



November 25, 2019

Siobhan Burland Ross, M.Eng.
Manager, Municipal and Industrial
Environmental Approvals Branch
Manitoba Conservation and Climate
1007 Century Street
Winnipeg, Manitoba R3H 0W4

RE: **Notice of Alteration for Maple Leaf Foods Inc, 870 Lagimodière Blvd, Winnipeg
Clean Environment Commission Order Number 240V**

Dear Ms. Burland Ross:

Further to our telephone conversation on November 19th, please accept this submission in accordance with Section 14 (1)(a) of *The Environment Act*, as a request for a minor alteration to our 870 Lagimodière Boulevard plant which is licensed by Clean Environment Commission Order #240V. This Order was issued to Burns Food Limited on September 6, 1974. Burns Food Limited was subsequently acquired by Maple Leaf Foods in 1996.

We are requesting your authorization to replace our existing two 1965 era boilers with two new boilers and four direct contact water heaters. The alterations are required to increase energy efficiency and to provide for future requirements at the plant. Details on the alteration and associated environmental effects are described below.

ALTERATION

The proposed alteration involves a small footprint expansion to the powerhouse, removing the existing (and original to the plant construction) 500 bhp boilers and replacing them with new, energy efficient boilers and water heaters.

The footprint expansion to the powerhouse is small, 5,446 sq. ft.

The boilers to be replaced are both from c. 1965 and are 23.3 million BTU/hr each. Currently some of the steam generated by these boilers are used to heat water for the plant. The new Cleaver-Brooks CBEX Elite boilers will be 20.4 million BTU/hr each and will be much more efficient than the old ones. They will consume less gas and produce much cleaner emissions.

Water heating will no longer be done via boiler steam. Four direct contact Armstrong AFD-10000 water heaters at 10,000 BTU/hr each will be installed to produce the plant's hot water requirements,

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with space to install two more if the need arises in the future. With the installation of the boilers and water heaters, it is still a net reduction in fuel consumption, coupled with a significant increase in efficiency, which will reduce air emissions. A specification summary of the boilers and water heaters is attached to this letter.

CURRENT LICENCE RENEWAL

The Lagimodière facility has applied for an updated licence from Manitoba Conservation and Climate, which is still being processed; we suggest incorporating this alteration into the new licence.

ENVIRONMENTAL EFFECTS

Wastewater

As the alteration only slightly increases the footprint of the powerhouse, and the powerhouse does not undergo the sanitation process done in the production areas, there is no impact to wastewater as a result of this alteration. All wastewater is pre-treated on site in the facility's Class 1 wastewater treatment plant before discharge to the City of Winnipeg municipal sewer system, under an overstrength discharge agreement.

Stormwater

We do not expect there to be any effect on stormwater as a result of this alteration.

Air emissions

As stated above, this project will replace old, inefficient boilers with new, much more efficient boilers and water heaters rated at a lower BTU/hr. The net effect will be a reduction in air emissions.

Odour

We do not anticipate any odour issues as a result of this alteration.

Noise

We do not anticipate any increase in noise from this project, with the possible exception of some temporary construction noise for a short period during the small footprint expansion. The plant is located in an industrial area, immediately adjacent to major roadways (Lagimodière Boulevard and

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Marion Street). No noise complaints have been received at the plant and none are expected as a result of this alteration.

Traffic

Traffic effects related to the proposed alteration are not expected, or in the case of traffic related to construction activities, temporary and minor.

Overall, in our view, the environmental effect of the alteration is positive, from a net reduction in air emissions.

PROJECT TIMELINE

This project is scheduled to begin construction on the week of December 2nd with a projected timeline of 6-8 months to accommodate strategic initiatives. As such, your early review and approval of this Notice of Alteration by December 2nd would be greatly appreciated.

Ms. Burland Ross, I appreciate the effort that you and your staff will make in processing this request for alteration. Should you or your staff have any questions, please do not hesitate to contact me at 204-235-8232 or on my cell at 204-229-9594.

Yours truly,

Joel Grant, M.Sc.
National Manager of Environmental Affairs
Maple Leaf Foods

cc: Kelly Simpson, Site Leader, Maple Leaf Foods
Clay Nagy, Engineering Project Manager, Maple Leaf Foods
Mike Walsh, VP Health, Safety, Security, Environment and Sanitation, Maple Leaf Foods
Jennifer Winsor, Environmental Engineer, Manitoba Conservation and Climate

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APPENDIX – BOILER AND WATER HEATER SPECIFICATIONS

STEAM BOILER SCHEDULE (FOOD GRADE SYSTEM) - BASE BID

MARK	LOCATION	MAKE	MODEL	BOILER HP	GAS INPUT (MBH)	GAS PRESSURE (PSIG)	CAPACITY @ 212 F (LBS/HR)	MAWP (PSIG)	OPERATING PRESSURE (PSIG)	DESIGN TEMP (F)	EFFICIENCY (%)	CONNECTIONS (IN)			DIMENSIONS (IN)			WEIGHT (LBS)	NOTES	
												STEAM	VENT	FEEDWATER	V/PH/HZ	LENGTH	WIDTH			HEIGHT
SB001A	CLIP RM 001	CLEAVER BROOKS	CBEK ELITE 700-500-150ST	500.00	20,412.00	4.60	17,250.00	150.00	120.00	212.00	82.00	8.00	24.00	2.50	460/3/60	270.00	105.00	113.00	24,710.00	1-4
SB001B	CLIP RM 001	CLEAVER BROOKS	CBEK ELITE 700-500-150ST	500.00	20,412.00	4.60	17,250.00	150.00	120.00	212.00	82.00	8.00	24.00	2.50	460/3/60	270.00	105.00	113.00	24,710.00	1-4

