TRA ANNUAL SUMMARY

OPERATIONAL COMPARISON 2019-2020

BASIC FACILITY INFORMATION

Company Name:	Wallenstein Feed & Supply Limited Wallenstein Operations
Facility Address:	7307 Highway 86 Wallenstein, Ontario N0B 2S0
Contact Information:	Craig Foster Operations Manager 519-669-5143 <u>craigfoster@wfs.ca</u>
Certifying Official :	Rick Martin General Manager 519-669-5143 <u>rickmartin@wfs.ca</u>
Parent Company:	Wallenstein Feed & Supply Limited 100% ownership
UTM Locator (NAD83):	Zone - 17 529299E; 4827527N
The facility's NPRI ID:	10111

In 2020, WFS-Wallenstein employed about 221 full time employees (equivalent)

The NAICS codes applicable to the facility are:

31	- Manufacturing
3111	 Animal Food Manufacturing
311119	 Other Animal Food Manufacturing

TOXIC REDUCTION STRATEGY STATEMENT OF INTENT

WFS-Wallenstein does not intend to reduce the amount of copper, manganese, selenium, zinc, cobalt and phosphorous used in its production of animal feeds nor is there any option at this time to reduce the creation of the particulate matter (TPM, PM_{10} or $PM_{2.5}$) that results from the handling and processing of the bulk dry feed ingredients (whole grains).

However as WFS-Wallenstein is committed to protecting the environment, wherever feasible, the reduction of these substances will be implemented should alternatives that are both technically and economically feasible be identified. Our employees are encouraged to participate in all types of reduction activities but the toxic substances associated with WFS-Wallenstein operations are primary ingredients in our feeds to improve and maintain the health of livestock and companion animals or by-products created during the processing activities or supporting operations. An additional effort is also ongoing at the facility to reduce the discharge and disposal of these toxic substances as this is not only environmentally responsible operations it also indicates improved efficiencies in our processing operations.

REDUCTION OBJECTIVES

The toxic substances that WFS uses and/or is created on-site is specific to the feed formulations they produce. The objective is not to reduce the amount of copper, manganese, selenium, zinc, cobalt and phosphorous used as this will increase as production increases. The creation of particulate matter (TPM, PM_{10} and $PM_{2.5}$) results from the handling of the bulk dry feed ingredients (whole grains) and as production levels increase the creation of particulate matter will also increase due to the increased quantity of whole grains processed. All mitigation and best management practices for handling of the grains to minimize the generation of particulate matter has been implemented.

TOXIC SUBSTANCES

The TRA required tracking of all NPRI substances for the 2020 operational year. Nine (9) substances were required to be tracked, quantified and reported for under TRA. This included Copper, Manganese, Selenium, Zinc, Cobalt, Phosphorous, TPM, PM_{2.5} and PM₁₀. The nine (9) substances were reported to the Ministry of the Environment and Climate Change under O. Reg. 455/09 through SWIM.

TRACKING AND QUANTIFICATIONS

The method used to calculate the TRA quantifications was a mass balance approach based on purchase records and emission estimates were based on published AP-42 emission factors. This is the best available method as there is no site specific monitoring data available.

Table 1 is a summary of reported TRA quantities for the 2020 operational year. When compared to the last reported values, an increase can be seen in the use of ingredients. This increase in use is due the increase in overall production of animal feed at the facility.

In the 2020 operational year, there were no out of the ordinary incidents or significant process changes at the facility.

Table 1: Comparison of Quantities Reported														
CAS	Substance	Description of Processes that Use or Create Substance	Reporting under NPRI Part	NPRI Threshold (tonnes)	2020 Used (tonnes)	Used 2019 - Last Reported Value	% Change	2020 Created (tonnes)	Created 2019 - Last Reported Value	% Change	2020 Contained In Product (tonnes)	Contained in Product 2019 - Last Reported Value	% Change	Reason for Changes
NA-06	Copper (and its compounds)	Used as a formulation component	Part 1	10 (MPO)	>10-100	>10-100	10.29%	0	0	0%	>10-100	>10-100	10.29%	Variation of Feed Composition
NA-09	Manganese (and its compounds)	Used as a formulation component	Part 1	10 (MPO)	>10-100	>10-100	-0.31%	0	0	0%	>10-100	>10-100	-0.31%	Variation of Feed Composition
NA-14	Zinc (and its compounds)	Used as a formulation component	Part 1	10 (MPO)	>100-1000	>100-1000	2.60%	0	0	0%	>100-1000	>100-1000	2.60%	Variation of Feed Composition
NA-12	Selenium (and its compounds)	Used as a formulation component	Part 1	0.100 (MPO)	>0.100-10	>0.100-10	3.44%	0	0	0%	>0.100-10	>0.100-10	3.44%	Variation of Feed Composition
NA-22	Phosphorous (total)	Used as a formulation component	Part 1	10 (MPO)	>1000-10000	>1000-10000	-7.08%	0	0	0%	>1000- 10000	>1000-10000	-7.08%	Variation of Feed Composition
NA-05	Cobalt (and its compounds)	Used as a formulation component	Part 1	0.05 (MPO)	>0.100-10	>0.100-10	2.78%	0	0	0%	>0.100-10	>0.100-10	2.78%	Variation of Feed Composition
NA-M10	PM2.5 - Particulate Matter	Grain Processing, Supporting Operations	Part 4	0.3 (Release)	0.00	0.00	0.00%	>10-100	>10-100	2.41%	0.00	0.00	0.00%	No Significant Change
NA-M09	PM10 - Particulate Matter	Grain Processing, Supporting Operations	Part 4	0.5 (Release)	0.00	0.00	0.00%	>10-100	>10-100	1.84%	0.00	0.00	0.00%	No Significant Change
NA-M08	TPM - Total Particulate Matter	Grain Processing, Supporting Operations	Part 4	20 (Release)	0.00	0.00	0.00%	>100- 1000	>100-1000	2.51%	0.00	0.00	0.00%	No Significant Change

COMPARISION OF TRACKING AND QUANTIFICATION

A slight change in the quantification calculations used for TPM, PM_{10} and $PM_{2.5}$ were made for operational year 2020. This change has resulted in an increase in the particulate matter emissions.

