site.

#### 2.5.5.3 Traffic

The facility currently receives milk seven days a week, therefore there is truck traffic on and off of the site every day. Approximately 38 to 40 trucks utilize the site every week. As the current site is located in a residential area truck traffic can be a nuisance and safety hazard for residents living nearby.



#### 2.5.5.4 Aesthetics

The aesthetics of the area are impacted by the Parmalat facility, as it is a multi-story industrial building surrounded by residential housing. A noise reducing fence has been placed around the truck loading dock area which helps to reduce the visual impacts of the truck trailers parked at the site, however the building structure still stands out from the surrounding houses.

### 2.5.6 Proposed Facility Sizing

The proposed milk processing facility will have a building footprint of approximately 12,000 m<sup>2</sup> plus surrounding truck loading docks, milk storage silos, a trailer parking area and a vehicle parking area (see Proposed Site Layout Plan in Appendix D). The facility will have a capacity for 40% more milk processing than the existing facility. Due to the limited capacity of the existing facility, some lines of milk processing have been moved to other facilities in Canada, which will be moved back to Winnipeg when the proposed facility is operational.

## 2.5.7 Topography and Geotechnical Information

### 2.5.7.1 Topography

A topographic survey of the proposed development site was completed by the City of Winnipeg. Based on the topographic mapping provided, the site is slightly raised in the centre and slopes towards the outer perimeter on all sides (see Lot Grading Plan in Appendix D). A maximum elevation difference of approximately 2.0 m was recorded along with a maximum slope of 1.5%.

#### 2.5.7.2 Geotechnical Data

Test holes were drilled at the proposed development site by AMEC Foster Wheeler from May 7 to May 11, 2015. The preliminary geotechnical report provided indicated that the soil profile generally consisted of the following:

- Surficial Organic Clay down to a depth of approximately 0.2 m
- High Plastic Clay with a thickness of approximately 2.5 m directly below the organic clay
- Low Plastic Silt with a thickness of approximately 0.2 m to 1.4 m and located within the layer of high plastic clay
- Low Plastic Silt Till was located below the layer of high plastic clay to depths of 13.4 m to 18.9 m below the surface.

Groundwater was recorded in approximately half of the test holes, at elevations varying between of 0.0 m to 13.0 m below the surface.



#### 2.5.7.3 Site Investigation

An onsite investigation was conducted by JRCC on June 16, 2015, to review the existing site conditions and features at the proposed development site. The site was observed to be partially forested and partially cleared. The vegetation consisted of mixed stands of balsam poplar and trembling aspen in the forested area, and native grasses and meadow flowers in the cleared area. There was some standing water at the surface and the surface soils were generally quite wet. Some bird species were observed during the site visit, however no noticeable mammal or bird habitats were observed. There was a constant background noise being issued from the railway yard to the south, becoming louder as trains moved past. No offensive odours were detected. The land to the immediate east, west of the site were also a mixture of forest and grassland, while the lands to the north and south were cleared grassland.

Mazenod Road was paved to the site, but then transitions into a dirt access road along the east border of the site. The CN railway and (GWWD) Aqueduct bordered the site to the north. A ditch was running along the east border of the site, along with overhead electricity transmission lines. The nearest industrial buildings were Genvion Corporation and Federal Express, located to the northeast of the proposed site.

### 2.5.8 Design Guidelines

The facility will be designed in accordance with the all applicable Canadian and City of Winnipeg building codes, fire codes and zoning by-laws.

#### 2.5.9 Proposed Process Design

The milk will be processed at the proposed facility in accordance with the flow diagram attached in Appendix C. In general the processing will include:

- raw milk receiving
- raw milk storage silos
- blending area
- dry goods (packaging, ingredients) area
- empty case receiving area
- milk pasteurization area
- laboratory
- pasteurized milk storage
- milk container filling area
- · casing and palletizing milk containers
- cold warehouse storage
- milk products shipping.



The facility will produce the following end products:

- skim milk
- 1% milk
- 2% milk
- 3.25% milk
- 10% cream
- 18% cream
- 35% cream
- chocolate milk
- vanilla and chocolate soft serve ice cream mix.

## 2.5.10 Review of City Regulatory Requirements

#### 2.5.10.1 Wastewater

The City of Winnipeg Sewer By-law provides concentration limits for discharges into the wastewater collection system. If these concentration limits are exceeded then a sewer surcharge is issued by the City of Winnipeg, under a City of Winnipeg Overstrength Discharge Licence. This would apply to the proposed Parmalat facility, as pre-treatment of the wastewater will be minimal. Common parameters related to the Parmalat milk processing facility and their concentration limits include:

- BOD 300 mg/L
- Nitrogen (total) 60 mg/L
- Oil and Grease (animal or vegetable) 100 mg/L
- pH less than 5.5 or greater than 11.0
- Phosphorus (total) 10 mg/L
- Suspended Solids (total) 350 mg/L.

Parmalat Canada will be required to obtain for an Overstrength Discharge Licence for the proposed facility prior to commissioning and start-up of the new facility. The new milk processing facility will include a sampling location, which will be utilized by the City of Winnipeg for automated sampling of the effluent.

#### 2.5.10.2 Storm Water

Storm water from the proposed facility will be directed to a retention pond located to the southeast of the proposed development site, which will outflow to the City of Winnipeg land drainage system (LDS). Approval to utilize the retention pond and LDS will be obtained from the City during the design process and will require proper site grading to ensure precipitation falling on the site is directed towards the pond. It is



not expected that any deleterious substance would be introduced into the retention pond from the proposed development.

#### 2.5.11 Wastewater Pre-treatment Plan

Wastewater from the proposed facility will initially be directed to an above ground buffer tank with aeration to help adjust the pH of the wastewater. After the buffer tank, the pH will be adjusted further with the addition of sulphuric acid or sodium hydroxide into an equalization tank with a capacity of 300 m³ to 600 m³. From this equalization tank, effluent will potentially be pumped to a sampling manhole and then to the City of Winnipeg wastewater collection system. The City may not require a sampling manhole if they can have access to the equalization tank on the property, in which case the effluent would flow directly into the City sewer system. It is the intention of Parmalat to continue to utilize the City of Winnipeg wastewater collection system with minimal pre-treatment, based on the economics of paying the over strength discharge surcharge rates. If the City of Winnipeg over strength discharge limits or surcharge rates change significantly in the future, then Parmalat will consider other pre-treatment options at that time.

