

OxyVinyls Canada Co.
Niagara PVC Plant
8800 Thorold Townline Rd.
Thorold, ON L2E 6V9

Toxics Reduction Plan Summary

for

Vinyl Chloride (CAS # 75-01-4)

per

O.Reg. 455/09

December 29, 2012

Facility Information (per O.Reg.455/09, s.18. (2))

1. Substances:
The following Phase 1 substances are included in this Plan Summary:

| <u>Name</u> | <u>CAS Registry No.</u> |
|----------------|-------------------------|
| Vinyl Chloride | 75-01-4 |
2. NPRI Identification No: 5762
3. MOE Identification No per O.Reg. 127/01: 5294
4. Legal Name and Address: Street: OxyVinyls Canada Co.
8800 Thorold Townline Rd.
Thorold, ON L2E 6S5

 Mailing: OxyVinyls Canada Co.
P.O.Box 1027
Niagara Falls, ON L2E 6V9
5. Full Time Employees: 91
6. NAICS Code: 325210
7. Company Contact: Don Davidson - Plant Manager
Tel: 905-374-5601
8. Technical Contact: Ron Morettin - HESS Team Leader
Tel: 905-374-5669
9. Plan Coordinator: Ron Morettin
10. Plan Preparation: Ron Morettin
11. Highest Ranking Employee: Don Davidson
12. Addresses of Contacts: Same as 4.
13. Plant Location (UTM): Zone: 17T
 Easting: 648800
 Northing: 4767600
 Latitude: 42.98100
 Longitude: -79.26660
14. Canadian Parent Company: Occidental Canada Holdings Ltd.
Charles S. Reagan
Suite 900
1959 Upper Water Street
Halifax, Nova Scotia B3J 2X2

Statement of Intent

Oxy Vinyls Canada Co. is required under O.Reg. 455/09 to develop Toxic Reduction Plans for Phase 1 substances by December 31, 2012.

Oxy Vinyls Canada Co. is committed to reducing the use, creation, or transfer of toxic substances in its processes where feasible and economically viable.

Objective

The objective of this Toxic 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, and how their use, creation, or transfer can be reduced or eliminated.

Description of Substance Use or Creation

Vinyl Chloride is used in the manufacturing of poly vinyl chloride (PVC) resin. Approximately 99.998% of the vinyl chloride used is converted to PVC or destroyed in the process.

Contents of Plan Summary Reflects Plan

This Plan Summary for vinyl chloride accurately reflects the Toxics Reduction Plan dated December 19, 2012.

Options To Be Implemented

Material or Feedstock Substitution - No option identified

Vinyl chloride is the necessary raw material in the manufacturing of poly vinyl chloride resin. PVC cannot be made with any other chemical. Consequently, the only way to reduce or eliminate vinyl chloride in the PVC manufacturing process is by reducing or shutting down production.

Product Design or Reformulation - No option identified

Neither PVC nor vinyl chloride can be redesigned or reformulated. PVC is a widely used plastic material with a variety of end uses such as pipe, siding, wire and cable insulation, pool liners, roof membranes, IV bags, automotive products, synthetic textiles, flooring, stretch wrap, and much more.

Equipment or Process Modifications - No option identified

The Niagara PVC manufacturing process is state of the art technology which maximizes productivity while minimizing environmental and safety risk to the workers and community. Process modifications are made routinely to incorporate newer and more advanced manufacturing technologies and equipment. Under O.Reg. 419/05 a technology review was conducted to compare the Oxy Vinyls Niagara PVC plant against other North American PVC and vinyl chloride plants. This review confirmed that the Niagara PVC plant incorporates all the best practices and technologies of this industry. Oxy Vinyls Niagara PVC will review and incorporate new technologies and practices as they are developed.

Spill and Leak Prevention - No option identified

Vinyl chloride spill and leak prevention is a requirement of O.Reg. 419/05. Oxy Vinyls Canada Co. - Niagara PVC plant has been granted an Altered Air Standard No. 201-09-rv0. Part of this standard requires the implementation of leak detection methods as well as process improvement to reduce vinyl chloride emissions.

On-site Reuse or Recycling - No option identified

Vinyl chloride consumption in the production of PVC resin is 99.998% efficient with only very small quantities being released to the environment. On-site recycling or reuse is being applied to PVC resin.

Improved Inventory Management or Purchasing Techniques - No option identified

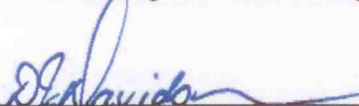
Current inventory management and purchasing techniques are consistent with the manufacturing requirements. The delivery and storage of vinyl chloride on-site is maintained at minimum required levels to meet the current manufacturing needs.

Training or Improved Operating Practices - No option identified

All operating personnel in the plant are fully trained to work with vinyl chloride and are required to maintain up to date training by periodic recertification on the procedures. As operating practices are improved, procedures are updated and the operating personnel are required to train and complete certification on the new procedures.

Certification by Highest Ranking Employee

As of DECEMBER 20, 2012, I, Donald Davidson, certify that I have read the toxic substance reduction plan for vinyl chloride and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the **Toxics Reduction Act, 2009** and **Ontario Regulation 455/09 (General)** made under that Act.



Donald Davidson, Plant Manager
OxyVinyls Canada Co.

12/20/2012


Date

Toxic Substance Reduction Planner

As of 12/21/2012, I, Scott Manser, certify that I am familiar with the processes at Oxy Vinyl Canada Co.'s Niagara Falls facility that use or create the toxic substances referred to below, that I agree with the estimates referred to in subparagraphs 7 iii, iv and v of subsection 4 (1) of the **Toxics Reduction Act, 2009** that are set out in the plan dated December 19, 2012, and that the plan complies with that Act and **Ontario Regulation 455/09 (General)** made under that Act.

Vinyl Chloride

CAS#75-01-4



Scott Manser
Toxic Substance Reduction Planner

TSR0071

License Number

12/21/2012

Date