

August 19, 2022

BY EMAIL & REGULAR MAIL

Client Services and Permissions Branch
Ministry of the Environment, Conservation and Parks
135 St Clair Ave West, 1st Floor
Toronto, ON M4V 1P5

Dear Sir/Madam:

**RE: APPLICATION FOR ENVIRONMENTAL COMPLIANCE APPROVAL (AIR & NOISE) – HOT MIX ASPHALT PLANT (R.W. TOMLINSON LTD.)
ENVIRONMENTAL REGISTRY NUMBER 019-5565**

Please be advised that Canadian Environmental Law Association (CELA) has been retained as counsel for Keep Napanee Great (KNG) in relation to the above-noted matter.

KNG is a federally incorporated non-profit organization whose objectives include protecting the environment, conserving natural resources, and safeguarding public health in Napanee and across the broader Quinte region. KNG and its 700 supporters (including local landowners who live close to the subject property) have been extensively involved in the land use planning and approvals process in relation to the proposed construction and operation of a hot mix asphalt (HMA) plant at 8205 County Road 2 in the Town of Greater Napanee.

PART I -- INTRODUCTION

(a) Overview

We have been instructed by our client to provide the Ministry with comments on the proposed issuance of an Environmental Compliance Approval (ECA) with Limited Operational Flexibility (Air & Noise) to R.W. Tomlinson Ltd. (Tomlinson) pursuant to section 9 of the *Environmental Protection Act (EPA)*. According to the Registry notice, this instrument (if issued) would replace all the current ECAs for air at this facility, and would incorporate new, or historically unapproved, sources for all emissions from the subject property, including the proposed HMA plant.

For the reasons described below, KNG concludes that Tomlinson's ECA documentation does not contain sufficient information, at an appropriate level of detail, to accurately describe existing baseline conditions, or to identify and assess the HMA plant's direct, indirect, and cumulative impacts upon the environment and human health. Accordingly, KNG submits that the Ministry should refuse to issue the ECA requested by Tomlinson.

In our view, the central question to be considered by the Director may be framed as follows:

Having regard for the applicable law/policy framework and the protective purpose of section 3 of the *EPA*, does the ECA documentation satisfactorily discharge Tomlinson's evidentiary onus of demonstrating that the proposed HMA plant will not result in "adverse effects" to the environment or area residents?

On the available evidence, CELA maintains that the answer to this threshold question is a clear and resounding "no." Accordingly, on behalf of our client, CELA submits that the proposed HMA plant should not be approved pursuant to section 9 and Part II.1 of the *EPA* on the basis of the ECA documentation tendered by Tomlinson to date. In our opinion, the proposed issuance of the ECA under these circumstances would be unreasonable and could cause significant harm to the environment.

It is beyond the scope of this letter to inventory every gap, concern, or shortcoming that CELA has identified in the ECA documentation. Instead, the purpose of this letter is to highlight some of the most significant problems that we have found within the ECA documentation.

This CELA letter should be read in conjunction with the supplementary submissions that KNG representatives have sent to the Ministry under separate cover.

(b) Scope of CELA's Review

The Registry notice for Tomlinson's ECA application was posted on July 6, 2022 for a 45-day public comment period. This notice provided a brief description of the proposal but did not attach, or contain a hyperlink to, any of the ECA-related documents submitted by Tomlinson.

On behalf of KNG, CELA contacted the Ministry's Client Services and Permissions Branch to request electronic copies of the ECA application, the Emissions Summary and Dispersion Modelling (ESDM) Report, and any other documentation submitted by Tomlinson in relation to the proposed ECA.

Unfortunately, while the public comment period continued to run, it took until August 2, 2022 for the Branch to provide CELA with a copy of the ECA application and a redacted copy of the ESDM Report. Similarly, although the ESDM Report states that the dispersion modelling input/output files are attached in Appendix D as a zip file,¹ this file was not disclosed to CELA. A copy of the Acoustic Assessment Report (AAR) was then provided to CELA on August 3, 2022, at which time the Branch confirmed that Tomlinson had submitted no other documents in support of the ECA application.

Because of this delayed and incomplete disclosure, please be advised that CELA hereby reserves the right to submit further comments to the Ministry on the ECA proposal as we continue our legal and technical review of the Tomlinson documentation.