#### 2.5.12 Facility Design Details

The proposed facility will consist of an office building, laboratory, blending room, filler room, maintenance shop, refrigeration room, electrical room, compressor room, boiler room, cooler warehouse, battery room, jug room, empty case storage room, 16 outdoor silos, a milk receiving area, three loading docks (two of which will have heated concrete pads), a 50 trailer parking area and a 60 car parking lot. The access roads and car parking areas will be constructed with paved asphalt, while the truck trailer parking area will be compacted granular material, and two approaches are proposed off of Mazenod Road (one for cars and one for semi-trucks). The initial building footprint will be approximately 12,000 m², however future expansion areas to the east and west of the warehouse, an additional milk receiving area to the north and an additional warehouse building located on the northwest corner of the facility have been included in the Proposed Site Layout Plan attached in Appendix D. At this point a preliminary timeframe for expansion would be approximately five years after commissioning the proposed facility. Areas for snow piling are also indicated on the Proposed Site Layout Plan attached in Appendix D.

Based on the preliminary AMEC geotechnical report, the footing of the building will consist of precast concrete piles driven into the dense glacial till or onto the underlying limestone bedrock. Construction works will include clearing the site of vegetation and topsoil prior to commencing with foundation and building construction. A perimeter ditch will be constructed around the interior roads and will tie into the ditch along Mazenod Road.

#### 2.5.13 Solid Waste

Solid waste generated will be similar to the waste generated from the existing facility, which consists mainly of domestic waste, plastic bags, plastic jugs, paper and cardboard packaging. The proposed facility will have a 30 m<sup>3</sup> compactor bin, which is estimated to be emptied every three weeks for an annual load of 140,000 kg. The facility will also recycle approximately 12,000



cardboard boxes or 20,000 kg of cardboard waste annually with a recycling firm known as Kernel Cartons Ltd. Currently, waste materials are sent to the Progressive Waste Solutions waste disposal ground, north of Winnipeg, and this arrangement will continue when the new facility is operational.

In addition to the "dry" waste produced at the site, a liquid by product waste material consisting of approximately 6% total solids is produced at the site and requires disposal. Currently, 20,000 L/week is truck hauled to the Progressive Waste Solutions WDG for final disposal. Parmalat is currently in discussions with the hog industry for the possible use of this liquid waste as hog feed, which would negate future hauling of this material to a WDG site.

#### 2.5.14 Decommissioning

Parmalat Canada is not intending on decommissioning or removing the existing building prior to selling the property. Decommissioning of the existing and proposed facilities would typically require the removal of the building structure and foundation, and conducting any environmental remediation that may be necessary. A design life for the proposed facility has not been established, as this depends on the economics of the business.

#### 2.5.15 Facility Operation and Maintenance

The proposed facility will be in production four days per week, however will be receiving raw milk and shipping milk products seven days per week. The facility will be operating 24 hours per day during the four days of production per week. Maintenance and cleaning of the facility will occur during the off day from production.



#### 3.0 POTENTIAL ENVIRONMENTAL IMPACTS

The biophysical and socioeconomic environment as related to the development, and potential impacts of the development on the environment.

## 3.1 Releases to Air, Water, Land

#### 3.1.1 Air

Typically concerns for releases to the air from an industrial process include nuisance odours, dust generation and greenhouse gas emissions. There is a potential for odours generated from spilled milk or chemical products.

There is a potential for dust generation from earth excavation and road construction during dry and windy periods. There is a potential for greenhouse gas emissions during construction works from heavy equipment and transport vehicles, and during operation from transport vehicles. The site will also utilize an industrial boiler, which will produce greenhouse gas emissions from the consumption of natural gas. Burning activities will not be conducted on the site during the construction phase.

#### 3.1.2 Water

Pollutants that may be released into surface and ground water during the operation of the facility include milk by products, wastewater (coliforms, organic wastes, suspended solids, and nutrients), chemicals utilized in the production process, cleaning agents, refrigeration coolants, and petroleum hydrocarbons (PHCs) found in transport trucks parked at the site.

Pollutants that have a potential to be released into the surface or ground water during the site construction activities, include PHCs from heavy equipment and sediments from soil erosion.

#### Surface Water

Surface water may be impacted if the substances listed above are spilled or leak onto the ground surface in an uncontained manner and eventually reach a surface water source. Siltation can occur from erosion of exposed soil surfaces into nearby waterways. There are not expected to be any potential impacts surrounding surface water from siltation in runoff, as the nearest water body is a low lying marsh area located approximately 450 m to the west and there will be no ditches adjacent to the site during the site clearing activities.

The proposed development should not cause or contribute to flooding in the area or along the drainage ditches, as precipitation or storm water will be directed to the City of Winnipeg LDS. There is no potential to impact the navigation of surface waters as a result of the development, as the proposed site is not in the immediate vicinity of a navigable body of water.



#### **Groundwater**

There is a potential for groundwater impacts if the substances listed above are spilled or leak onto the exposed ground surface during the construction works or during operation of the site. There is also a potential to impact groundwater if the buried wastewater service lines leak.

#### 3.1.3 Land

The landscape would be altered by clearing the site of native grass and trees and by construction of the new milk processing building, silos, interior roads, parking areas and perimeter ditching. Fencing would be installed around the perimeter of the site. Disturbed ground surface areas can be impacted through soil erosion if not covered or re-vegetated. Precipitation running off of the roof can potentially cause ground erosion if it is discharged onto the ground surface from a downspout. Also, precipitation surface flows can have an impact on the surrounding land if not properly captured onsite and directed to the LDS.

Pollutants that may be released to the land are typically PHCs, which could be released during construction activities from equipment leaks, or during operation from leaks from transport trucks on the site. There is also the potential for coolant leaks from the transport trucks as the trailers will be refrigerated.

#### 3.2 Wildlife

The proposed lagoon site is located in the "Lake Manitoba Plain" Ecoregion of Canada. Characteristic wildlife includes white-tailed deer, counter, rabbit and ground squirrel. Bird species include waterfowl.

The typical concern on any construction project is that wildlife species would being displaced through the construction works. As the proposed development site is surrounded with industrial businesses and residential areas beyond, it is unlikely that there is a significant wildlife population in the area and that they would be significantly impacted by the proposed development. From observations made during the site investigation it is unlikely that the construction works will have any significant impact on wildlife in the area. In addition, the Manitoba Conservation Wildlife and Ecosystem Protection Branch was contacted regarding the proposed lagoon development project and they indicated that there were no occurrences of species at risk at the proposed site in the database (see email correspondence attached in Appendix B).

## 3.3 Fisheries

The typical concerns for impacts to fish and fish habitat would be from sediments released during construction and from chemical spills reaching surface water utilized by fish species. These impacts could include the reduction of water quality or physical disturbances which would create an unfavorable environment for fish or fish eggs.

However, impacts to fish species are very unlikely as the development area is located approximately 3.4 km from the nearest body of surface water with known fish species (i.e. Seine River). In addition, the Red



River is located approximately 4.2 km from the proposed development site. These distances would typically provide sufficient buffer areas in the event of a spill or sedimentation at the development site.

