

Requirements of a BMPP for Odour and an OCR O. Reg. 1/17

June, 2017

Environmental Sciences and Standards Division Standards Development Branch

Purpose

- Provide a background to the development of Ontario Regulation 1/17 (Air Emissions EASR regulation) odour requirements.
- Briefly overview the odour requirements for O. Reg. 1/17.
- Provide a detailed overview of the requirements for a Best Management Practice Plan (BMPP) for odour and an Odour Control Report (OCR).
- Outline existing tools available for facilities that require a BMPP for odour or an OCR.



- Through the government's 2015 Fall Economic Statement, the ministry committed to improving the ECA process by:
 - Reducing, for the fall of 2017, the amount of ministry time taken to review air and noise ECA applications by at least 50 per cent.
 - Implementing a one-year service standard for higher-risk ECA requests received after 2017.
- In support of this commitment and in support of the ministry's ongoing efforts to implement a risk-based approach to environmental approvals, a new Environmental Activity and Sector Registry (EASR) Regulation was developed for facilities with air emissions that are not considered high risk and/or complex.
- O. Reg. 1/17 (Air Emissions EASR regulation), came into force on January 31st, 2017.



<u>What is the EASR?</u>? (Environmental Activity and Sector Registry)

- The EASR is a public, online system where people engaging in prescribed activities must register the activity rather than obtain an Environmental Compliance Approval (ECA).
- Auto Refinishing, Printing, etc., and now the Air Emissions EASR regulation prescribe the activities that must be registered in the EASR.
- Facilities engaging in activities prescribed by the Air Emission EASR regulation are required to meet operating requirements specified in O. Reg. 1/17.



Air Emissions EASR Regulation Activity Requirements:

O. Reg. 1/17 sets out requirements, including:

- At all times, a person engaging in a prescribed activity must have the following available at the facility:
 - EASR ESDM report and report supplement;
 - noise report; and,
 - an odour screening report.
 - These reports, other than the odour screening report, must be signed and sealed by a licensed engineering practitioner (LEP).
 - Please refer to O. Reg. 1/17 for all requirements.



Who is Required to Register in the EASR??

- Activities engaged in at facilities that are part of a class set out in Schedule 4 and 5 of O. Reg. 419/05 are considered higher risk and/or complex, and are not prescribed under O. Reg. 1/17.
- Most activities engaged in at facilities that are not part of a class set out in Schedule 4 or 5 were NOT considered high risk and/or complex, and are prescribed, with some exceptions.
- There are other activities that are not prescribed under O. Reg. 1/17 (e.g. on-site land disposal).
- Please refer to O. Reg. 1/17 for a complete list of prescribed activities.



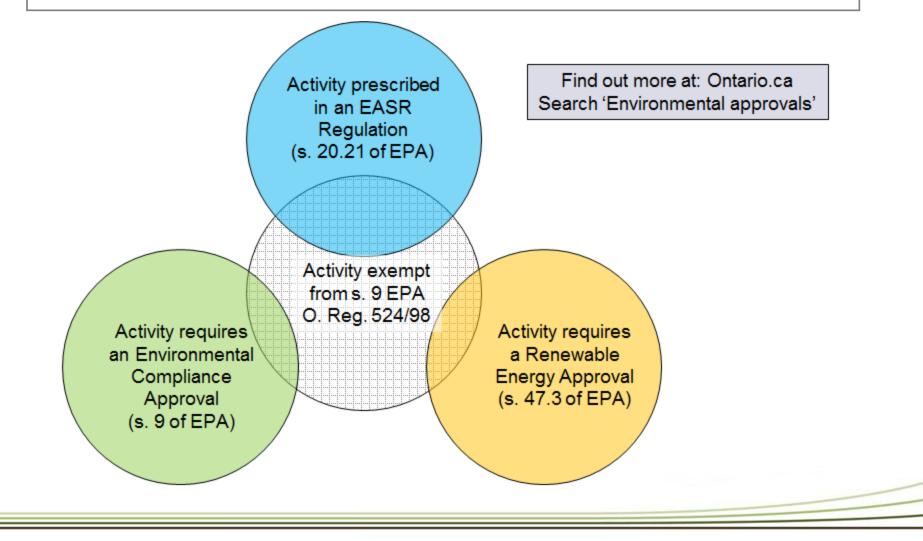
O. Reg. 1/17 – Examples of Activities Not Prescribed