¹ ESDM Report, page 14.

As noted above, the scope of CELA's ongoing review is focused on the problematic aspects of the ECA application, the ESDM Report, and the AAR. Where relevant, we have also considered the documentation previously submitted to the Town of Greater Napanee by Tomlinson in support of its unsuccessful application for rezoning under the *Planning Act*, including the following materials:

- Planning Report (August 2020)
- Air Quality Impact Assessment (September 2021)
- Best Management Practices Plan for the Control of Fugitive Dust (September 2021)
- Best Management Practices Plan for Odour (September 2021)

PART II – COMMENTS ON THE ECA APPLICATION

We have reviewed the ECA application that was filed by Tomlinson, and we offer the following comments for the consideration of the Ministry.

(a) Uncertainty about Future On-Site Sources of Air/Noise Discharges

The Registry notice for the ECA proposal states that the intended purpose of the ECA (if issued) is to replace “all the current Environmental Compliance Approvals for air at this facility, and includes the addition of new, or historically unapproved, sources for all emissions from R. W. Tomlinson Limited, a hot mix asphalt plant, located in the Town of Greater Napanee, Ontario.” We are not aware of any other site-specific ECAs at this property although there is an existing Ontario-wide ECA that was issued in 2021 to Tomlinson (ECA No. 2456-BZ7P6H) for a mobile ready-mix concrete plant which has been operating at the Napanee site (and presumably other Tomlinson properties).

The ECA application form² itself similarly indicates that there are no current air/noise ECAs that may be changed or amended by the issuance of the proposed ECA, and the application does not list or identify any current ECAs in effect at the Napanee Quarry.

Although the current ECA documentation is focused on air and noise discharges from the HMA plant, it must be recalled that Tomlinson's rezoning application also proposed the establishment of a separate permanent ready-mix concrete plant on the same subject property. However, the ECA application, the ESDM Report, the AAR, and the previous Air Quality Impact Assessment do not mention, model, or evaluate noise, odour, or other airborne emissions from the proposed concrete batching plant.

In these circumstances, we conclude that a permanent ready-mix concrete plant (which is also not permitted under the current zoning) cannot be authorized under the auspices of Tomlinson's current ECA application for the HMA plant. Similarly, the Registry Notice's statement that this application would replace all current ECAs should not be understood as extending or relating to the mobile ready-mix concrete plant.

² ECA Application, page 5.

If Tomlinson wishes to establish a permanent ready-mix concrete plant on the subject property at a future date, then we submit that the proposal will require its own ECA application and supporting documentation (and the requisite rezoning) and cannot simply be approved by the Ministry as a mere afterthought or administrative amendment to the HMA plant ECA if issued over our client's objections.

The Registry notice also states that “the proposal includes all sources at the facility that exhaust to the atmosphere, including:

- a dust silo
- hot oil heater
- baghouse
- crushing plant generator
- fugitive emissions from the storage and transfer of materials associated with hot mix asphalt operations.”

Because a draft copy of the proposed ECA has not been publicly disclosed by the Ministry to date, we are unable to review the terms and conditions to determine whether the approval would, in fact, be restricted to the five above-noted components or activities, or whether it may extend to other new or as-yet unapproved facilities.

(b) Lack of Rezoning Approval for the HMA Plant

The ECA application form³ correctly states that the current zoning (Mineral Extraction) does not permit the proposed activity, and that the official plan designation does not support the proposed activity.

Napanee's town council unanimously decided on April 5, 2022 to refuse to grant the necessary rezoning for the proposed HMA plant. This refusal has been appealed by Tomlinson to the Ontario Land Tribunal but it is unknown when the Tribunal will hear and decide the appeal in 2023.

The Town Council of Greater Napanee also passed Resolution 184/22 on April 5, 2022 to advise the Provincial government that the Town is an unwilling host for a permanent asphalt plant at this location.

In these circumstances, KNG submits that it is premature, inappropriate, and unreasonable for the Ministry to consider the issuance of an ECA for an industrial land use that cannot be legally established at the present time, and that might never be approved under the *Planning Act*, depending on the outcome of the Tribunal's proceedings.

