



**LAND USE COMPATIBILITY AND AIR QUALITY STUDY  
FOR  
7525 GARNER ROAD, NIAGARA FALLS**

**SUBMITTED TO:**

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## **1.0 INTRODUCTION**

Madan Arianna Developments Inc. (the “Applicant”) retained SONAIR Environmental Inc. (SONAIR) to prepare a Land Use Compatibility and Air Quality Study in support of a Zoning By-law Amendment (ZBA) and Official Plan Amendment (OPA) application for a proposed residential development to be located at 7525 Garner Road in Niagara Falls. The proposal would introduce a sensitive land use to a primarily residential, with slight commercial and light industrial area. At the request of the City of Niagara Falls, a Land Use Compatibility and Air Quality Study is required which covers the environmental aspects of dust, odour and noise/vibration emissions.

The purpose of this assessment is to determine if noise/vibration, dust, and odour emissions from surrounding sources might adversely impact proposed sensitive land uses within the development.

This study was conducted in accordance with the Ministry of the Environment, Conservation, and Parks (MECP) Guidelines:

- Guideline D-1: Land Use Compatibility
- Guideline D-6: Compatibility between Industrial Facilities and Sensitive Land Uses

### **1.1 Subject Site**

The Applicant is proposing to redevelop the property located at 7525 Garner Road in Niagara Falls. The proposed development is a sensitive land use, consisting of three 2-storey building blocks with a total of fifty-one (51) stacked town residential units.

Under the City of Niagara Falls’ Zoning By-law 79-200, the proposed development is currently zoned as a Development Holding (DH) and is also surrounded by lands zoned as Development Holding (DH) to the immediate North, South, and West. Lands to the immediate East of the proposed development is zoned as Residential 1F Density (R1F). The nearest existing residential dwellings are located to the immediate North, East, and South of the proposed development.

A zoning and land use map for the City of Niagara Falls is shown in Appendix A.

The surrounding land can be characterized as:

*Table 1 – Summary of Surrounding Land Use*

Direction	Land Use
North	Residential
East	Residential
South	Residential
West	Environmental Protection Area

## **2.0 POLICY REVIEW**

### **2.1 Ontario Planning Act**

The Ontario Planning Act, 2024, establishes regulations for land use planning in Ontario and intends to provide policies around factors which are of interest to the provincial government, such as development, public health, and safety. The Act discusses who is allowed to use land and what land uses are allowed depending on land designation through the planning and development of sensitive land uses in proximity to industrial, utility, and transportation uses. The Act promotes fair and economically sustainable development regarding time, efficiency, and accessibility. It implements municipal and provincial governments into the decision-making process by mandating that all decisions must be in accordance with the Provincial Planning Statement and provincial planning documents.

Section 2.1 explains how approval authorities or Tribunals must take factors which are of interest to the provincial government into account, such as development, public health, and safety.

### **2.2 Provincial Planning Statement**

The Provincial Planning Statement (PPS), 2024, establishes rules for land use planning in Ontario and intends to provide policies around managing growth, using and managing natural resources, protecting the environment, and the public health and safety.

Section 3.5 of the PPS have been found to be relevant to this Land Use Compatibility Study, which states:

- 1) *Major facilities and sensitive land uses shall be planned and developed to avoid, or if avoidance is not possible, minimize and mitigate any potential adverse effects from odour, noise and other contaminants, minimize risk to public health and safety, and to ensure the long-term operational and economic viability of major facilities in accordance with provincial guidelines, standards and procedures.*
- 2) *Where avoidance is not possible in accordance with policy 3.5.1, planning authorities shall protect the long-term viability of existing or planned industrial, manufacturing or other major facilities that are vulnerable to encroachment by ensuring that the planning and development of proposed adjacent sensitive land uses is only permitted if potential adverse affects to the proposed sensitive land use are minimized and mitigated, and potential impacts to industrial, manufacturing or other major facilities are minimized and mitigated in accordance with provincial guidelines, standards and procedures.*

The proposed development is located in an area where there is adequate separation distance between the proposed development and surrounding major facilities. The proposed development within the area of influence of existing and potential future facilities or vice versa are not anticipated to be adversely impacted given the nature of the anticipated facility operations and the obligation for facilities to obtain the necessary approvals to meet regulatory requirements at closer sensitive points of reception. Based on the evaluation performed for each facility of concern in support of this study, no major facilities are expected to impact the proposed development nor is the proposed development expected to impact surrounding major facilities. Provided the project development meets the local and provincial guidelines and regulations, the requirements of the PPS will also be met which are implemented through local and provincial policies.

### **3.0 LAND USE COMPATIBILITY ASSESSMENT**

#### **3.1 Guideline D-6: Compatibility between Industrial Facilities and Sensitive Land Uses**

Guideline D-6 – Compatibility Between Industrial Facilities and Sensitive Land Uses, sets out three (3) distinct classes of facilities. The criterion is provided in the table below.

*Table 2 – Guideline D-6 Industrial Categorization Criteria*

Category	Outputs	Scale	Process	Operation & Intensity
CLASS I	<p><i>NOISE:</i> Sound not audible off property.</p> <p><i>DUST and/or ODOUR:</i> Infrequent and not intense.</p> <p><i>VIBRATION:</i> No ground- borne vibration on plant property.</p>	<ul style="list-style-type: none"> <li>- No outside storage</li> <li>- Small scale plant or scale is irrelevant in relation to all other criteria for this Class</li> </ul>	<ul style="list-style-type: none"> <li>- Self-contained plant or building which produces/ stores a packaged product. Low probability of fugitive emissions</li> </ul>	<ul style="list-style-type: none"> <li>- Daytime operations only</li> <li>- Infrequent movement of products and/or heavy trucks</li> </ul>
CLASS II	<p><i>NOISE:</i> Sound occasionally audible off property.</p> <p><i>DUST and/or ODOUR:</i> Frequent and occasionally intense.</p> <p><i>VIBRATION:</i> Possible ground-borne vibration, but cannot be perceived off property.</p>	<ul style="list-style-type: none"> <li>- Outside storage permitted</li> <li>- Medium level of production allowed</li> </ul>	<ul style="list-style-type: none"> <li>- Open process</li> <li>- Periodic outputs of minor annoyance</li> <li>- Low probability of fugitive emissions</li> </ul>	<ul style="list-style-type: none"> <li>- Shift operations permitted</li> <li>- Frequent movement of products and/or heavy trucks with the majority of movements during daytime hours</li> </ul>
CLASS III	<p><i>NOISE:</i> Sound frequently audible off property.</p> <p><i>DUST and/or ODOUR:</i> Persistent and/or intense.</p> <p><i>VIBRATION:</i> Ground-borne vibration can frequently be perceived off property.</p>	<ul style="list-style-type: none"> <li>- Outside storage of raw and finished products</li> <li>- Large production levels</li> </ul>	<ul style="list-style-type: none"> <li>- Open process</li> <li>- Frequent outputs of major annoyances</li> <li>- High probability of fugitive emissions</li> </ul>	<ul style="list-style-type: none"> <li>- Continuous movement of products and employees</li> <li>- Daily shift operations permitted</li> </ul>

The study area for Land Use Compatibility Assessments is established in the D-Series Guidelines. Depending on the Facility Class categorization around the facility the potential influence area will be as set out in Table 3 below. SONAIR has conservatively taken the position to review the impact from 1,000 meters around the subject site. The recommended setback distances as a function of Facility Class are also provided in Table 3.

*Table 3 – Guideline D-6 Minimum Separation Distances and Potential Influence Areas*

Class	Recommended Separation Distance	Potential Influence Area
I	20	70
II	70	300
III	300	1000

Further to Table 3, the D-6 guideline also suggests that while separation distances are typically measured between property lines, there is an alternative which allows for measuring from facility property line to a sensitive receptor. Additionally, guideline D-6 provides allowances for reducing the minimum separation distance required based on mitigation at industrial sites and provides for exceptions to the Minimum Separation Distances for some development sites.

### **3.2 Summary of D-6 Facilities within the Study Area**

The 1,000-meter study area surrounding the proposed development was developed with predominantly residential and employment land uses. Table 4 below provides a summary of the surrounding facilities, the nature of their operations, and if any potential impact exists.

*Table 4 – D-6 Study Area Facility Classification*

Facility	Address	Distance (m)	Operations	ECA/EASR (Year)	MECP Industrial Class	Comments
Sure-Fix Service Group Inc.	7334 Garner Rd	223	HVAC contractor	-	I	Acceptable Range
Niagara Store Fixtures	7317 Garner Rd	316	Custom Store Fixtures Manufacturing and Commercial Millwork	-	I	Acceptable Range
The Mechanic's Team Auto Repair Inc.	8943 McLead Rd	426	Auto Repair Shop	-	I	Acceptable Range
Boys' & Girls' Club of Niagara	8800 McLead Rd	263	Youth Centre	8357-8L8Q8B (2011)	I	Acceptable Range
Walker Construction - Niagara	9101 Brown Rd	334	Material Storage Yard	-	II	Acceptable Range
Cytec Canada, Inc.	9061 Garner Rd	789	Chemical Manufacturing Facility	9547-C5ULRS (2022)	III	Within Potential Influence Area
Dan's Produce	7201 Beechwood Rd	947	Produce Wholesaler	-	I	Acceptable Range

### 3.3 Investigation of Facilities within the Study Area

Numerous facilities were identified within the 1000m study area of the proposed development. The potential for the facilities to adversely impact the proposed development is investigated below.

#### 3.3.1 *Sure-Fix Services Group Inc.*

Sure-Fix Services Group Inc. is an HVAC contracting company that supplies and installs HVAC systems for a diverse range of clients located approximately 223m to the North of the proposed development. On-site repair activities are only anticipated during the daytime hours with most repair work performed off-site throughout the day.

A site visit was conducted by staff at SONAIR on June 6, 2025, where no dust, odour or noise/vibration concerns were identified. A search in the MECP approval database returned no results for this facility.

Dust, odour, and noise emissions are not expected to be a concern given the small-scale and nature of its operations. Further, repair services are not considered significant sources of emissions, and frequent movement of vehicles and/or materials are not expected on-site.

As a result, this facility has been classified as a Class I facility, which is located beyond the potential influence area.

#### 3.3.2 *Niagara Store Fixture*

Niagara Store Fixture is a millwork and producer of custom store fixtures located approximately 316m to the North of the proposed development. Given the small-scale facility, on-site operations are only anticipated during the daytime hours.

A site visit was conducted by staff at SONAIR on June 6, 2025, where no dust, odour or noise/vibration concerns were identified. A search in the MECP approval database returned no results for this facility.

Dust, odour, and noise emissions are not expected to be a concern given the small-scale and nature of its operations. Emissions, if any, are expected to be self-contained within the building, and frequent movement of vehicles and/or materials are not expected on-site.

As a result, this facility has been classified as a Class I facility, which is located beyond the potential influence area.

### *3.3.3 The Mechanic's Team Auto Repair Inc.*

The Mechanic's Team Auto Repair Inc. is an auto repair shop located approximately 426m to the North of the proposed development. The facility operates from Monday to Fridays between the hours of 8am and 5pm.

A site visit was conducted by staff at SONAIR on June 6, 2025, where no dust, odour or noise/vibration concerns were identified. A search in the MECP approval database returned no results for this facility.

Dust, odour, and noise emissions are not expected to be a concern given the small-scale and nature of its operations. Further, repair services are not considered significant sources of emissions, and frequent movement of vehicles and/or materials are not expected on-site. Based on aerial imagery, no rooftop paint booth stack was identified; therefore, there is no indication that the facility operates a paint booth for autobody work.

As a result, this facility has been classified as a Class I facility, which is located beyond the potential influence area.

### *3.3.4 Boys' & Girls' Club of Niagara*

The Boys' & Girls' Club of Niagara is a youth center located approximately 263m to the Northeast of the proposed development. The facility operates from Monday to Fridays between the hours of 6am and 8:30pm.

A site visit was conducted by staff at SONAIR on June 6, 2025, where no dust, odour or noise/vibration concerns were identified. A search in the MECP approval database shows that the facility has been issued a Certificate of Approval (CoA), #8357-8L8Q8B on August 31, 2011, as shown in Appendix C.

Details of the ECA indicate that the facility consists of a standby diesel generator set to provide power for the fitness and recreational sport centre during emergency situations.

Dust, odour, and noise emissions are not expected to be a concern given that the recreational activities performed at the youth centre is not considered to be a significant source of emissions.