- 1. 2122 (Metal ore mining).
- **2. 2123** (Non-metallic mineral mining and quarrying).
- 3. 22132 (Sewage treatment facilities).
- 31122 (Starch and vegetable fat and oil manufacturing).
- 5. 31161 (Animal slaughtering and processing).
- 6. 321111 (Sawmills (except shingle and shake mills)).
- 7. 3221 (Pulp, paper and paperboard mills).
- 8. 32411 (Petroleum refineries).
- **9. 32412** (Asphalt paving, roofing and saturated materials manufacturing).
- **10. 32419** (Other petroleum and coal product manufacturing).
- 11. 325 (Chemical manufacturing).
- **12. 32615** (Urethane and other foam product (except polystyrene) manufacturing).
- 13. 3262 (Rubber product manufacturing).

- 14. 32731 (Cement manufacturing).
- 15. 32732 (Ready-mix concrete manufacturing).
- 16. 32741 (Lime manufacturing).
- **17. 3279** (Other non-metallic mineral product manufacturing).
- **18. 331** (Primary metal manufacturing).
- **19. 3321** (Forging and stamping).
- **20. 33281** (Coating, engraving, cold and heat treating and allied activities).
- **21. 332999** (All other miscellaneous fabricated metal product manufacturing).
- 22. 336 (Transportation equipment manufacturing).
- 23. 56211 (Waste collection).
- **24. 5622** (Waste treatment and disposal).
- **25. 5629** (Remediation and other waste management services).
- **26.** 81222 (Cemeteries and crematoria).

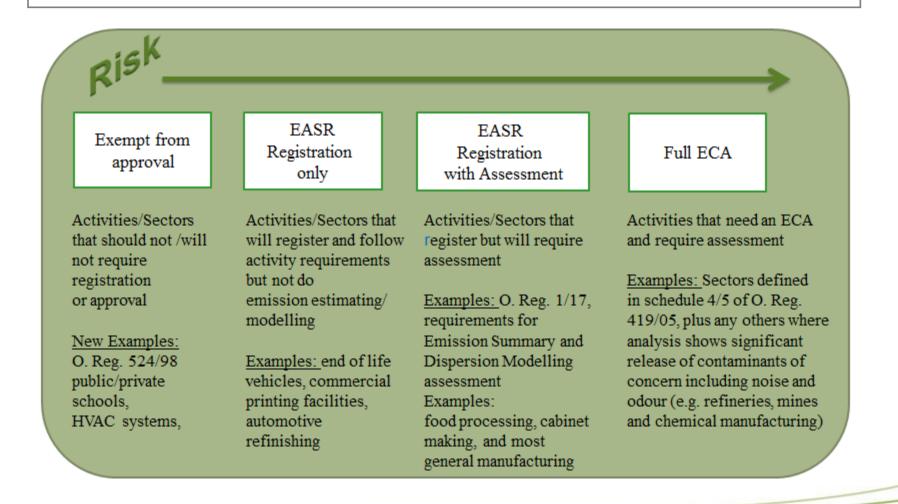


Do I Have an Activity/Equipment Discharging to Air?





Risk-Based Framework





- Standards Development Branch (SDB) was engaged in March 2016 to develop odour requirements for the proposed Air Emissions EASR regulation.
- SDB had been working on an odour framework for the Ministry.
 - The odour framework being completed at the time included decision making / engineering judgment from senior review engineers.
 - Due to the timeline for the Air Emission EASR regulation, the odour framework for ministry (ECAs, etc.) was put on hold.
- Commitment posted on the EBR with the odour requirements set out in the Air Emissions EASR regulation to develop a proposed odour framework in 2017.