More fundamentally, the residents and elected representatives in Napanee have clearly demonstrated their well-founded opposition to this locally unwanted land use. In our view, it would behoove the Ministry to respect the Town's position by refusing (or at least deferring) the issuance of the ECA at this time.

³ ECA Application, page 12.

PART III – COMMENTS ON THE ESDM REPORT

We have reviewed the ESDM Report that was filed by Tomlinson, and we offer the following initial comments for the consideration of the Ministry.

(a) The Potentially Harmful Substances that will be Discharged into Air

The Registry notice indicates that various chemicals, metals, particulate matter, and other substances will be emitted from the HMA plant into the local airshed, including:

- benzene
- benzo(a)pyrene
- carbon monoxide
- crystalline silica
- naphthalene
- nickel
- sulphur dioxide
- suspended particulate matter
- products of combustion such as nitrogen oxides

KNG is gravely concerned about the discharge of these substances from the proposed HMA plant into the air since it is well-documented that they are potentially harmful to the environment and human health. For example, benzene is a known carcinogen that has been classified as a toxic substance under the *Canadian Environmental Protection Act*. Similarly, benzo(a)pyrene is a carcinogen that can cause other adverse health impacts to people who are exposed to this substance. Accordingly, KNG remains highly concerned about the proposed discharge of these environmentally significant substances and submits that the ECA should not be issued since the proponent has not substantiated its claim that the HMA plant will not cause any adverse effects or will not cause exceedances of applicable air pollution standards in O.Reg.419/05.

It should be further noted that the above-noted bullet point list is not the full inventory of substances that may be discharged from the HMA plant or other quarry operations. Instead, these are just the indicator compounds that the proponent has chosen to model in the ESDM Report. In reality, KNG submits that the HMA plant and the Napanee Quarry may emit numerous other chemicals, compounds, or odourous substances into the air that were not specifically identified, modelled, or assessed in the ESDM Report.

However, the ESDM Report does not review whether – or to what extent – the full suite of discharged substances may have additive or synergistic effects with each other or with airborne contaminants emitted from other sources or activities within the local airshed. Similarly, the proponent has not submitted a human health risk assessment, or an odour assessment study, in relation to the proposed HMA plant.

Predictably, the ESDM Report prepared for Tomlinson concludes⁴ that the proposed HMA plant potentially “can” be operated in compliance with applicable provincial standards prescribed under section 20 of O.Reg.419/05. KNG submits that this curious language provides no assurance that the facility “will” or “shall” be operated in compliance with regulatory standards at all material times.

(b) Vague Description of Annual Tonnage Limits and Production Rates

The ESDM Report states⁵ that the proposed HMA plant “could” operate at an annual total production limit of 80,000 tonnes/year of hot mix asphalt. Again, this vague language provides no explicit commitment that the plant “will” or “shall” comply with this annual tonnage limit. It is also unclear whether Tomlinson is proposing this annual limit as an aspirational goal or as an enforceable cap that is entrenched in the ECA with Limited Operational Flexibility if issued.

Similarly, the ESDM Report further states that the plant “could” operate “approximately” 180 days/year, and that asphalt production and shipping will “generally” occur during the daytime at a production rate of 180 tonnes/hour. However, the Report also indicates that sometimes the facility will operate 24 hours/day (i.e., for nighttime paving projects on Highway 401). Moreover, even this proposed exception is itself subject to more uncertainty since the ESDM Report claims⁶ that nighttime operations are “expected” (but not required) to be at “reduced capacity.”

Given this lack of precise operational detail, it therefore appears that Tomlinson wants to retain absolute discretion about how, when, and for how long day and night operations may be undertaken at the subject property, which undermines the need for predictability, transparency, and accountability about such matters.

We also note that most of the hourly contaminant emission rates described in the table in Section 4.1 of the ESDM Report⁷ have been redacted on the dubious claim by Tomlinson that this information is proprietary. Similar redactions are contained in the emission rate calculations set out in Appendix A of the ESDM Report. These deletions make it difficult for public reviewers of the ESDM Report to independently verify the calculations and conclusions put forward by Tomlinson.