As a result, this facility has been classified as a Class I facility, which is located beyond the potential influence area.

### *3.3.5 Walker Construction - Niagara*

Walker Construction - Niagara is a construction company with an equipment and material storage yard located approximately 334m to the South of the proposed development. On-site activities and operations are expected to be intermittent during the daytime with potential limited activities (i.e returning equipment) during the nighttime.

A site visit was conducted by staff at SONAIR on June 6, 2025, where no dust or odour concerns were identified. While the site is not considered a significant source of odour, occasional dust emissions may be expected during the outdoor material loading operations and trucks driving over dusty roadways. Noise emissions were identified from trucks entering/existing the facility and is also expected from occasional on-site equipment and material loading/unloading operations. A search in the MECP approval database returned no results for this facility.

As a result, this facility has been classified as a Class II facility, which is located beyond the potential influence area.

### *3.3.6 Cytec Canada, Inc.*

Cytec Canada, Inc. is a chemical manufacturer that has the potential to operate 24/7. The closest facility property boundary is located approximately 789m Southwest from the proposed development. Based on the scale and nature of its operations, this facility has been classified as a Class III facility. The facility is located within the potential influence area, but beyond the minimum separation distance.

A site visit was conducted by staff at SONAIR on June 6, 2025, where no dust, odour, or noise/vibrations concerns were identified at the closest facility property boundary to the proposed development.

A search in the MECP approval database shows that the facility has been issued an Amended Environmental Compliance Approval (ECA), #9547-C5ULRS on February 3, 2022, as shown in Appendix C. Based on the ECA, the facility operates at a maximum production limit of 40,000 tonnes of phosphine-based chemicals per year. As part of the ECA, the facility is required to update the necessary assessments and reports on an annual basis.

Details of the ECA indicate that the facility consists of the following processes and support units:

- Two emergency flares, equipped with natural gas fired continuous pilot burner systems;
- Two natural gas fired thermal oxidizers, equipped with natural gas fired burners;
- Four natural gas fired boilers.

Given that an Emission Summary and Dispersion Modelling (ESDM) report was prepared in support of the approval, it is anticipated that the facility would be in compliance with the applicable air quality standards and limits at the property line and beyond. While the introduction of high-rise sensitive buildings may require the facility to reassess their impact at new elevated receptors, the proposed low-rise sensitive buildings does not introduce new receptors as the facility already has an obligation to meet air quality standards at ground level from the property boundary and beyond.

An Acoustic Assessment Report (AAR) was also submitted as part of the ECA application. Under NPC-300, the facility is required to assess the noise impact generated from the facility towards the closest sensitive receptors around the facility. Given that residential dwellings are located in much closer proximity to the South of the facility along Grassy Brock Road, and to the Northeast along Brown Road, compared to the proposed development, it is expected that the facility will be in compliance with the requirements of NPC-300 at the proposed development.

Further, a survey completed by J.D. Barnes Limited, as shown in Appendix D, identifies residences that are located within a 2km radius of the Cytec plant. According to the figure, 36 residential uses were identified within the arc. Based on the location of the proposed development, the project site falls outside of this 2km arc.

Based on the above and given that the facility already has an obligation to meet regulatory requirements pertaining to air and noise emissions at the property line and at the closest sensitive receptors, no adverse impact is expected from this facility on the proposed development from an air and noise perspective.

### *3.3.7 Dan's Produce*

Dan's Produce is a wholesaler of fruits and vegetables located approximately 947m to the Northwest of the proposed development. The facility operates from Monday to Sundays between the hours of 6am and 10:30am.

A site visit was conducted by staff at SONAIR on June 6, 2025, where no dust, odour or noise/vibration concerns were identified. A search in the MECP approval database returned no results for this facility.

Dust, odour, and noise emissions are not expected to be a concern given the small-scale and nature of its operations. Further, the preparation of the fruits and vegetables for distribution are not considered significant sources of emissions, and frequent movement of vehicles are not expected on-site.

As a result, this facility has been classified as a Class I facility, which is located beyond the potential influence area.

### 3.4 Future Uses and Vacant Land Plots

Vacant lands have been identified in the vicinity of the proposed development, which could potentially be developed for future industrial usage. Thus, an analysis of the City of Niagara Falls Zoning By-Law 79-200 regarding the permitted uses of Light Industrial (LI) and Heavy Industrial (HI) zones was conducted to determine the industrial class using the MECP's D-6 Guidelines.

#### 3.4.1 Light Industrial Zoned Vacant Lands

A list of permitted light industrial land uses in accordance with the City of Niagara Falls Zoning By-Law 79-200 is shown below.

*Table 5 – D-6 Classification of Light Industrial (LI) Zoned Vacant Lands*

Permitted Use	Description	MECP Industrial Class	Area of Influence (m)	Recommended Separation Distance (m)
Manufacturing	Classification based on size and intensity of operations. Expected to be a Class I industry. Must obtain MECP permit to produce emissions.	I or II	70 or 300	20 or 70
Car Rental	N/A	N/A	N/A	N/A
Car Wash	Expected to be a Class I industry. Must obtain MECP permit to produce emissions.	I	70	20

Carpenter Shop	Classification based on size and intensity of operations. Expected to be a Class I industry. Must obtain MECP permit to produce emissions.	I or II	70 or 300	20 or 70
Cold Storage Plant	Classification based on size and intensity of operations. Expected to be a Class I industry. Must obtain MECP permit to produce emissions.	I or II	70 or 300	20 or 70
Commercial bakery	Classification based on size and intensity of operations. Expected to be a Class I industry. Must obtain MECP permit to produce emissions.	I or II	70 or 300	20 or 70
Commercial printing and associated services establishment	Classification based on size and intensity of operations. Expected to be a Class I industry. Must obtain MECP permit to produce emissions.	I or II	70 or 300	20 or 70
Contractor's or tradesman's shop, contractor's or construction equipment rental shop	Classification based on size and intensity of operations. Expected to be a Class I industry. Must obtain MECP permit to produce emissions.	I or II	70 or 300	20 or 70
Consulting engineering office	Enclosed noise/air emissions with low intensity.	I	70	20
Grain and feed mill and storage	Classification based on size and intensity of operations. Expected to be a Class I industry. Must obtain MECP permit to produce emissions.	I or II	70 or 300	20 or 70
Ice manufacturing plant	Classification based on size and intensity of operations. Expected to be a Class I industry. Must obtain MECP permit to produce emissions.	I or II	70 or 300	20 or 70
Laboratory - experimenting, commercial or testing	Classification based on size and intensity of operations. Expected to be a Class I industry. Must obtain MECP permit to produce emissions.	I or II	70 or 300	20 or 70
Laundry Plant	Classification based on size and intensity of operations. Expected to be a Class I industry. Must obtain MECP permit to produce emissions.	I or II	70 or 300	20 or 70
Machine Shop	Classification based on size and intensity of operations. Expected to be a Class I industry. Must obtain MECP permit to produce emissions.	I or II	70 or 300	20 or 70
Monument, stone, clay or glass manufacturing plant	Classification based on size and intensity of operations. Expected to be a Class I industry. Must obtain MECP permit to produce emissions.	I or II	70 or 300	20 or 70

New Car Agency	N/A	N/A	N/A	N/A
Nursery for trees, shrubs, and plants	Expected to be a Class I industry. Must obtain MECP permit to produce emissions.	I	70	20
Public garage, auto body	Expected to be a Class I industry. Must obtain MECP permit to produce emissions.	I	70	20
Public garage, mechanical	Expected to be a Class I industry. Must obtain MECP permit to produce emissions.	I	70	20
Shop for the repair and servicing of goods, machinery and equipment	Expected to be a Class I industry. Must obtain MECP permit to produce emissions.	I	70	20
Silver plating and cutlery plant	Classification based on size and intensity of operations. Expected to be a Class I industry. Must obtain MECP permit to produce emissions.	I or II	70 or 300	20 or 70
Trucking or shipping terminal	Expected to be a Class I industry. Must obtain MECP permit to produce emissions.	I	70	20
Used Car Lot	N/A	N/A	N/A	N/A
Warehouse	Enclosed noise/air emissions with low intensity. Expected to be a Class I industry.	I	70	20
Wholesale establishment	Enclosed noise/air emissions with low intensity. Expected to be a Class I industry.	I	70	20
Winery	Enclosed noise/air emissions with low intensity. Expected to be a Class I industry.	I	70	20
Adult entertainment parlour	N/A	N/A	N/A	N/A
Body-rub parlour	N/A	N/A	N/A	N/A
An office which is an accessory use to one of the foregoing permitted uses	N/A	N/A	N/A	N/A

Based on a review of the permitted uses under the Light Industrial zone, the classifications under the D-6 Guidelines ranges from Class I to Class II facilities. Thus, worst-case scenario minimum separation distance is 70 m.

The closest LI zoned land plot is located approximately 335 m South from the proposed development, which is located beyond the minimum separation distance of 70m, and potential influence area of 300 m of a Class II facility. Therefore, no adverse impact is expected from these facilities on the proposed development from an air and noise perspective.

### 3.4.2 Heavy Industrial Zoned Vacant Lands

A list of permitted heavy industrial land uses in accordance with the City of Niagara Falls Zoning By-Law 79-200 is shown below.

*Table 6 – D-6 Classification of Heavy Industrial (HI) Zoned Vacant Lands*

Permitted Use	Description	MECP Industrial Class	Area of Influence (m)	Recommended Separation Distance (m)
Manufacturing, compounding, processing, packaging, crating, bottling, assembling of raw or semi-processed or fully processed materials	Classification based on size and intensity of operations. Expected to be a Class II or III industry. Must obtain MECP permit to produce emissions.	II or III	300 or 1000	70 or 300
Abattoir and stock yard used in connection with an abattoir	Classification based on size and intensity of operations. Expected to be a Class III industry. Must obtain MECP permit to produce emissions.	III	1000	300
Acetylene gas manufacture	Classification based on size and intensity of operations. Expected to be a Class III industry. Must obtain MECP permit to produce emissions.	III	1000	300
Artificial abrasive plant	Classification based on size and intensity of operations. Expected to be a Class III industry. Must obtain MECP permit to produce emissions.	III	1000	300
Caustic manufacture	Classification based on size and intensity of operations. Expected to be a Class III industry. Must obtain MECP permit to produce emissions.	III	1000	300

Cement manufacture	Classification based on size and intensity of operations. Expected to be a Class II or III industry. Must obtain MECP permit to produce emissions.	II or III	300 or 1000	70 or 300
Cleaning, curing, storage or tanning of fresh or green hides	Classification based on size and intensity of operations. Expected to be a Class III industry. Must obtain MECP permit to produce emissions.	III	1000	300
Fertilizer processing plan	Classification based on size and intensity of operations. Expected to be a Class III industry. Must obtain MECP permit to produce emissions.	III	1000	300
Lime, plaster or paris manufacture	Classification based on size and intensity of operations. Expected to be a Class III industry. Must obtain MECP permit to produce emissions.	III	1000	300
Poultry processing plant	Classification based on size and intensity of operations. Expected to be a Class III industry. Must obtain MECP permit to produce emissions.	III	1000	300
Iron and steel plant	Classification based on size and intensity of operations. Expected to be a Class III industry. Must obtain MECP permit to produce emissions.	III	1000	300
Lime kiln	Classification based on size and intensity of operations. Expected to be a Class III industry. Must obtain MECP permit to produce emissions.	III	1000	300
Rubber factory	Classification based on size and intensity of operations. Expected to be a Class III industry. Must obtain MECP permit to produce emissions.	III	1000	300
Soap manufacture	Classification based on size and intensity of operations. Expected to be a Class II or III industry. Must obtain MECP permit to produce emissions.	II or III	300 or 1000	70 or 300

Steel furnace, blooming or rolling mill	Classification based on size and intensity of operations. Expected to be a Class III industry. Must obtain MECP permit to produce emissions.	III	1000	300
Winery	Classification based on size and intensity of operations. Expected to be a Class II industry. Must obtain MECP permit to produce emissions.	II	300	70
Adult entertainment parlour	N/A	N/A	N/A	N/A
Body-rub parlour	N/A	N/A	N/A	N/A
An office which is an accessory use to one of the foregoing permitted uses	N/A	N/A	N/A	N/A
Licensed production facilities and designated medical growth of cannabis	Classification based on size and intensity of operations. Expected to be a Class II or III industry. Must obtain MECP permit to produce emissions.	II or III	300 or 1000	70 or 300

Based on a review of the permitted uses under the Heavy Industrial zone, the classifications under the D-6 Guidelines ranges from Class II to Class III facilities. Thus, worst-case scenario minimum separation distance is 300 m.