## 3.4 Vegetation

Characteristic vegetation in the "Lake Manitoba Plain" Ecoregion is classified as being a transitional between areas of boreal forest and aspen parkland. The native landscape is characterized by trembling aspen, oak groves and rough fescue grasslands. Secondary species include shrubs, bur oak, willow and sedge communities.

There is a potential concern from the removal of "at risk" vegetative species through the clearing and construction works, however Manitoba Conservation Wildlife and Ecosystem Protection Branch were contacted regarding occurrences of rare or endangered species in their database at the proposed development site. The Branch indicated that there were no occurrences of any species at risk at the proposed site in the provincial database (see email correspondence attached in Appendix B).

## 3.5 Forestry

There are no potential impacts to forestry as the area of the proposed development is not commercially forested and does not have the potential to be. Lumber removed from the site through clearing will be hauled off of the site to a licenced WDG facility.

## 3.6 Noise Impacts

There is a potential for noise impacts in the immediate area of development due to the heavy equipment utilized during construction. Operation of the facility will also generate noise both inside and outside of the building, from milk processing and refrigeration equipment.

## 3.7 Health and Safety

There is a potential for impacts to the health and safety of workers and the public during the construction works, as heavy equipment will be utilized on site and excavation works will be required. There is also the potential for impacts to the health and safety of the Parmalat employees during operation of the facility, due to mechanical equipment and chemicals used during the processing and facility maintenance.

## 3.8 Heritage Resources

The City of Winnipeg was not aware of any historic or heritage resources located at the proposed development site. The Manitoba Historic Resources Branch was also contacted regarding the proposed site and they indicated that that they have no concerns with the project (see Memorandum attached in Appendix B).

## 3.9 Socio-Economic Implications

The proposed milk processing facility is not expected to have adverse socio-economic impacts. In fact, construction related economic activity and increased production capacity should have a positive



economic impact, due to increased local employment opportunities. In addition, the truck traffic from the current location, which is in a residential area, will be diverted to the new industrial park location with no adjacent residences. The elimination of truck traffic in a residential area should have an overall positive impact. Solid waste material generated from the site during construction and operation would be disposed of at a licenced WDG or alternative facility.

#### 3.10 Aesthetics

The proposed development is expected to impact the aesthetics of the development area, as the landscape will be altered from unused grassland and forested land to an industrial building development. The surrounding area to the east and west is currently also unused grassland and forest land, however this land is also designated for future industrial use.



#### 4.0 MANAGEMENT PRACTICE

Proposed environmental management practices to be employed to prevent or mitigate adverse implications from the impacts identified above.

## 4.1 Mitigation of Impacts to Air

To reduce the potential for odour nuisance in the surrounding communities, the majority of the milk processing will be in a closed system of tanks and pipes, which will greatly reduce the potential for odours. The facility is also cleaned regularly to prevent odours from spilled milk products. The surrounding areas are also industrial and therefore the risk of impacting surrounding residential areas is low.

Emissions from construction equipment and transport vehicles will be controlled through regular maintenance by the contractor, to meet all provincial and local standards during construction. During the operation of the facility transport vehicles will be moving milk products to and from the facility seven days a week. Emissions from these vehicles will need to meet provincial and local standards. The boiler system installed in the facility will be a high efficiency unit, therefore reducing the greenhouse gas emissions and meeting all provincial and federal requirements.

Dust suppression methods (i.e. water spraying) will be utilized during construction if dry conditions create excessive dust through construction activities and transport, and becomes a nuisance to nearby residents or businesses. Due to the setback distance from residences, it is unlikely that dust will have any impact on residential areas. During operation of the site dust from the granular parking areas will be suppressed through either utilization of a low dust producing base material or by adding a surface sealant on the granular material.

## 4.2 Mitigation of Impacts to Water

#### Surface Water

Impacts to surface waters from spills or leaks during operation are not expected, as the liquid chemical containers in the facility will be stored on spill containment pallets. Spill clean-up kits will be on hand in the facility next to liquid chemical storage containment units.

As wastewater would be directed to the City of Winnipeg wastewater collection system and storm water directed to a retention pond and the City of Winnipeg LDS, no impacts to surrounding surface waters would be expected from the wastewater and storm water generated at the site.

Upon completion of the facility, road and parking lot construction, disturbed and bare soil areas around the building and in the ditches will be seeded with grass to prevent future soil erosion and siltation in surrounding ditches. Disturbance of the soils will be limited to the boundaries of the proposed development property.

To minimize impacts from construction equipment on surface waters, the construction specifications should outline to the contractor the requirements for handling and storage of fuels and hazardous



materials during construction, as per federal and provincial regulations. The specification should state wording similar to the following:

- Diesel or gasoline should be stored in double walled tanks or have containment dikes around fuel containers for volumes greater than 68.2 L (15 gallons) or in compliance with provincial regulations
- Clean up material should be available at the site, consisting of a minimum of 25 kg of suitable commercial sorbent, 30 m<sup>2</sup> of 6 mil PVC, and an empty fuel barrel for spill collection and disposal
- Fuel storage and hazardous material areas established for project construction should be located a minimum of 100 m from a water body, and comply with provincial regulations
- Waste hazardous materials from construction activities and equipment must be properly collected and disposed of in compliance with provincial regulations
- Hazardous material handling and storage are to follow all provincial and federal regulations including WHMIS and spill containment requirements
- In the event of spills or leaks of fuels and hazardous materials, the contractor or operator should notify the project engineer and provincial authorities.

The specifications should state that when working near water with construction equipment:

- Construction equipment is to be properly maintained to prevent leaks and spills of fuels, lubricants, hydraulic fluids or coolants
- There can be no re-fueling or servicing of construction equipment within 100 m of a water body.

#### Groundwater

Mitigation of potential impacts to groundwater during the construction activities from fuel handling, equipment leaks or fuel spills, would follow the same procedures as described above for surface waters. Concrete floors with curbs and spill containment kits will be utilized at the facility during operation to prevent spills or leaks for impacting groundwater. Refrigerated truck trailers parked at the facility will be inspected regularly to insure there are no coolant leaks. If leaks are detected, the spill will be contained and cleaned up by Parmalat employees immediately.

Wastewater service lines will be inspected during installation and pressure tested after installation to ensure the pipes do not leak.

## 4.3 Mitigation of Impacts to Land

To minimize the potential for the release of PHCs and coolants onto the land, the mitigation measures described in Section 4.2 above should be followed.

To minimize the potential for soil erosion, disturbed ground surfaces would be seeded with grass. The outlet of the downspouts would have concrete or stone dispersion to minimize soil erosion during precipitation events. Precipitation surface flows from the site will be directed to a storm water retention pond with proper site grading and released to the LDS at a flow rate pre-determined by the City, to mitigate impacts to the surrounding land.



## 4.4 Mitigation of Impacts to Vegetation

Impacts to vegetative species will be minimized by containing the removal of vegetation to the boundaries of the development site.

