

ADOPTED by Council at its meeting held January 23, 2012 [M28-2012]  
/AA  
Windsor, Ontario January 23, 2012

**REPORT NO. 34** of the  
**ENVIRONMENT & TRANSPORTATION STANDING COMMITTEE**  
of its meeting held November 23, 2011

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**Present:**                    **Councillor Hatfield, Chair**  
                                  **Councillor Payne**  
                                  **Councillor Sleiman**  
                                  **Councillor Halberstadt**  
                                  **Councillor Valentinis**

That the following recommendations of the Environment and Transportation Standing Committee **BE APPROVED:**

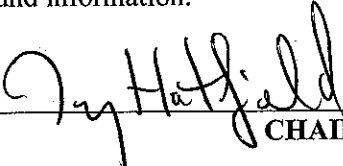
Moved by Councillor Halberstadt, seconded by Councillor Valentinis,  
That the report of the Environmental Coordinator dated October 26, 2011 entitled "Detroit Renewable Power (Detroit Incinerator)" **BE RECEIVED** for information and further,

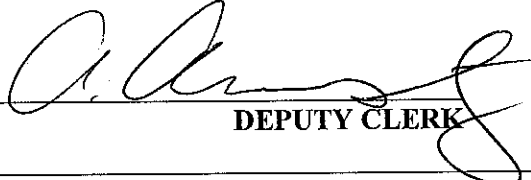
That the Windsor Essex County Environment Committee make an offer of support with available resources to Zero Waste Detroit for its petition against the permit extension for Detroit Renewable Power (Detroit Incinerator).

Carried.

**Livelinek 15535, EI2011**

Clerk's Note: The report entitled "Detroit Renewable Power (Detroit Incinerator)" dated October 26, 2011 is attached as background information.

  
\_\_\_\_\_  
CHAIRPERSON

  
\_\_\_\_\_  
DEPUTY CLERK

NOTIFICATION:				
Name	Address	Email Address	Telephone	FAX

**THE CORPORATION OF THE CITY OF WINDSOR**  
**Environment & Transportation Standing Committee - Administrative Report**



**MISSION STATEMENT:**

*"The City of Windsor, with the involvement of its citizens, will deliver effective and responsive municipal services, and will mobilize innovative community partnerships"*

LiveLink REPORT #: 15535 EI2011	Report Date: October 26, 2011 (#3178 j-lr-10/26/11:eb)
Author's Name: Karina Richters	Date to Standing Committee: November 23, 2011
Author's Phone: 519 253 7111 ext. 226	Classification #:
Author's E-mail: krichters@city.windsor.on.ca	

To: Environment & Transportation Standing Committee

Subject: Detroit Renewable Power (Detroit Incinerator)

1. **RECOMMENDATION:** City Wide:  Ward(s): \_\_\_\_\_

That City Council RECEIVE this report for information.

**EXECUTIVE SUMMARY:**

2. **BACKGROUND:**

On May 10, 2010, City Council adopted the following resolution:

**M147-2010** That the City of Windsor SUPPORTS the attached objection of the Citizens Environmental Alliance of Southwestern Ontario, to the Renewable Operating Permit for the Greater Detroit Resource Recovery Facility, SRN M 4148, Wayne County, also known as the Detroit Incinerator.

This objection is attached as an appendix.

A letter from the Michigan's Department of Environmental Quality, dated August 19, 2011 (on Council Communications September 6<sup>th</sup> agenda) outlined that the renewal of Renewable Operating Permit (ROP) was approved.

Subsequently, Councillor Halberstadt requested an administrative report providing a preliminary investigation on the cost and effectiveness of filing an appeal.

### **3. DISCUSSION:**

Under the USEPA any person who had previously filed an objection and is dissatisfied by the issuance of the ROP may appeal the final decision to the US EPA Administrator. The City of Windsor is not listed as an official commenter during the review period. The appeal/petition must be filed within 60 days of the expiration of the US EPA's 45-day review period, in this case September 28, 2011.

The petition must be based only on an objection or comment raised during the comment period, unless that petitioner can demonstrate that it was impracticable to raise the objection during the public comment period or unless the grounds for the objection arose after the comment period. The petitioner must make a compelling argument that the agency did not adequately address the comments.

The following are the responses provided in the Michigan Department of Environmental Quality's Air Quality Division staff report arising from the objection submitted by the Citizen's Environmental Alliance of Southwestern Ontario as supported by City Council.

#### **Comment 9**

*Windsor and Essex County, Ontario are downwind of the facility. Each year in Ontario, transboundary air pollution causes 2,700 premature deaths, puts almost 12,000 people into hospitals and causes minor illness symptoms in about 2.7 million others (see "Transboundary Air Pollution in Ontario", June 2005). It is responsible for an estimated \$5.2 billion in damage to Ontario's population, economy and environment. Pollutants emitted by the facility which can have significant health impacts include: lead; particulate matter and sulfur dioxide which affect the respiratory system and heart disease; nitrogen dioxide which can affect the respiratory system; volatile organic compounds which can react with nitrogen dioxide to form ozone which affects the respiratory system; and, mercury which can damage the kidneys and brain function.*