(c) Lack of Design and Operational Details

While the ESDM Report attempts to predict whether the HMA plant will meet Ontario’s point-of-impingement standards under O.Reg. 419/05, the Report itself provides insufficient particulars on the proposed location of the HMA plant within the subject property. Accordingly, the ESDM Report provides only a superficial overview of the intended asphalt production and shipping process (e.g., the simplistic schematics depicted in the high-level Process Flow Diagrams in Figures 3a and 3b).

⁴ ESDM Report, page iii.

⁵ ESDM Report, page 1.

⁶ ESDM Report, page 2.

⁷ ESDM Report, pages 5-6.

In our experience, the actual siting of this type of facility in the local landscape (e.g., elevation, terrain type, proximity to trees/vegetation, etc.) will significantly affect the pathways for airborne contaminants and potential impacts to receptors. However, the ESDM Report fails to specify the precise location of the hypothetical HMA plant on the subject property, and the modelling does not appear to evaluate emissions from alternative sites or building footprints within the subject property.

On this point, Figure 4 of the ESDM Report suggests that the air dispersion modelling was conducted on the assumption that the proposed HMA plant would be sited in the approximate middle of the subject property. However, we note that Tomlinson's *Planning Act* application proposes to rezone a large swath of property in this area,⁸ which, if rezoned in this manner, appears to give considerable latitude to Tomlinson to site the HMA plant on the west or east side of the subject property rather than the middle.

Similarly, the ESDM Report provides no details on the specific brand or type of HMA plant equipment that is being proposed for use at the subject property. For example, the Report does not specify whether Tomlinson intends to install new or used equipment at the subject property, or whether the HMA plant will be a former mobile (or portable) HMA plant that will be converted to a permanent stationary facility. Interestingly, the ESDM report states⁹ that the "parameters for the baghouse exhaust stack were obtained from manufacturer's data" but the manufacturer is not identified in this section.

This paucity of technical information is compounded by the current absence of a Design and Operations report that provides further prescriptive detail on construction, operation, monitoring, and contingency matters pertaining to the HMA plant. In our view, the generic (and virtually unenforceable) suggestions contained in Tomlinson's Best Management Practices Plan for odour and dust control are inadequate substitutes for clear and comprehensive details on the actual design and operation of the proposed HMA plant.

Appendix 1 to this submission includes three site maps from the ESDM Report, the AAR, and the previous Air Quality Impact Assessment. The maps are not the same, and the acoustic assessment map does not appear to include the cold feed bins.¹⁰ It is abundantly clear that the actual design, layout, and details of the HMA plant remain in considerable flux at the present time.

(d) The Need for Local Data to Generate or Verify Modelling Outputs

In our view, the ESDM Report suffers the same fundamental flaw as the previous Air Quality Impact Assessment, *viz.*, that regional data was used for modelling purposes instead of local empirical data obtained at or near the subject property.

For example, the ESDM Report confirms¹¹ that a regional dataset for eastern Ontario (i.e., Massena meteorological dataset) was used for modelling purposes, and that "Crops" land use was selected

⁸ See Figure 1 of the Air Quality Impact Assessment.

⁹ ESDM Report, page 10.

¹⁰ Appendix 1, site plan maps from Acoustic Assessment, ESDM Report, Air Quality Impact Assessment.

¹¹ *Ibid.*

in this case on the grounds that the lands nearest the subject property are rural, industrial, and agricultural in nature.

In our opinion, this selection is highly questionable for several reasons. First, Tomlinson has adduced no compelling or persuasive evidence that the meteorological conditions in the Ottawa/Cornwall/Kingston/Belleville/Peterborough region are identical, or substantially similar, to the local conditions (or micro-climate) that may affect the subject property and surrounding lands along the Napanee River valleyland.

Second, using “Crops” land use is inappropriate since it conveniently overlooks the urban settlement area (including residential and commercial land uses) in nearby Napanee, located about 1-2 kms to the west of the subject property as reflected in Figures 1 and 5 of the ESDM Report.

Third, there was nothing to prevent Tomlinson from installing a temporary meteorological station at the subject property in order to obtain actual data on local weather conditions, particularly wind speed, direction, and frequency. Instead, Tomlinson conducted its air-related work based on regional datasets that, in our view, are unlikely to be representative of local conditions in the vicinity of the subject property.