## 4.5 Mitigation of Noise Impacts

To minimize the potential for noise impacts during construction, heavy equipment and transport vehicles should have mufflers working properly, and construction activities would normally be limited to daylight hours only.

During operation of the facility, employees on the operation floor will be required to where hearing protection. In addition, the facility will be designed to maintain normal noise levels below 85 dBA, which is the threshold for requiring hearing protection. Outside noise from daily operations is not expected to create a nuisance to neighboring industrial businesses.

## 4.6 Mitigation of Impacts to Health and Safety

To minimize potential impacts to health and safety of workers and the public, the construction contractor should have a safety program in place, in accordance with all federal and provincial health and safety regulations. During construction, site access will be limited to construction personnel only. Personal protective equipment will be worn in accordance with the contractor's safety program while on the site.

Parmalat employees will be properly trained in safety procedures for mechanical equipment use and chemical handling procedures. The wearing of personal protective equipment will be enforced by the site manager for all employees. An emergency procedure plan will be developed by Parmalat for the facility in the event of a fire, explosion, chemical spill, etc.

## 4.7 Mitigation of Impacts to Heritage Resources

If any significant historic or heritage resources are discovered in the course of excavation or construction, the specifications should identify that works are to temporarily cease and an investigation of the site is to be conducted by Parmalat, the City of Winnipeg, Manitoba Historic Resources Branch and any other authority as may be required.

## 4.8 Mitigation of Impacts to Aesthetics

The exterior of the proposed milk processing facility will be properly landscaped, seeded with grass, and will conform to the general aesthetics of the surrounding industrial buildings. As the site is located in an industrial park, and is not visible from any nearby residential roads, aesthetic impacts to surrounding residents are unlikely. In addition, the site currently does not have an adjacent access road, therefore the change in the landscape would not impact local residents.



### 5.0 RESIDUAL AND CUMULATIVE EFFECTS

Residual environmental effects remaining after the application of mitigation measures, to the extent possible expressed in quantitative terms relative to baseline conditions

No negative residual effects are anticipated through the construction and operation of the proposed milk processing facility, due to the mitigation measures described above. Positive residual effects are expected from economics of developing a larger milk processing facility, which will allow for increased employment opportunities. In addition, moving the milk processing facility away from a residential area, in which it is currently located, to an industrial area will be a benefit to the surrounding residents at the existing facility location.

Cumulative effects are anticipated from the additional wastewater being contributed to the City of Winnipeg wastewater collection and treatment system. Cumulative noise impacts are also anticipated as the noise from the proposed facility would be combined with the noise from the surrounding industrial businesses and adjacent railway.



## 6.0 MONITORING AND FOLLOW-UP

Proposed follow-up activities that will be required at any stage of development (eg. Monitoring, inspection, surveillance, audit, etc.)

Monitoring of the wastewater generated at the site will be conducted by the City of Winnipeg via an automated sampling system in a dedicated manhole. The facility will be operated by trained personnel, who will ensure the facility is operated under the requirements of the Environment Act licence and the City of Winnipeg requirements. The site manager will ensure the pH buffering of the wastewater is operating properly. The site manager is to maintain records of any environmental spills or incidents and report them to Manitoba Conservation and the City of Winnipeg in a timely manner.

Parmalat personnel or the construction contractor will ensure that grass growth occurs on disturbed areas of the site, after the facility construction activities are completed.



### 7.0 FUNDING AND APPROVALS

Name and address of any Government Agency or program (federal, provincial or otherwise) from which a grant or loan of capital funds have been requested (where applicable). Other federal, provincial or municipal approvals, licences, permits, authorizations, etc. known to be required for the proposed development, and the status of the project's application or approval.

The project works will be privately funded by Parmalat Canada Inc. An Overstrength Discharge Licence will be required from the City of Winnipeg for the discharge of over strength wastewater into the City wastewater collection system. Construction permits from the City will be obtained by the construction contractor. Approval from the City of Winnipeg to utilize the retention pond and LDS for storm water will be obtained as part of the design process.



## 8.0 PUBLIC CONSULTATION

Results of any public consultations undertaken or to be undertaken in conjunction with project planning.

No public consultation by Parmalat has been conducted to date, nor is any public consultation being planned for the project. It is expected that any public comments will be received by Manitoba Conservation through the public registry during the Environmental Act Proposal review period.



## 9.0 CONCLUSION

Based on the design of the project and the implementation of the mitigation measures identified in Section 4.0 above, no significant negative environmental impacts are anticipated.

The proponent would like to complete the requirements of the Environment Act Proposal as soon as possible so that the construction can begin in a timely fashion.

JR Cousin Consultants Ltd. requests that a draft copy of the Environment Act Licence be forwarded for review prior to the issue of the final licence.



## **APPENDICES**

## Appendix A

Letter of Intent to Purchase Land - Draft

Service Needs from the City of Winnipeg

Crown Lands & Property Agency - Lands Branch, June 4, 2015 Email Correspondence

## Appendix B

Manitoba Conservation and Water Stewardship - Wildlife and Ecosystem Protection Branch, June 5, 2015 Email Correspondence

Manitoba Tourism, Culture, Heritage, Sport and Consumer Protection – Historic Resources Branch, June 4, 2015 Memorandum

## **Appendix C**

Wastewater Sampling Results

Milk Processing Flow Diagram

## <u>Appendix D</u>

Facility Location Plan

Lot Layout Plan

Lot Grading Plan

Proposed Site Layout Plan

## Appendix A

Letter of Intent to Purchase Land – Draft

Service Needs from the City of Winnipeg

Crown Lands & Property Agency - Lands Branch, June 4, 2015 Email Correspondence



June **■**, 2015

THE CITY OF WINNIPEG

Attention: ■

Dear **■** 

## RE: Prairie Industrial Park - Letter of Intent

This letter of Intent will confirm the interest of Parmalat Canada Inc. (hereinafter referred to as the "**Purchaser**") in purchasing certain lands comprising approximately seventeen and three tenths (17.3) of an acre as herein set forth (the "**Lands**") on the following terms and conditions:

**Vendor**: The City of Winnipeg

Vendor's Agent: Colliers International [NTD: Vendor to confirm agent is

still involved, acting for Vendor, and holding deposit]

The Lands: The Lands shall be that parcel located in what is commonly

known as the Prairie Industrial Park, in the City of Winnipeg, comprising approximately seventeen and three tenths (17.3) of an acre in area as shown highlighted in red on **Schedule** "A" attached hereto and currently legally described as Lots 9, 10, 11, 12, 13, 14, 15, 16 and 17 in Block 3, Pt. Lot 230

ROMAN CATHOLIC MISSION PROPERTY

Interest Purchased: a 100% freehold interest in and to the Lands, free of all

liens, encumbrances and mortgages whatsoever, excepting those encumbrances which the Purchaser or its financier may place on title and those that the Purchaser agrees in writing may remain. Any existing mortgages or encumbrances to which the Purchaser does not consent are

to be discharged by the Vendor at its expense.