The closest HI zoned land plot is located approximately 528 m Southwest from the proposed development, which is located beyond the minimum separation distance of 300 m, and within the potential influence area of 1000 m of a Class III facility.

New industrial facilities proposed that may generate air and noise emissions are required to obtain applicable MECP approvals (EASR or ECA) to meet regulatory requirements in accordance with O. Reg 419/05 and the MECP's NPC 300. Facilities would be obliged to meet regulatory standards and limits pertaining to air and noise emissions at the property line and beyond at the closest sensitive receptors. If the facility satisfies regulatory requirements at the location of the nearest sensitive receptors, then it is expected that they will also be satisfied at the

proposed development. Therefore, no adverse impact is expected from potential future facilities on the proposed development from an air and noise perspective.

#### 4.0 METEOROLOGICAL DATA

A wind rose has also been developed from local meteorological conditions, attached in Appendix B, to determine the frequency of wind occurrences that blows from each direction. Based on a historical 5-year (42,840 hours) local weather data obtained for 2020-2024 from the St. Catharines A weather station (Climate ID 6137304), prevailing winds are blowing from the Southwest to the Northeast quadrant.

*Table 7 – Wind Frequency*

Direction (Blowing From)	Frequency	Equivalent Days
N	5.77%	21
NNE	3.72%	14
NE	3.94%	14
ENE	3.96%	14
E	6.37%	23
ESE	2.33%	9
SE	1.73%	6
SSE	1.96%	7
S	9.33%	34
SSW	10.35%	38
SW	14.24%	52
WSW	9.84%	36
W	8.32%	30
WNW	6.30%	23
NW	5.20%	19
NNW	4.35%	16

Sure-Fix Service Group Inc., Niagara Store Fixture, and The Mechanic's Team Auto Repair Inc. are located to the North of the proposed development. Wind is anticipated to be blown from the North towards the proposed development approximately 6% of the time.

Boys' & Girls' Club of Niagara is located to the Northeast of the proposed development. Wind is anticipated to be blown from the Northeast towards the proposed development approximately 4% of the time.

Walker Construction - Niagara is located to the South of the proposed development. Wind is anticipated to be blown from the South towards the proposed development approximately 9% of the time.

Cytec Canada Inc. is located to the Southwest of the proposed development. Wind is anticipated to be blown from the Southwest towards the proposed development approximately 14% of the time.

Dan's Produce is located to the Northwest of the proposed development. Wind is anticipated to be blown from the Northwest towards the proposed development approximately 5% of the time.

## **5.0 TRAFFIC-RELATED AIR POLLUTION**

Based on the City of Toronto's report titled "Reducing Health Risks from Traffic-Related Air Pollution (TRAP) in Toronto", the health risk associated with TRAP on sensitive receptors is greater in highly urbanized areas. The report denotes that major highways within 500m of a proposed development with an average daily traffic volume of 100,000 vehicles or more, highways within 150 m with an average daily traffic volume of 50,000 vehicles or more, and arterial roads within 100m of a proposed development with an average daily traffic volume of 15,000 vehicles or more have a greater risk for TRAP impacting a nearby sensitive receptor.

The subject site is located in close proximity to one (1) arterial road. Garner Road is located to the East of the site, which consists of a 2-lane road, and has an anticipated AADT of less than 5,000 vehicles, based on road traffic data provided by the City of Niagara Falls. Given that the AADT for Garner Road is below the threshold of 15,000 vehicles per day, TRAP from this road is not expected to be a concern.

## **6.0 CONCLUSION**

SONAIR was retained by Madan Arianna Developments Inc. to conduct a Land Use Compatibility Study and Air Quality Study to evaluate potential impacts from surrounding facilities towards the proposed development located at 7525 Garner Road in Niagara Falls.

Based on the evaluation of facility operations in the vicinity of the proposed development against the MECP D-6 Guideline, impact from an air quality and noise perspective is not anticipated to be a concern on the proposed development. Therefore, the proposed development is expected to be compatible with surrounding land uses.

## **7.0 REFERENCES**

Ministry of the Environment, Conservation and Parks, “*D-1 Land Use and Compatibility*”, July 1995

Ministry of the Environment, Conservation and Parks, “*D-6 Compatibility between Industrial Facilities*”, July 1995

City of Toronto, “*Reducing Health Risks from Traffic-Related Air Pollution (TRAP) in Toronto*”, October 2017

Ontario, “*Planning Act, R.S.O. 1990, Chapter P.13*”, 2025

Ontario, “*Provincial Planning Statement, 2024*”, 2024



**APPENDIX A**

**SITE PLAN & DRAWINGS**

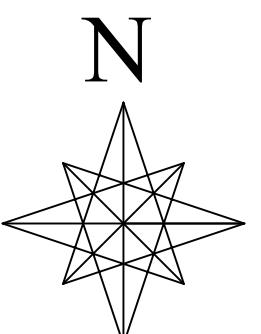


#### **FACILITY NAMES**

1. Sure-Fix Service Group Inc.
2. Niagara Store Fixtures
3. The Mechanic's Team Auto Repair Inc.
4. Boys' & Girls' Club of Niagara
5. Walker Construction - Niagara
6. Cytec Canada, Inc.
7. Dan's Produce

#### **LEGEND**

- Class I Facility
- Class II Facility
- Class III Facility



ADDRESS:  
PO BOX 56702 PINE VALLEY PO  
VAUGHAN, ON L4L 8V3

DRAWN BY:  
DP

CHECKED BY:  
TL

CLIENT'S NAME:  
Madan Arianna Developments Inc.

CLIENT'S ADDRESS:  
145 Traders Boulevard  
Mississauga, ON L4Z 3L3

SCALE:  
As shown

SE#:  
1444.001

DATE:  
2025-07-11

DRAWING NAME:  
1000 Study Area

REVISION #:  
0

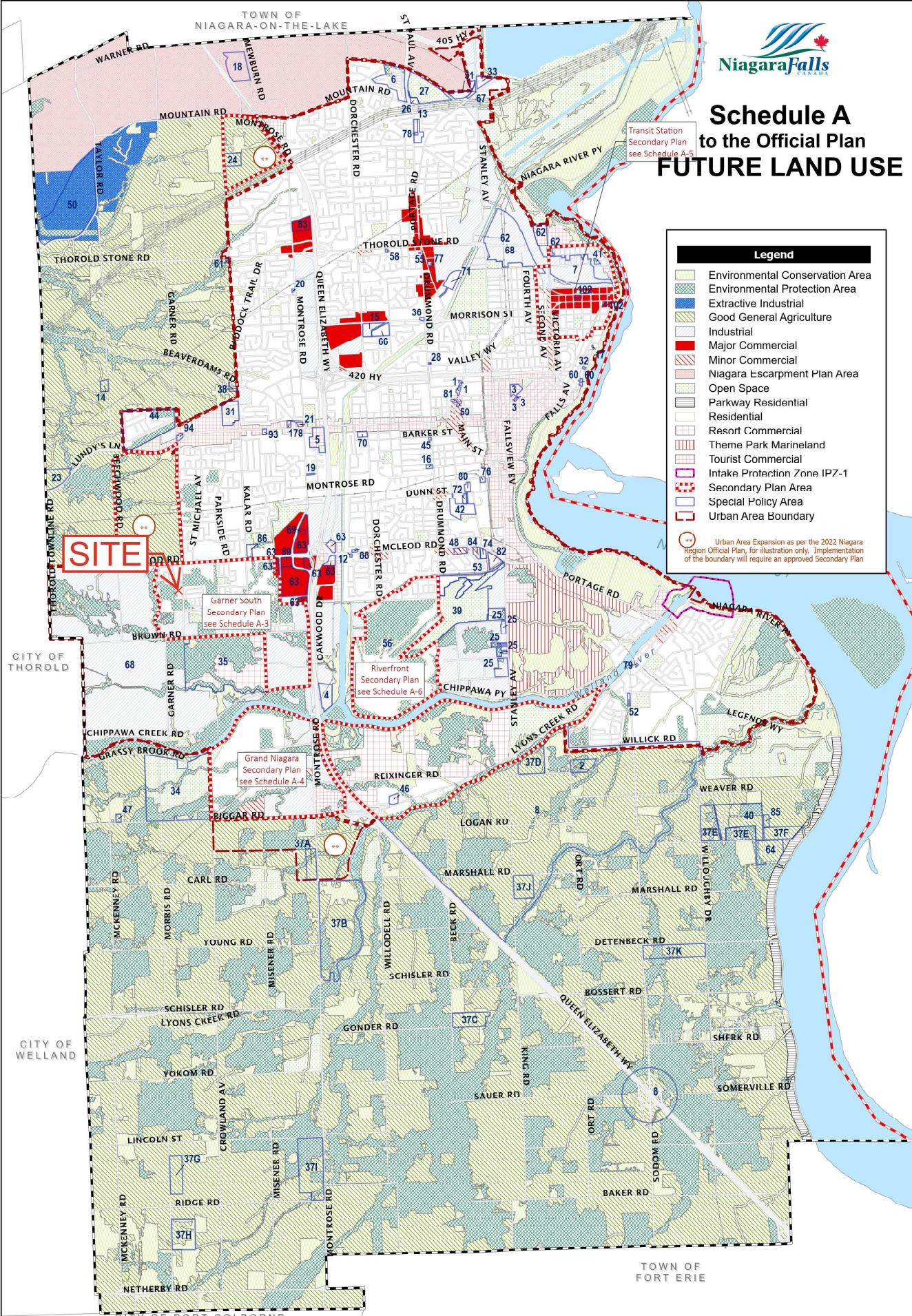
NOTES:  
Site at 7525 Garner Road, Niagara Falls





# Schedule A to the Official Plan **FUTURE LAND USE**

Visit Station  
Boundary Plan  
Schedule A-5



NOTE: THIS MAP MUST BE READ IN CONJUNCTION WITH THE  
WRITTEN TEXT OF THE OFFICIAL PLAN APPROVED OCTOBER 1993  
UPDATED TO MARCH 2025