- Prior to developing any odour requirements for the Air Emissions EASR regulation, industrial sectors and activities were reviewed to determine if any activities proposed to be prescribed were considered high risk or complex with respect to odour.
 - The ministry reviewed ECAs with specific terms and conditions for controlling odour emissions, as well as the ministry's source testing database, and complaint histories for the last 10 years.
- Activities that have the potential for significant odours were not included in the proposed Air and Noise Emissions EASR regulation
 - E.g., activities with high volume of historical complaints, or sectors with consistent ECA terms and conditions related to odour.
 - It should be noted that other NAICS codes were also deemed ineligible based on other considerations that did not include odour.



- NAICS Code 22132 Sewage Treatment Facilities*
- NAICS Code 31122 Starch and Vegetable Fat and Oil Manufacturing
- NAICS Code 31161 Animal Slaughtering and Processing (including Rendering and Meat Processing from Carcasses)
- NAICS Code 32412 Asphalt Paving, Roofing and Saturated Materials Manufacturing*
- NAICS Code 3262 Rubber Product Manufacturing*
- NAICS Code 562110 Waste Collection
- NAICS Code 5622 Waste Treatment and Disposal*
- NAICS Code 5629 Remediation and Other Waste Management Services

*Denotes activity was not prescribed based on other considerations including odour



EASR Odour Requirements

- Odour Screening Report
- Best Management Practices Plan for Odour
- Odour Control Report

• Sections 24 – 28 of O. Reg. 1/17



EASR requirement – Complete an Odour Screening Report

• Paragraph 1 of section 24:

"At all times when engaging in the activity, an odour screening report that meets the requirements in section 25 must be available at the facility at which the person engages in the activity".

- Odour Screening Report must satisfy section 25 of O. Reg. 1/17:
 - Paragraphs 1 to 6 of section 25 Administrative requirements.
 - Paragraph 7 of section 25 requires the person/facility to determine if further odour documentation is required for the activities being engaged in at the facility.



EASR requirement – Complete an Odour Screening Report

- On-line Odour Screening Report available on the Ministry's Website.
 - Provides the user with a printable 'report'.
 - Includes all administrative data required in paragraphs 1 to 6 of section 25 and a determination of whether odour documentation is required as per paragraph 7 of section 25.



On-Line Odour Screening Report (OSR)

- Completing an OSR requires facility specific information:
 - Primary and Secondary activity NAICS code;
 - Are any odorous processes used at the facility;
 - Shortest horizontal distance from an odour source to the nearest odour receptor (setback distance); and,
 - Other facility information as needed (e.g. process rate, if applicable).
- OSR identifies facilities that 'screen out' (i.e. low or no risk of emitting odours and no further action is required).
- OSR identifies facilities that 'screen in' (i.e. risk of emitting odours the facility may be required to complete additional documentation).



What Sectors 'Screen in'??

- The ministry has created a document titled: "Environmental Activity and Sector Registry – Limits and Other Requirements", which is incorporated into the regulation as the "EASR Publication".
- This document contains limits, intensity rates, operational parameters and other requirements, that facilities must follow if they are engaging in an activity prescribed by the Air Emissions EASR Regulation.
- The EASR Publication includes a chapter on odour.
 - Contains definitions, tables, clarifications and additional instructions.



 Facilities with activities or processes listed in Tables 1-4 of the EASR Publication may be required to complete additional documentation for odour (i.e. 'screen-in').

