



Improving ECA Applications Air Practitioners' Meeting

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Environmental Approvals Branch

Ministry of the Environment and Climate Change

Overview

- Improving turnaround time with
 - Complete ESDM report
 - Concise information
 - Clear presentation of key sections
 - Correct data such as NAICS code, MSDS, Modelling
 - Consistent information in various reports for different media (Air, Noise, Waste, Wastewater)

Improvement Wish List

- Correct NAICS code, Correct Reg. 419 schedule
- Clearly marked chapters in the report
- Detailed calculations
- Legible diagrams
- Sufficient supporting information
- AERMOD files that match tables in the report
- All forms included, such as noise screening, list of contaminants without POI, S.20(4) Speed Up Request
- Data presented in legible tables

Improvement Wish List (cont'd)

- Emission Summary Table demonstrating compliance
- Amendment applications NOT referring to previous submissions for supporting information
- A list of modifications for amendment applications
- No changes made to layout, sources and contaminants during the review process
- All applicable Ministry guideline requirements considered
 - Include supporting information on meeting these guidelines in a separate appendix, clearly marked.

ESDM Executive Summary

- Application type (New, Amendment, Renewal, LOF)
- Industry category, facility zoning and hours
- Correct (Canadian) NAICS Code
- Reg. 419/05 Schedule
- Choice of Air Dispersion Model and **version** (including self-contamination calculations)
- Whether some contaminants didn't have POI limits
- EASR eligibility
- Noise emissions (PS, SS, AAR, A-AAR)
- Emission Summary Table (demonstrating compliance)

Source Summary Table

- SST sorted by source (preferred)
- All emissions for each contaminant adding up to 100%

For large facilities with numerous sources and contaminants SST could be complex.

Submission of electronic Excel file could help improve the review time.

Insignificant Sources

Insignificant sources need to be reasonably described in ESDM reports.

Some insignificant sources may also be specified on the ECA.

A facility with insignificant sources may not be exempt from getting an ECA.

AERMOD

- Model consistent with SST
- Modelling results consistent with EST
- Sources identified in the model
- New Met data (AERMET 14134) used with new AERMOD versions
- If modelling file sent on a CD, include Met and Terrain data
- Save Lakes AERMOD run as a zipped “Backup”
- If using AERMOD with another interface, include BPIP file

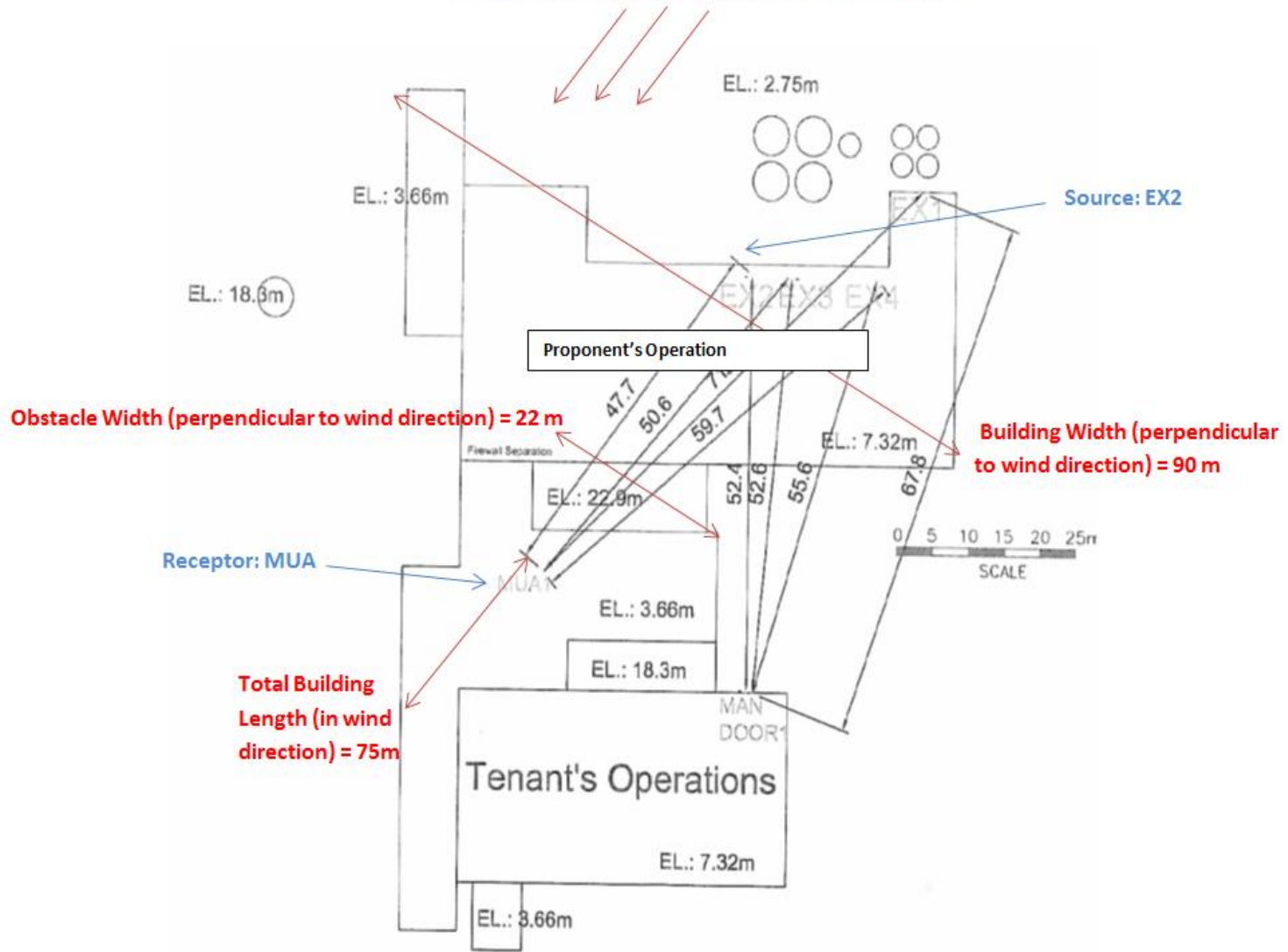
If emailing files to the MOECC, note the 10 MB size limit for attachments per email.