PLANNING & DEVELOPMENT DIVISION  
Updated to: March 2025

# **ZONING BY-LAW 79-200**



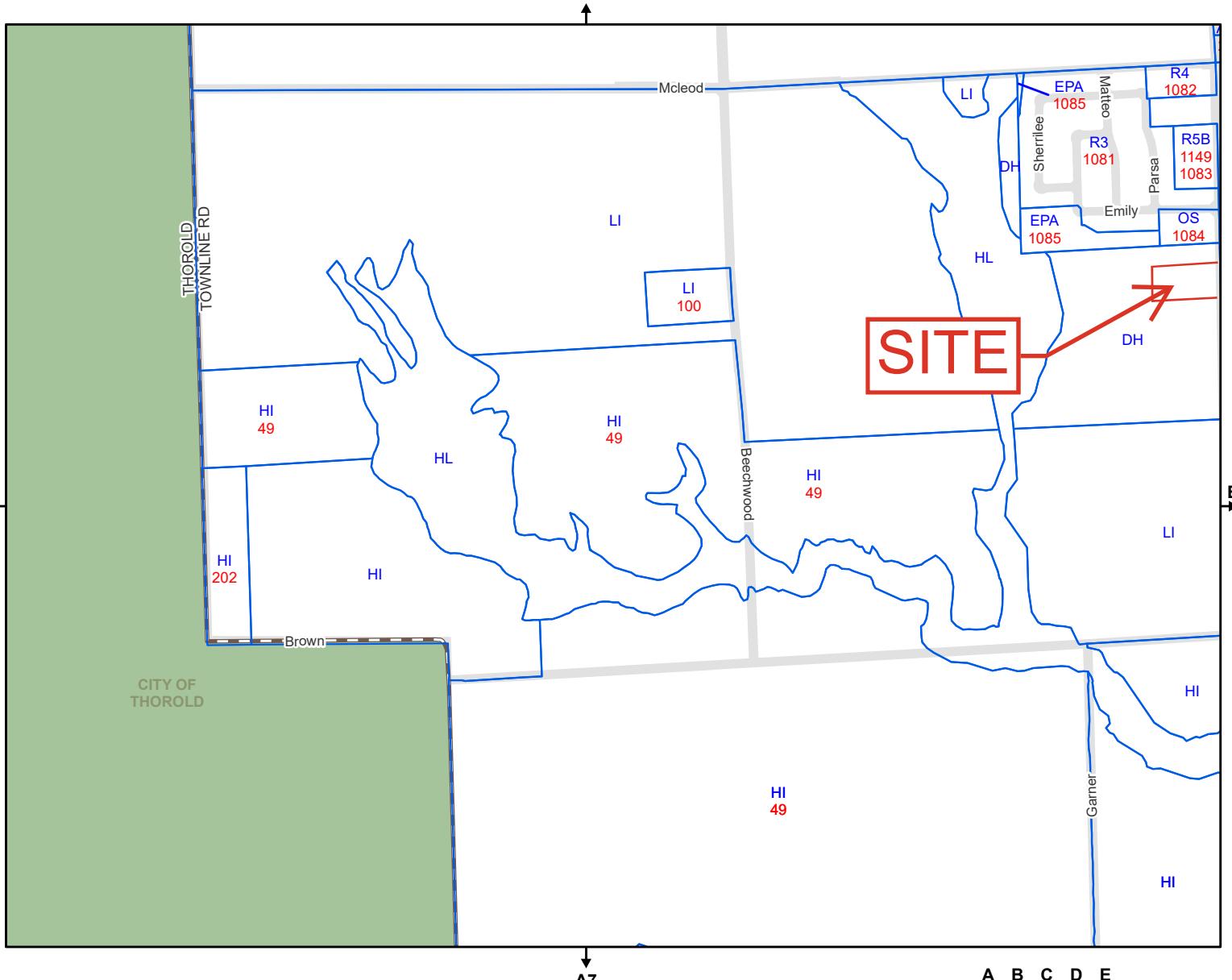
## — ZONE LINES

EXCEPTIONS & SPECIAL PROVISION NO.  
SEE SECTION 19

98-92  
19-003  
21-97

## CONSOLIDATION DECEMBER 2022

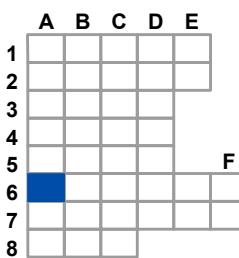
## **SHEET A6**



CITY OF NIAGARA FALLS  
Planning & Development Department

A horizontal scale bar with a black line and numerical markings. The left end is labeled '0' and the right end is labeled '500'. Below the line, the label 'm' indicates meters.

Print Date: FEBRUARY, 2023

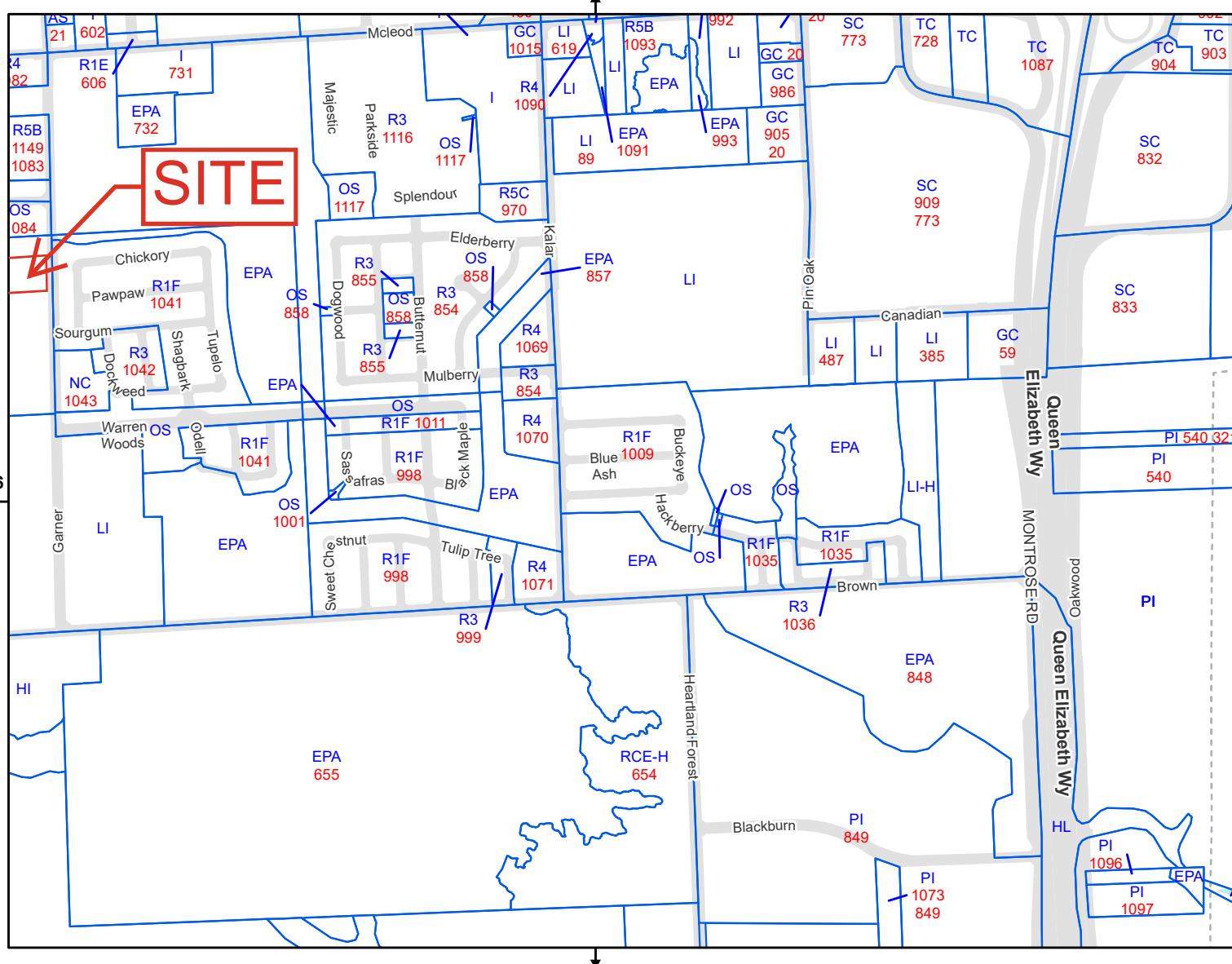


# ZONING BY-LAW

## 79-200



ZONE LINES



EXCEPTIONS & SPECIAL PROVISION NO.  
SEE SECTION 19

98-082	10-109	19-056
99-204	10-110	19-057
01-075	10-111	20-021
03-006	13-111	21-97
03-036	12-119	
03-007	13-169	
03-095	14-052	
05-175	15-150	
05-186	15-042	
05-198	15-052	
07-062	15-150	
08-107	16-054	
08-108	17-003	
09-051	17-044	
95-130	17-058	
10-003	18-075	
10-007	18-095	
10-101	18-096	
10-102	18-097	
10-105	18-111	
10-106	19-003	
10-107	19-024	
10-108	19-048	

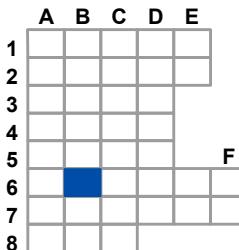


CONSOLIDATION  
DECEMBER 2022

**SHEET B6**

CITY OF NIAGARA FALLS  
Planning & Development Department

0 500  
Scale 1:13,000 m





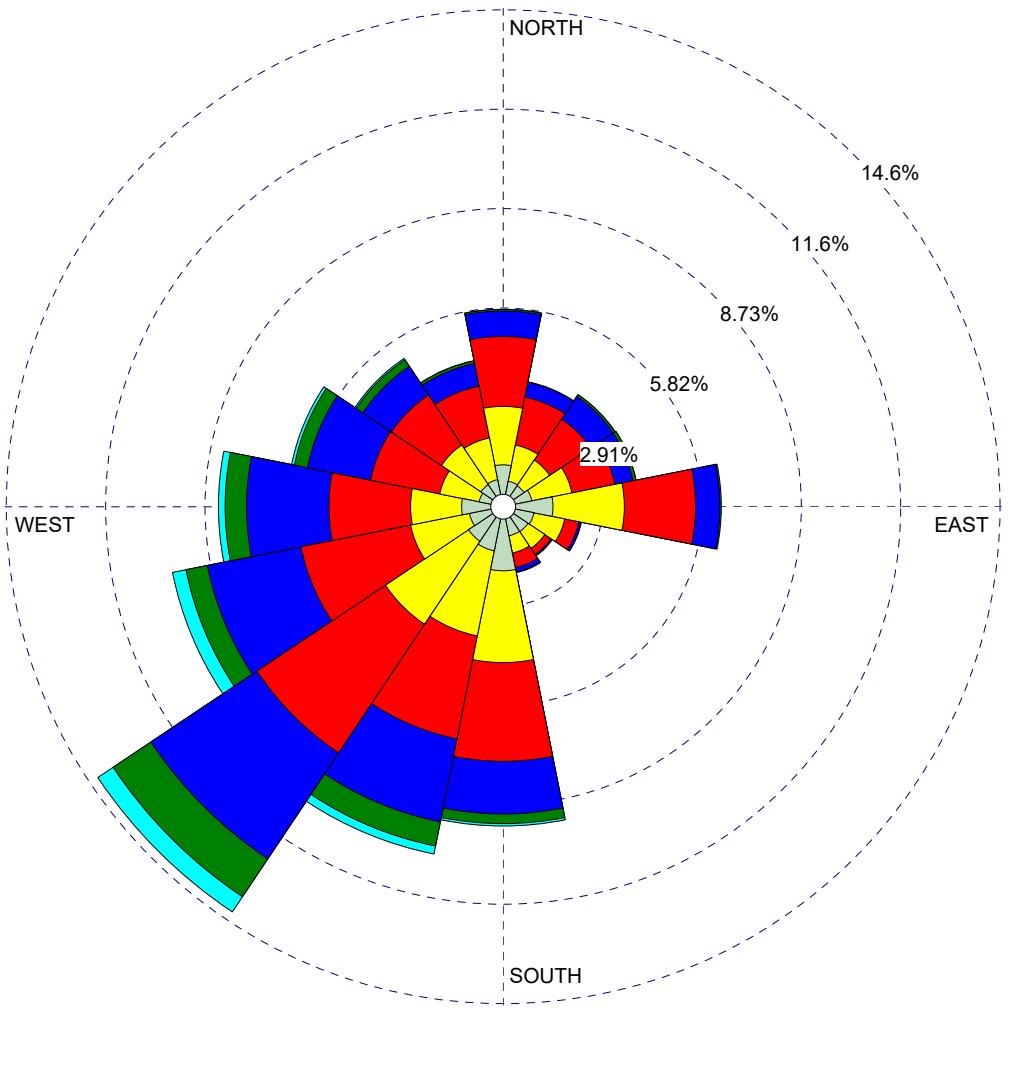
## **APPENDIX B**

### **WIND ROSE**

WIND ROSE PLOT:

**Wind Rose Plot (2020-2024), Niagara, ON**

DISPLAY:

**Wind Speed  
Direction (blowing from)**

COMMENTS:  Cirrate ID: 6137304 Data retained from Environment Canada Hourly Data for St Catharines A	DATA PERIOD:  <b>Start Date: 2019-12-31 - 00:00</b> <b>End Date: 2024-12-31 - 23:00</b>	COMPANY NAME:  <b>SONAIR Environmental Inc.</b>
	CALM WINDS:  <b>0.00%</b>	MODELER:  <b>DP</b>
	AVG. WIND SPEED:  <b>4.39 m/s</b>	TOTAL COUNT:  <b>42840 hrs.</b>
	DATE:  <b>2025-05-21</b>	PROJECT NO.:  <b>1444.001</b>





## **APPENDIX C**

### **ECA / EASR APPROVALS**

**AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL**

NUMBER 9547-C5ULRS

Issue Date: February 3, 2022

Cytec Canada Inc.  
9061 Garner Rd  
Niagara Falls, Ontario  
L2H 0Y2

**Site Location:** Cytec Canada Inc.

9061 Garner Rd  
Niagara Falls City, Regional Municipality of Niagara  
L2E 6S5

*You have applied under section 20.2 of Part II.1 of the Environmental Protection Act, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:*

**Description Section**

A phosphine and phosphine derivatives facility, consisting of the following processes and support units:

