

February 7, 2018

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Via Email Only

Dear Ms. Hussain:

**Re: Canadian Environmental Law Association's Comments on
Cumulative Effects Assessment in Air Approvals, EBR Registry Number 013-1680**

1) Background

The Canadian Environmental Law Association (CELA) is a legal aid clinic founded in 1970 for the purpose of using and improving laws to protect the environment and natural resources.

CELA represents individuals and citizen groups in hearings before administrative tribunals and the courts on a broad range of environmental cases and also undertakes law reform. CELA has a lengthy history of involvement with working towards strengthening and improving Ontario's air quality management regime. CELA counsel have been involved in court cases, administrative hearings involving environmental compliance approvals for air emissions, including *Dawber v. Ontario (Director, Ministry of Environment)* before the Environmental Review Tribunal (ERT) and the subsequent appeal of that decision to the Ontario Divisional Court.¹ CELA staff have also authored or co-authored numerous submissions on federal and provincial air quality initiatives which are available on its website.

¹ *Dawber v. Ontario (Director, Ministry of the Environment)* (2007), 28 C.E.L.R. (3d) 281; affd. (2008), 36 C.E.L.R. (3d) 191 (Ont.Div.Ct.); leave to appeal refused (Ont. C.A. File No. M36552, November 26, 2008).

CELA counsel was a member of the Air Standards/Local Air Quality Regulation External Working Group (EWG) established by the Ministry of Environment and Climate Change (hereinafter MOECC or Ministry). The EWG is a group of industry, environmental non-governmental organizations, public health organizations and members of First Nation communities that meet regularly to discuss local air quality issues and provide recommendations to the government.

CELA counsel was also a member of the Cumulative Air Emissions Assessment subgroup (CAEA subgroup) of the EWG which was established to review cumulative effects policies in other jurisdictions and to discuss principles to guide the development of a cumulative effects assessment policy for Ontario.

The MOECC posted its policy on cumulative effects assessment for air approvals on the Environmental Bill of Rights Registry on November 9, 2017 for a 90 day comment period (hereinafter referred to as the “CEA policy or policy”). CELA’s comments on the policy are set out below.

2) The MOECC is Required by Law to Consider Cumulative Effects

The assessment of cumulative effects is an essential component of an effective air quality management programme.² Many jurisdictions, including British Columbia, Alberta, California, Texas, and Quebec have developed and implemented a cumulative effects assessment as an integral part of their air quality management program. Ontario, in contrast, does not undertake such an assessment when issuing environmental compliance approvals to industries emitting air pollution. The lack of a cumulative effects assessment has been described as a “glaring failure” in Ontario’s air regulatory approach.³

Since the Ontario Divisional Court decision in *Dawber*, almost ten years ago, the MOECC is legally required to consider and assess cumulative effects in its decision-making process.⁴ In that case, the

² Environ EC Canada Inc, *Report – Jurisdictional Review of Air Quality prepared for the Environmental Commissioner of Ontario* (Mississauga: Environ EC Canada Inc, May 2009) at 1.

³ Dayna N. Scott, “Confronting Chronic Pollution: A Socio-Legal Analysis of Risk and Precaution” (2008) 46:2 Osgoode Hall LJ 293 at 323.

⁴ *Supra* note 1.

Divisional Court upheld the Environmental Review Tribunal's (ERT) decision that the Ministry had a duty to consider and assess cumulative effects when issuing environmental compliance approvals.

Approximately two years ago, 13 environmental and public health organizations wrote to former Environment Minister, Glen Murray, reminding him that the Ministry was under a legal obligation to consider and assess cumulative impacts and urged the government to take action to protect the health of Ontarians and Ontario's airsheds from the harmful effects of air pollution.⁵

The Ministry's failure to undertake cumulative effects assessment has had serious implications for environmental protection in Ontario. It has caused some communities to endure a disproportionate burden of industrial air pollution. Research has established that areas of the province that have higher air pollution also tend to have higher poverty rates, raising serious environmental equity concerns regarding the siting and operation of industrial facilities in Ontario.⁶