DESCRIPTION OF STEPS TAKEN TO ACHIEVE OBJECTIVE AND ASSESS EFFECTIVNESS

There was no technologically feasible reduction strategy objectives identified for the Wallenstein facility and as such there was no economic feasibility study completed for the prescribed TRA substances.

There are no objectives to track or reduction targets to evaluate.

Table 2 provides a summary of the facility TRA changes and updates which took place in 2020.

Table 2:	2: Changes in Quantifications, Quantities and Plan Updates								
CAS	Substance	Quantification Method(s) Used	Change in Quantification Method Used	Rationale for Using Selected Method(s)	Incidents out of the Ordinary	Significant Process Change	Objectives, Descriptions, Targets	Actions	Amendments
NA-06	Copper (and its compounds)	Mass Balance/Emission Factors	No change	No site specific monitoring data available	No	No	No reduction options were identified to be both technically and economically feasible. Therefore, no options were chosen for implementation.	None	None
NA-09	Manganese (and its compounds)	Mass Balance/Emission Factors	No change	No site specific monitoring data available	No	No	No reduction options were identified to be both technically and economically feasible. Therefore, no options were chosen for implementation.	None	None
NA-14	Zinc (and its compounds)	Mass Balance/Emission Factors	No change	No site specific monitoring data available	No	No	No reduction options were identified to be both technically and economically feasible. Therefore, no options were chosen for implementation.	None	None
NA-12	Selenium (and its compounds)	Mass Balance/Emission Factors	No change	No site specific monitoring data available	No	No	No reduction options were identified to be both technically and economically feasible. Therefore, no options were chosen for implementation.	None	None
NA-22	Phosphorous (total)	Mass Balance/Emission Factors	No change	No site specific monitoring data available	No	No	No reduction options were identified to be both technically and economically feasible. Therefore, no options were chosen for implementation	None	None
NA-05	Cobalt (and its compounds)	Mass Balance/Emission Factors	No change	No site specific monitoring data available	No	No	No reduction options were identified to be both technically and economically feasible. Therefore, no options were chosen for implementation	None	None
NA-M08	TPM - Total Particulate Matter	Mass Balance/Emission Factors	Calculation refined - resulting in increase	No site specific monitoring data available	No	No	No reduction options were identified to be both technically and economically feasible. Therefore, no options were chosen for implementation	None	None
NA-M09	PM10 - Particulate Matter	Mass Balance/Emission Factors	Calculation refined - resulting in increase	No site specific monitoring data available	No	No	No reduction options were identified to be both technically and economically feasible. Therefore, no options were chosen for implementation	None	None
NA-M10	PM2.5 - Particulate Matter	Mass Balance/Emission Factors	Calculation refined - resulting in increase	No site specific monitoring data available	No	No	No reduction options were identified to be both technically and economically feasible. Therefore, no options were chosen for implementation	None	None

CERTIFICATION OF HIGHEST RANKING EMPLOYEE

As of 18 December 2014, I, Rick Martin, 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.

Total Particulate Matter

NA-M08

Having already certified as of 30 December 2013 I, Rick Martin, 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.

Phosphorous (total)	NA-22
Particulate Matter <= 10 microns (PM ₁₀)	NA-M09
Particulate Matter ≤ 2.5 microns (PM _{2.5})	NA-M10

Rick Martin General Manager Wallenstein Feed & Supply Ltd.

CERTIFICATION OF HIGHEST RANKING EMPLOYEE

As of 30 December 2013, I, Rick Martin, 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.

Phosphorus (total) NA-22 Particulate Matter <= 10 microns (PM₁₀) NA-M09 Particulate Matter <= 2.5 microns (PM_{2.5}) NA-M10

Rick Martin General Manager Wallenstein Feed & Supply Ltd.

CONFIRMATION STATEMENT OF HIGHEST RANKING EMPLOYEE

As of 30 December 2013, I, Rick Martin, 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, with the exception of the deadline, the plan meets all other requirements of the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under that Act.

Copper (and its compounds)	NA-06
Manganese (and its compounds)	NA-09
Selenium (and its compounds)	NA-12
Zinc (and its compounds)	NA-14

Rick Martin General Manager Wallenstein Feed & Supply Ltd.

CONFIRMATION STATEMENT OF HIGHEST RANKING EMPLOYEE

As of 30 December 2017, I, Rick Martin, 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, with the exception of the deadline, the plan meets all other requirements of the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under that Act.

Cobalt (and its compounds)	NA-05
Phosphorus (total)	NA-22
Particulate Matter <= 10 microns (PM ₁₀)	NA-M09
Particulate Matter <= 2.5 microns (PM _{2.5})	NA-M10

Rick Martin General Manager Wallenstein Feed & Supply Ltd.