- Phosphine Plant including derivatives section;
- Purification, mixing and packaging; and;
- Research and development pilot plant;

**and the following *Equipment with Specific Operational Limits* :**

- one (1) emergency flare located in the phosphine building equipped with a natural gas fired continuous pilot burner system having a maximum thermal input of 142,290 kilojoules per hour combined for the three burner units, used to burn spills, releases from safety valves, rupture disk type vents and vapour headspace in reaction vessels from Train 1 operations. Under the worst case upset, the flare combusts pyrophoric waste gas originating from a safety valve of an autoclave, having a maximum volumetric flow rate of 1,262 standard cubic metres per minute;
- one (1) emergency flare located in the flare and thermal oxidizer building equipped with a natural gas fired continuous pilot burner system having a maximum thermal input of 1,106,700 kilojoules per hour combined for the three burner units, used to burn spills, releases from safety valves, rupture disk type vents and vapour headspace in reaction vessels from Train 2 operations. Under the worst case

upset, the flare combusts pyrophoric waste gas originating from a safety valve of an autoclave, having a maximum volumetric flow rate of 1,262 standard cubic metres per minute;

- one (1) natural gas fired thermal oxidizer serving Train 1, designed for a maximum heat input of 7,157,000 kilojoules per hour equipped with a natural gas fired burner used to incinerate the following streams:
  - waste gas comprising of phosphine, nitrogen, isobutylene, butene, low levels of all raw materials and phosphine compounds from the vessel vapour headspaces, having a maximum volumetric flow rate of 4.39 standard cubic metres per minute;
  - waste organic liquid, a mixture of organic solvents and phosphine derivatives, consisting of toluene, isopropyl alcohol mixture, octene, organophosphines, diisobutylene, tri-isobutyl phosphine, methyl tosylate, cyclooctadiene, hexene and isopar-M, having a maximum flow rate of 2.5 litres per minute; and
  - waste aqueous having a volumetric flow rate of 7.57 litres per minute.

The thermal oxidizer operates at a temperature of 871 degrees Celsius with a minimum gas residence time of 2 seconds and is equipped with a continuous monitoring and recording system, a quench section, a venturi scrubber and a mist eliminator comprising of polyester fiber filters, having a dust removal efficiency of not less than 90 percent. The thermal oxidizer temperature will drop to 843 degrees Celsius during swings in operation before the waste organic liquid is shut off;

- one (1) natural gas fired thermal oxidizer serving Train 2, designed for a maximum heat input of 10,736,000 kilojoules per hour equipped with a natural gas fired burner, used to incinerate the following streams:
  - waste gas comprising of phosphine, nitrogen, isobutylene, butene, low levels of all raw materials and phosphine compounds from the vessel vapour headspaces, having a maximum volumetric flow rate of 4.39 standard cubic metres per minute;
  - waste organic liquid, a mixture of organic solvents and phosphine derivatives, consisting of toluene, isopropyl alcohol mixture, octene, organophosphines, diisobutylene, tri-isobutyl phosphine, methyl tosylate, cyclooctadiene, hexene and isopar-M, having a maximum flow rate of 3.75 litres per minute; and
  - waste aqueous having a volumetric flow rate of 11.4 litres per minute.

The thermal oxidizer operates at a temperature of 871 degrees Celsius and a minimum gas residence time of 2 seconds, and is equipped with a continuous monitoring and recording system, a quench section, a venturi scrubber and a mist eliminator comprising of polyester fiber filters, having a dust removal efficiency of

not less than 90 percent. The thermal oxidizer will drop to 843 degrees Celsius during swings in operation before the waste organic liquid is shut off;

- two (2) natural gas fired boilers located in the steam plant, each having a total maximum heat input of 13,900,000 kilojoules per hour;
- two (2) natural gas fired boilers located in the utilities building, each having a total maximum heat input of 22,051,788 kilojoules per hour;

including the Equipment and any other ancillary and support processes and activities, operating at a Facility Production Limit of up to **40,000 tonnes of phosphine based chemicals per year** discharging to the air as described in the Original ESDM Report.

*For the purpose of this environmental compliance approval, the following definitions apply:*

1. "ACB list" means the document entitled "Air Contaminants Benchmarks (ACB) List: Standards, guidelines and screening levels for assessing point of impingement concentrations of air contaminants", as amended from time to time and published by the Ministry and available on a Government website;
2. "Acceptable Point of Impingement Concentration" means a concentration accepted by the Ministry as not likely to cause an adverse effect for a Compound of Concern that,
  - a. is not identified in the ACB list, or
  - b. is identified in the ACB list as belonging to the category "Benchmark 2" and has a concentration at a Point of Impingement that exceeds the concentration set out for the contaminant in that document.

With respect to the Original ESDM Report, the Acceptable Point of Impingement Concentration for a Compound of Concern mentioned above is the concentration set out in the Original ESDM Report;
3. "Acoustic Assessment Report" means the report, prepared in accordance with Publication NPC-233 and Appendix A of the Basic Comprehensive User Guide, by Slavi Grozev, P.Eng. / RWDI AIR Inc. and dated October 7, 2021 submitted in support of the application, that documents all sources of noise emissions and Noise Control Measures present at the Facility, as updated in accordance with Condition 5 of this Approval;
4. "Acoustic Assessment Summary Table" means a table prepared in accordance with the Basic Comprehensive User Guide summarising the results of the Acoustic Assessment Report, as updated in accordance with Condition 5 of this Approval;

5. "Approval" means this entire Environmental Compliance Approval and any Schedules to it;
6. "Basic Comprehensive User Guide" means the Ministry document titled "Basic Comprehensive Certificates of Approval (Air) User Guide" dated March 2011, as amended;
7. "Best Management Practices Plan for Facility Flares" means a document or a set of documents which describe record keeping and notification processes for Flaring Events at the Facility;
8. "Company" means **Cytec Canada Inc.** that is responsible for the construction or operation of the Facility and includes any successors and assigns in accordance with section 19 of the EPA;
9. "Compound of Concern" means a contaminant described in paragraph 4 subsection 26 (1) of O. Reg. 419/05, namely, a contaminant that is discharged from the Facility in an amount that is not negligible;
10. "Description Section" means the section on page one of this Approval describing the Company's operations and the Equipment located at the Facility and specifying the Facility Production Limit for the Facility;
11. "Director" means a person appointed for the purpose of section 20.3 of the EPA by the Minister pursuant to section 5 of the EPA;
12. "District Manager" means the District Manager of the appropriate local district office of the Ministry, where the Facility is geographically located;
13. "Emission Summary Table" means a table described in paragraph 14 of subsection 26 (1) of O. Reg. 419/05;
14. "Environmental Assessment Act" means the *Environmental Assessment Act*, R.S.O. 1990, c.E.18;
15. "EPA" means the *Environmental Protection Act*, R.S.O. 1990, c.E.19;
16. "Equipment" means equipment or processes described in the ESDM Report, this Approval and in the Schedules referred to herein and any other equipment or processes;
17. "Equipment with Specific Operational Limits" means emergency flares, natural gas fired thermal oxidizers, natural gas fired boilers each with a heat input greater than 10.5 gigajoules per hour and any Equipment related to the thermal oxidation of waste or waste derived fuels, fume incinerators or any other Equipment that is specifically referenced in any published Ministry document that outlines specific operational guidance that must be considered by the Director in issuing an Approval;
18. "ESDM Report" means the most current Emission Summary and Dispersion

Modelling Report that describes the Facility. The ESDM Report is based on the Original ESDM Report and is updated after the issuance of this Approval in accordance with section 26 of O. Reg. 419/05 and the Procedure Document;

19. "Facility" means the entire operation located on the property where the Equipment is located;
20. "Facility Production Limit" means the production limit placed by the Director on the main product(s) or raw materials used by the Facility;
21. "Flaring Event" means the operation of an emergency flare that was reported to the Ministry's Spills Action Centre and/or the discharge of greater than 10 kilograms of phosphine (CAS no.7803-51-2) to an emergency flare;
22. "Log" means a document that contains a record of each change that is required to be made to the ESDM Report and Acoustic Assessment Report, including the date on which the change occurred. For example, a record would have to be made of a more accurate emission rate for a source of contaminant, more accurate meteorological data, a more accurate value of a parameter that is related to a source of contaminant, a change to a Point of Impingement and all changes to information associated with a Modification to the Facility that satisfies Condition 2;
23. "Low Flow Event" means a discharge of phosphine (CAS no.7803-51-2) to flare other than a Flaring Event and includes low flow and/or low volume discharges to flare;
24. "Minister" means the Minister of the Environment, Conservation and Parks or such other member of the Executive Council as may be assigned the administration of the EPA under the Executive Council Act;
25. "Ministry" means the ministry of the Minister;
26. "Modification" means any construction, alteration, extension or replacement of any plant, structure, equipment, apparatus, mechanism or thing, or alteration of a process or rate of production at the Facility that may discharge or alter the rate or manner of discharge of a Compound of Concern to the air or discharge or alter noise or vibration emissions from the Facility;
27. "Noise Control Measures" means measures to reduce the noise emissions from the Facility and/or Equipment including, but not limited to, silencers, acoustic louvres, enclosures, absorptive treatment, plenums and barriers;
28. "O. Reg. 419/05" means Ontario Regulation 419/05: Air Pollution – Local Air Quality, made under the EPA;
29. "Original ESDM Report" means the Emission Summary and Dispersion Modelling Report which was prepared in accordance with section 26 of O. Reg. 419/05 and the Procedure Document by RWDI AIR Inc. and dated September 30, 2020

submitted in support of the application, and includes any changes to the report made up to the date of issuance of this Approval;

30. "Point of Impingement" has the same meaning as in section 2 of O. Reg. 419/05;
31. "Point of Reception" means Point of Reception as defined by Publication NPC-300;
32. "Procedure Document" means Ministry guidance document titled "Procedure for Preparing an Emission Summary and Dispersion Modelling Report" dated March 2018, as amended;
33. "Processes with Significant Environmental Aspects" means the Equipment which, during regular operation, would discharge one or more contaminants into the air in an amount which is not considered as negligible in accordance with section 26 (1) 4 of O. Reg. 419/05 and the Procedure Document;
34. "Publication NPC-207" means the Ministry draft technical publication "Impulse Vibration in Residential Buildings", November 1983, supplementing the Model Municipal Noise Control By-Law, Final Report, published by the Ministry, August 1978, as amended;
35. "Publication NPC-233" means the Ministry Publication NPC-233, "Information to be Submitted for Approval of Stationary Sources of Sound", October, 1995, as amended;
36. "Publication NPC-300" means the Ministry Publication NPC-300, "Environmental Noise Guideline, Stationary and Transportation Sources – Approval and Planning, Publication NPC-300", August 2013, as amended;
37. "*Report EPS 1/PG/7*" means the report titled "Protocols and Performance Specifications for Continuous Monitoring of Gaseous Emissions from Thermal Power Generation" dated December 2005 and published by Environment Canada, as amended.
38. "Schedules" means the following schedules attached to this Approval and forming part of this Approval namely:
  - Schedule A - Supporting Documentation
  - Schedule B - Continuous Temperature Monitor and Recorder;
  - Schedule C - Carbon Monoxide Monitor and Recorder;
  - Schedule D - Continuous Oxygen Monitor and Recorder; and
  - Schedule E - Flaring Event Emission Summary and Dispersion Modelling Report.
39. "Thermal Oxidizers" means the two (2) thermal oxidizers (referenced in the Original ESDM Report as sources 74 and AH) each equipped with a quenched

section, venturi scrubber and mist eliminator, described in the Company's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval;

40. "Toxicologist" means a qualified professional currently active in the field of risk assessment and toxicology that has a combination of formal university education, training and experience necessary to assess contaminants; and
41. "Written Summary Form" means the electronic questionnaire form, available on the Ministry website, and supporting documentation, that documents the activities undertaken at the Facility in the previous calendar year.

*You are hereby notified that this environmental compliance approval is issued to you subject to the terms and conditions outlined below:*

## TERMS AND CONDITIONS

### 1. GENERAL

1. Except as otherwise provided by this Approval, the Facility shall be designed, developed, built, operated and maintained in accordance with the terms and conditions of this Approval and in accordance with the following Schedules attached hereto:
  - Schedule A - Supporting Documentation
  - Schedule B - Continuous Temperature Monitor and Recorder;
  - Schedule C - Carbon Monoxide Monitor and Recorder;
  - Schedule D - Continuous Oxygen Monitor and Recorder; and
  - Schedule E - Flaring Event Emission Summary and Dispersion Modelling Report.