ASHRAE

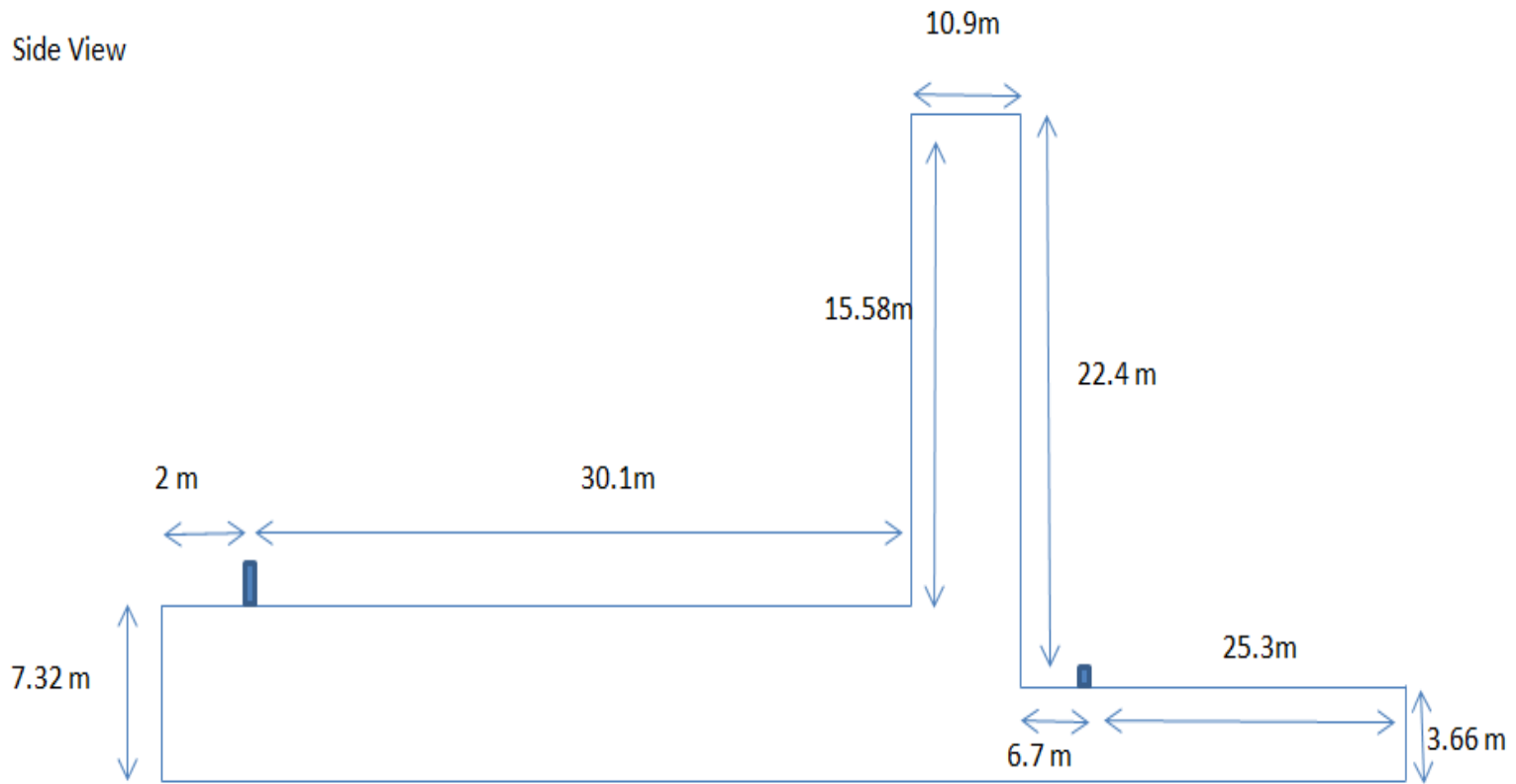
- Version specified
- Sufficient supporting information is key
- Legible top-view and side-view scaled drawings are required as part of the submission
- List all assumptions and parameters
- Show all source-receptor combinations