In Sarnia, for example, the lack of a cumulative effects assessment process has allowed significantly high levels of toxic pollution to be emitted into the local airshed. A report by Ecojustice which examined the cumulative air pollution emissions in Sarnia, found that in 2005, the facilities which were subject to the National Pollutant Release Inventory (NPRI) had "released 5.7 million kilograms of Toxic Air Pollutants including numerous chemicals associated with reproductive and development disorders and cancer among humans."⁷ These toxic air emissions were found to be more than the NPRI releases of Manitoba, New Brunswick or Saskatchewan and more than that of any other Ontario community.⁸ Exposure to air pollution has resulted in serious health impacts to local residents, in particular to the members of the Aamjiwnaang First Nations, who live in close proximity to industrial facilities which are causing the air pollution. The residents of Aamjiwnaang have reported disproportionately higher levels of asthma, respiratory problems, miscarriages,

⁵ Letter to the Hon. Glen Murray, Ministry of Environment and Climate Change from the Canadian Environmental Law Association, Ecojustice, Earth Roots, Environment Hamilton, Women's Healthy Environment Network, and Canadian Association of Physicians for the Environment, Registered Nurses Association, Citizens Environment Alliance, Ontario Sustainable Network and the Toronto Environment Alliance dated February 25, 2015.

⁶ Pollution Watch, *An Examination of Pollution and Poverty in the Great Lakes Basin*, (Toronto: Pollution Watch, November 2008) at 2-4.

⁷ Ecojustice, *Exposing Canada's Chemical Valley: An Investigation of Cumulative Air Pollution Emissions in the Sarnia, Ontario Area*, (Toronto: Ecojustice, October 2007) at 5.

⁸ *Ibid.*

learning disabilities, cancer and skewed birth ratios in some years.⁹ Hospital admission rates are also higher in Sarnia for respiratory illness in comparison to Windsor and Ontario.¹⁰

Similarly in Hamilton, a 2011 Ontario Air Quality Assessment estimated that commonly emitted air pollutants such as nitrogen-dioxide, ground-level ozone, particulate matter, carbon monoxide and sulphur dioxide contribute to approximately 186 premature deaths, 395 respiratory hospital admissions, and 323 cardiovascular hospital admissions each year.¹¹ The final report released the following year indicated that air quality in Hamilton had been improving since 2001, but total respiratory hospital admissions remained constant while total cardiovascular hospital admissions had decreased.¹² The report predicted that reductions in air pollution should result in improved health outcome of residents in Hamilton. The findings in the report underscore the important correlation that reductions in air pollution can have on improved health impacts for residents. Given the adverse impacts that air pollution can cause to the environment and Ontarians' health and well-being, particularly on low-income and marginalized populations, it is imperative that the Ministry develop and implement a credible and effective cumulative effects assessment policy. The CEA policy is neither, for reasons which are outlined below:

3) The Key Features of the CEA Policy

The MOECC's proposed policy on cumulative effects assessment in air approvals only applies to:

- new and expanding facilities
- air emissions of benzene and benzo(a)pyrene; and
- facilities in the Hamilton/Burlington and Sarnia/ Corunna area.

The policy identifies a series of "Action levels" to manage the cumulative effects of air contaminants. The Action levels are contingent on the extent to which the concentration of a contaminant exceeds the Ambient Air Quality Criteria (AAQC), which is used by the Ministry to assess general air quality resulting from all sources of a contaminant to air. Action levels includes the

⁹ *Ibid* at. 9-10.

¹⁰ *Ibid* at 9.

¹¹ A summary of the report is available at <http://cleanairhamilton.ca/health-impacts/>

¹² Senes Consultants Limited, *Final Report: Health Impacts Exposure to Outdoor Air Pollution in Hamilton* (Richmond Hill: Senes Consultants Limited, 2012) at p. ES-2.

preparation of technology benchmarking reports, best available pollution control methods and pollution control methods to achieve the lowest possible emission rates as compared to an existing source of the same kind in North America.

4) The CEA Policy only Applies to New and Expanding Facilities

The CEA policy is intended to only apply to new and expanding facilities. This poses a serious limitation given that a case study undertaken by MOECC for the CAEA Subgroup demonstrated the AAQC's for benzene and benzo(a)pyrene from existing facilities were exceeded at monitoring locations based on annual average concentrations.

The International Agency for Research on Cancer (IARC) classifies benzene as “carcinogenic to humans,” based on sufficient evidence that benzene causes acute myeloid leukemia (AML). According to IARC benzene exposure has been linked with acute lymphocytic leukemia (ALL), chronic lymphocytic leukemia (CLL), multiple myeloma, and non-Hodgkin lymphoma. IARC also concluded that benzo(a)pyrene is carcinogenic to humans.

