

May 13, 2025

Attention: Jordan Fohkens
B. M. Ross and Associates Limited
2695 Hamilton Road, Box 400
Sarnia, ON N0N 1C0

SLR Project No.: 241.032145.00001

Revision: 0

**RE: Peer Review –Odour Assessment Report by RWDI AIR Inc.
Cornerstone 5309 & 5310 Leyton Street, Wanstead, Ontario**

1.0 Introduction

SLR Consulting (Canada) Ltd. was retained by B.M. Ross and Associates Limited to conduct a peer review on behalf of Lambton County, of the technical odour assessment report of a proposed commercial livestock transportation washing facility at 5309 and 5310 Leyton Street in Wanstead, Ontario (the “Project site”).

The following document prepared by RWDI AIR Inc. (RWDI) was reviewed:

- Odour Assessment Report dated February 6, 2025.

The SLR technical review will evaluate the completeness and accuracy of the assessment as it relates to the following guidelines:

- Ontario Ambient Air Quality Criteria (2020)¹;
- Ministry of the Environment, Conservation and Parks (“MECP”) Guidelines D-1 and D-6²;
- Ontario Regulation 419/05: Air Pollution – Local Air Quality and its associated air quality standards and assessment requirements³;
- Ontario Ministry of the Environment, Conservation & Parks (MECP, 2008), *Technical Bulletin, Standards Development Branch, Methodology For Modelling Assessments Of Contaminants With 10-Minute Average Standards And Guidelines Under O. Reg. 419/05*, September 2016; and
- MECP Air Dispersion Modelling Guideline of Ontario A.11, dated February 2017⁴.

SLR has also considered Professional Engineers Ontario Practice Guideline entitled “Professional Engineers Reviewing Work Prepared by Another Professional Engineer”, dated October 2011.

2.0 Background

RWDI was retained by Cornerstone Group (Cornerstone) to conduct an odour assessment of a proposed commercial livestock transportation washing facility at 5309 and 5310 Leyton Street in

¹ <https://www.ontario.ca/page/ontarios-ambient-air-quality-criteria#section-4>

² <https://www.ontario.ca/page/d-6-compatibility-between-industrial-facilities>

³ <https://www.ontario.ca/laws/regulation/050419>

⁴ <https://www.ontario.ca/document/guideline-11-air-dispersion-modelling-guideline-ontario-0>

Wanstead, Ontario (the “Project site”). The purpose of the assessment was to evaluate potential odour impacts from the proposed facility at surrounding sensitive receptors and determine if the proposed operations would be compatible with the existing uses. The assessment included an odour source testing program and dispersion modelling of the collected data to evaluate potential odour impacts from the proposed facility.

The proposed washing facility will be used to wash and sanitize trailers used for livestock transportation, specifically cattle and pig. It is understood from the report that the facility will include three buildings/processes. The first building, on the west side of Leyton Street, will be used for trailer parking as they first arrive and wait to be cleaned. The second building, on the east side of Leyton Street, will be used for washing the trailers. The third building, on the west side of Leyton Street, will be used to sanitize and dry the trailers before leaving the facility, including a “baking unit” for sanitization purposes. From there, the clean trailers are taken off site.

Source testing was conducted on the inside of a cattle trailer and analysed by an odour panel. The results of the source testing were used to determine an average odour concentration within the cattle trailer. This concentration was applied to the ventilation fans from the trailer parking building and the washing building and assessed using dispersion modelling. The modelling considered the use of carbon filtration on the exhaust fans, with an assumed odour control efficiency of 90%. Based on the results of this analysis, the report concluded that predicted odour concentrations would generally be deemed acceptable by the MECP, therefore, the facility is considered compatible with the existing land uses.

3.0 Comments Related to the Odour Assessment Report

- Q3.1 SLR understands that a control efficiency of 90% was assumed for the carbon filters, given that specifications were not available at the time of the assessment. While SLR agrees that this is likely a reasonable assumption, additional justification and/or specifications to confirm that this efficiency can be achieved are requested. A maintenance program outlining the replacement procedures for the carbon filters should be confirmed and included in the report.
- Q3.2 The odour assessment considered emissions from the ventilation fans from the trailer parking building and the washing building (point sources). The assessment did not consider fugitive odour emissions from trailer pass by's. Given that there will frequent movement of vehicles between three on-site building, and the close proximity of existing sensitive receptors, SLR recommends that these emissions be assessed or that justification be provided for why these fugitive emissions do not require assessment. The number of truck movements per day should be provided confirm the frequency and duration of these fugitive emissions.
- Q3.3 The odour sampling was conducted on a dry cattle trailer. SLR recommends that RWDI comment on the potential for odours to increase during the washing process and spray down as the materials are disturbed and confirm that the addition of water to dry manure will not increase the potential strength of the odours. The wash bay cleaning procedures should also be included, such as how often the wash bay floors will be washed down.
- Q3.4 The odour sampling was conducted on a dry cattle trailer. It is noted that the facility will conduct washing of trailers used to transport both cattle and pigs. Justification for not considering odours from other forms of livestock should be included. In SLR's experience, odours from pig livestock can be stronger than those from cows.



- Q3.5 The baking process is noted to include heating the bay to a very high temperature to dry the trailer and complete the sanitation process by killing any remaining bacteria. Once dried, fans ventilate the hot air out of the bay. This process is noted to have no odours as it occurs after the washing stage, however, it is used to kill remaining bacteria. Please provide further justification for assuming no odours from this process. The report should also confirm the location of the ventilation fan in the building at 5309 Leyton Street. It is recommended that the ventilation fan be located on the side of the building facing away from the existing residences, including the adjacent dwelling located at 5327 Leyton Street.
- Q3.6 SLR has not reviewed the dispersion modelling files. SLR is in agreeance with the modelling details and parameters provided in the report, and assumes the results provided are correct.
- Q3.7 It appears that the odour frequency analysis provided in Table 4 was conducted over the 5-year period. In accordance with the MECP *Methodology for Modeling Assessments of Contaminants with 10-Minute Average Standards and Guidelines under O. Reg. 419/05*, the frequency analysis for 10-minute averaging periods must be done on an annual basis for each of the 5-years of meteorology. Given the number of exceedances found over the 5-year period, it is expected that the 0.5% frequency (44-hours) will be met on an annual basis; however, this should be confirmed with updated modelling. Similarly, the maximum odour prediction for the worst-case year over the 5-year data set should be reported, and the worst-case year and frequency prediction should be noted.

4.0 Recommendations

In summary, we agree with the overall approach and assessment methodologies considered in the odour assessments undertaken to assess land use compatibility of the proposed commercial livestock transportation washing Facility. However, SLR requests further clarification regarding some of the assumptions and methods relied upon in the assessment. Particularly, further information regarding the potential for fugitive odour emissions from trailer pass-by's, and the overall strength of odour considering different types of livestock is requested to confirm that the facility will be compatible with the existing land uses.



5.0 Statement of Limitations

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6.0 Closure

Please direct any questions or comments concerning this letter report to Jenny Graham or Laura Clark.

Regards,

SLR Consulting (Canada) Ltd.

Jenny Graham, P. Eng.
Senior Engineer, Air Quality
jgraham@slrconsulting.com

Laura Clark, P. Eng.
Senior Engineer, Air Quality
lclark@slrconsulting.com

