EBR Registry number 013-0903

Regulatory amendments related to air emissions of sulphur dioxide and other items

Submission to

Ministry of Environment

And

Climate Change

December 11, 2017

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Regulatory amendments related to sulphur dioxide and other items.

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General Comments (refer to the EBR Regulation Proposal Notice unless otherwise stated)

Description of Regulation
(a) Updated air standards for sulphur dioxide

Quote:
"Specifically the ministry is seeking input on whether to apply the standards to Southern Ontario and have the current standards apply to Northern Ontario and parts there of."

Question:
What is the justification and long term impact of a 2 tiered standard?

Rationale:

The industry in northern Ontario should be recognized and applauded for the huge investments on pollution controls which have greatly reduced emissions in northern Ontario. In addition, they play an important contribution to the local and provincial economy. However, the fact remains that a two tiered regulation does not support the government's own science research findings.

The northern industry sector is concerned that a site specific standard would place companies in non-compliance and this may not be acceptable to their community and/or their corporate interests. We fail to understand how an initiation of a double provincial standard which allows the current threshold to remain in the north while creating a more stringent threshold in southern Ontario would create more of an acceptable position to communities or corporate interests.

Site Specific Standards are legal permits that can be managed successfully when using a variety of communication strategies including a robust community industry dialogue process, tracking of a variety of continuous improvement milestones and transparency of pollution prevention technologies used. A two tiered regulation for SO_2 could leave a perception of complicity between the northern industries and government. This could tarnish the image of the companies, which have up to now initiated important stewardship programs, and government, specifically during an election year. As such, there is concern that this action would lead to long term irreversible diminished credibility for both industry and government.

The provincial government and municipality in the remote regions have a huge responsibility in land use planning to ensure that appropriate buffer zones external to fence lines are in place and enforced to prevent development. Municipal and/or industry controlled buffer zones, where reaching fence line compliance is an issue, are a low cost temporary alternative to the protection of human health. There needs to be a disclaimer that buffer zone policies do not address ecosystem health and vegetation.

Recommendation:

The province should adopt one standard. Site Specific Standards should be used in locations where the ministry has evidence of economic non-viability and where the company uses two way community dialogue to demonstrate metrics for continual improvements. In addition, the government should work with municipalities to expect buffer zone land use planning by-laws for the protection of human health.

(b) Clarifications of the requirements for assessing operating conditions

Quote:
"It is proposed that emissions of contaminants during non-routine conditions which are designed to occur at the facility be addressed on a case-by-case basis by way of a notice…"

Question:

What mechanisms will trigger a potential for the Director's notice and what is the status of stakeholders in this notice?
What support will the ministry provide in reverse onus situations where non industry stakeholders notify the ministry because they feel the air standards are not being met?

Rationale:

The current amendment language does not give communities (non-industry) status to trigger a Director to engage in further assessment for TOC scenarios. Yet, the ministry is accountable for its decisions on health to the impacted communities and in many cases needs input from those same communities. Although the process of ESDM summary reports, is intended to inform communities, there needs to be more transparent and proactive action plans when applied on a case-by-case basis for individual sites. We view the case-by-case scenarios as a reverse onus responsibility placed on a community. Case-by-case tools only work when the responsibilities and rights are well understood, especially by local citizens who in most cases do not have the background necessary nor the funds to hire expert consultants.

Recommendation:
That an education and communication plan include a hierarchy of training be included not only for ministry personnel but other stakeholder agencies such as health departments, medical specialists and local communities impacted by air quality.

Quote:

"The proposed Amendments would also include new tools for the ministry to obtain information …..such as malfunctions and spills."

Question

How will these new tools be extended to link and benefit community health and right to know?

What additional information will be added to Environmental Compliance Reports and verify that they are easily understood by the community which is impacted during malfunctions, routine and non-routine operations?

Rationale:

These amendments are very weak on notifications to impacted communities and education to ensure that citizens who are impacted have a well understood course of action.

Under Reg. 419 Section 27, we would like ministry to explore more detailed information on Annual Environmental Compliance Reports in terms of when a notification from a Director has occurred, including publically accessible flaring data embedded to the (max. POI) ESDM. This information should be accessible (e.g. on a ministry site and/or notifications sent to impacted community members) as part of community right to know. Should a community member require additional information or clarification of the EC reports, the ministry, the health department and/or the company be required to review the materials given to the person under Section 27(3). Currently, this type of service and support is not consistently applied or known that it exists.

Under Alberta Directive 060, the principles of AER CASA framework and AER 2.10 Public Participation are well aligned with the current amendments. We are requesting the ministry to consider a multi stakeholder consultation process to be added to Reg. 419 Section 10 (and/or other sections) for Education and Public Involvement, where the onus will be for companies to create a Public Information Package.
The framework for the public information package should have common basic principles, adapted for local requirements. We would like to see industries partner with the Public Health Units (PHU), Occupational Health Clinics for Ontario Workers (OHCOW), other medical experts, First Nations including community groups to be part of this initiative and establishment of the framework of "community right to know" package on TOC's and malfunctions. Please refer to our separate comments on Directive060.