It further appears that Tomlinson has not attempted to verify or “ground-truth” the modelling results by obtaining local data to assess the appropriateness of using the regional data sets for the subject property. Similarly, the ESDM Report does not include an uncertainty analysis that quantifies the degree to which the impact predictions may be incorrect or underestimated.

This continuing lack of local data is also perplexing since it is our understanding that the proponent operated a mobile HMA facility at the Napanee Quarry in the fall of 2021. This means that the proponent had the opportunity to measure or assess noise, odour, and chemical contaminants emanating from the HMA facility but failed or refused to do so. Moreover, we are advised that area residents experienced off-site adverse effects while the mobile HMA plant was in operation.

(e) Non-Existent Cumulative Effects Analysis

The ESDM Report makes no attempt to identify or assess any cumulative effects (or point-of-impingement considerations) arising from the HMA plant emissions in conjunction with airborne contaminants discharged from other sources or activities in the 3 km study area or the broader airshed in the Quinte region.

This region includes various industrial, commercial, or institutional undertakings that individually and collectively discharge VOCs, PAHs, metals, CO, PM, NO_x, SO₂ and other contaminants into the airshed, including electricity generation from natural gas (e.g., Napanee Generating Station and Lennox Generating Station), cement production (e.g., Bath and Picton facilities), waste disposal sites (e.g., Richmond Landfill Site), small and large manufacturing plants, pits and quarries, transportation corridors, and long-range or transboundary air pollution.

(f) Insufficient Description of Baseline Conditions

The ESDM Report indicates¹² that the zoning designations for the subject property and surrounding lands are presented in Figure 2 but omits the key fact that the proposed HMA plant is not a permitted land use at the present time.

It is also noteworthy that Figure 2 demonstrates that the northern portion of the Tomlinson lands overlap a small watercourse that joins a larger environmentally sensitive tributary that flows into the Napanee River and has been designated as Environmental Protection under Napanee's zoning by-law. However, this key fact, too, is conspicuously absent from the ESDM Report. In our view, this is a significant omission since it is possible that receptors may be present along these smaller watercourses, but the receptor grid depicted in Figure 5 of the ESDM Report does not appear to fully extend to this area.

In terms of baseline air quality, it appears that for the purposes of the ECA application, Tomlinson has not conducted any on-site or off-site sampling or monitoring of existing ambient air conditions. This is despite the fact that there are other significant sources of airborne contaminants in the Quinte region, as outlined above.

Instead, in the context of the Air Quality Impact Assessment, Tomlinson simply utilized data drawn from very distant air monitoring stations located at Belleville, Newmarket, and Saint-Anicet, Quebec. In addition, these stations do not have complete data for all substances that will be emitted from quarry and asphalt production operations at the subject property. In our view, the lack of comprehensive local data for all key parameters undermines the credibility of Tomlinson's claims that the proposed HMA plant will not adversely affect air quality within the area.

PART IV – COMMENTS ON THE ACOUSTIC ASSESSMENT REPORT

We have reviewed the AAR that was filed by Tomlinson, and we offer the following comments for the consideration of the Ministry.

NPC-199 requires an assessment of sound level limits for blasting operations. We understand that past blasting activities have been disruptive to area residents and complaints have been filed with the Ministry. Although the AAR suggests that the impacts of blasting are being assessed by blasting specialists, we are unaware of such an assessment and to our knowledge it was not filed with the Ministry as part of the ECA application.¹³ This assessment should be completed and reviewed before any decision is made on the ECA application and we reserve the right to comment on it once it is submitted.

Despite ongoing aggregate operations at the site, the acoustic assessment relies on manufacturers data and operations at other Ontario facilities.¹⁴ This includes the use of manufacturers data for

¹² ESDM Report, page 10.

¹³ Freefield Ltd., *Acoustic Assessment Report for the Hot Mix Asphalt Plant and Quarry, Town of Greater Napanee County of Lennox and Addington, Ontario*, March 26, 2022, Executive Summary, page i.

¹⁴ Acoustic Assessment, pages 1, 4, 7.

quarry noise sources, despite the quarry being an ongoing operation at the site.¹⁵ It would be far more accurate to measure existing ongoing noise levels at the quarry. We also understand there has been a temporary asphalt plant in operation at the site, and any modelling of predicted noise levels from the proposed permanent asphalt plant should be compared against the noise levels being experienced at this particular site to ensure accuracy.

