

**Maple Leaf Foods Inc.
10 Canning Street
Brantford, ON N3T 1P1**

**Toxics Reduction Plan Summary
for
Sulphuric Acid (CAS # 7664-93-9)**

May 29th, 2013

Facility Information

1. Substance: Sulphuric Acid (CAS # # 7664-93-9)
2. NPRI Identification no.: 10615
3. Legal Name and Address: Maple Leaf Foods Inc.
10 Canning Street
Brantford, ON N3T 1P1
4. Full Time Employees: 170
5. NAICS: 311990
6. Company Contact: Don Weimer
Plant Manager
10 Canning Street
Brantford, ON N3T 1P1
(519) 751-8116
7. Technical Contact: Patrick Huynh
Manager, Environmental Projects
6985 Financial Drive
Mississauga, ON L5N 0A1
(905) 285-5721
8. Plan Coordinator: Patrick Huynh
9. Plan Preparation: Patrick Huynh
10. Highest Ranking Official: Don Weimer
11. Plant Location (UTM): Zone 17
Easting 601008
Northing 4829488
12. Canadian Parent Company: Maple Leaf Foods Inc.
30 St. Clair Avenue West
Toronto, ON M4V 3A2

Statement of Intent

Maple Leaf Foods Inc. (MLF) is committed to reducing the use, creation, or transfer of toxic substances in its process where technically and economically feasible.

Objective

The objective of Toxics Reduction Plan is to

- Identify the toxic substances used, created, or transferred
- How they are used, created, or transferred
- Where they are used, created, or transferred
- How their use, creation, or transfer can be reduced or eliminated

Description of Substance Use or Creation

MLF operates a meat preparation, cooking and packaging at 10 Canning Street, Brantford (Ontario).

Sulphuric acid is used in the wastewater treatment plant for pH control. Stages and processes that involve sulphuric acid are illustrated in Figure 1 and described below:

- Sulphuric acid is received in the Receiving Process at the Receiving Stage in the form of liquid. It is pumped to a central storage tank, where it is stored until required. It is pumped to the Dissolved Air Flotation (DAF) process at the Wastewater Treatment Stage.
- At the Wastewater Treatment Stage, sulphuric acid is added to the DAF to 'acid break' the emulsifying oils in wastewater.

Contents of Plan Summary Reflects Plan

This Plan Summary for sulphuric acid accurately reflects the Toxics Reduction Plan dated May 29th, 2013.

Toxic Substance Reduction Options

Material or Feedstock Substitution: Options identified. Given the potential environmental consequences and operating pH range process requirement, sulphuric acid is the standard.

Option 1: Hydrochloric acid

Option 2: Phosphoric acid

Option 3: Citric acid

Option 4: Carbon dioxide

Product Design or Reformulation: No option identified. Sulphuric acid cannot be redesigned or reformulated.

Equipment or Process Modification: No option identified. It is not economically feasible to modify equipment or process of wastewater treatment plant.

Spill and Leak Prevention: No option identified as sulphuric acid spillage and leakage is insignificant. The storage tanks are monitored and protected from overflowing and are in a containment dyke.

On-site Reuse or Recycling: No option identified. Sulphuric acid is 100% consumed by neutralization process. Reuse and recycling does not apply to this process.

Improved Inventory Management or Purchasing Techniques: No option identified. Current inventory management and purchasing techniques are consistent with the process requirements and best practices. Sulphuric acid is purchased and delivered on an as-needed basis.

Training or Improved Operating Practices: No option identified. All wastewater operators are fully trained on procedures. Addition of sulphuric acid is fully automated.

Feasibility of Toxic Substance Reduction Options

Material or Feedstock Substitution

Option 1: Hydrochloric acid poses a potential sewer use bylaw violation where it has chlorides restriction. It is also very corrosive and would destroy the wastewater pipes and other equipment.

Option 2: Phosphoric acid poses a potential sewer use bylaw violation where it has total phosphorus restriction.

Option 3: Citric acid cannot drive pH low enough to desirable range of 4 to 5.5 S.U.

Option 4: Carbon dioxide cannot drive pH low enough to desirable range of 4 to 5.5 S.U.

Certification by Highest Ranking Employee

As of May 28, 2013, I, Don Weimer, certify that I have read the toxic substance reduction plan for sulphuric acid and am familiar with its content, and to my knowledge the plan is factually accurate and complies with the **Toxic Reduction Act, 2009** and **Ontario Regulation 455/09 (General)** made under that Act.



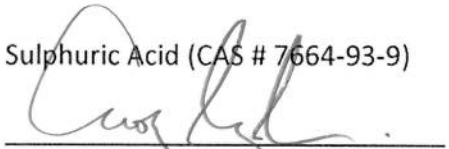
Don Weimer, Plant Manager
Maple Leaf Foods Inc.

May 28, 2013

Date

Toxics Substance Reduction Planner

As of May 29, 2013, I, Patrick Huynh, certify that I am familiar with the process at Maple Leaf Foods Inc.'s Brantford facility that use or create the toxic substances referred to below, that I agree with the estimates referred to paragraph 7 iii, iv and v of subsection 4(1) of the **Toxic Reduction Act, 2009** that are set out in the plan dated xxx and that plan complies with that Act and **Ontario Regulation 455/09 (General)** made under that Act.

Sulphuric Acid (CAS # 7664-93-9)


Patrick Huynh,
Manager, Environmental Projects
Maple Leaf Foods Inc.

TSRPO249

License Number

May 29, 2013

Date