

## NALCO CANADA ULC – BURLINGTON TOXICS REDUCTION PLAN FOR DIETHANOLAMINE

### EXECUTIVE SUMMARY

Stantec Consulting Ltd. (Stantec) has worked with Nalco Canada ULC (Nalco) to prepare this Toxics Reduction Plan for their facility located at 1055 Truman Street in Burlington, Ontario. The subject toxic substance is diethanolamine (CAS 111-42-2) processed and used in the facility. The substance met the 2017 National Pollutant Release Inventory (NPRI) reporting criteria and thus a toxics reduction plan is required in accordance with the Ontario Toxic Reduction Act (2009) and Ontario Regulation 455/09. This plan was prepared to meet the requirements of the Act and the Regulation. Nalco has also prepared toxics reduction plans for each of the other applicable substances (acrylamide, sulfuric acid, isopropyl alcohol, nonylphenol and ethoxylates, phosphorous, sodium nitrite, acrylic acid, zinc and its compounds) as required by the Act. The purpose of the plan is for the facility to undertake toxic substance accounting to better understand the quantities of toxic substances that are used, created, transformed, destroyed, released, disposed of, and contained in product; and to examine how the amount of the toxic substance used or created at the facility could be reduced or eliminated by implementing technically and economically feasible toxic substance reduction options. The following are included in the plan:

- Basic facility information.
- Statement of intent to reduce use and creation of the toxic substance.
- Toxic substance accounting data, including
  - identification and description of stages and processes;
  - descriptions of how, when, where, and why the substance is used and/or created;
  - process flow diagrams;
  - data and methods used in toxic substance accounting; and,
  - analysis of input/output balances.
- Costs associated with the use, creation, release, disposal, and transfer of the toxic substance.
- Toxics reduction options.
- Reduction estimates, technical and economic feasibilities analysis.
- Summary of options to be implemented.
- Recommendations in applicable categories.

Nalco has taken proactive initiatives to reduce the use of toxics (including the subject toxic substance) through process modification, spill/leakage prevention, onsite reuse, inventory management systems and specific training programs. The facility has detailed material storage, handling and monitoring procedures to prevent the loss of the substance. The facility does not create diethanolamine onsite and thus this plan does not address reducing its creation.

Based on the nature of the facility operation, no further toxics reduction options have been identified as feasible for the facility. Therefore, the facility does not plan to implement toxics reduction options additional to the practices that the facility is performing as part of their best practices and continuing improvement programs.

## **NALCO CANADA ULC – BURLINGTON TOXICS REDUCTION PLAN FOR DIETHANOLAMINE**

Nalco Canada ULC continues to be committed to playing a leadership role in protecting the environment. The company will continue to apply the industrial sector best practices and continuous improvement strategies to reduce the use and minimize the release/leak of the of the subject toxic substance.

The plan was certified by the highest ranking official at Nalco and a licenced planner from Stantec.

### **BASIC FACILITY INFORMATION**

#### **Facility Information**

Company Name: Nalco Canada ULC

Facility Name: Nalco Canada ULC – Burlington

#### **Owner and Operator of the Facility**

Name: Nalco Canada ULC

Address: 1055 Truman Street, Burlington, ON L7R3Y9

#### **Public Contact**

Name: Steve Narasnek

Title: Plant Manager

Address: 1055 Truman Street, Burlington, ON L7R3Y9

Phone Number: (905) 633-1050

E-mail: [snarasnek@ecolab.com](mailto:snarasnek@ecolab.com)

#### **Parent Company Information**

Legal Name of Parent Company: Nalco Company

Address of Parent Company: 1601 Diehl Road West, Naperville, IL 605 63-1198

Percentage of Facility Owned by Company: 100%

CCRA Business Number: 100119627

NPRI Identification Number: 1668

Ontario MOE Identification Number: 7081

NAICS 2 Code: 31-33 - Manufacturing

NAICS 4 Code: 3259 - Other Chemical Product Manufacturing

NAICS 6 Code:

