

Notes from Ontario Air Practitioner's Meeting, February 2, 2023

– Final for Distribution.

Feb 20223

Annual Written Summary Reports

- Submission of AWSR lifted only for new ECAs. Come in for an amendment to get the condition changed. This is an administrative amendment, but might also be handled through a notice, not necessarily a fully amended ECA. Guidance to follow. If the application is submitted through eECAS, they will need to issue a fully amended ECA.
- AWSR form is being updated to reflect this and other changes. Form is also being slimmed down. The updated form will be posted on ministry website to replace the current form, at a date later advised to the Air Practitioners.

Updated Air Contaminant Benchmarks List

- No grace period on ACB List updates. Applications submitted before April first, or in the system now can use the old list. After April 1, the new ACB List is in effect. EASRs are the same. However you can use the new list, just document it.
- 1880 ug/m3 for standby power still in effect.
- FAQ already exists for how to deal with ACB List B2 values change.

Update to Ontario's Air Models and Air Modelling Guidance

- Alpha options are a hard no. Beta options are potentially ok on a limited basis, but you need to get approval from EMRB.
- Regional data sets are not reflective of areas with mixed dominant land uses or significant proportion of water (see ADMGO section 6.4). MECP recommends site-specific data in these situations.
- MECP intends to adopt AERMOD 22112 in April of 2023.
- You can request site-specific data using the new version, but otherwise requests submitted now will use 19191.
- You can also request regional data sets now that use the new version.
- For sensitive receptors or where frequency analysis is required (e.g., odour assessments), only site-specific data should be used.
- As always, the regional data sets are still reflective of the 1996-2000 observation as these sets are hard coded in O. Reg. 419/05.
- MECP does not expect significant changes due to the new model version.
- MECP will consider posting data sets on AP site early if permission is granted. Just remember they will be unofficial and draft.
- If you get approval to use new model with regional data now, the regional data set you get issued by MECP will be official for your site regardless of any changes to regional sets that may occur between now and when the new version is officially posted.

- For MECP orders or other short-term deadlines, use current model as long as it goes in before the drop-dead date. Otherwise, the carriage goes back to being a pumpkin.
- If you have site-specific data that is more than 10 years old, MECP will update the observations if/when they issue that processed data. If they change the observations, you'll get a new s13 approval letter too.
- For ECA with LOF, your first update will need the new model, so best practice is to just use new model.
- April 1 is an aspirational target. It may come later, but hopefully not.
- Notice will go out, but practitioners are encouraged to monitor the website.

Urban Roughness Settings in AERMOD – Use of the URBANOPT

- Please refer to slide deck section on URBANROUGHNESS. Essentially use the minimum roughness in the met data file being used.
- Please refer to slide deck section on AUER method. Visual methods can and should be used in conjunction with quantifiable methods but not alone.
- See discussion on how to define the population for an urban area.
- Tony raised a question about the Auer classifications and whether the MECP has guidance on them. Cities and planners use different classifications than Auer. Abby deferred to the original Auer reports.
- Abby reminded us that this likely only applies to a small number of facilities.
- Who reviews the land use analysis? EMRB reviews it, but through an air quality modelling / dispersion perspective. They do not involve planners in the process.
- What about 49% or 51%? It depends on area around it and other considerations.
- Approvals issued using URBANOPT in the past do not guarantee that this will be acceptable now.
- Why do we use 10km x 10km for population vs. say the 3km circle? MECP uses 10 x 10 as a guideline to better characterize population in the overall area. It is not set in stone, however.
- Care must be used with zoning vs. built form.
- For ECAs with LOF, if an area becomes built up over time, that can be adjusted in the Log without advising the MECP.
- Suggestion to form a committee to help provide clearer guidance on the use of Auer. MECP to seek approval to get MECP staff involved.

Use of CALPUFF / CALMET in Ontario

- Please refer to slide deck section on CALPUFF and CALMET. This is a major undertaking. Do NOT underestimate this!
- MECP has s13 approved CALPUFF-ready CALMET data available for the Hamilton area and is encouraging facilities in this area to shift to CALPUFF.
- Will MECP provide formal guidance on running CALPUFF? MECP may be able to issue a best practice prior to formal guidance. MECP taking this back for consideration.
- Question about CALPUFF met data for things like odour studies / investigation. MECP not set up to do this for nonregulated facilities such as cannabis. If a facility requires 419 permits that's ok.
- For land use planning, MECP cannot provide met data to anyone except the owner of the emission source. (e.g., not to developers). If the industry wants to share, that is fine, but otherwise no.

- What does MECP define as complex terrain. Urban canyons don't count. MECP doesn't have a formal definition but considers various definitions from literature.
- MECP has no intent to shift away from AERMOD, but CALPUFF is preferred for certain areas.
- MECP will not issue data for testing purposes. Section 13 only.
- MECP will provide supporting files with CALMET files (e.g., CALWRF).
- Boris asked about modifying AERMOD code to parallelize AERMOD. MECP has concerns about anyone using modified code. Interfaces can be used as long as they draw on the USEPA executable. The exception is the Lakes MPI (parallelized version) which MECP has tested.
- Section 7 applications to use CALPUFF will be tied to a Section 13.

Emissions and Dispersion Modelling Considerations for Wastewater Evaporators

- Wastewater evaporators – not much discussion. Call out for interested practitioner's with WW evaporator experience to join MECP working group on these units.
- Contact Larry Smet (larry.smet@ontario.ca) or Abby Salb (abby.salb@ontario.ca)
- All source testing information requests should go to sourcetesting@ontario.ca

Use of the U.S. EPA TANKS Model

- TANKS will no longer be accepted, but you can use the equations in your own system.
- The equations under Section 7 of AP-42 are the preferred approach.
- The current model is 4.09D, which was released October 5, 2006, with minor updates and bug fixes last occurring in 2012.
- TANKS itself might not run under modern operating systems.
- <https://www3.epa.gov/ttnchie1/software/tanks/>

Revoking Existing ECAs Upon Registration Under the EASR

- Revoking ECAs when submitting EASRs still needs to be done separately. The two systems are not linked.

Mobile ECAs for Portable Aggregate Crushing and Screening Plants (or Similar Equipment)

- Wide variety of conditions on separate distances in ECAs even for identical/similar equipment, concerning for industry.
- Perhaps a best practice.

Site-Specific Limits for Noise

- Ian Greason confirmed that O. Reg. 13/23 was filed on January 31, 2023 to amend Regulation 1/17.
- The regulation provides a site-specific approach for this one Salit Steel facility so that Points of Reception located within 500 metres of the facility boundary will be deemed to be located in a Class 4 area.
- There is no crossover to any other facilities, except that a facility identified as a Class 4 Point of Reception for Salit Steel would also be considered Class 4 for any other facility.
- Please see O. Reg. 13/23 for further details.

Updates to the PRIME Algorithm

- No one from MECP currently on the committee developing this. MECP will look into participating.

Update on Technical Standards

- Jeff Burdon mentioned that the following technical standards are in the works:
 - Mini-mill technical standard
 - Integrated iron and steel technical standard
 - Carbon black industry technical standard.

Online EASR System Issues

- Question about a purge of draft EASR applications back in November.
- A system update occurred in November that deleted all draft EASRs currently in progress.
- An email is sent out prior to this, but not everyone got it.

Difference in Approach to Large Boilers for ECAs With and Without LOF

- Engineers can sign off on changes for EASRs and ECAs without LOF.
- For ECAs with LOF, boiler cannot be modified without amendment, because of the equipment with specific operating conditions.
- Can this be changed?