



Summary Letter as required under Toxics Reduction Act and Ontario Regulation 455/09

Integrated Grain Processors Co-operative Incorporated - IGPC Ethanol

NPRI ID: 11696
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Number of employees: 82

Contact Information

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Geographical Coordinates

Latitude: 42.7827
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Datum: 1983

Standard Industrial Classifications

- **NAICS 2 Code:** 31-33 - Manufacturing
- **NAICS 4 Code:** 3251 - Basic Chemical Mfg.
- **NAICS 6 Code:** 325190 - Other Basic Organic Chemical Mfg.

Other Environmental Programs

- G10478 - GHGRP

Substance Information (tonnes)

Substance Name	CAS Number	Amount Entering Process	Amount Created	Amount Released to Air	Amount Disposed	Amount Recycled	Amount Contained in Product
Methanol	67-56-1	1 to 10	1 to 10	8.82	0	0	1 to 10
Sulphuric Acid	7664-93-9	1,000 to 10,000	0	0	0	0	0
Toluene	108-88-3	100 to 1,000	0	0.74	0	0	100 to 1,000
Benzene	71-43-2	10 to 100	0	0.06	0	0	10 to 100
Ethyl Alcohol	64-17-5	0	100,000 to 1,000,000	74.63	0	0	100,000 to 1,000,000
Ammonia	NA - 16	0	0	0	0	0	0
Nitrogen Oxides	11104-93-1	0	100 to 1000	137.72	0	0	0
Carbon Monoxide	630-08-0	0	100 to 1000	222.75	0	0	0
Particulate Matter (PM _{2.5})	NA - M10	0	10 to 100	49.14	0	0	0
Particulate Matter (PM ₁₀)	NA - M09	0	10 to 100	53.06	0	0	0



For comparison purposes, the following table provides a summary of the 2019 and 2020 TRA Accounting values.

Comparison of 2019 to 2020 Reportable TRA Substances (tonnes)

Substance Name	Year	Amount Entering Process	Amount Created	Amount Released to Air	Amount Off-Site Disposal	Amount Contained in Product
Methanol 67-56-1	2019	10 to 100	1 to 10	9.09	0	1 to 10
	2020	1 to 10	1 to 10	8.82	0	1 to 10
	Change in % and Tonnes	Increase of 0.3% or 0.01 tonnes	Decrease of 2.9% or 0.27 tonnes	Decrease of 2.9% or 0.27 tonnes	N/A	Increase of 0.3% or 0.01 tonnes
	Rationale	Increased chemical usage	Decrease in Thermal Oxidizer hours.	Decrease in Thermal Oxidizer hours.	N/A	Increased chemical usage
	Installation of the Ethanol Vapour Recovery System was proposed to result in a decrease of 98% or 4.3 tonnes of methanol emissions to air by end of calendar year 2014. In 2013, an increase of 0.048 tonnes or 1.3% of emission to air was recorded. In 2014, a decrease of 0.23 tonnes or 4.73% of emission to air was recorded. Due to increased 2015 production, the methanol air releases increased by 0.6 tonnes. Also due to increased production, methanol air releases increased by 3.11% in 2016. In 2017, a decrease of 0.03 tonnes or 0.54% of emissions to air was recorded. Due to the facility expansion and resultant increased production in 2018, the methanol air releases increased by 2.0 tonnes or 38%. The implementation of the system did not result in the anticipated reductions.					
Sulphuric Acid 7664-93-9	2019	1,000 to 10,000	0	0	0	0
	2020	1,000 to 10,000	0	0	0	0
	Change in % and Tonnes	Decrease of 1.3% or 41.5 tonnes	N/A	N/A	N/A	N/A
	Rationale	Increased chemical usage	N/A	N/A	N/A	N/A
	No plans to reduce Sulphuric Acid use.					
Toluene 108-88-3	2019	100 to 1,000	0	1.93	0	100 to 1,000
	2020	100 to 1,000	0	0.74	0	100 to 1,000
	Change in % and Tonnes	Decrease of 4.7% or 37.4 tonnes	N/A	Decrease of 61.6% or 1.19 tonnes	N/A	Decrease of 4.6% or 36.24 tonnes
	Rationale	Decreased chemical usage	N/A	Decrease in hours for Ethanol Truck Loadout Flare	N/A	Decreased chemical usage
	It is the objective of IGPC Ethanol Inc. to minimize the use of toluene containing denaturants within product specification limits.					