Recommendation:

The current ESDM and data pertaining to flaring needs to be more comprehensive and accessible to health departments and neighbours impacted by deterioration in air quality. In addition, better public accountability for both industry and governments should be initiated by the establishment of Public Information and Education to be reviewed on a prescribed frequency under Section 10 (and/or other sections) of Regulation 419. A tracking score card of Plan, Do, Check, Act would evaluate the effectiveness and compliance in the principles of community right to know at the local level.

Quote:

(1.6) The Director may give a person who discharges or causes or permits discharges of contaminants from a facility written notice mentioned in subsection (1.5) if the notice is requested in writing by the person.

Reg. 419 Section 10 (1.6) gives "a person" i.e. company status to request a notice from the Director. This status should also be extended to community for the Director to consider a notice. Although there are mechanisms under EBR, it should not preclude additions to Reg. 419.

Recommendation:

"A person" status be extended to a citizen/community who wishes to notify the Director of a scenario outlined in (*Reg. 419 Section 10)* 1.5. i.e. acute health effects or too frequent. See earlier comment on trigger mechanisms for case-by-case basis.

Transitional Operating Conditions **(in the proposal)**

Quote:

"Providing clear rules would provide consistent interpretation and application of Section (10) of the Regulation….and ministry staff when preparing and reviewing ESDM reports. It would also provide a better depiction of a facility's compliance…."

Question:

Will the public have access to the process when review and compliance of Reg. 419 Section (10) is applied within their communities?

Recommendation:

That the ministry outline a plan to articulate how local communities will understand and benefit from the case-by-case decisions based on Reg. 419 Section (10).

We support consistent and transparent interpretation of the Regulation Section (10) and Guideline A10. (See previous recommendations)

Discussion Paper Questions for Stakeholders

TOC Contaminants

1. TRS and H_2S should be considered due to its acute health effects. PM2.5 or smaller although not directly involved in toxicity hugely affect asthmatics and those who perform outdoor activities.

2. A data bank overlaying a geographic mapping showing POI would be useful in alerting community during TOC events and weather inversions. We appreciate the current real time software for Sarnia air monitoring stations but more air monitoring stations in Sarnia would increase public confidence in the data. We have heard this suggestion from many sources.

3. A user friendly version of Air Contaminant's Benchmark list would be useful for community right to know.

Operating Conditions

1. Does the term "maximum design capacity" reflect the concept of maximum peak production?

When "maximum design capacity" or other redundancy is built as a safety feature it should be excluded from the POI calculations. If oversized stacks are built to prevent catastrophic failure and not used for expansion of the facility, it is counterintuitive to designate theoretical calculations as non-compliant. It is assumed that facilities will calculate maximum or peak production using other parameters, not linked to redundant safety design.

2. Are there measures to quantify emissions from TOC's when the facility is not operating normally?

The ministry should expect facilities to consider programs and models in place such as HAZOPs, OHSA PSM, PHA's, including historical experience, worst case scenario analysis, analytical methods and knowledge and experience including information sharing amongst companies. Facilities which have robust emergency simulations on a variety of scenarios expected to perform frequently on a regular basis should be well equipped to quantify data. We have seen varieties of software that industries in Sarnia use, e.g. at a Bluewater Community Advisory meeting last year, projected to area maps with impingement circles.

This modelling could take into account the equipment (release valve, flare, etc.) that performed the release, the max flow rate, and duration, and then estimate the largest possible release that occurred. If detailed pressure values were available, then a more accurate release quantity could be modeled. This doesn't have to be complex software, a facility could build a spreadsheet for all of its release equipment and then simply plugin in the values during/after an incident to get the estimated data.

The greatest challenge is to release the information after an event through timely debriefing to the community. Currently, this type of work is not a priority for many companies. As a first step the ministry should require the TOC reporting to be done as soon as practical after the incident to a common data bank. Then once industry has developed the modeling needed for these reports, the ministry can take the next step and require them to report in near real-time.

We support LIMA and continuation of Regulation 350 with respect to air (and SLEA water) monitoring stations with administrative amendments.

Notification process under Operating Conditions

In this regulation, we would specifically like the ministry to address the issues of community right to know, community awareness and timely notification so that it is user friendly, uniformly applied and consistently tracked for compliance. Currently Sarnia has a notification plan but in our opinion it does not meet the above criteria. Please refer to our comments on Alberta Energy Regulator's Directive060.