We likewise highlight that the acoustic report also uses traffic data obtained from the Ministry of Transportation for Highway 401 and the County of Lennox and Addington generally, as opposed to real-world data at an existing site.¹⁶

We note with concern that there is predicted to be a significant amount of truck traffic at the site, including 9 truckloads of asphalt shipped from the site per hour and 12 loads of processed aggregate shipped offsite per hour, for a total of 21 trucks per hour leaving the site (one truck per less than 3 minute interval). On top of those predictions, the acoustic assessment predicts 3 loads of sand and recycled asphalt will be delivered to the site and 5 loads of processed aggregate will be delivered to the HMA plant per hour. Accounting for empty trucks arriving at the site for loading materials to remove from the site, and empty trucks leaving the site after delivery, there will be frequent truck traffic.¹⁷

Several points of reception within the Class 2 area had background sound limits above the general Class 2 exclusion limits, and instead minimum background noise levels were used to set limits. These limits suggest existing noise levels are already high, which is of significant concern in any assessment of exposing these residents to further industrial noise.¹⁸

- Point of Reception 7 – the Plane of Window and outdoor sound level limit is proposed at 52.8 dBA, above the general 50 dBA limit. During evening hours, the proposed sound level limit is 49.7 for the outdoor limit, above the general limit of 45 dBA during evening hours for Class 2 areas.
- Point of Reception 8 – During daytime hours, the proposed sound level limit is 52.8 dBA for both the Plane of Window and outdoor limits, above the general 50 dBA limit. For the evening hours, the proposed limit is 49.7 for the outdoor limit, above the general limit of 45 dBA during the evening for Class 2 areas.
- Point of Reception 19 – The proposed sound limit is 58.8 dBA for both the Plane of Window and outdoor limit, well above the 50 dBA limit for Class 2 areas. The proposed limit of 55.5 for the Plane of Window and outdoor limits during the evening is also well above the usual limits of 45 dBA for outdoor evening hours, and 50 dBA for Plane of Window evening hours.

Some of the modelled noise impacts come quite close to the general limits, and we strongly recommend a real-world verification of those results.

¹⁵ Acoustic Assessment, page 7.

¹⁶ Acoustic Assessment, page 10.

¹⁷ Acoustic Assessment, page 8.

¹⁸ Acoustic Assessment, page 11.

The worst noise impacts appear to be at POR 18, which is actually a number of residences from 454 to 498 Palace Road and there are nearby apartment complexes. There is no explanation for why these points of reception have all been combined. In Table 6.1, Scenario 1, for Point of Reception 18, after mitigation, the predicted outdoor sound level is 49.2 dBA, close to the 50 dBA limit.¹⁹ For Point of Reception 18 in table 6.5, the predicted sound level outdoors after mitigation is 44.8 dBA, compared to an outdoor limit of 45 dBA.

We note as well, in Table 6.5, for Point of Reception 15, after mitigation, the predicted Plane of Window sound level is 44.7 dBA, close to the 45 dBA sound limit.

PART V -- CONCLUSIONS

For the foregoing reasons, CELA concludes that the proposed ECA should not be issued to Tomlinson under section 9 of the *EPA*.

Despite the air and noise reports filed by Tomlinson, it is our opinion that the ECA documentation is inadequate, incomplete, and unacceptable for the purposes of granting *EPA* approval for the proposed HMA plant. Accordingly, it is neither prudent nor precautionary for the Ministry to issue the requested ECA on the basis of the questionable methodology, findings, and conclusions contained within the ESDM Report and the AAR. Moreover, given the outstanding concerns of KNG, area residents, and the municipality, it would not be in the public interest to issue the ECA.

Based on the available evidence, we further submit that the issuance of the ECA would be unreasonable considering the applicable law/policy framework (including the key environmental principles in the Ministry's *Statement of Environmental Values*) and it could result in significant environmental harm.

We trust that our client's comments will be duly considered and promptly acted upon by the Ministry in this case. Please feel free to contact the undersigned if you have any questions or comments arising from this submission.