### 2. LIMITED OPERATIONAL FLEXIBILITY

1. Pursuant to section 20.6 (1) of the EPA and subject to Conditions 2.2 and 2.3 of this Approval, future construction, alterations, extensions or replacements are approved in this Approval if the future construction, alterations, extensions or replacements are Modifications to the Facility that:
  - a. are within the scope of the operations of the Facility as described in the Description Section of this Approval;
  - b. do not result in an increase of the Facility Production Limit above the level specified in the Description Section of this Approval; and

- c. result in compliance with the performance limits as specified in Condition 4.
- 2. Condition 2.1 does not apply to,
  - a. the addition of any new Equipment with Specific Operational Limits or to the Modification of any existing Equipment with Specific Operational Limits at the Facility; and
  - b. Modifications to the Facility that would be subject to the Environmental Assessment Act.
- 3. Condition 2.1 of this Approval shall expire December 19, 2027, unless this Approval is revoked prior to the expiry date. The Company may apply for renewal of Condition 2.1 of this Approval by including an ESDM Report and an Acoustic Assessment Report that describes the Facility as of the date of the renewal application.

### **3. REQUIREMENT TO REQUEST AN ACCEPTABLE POINT OF IMPINGEMENT CONCENTRATION**

- 1. Prior to making a Modification to the Facility that satisfies Condition 2.1.a. and 2.1.b., the Company shall prepare a proposed update to the ESDM Report to reflect the proposed Modification.
- 2. The Company shall request approval of an Acceptable Point of Impingement Concentration for a Compound of Concern if the Compound of Concern is not identified in the ACB list as belonging to the category “Benchmark 1” and a proposed update to an ESDM Report indicates that one of the following changes with respect to the concentration of the Compound of Concern may occur:
  - a. The Compound of Concern was not a Compound of Concern in the previous version of the ESDM Report and
    - i. the concentration of the Compound of Concern exceeds the concentration set out for the contaminant in the ACB list; or
    - ii. the Compound of Concern is not identified in the ACB list; or
  - b. The concentration of the Compound of Concern in the updated ESDM Report exceeds the higher of,
    - i. the most recent Acceptable Point of Impingement Concentration, and
    - ii. the concentration set out for the contaminant in the ACB list, if the contaminant is identified in that document.
- 3. The request required by Condition 3.2 shall propose a concentration for the

Compound of Concern and shall contain an assessment, performed by a Toxicologist, of the likelihood of the proposed concentration causing an adverse effect at Points of Impingement.

4. If the request required by Condition 3.2 is a result of a proposed Modification described in Condition 3.1, the Company shall submit the request, in writing, to the Director at least 30 days prior to commencing to make the Modification. The Director shall provide written confirmation of receipt of this request to the Company.
5. If a request is required to be made under Condition 3.2 in respect of a proposed Modification described in Condition 3.1, the Company shall not make the Modification mentioned in Condition 3.1 unless the request is approved in writing by the Director.
6. If the Director notifies the Company in writing that the Director does not approve the request, the Company shall,
  - a. revise and resubmit the request; or
  - b. notify the Director that it will not be making the Modification.
7. The re-submission mentioned in Condition 3.6 shall be deemed a new submission under Condition 3.2.
8. If the Director approves the request, the Company shall update the ESDM Report to reflect the Modification.
9. Condition 3 does not apply if Condition 2.1 has expired.

#### **4. PERFORMANCE LIMITS**

1. Subject to Condition 4.2, the Company shall not discharge or cause or permit the discharge of a Compound of Concern into the air if,
  - a. the Compound of Concern is identified in the ACB list as belonging to the category "Benchmark 1" and the discharge results in the concentration at a Point of Impingement exceeding the Benchmark 1 concentration; or
  - b. the Compound of Concern is not identified in the ACB list as belonging to the category "Benchmark 1" and the discharge results in the concentration at a Point of Impingement exceeding the higher of,
    - i. if an Acceptable Point of Impingement Concentration exists, the most recent Acceptable Point of Impingement Concentration, and
    - ii. the concentration set out for the contaminant in the ACB list, if the contaminant is identified in that document.
2. Condition 4.1 does not apply if the benchmark set out in the ACB list has a

10-minute averaging period and no ambient monitor indicates an exceedance at a Point of Impingement where human activities regularly occur at a time when those activities regularly occur.

3. The Company shall, at all times, ensure that the noise emissions from the Facility comply with the limits set out in Ministry Publication NPC-300.
4. The Company shall, at all times, ensure that the vibration emissions from the Facility comply with the limits set out in Ministry Publication NPC-207.
5. The Company shall operate any Equipment with Specific Operational Limits approved by this Approval in accordance with the Original ESDM Report and Conditions 7, 8, 10, 11 and 12 in this Approval.

## **5. DOCUMENTATION REQUIREMENTS**

1. The Company shall maintain an up-to-date Log.
2. No later than March 31 in each year, the Company shall update the Acoustic Assessment Report and shall update the ESDM Report in accordance with section 26 of O. Reg. 419/05 so that the information in the reports is accurate as of December 31 in the previous year.
3. The Company shall make the Emission Summary Table (see section 27 of O. Reg. 419/05) and Acoustic Assessment Summary Table available for examination by any person, without charge, by posting it on the Internet or by making it available during regular business hours at the Facility.
4. The Company shall, within three (3) months after the expiry of Condition 2.1 of this Approval, update the ESDM Report and the Acoustic Assessment Report such that the information in the reports is accurate as of the date that Condition 2.1 of this Approval expired.
5. Conditions 5.1 and 5.2 do not apply if Condition 2.1 has expired.

## **6. REPORTING REQUIREMENTS**

1. Subject to Condition 6.2, the Company shall provide the Director no later than June 30 of each year, a Written Summary Form to be submitted through the Ministry's website and by email to [Environment.Niagara@ontario.ca](mailto:Environment.Niagara@ontario.ca) that shall include the following:
  - a. a declaration of whether the Facility was in compliance with section 9 of the EPA, O. Reg. 419/05 and the conditions of this Approval;
  - b. a summary of each Modification satisfying Condition 2.1.a. and 2.1.b. that took place in the previous calendar year that resulted in a change in the previously calculated concentration at a Point of Impingement for any Compound of Concern or resulted in a change in the sound levels reported in the Acoustic Assessment Summary Table at any Point of

Reception.

2. Condition 6.1 does not apply if Condition 2.1 has expired.

## **7. OPERATION AND MAINTENANCE**

1. The Company shall prepare and implement, not later than three (3) months from the date of this Approval, operating procedures and maintenance programs for all Processes with Significant Environmental Aspects, which shall specify as a minimum:
  - a. frequency of inspections and scheduled preventative maintenance;
  - b. procedures to prevent upset conditions;
  - c. procedures to minimize all fugitive emissions;
  - d. procedures to prevent and/or minimize odorous emissions;
  - e. procedures to prevent and/or minimize noise emissions;
  - f. procedures for record keeping activities relating to the operation and maintenance program;
  - g. routine and emergency operating and maintenance procedures recommended by Thermal Oxidizers, the continuous monitoring and recording systems and emergency flares suppliers;
  - h. calibration procedures of the continuous monitoring and recording systems;
  - i. operator training which is to be provided by an individual experienced with Thermal Oxidizer Systems and emergency flares;
  - j. procedures for optimizing the operation of the Thermal Oxidizers to minimize the emissions from the Thermal Oxidizers;
  - k. periodic inspection of the Thermal Oxidizers which are to be conducted by individuals experienced with the Thermal Oxidizers;
  - l. procedures for recording and responding to complaints regarding the operation of the Thermal Oxidizers;
  - m. procedures to record the usage rate of chemicals in fume hoods; and
  - n. The Company shall ensure that any Equipment subject to Guideline A-9 is operated in compliance with the requirements of Guideline A-9, and that the emissions of nitrogen oxides, expressed collectively as nitrogen dioxide equivalent, from the natural gas fired boilers having a maximum heat input greater than 10.5 gigajoules per hour, shall not exceed the nitrogen oxides emission limit of 26 grams per gigajoule of input fuel energy.

2. The Company shall ensure that the combustion chambers of each of the thermal oxidizers are not loaded unless the continuous temperature monitoring system is fully operational.
3. The Company shall ensure that no substances containing chlorinated and/or fluorinated and/or brominated compounds, including polyvinyl chloride and Teflon are combusted in the Thermal Oxidizers.
4. The Company shall ensure that all Processes with Significant Environmental Aspects are operated and maintained in accordance with this Approval, the operating procedures and maintenance programs.

## **8. FLARE OPERATIONS**

1. The Company shall immediately implement the Best Management Practices Plan for Facility Flares entitled "Best Management Practices Plan (BMPP) for Facility Flares", dated January 27, 2022, as amended.
  - a. The Company shall:
    - i. review and evaluate on a yearly basis, the Best Management Practices Plan for Facility Flares;
    - ii. record the results of each yearly review and update the Best Management Practices Plan for Facility Flares within two (2) months of the completion of the yearly review;
    - iii. maintain the updated Best Management Practices Plan for Facility Flares at the Facility;
    - iv. implement, at all times, the most recent version of the Best Management Practices Plan for Facility Flares.
2. The Company shall notify the District Manager as soon as reasonably possible of each Flaring Event, and provide the following information following each Flaring Event as soon as reasonable possible:
  - a. the start and end times of the Flaring Event;
  - b. the type of gas sent to flare;
  - c. estimated total volume and mass of gas sent to flare;
  - d. the contaminants and the mass of each contaminant discharged during the Flaring Event;
  - e. a summary of investigations conducted including an assessment of root causes and failure analyses linked to the Flaring Event;
  - f. a summary of findings from investigations conducted;
  - g. corrective actions taken to prevent future Flaring Events;

- h. any remaining actions and their proposed completion dates;
- i. wind direction/weather details at time of Flaring Event;
- j. available photos/video during the Flaring Event; and
- k. details regarding if, when and how neighbours were notified of the Flaring Event.

3. The Company shall notify the District Manager as soon as reasonably possible of each Low Flow Event, and provide the following information following each Low Flow Event:

- a. the start and end times of the Low Flow Event;
- b. estimated total volume and mass of phosphine (CAS no.7803-51-2) sent to flare;
- c. the contaminants and the mass of each contaminant discharged during the Low Flow Event;
- d. a summary of investigations conducted including an assessment of root causes and failure analyses linked to the Low Flow Event;
- e. a summary of findings from investigations conducted;
- f. corrective actions taken to prevent future Low Flow Events;
- g. any remaining actions and their proposed completion dates;
- h. wind direction/weather details at time of Low Flow Event;
- i. available photos/video during the Low Flow Event; and
- j. details regarding if, when and how neighbours were notified of the Low Flow Event.

4. The Company shall prepare, at the end of each calendar quarter, and retain on-site for inspection by the Ministry, upon request, a report for the previous calendar quarter that includes at a minimum:

- a. a list of Flaring Events and Low Flow Events, provided in table format, including start and end times, type and total volume and mass of gas sent to flare, and the contaminants discharged during the events;
- b. a summary of the assessment of root cause and failure analyses;
- c. a summary of actions taken to prevent future Flaring Events and Low Flow Events;
- d. a summary of pending actions to be taken to prevent future Flaring Events and Low Flow Events; and
- e. as established within the Best Management Practices Plan for Facility

Flares, a summary of efforts taken to notify local communities and other interested parties of Flaring Events and Low Flow Events.

5. The Company shall prepare, at the end of each calendar quarter, and provide to the District Manager a Flaring Event Emission Summary and Dispersion Modelling Report in accordance with section 26 of O.Reg. 419/05 and prepared in accordance with the requirements outlined in Schedule E. The Flaring Event Emission Summary and Dispersion Modelling Report shall assess each Flaring Event during the previous calendar quarter, and shall be provided within 4 weeks of the receipt of, from the Ministry, local meteorological data reflective of meteorological and local land use conditions for each of the Flaring Events during the calendar quarter.
  - a. Despite subsection 5, the Director may waive in writing the requirement to assess a specific Flaring Event.