In Sarnia, the issue of whether or not adequate and timely notification is occurring, prior to, during and/or after unplanned, non-routine and malfunction events for both within Ontario and across the border in the US has been in the forefront for many years through the media, the Environmental Commissioners Office and local campaigns. We see at least a four phased approach to the problem.
1. Companies are relying on 3rd parties, such as MyCNN, CAER and CVECO to manage their notification and community awareness plan.
2. Companies are not validating or auditing their own notification process to ensure that the message

reaches the right people, is understood and is timely.
3. In cases where the responsibility of the notifications is transferred to 3rd parties such as SLEA, CAER and CVECO for community awareness and emergency response, the companies are not auditing these 3rd parties to ensure that the message reaches the right people, is understood and is timely.
4. After an event, there is no timely or comprehensive debriefing for the community so that they understand the lessons learned. In some cases it does not happen or in other cases it is stalled by legal departments.

It is worth noting that, CIAC Responsible Care companies (including those in Sarnia) have more rigorous voluntary expectations over and above what is required by law. Under the Responsible Care voluntary commitments member companies are expected to annually manage their own notifications or have a robust system of auditing and oversight if they choose to transfer the notification to a 3rd party. Communities can judge the degree of transparency and accountability in Sarnia (and across Canada) by the member companies in the 3rd party verification reports at http://www.canadianchemistry.ca/responsible_care/index.php/en/responsible-care-verification-reports

Directive060 has many basic principles of a notification framework already in place, including community right to know and worst case scenarios.

Recommendation

Considering that the CIAC Responsible Care companies and Alberta Energy Regulators are already including best practices in the protection of health and environment with respect to impacted communities in terms of community awareness, notification, emergency response and post analysis of events, it would seem worthwhile for Ontario to move towards the path of least resistance using these same principles.

Alberta Energy Regulator Directive060

Question

What can Ontario learn from Alberta Energy Regulator (AER) Directive060?

Rationale

WATCH is a group of volunteers whose mandate is to work with governments and industries for the protection of human and ecosystem health. We are not experts nor do we have resources to hire experts. In light of these limitations, we have attempted to examine Alberta Energy Regulator Directive060 for any parallels with the current EBR proposal for ministry's consideration and further discussion.

Although Directive060 applies to Upstream Petroleum Industry Flaring, Incinerating, and Venting, there are basic principles which should be examined for application in Ontario.

1. The use of a "decision tree process" for better understanding of ministry's decisions and industry's action plans, specifically as it relates to consistent application.

2. List of stakeholders to be developed by industry to regularly communicate and notify for prescribed events (AER3.8). Industries in Sarnia currently depend on MyCNN. However, not all residents are

covered by this. There should be a variety of mechanisms and a more proactive validation on a prescribed frequency to ensure that the notifications are working as intended. Companies need to visit local schools, day care facilities, seniors centres and recreation centres and not assume that they know what to do, or that someone else is responsible in case of an emergency. Directive060 is very clear in the responsibility of each company to control its own neighbourhood.

3. Tables 1 (page 19) and Table 2 (page 34) very specifically outline minimum notification requirements by distance from the facility in metres and timelines in hours after an event and in addition encourage a "good neighbour" notification process.

4. A special section Addressing Resident Concerns (AER3.8.1)

5. Smoke Emissions in section (AER7.2).
Sarnia specifically has continuous issues on smoke emissions, for example, US shoreline residents who have continuously complained about "an invasion of smoke inside their homes" and a lack of notification with shoreline residents. For example December 2016 there were 4 incidents of CO boiler upsets from the same company as noted in Aamjiwnaang First Nations Notification Report.
See link with description and photo from 2012.
http://www.sarniathisweek.com/2012/05/15/imperial-repairing-damage-from-coker-incident

6. Under AER7.12.5 (6)(7)Non routine Flaring and Dispersion Modelling there is mention of Worst Case Scenarios as part of the emergency planning process. Since Worst Case Scenario modelling is a requirement under Chemistry Industry Association of Canada (CIAC) Responsible Care for all member facilities in Canada, it could be benchmarked as best practice by the MOECC.

7. Requirements for Peace River Area has a special section AER8.7. Given the geographic location of the Aamjiwnaang First Nations community, it seems imperative that a form of national/federal equity be included in the amendments or through another venue such as MOU supported by AFN. It is important for the ministry to ensure that any emission and health information disseminated to the First Nations communities, should also be available to the communities outside the Aamjiwnaang fence line. (i.e. without Freedom of Information requirements and charges that individuals are required to pay).

Recommendation
Principles within Directive060 be investigated specifically (but not limited to) a more robust accountability system in the community right to know areas of the amendments for SO_2 and other items of concern.

Conclusion

WATCH wishes to commend the MOECC in this very complex and energy intensive task. The MOECC staff are to be recognized for their willingness to share their expertise to ensure that as average citizens we understand the content and information throughout this initiative. It is important to keep in mind that once these amendments are finalized they will need to withstand the test of time with future governments whose priorities and ideologies may not measure up to the same standards.