Yours truly,

CANADIAN ENVIRONMENTAL LAW ASSOCIATION



Richard D. Lindgren
Counsel

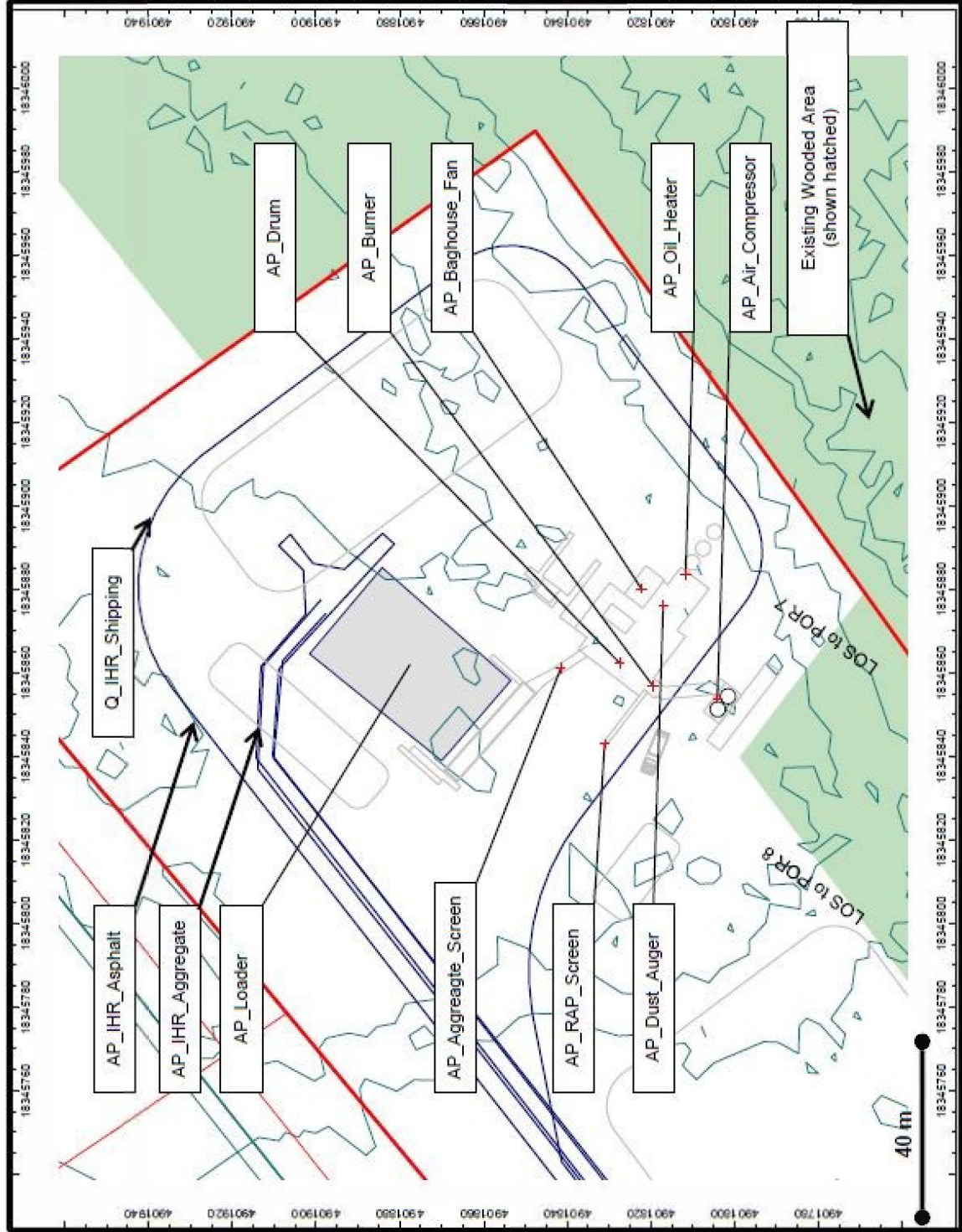


Jacqueline Wilson
Counsel

¹⁹ Acoustic Assessment, page 27.

APPENDIX 1

Figure 3: Detail Plan at HMA Plant showing Source Locations



Emission Summary and Dispersion
Modelling Report, p. 54