**Purchase Price**: The Purchase Price for the Lands shall be ■ (\$■) Dollars per

acre; the area of the Lands to be confirmed by a survey prior to closing. (i.e. if the Lands comprises 17.3 aces, the Purchase Price shall be ■ (\$■) Dollars.) The Purchase Price

shall be payable by way of bank draft, wire transfer or solicitor's trust cheque.

Deposits:

An initial deposit of One Hundred Thousand (\$100,000.00) Dollars shall be payable to Colliers International, in trust, with acceptance of this Letter of Intent by the Vendor. Upon completion of an Agreement of Purchase and Sale for the Lands and upon removal of all pre-closing conditions of purchase and sale thereunder, an additional deposit of One Hundred Thousand (\$100,000.00) Dollars shall be payable to Colliers International, in trust. If no Agreement of Purchase and Sale is entered into, the initial deposit shall be refunded to the Purchaser in its entirety upon the Purchaser's request. The initial deposit and the second deposit shall remain refundable at the Purchaser's request until the satisfaction or waiver of all the pre-closing conditions under the Agreement of Purchase and Sale, at which time such deposits shall become non-refundable, subject to any breach by the Vendor. On closing, the initial and second deposit shall, together with all interest accrued thereon, be applied to the Purchase Price payable hereunder by the Purchaser.

Holdback:

There shall be held back from the Purchase Price the amount of • (\$•) Dollars, to be held in escrow by the Purchaser's solicitors, pending the confirmation of the satisfaction of the Purchaser's conditions set forth in paragraphs (f) and (i) below.

## **Vendors Conditions:**

- (a) This letter of intent or any formal Agreement of Purchase and Sale is subject to the Vendor receiving valid and saleable title from the Winnipeg Land Titles Office for the Lands as described herein, no later than ■, 2015. Failure to remove this condition in writing by the Vendor will render this Letter of Intent null and void and all deposit moneys shall be returned forthwith without deduction.
- (b) The Vendor shall have 5 days from acceptance of an Agreement of Purchase and Sale to obtain the Vendor's lawyer's approval of the Agreement of Purchase and Sale as to form.

### **Purchaser's Conditions:**

- (a) the Purchaser shall have 30 days from acceptance of an Agreement of Purchase and Sale (and if the Purchaser identifies any issues the Purchaser shall have an additional 30 days) to ascertain that the Lands comply with all building and zoning restrictions and that there are no encroachments from or onto adjoining properties;
- (b) the Purchaser shall have 5 days from acceptance of an Agreement of Purchase and Sale to obtain the Purchaser's lawyer's approval of the Agreement of Purchase and Sale as to form;
- (c) the Purchaser shall have 30 days from acceptance an Agreement of Purchase and Sale (and if the Purchaser identifies any issues the Purchaser shall have an additional 30 days) to obtain an environmental assessment and complete a geotechnical survey of the Lands, each to be satisfactory to the Purchaser in its sole discretion;
- (d) the Purchaser shall have 30 days from acceptance of an Agreement of Purchase and Sale to confirm that the Lands conform to the use as a Dairy Production Facility within the M3 Zoning designation;
- (e) the Purchaser shall have, 30 days from acceptance of an Agreement of Purchase and Sale, to review and accept, in its sole and unfettered discretion, all service agreements that the Vendor has entered into or will enter into for the provision of services as set forth in **Schedule "B"** hereto, to the lot line of the Lands;
- (f) the Vendor shall, at its sole cost, on or prior to August 3, 2015 (the "First Completion Date") do the following:
  - (i) ensure that the Lands are a grade level lot;
  - (ii) provide the Purchaser and its agents and contractors with road access to the Lands;
  - (iii) provide the Lands with temporary electrical power to site; [NTD: this is vague what constitutes temporary electrical power? Single phase 110V service?]
  - (iv) supply a surveyor's certificate for the Lands being purchased, prepared by a Manitoba Land Surveyor, which verifies the area of the Lands; and
  - (v) adjust the Purchase Price payable for the Lands, calculated at (\$■) Dollars per acre;

- (g) the Winnipeg Land Titles Office shall have issued title for the Lands as described herein, in the name of the Vendor, no later than ■, 2015.
- (h) the Purchaser shall have, 30 days from acceptance of the Agreement of Purchase and Sale to obtain written confirmation from the Vendor that the building permits required by the Purchaser will be issued on or before such dates as the Purchaser shall specify, subject to proper specifications being provided to the Vendor's permits office;
- (i) without detracting from the Vendor's obligations under the Purchaser's conditions set forth in **paragraph** (f) above, the Vendor shall complete, at its sole cost, on or prior to October 30, 2015 (the "Second Completion Date"), the remaining services on Prairie Trail West, including, without limitation:
  - (i) <u>Water and Sewer Service</u>: water and sewer service to the lot line of the Lands to meet quantities and pressure for industrial consumption and firefighting capabilities, as more particularly set forth in **Schedule "B"** hereto;
  - (ii) Roadways: 12m wide heavy duty asphalt surface (8m roadway plus 2 x 2m shoulders) to allow for large turning radius and easy flow of industrial truck traffic from established municipal roadways to the lot line of the Lands:
  - (iii) <u>Land Drainage</u>: ecologically sustainable grassed swales in combination with retention ponds and regional land drainage facilities incorporated to provide land drainage;
  - (iv) <u>Utility Service</u>: Hydro, telephone, data service and natural gas to be available within the right of way in front of the Lands; Hydro, telephone and data service will be provided overhead, all as more particularly set forth in **Schedule** "B" hereto; and
  - (v) Zoning: ensure the Lands are, or cause the Lands to be, zoned for use as an industrial Dairy Production Facility;
- (j) In the event that the Vendor does not satisfy the conditions to be fulfilled by either the First Completion Date or Second Completion Date above, the Purchaser shall be entitled to the holdback amount of ■ (\$■) Dollars, together with any accumulated interest; provided however, that to the extent that Purchaser suffers any damages over and above the foregoing dollar amount, it reserves the right to pursue its legal remedies.

### Agreement of Purchase and

Sale:

It is agreed between the Vendor and the Purchaser that the formal Agreement of Purchase and Sale shall be completed by **a**, 2015.

Adjustments:

Appropriate adjustments with respect to items usually adjusted in such a transaction shall be made upon closing.

Closing Date:

■, 2015 provided that all of Vendor's and Purchaser's conditions have been satisfied or waived in writing (excluding the Purchaser's conditions outlined in paragraphs (f) and (i) above, which are to be satisfied on or before the First Completion Date and Second Completion Date, respectively).

