



Report:

2204604 Ontario Inc.
Air Quality and Odour Study for a Mixed Commercial Site
Collingwood, Ontario

Date: September 15, 2014



Report:

2204604 Ontario Inc. Air Quality and Odour Study for a Mixed Commercial Site Collingwood, Ontario

Submitted to: 2204604 Ontario Inc.
c/o Landex Captial Corporation
Ken Hale
Manager, Land Development & Acquisitions
40 Huron Street, Suite 300, Collingwood, Ontario L9Y 4R3

Prepared by: Peter Piersol,
Senior Project Manager
ORTECH Consulting Inc.
804 Southdown Rd., Mississauga, Ontario L5J 2Y4
Tel: (905) 822-4120, Ext. 545
Fax: (905) 855-0406
E-mail: ppiersol@ortech.ca

Report No.: 91417
10 pages, 1 Attachment

Revision History

Version	Date	Summary Changes/Purpose of Revision
1	August 25, 2014	None
2	September 15, 2014	Review comments

NOTICE:

This report was prepared by ORTECH Consulting Inc. (ORTECH) solely for the Client identified above and is to be used exclusively for the purposes set out in the report. The material in this report reflects the judgment of ORTECH based on information available to them at the time of preparation. Unless manifestly incorrect, ORTECH assumes information provided by others is accurate. Changed conditions or information occurring or becoming known after the date of this report could affect the results and conclusions presented. Unless otherwise required by law or regulation, this report shall not be shared with any Third Party without the express written consent of ORTECH. ORTECH accepts no responsibility for damages, if any, suffered by any Third Party which makes use of the results and conclusions presented in this report.

Table of Contents

	Page
1. INTRODUCTION	4
2. IDENTIFIED FACILITIES WITH ODOUR AND DUST POTENTIAL	6
2.1 Industrial Facilities	8
2.2 Other Facilities	10
3. SUMMARY OF POTENTIAL AIR EMISSION IMPACTS	10
Table 1 Industrial Class, Minimum Separation Distances and the Potential Influence Areas from Guideline D-6	4
Table 2 Summary of Industries/Facilities with Potential Odour and Dust Emission Issues	7
Figure 1 Mixed Commercial Site and Surrounding Area.....	5
ATTACHMENT A Definitions of Classes from Guideline D-6	

1. INTRODUCTION

ORTECH Environmental (ORTECH) was retained by 2204604 Ontario Inc. to provide an Air Quality and Odour Study for a mixed commercial site in Collingwood which is located on the west side of High Street northwest of Third Street, as indicated on Figure 1. This mixed commercial site may possibly include residential use on the western portion of the site facing Black Ash Creek.

The specific objective of the study was to undertake an odour and dust assessment of the surrounding uses and air quality impacts on the proposed development site. The study was conducted based on the Ontario Ministry of the Environment (MOE) Guideline D-1 on Land Use Compatibility; D-6 on Compatibility between Industrial Facilities and Sensitive Land Uses and D-4 Land Use On or Near Landfills and Dumps.

This report describes the surrounding industrial and commercial facilities within 1,000 metres of the site. The assessment was based on readily available information, (e.g. facility websites, etc.) and direct observations during a site visit.

Guideline D-6 recommends a 1000 metre Study Area for land use proposals; defines three classes of industrial facilities: Class I, Class II and Class III (see Attachment A); and defines Sensitive Land Uses. It also defines Minimum Recommended Separation Distances and Potential Influence Areas between industrial facilities and sensitive land uses for each Class as shown in Table 1. The class designations are based on the potential for noise, dust and odours.

Table 1: Industrial Class, Minimum Separation Distances and the Potential Influence Areas from Guideline D-6

Class	Recommended Minimum Separation Distance (m)	Potential Influence Area (m)
I	20	70
II	70	300
III	300	1000

Figure 1: Mixed Commercial Site and Surrounding Area



Although the D-6 guideline suggests that distances are normally measured from property line to property line, there is allowance for measuring from a specific source to sensitive receptors. D-6 also discusses reducing the minimum separation distance required based on mitigation at industrial sites and provides for exceptions to the Minimum Recommended Separation Distances for some development sites including infilling.

The D-6 guideline provides definitions (see Attachment A) and examples to illustrate the three classes. Facilities that do not meet the definition of any one of the three classes are expected to have virtually no potential for creating noise, odour, dust or vibration that would give rise to complaints (noted in this report as Class 0). The definitions and examples in the MOE Guidelines relevant to air quality concerns were used to characterize each of the nearby facilities.

The D-6 Guideline includes “residences, senior citizens homes, schools, daycare facilities, hospitals, churches and other institutional uses” as sensitive land uses. The Ontario MOE April 2008 “Methodology for Modelling Assessments of Contaminants with 10-minute Average Standards and Guidelines under O. Reg. 419/05” further differentiates ‘locations where human activities occur’ into several categories which include ‘permanent potential 24-hour sensitivity’ (anywhere where someone could sleep) and ‘permanent daily hours but with definite periods of shutdown/closure’. The proposed mixed commercial site may possibly include residential uses on the west portion of the site facing Black Ash Creek.