Column 1:	Column 2:	Column 3:	Column 4:	Column 5:
Item	NAICS Code	NAICS Code Description	Design Capacity of Facility	Setback Distance (m)
1.	311119	Other animal food manufacturing	N/A	500
2.	311214	Rice Milling and Malt Manufacturing	N/A	500
3.	311230	Breakfast cereal manufacturing	N/A	300
4.	311340	Non-chocolate confectionery manufacturing	N/A	300
5.	311351	Chocolate and chocolate confectionery manufacturing from cacao beans	N/A	500

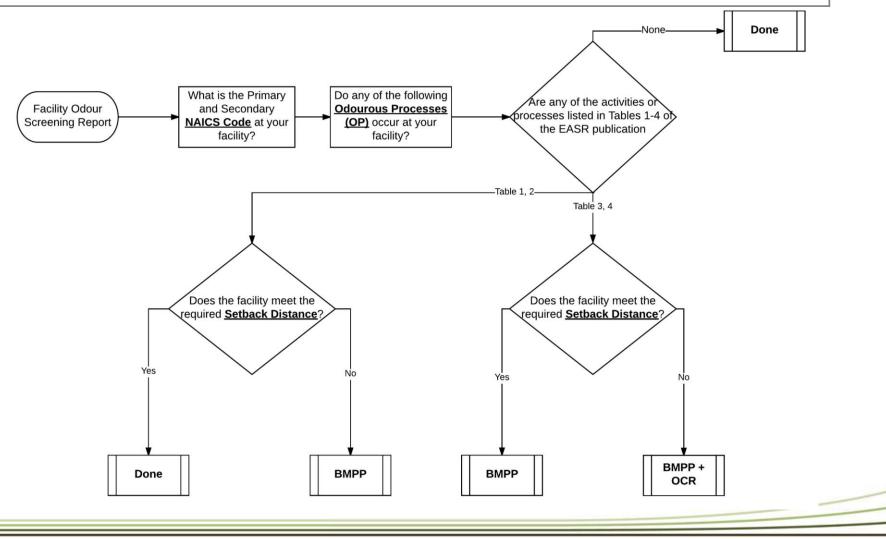
Table 1- Odour – Activities and Setback Distances



- Activities and processes in Tables 1 & 2: some potential to cause an adverse effect due to odours.
- Activities and processes in Tables 3 & 4: a higher risk of causing an adverse effect due to odours compared to Tables 1 & 2.
 - Table 1 e.g. Rice milling and Malt Manufacturing (NAICS 311214)
 - Table 2 e.g. Scented Products Manufacturing
 - Table 3 e.g. Dog and Cat Food Manufacturing (NAICS 31111)
 - Table 4 e.g. Solvent based spraying > 10L/hr

All NAICS / activities, process and set-back distances are listed in the EASR Publication.







<u>Setbacks</u>

- Relevant information was reviewed when developing the odour requirements in O. Reg. 1/17:
 - Known complaint locations were mapped along with the potential industrial source of odour.
 - Set-back distances for certain sectors were developed.
- A jurisdictional review was also completed.
 - In most jurisdictions, odour is handled through guidance and the approach varies significantly.
 - Odour set-back distances from some jurisdictions were also reviewed.
- All NAICS / activities / processes and set-backs were reviewed by environmental officers and other field staff.



Odour Screening Report Outcome

- If facility NAICS / activities or processes are not in Tables 1 4 in the EASR Publication:
 - $_{\circ}$ $\,$ No further action required.
- If facility NAICS / activities or process are listed in Tables 1 and 2 of the EASR Publication:
 - No further action required IF facility meets setback listed in Tables 1 or 2.
 - Facility must complete a Best Management Practice Plan for Odour (BMPP) if they do not meet setback.
- If facility NAICS / activities or process are listed in Tables 3 and 4 of the EASR Publication:
 - Facility must complete a BMPP if they meet setback listed in Tables 3 or 4.
 - Facility must complete an Odour Control Report (OCR) and a BMPP if they do not meet setback.