Confidentiality:

All information related to this transaction shall be kept in the strictest of confidence by the parties and the parties shall make all commercially reasonable efforts during the term of this Letter of Intent and thereafter to prevent any confidential information of a party from being disclosed to or obtained by any person or entity for any purpose except as described in this Letter of Intent without the express written consent of the other party. Neither the Purchaser nor the Vendor nor any of their respective officers, directors, shareholders, employees, representatives will make any announcement concerning this proposed transaction or related negotiations, without the other party's prior written approval, except as may be required by law. Where such an announcement is required by law, the party required to make the announcement will inform the other party of the contents of the announcement proposed to be made and will use commercially reasonable best efforts to obtain the other party's approval for the announcement.

**Exclusivity:** 

Until the closing of this transaction or until the Purchaser requests the return of the deposit(s), whichever is earlier, the Vendor shall not entertain or solicit any alternative offers or negotiate with or consider any proposal from any other person relating to the acquisition of an interest in the Lands. In the event that the Purchaser requests the return of the deposit(s), the Vendor shall be immediately released of the exclusivity covenants contained herein.

Binding clauses:

Notwithstanding the general non-binding nature of this letter of intent, the covenants of Confidentiality and Exclusivity are intended to be binding legal obligations of the grantor.

(Winnipeg time) the  $\blacksquare$  day of  $\blacksquare$  2015. Yours truly, PARMALAT CANADA INC. Per: Authorized Signatory Authorized Signatory The City of Winnipeg hereby accepts the terms and conditions as set forth above but other than expressly set forth herein, does not intend this Letter to be binding on either party, nor will efforts to conclude a formal Agreement of Purchase and Sale create any other binding obligation. An agreement and obligation to purchase and sell will not exist until subsequent execution by both parties of an acceptable formal agreement of purchase and sale, which the City of Winnipeg agrees to negotiate exclusively with the Purchaser in good faith within the time limits set forth above. Dated at the City of Winnipeg in the Province of Manitoba this ■ day of ■, 2015. THE CITY OF WINNIPEG Authorized Signatory Name: Title: Authorized Signatory Name: Title:

This letter is open for acceptance by The City of Winnipeg until 5:00 p.m.





### **WINNIPEG - VERDE**

equipment

### **SERVICING NEEDS FOR PROJECT**

UPDATE: 6-22-2015

Phases Services	Construction	Startup (trials and commissioning) June 1st 2016	Full production December 1st 2016	Future (2years)	
Nater main	Not needed, use of existing Hydrant thru april 2016	90,000l/h peak load for 1 hour average usage 30,000l/h average usage 40,000l/h 4 bars pressure minimum 4 bars pressure minimum		150,000l/h peak load for 1 hour average usage 50,000l/h 4 bars pressure minimum	
Vaste water sewer	Not needed until 2016	average usage 30,000l/h**	average usage 40,000l/h**	average usage 70,000l/h**	
and drainage sewer	TO BE DETERMINED	Per contract	Per contract	Per contract	
lectrical	Temporary for construction usage 600V 3ph 400A from August 1st thru end 2015 5,000kW Full service by Januray 2016		5,000kW	5,000kW	
latural Gas	5MMBtu 10psi by December 1st 2015	25MMBtu 10psi	25MMBtu 10psi	50MMBtu 10psi	
Road and access	Road scetion to access into the property: 26 feet wide 12" compacted gravel to wistand heavy duty constrution traffic and	Per contract *	Per contract *	Per contract *	

<sup>\*</sup> Road to be paved thru prairie trail west up to property line in case of issue at permit submital about truck entrance

<sup>\*\*</sup> using a buffer tank for pH adjustment and flow buffering

Crown Lands & Property Agency - Lands Branch, June 4, 2015 Email Correspondence

### **Oswald Wohlgemut**

From:

McCartney, Erin (CLPA) [Erin.McCartney@gov.mb.ca]

Sent:

Thursday, June 04, 2015 1:08 PM

To:

'Oswald Wohlgemut'

Subject:

FW: Parmalat Milk Processing Facility - Mineral Rights

Good Afternoon, in response to your original email, the Mines and Minerals in Lot 231 Roman Catholic Mission Property, as of today's date, are owned by the Crown and the Sand and Gravel are with the surface.

I apologize for the delay in sending this information to you.

### Erin McCartney

A/Supervisor, Crown Lands Registry

Crown Lands and Property Agency 308 - 25 Tupper Street North Portage la Prairie MB R1N 3K1 P 204-239-3814 F 204-239-3560 Toll Free 1-866-210-9589 www.clp.gov.mb.ca



An Agency of the Manitoba Government

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From: McCartney, Erin (CLPA) Sent: June-01-15 8:11 AM To: 'Oswald Wohlgemut'

Subject: RE: Parmalat Milk Processing Facility - Mineral Rights

Good Morning Oswald, the attached plan has been very helpful however I still need another document from the Winnipeg Land Titles Office before I can make a determination. I will let you know when I have receive their document.

Erin

From: Oswald Wohlgemut [mailto:owohlgemut@jrcc.ca]

**Sent:** May-28-15 4:09 PM **To:** McCartney, Erin (CLPA)

Subject: RE: Parmalat Milk Processing Facility - Mineral Rights

Hello Erin,

### Appendix B

Manitoba Conservation and Water Stewardship - Wildlife and Ecosystem Protection Branch, June 5, 2015 Email Correspondence

Manitoba Tourism, Culture, Heritage, Sport and Consumer Protection – Historic Resources Branch, June 4, 2015 Memorandum

Manitoba Conservation and Water Stewardship - Wildlife and Ecosystem Protection Branch, June 5, 2015 Email Correspondence

### **Oswald Wohlgemut**

From:

Friesen, Chris (CWS) [Chris.Friesen@gov.mb.ca]

Sent:

Friday, June 05, 2015 9:44 AM

To:

'Oswald Wohlgemut'

Subject:

RE: Parmalat Milk Processing Facility - Species at Risk

#### Oswald

Thank you for your information request. I completed a search of the Manitoba Conservation Data Centre's rare species database and found no occurrences at this time for your area of interest.

The information provided in this letter is based on existing data known to the Manitoba Conservation Data Centre at the time of the request. These data are dependent on the research and observations of CDC staff and others who have shared their data, and reflect our current state of knowledge. An absence of data in any particular geographic area does not necessarily mean that species or ecological communities of concern are not present; in many areas, comprehensive surveys have never been completed. Therefore, this information should be regarded neither as a final statement on the occurrence of any species of concern, nor as a substitute for on-site surveys for species as part of environmental assessments.

Because the Manitoba CDC's Biotics database is continually updated and because information requests are evaluated by type of action, any given response is only appropriate for its respective request. Please contact the Manitoba CDC for an update on this natural heritage information if more than six months pass before it is utilized.

Third party requests for products wholly or partially derived from Biotics must be approved by the Manitoba CDC before information is released. Once approved, the primary user will identify the Manitoba CDC as data contributors on any map or publication using Biotics data, as follows as: Data developed by the Manitoba Conservation Data Centre; Wildlife Branch, Manitoba Conservation and Water Stewardship.