As noted above, the guidelines are based on the potential for noise, dust and odours. This study addresses dust and odour sources but does not address environmental noise or vibration.

2. IDENTIFIED FACILITIES WITH ODOUR AND DUST POTENTIAL

The area surrounding the proposed mixed commercial site has commercial, residential and some industrial uses.

Table 2 provides the name and address of each of identified facilities with odour or dust potential and summarizes: the minimum property line to property line distance from each facility to the residential site; identification of operations of each facility; the identification of potential odour and dust emission sources; and the anticipated MOE industry Class for each facility based on potential for dust and odour impact. The following provides information on how the MOE classes were assigned to the surrounding facilities.

Table 2: Summary of Industries/Facilities with Potential Odour and Dust Emission Issues

Direction Quadrant	Facility/Facilities	Address/Location	Minimum Distance From Site, Property Line to Property Line (m)	Relevant Operations	Potential Air Emissions	MOE Industrial Class	Comments
North-West	AGNORA Architectural Glass North America	200 Mountain Rd.	420	Glass Fabrication	None	0	No Adverse Impacts
North-east	Side Launch	200 Mountain Rd.	420	Brewery	Odour	II	Adequate separation distance
North-east	Lafarge Concrete Plant	10 th Line	730	Ready-Mix Concrete	Dust	II	Adequate separation distance
North-east	Collingwood Public Works & Recreation	10 th Line	840	Offices & Maintenance Yard	None	0	No Adverse Impacts
North-east	Legendary Logcrafters	475 10 th Line	1,000	Log building construction	Dust	I	Adequate separation distance
North	Collingwood Landfill	10 th Line	1,150	Municipal Landfill	Dust & Odour	D-4	Adequate separation distance
North-East	Commercial / Retail	100 Mountain Road	150	Light Commercial	Dust & Odour	I	Adequate separation distance
North-East	Walmart, Home Depot, etc.	Area of Mountain Rd., High St. & Balsam St.	<20	Retail	None	0	No Adverse Impacts
North-East	Premier Kitchens	20 Balsam Street	500	Cabinets	Odour	I	Adequate separation distance
East	Goodall Rubber Co. of Canada	530 Third St.	<30	Rubber Hose	Odour	II	Adequate separation distance
South-East	Stewart Industrial Park	Stewart St.	140 to 450	Light Industrial	Dust & Odour	I	Adequate separation distance

2.1 Industrial Facilities

The AGNORA Architectural Glass North America facility is north of the site at the corner of 10th Line and Mountain Road. This facility fabricates architectural glass products with processes including heat treatment, lamination, cutting, polishing, grinding and roller painting. Typically, these processes do not emit significant quantities of dust or odorous substances.

Since the AGNORA facility only releases contaminants to the environment in negligible amounts, they do not require or have an MOE air emission environmental compliance approval. The roller painting operation uses water-based silicon coatings which do not emit odorous volatile solvents and the cutting, polishing and grinding is a wet water system that eliminates dust emissions. The heat treatment and laminating processes emit only heat which is discharged into the plant.

The AGNORA facility is considered a Class 0 facility for dust and odours and is 420 metres from the proposed mixed commercial site.

The Side Launch brewery also occupies a portion of the building at 200 Mountain Rd. Side Launch brewery is considered a small to medium brewery with the potential of releasing odours and is a Class II facility. It is not a Class III large production brewery with frequent and annoying odour releases. At 420 metres from the mixed commercial site it well beyond the Minimum Separation distance of 70 metres and the Potential Influence Area of 300 metres for a Class II Facility.

North of Mountain Rd on 10th Line is the Lafarge Canada Collingwood ready-mix concrete plant at 730 metres from the proposed mixed commercial site. The ready-mix concrete plant is a Class II facility with the potential of releasing dust from the aggregate and sand handling, vehicle traffic on the facility unpaved roads and from the ready-mix concrete manufacturing processes. Lafarge Canada has implemented a dust management plan to minimize fugitive dust emissions at this facility. This Class II facility is well beyond both the recommended Minimum Separation distance of 70 metres and the Potential Influence Area distance of 300 metres.

North of the ready-mix concrete plant is the Town of Collingwood Public Works and Recreation offices and buildings, the Legendary Logcrafters plant and, at the end of 10th Line, is the Collingwood Landfill. The Town of Collingwood Public Works and Recreation site is paved and there are no operations that are significant sources of dust or odours.

The manufacture of log buildings at Legendary Logcrafters may emit sawdust on occasion and is considered a Class I facility. At 1,000 metres from the subdivision site Legendary Logcrafters is well beyond the recommended D-6 guideline Class I separation distances.

The Collingwood Landfill is at a minimum of 1,150 metres from the mixed commercial site and is beyond the D-4 guideline recommended separation distance of 500 metres for landfills. Dust may be released from landfill operations on occasion, however, with dust suppression measures and the greater than 1 kilometre separation distance dust impacts on the proposed subdivision are not anticipated.