Given that MOECC's modelling data clearly demonstrates that Ontarians face an elevated cancer risk from combined benzene and benzo(a)pyrene levels, the restriction of the application of the policy to just new and expanding facilities is unjustifiable. The Ministry needs to undertake a cumulative effects assessment for existing facilities as well as new and expanding facilities which emit benzene and benzo(a)pyrene. For reasons that are set out in more detail below, the policy needs to apply to all major facilities, not just those that are subject to an environmental compliance approval.

The MOECC proposal does not address the issue of how facilities which emit air pollution and are subject to the Environmental Activity and Sector Registration (EASR) process would be dealt with under the CEA policy. The EASR regime which came into effect on January 31, 2011 exempts certain facilities from the requirement to obtain an environmental compliance approval. Instead, these facilities are only required to operate in compliance with prescribed rules established by regulation. As a result of Ontario Regulation 1/17, most facilities which emit air emissions are now covered under the EASR process.

When the EASR regime was first introduced in Ontario seven years ago, CELA and other environmental organizations raised concerns about how cumulative effects would be considered and integrated into the EASR regime. CELA noted that the Environmental Commissioner of Ontario had also raised similar concerns and observed that the “cumulative effect of low-risk facilities which are located closely together, as they commonly are, can be quite significant.”¹³ The MOECC has yet to address this issue. Given that most facilities which emit air emissions are now exempt from the approval process, CELA is concerned that the CEA policy will have negligible effect on the assessment of cumulative air emissions in the province.

The CEA policy also fails to address how the proposal to undertake cumulative effects assessment will be integrated with site specific standards and technical standards. A site specific standard is a standard for a contaminant established for a facility that is unable for economic or technical reasons to meet the provincial air standards under O. Reg. 419/05. Technical standards allow a class of facilities under certain circumstances to register for a technical standard in respect of a facility for certain contaminants. Both site specific standards and technical standards provide facilities with an exemption from having to meet provincial air standards. MOECC’s technical standard registry indicates that a number of large facilities are already registered for technical standards in relation to benzene and benzo(a)pyrene.

The CEA policy fails to provide any details on how the proposed policy would interact with the EASR regime and with facilities operating under site specific standards and technical standards. CELA recommends that air emissions from all major facilities, irrespective of whether they require an ECA, be subject to the cumulative effects assessment. Otherwise, the CEA policy will fail to accurately capture the cumulative impact of air pollution in the province.

The proposed policy sets out a series of “Action levels” to manage cumulative effects of contaminants on air, including technology benchmarking reports, best available pollution control methods and pollution control methods to achieve the lowest possible emission rates as compared to an existing source of the same kind in North America. However, the CEA policy does not indicate what steps will be taken, if despite the proposed management actions, contaminants exceed

¹³ Environmental Commissioner of Ontario, *Doing Less with Less: How shortfalls in budget and staff and in-house expertise are hampering the effectiveness of MOE and MNR* (Toronto; ECO, April 24, 2007) at 41.

their AAQCs. In such cases, CELA recommends the policy should expressly stipulate that the MOECC Director will refuse the ECA application.

Recommendation No 1: The MOECC needs to undertake a cumulative effects assessment of all existing facilities as well as new and expanding facilities which emit air emissions in Ontario.

Recommendation No 2: The MOECC needs to provide detailed guidance on how the cumulative effects policy will be integrated with the EASR regime and site specific standards and technical standards.

Recommendation No 3: The MOECC needs to expressly state in the CEA policy that, if despite proposed management actions, contaminants exceed their AAQCs, the MOECC Director will refuse the ECA application.

5) The CEA Policy only applies to Benzene and Benzo(a)pyrene

The CEA policy is intended to only apply to benzene and benzo(a)pyrene. Given the multitude of contaminants that are discharged by facilities in Ontario, including in the Hamilton/Burlington and Sarnia/Corunna areas, there is no justification for excluding other contaminants from the policy.

The MOECC Discussion paper states that the Ministry considered the addition of sulphur dioxide to the CEA policy.¹⁴ However, since new more stringent standards for sulphur dioxide are being proposed by the Ministry, it was determined that the contaminant should be excluded. The MOECC's rationale for excluding sulphur dioxide is not valid given that new standards will not come into effect for another five years. Furthermore, none of the proposed regulatory measures address how the cumulative impacts of sulphur dioxide will be assessed.