This letter is for information purposes only - it does not constitute consent or approval of the proposed project or activity, nor does it negate the need for any permits or approvals required by the Province of Manitoba.

We would be interested in receiving a copy of the results of any field surveys that you may undertake, to update our database with the most current knowledge of the area.

If you have any questions or require further information please contact me directly at (204) 945-7747.

Chris Friesen
Coordinator
Manitoba Conservation Data Centre
204-945-7747
chris.friesen@gov.mb.ca
http://www.gov.mb.ca/conservation/cdc/

From: Oswald Wohlgemut [mailto:owohlgemut@jrcc.ca]

Sent: May-22-15 4:06 PM To: Friesen, Chris (CWS)

Subject: Parmalat Milk Processing Facility - Species at Risk

Hello,

J.R. Cousin Consultants is conducting an Environment Act Proposal on behalf of Parmalat Canada, for the construction of a new milk processing facility within the City of Winnipeg. The construction works will occur on lots 9, 10, 11, 12, 13, 14, 15, 16, and 17 in Block 3, Pt. Lot 230, Roman Catholic Mission property, at the corner of Prairie Trail West and Mazenod Road, at the south end of the St. Boniface Industrial Park between the Greater Winnipeg Water District Aqueduct Railway and the CN Symington yards (see attached plan). The land area proposed for construction is partially cleared

grass land and forest land. Works will include construction of a processing facility building, milk silos, trailer truck turnaround area, parking lot and water and sewer connections to the City of Winnipeg.

Please provide information on any at risk wildlife and plant species that are known to exist in the location outlined above, as well as any registered habitat areas, or known migrating bird species as we would like to include that information in the Environment Act Proposal.

Please let us know if you have any questions.

Regards,

Oswald Wohlgemut, M.Sc. Environmental Scientist

J.R. Cousin Consultants Ltd. Phone: (204) 489-0474 Fax: (204) 489-0487 www.jrcc.ca

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Manitoba Tourism, Culture, Heritage, Sport and Consumer Protection — Historic Resources Branch, June 4, 201 Memorandum	5



## Memorandum

DATE: June 4, 2015

TO: Oswald Wohlgemut

Environmental Scientist J.R. Cousin Consultants Ltd.

FROM: Christina Nesbitt

Impact Assessment

Archaeologist

Historic Resources Branch Main Floor 213 Notre Dame

Avenue Winnipeg MB R3B 1N3

Christina.Nesbitt@gov.mb.ca

PHONE NO: (204) 945-8145

SUBJECT: Parmalat Canada

Milk processing facility

**HRB Review and Comments** 

HRB FILE: AAS-15-9292

Further to your memo requesting a heritage screening for the Parmalat Canada milk processing facility (Planned Area), the Historic Resources Branch (HRB) has examined the applicabe areas proposed for development in conjunction with the Branch's records for areas of potential concern, and can advise you that HRB has no concerns with the project at this time.

However, pleased be advised that if any heritage resources are encountered in association with the Planned Area during development, the Developer is required to notify HRB and HRB may require that a heritage resource management strategy be implemented to mitigate the effects of development on the heritage resources.

If you have any questions or comments, please feel free to contact the undersigned at the above noted address, phone number, or e-mail.

Christina Nesbitt

### Appendix C

Wastewater Sampling Results

Milk Processing Flow Diagram



### **Wastewater Sampling Results**

Company: Parmalat Canada Inc.

Sample Name: PARM 1 Sample Location: Manhole Sample Type: Composite Date Sampled: 09-Mar-15

Parameter	Sewer By-Law Limit (mg/L)	Sample Result (mg/L)	Comments
Aldrin / dieldrin	0.0002	<0.2**	
Aluminum (total)	50	0.582	
Antimony (total)	5	<0.0020	
Arsenic (total)	1	<0.0020	
Benzene	0.5	<0.00050	
Biochemical oxygen demand*	300	2020	Above By-Law Limit
Cadmium (total)	0.7	0.00044	
Chlordane (cis plus trans isomers)	0.1	<0,2**	
Chromium (hexvalent)	2	<0.01	
Chromium (total)	4	<0.010	
Cobalt (total)	5	<0.0020	
Copper (total)	2	0.0435	
Cyanide (total)	2	<0.0020	
1.1.2.2 Tetrachloroethane	1.4	<0.00050	
1, 2 - dichlorobenzene	0.05	<0.004	
1.4 - dichlorobenzene	0.08	<0.004	
3,3 - dichlorobenzidine	0.002	<0.004	
Dichlorodiphenyltrichloroethane (DDT)	0.0001	<0.2**	
Cis - 1, 2 - dichloroethylene	4	<0.00050	
Ethyl benzene	0.16	<0.00050	
Fluoride	10	0.875	
Hexachlorobenzene	0.0001	<0.0004**	
Hexachlorocyclohexane (Lindane)	0.1	<0.1	
Lead (total)	1	0.00302	
Manganese (total)	5	0.0618	
Mercury (total)	0.01	<0.00080	
Methylene chloride	2	<0.00050	
Mirex	0.1	<0.1	
Molybdenum (total)	5	<0.0020	
Nickel (total)	2	<0.020	
Nitrogen (total)*	60	72	Above By-Law Limit
Nonylphenols	0.02	<0.001	
Nonylphenol ethoxylates	0.2	<0.0028	
Animal or vegetable oil	100	see attached	

### **Wastewater Sampling Results**

Company: Parmalat Canada Inc.

Sample Name: PARM 1
Sample Location: Manhole
Sample Type: Composite
Date Sampled: 09-Mar-15

Parameter	Sewer By-Law Limit (mg/L)	Sample Result (mg/L)	Comments
Mineral or synthetic oil	1.5	see attached	
Pentachlorophenol (PCP)	0.01	<0.005	
Phenolics (total by 4AAP method)	1	0.665	
Н	5.5 to 11	see attached	Composite sample
Phosphorus (total)*	10	17.5	Above By-Law Limit
Polychlorinated biphenyls (PCBs)	0.001	<0.00060	·
Polycyclic aromatic hydrocarbons (PAHs)	0.005	<0.0098**	
Selenium (total)	1	<0.010	
Silver (total)	. 5	<0.0010	
Sulphate (total)	1500	375	
Sulphide	1	<0.020	
Suspended Solids (total)*	350	460	Above By-Law Limit
Tetrachloroethylene	1	<0.00050	
Tin (total)	5	<0.0020	
Titanium (total)	5	0.0139	
Toluene	0.024	0.00613	
Total Purgeable Hydrocarbons	10	<0.10	
Total Semivolatile Hydrocarbons	100	4.53	
Trichloroethylane	0.4	<0.00050	
Xylenes (total)	1.4	<0.0015	
Zinc (total)	2	0.150	

Notes: \* - Discharges exceeding these limits are incorporated in your overstrength wastewater discharge license and do not need to be addressed in your Pollution Prevention Plan.

