



## **LAKE SHORE GOLD BELL CREEK COMPLEX**

**3160 FLORENCE STREET, PORCUPINE, ONTARIO P0N 1C0**

### **TOXICS REDUCTION ACT TOXIC SUBSTANCE REDUCTION PLAN SUMMARY 2016**

REPORT PREPARED BY:  
*O2E INC.*

REPORT PREPARED FOR:  
*LAKE SHORE GOLD*

DECEMBER 15, 2017

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## 1. PLAN SUMMARY – AMMONIA (TOTAL)

<b>Name and CASRN of Substance</b>	Ammonia (total)	NA-16
<b>Substances for which other plans have been prepared</b>	Chromium (and its compounds)	NA - 04
	Copper (and its compounds)	NA - 06
	Cyanides (ionic)	NA - 07
	Manganese (and its compounds)	NA - 09
	Nickel (and its compounds)	NA - 11
	Nitric acid	7697-37-2
	Vanadium	7440-62-2
	Zinc (and its compounds)	NA - 14
	Arsenic (and its compounds)	NA - 02
	Cadmium (and its compounds)	NA - 03
	Cobalt (and its compounds)	NA - 05
	Lead (and its compounds)	NA - 08
	Selenium (and its compounds)	NA - 12
	Thallium	NA - 23
	Particulate Matter (TPM)	NA - M08
	Particulate Matter (10)	NA - M09
Particulate Matter (2.5)	NA - M10	

### 1.1 Basic Facility Information

Basic facility information has been included in Section 2 of this document.

### 1.2 Toxic Reduction Policy Statement of Intent

Lake Shore Gold (a division of Tahoe Resources Inc.) (Lake Shore) is committed to operating its mines and projects in an environmentally responsible manner. We regularly evaluate existing work conditions; minimize and mitigate environmental impacts of our operations; apply prudent design and operating practices; and educate employees and contractors who work at our facilities. Lake Shore is committed to the following:

- Meeting or exceeding the standards set by the applicable environmental laws and regulations in the countries in which they operate;
- Exploring, designing, constructing, operating and reclaiming mining operations by using effective and proven practices that minimize adverse environmental impacts;
- Educating employees regarding environmental matters and promoting employee participation in minimizing environmental impacts;
- Proactively and diligently addressing stakeholder concerns;
- Promoting environmental education in our CSR training programs;

- Conducting regular environmental reviews and reporting findings to environmental agencies, management and the Board of Directors to ensure compliance with high environmental standards;
- Prominently displaying and promoting this policy to their employees and contractors and publicly disclosing it.

Wherever feasible, Lake Shore will reduce the creation and release of Ammonia (total) in full compliance with all federal and provincial regulations. Toxic substance reduction will be an ongoing effort at Lake Shore, and we will continue to monitor technological advancements to ensure that options that are both technologically and financially viable are implemented at our facility.

### **1.3 Reduction Objectives**

The reduction of toxic substance use, creation and releases is a priority for Lake Shore forming part of our sustainability programs and EMS. Based on currently available information and technologies,, there are no reduction options that have been identified as being both technically and economically feasible for this substance. However, we will continue to monitor technological advancements and ensure the sound management and use of this substance that minimizes significant adverse impacts on human health and the environment.

### **1.4 Description of Substance**

Ammonia (total) is created by the facility as a by-product of the use of Ammonium Nitrate Fuel Oil (ANFO) explosives. Specifically, the incomplete detonation of ANFO in wet environments leaves behind water-soluble by-products of unreacted ammonium nitrate as nitrate, nitrite and ammonia into the environment. Water containing ammonia from the underground works at the facility is pumped to the polishing pond, part of the effluent treatment operations, prior to being released to the natural environment.

### **1.5 Toxic Substance Reduction Option to be Implemented**

There are currently no options that have been determined to be both technically and economically feasible. Walters Inc. will continue to explore and investigate potential options as they arise as part of their commitment to environmental stewardship and sustainability.

### **1.6 Plan Summary Statement**

This plan accurately reflects the content of the toxic substance reduction plan for Ammonia (total), prepared on behalf of Lake Shore, and dated December 15, 2017.

## 1.7 Copy of Plan Certification

A copy of the plan certification is presented in Section 3 of this document.

## 2. BASIC FACILITY INFORMATION

<b>Facility Identification and Site Address</b>		
<b>Company Name</b>	Lake Shore Gold (A Division of Tahoe Resources Inc.)	
<b>Facility Name</b>	Bell Creek Complex	
<b>Facility Address</b>	Physical Address:	Mailing Address
	3160 Florence Street Porcupine ON PON 1C0	3160 Florence Street Porcupine ON PON 1C0
<b>Spatial Coordinates (UTM)</b>	458919 (Easting)	5359037 (Northing)
<b>Datum</b>	WGS84	
<b>Number of Employees</b>	307 (Full time equivalents)	
<b>NPRI ID</b>	11796	
<b>ON MOE ID</b>	-	
<b>Parent Company Information</b>		
<b>Parent Company Name &amp; Address</b>	Not Applicable	
<b>Percent Ownership</b>		
<b>Primary North American Industrial Classification System Code (NAICS)</b>		
<b>2 Digit NAICS Code</b>	21 - Mining, quarrying, and oil and gas extraction	
<b>4 Digit NAICS Code</b>	2122 - Metal ore mining	
<b>6 Digit NAICS Code</b>	212220 - Gold and silver ore mining	
<b>Company Contact Information</b>		
<b>Facility Public Contact</b>	Marcel Cardinal Manager of Environmental Affairs	Contact Address
	<a href="mailto:MCardinal@tahoeresources.com">MCardinal@tahoeresources.com</a>	Tahoe Resources Inc. 3160 Florence Street Porcupine ON PON 1C0
	Phone: (705) 269-4344 Ext. 4202	

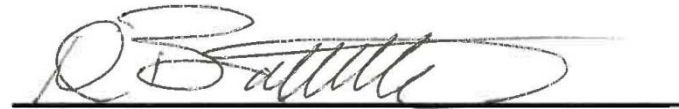
### 3. COPY OF PLAN CERTIFICATION

#### **Certification by the Highest Ranking Employee**

As of December 15, 2017, I, Dan Battiston, certify that I have read the toxic substance reduction plans for the toxic substances referred to below and am familiar with their contents, and to my knowledge the plans are factually accurate and comply with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substances:

Ammonia (total)



Dan Battiston  
General Manager Canadian Operations  
Lake Shore Gold – A Division of Tahoe Resources

#### **Certification by Licensed Planner**

As of December 15, 2015, I, Tim Logan certify that I am familiar with the processes at the Lake Shore Gold Bell Creek Complex 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 plans dated December 15, 2017 and that the plans comply with that Act and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substances:

Ammonia (total)



Tim Logan, EP (License No. TSRP0003)  
President  
O2E Inc. Environmental Consultants