## **9. COMPLAINTS RECORDING AND REPORTING**

1. If at any time, the Company receives an environmental complaint from the public regarding the operation of the Equipment approved by this Approval, the Company shall take the following steps:
  - a. Record and number each complaint, either electronically or in a log book. The record shall include the following information: the time and date of the complaint and incident to which the complaint relates, the nature of the complaint, wind direction at the time and date of the incident to which the complaint relates and, if known, the address of the complainant.
  - b. Notify the District Manager of the complaint within two (2) business days after the complaint is received, or in a manner acceptable to the District Manager.
  - c. Initiate appropriate steps to determine all possible causes of the complaint, and take the necessary actions to appropriately deal with the cause of the subject matter of the complaint.
  - d. Complete and retain on-site a report written within five (5) business days of the complaint date. The report shall list the actions taken to appropriately deal with the cause of the complaint and set out steps to be taken to avoid the recurrence of similar incidents.

## **10. RECORD KEEPING REQUIREMENTS**

1. Any information requested by any employee in or agent of the Ministry concerning the Facility and its operation under this Approval, including, but not limited to, any records required to be kept by this Approval, shall be

provided to the employee in or agent of the Ministry, upon request, in a timely manner.

2. Unless otherwise specified in this Approval, the Company shall retain, for a minimum of five (5) years from the date of their creation all reports, records and information described in this Approval, including,
  - a. a copy of the Original ESDM Report and each updated version;
  - b. a copy of each version of the Acoustic Assessment Report;
  - c. supporting information used in the emission rate calculations performed in the ESDM Reports and Acoustic Assessment Reports;
  - d. the records in the Log;
  - e. copies of each Written Summary Form provided to the Ministry under Condition 6.1 of this Approval;
  - f. records of maintenance, repair and inspection of Equipment related to all Processes with Significant Environmental Aspects;
  - g. all records on maintenance, repair and inspection of the continuous monitoring and recording system, and original date that work was recommended;
  - h. all records produced by the continuous monitoring and recording system;
  - i. all records on operators training;
  - j. all records of the usage rate of chemicals in fumehoods;
  - k. description of all upset conditions associated with the operation of the Thermal Oxidizers and remedial action taken; and
  - l. all records related to environmental complaints made by the public as required by Condition 9 of this Approval.

## **11. EQUIPMENT WITH SPECIFIC OPERATIONAL LIMITS**

1. The Company shall ensure that the Thermal Oxidizers, used to incinerate waste gas, waste organic liquid and water containing organic are designed and operated to comply, at all times, with the following performance requirements:
  - a. the temperature in the combustion chamber, as recorded by the continuous monitoring and recording system, shall be at least 871 degrees Celsius throughout the combustion cycle but may drop to 843 degrees Celsius during swings in operation before the waste organic liquid is shut off; and

- b. the minimum residence time of the combustion gases in the combustion chamber shall be 2.0 seconds, operating at a temperature of not less than 843 degrees Celsius.

## **12. CONTINUOUS MONITORING**

1. The Company shall install, conduct and maintain a program to continuously monitor:
  - a. the temperature at the location in the combustion chamber of the Train 1 Thermal Oxidizer where the minimum retention time of the combustion gases at a minimum temperature of 843 degrees Celsius at 2 seconds is achieved. The continuous monitoring and recording system shall be equipped with continuous recording devices, and shall comply with the requirements outlined in the attached Schedule B1. The continuous monitoring and recording system shall comply with the requirements outlined in the attached Schedule B2 by January 31, 2023.
  - b. the temperature at the location in the combustion chamber of the Train 2 Thermal Oxidizer where the minimum retention time of the combustion gases at a minimum temperature of 843 degrees Celsius at 2 seconds is achieved. The continuous monitoring and recording system shall be equipped with continuous recording devices, and shall comply with the requirements outlined in the attached Schedule B2.
  - c. carbon monoxide at an accessible location where the measurements are representative of the actual concentrations of carbon monoxide in the gases leaving each of the Thermal Oxidizers. The continuous monitoring and recording system shall be equipped with continuous recording devices, and shall comply with the requirements outlined in the attached Schedule C.
  - d. oxygen at an accessible location where the measurements are representative of the actual concentrations of oxygen in the gases leaving each of the Thermal Oxidizers. The continuous monitoring and recording system shall be equipped with continuous recording devices, and shall comply with the requirements outlined in the attached Schedule D.

## **13. REVOCATION OF PREVIOUS APPROVALS**

1. This Approval replaces and revokes all Certificates of Approval (Air) issued under section 9 EPA and Environmental Compliance Approvals issued under Part II.1 EPA to the Facility in regards to the activities mentioned in subsection 9(1) of the EPA and dated prior to the date of this Approval.

## **SCHEDULE A**

# **Supporting Documentation**

1. Environmental Compliance Approval Application, dated October 29, 2020, signed by Heidi Kelly and submitted by the *Company*;
2. Acoustic Assessment Report, prepared by Slavi Grozev, P.Eng., RWDI AIR Inc. and dated October 7, 2021;
3. Emission Summary and Dispersion Modelling Report, prepared by RWDI AIR Inc. and dated September 30, 2020;
4. The emails from Sharon Schajnoha, RWDI Air Inc. dated July 10, 11 and 24, 2017.
5. The letter dated March 10, 2017 and signed by Hedi Kelly, Health, Safety and Environmental Engineer, Cytec Canada Inc.; and
6. The letters (e-mails) dated March 10 and 13, 2017 and provided by Katie Allen and Sharon Schajnoha, RWDI AIR Inc.

## **SCHEDULE B1**

### **Continuous Temperature Monitoring and Recording System Requirements**

#### **PARAMETER:**

Temperature

#### **LOCATION:**

The sample point for the Continuous Temperature Monitoring and Recording system shall be located at a location where the measurements are representative of the minimum temperature of the gases leaving the combustion chamber of the Thermal Oxidizer.

#### **PERFORMANCE:**

The Continuous Temperature Monitoring system shall meet the following minimum performance specifications for the following parameters.

<b>PARAMETERS</b>	<b>SPECIFICATION</b>
Type	shielded "K" type thermocouple, or equivalent
Accuracy	± 1.5 percent of the minimum gas

temperature
-------------

## **RECORDER:**

The recorder must be capable of registering continuously the measurement of the monitoring system without a significant loss of accuracy and with a time resolution of 1 minute or better.

## **RELIABILITY:**

The monitor shall be operated and maintained so that accurate data is obtained during a minimum of 95 percent of the time for each calendar quarter.

## **SCHEDULE B2**

### **Continuous Temperature Monitoring and Recording System Requirements**

## **PARAMETER:**

Temperature

## **LOCATION:**

The sample point for the Continuous Temperature Monitoring and Recording system shall be located at a location where the measurements are representative of the minimum temperature of the gases leaving the combustion chamber of the Thermal Oxidizer.

## **PERFORMANCE:**

The Continuous Temperature Monitoring system shall meet the following minimum performance specifications for the following parameters.

PARAMETERS	SPECIFICATION
Type	shielded "K" type thermocouple, or equivalent
Accuracy	$\pm 1.5$ percent of the minimum gas temperature
Response Time (95%)	60 sec. (max)
Operating Range (Full Scale)	1.5 times approval limit
Standard Tolerance	$\pm 2.2$ °C or $\pm 0.75$ %
Resolution	0.1 °C

Calibration	Per manufacturer's recommendations
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## **RECORDER:**

The recorder must be capable of registering continuously the measurement of the monitoring system without a significant loss of accuracy and with a time resolution of 1 minute or better.

## **RELIABILITY:**

The monitor shall be operated and maintained so that accurate data is obtained during a minimum of 90 percent of the time for each calendar quarter during the first full year of operation, and 95 percent, thereafter.

## **SCHEDULE C**

### **Carbon Monoxide Monitor and Recorder**

#### **PARAMETER:**

Carbon Monoxide

#### **INSTALLATION:**

The continuous carbon monoxide monitor shall be installed at an accessible location where the measurements are representative of the actual concentrations of carbon monoxide in the gases leaving each of the Thermal Oxidizers and shall meet the following installation specifications:

<b>PARAMETERS</b>	<b>SPECIFICATION</b>
Range (parts per million, ppm)	0 to highest concentration anticipated from the source
Calibration Gas Ports	close to the sample point

#### **PERFORMANCE:**

The continuous carbon monoxide monitor shall meet the following minimum performance specifications for the following parameters:

<b>PARAMETERS</b>	<b>SPECIFICATION</b>
Span Value (nearest ppm equivalent)	2 times the average normal concentration of the source
Relative Accuracy	< 10 percent of the mean value of the reference method test
Calibration Error	< 2 percent of actual concentration
System Bias	< 4 percent of the mean value of the reference method test

Procedure for Zero and Span Calibration Check	all system components check
Zero Calibration Drift (24-hour)	< 5 percent of span value
Span Calibration Drift (24-hour)	< 5 percent of span value
Response Time (90 percent response to step change)	< 90 seconds
Operational Test Period	> 168 hours without corrective maintenance

### **CALIBRATION:**

Daily calibration drift checks on the monitor shall be performed and recorded when each of the Thermal Oxidizers are operating and in accordance with the requirements of Report EPS 1/PG/7.

### **DATA RECORDER:**

The data recorder must be capable of registering continuously the measurement of the monitor with an accuracy of 0.5 percent of a full scale reading or better and with a time resolution of 2 minutes or better.

### **RELIABILITY:**

The monitor shall be operated and maintained so that accurate data is obtained during a minimum of 90 percent of the time for each calendar quarter during the first full year of operation, and 95 percent, thereafter when each of the Thermal Oxidizers is operating.

## **SCHEDULE D**

### **Continuous Oxygen Monitor and Recorder**

### **INSTALLATION:**

The continuous oxygen monitor shall be installed at an accessible location where the measurements are representative of the actual concentrations of oxygen in the gases leaving each of the Thermal Oxidizers and shall meet the following installation specifications:

PARAMETERS	SPECIFICATION
Range (percentage)	0 to highest concentration anticipated from the source
Calibration Gas Ports	close to the sample point

### **PERFORMANCE:**

The continuous oxygen monitor shall meet the following minimum performance specifications for the following parameters:

PARAMETERS	SPECIFICATION
Span Value (percentage)	2 times the average normal concentration of the source
Relative Accuracy	< 10 percent of the mean value of the reference method test
Calibration Error	0.25 percent O <sub>2</sub>
System Bias	< 4 percent of the mean value of the reference method test
Procedure for Zero and Span Calibration Check	all system components checked
Zero Calibration Drift (24-hour)	< 0.5 percent O <sub>2</sub>
Span Calibration Drift (24-hour)	< 0.5 percent O <sub>2</sub>
Response Time (90 percent of full scale)	< 90 seconds
Operational Test Period	> 168 hours without corrective maintenance

#### **CALIBRATION:**

Daily calibration drift checks on the monitor shall be performed and recorded when each of the Thermal Oxidizers is operating and in accordance with the requirements of Report EPS 1/PG/7.

#### **DATA RECORDER:**

The data recorder must be capable of registering continuously the measurement of the monitor with an accuracy of 0.5 percent of a full scale reading or better and with a time resolution of 2 minutes or better.

#### **RELIABILITY:**

The monitor shall be operated and maintained so that accurate data is obtained during a minimum of 90 percent of the time for each calendar quarter during the first full year of operation, and 95 percent, thereafter when each of the Thermal Oxidizers is operating.

## **SCHEDULE E**

### **Flaring Event Emission Summary and Dispersion Modelling Report**

1. A Flaring Event Emission Summary and Dispersion Modelling Report required by condition 8.5. shall be prepared in accordance with the following requirements:
2. The Flaring Event Emission Summary and Dispersion Modelling Report need only be prepared with respect to discharges of Phosphine, Phosphorous Pentoxide and

Phosphoric Acid during each Flaring Event and need not list all contaminants that are discharged from the Facility, despite anything to the contrary in section 26 of O.Reg. 419/05; the Flaring Event Emission Summary and Dispersion Modelling Report must include all discharges of these contaminants from all sources of these contaminants at the Facility in accordance with section 3 and 26 of O.Reg. 419/05;

3. The Flaring Event Emission Summary and Dispersion Modelling Report shall be prepared with respect to each discharge of Phosphine, Phosphorous Pentoxide and Phosphoric Acid for 1-hour and 24-hour averaging periods for each Flaring Event;
4. Despite Section 10 of O.Reg. 419/05, an approved dispersion model shall be used in accordance with a scenario that uses actual operating data for the Facility during each Flaring Event;
5. Despite Section 11 of O.Reg. 419/05, an approved dispersion model shall be used with an emission rate that is an accurate reflection of the emission rate of each contaminant during each Flaring Event, reflected through the use and input of variable emissions by hour;
6. Where the Flaring Event Emission Summary and Dispersion Modelling Report is being prepared with respect to a 1-hour averaging period, the rolling hour during each Flaring Event that would result in the highest concentration of the contaminant at a Point of Impingement must be used; and
7. The approved dispersion model shall be used with local meteorological data approved under paragraph 3 of subsection 13 (1) of O.Reg. 419/05 as an accurate reflection of meteorological and local land use conditions during the period of each Flaring Event.