<sup>\*\* -</sup> Detection limit greater than By-law limit due to matrix effects.



### Water and Waste Department • Service des eaux des déchets

The following tables indicate our analysis for pH, Temperature, and Fats, Oils and Grease.

Company:

PARMALAT CANADA INC.

Address:

738 ST. JOSEPH STREET

### SAMPLE INFORMATION

Date:

March 9, 2015

Type:

16 hour Manual Composite

Location:

Manhole on rue La Verendrye St

Table 1: Table 1: pH and Temperature Analysis

TIME (hh:mm)	рН	TEMPERATURE (°C)	INITIALS
07:28	8.23	17.20	EG
08:35	11.68*	17.30	EG
09:27	6.20	13.30	EG
10:27	2.57*	17.60	EG
13:32	8.97	22.60	EG
15:54	10.13	16.80	EG
16:46	8.40	16.80	DE
17:38	9.53	17.70	DE
18:35	10.71	20.30	DE
20:56	2.27*	18.50	DE

Note: There was no flow at 12:30 and at 19:40

Table 2: Fats, Oils and Grease Analysis

SAMPLE DATE (dd-mmm-yy)	SAMPLE TIME (hh:mm)	рН	SAMPLE TEMPERATURE (°C)	ANIMAL OR VEGETABLE OIL (mg/L)	MINERAL OR SYNTHETIC OIL (mg/L)
9-Mar-15	7:34	8.26	17.00	1340*	<3.0
9-Mar-15	13:37	10.32	25.00	96.2	1.9
9-Mar-15	15:58	9.68	16.10	103*	1.1

<sup>\*</sup>indicates results outside by-law concentration limits

Sewer By-law concentration limits:

pH must be between 5.5 to 11.0 Animal or Vegetable Oil must be less than 100.0 mg/L Mineral Synthetic Oil must be less than 15.0 mg/L

# Wastewater Sampling Results for 738 St. Joseph Street: Quarter 1, 2015

Sample Number	Sample Date	Min pH (units)	Max pH (units)	BOD (mg/L)	TN (mg/L)	TP (mg/L)	TSS (mg/L)	Sample Comments
416819	02-Dec-14	2.20	9.24	1,790	72	15.4	328	pH outside By-law limits
417562	08-Dec-14	6.81	10.23	1,050	70	17.6	306	
418233	18-Dec-14	1.94	11.64	3,660	181	36.6	925	pH outside By-law limits
419751	06-Jan-15	2.24	10.98	1,020	78	21.2	244	pH outside By-law limits
420478	15-Jan-15	5.65	8.87	2,250	66	16.7	268	
421160	19-Jan-15	1.99	10.08	919	72	15.9	285	pH outside By-law limits
421791	28-Jan-15	5.16	7.30	134	17	6.4	33	pH outside By-law limits
422460	03-Feb-15	6.19	10.02	1,130	70	16.6	346	
423133	09-Feb-15	2.29	12.18	1,200	69	18.4	308	pH outside By-law limits
423742	18-Feb-15	3.58	11.78	1,230	74	13.5	315	pH outside By-law limits
124424	25-Feb-15	2.41	12.21	965	40	15.9	348	pH outside By-law limits
		A۱	/erage:	1,395	74	17.7	337	

Notes: NA - not analyzed NR - no result available, due to lab error or QC Failure NS - no sample

pH - acceptable range is 5.5-11.0 units

# Wastewater Sampling Results for 738 St. Joseph Street Quarter 2, 2015

Sample Number	Sample Date	Min pH (units)	Max pH (units)	BOD (mg/L)	TN (mg/L)	TP (mg/L)	TSS (mg/L)	Sample Comments
425210	04-Mar-15	2.38	12.03	408	29	14.1	157	pH outside By-law limits
425849	09-Mar-15	2.27	11.68	2,020	72	17.5	460	pH outside By-law limits
426675	17-Mar-15	4.73	10.01	668	35	10.1	134	pH outside By-law limits
427301	23-Mar-15	4.95	10.75	1,650	114	27.0	223	pH outside By-law limits
428038	30-Mar-15	5.76	8.55	1,290	85	17.4	206	
		Α	verage:	1,207	67	17.2	236	

Notes: NA - not analyzed

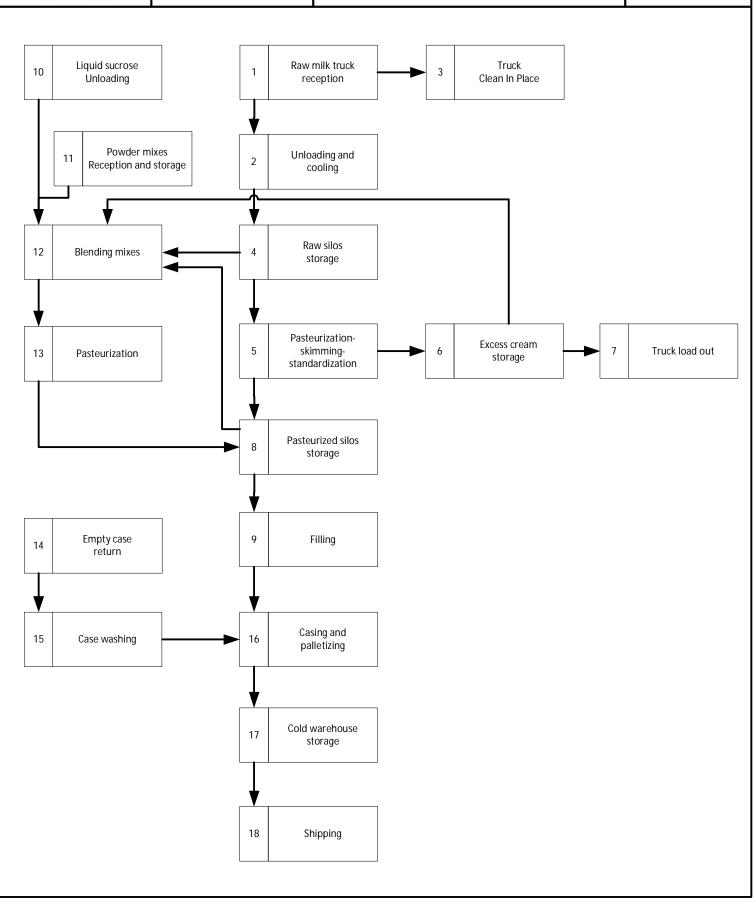
NR - no result available, due to lab error or QC Failure

NS - no sample

pH - acceptable range is 5.5-11.0 units







## Appendix D

Facility Location Plan

Lot Layout Plan

Lot Grading Plan

Proposed Site Layout Plan

