



**ENVIRONMENTAL REPORTING  
SYSTEMS LIMITED**

**Grand Valley Fortifiers Ltd.**  
486 Main Street East, Cambridge, Ontario N1R 5W6

**Toxic Substance Reduction Plan  
Summary  
- Selenium -**

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**Toxics Reduction Act & Ontario Regulation 455/09**

For: Andy Lobbezoo  
Production Manager  
Grand Valley Fortifiers Ltd.

May 25, 2013

## Toxic Substance Reduction Plan Summary - Selenium Toxics Reduction Act & Ontario Regulation 455/09

### Basic Facility Information

Grand Valley Fortifiers Ltd. (GVF) is an Animal Feed Manufacturer. The main facility activities include blending, shipping, receiving, and warehousing. GVF produces animal feed product to industry standards and governmental requirements. The inclusion of nutrients is vital to the effectiveness and functionality of its products necessitates the presence and use of the prescribed toxic substances; Selenium (TRA Phase 1) and Phosphorous (TRA Phase 2). Particulate Matter (PM10 & PM2.5) is released from a baghouse dust collector. These substances include compounds containing the substance and so there is no single Chemical Abstracts Service (CAS) Registry number for them.

The Facility is made up of several buildings totaling approximately 4,760 square metres on a site of irregular shape and approximately 9,750 square metres or just under one hectare. Most of the building space is used by warehousing with some offices, a sales/greenhouse area and a retail store. The feed blending activity operates 24 hours per day, five days a week.

Facility Name: Grand Valley Fortifiers Ltd. (GVF)  
Address: 486 Main Street East, Cambridge, Ontario, N1R 5W6  
NPRI Identification Number: 11038  
Two Digit NAICS Code: 31  
Four Digit NAICS Code: 3111  
Six Digit NAICS Code: 311119  
Number of Full-time Employees: ~ 30  
UTM Spatial Coordinates: (NAD83-Zone17) 557654 mN: 4800829 mE (southwestcorner)

Operator Name: Grand Valley Fortifiers Ltd.  
Address: 151 Savage Drive, Cambridge, Ontario, N1R 1S6

Substance 1: *Phosphorus* CAS Number: N/A (TRA Phase 2)  
Substance 2: **Selenium** CAS Number: N/A (TRA Phase 1)  
Substance 3: *Particulate Matter*;  $\leq 10$  microns (PM10) CAS Number: NA-M09 (TRA Phase 2)  
Substance 4: *Particulate Matter*;  $\leq 2.5$  microns (PM2.5) CAS Number: NA-M10 (TRA Phase 2)

As TRA Phase 2 Substances are not required to have a Toxic Substance Reduction Plan until Dec. 31, 2013, the above Phase 2 Substances are included and considered voluntary for reporting and planning.

### *Public Contact*

Name: Andy Lobbezoo  
Address: 486 Main Street East, Cambridge, Ontario, N1R 5W6  
Phone Number: (519) 621-4400  
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E-mail: andylobbezoo@grandvalley.com

## **Statement of Intent**

Grand Valley Fortifiers does not intend to reduce its use of the toxic substance as it is a product ingredient and is required by law. The substances are essential nutrients in the animal feed product.

## **Objective of the Plan**

Grand Valley Fortifiers does not intend to reduce the use of the toxic substance as this is contrary to the core business but will consider the findings of the Plan.

## **Target & Timeline**

GVF is unable to reduce the use of the toxic substance and therefore has no targets or timelines for the Plan.

## **Description of Toxic Substance Use**

The Toxic Substance Selenium is present in materials used in the Blending process of the Production stage. These ingredients are purchased. Animal feeds are blended to the strict requirements of the Canada Feed Inspection Agency.

There are hundreds of feed blends produced but most are made with the following percent composition of Toxic Substances; Selenium at 0.0018 %, *Phosphorous at 4.05 %*. The Toxic Substances *Particulate Matter (PM10 and PM2.5)* are released to air from the Blending process. (The Substances).

Selenium is a prescribed toxic substance (Phase 1) found in a concentration equal or greater than 0.000005 % and used in a quantity more than 100 kg per year (Phase 1). *Phosphorous is a prescribed (Phase 2) toxic substance found in a concentration equal or greater than one percent and is used in a quantity of more than 10 tonnes per year. Particulate Matter (PM10 and PM2.5) are released in quantities exceeding the reporting threshold.*

Selenium is received in raw materials delivered in bags that are stored until dumped into hoppers for blending. *Phosphorous arrives in materials delivered by truck to silos for blending.* They are then mixed in-vessel with other ingredients in the Blending process of the Production stage.

The process that uses the prescribed toxic substances, the Blending process of the Production Stage, is an intermittent batch process where ingredients are fed into a hopper and mixed before packaging. The Blending process releases the Substances to Air as Particulate Matter through dust collector and bin venting (on-site emission). Dust collection also produces off-site disposal of the Substances. The Substances are primarily contained in product.

## TRA Summary Table

Quantities of the Substance Used, Created, etc. are presented in ranges per MOE guidance.

Substance	Requirement	Units	Used	Created	Transformed	Released	Recycled	Disposed	Contained in Product
Selenium	NPRI Part 1B/TRA	kilograms	100 - 1000	-	-	0 - 1	-	0 - 1	100 - 1000

## Description of Options

The only option that made it to the economic feasibility assessment would not reduce the use of the Substance and is strictly a method of pollution control that provides no further benefit to substance reduction or market competitiveness. As a result, the implementation of the option will not be made under this plan but may be considered for its value.

## Implementation of Option

The only option remaining from the technical feasibility assessment does not provide a reduction in the use of the Substance and adds to the cost of each tonne of material blended. Therefore, this option is not economically feasible and this plan will not be implemented.

This Toxic Substance Reduction Plan Summary accurately reflects the Plan it summarizes.

## Plan Certifications for Toxic Substance

TOXIC SUBSTANCE REDUCTION PLAN - SELENIUM

GRAND VALLEY FORTIFIERS LTD., CAMBRIDGE

As of May 25, 2013, I, Ian Ross, confirm 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, with exception of the regulatory deadline. Despite the best efforts of our team, circumstances did not allow for the completion of this plan in as timely fashion as would have been preferred. Grand Valley Fortifiers Ltd. remains committed to environmental protection as part of its policies and operations.

[Selenium]



Ian Ross

Date

May 28 2013

President, Grand Valley Fortifiers Ltd. (Highest Ranking Employee)

As of May 25, 2013, I, Grahaem Capaldi confirm that I am familiar with the processes at Grand Valley Fortifiers Ltd. 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 May 25, 2013 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act, with exception of the regulatory deadline.

[Selenium]



Grahaem Capaldi

Date

May 28, 2013.

Toxic Substance Reduction Planner (TSRP#0063), Environmental Reporting Systems Limited



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