325999 - All Other Miscellaneous Chemical Product Manufacturing

Number of Full-time Employees: 75

UTM Spatial Coordinates (NAD83): Latitude: 43.3428; Longitude: -79.8175

Datum: 1983

## NALCO CANADA ULC – BURLINGTON TOXICS REDUCTION PLAN FOR DIETHANOLAMINE

### Toxic Substances for Which Facility Must Prepare Plan:

Substance	CAS
Diethanolamine	111-42-2

### Other Toxic Substances for Which Facility has prepared Plans:

Substance	CAS
Acrylamide	79-06-1
Acrylic Acid	79-10-7
Sulfuric Acid	7664-93-9
Isopropyl Alcohol	67-63-0
Nonylphenol and ethoxylates	various
Phosphorous as P	various

### Statement of Intent

Diethanolamine is the subject toxic substance of this plan. It is used in the facility in the production stage (i.e., liquid blending) as a composition of the final products as required by the product specification. The majority of diethanolamine is contained in the final products. The facility does not create diethanolamine onsite and this plan does not address reducing its creation.

### Objectives

Nalco has taken proactive initiatives to effectively use and reduce the loss of toxic substance (including diethanolamine) through process modification, spill/leakage prevention, onsite reuse, inventory management systems and specific training programs (discussed in Section 6). The facility has detailed material storage, handling and monitoring procedures to prevent the loss of the substances used onsite. Based on the nature of the facility operation, no further toxics reduction options have been identified as feasible for the facility. Therefore, the facility does not plan to implement toxics reduction options in addition to the practices that the facility is performing as part of their best practices and continuing improvement programs. Nalco Canada ULC continues to be committed to playing a leadership role in protecting the environment. The company will continue to apply the industrial sector best practices and continuous improvement strategies to reduce the use and minimize the release/leak of the of the subject toxic substance. Toxics use reduction will be an ongoing effort for Nalco.

## NALCO CANADA ULC – BURLINGTON TOXICS REDUCTION PLAN FOR DIETHANOLAMINE

### **Identification of options**

The subject substance is used at the facility for product specification purposes. It is contained in two raw materials that are used in the liquid processes to produce final products. The use of the substance is required by the products specification to meet the customer needs.

Based on current available information, it is not known if any viable alternatives can be used to replace the subject substance in each specific product. According to the Nalco research centre located in Naperville in IL, U.S., currently there is no corporate initiative to identify alternatives. Therefore, no options are identified under this category.

### **Estimated reductions, technical and economic feasibility**

Provision of estimated reductions, and technical and economic feasibility evaluation is not applicable, as no options were identified.

#### **Statement:**

This Plan Summary accurately reflects the overall Plan as submitted to Environment Canada.

#### **Person Who Prepared the Plan**

Name: Boris Chen

Position: Project Manager, Stantec

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**NALCO CANADA ULC – BURLINGTON TOXICS REDUCTION PLAN FOR DIETHANOLAMINE**

**NALCO CANADA ULC BURLINGTON FACILITY TOXICS REDUCTION PLAN FOR DIETHANOLAMINE**

PLAN CERTIFICATIONS

October 19, 2018

**CERTIFICATION BY HIGHEST RANKING EMPLOYEE**

As of October 19, 2018, I, Steve Narasnek, certify that I have read the toxic substance reduction plan for the toxic substance referred to below 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.

Toxic Substance: Diethanolamine (CAS 111-42-2)



October 24, 2018

Steve Narasnek  
Plant Manager  
1055 Truman Street, Burlington, ON L7R3Y9  
Phone: 905-633-1050  
snarasnek@nalco.com

Date

**CERTIFICATION BY LICENSED PLANNER**

As of October 19, 2018, I, Ruouu (Boris) Chen certify that I am familiar with the processes at Nalco Canada ULC that use or create the toxic substance 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 October 19, 2018 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substance: Diethanolamine (CAS 111-42-2)

*Oct 19, 2018*

Ruouu (Boris) Chen (License No. TSRP0239)  
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Date