The CAEA subgroup's case study on cumulative sulphur dioxide emissions in Sarnia indicated that the modelled concentrations (one hour average) were greater than 690 µg/m³.¹⁵ At these levels

¹⁴ MOECC, Discussion Paper: Cumulative Effects Assessment in Air Approvals, (Toronto: MOECC, Standards Development Branch, November 2017) at p.9.

¹⁵ MOECC, Cumulative Air Emissions Assessment (CAEA) Subgroup of the 419 Extended Working Group (EWG), Multisource Modelling Scenarios: Preliminary results on Cumulative Air Emissions Case Studies for Sarnia and Hamilton, (Toronto: Local Air Quality External Working Group, September 14, 2016), p. 9.

symptoms are expected in at least 50% of asthmatics.¹⁶ It is evident from these findings that sulphur dioxide emissions at their current levels are causing serious health impacts to Sarnia residents.

The MOECC's Standards Development Branch has noted that Health Canada and the United States Environmental Protection Agency "concluded that the strongest causal relationship exists between short-term SO₂ exposure and respiratory effects. These adverse effects include bronchoconstriction, changes in lung function, airway inflammation, airway hyper-responsiveness and emergency room hospital visits."¹⁷

Given the serious adverse impacts that can result from exposure to sulphur dioxide and the clear evidence that the AAQC in Sarnia for sulphur dioxide levels are being greatly exceeded, it is not acceptable for the MOECC to exclude sulphur dioxide emissions from the CEA proposal. CELA recommends that MOECC should apply cumulative effects assessment to all contaminants that are listed on Schedule 3 of O. Reg. 419/05, including sulphur dioxide.

Recommendation No 4: The MOECC should apply cumulative effects assessment to all contaminants that are listed on schedule 3 of O. Reg. 419/05, including sulphur dioxide.

6) The CEA Policy only applies to the Hamilton/Burlington and Sarnia/Corunna areas

The MOECC states that the proposed policy will only apply to the Hamilton/Burlington and Sarnia/Corunna area. Thus, the vast majority of urban centres in Ontario will be exempt from the policy.

Restricting the application of the policy to only two urban centres in Ontario is troubling given that the most recent National Pollutant Release Inventory (NPRI) data indicates high levels of contaminants are discharged in urban centres beyond Sarnia and Hamilton.¹⁸ Windsor, for example,

¹⁶ Ibid. p.6.

¹⁷ MOECC, Science Discussion Document on the Development of Air Standards for Sulphur Dioxide (SO₂), Standards Development Branch, July 2016.

¹⁸ There are a number of limitations to the NPRI data as it only captures sources of contaminants that meet a certain threshold and therefore does not provide a complete account of emissions from all sources. Moreover, given that NPRI data relies on self-reporting by facilities, the reporting may vary due to differences in reporting methods to estimate

has 52 facilities that report on a range of pollutants listed under NPRI and of those 52 facilities, 37 facilities reported air releases of a number of pollutants including criteria air contaminants (e.g. particulate matters, volatile organic compounds and nitrogen oxides) and other toxic pollutants (i.e. mercury, cadmium, lead) many of which are considered toxic under the *Canadian Environmental Protection Act*. Many of these chemicals are associated with health effects such as respiratory conditions, neurological and reproductive impacts. The NPRI data indicates that the total air releases in Windsor in 2016, including criteria air contaminants, was approximately 7,339,451 kg.

If the MOECC intends to implement an effective cumulative effects assessment policy in Ontario, it is critical that the policy be applied consistently across the province. The failure to do so will lead to other urban centres bearing a disproportionate burden of air pollution resulting in pollution havens in Ontario.

The CEA policy is part of a disturbing trend by the Ministry to impose inconsistent environmental standards in Ontario. Last October, for example, the MOECC announced it was considering a five-year phase-in period to bring into force a new provincial standard for sulphur dioxide. However, the Ministry indicated that it was considering applying the new standard on a regional basis as opposed to province-wide. In response, CELA stated that the failure to implement the sulphur dioxide standards consistently would create pollution havens within the province and undermine the rule of law.¹⁹ These concerns apply equally with respect to the proposal to limit the application of cumulative effects assessments to just the Hamilton/Burlington and Sarnia/Corunna areas.