ASHRAE calculations may be reproduced by the reviewer.

Wind Direction (that connects source to Receptor)



Side View



Stretched String distance between source and receptor = $(30.1^2 + (15.58 - 3.35)^2)^{0.5} + 10.9 + (22.4^2 + 6.7^2)^{0.5} = 66.77$ m

Supporting Documentation

- Supporting documents could include
 - Technical literature used for emission factors (other than references in the ESDM Procedure Document)
 - Manufacturers' specifications for filters, dust collectors, generators
 - Latest version of Safety Data Sheets with electronic copies where available
 - Previous source testing results (validated or not)
 - Previous audit results

Contaminants Without POI Limit

- Contaminants without POI may go through a toxicology assessment, regardless of previous acceptability
- Consider sending an electronic list, if too long
- For “proprietary” material, work with the manufacturer to obtain the CAS No. for contaminants (before submission)
- If manufacturer is not releasing CAS No., as much information as possible about the contaminant (VOC/TSP?)
- “Proprietary” contaminants should be considered, at a minimum in the significance assessment and further in modelling, if they are assessed to be significant

Information Requests

- Response should be provided within a reasonable time frame
- Response should be application/site specific

Other Time-saving Tips

- Bind ESDM and AAR separately
- Include a copy of EASR Registration or s.20.18 request confirmation number/date
- Consider submitting Excel files for complex calculations and tables and lists
- S. 7.1 requests should have been sent to EMRB prior to the application submission for review (and preferably approved)
- Call our duty officer if you have any questions regarding what should be included.

Multimedia Applications

- Applications for all the various media should be submitted together
- Indicate if application is for one Multimedia ECA or separate media ECAs
- If the applicant has retained multiple consultants, the applicant should ensure consistency in various reports
- Communication among consultants' for a multimedia application is the applicant's responsibility

Tips for Primary Noise Screening (PNS)

- Read and follow the instructions carefully
- Attach the required zoning plan(s) and area location plan showing the actual separation distance
- If PNS fails and a Secondary Noise Screening or Acoustic Assessment Report is submitted, no need to send the failed Primary Noise Screening form

The PNS may be acceptable for facilities with other NAICS codes

- All of the significant noise sources must be addressed in Question 3
- None of the equipment from Table 1.2 may be present at the facility
- Include a cover letter with description, rationale, and note that the above criteria are met
- The Ministry may request a more detailed Acoustic Assessment and/or AAR at any time during the review

Secondary Noise Screening Reports (SNS)

- Follow the outlined methodology explicitly
- Deviations (such as time weighting) cannot be accommodated in a SNS – must submit an AAR
- Use the MOECC's forms

When an AAR is Submitted

- Ensure that the scope of the AAR matches the scope of the ESDM Report
- Equipment duty cycles or operational controls should be consistent or at least conservative
 - Ex. Some equipment operating at lower capacity during certain times of day
- Both Air and Noise scopes must be consistent with what is posted on to the EBR Registry

Review of Draft ECAs

- Draft ECAs are not sent out routinely for reviews
- If a draft ECA is sent out, should be reviewed within a reasonable time frame
- Comments received during review of draft ECA review by applicant/consultant will be considered by the reviewer and Director
- The Director reserves the authority to incorporate part/all of the comments in a revised draft ECA or reject part/all of the comments

Thank You!

Questions?