NOTES:

- CONTACT: BRAD FINLAYSON AT WATERLOO MANUFACTURING, 519-599-3410.
- FIRE TUBE STEAM BOILER FOR FOOD GRADE SYSTEM, 30PRM NOK. PROVIDE REVERT TO PLOT TO ENSURE BOILER IS ALWAYS ON ORN MANITOBA.
- INCLUDES 30HP FORCED DRAFT FAN, 10-1 BURNER TURNDOWN.
- INCLUDES TWO (2) SAFETY RELIEF VALVES, ONE (1) AT 2.9', ONE (1) AT 2'; SHIPPED LOOSE, INSTALLED BY MECHANICAL CONTRACTOR.
- INCLUDES ECONOMIZER SUPPORTS FOR STANDARD ECONOMIZER, MODEL NUMBER CRE-3646.

WATER HEATER - GAS FIRED - BASE BID

TAG	QTY	MAKE	MODEL	SERVING	TEMP RISE (F)	FLOW (USGPM)	INPUT (BTU/H)	INPUT PRESSURE (PSIG)	STACK TIE IN SIZE	COMBUSTION AIR (CFM)	ELECTRICAL				DIMENSIONS LxWxH (IN.)	DRY WEIGHT (LBS)	NOTES	
											V	PH	HZ	FLA				MOCP
WH001A	1.00	ARMSTRONG	AFD-10000	FUTURE	100.00	200.00	10,000.00	2-6	22" OD	-	460.00	3.00	60.00	-	-	61 x 61 x 181	5,200.00	1-3
WH001B	1.00	ARMSTRONG	AFD-10000	FUTURE	100.00	200.00	10,000.00	2-6	22" OD	-	460.00	3.00	60.00	-	-	61 x 61 x 181	5,200.00	1-3
WH001C	1.00	ARMSTRONG	AFD-10000	DHW & MPH-W	100.00	200.00	10,000.00	2-6	22" OD	-	460.00	3.00	60.00	-	-	61 x 61 x 181	5,200.00	1-3
WH001D	1.00	ARMSTRONG	AFD-10000	DHW & MPH-W	100.00	200.00	10,000.00	2-6	22" OD	-	460.00	3.00	60.00	-	-	61 x 61 x 181	5,200.00	1-3
WH001E	1.00	ARMSTRONG	AFD-10000	DHW & MPH-W	100.00	200.00	10,000.00	2-6	22" OD	-	460.00	3.00	60.00	-	-	61 x 61 x 181	5,200.00	1-3
WH001F	1.00	ARMSTRONG	AFD-10000	DHW & MPH-W	100.00	200.00	10,000.00	2-6	22" OD	-	460.00	3.00	60.00	-	-	61 x 61 x 181	5,200.00	1-3

NOTES:

POWER AND CONTROL WIRING BY DIV 16, INSTRUMENTATION BY DIV 15 UNLESS NOTED OTHERWISE.

- PROVIDE NATURAL GAS TANKLESS DIRECT CONTACT HOT WATER SYSTEM C/W ALL STAINLESS STEEL CONSTRUCTION, HEAVY GUAGE STAINLESS STEEL FABRICATION, ULIC LISTED/CSA RATED BURNER CONTROL PANEL & GAS TRAIN (PREPARED & PREWIRED), 304 STAINLESS STEEL WETTED SURFACES, INLET WATER PRESSURE REGULATOR, HEATER MOUNTED NEMA 4 CONTROL PANEL W/ BURNER & PUMP CONTROLS, ALLEN BRADLEY COMPACT LOGIX PLC, PANEL VIEW 10.4" TOUCH SCREEN CONTROL ON PANEL, FUSED DISCONNECT BY OTHERS, STANDARD NOK BURNER, PROVIDE MATING FLANGE FOR STACK CONNECTION. HEATERS PROVIDED BY PRESTON PHIPPS/ARMSTRONG. CONTACT: JOE VAN DEN BORRE (519-240-0065).
- PROVIDE DISCONNECT SWITCHES, OVERFLOW PIPING TO DRAIN, INLET WATER STRAINER, PIPING FROM HEATER DRAIN OUTLET TO DRAIN, & STAINLESS STEEL EXHAUST STACK (INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS). PROVIDE WATER PRESSURE INDICATOR, WATER TEMPERATURE INDICATOR, CHECK VALVE AND ISOLATION VALVE UPSTREAM OF ARMSTRONG INLET PRESSURE REGULATOR. PROVIDE ISOLATION VALVE DOWNSTREAM OF ARMSTRONG DISCHARGE VALVE. PROVIDE STRUCTURAL REINFORCEMENT FOR STACK, DO NOT SUPPORT OFF UNIT.
- PROVIDE 370 GAL, 304 STAINLESS STEEL CENTRAL COLLECTION TANK C/W VENT, OVERFLOW, AND DRAIN. PROVIDE VARIABLE SPEED TRANSFER PUMP SKID C/W TWO 600 USGPM PUMPS (ONE DUTY, ONE STANDBY). PROVIDE BLIND FLANGE ON TANK AND PUMP SKID FOR FUTURE THIRD PUMP.

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