O. Reg. 1/17 – Odour

Best Management Practice Plan



BMPP for Odour

EASR requirement – Best Management Practices Plan for Odour

- Paragraphs 1 to 7 pf section 26: administrative requirement including*:
 - It must be dated, signed and sealed by a licensed engineering practitioner (LEP) and set out the practitioner's name and license number.
 - It must contain a statement by the LEP confirming that, based on the information provided to the practitioner, the information in the plan is accurate as of the date it is signed and sealed.
 - It must contain a statement signed by the person engaging in the prescribed activity confirming that all information the person gave to the licensed engineering practitioner in order to prepare the plan was complete and accurate.
- Paragraph 8 of section 26: technical requirements*



Paragraph 8 of section 26* - For all sources of odour (incl. fugitive), BMPP must set out for each source of odour at the facility:

- *i.* Potential causes for occasional increases in the discharge of odour from the source.
 - Occasionally missed as a requirement of BMPPs.
 - Requires not only a description of the source, but consideration as to what circumstances will cause increases in odour discharges.
 - Not just process upsets or other conditions, but daily/weekly/month/etc. process events that could cause higher odours than normal (e.g. storage piles left too long in the sun, occasionally using certain ingredients resulting in higher process odours, etc.).



Paragraph 8 of section 26* - For all sources of odour (incl. fugitive), BMPP must set out for each source of odour at the facility:

- *i.* Potential causes for occasional increases in the discharge of odour from the source.
 - Goal is to not only consider best practices to manage the sources, but also to limit the number of incidents with elevated odours.
 - The BMPP should provide the reader with a good understanding of sources of odour at the facility.



Paragraph 8 of section 26* - For all sources of odour (incl. fugitive), BMPP must set out for each source of odour at the facility:

- *ii.* ... confirmation that the terms or conditions, if any, relating to the control of the discharge of odour from the facility included in an environmental compliance approval that was in effect immediately before the registration ... were considered in the BMPP.
 - The LEP should consider including any odour-related Terms & Conditions from the most recent ECA in the BMPP.
 - Odorous Terms & Conditions are included in ECA for a reason.
 - Purpose is to make sure relevant Terms & Conditions are continued (e.g. monitoring conditions for control equipment, etc.).
 - Purpose is to also give flexibility to the LEP to make appropriate decisions (e.g. maintaining a separate manual to minimize odours would be redundant).



Paragraph 8 of section 26* - For all sources of odour (incl. fugitive), BMPP must set out for each source of odour at the facility:

- *iii.* Measures and procedures implemented at the facility to prevent or minimize the discharge of odour from the source into the air.
 - Include all measures and procedures in place.
 - The BMPP should provide the reader with a good understanding of what is being done to manage odours at the facility.
 - If obvious options were considered but determined infeasible, it would be beneficial to include rationale.
 - Some BMPPs omit measures or procedures that were previously integrated into the facility or initiated for reasons other than odour (e.g. raw ingredient recovery system); however, these should be included.



Paragraph 8 of section 26* - For all sources of odour (incl. fugitive), BMPP must set out for each source of odour at the facility:

- *iv.* Inspection, maintenance and monitoring procedures to ensure the adoption and continued implementation of measures and procedures...
 - Inspection, maintenance and monitoring procedures can show that a facility is serious about minimizing odours and being proactive.
 - The BMPP should provide the reader with a good understanding of what is being done to manage odours.
 - Some BMPPs omit measures or procedures that were previously integrated into the facility or initiated for reasons other than odour, but have synergistic effects (e.g. daily inspections, recording/trending control equipment gauges); however, these should be included.



Paragraph 8 of section 26* - For all sources of odour (incl. fugitive), BMPP must set out for each source of odour at the facility:

- Identification of additional measures and procedures that should be implemented at the facility to prevent or minimize the discharge of odour from the source into the air, if any, including:
 - A. A description of the additional measures to be implemented.
 - B. A description of the additional preventative procedures to be implemented.
 - c. If the additional preventative procedures are to be implemented periodically, the frequency with which the procedures are to be implemented.
 - D. A schedule for the implementation of the additional measures, including training of workers.
 - E. Inspection, maintenance and monitoring procedures to ensure the adoption and continued implementation of the measures and procedures.