On the south side of Mountain Road 150 metres to the north-east is a commercial/retail mall with various businesses. The majority of the businesses (property management, plumbing equipment sales, office supplies, motorcycles, trampolines) do not operate equipment or processes that are sources of dust or odours. However, two of the businesses are involved in the manufacturing of countertops and cabinets (Heritage Cabinetry) which may emit dust from woodworking and odours from paint spraying. Both are well beyond the Class I Potential Influence Area.

On the north side of Mountain Road is the site formerly occupied by the Goodyear Canada Hose plant. Goodyear no longer occupies the site and the building is vacant.

The Goodall Rubber Co. plant is located immediately south of the mixed commercial site. This facility manufactures rubber hose, conveyor belting, gaskets etc. The Goodall Rubber Co. plant is considered a Class II facility and a potential source of odours from rubber cement mixing and rubber hose manufacturing. The Goodall Rubber Co. has an Environmental Compliance Approval (ECA) Air under the Environmental Protection Act for the facility, which requires the documentation and mitigation of environmental complaints, such as odour nuisance complaints. The ECA also requires Goodall Rubber to operate the plant such that unacceptable emissions are not released. Air emissions from the Goodall Rubber plant are reported to the Environmental Canada National Pollutant Release Inventory (NPRI). In 2013 Goodall Rubber reported emissions of volatile organic compounds which may be sources of odours.

Although Goodall Rubber plant is located immediately south of the eastern portion of the mixed commercial site, the ECA and the Ministry of the Environment specifically requires that there are no adverse impacts on adjacent land uses and there are to be no environmental complaints. Possible residential use of the western portion of the mixed commercial site will not be immediately adjacent to the Goodall facility, with a separation distance of greater than 200 metres.

Also immediately south of the mixed commercial site and west of the Goodall Rubber plant, is an undeveloped area designated M4-1, Business Park Industrial. Future industrial facility development in this area will require Ministry of the Environment approvals with conditions which will mitigate potential air emissions such that odours and dust emissions will not adversely impact the mixed commercial site.

Premier Kitchens, located on the east side of Balsam Street, manufactures kitchen cabinets and has a paint spray booth that will release paint solvent odours. Premier Kitchens is a Class I facility and the odours from the paint spray booth will be of low intensity and infrequent. At 500 metres from the mixed commercial site Premier Kitchens is well beyond the Class I recommended separation distance and will not adversely impact the mixed commercial site.

The businesses in Stewart Street Industrial Park include vehicle repair, a fuels depot, a plastic fabricator, electronics, printing, municipal utility offices and yard, book distributor, fitness centres and home furnishing sales. All are minor and infrequent emitters of dust and odours. Although minor odours may be released from a vehicle paint spray booth, the fuels depot and off-set printing. The unpaved vehicle traffic and parking areas are potential sources of dust emissions. However, at a minimum of 140 metres from the mixed commercial site, there will be no adverse air impacts from the Stewart Street Industrial Park facilities.

2.2 Other Facilities

Retail outlets, a movie theatre, restaurants and a hotel are located in the north of the mixed commercial site and these businesses will not emit odours and dust.

3. SUMMARY OF POTENTIAL AIR EMISSION IMPACTS

The Mixed Commercial site, including possible residential use, located west of High Street and northeast of Third Street can be supported at this site as odour and dust from surrounding land use are not expected to adversely impact the future occupants.

Most of the industrial and commercial facilities are Class I or 0 (i.e. no potential for air quality issues). The Class II Lafarge ready-mix concrete plant is adequately separated from the mixed commercial site and environmental regulatory conditions on the Goodall Rubber plant are such a that there will be no adverse odour and dust impacts on the mixed commercial site, which may include possible residential uses on the western portion of the site.

The local retail businesses are anticipated to be Class 0 with no potential for air quality issues.

ATTACHMENT A

Definitions of Classes from Guideline D-6

A Class I Industrial Facility is “A place of business for a small scale, self-contained plant or building which produces/stores a product which is contained in a package and has low probability of fugitive emissions. Outputs are infrequent, and could be point source or fugitive emissions for any of the following: noise, odour, dust and/or vibration. There are daytime operations only, with infrequent movement of products and/or heavy trucks and no outside storage”.

A Class II Industrial Facility is “A place of business for medium scale processing and manufacturing with outdoor storage of wastes or materials and/or there are periodic outputs of minor annoyance. There are occasional outputs of either point source or fugitive emissions for any of the following: noise, odour, dust and/or vibration, and low probability of fugitive emissions. Shift operations are permitted and there is frequent movement of products and/or heavy trucks during daytime hours”.

A Class III Industrial Facility is “A place of business for large scale manufacturing or processing, business characterized by: large physical size, outside storage of raw and finished products, large production volumes and continuous movement of products and employees during daily shift operations. It has frequent outputs of major annoyance and there is a high probability of fugitive emissions”.