Substance Name	Year	Amount Entering Process	Amount Created	Amount Released to Air	Amount Off-Site Disposal	Amount Contained in Product
Benzene 71-43-2	2019	10 to 100	0	0.15	0	10 to 100
	2020	10 to 100	0	0.06	0	10 to 100
	Change in % and Tonnes	Decrease of 4.7% or 2.81 tonnes	N/A	Decrease of 57.9% or 0.09 tonnes	N/A	Decrease of 4.6% or 2.72 tonnes
	Rationale	Decreased chemical usage	N/A	Decrease in hours for Ethanol Truck Loadout Flare	N/A	Decreased chemical usage
	It is the objective of IGPC Ethanol Inc. to minimize the use of benzene containing denaturants within product specification limits and.					
Ethyl Alcohol 64-17-5	2019	0	100,000 to 1,000,000	81.48	0	100,000 to 1,000,000
	2020	0	100,000 to 1,000,000	74.63	0	100,000 to 1,000,000
	Change in % and Tonnes	N/A	Decrease of 1.6% or 4,648 tonnes	Decrease of 8.4% or 6.85 tonnes	N/A	Decrease of 1.6% or 4,641 tonnes
	Rationale	N/A	Decrease in Ethanol Production	Decrease in hours for Ethanol Truck Loadout Flare and decrease in Ethanol Production	N/A	Decrease in Ethanol Production
	No plans to reduce Ethyl Alcohol use.					
Ammonia NA - 16	2019	0	0	0	0	0
	2020	0	0	0	0	0
	Change in % and Tonnes	N/A	N/A	N/A	N/A	N/A
	Rationale	Eliminated use of ammonia	N/A	N/A	Eliminated use of ammonia	N/A
	Installation of hose weights and improvement of loading process were to result in decrease of 1% or 0.003 tonnes in 2013. In 2013, IGPC attempted to implement toxic reduction plans and concurrently performed trial using enzymes, which eliminated use of ammonia during the trial period. The enzyme trial resulted in a 20% decrease in use of ammonia and 30% decrease in off-site transfers in 2013. In 2014, IGPC eliminated the use of ammonia. With the implementation of the aforementioned actions, IGPC surpasses the reduction plan targets. Since 2015, ammonia continues to be absent at the facility.					
Nitrogen Oxides 11104-93-1	2019	0	100 to 1,000	146.42	0	0
	2020	0	100 to 1,000	137.72	0	0
	Change in % and Tonnes	N/A	Decrease of 5.9% or 8.71 tonnes.	Decrease of 5.9% or 8.71 tonnes.	N/A	N/A
	Rationale	N/A	Decrease in hours of operation for thermal oxidizer and Ethanol Truck Loadout. Slight decrease in NG consumption.	Decrease in hours of operation for thermal oxidizer and Ethanol Truck Loadout. Slight decrease in NG consumption.	N/A	N/A
	No plans to reduce the creation of Nitrogen Oxides.					



Substance Name	Year	Amount Entering Process	Amount Created	Amount Released to Air	Amount Off-Site Disposal	Amount Contained in Product
Carbon Monoxide 630-08-0	2019	0	100 to 1,000	226.89	0	0
	2020	0	100 to 1,000	222.75	0	0
	Change in % and Tonnes	N/A	Decrease of 1.8% or 4.14 tonnes.	Decrease of 1.8% or 4.14 tonnes.	N/A	N/A
	Rationale	N/A	Decrease in hours of operation for thermal oxidizer and Ethanol Truck Loadout. Slight decrease in NG consumption.	Decrease in hours of operation for thermal oxidizer and Ethanol Truck Loadout. Slight decrease in NG consumption.	N/A	N/A
	No plans to reduce the creation of carbon monoxide.					
Particulate Matter (PM_{2.5}) NA-M10	2019	0	48.49	48.49	0	0
	2020	0	49.14	49.14	0	0
	Change in % and Tonnes	N/A	Increase of 1.4% or 0.69 tonnes.	Increase of 1.4% or 0.69 tonnes.	N/A	N/A
	Rationale	N/A	Slight increase in hours of operation for various sources	Slight increase in hours of operation for various sources	N/A	N/A
	No plans to reduce the creation of PM _{2.5} .					
Particulate Matter (PM₁₀) NA-M09	2019	0	52.28	52.28	0	0
	2020	0	53.06	53.06	0	0
	Change in % and Tonnes	N/A	Increase of 1.6% or 0.82 tonnes.	Increase of 1.6% or 0.82 tonnes.	N/A	N/A
	Rationale	N/A	Slight increase in hours of operation for various sources	Slight increase in hours of operation for various sources	N/A	N/A
	No plans to reduce the creation of PM ₁₀ .					



Certification

As of September 20, 2021, I, Kevin Norton certify that I have read the report on the toxic substance reduction plan for the toxic substances referred to above and am familiar with its contents, and to my knowledge the information contained in the report is factually accurate and the report complies with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under that Act.

**It should be noted that for the 2020 reporting year, due to the situation with the global coronavirus (COVID-19) pandemic and associated delays in the release of the new NPRI online reporting application, TRA has amended the deadline for 2020 reporting from June 1st, 2021 to September 30th, 2021.*

Signed, in Aylmer, ON, on September 20, 2020

**Signed version available at facility upon request*

Kevin Norton, CEO-COO
IGPC Ethanol Inc.