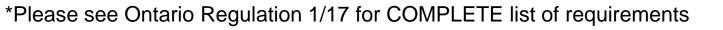
- v. Identification of additional measures and procedures that <u>should</u> be implemented at the facility to prevent or minimize the discharge of odour from the source into the air...
 - Purpose is to list any future/proposed measures or procedures to control odours. Note that an implementation schedule is required.
 - SHOULD be implemented = attempt to have LEP identify any measures or procedures that should be implemented at the facility.
 - This requirement to identify additional measures and procedures should create discussions between LEP and facility.
 - LEP should feel comfortable with BMPP and that efforts are reasonable.



BMPP for Odour

BMPP for Odour – other requirements*

- Paragraph 6 of section 24 The BMPP must be reviewed at least once in every 10-year period by a LEP.
- An updated plan must be prepared at least once in every 10-year period. However, this requirement does not apply if:
 - The LEP has reviewed the BMPP, and the information is up to date/accurate.
 - no additional measures are necessary to prevent or minimize the discharge of odour from the facility.
 - LEP provides an addendum to the most recent BMPP confirming the above and is signed and dated.





BMPP for Odour

BMPP for Odour – other requirements*

- Paragraph 5 of section 33 Procedures for record-keeping activities and logs relating to the operating, maintenance and monitoring procedures and plans.
- Paragraph 8 of section 33 Procedures for recording / responding to complaints that relate to the facility and the natural environment must be implemented.



BMPP for Odour - Resources

- To assist facilities with developing a BMPP, the ministry published the technical bulletin "Best Management Practices for Industrial Sources of Odour" on its website.
- This technical bulletin is applicable to any facility who is developing a BMPP for odours (i.e. it is not limited to facilities engaging in activities prescribed by O. Reg. 1/17).
 - Identifies information that should be included in a BMPP, even though not specifically mentioned in O. Reg. 1/17 (e.g. site layout, process flow, etc.).
 - Assist in identifying sources of odour that may otherwise be omitted.
 - Outlines other key components of a BMPP (training, record keeping, etc.).
 - Outlines development and implementation process for an efficient BMPP: Plan, Do, Check, Act.



BMPP for Odour – Technical Bulletin

- Plan
 - Assess processes and facility operations, identify potential sources of odour and the manner of discharge.
 - Detail control and mitigation strategies specific to the facility based on preventative maintenance and general operations.
- Do
 - Identify BMPs to be implemented and how the BMPs will be integrated into facility operations.
 - Establish odour complaint response protocols.
 - Implement administrative controls such as staff training, development of Standard Operating Procedures (SOPs), preventative maintenance schedules and recordkeeping.



BMPP for Odour - Technical Bulletin

- Check
 - Odour monitoring and inspection protocols.
 - Record-keeping.
 - Accountability and Management oversight of BMPP-related activities.
- Act
 - Periodic review of the effectiveness of the BMPs and update of the BMPP on a regularly-scheduled basis, or when changes are made at the facility.



BMPP for Odour

In General:

- For facilities engaging in activities prescribed by O. Reg. 1/17, ensure BMPP meets the requirements set out in the regulation.
- Common sense approach goal is for facilities to do their best.
- The facility knows the operations better than anyone.
- Plan, Do, Check, Act.
- In the BMPP, provide the reader with:
 - a good understanding of facility and challenges
 - a good understanding of odour sources
 - If common BMPs aren't technically possible
 - o If facility odour issues are well controlled please elaborate



O. Reg. 1/17 – Odour

Odour Control Report



OCR - Purpose

- To compile a list of feasible options for reducing odour.
 - If odour issues arise, available options are already listed.
 - Facilities spend time determining options in advance of odour issues.
- To look at other similar facilities/sources to compare facility controls.
 - When looking at other facilities / jurisdictions, it will be apparent if control options that are commonly used at other facilities are lacking at the facility.
- Good information for facility.
- Not a requirement to implement all or any controls identified as feasible.
- Unlike a Technology Benchmarking Report (TBR) described in section 27.1 of O. Reg. 419/05, no ranking of control measures (although this might benefit the facility if odour issues arise).
 - Details on how to prepare a TBR are outlined in Appendix A of the ministry's Guide to Requesting a Site-Specific Standard.