*The reasons for the imposition of these terms and conditions are as follows:*

**1. GENERAL**

Condition No. 1 is included to require the Approval holder to build, operate and maintain the Facility in accordance with the Supporting Documentation in Schedule A considered by the Director in issuing this Approval.

**2. LIMITED OPERATIONAL FLEXIBILITY, REQUIREMENT TO REQUEST AN ACCEPTABLE POINT OF IMPINGEMENT CONCENTRATION AND PERFORMANCE LIMITS**

Conditions No. 2, 3 and 4 are included to limit and define the Modifications permitted by this Approval, and to set out the circumstances in which the Company shall request approval of an Acceptable Point of Impingement

Concentration prior to making Modifications. The holder of the Approval is approved for operational flexibility for the Facility that is consistent with the description of the operations included with the application up to the Facility Production Limit. In return for the operational flexibility, the Approval places performance based limits that cannot be exceeded under the terms of this Approval. Approval holders will still have to obtain other relevant approvals required to operate the Facility, including requirements under other environmental legislation such as the Environmental Assessment Act.

### **3. DOCUMENTATION REQUIREMENTS**

Condition No. 5 is included to require the Company to maintain ongoing documentation that demonstrates compliance with the performance limits as specified in Condition 4 of this Approval and allows the Ministry to monitor on-going compliance with these performance limits. The Company is required to have an up to date ESDM Report and Acoustic Assessment Report that describe the Facility at all times and make the Emission Summary Table and Acoustic Assessment Summary Table from these reports available to the public on an ongoing basis in order to maintain public communication with regard to the emissions from the Facility.

### **4. REPORTING REQUIREMENTS**

Condition No. 6 is included to require the Company to provide a yearly Written Summary Form to the Ministry, to assist the Ministry with the review of the site's compliance with the EPA, the regulations and this Approval.

### **5. OPERATION AND MAINTENANCE**

Condition No. 7 is included to require the Company to properly operate and maintain the Processes with Significant Environmental Aspects to minimize the impact to the environment from these processes.

### **6. FLARE OPERATIONS**

Condition No. 8 is included to require the Company to develop documentation and maintain records that require best management practices to reduce the potential for Flaring Events.

### **7. COMPLAINTS RECORDING AND REPORTING PROCEDURE**

Condition No. 9 is included to require the Company to respond to any environmental complaints regarding the operation of the Equipment, according to a procedure that includes methods for preventing recurrence of similar incidents and a requirement to prepare and retain a written report.

### **8. RECORD KEEPING REQUIREMENTS**

Condition No. 10 is included to require the Company to retain all documentation related to this Approval and provide access to employees in or agents of the Ministry, upon request, so that the Ministry can determine if a more detailed review of compliance with the performance limits as specified in Condition 4 of this

Approval is necessary.

## **9. EQUIPMENT WITH SPECIFIC OPERATIONAL LIMITS**

Condition No. 11 is included to outline the specific operational limits considered necessary to prevent an adverse effect resulting from the operation of each of the Thermal Oxidizers. This condition is also included to emphasize that the Thermal Oxidizers must be operated according to a procedure that will result in compliance with the EPA, the regulations and this Approval.

## **10. CONTINUOUS MONITORING**

Condition No. 12 is included to require the Company to gather accurate information on a continuous basis so that compliance with the EPA, the regulations and this Approval can be verified.

## **11. REVOCATION OF PREVIOUS APPROVALS**

Condition No. 13 is included to identify that this Approval replaces all Section 9 Certificate(s) of Approval and Part II.1 Approvals in regards to the activities mentioned in subsection 9(1) of the EPA and dated prior to the date of this Approval.

**Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 1282-AQRMJB issued on December 19, 2017**

*In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me, the Environmental Review Tribunal and in accordance with Section 47 of the Environmental Bill of Rights, 1993, the Minister of the Environment, Conservation and Parks, within 15 days after receipt of this Notice, require a hearing by the Tribunal. The Minister of the Environment, Conservation and Parks will place notice of your appeal on the Environmental Registry. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall state:*

- a. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;
- b. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

*Pursuant to subsection 139(3) of the Environmental Protection Act, a hearing may not be required with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.*

*The Notice should also include:*

1. The name of the appellant;
2. The address of the appellant;

3. The environmental compliance approval number;
4. The date of the environmental compliance approval;
5. The name of the Director, and;
6. The municipality or municipalities within which the project is to be engaged in.

*And the Notice should be signed and dated by the appellant.*

*This Notice must be served upon:*

The Secretary*	The Minister of the Environment, Conservation and Parks	The Director appointed for the purposes of Part II.1 of the Environmental Protection Act
Environmental Review Tribunal	777 Bay Street, 5th Floor	Ministry of the Environment, Conservation
655 Bay Street, Suite 1500	Toronto, Ontario	and Parks
Toronto, Ontario	M7A 2J3	135 St. Clair Avenue West, 1st Floor
M5G 1E5		Toronto, Ontario
		M4V 1P5

**\* Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or [www.ert.gov.on.ca](http://www.ert.gov.on.ca)**

*This instrument is subject to Section 38 of the Environmental Bill of Rights, 1993, that allows residents of Ontario to seek leave to appeal the decision on this instrument. Residents of Ontario may seek leave to appeal within 15 days from the date this decision is placed on the Environmental Registry. By accessing the Environmental Registry at <https://ero.ontario.ca/>, you can determine when the leave to appeal period ends.*

*The above noted activity is approved under s.20.3 of Part II.1 of the Environmental Protection Act.*

DATED AT TORONTO this 3rd day of February,  
2022



Bijal Shah, P.Eng.  
Director  
appointed for the purposes of Part  
II.1 of the *Environmental Protection  
Act*

MS/  
c: District Manager, MECP Niagara  
Heidi Kelly, Cytec Canada Inc.



**CERTIFICATE OF APPROVAL**

**AIR**

NUMBER 8357-8L8Q8B  
Issue Date: August 31, 2011

Boys' & Girls' Club of Niagara  
8800 McLeod Road  
Niagara Falls, Ontario  
L2H 3A4

Site Location: 8800 McLeod Road  
Niagara Falls City, Regional Municipality of Niagara, Ontario

*You have applied in accordance with Section 9 of the Environmental Protection Act for approval of:*

- one (1) standby diesel generator set, having a rating of 125 kilowatts, to provide power for the fitness and recreational sport centre during emergency situations;

all in accordance with the Application for Approval (Air & Noise) dated May 18, 2011 and signed by Joe Macoretta, (Director of Operations), Boys' & Girls' Club of Niagara, and all supporting information associated with the application including the Emission Summary and Dispersion Modelling Report prepared by AMEC Earth & Environmental, dated May 18, 2011, and signed by Nadine Guppy.

*For the purpose of this Certificate of Approval and the terms and conditions specified below, the following definitions apply:*

- (1) "Act" means the *Environmental Protection Act*;
- (2) "Certificate" means this Certificate of Approval issued in accordance with Section 9 of the Act;
- (3) "Equipment" means the diesel generator set described in the Owner's application, this Certificate and in the supporting documentation submitted with the application, to the extent approved by this Certificate;
- (4) "Manual" means a document or a set of documents that provide written instructions to staff of the Owner;
- (5) "Ministry" means the Ontario Ministry of the Environment;
- (6) "Owner" means Boys' & Girls' Club of Niagara, and includes its successors and assignees;
- (7) "Publication NPC-205" means Ministry Publication NPC-205, Sound Level Limits for Stationary Sources in Class 1 & 2 Areas (Urban), October, 1995; and
- (8) "Publication NPC-232" means Ministry Publication NPC-232, Sound Level Limits for Stationary Sources in Class 3 Areas (Rural), October, 1995.

*You are hereby notified that this approval is issued to you subject to the terms and conditions outlined below:*

**TERMS AND CONDITIONS**

**GENERAL**

1. Except as otherwise provided by these Conditions, the Owner shall design, build, install, operate and maintain the

## CONTENT COPY OF ORIGINAL

Equipment in accordance with the description given in this Certificate, application for approval of the Equipment and the submitted supporting documents and plans and specifications as listed in this Certificate.

2. Where there is a conflict between a provision of any submitted document referred to in this Certificate and the Conditions of this Certificate, the Conditions in this Certificate shall take precedence, and where there is a conflict between the listed submitted documents, the document bearing the most recent date shall prevail.

### **PERFORMANCE**

3. The Owner shall ensure that the noise emissions from the Equipment comply with the limits set out in Publication NPC-205 or NPC-232, as applicable.

### **OPERATION AND MAINTENANCE**

4. The Owner shall restrict the periodic testing of the Equipment to the daytime hours from 7:00 am to 7:00 pm.

5. The Owner shall ensure that the Equipment is properly operated and maintained at all times. The Owner shall:

(1) prepare, not later than three (3) months after the date of this Certificate or the date of commissioning of the Equipment, and update, as necessary, a Manual outlining the operating procedures and a maintenance program for the Equipment, including:

(a) routine operating and maintenance procedures in accordance with good engineering practices and as recommended by the Equipment suppliers;

(b) emergency procedures;

(c) procedures for any record keeping activities relating to operation and maintenance of the Equipment;

(d) all appropriate measures to minimize noise and odorous emissions from all potential sources;

(2) implement the recommendations of the Manual; and

(3) retain, for a minimum of two (2) years from the date of their creation, all records on the maintenance, repair and inspection of the Equipment, and make these records available for review by staff of the Ministry upon request.

*The reasons for the imposition of these terms and conditions are as follows:*

1. Condition Nos. 1 and 2 are imposed to ensure that the Equipment is built and operated in the manner in which it was described for review and upon which approval was granted. These conditions are also included to emphasize the precedence of Conditions in the Certificate and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review.

2. Condition No. 3 is included to provide the minimum performance requirement considered necessary to prevent an adverse effect resulting from the operation of the Equipment.

3. Condition No. 4 is included to ensure that the proposed operation, excluding emergency situations, is not extended beyond specific daytime hours to prevent an adverse effect resulting from the operation of the Equipment.

4. Condition No. 5 is included to emphasize that the Equipment must be maintained and operated according to a procedure that will result in compliance with the Act, the regulations and this Certificate. In addition the Owner is required to keep records and provide information to staff of the Ministry so that compliance with the Act, the regulations and this Certificate can be verified.

## CONTENT COPY OF ORIGINAL

*In accordance with Section 139 of the Environmental Protection Act, R.S.O. 1990, Chapter E-19, as amended, you may by written notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the Environmental Protection Act, provides that the Notice requiring the hearing shall state:*

1. The portions of the approval or each term or condition in the approval in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

*The Notice should also include:*

3. The name of the appellant;
4. The address of the appellant;
5. The Certificate of Approval number;
6. The date of the Certificate of Approval;
7. The name of the Director;
8. The municipality within which the works are located;

*And the Notice should be signed and dated by the appellant.*

*This Notice must be served upon:*

The Secretary\*  
Environmental Review Tribunal  
655 Bay Street, 15th Floor  
Toronto, Ontario  
M5G 1E5

AND

The Director  
Section 9, *Environmental Protection Act*  
Ministry of the Environment  
2 St. Clair Avenue West, Floor 12A  
Toronto, Ontario  
M4V 1L5

\* **Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at:**  
**Tel: (416) 314-4600, Fax: (416) 314-4506 or [www.ert.gov.on.ca](http://www.ert.gov.on.ca)**

*The above noted works are approved under Section 9 of the Environmental Protection Act.*

DATED AT TORONTO this 31st day of August, 2011

Sherif Hegazy, P.Eng.  
Director  
Section 9, *Environmental Protection Act*

TT/  
c: District Manager, MOE Niagara District Office  
Nadine Guppy, AMEC Earth & Environmental



**APPENDIX D**

**J.D. BARNES RESIDENTIAL USES**



CAUTION  
(A) THIS IS NOT A PLAN OF SURVEY AND SHALL NOT BE USED EXCEPT FOR  
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