In the *Damber* decision noted above, the ERT citing *Safety-Kleen*, made the following comments about inconsistency in the environmental decision-making process:

Consistency in environmental standards is highly desirable. Unpredictability and inconsistency produce uncertainty for those who would otherwise embrace beneficial change. Thus unpredictability and inconsistency in the application of environmental laws can defeat the benefits such laws were intended to achieve. Indeed, consistency is one of the

emissions. See *Exposing Canada's Chemical Valley: An Investigation of Cumulative Air Pollution Emissions in the Sarnia, Ontario Area*, (Ecojustice: Toronto) October 2007 at p.10.

¹⁹ Canadian Environmental Law Association, Media Release dated October 27, 2017, CELA Supports Updated Air Quality Standards but calls on Province to Apply the Law Fairly., available at <http://www.cela.ca/newsevents/media-release/mr102717>

characteristics of a system of governance based on the rule of law. Inconsistency violates the principle that like cases should be treated alike...²⁰

The ERT noted that “consistency in the context of the *EPA* does not mean that all facilities should operate under the same conditions, but that facilities should be regulated to limit environmental effects to a consistent level across Ontario.”²¹

It is CELA’s position that the proposed policy is discriminatory given that communities not covered by the policy will not be afforded the benefits that it was intended to achieve. CELA, therefore, recommends that CEA policy should apply province-wide to ensure that air emissions from facilities are regulated at a consistent level across Ontario.

Recommendation No. 5: The proposed cumulative effects assessment policy should apply province-wide and not be restricted to only the Hamilton/Burlington and Sarnia/Corunna areas.

Conclusion

The MOECC’s proposed policy to assess cumulative effects of air pollution is feeble and woefully inadequate. The policy will not address the serious health impacts that many Ontarians suffer as result of exposure to air pollution.

Given that Ontarians in some communities are already suffering serious adverse health impacts from air pollution, there is absolutely no justification for restricting the policy to only new and expanding facilities.

The proposal to restrict the application of the policy to only two contaminants, namely benzene and benzo(a)pyrene, makes the policy meaningless, given the multitude of toxic chemicals that are currently discharged in areas such as Sarnia, Hamilton as well as other urban centres.

Furthermore, there is simply no policy rationale which justifies limiting the application of the policy to just two areas of the province. Recent NPRI data indicates high levels of air contaminants in

²⁰ *Dawber v. Ontario (Director, Ministry of the Environment)* (2007), 28 C.E.L.R. (3d) 281 at para 79.

²¹ *Ibid.* at para 80.

other urban centres in Ontario, beyond Sarnia and Hamilton. The area restrictions in the CEA policy would will lead to inconsistent environmental effects across Ontario and result in an uneven and inherently unfair application of the *EPA* throughout the province. The lack of consistency in the application of the *EPA* was one of the reasons the ERT concluded that the ECA application in question in *Damber* was one which “no reasonable person could make.” Given the ERT’s findings in the *Damber* case, it is difficult to comprehend how the MOECC, almost ten years after that decision, can justify formulating a policy that will lead to the inconsistent application of environmental law and result in discriminatory effects between communities in Ontario.

The extremely narrow application of the proposed policy on facilities, types of contaminants and the areas in province means that the majority of the ECA applications for air emissions in Ontario will not be subject to a cumulative effects assessment. Accordingly, the MOECC’s air regulatory regime will continue to remain in non-compliance with the *Damber* decision.

In conclusion, it is CELA’s firm position that the policy as currently drafted would not alleviate the serious adverse health impacts Ontarians face from air pollution. CELA, therefore, recommends the MOECC immediately take the following steps to amend the policy as follows:

Recommendation No 1: The MOECC needs to undertake a cumulative effects assessment of all existing facilities as well as new and expanding facilities which emit air emissions in Ontario.

Recommendation No 2: The MOECC needs to provide detailed guidance on how the cumulative effects policy will be integrated with the EASR regime and site specific standards and technical standards.

Recommendation No 3: The MOECC needs to expressly state in the CEA policy that, if despite proposed management actions, contaminants exceed their AAQCs, the MOECC Director will refuse the ECA application.

Recommendation No 4: The MOECC should apply cumulative effects assessment to all contaminants that are listed on Schedule 3 of O. Reg. 419/05, including sulphur dioxide.

Recommendation No. 5: The proposed cumulative effects assessment policy should apply province-wide and not be restricted to only the Hamilton/Burlington and Sarnia/Corunna areas.

Sincerely,

CANADIAN ENVIRONMENTAL LAW ASSOCIATION

A handwritten signature in black ink, appearing to read "R. Nadarajah", with a stylized flourish at the end.

Ramani Nadarajah

Counsel

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