OCR

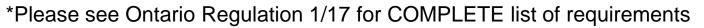
<u>Air Emissions EASR Regulation requirement</u> – Odour Control Report

- Paragraphs 1 to 7 of section 27: administrative requirement including*:
 - It must be dated, signed and sealed by a licensed engineering practitioner (LEP) and set out the practitioner's name and licence number.
 - It must contain a statement by the LEP confirming that, based on the information provided to the practitioner, the information in the plan is accurate as of the date it is signed and sealed.
 - It must contain a statement signed by the person engaging in the prescribed activity confirming that all information the person gave to the licensed engineering practitioner in order to prepare the plan was complete and accurate.
- Paragraph 8 of section 27: technical requirements*



Paragraph 8 of section 27* - The OCR must set out the following:

- *i.* A list of the measures and procedures that are used in similar facilities, including facilities in other jurisdictions, to prevent or minimize the discharge of odour, ...
 - Purpose is to gather all options for sources of odour at the facility.
 - Must review odour controls from other jurisdictions and other similar facilities.
 - Should also look at controls commonly used for similar sources (e.g. if source of odours is an exhaust with high VOCs, look at options to control VOCs).
 - If there are odour issues, a list of viable options will already be available.
 - Should identify any potential gaps for new facilities when considering odour controls.
 - Can identify easy options that could immediately be put in place.





Paragraph 8 of section 27* - The OCR must set out the following:

- *i. ... including measures and procedures such as the use of air pollution control technology and the implementation of changes to equipment, processes or materials.*
 - Not just end of pipe controls, need to consider BMPs, material substitution, process changes, etc.
 - Can identify BMPs, etc. that could be incorporated into the facility's BMPP.
 - Can identify low cost options that might not otherwise typically be considered.





Paragraph 8 of section 27* - For all sources of odour (incl. fugitive), OCR must set out:

- *ii.* An analysis of the measures and procedures identified under subparagraph *i*, and potential combinations of them, to determine which would be technically feasible to implement at the facility in order to prevent or minimize the discharge of odour.
 - Reasons that an option is infeasible include space restrictions, safety, etc.
 - Technical feasibility is discussed in section 3.2 of the TBR guidance. (Appendix A of the ministry's Guide to Requesting a Site-Specific Standard)
 - Cost is not a reason for infeasibility.



Paragraph 8 of section 27* - For all sources of odour (incl. fugitive), OCR must set out:

- *ii.* An analysis of the measures and procedures identified under subparagraph *i*, and potential combinations of them, to determine which would be technically feasible to implement at the facility in order to prevent or minimize the discharge of odour.
 - Must look at all combinations.
 - Note however that it is rare to see two end of pipe controls on same exhaust stream (although is possible).
 - Note that one should be able to implement any combination of BMP plus other control option.



Paragraph 8 of section 27* - For all sources of odour (incl. fugitive), OCR must set out:

- *iii.* A list of the measures and procedures or combinations that are determined under subparagraph *ii* to be technically feasible to implement at the facility ...
 - Want the LEP to develop a list of all feasible options for the facility.
 - Note that these options do not necessarily need to be installed at the facility the list is to be as broad as possible to give the facility ideas for how to better deal with odour emissions should the need arise.



Paragraph 8 of section 27* - For all sources of odour (incl. fugitive), OCR must set out:

- iii. ... for each measure or procedure that is not included in the best management practices plan for odour, an explanation of why that measure or procedure is not necessary to adequately prevent or minimize the discharge of odour from the facility.
- *iv.* An explanation of why the measures and procedures set out in the best management practices plan for odour are adequate to prevent or minimize the discharge of odour from the facility.
 - For a well-controlled (or sited) facility with no history of complaints or issues, justification should be fairly straightforward.
 - Requires the LEP and facility to consider the state of the facility and if anything else is required.





