



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: 83

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	10 to 100	1 to 10	9.09	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	1.93	0	0	100 to 1,000
Benzene	71-43-2	10 to 100	0	0.15	0	0	10 to 100
Ethyl Alcohol	64-17-5	0	100,000 to 1,000,000	81.48	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	146.42	0	0	0
Carbon Monoxide	630-08-0	0	100 to 1000	226.89	0	0	0
Particulate Matter (PM _{2.5})	NA - M10	0	10 to 100	48.49	0	0	0
Particulate Matter (PM ₁₀)	NA - M09	0	10 to 100	52.28	0	0	0



For comparison purposes, the following table provides a summary of the 2018 and 2019 TRA Accounting values.

Comparison of 2018 to 2019 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	2018	1 to 10	1 to 10	7.42	0	1 to 10
	2019	10 to 100	1 to 10	9.09	0	1 to 10
	Change in % and Tonnes	Increase of 42.7% or 0.82 tonnes	Increase of 22.5% or 1.67 tonnes	Increase of 22.5% or 1.67 tonnes	N/A	Increase of 42.7% or 0.82 tonnes
	Rationale	Increased chemical usage due to production increase	Plant production increase	Plant expansion and production increase	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
	2019	1,000 to 10,000	0	0	0	0
	Change in % and Tonnes	Increase of 51% or 1,074 tonnes	N/A	N/A	N/A	N/A
	Rationale	Increased chemical usage due to production increase	N/A	N/A	N/A	N/A
	No plans to reduce Sulphuric Acid use.					
Toluene 108-88-3	2018	100 to 1,000	0	0.89	0	100 to 1,000
	2019	100 to 1,000	0	1.93	0	100 to 1,000
	Change in % and Tonnes	Increase of 71.4% or 329.3 tonnes	N/A	Increase of 116% or 1.04 tonnes	N/A	Increase of 71.4% or 328.24 tonnes
	Rationale	Increased chemical usage due production increase	N/A	Updated truck loadout flare last containing information and an increase in annual hours of operation.	N/A	Increased production
	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	2018	10 to 100	0	0.08	0	10 to 100
	2019	10 to 100	0	0.15	0	10 to 100
	Change in % and Tonnes	Increase of 71.4% or 24.7 tonnes	N/A	Increase of 105% or 0.08 tonnes	N/A	Increase of 71.4% or 59.1 tonnes
	Rationale	Increased chemical usage due to production increase	N/A	Updated truck loadout flare last containing information and an increase in annual hours of operation.	N/A	Increased production
	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	2018	0	100,000 to 1,000,000	72.43	0	100,000 to 1,000,000
	2019	0	100,000 to 1,000,000	81.48	0	100,000 to 1,000,000
	Change in % and Tonnes	N/A	Increase of 66% or 115,727 tonnes	Increase of 12.5% or 9.05 tonnes	N/A	Increase of 66% or 115,718 tonnes
	Rationale	N/A	Increase in production	Updated truck loadout flare last containing information and an increase in annual hours of operation.	N/A	Increased production
	No plans to reduce Ethyl Alcohol use.					
Ammonia NA - 16	2018	0	0	0	0	0
	2019	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	2018	0	100 to 1,000	134.83	0	0
	2019	0	100 to 1,000	146.42	0	0
	Change in % and Tonnes	N/A	Increase of 9% or 11.6 tonnes.	Increase of 9% or 11.6 tonnes.	N/A	N/A
	Rationale	N/A	Increase in production and natural gas usage.	Increase in production and natural gas usage.	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	2018	0	100 to 1,000	196.54	0	0
	2019	0	100 to 1,000	226.89	0	0
	Change in % and Tonnes	N/A	Increase of 15.4% or 30.34 tonnes.	Increase of 15.4% or 30.34 tonnes.	N/A	N/A
	Rationale	N/A	Increase in production and natural gas usage.	Increase in production and natural gas usage.	N/A	N/A
	No plans to reduce the creation of carbon monoxide.					
Particulate Matter (PM_{2.5}) NA-M10	2018	0	39.43	39.43	0	0
	2019	0	48.49	48.49	0	0
	Change in % and Tonnes	N/A	Increase of 23% or 9.06 tonnes.	Increase of 23% or 9.06 tonnes.	N/A	N/A
	Rationale	N/A	Increase in production.	Increase in production.	N/A	N/A
	No plans to reduce the creation of PM _{2.5} .					
Particulate Matter (PM₁₀) NA-M09	2018	0	41.79	41.79	0	0
	2019	0	52.28	52.28	0	0
	Change in % and Tonnes	N/A	Increase of 25.1% or 10.49 tonnes.	Increase of 25.1% or 10.49 tonnes.	N/A	N/A
	Rationale	N/A	Increase in production.	Increase in production.	N/A	N/A
	No plans to reduce the creation of PM ₁₀ .					



Certification

As of June 30, 2020, 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 2019 reporting year, due to the situation with the global coronavirus (COVID-19) pandemic, TRA has amended the deadline for 2019 reporting from June 1st, 2020 to July 31st, 2020.*

Signed, in Aylmer, ON, on June 30, 2020

**Signed version available at facility upon request*

Kevin Norton, CEO-COO
IGPC Ethanol Inc.