OCR for Odour

OCR – other requirements*

- Paragraph 6 and 8 of section 24 The OCR must be reviewed at least once in every 10-year period by a LEP.
 - This includes reviewing the list of feasible technologies to see whether the list needs to be updated!!
- The OCR must be updated at least once in every 10-year period, however, this requirement does not apply if:
 - $_{\circ}$ The LEP has reviewed the OCR, and the information is up to date/accurate.
 - no additional measures are necessary to prevent or minimize the discharge of odour from the facility.
 - LEP provides an addendum to the most recent BMPP confirming the above and is signed and dated.



OCR for Odour

OCR – other requirements*

 Paragraph 5 of section 33 - Procedures for record-keeping activities and logs relating to the operating, maintenance and monitoring procedures and plans.





OCR - Resources

- To assist facilities with developing an OCR, the ministry developed example OCRs for all activities or processes that may be required to do so.
- Facilities that are required to complete an OCR are facilities with activities or processes listed in Tables 3 and 4 of the EASR publication (Tier 2) and do not meet the setback distance (listed in Tables 3/4).
 - NAICS 311111 Dog and Cat Food Manufacturing
 - NAICS 311310 Sugar Manufacturing
 - NAICS 312120 Breweries (>20 ML/yr)
 - Spraying Operations (>10 L/hr)
 - Wastewater Treatment (Lagoons, Uncovered Clarifiers, Sludge Management)
 - Food Frying
 - Cooking and Drying Animal Products
 - Printing (>400 kg/hr)



- Example OCRs were developed:
 - To provide guidance for facilities.
 - To reduce the workload required by facilities (e.g. jurisdictional review, list of technologies, etc. has been completed in example OCRs).
 - Caution should be used when using example OCRs:
 - $_{\circ}$ They are current as of 2017.
 - Facility-specific information needs to be included in OCR.
- Format:
 - OCRs were written as an examples and includes all mandatory information (administrative requirements, required sections, technical data, etc.).
 - Guidance was written into the OCRs using 'text boxes'.
 - Format, technical information, etc. can (should) be replicated by facilities but beware – OCR must be modified to reflect facility specifics.



Elements of the Example OCRs:

- All required administrative data (facility legal name, owner, etc.).
- Statements of Certification for the LEP and Facility Representative.
- Identification of sources of odour primary and secondary.
- Sector and Jurisdictional Review (as of 2017) based on publicly available information from:
 - o Ontario, and Canada (very little public data available from other provinces)
 - US (Title V permits, etc.)
 - EU (BREF)
 - Australia & NZ



Elements of the Example OCRs:

- List of potential measures and procedures to reduce odour.
 - Comprehensive list should be applicable to all / most sources at facility.
 - Also includes common odour controls that were not noted during the sector / jurisdictional review.
- Feasibility Assessment.
 - May not be applicable to facilities other than the example facility but provides practical format.
 - In example OCRs, certain measures or procedures were determined to be feasible or not feasible based on fictitious (but realistic) considerations.
- Justification as the why the feasible controls identified are currently not required, and that the facility BMPP is adequate.
 - May not be applicable to facilities but provides practical format.



Elements of the Example OCRs that are not in O. Reg. 1/17 (but useful):

- Sector and facility process description.
- Identification and description of all sources of odour at the facility.
- Facility complaint history.
- Additional information to justify why certain control options may be feasible or not feasible.
 - Unique facility or process attributes.
 - Identification of odorous contaminants.
- Control measures or procedures to be evaluated for implementation.



OCR

In General:

- Ensure OCR meets the requirements in O. Reg. 1/17.
- The facility knows the operations better than anyone.
- If using the example OCRs, modify and include facility specific information.
- If facility odour issues are well-controlled and there is no history of odour issues or complaints – good justification that no additional controls are required and BMPP is adequate.
- Provide the reader with:
 - a good understanding of facility and challenges
 - a good understanding of odour sources
 - If some options aren't technically possible



BMPP for Odour and OCRs

Any Questions???

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