#### **AQD(Air Quality Division) Response 9**

*The DEQ is confident that the regulatory requirements applicable to the facility provide a level of public health protection for criteria air pollutants as well as air toxics. The facility air emissions are in compliance with all applicable rules and regulations as shown in the attached ROP Renewal Staff Report's most recent 5 year stack test results table. Our air monitoring data indicate that the levels of fine particulate matter (PM2.5) in Detroit and all of Southeast Michigan are in compliance with the National Ambient Air Quality Standards (NAAQS) and we are currently in the process of pursuing redesignation into attainment status from the USEPA with the PM2.5 standards. The monitored levels of lead in the air in Detroit are six times lower than the NAAQS. The area is also in attainment with all of the other NAAQS – such as sulfur dioxide, nitrogen oxide, carbon monoxide, ozone, and particulate matter (PM10). The facility is one source of emissions which can contribute to transboundary air pollution, and estimates can be derived for the health effects and costs of air pollution in Ontario. However, such estimates do not override the fact that the operating permit for this facility complies with all applicable rules and regulations, including those designed to ensure a sufficient level of health protection.*

#### **Comment 5**

*One commenter stated that there is a large concentration of children with lead poisoning near and east of the facility, as reported by the Detroit Free Press. Another commenter stated that a study by the Detroit Free Press noted that the facility released 396 pounds of lead into the air.*

between 1998 and 2001, and soil tests in the neighborhood to the east of the incinerator showed high levels along three streets, of between 532 and 604 ppm. Lead poisoning among Detroit's children is a serious public health crisis, and the ZIP code surrounding the incinerator had the highest percentage of Detroit children who were tested and diagnosed with elevated blood lead levels (DFP, January 21-26, 2003 special report, [www.freep.com/lead](http://www.freep.com/lead)).

#### **AOD Response 5**

The website cited for a 2003 special report by the Detroit Free Press is not an active website, and the report was not provided to DEQ by the commenter, therefore it is not possible for DEQ to evaluate that information and to provide specific responses. We have reviewed the childhood lead information including the interactive maps cited in the Detroit Free Press article on May 16, 2010, and from the Michigan Department of Community Health.

Elevated blood lead in children is a very serious problem in Detroit. The predominant cause of childhood lead poisoning is lead paint in homes. Urban soils, in Detroit and in other cities, can be expected to have areas with elevated soil lead due to the historical use of lead in gasoline (and in vehicle emissions) and in house paint. Historically, some industries such as lead smelters may have also caused local hotspots of lead in topsoil. Once lead has been deposited in soil, it moves very little through the soil and can persist for a long time. Elevated soil lead can be a significant contributor to children's exposure.

Therefore, lead contamination of soils from these sources continues to be a concern. Some exposure also comes from low levels of lead that occur in food, water, and in the air. There is no indication that the facility emissions of lead are a significant contributor to the childhood lead problem in Detroit. Although the facility's lead emissions do contribute to the ambient air levels, those levels are well below the national ambient air quality standard, which is set at a level that is protective of children's health from exposure via direct inhalation as well as from indirect exposure due to lead deposition. A DEQ evaluation of the facility's lead air emissions and deposition to the topsoil estimated that the most impacted location may have an increase of 4 parts per million (ppm) of lead in topsoil after 30 years of facility operation and topsoil accumulation. That maximum point of impact may be compared to the residential topsoil direct contact cleanup value of 400 ppm. Therefore, although the facility's lead emissions can be expected to make some contribution to the topsoil lead level near the facility, that impact is relatively small. Children's blood lead levels depend on overall lead exposure from house dust, soil, air, food, and water. The contribution of the facility's emissions to the local lead levels in air, topsoil, garden produce and house dust are not reasonably anticipated to be significant in comparison to background levels in house dust and soil which are attributable to the historical use of lead in paint and gasoline.

#### **Comment 10**

The DEQ should perform a thorough cumulative impact analysis of the facility to protect human health and the environment, and lower the emission rates, under the authority of Rule 228. The DEQ has the authority to apply lower limits to protect the public health, particularly in this case due to cumulative and disparate impacts. The ROP should consider the cumulative effects of all the pollution sources affecting the residents of this community and those downwind of the facility. Because of the significant number of pollution sources in the community, the emissions from the incinerator, which is one of the largest pollution sources in the area, must be considered adverse.

## **AQD Response 10**

*The DEQ operates air monitors to assess the cumulative impacts of specific air pollutants. This includes three air monitors just east of the facility, at the EQ-Detroit property. We have also reviewed the EPA assessment of the cumulative impact of specific air toxics in each census tract (the National Scale Air Toxics Assessment, NATA). And, the facility's permitted emissions of air toxics and criteria air pollutants are acceptable under all applicable DEQ rules and regulations, including those that are designed to ensure public health protection. These sources of information do not suggest that the facility emissions cause significant cumulative adverse impacts on community health. It is unclear if the commenter is requesting a broader inclusion of factors in the analysis of "cumulative impacts". As indicated above, the DEQ has taken steps to attempt to evaluate and to account for cumulative air quality impacts. The DEQ has limited authority to account for cumulative air impacts in the permitting process, and has no authority to take into account environmental issues that are not air quality related.*

The most common reason for the US EPA Administrator to object to a proposed permit is that it lacks sufficient periodic monitoring to assure compliance with applicable requirements. The Administrator has also objected to a proposed permit because it did not include applicable New Source Review requirements and New Source Performance Standards.

There is no cost in filing a petition; costs would be limited to staffing resources. However, the biggest obstacles are the deadline for appeal is September 28<sup>th</sup> as well as the limited knowledge of the US appeals process. At this time it is also unclear if a Canadian organization petitioning would be considered unless as a follow-up to an objection to air pollution made under the Canada-US air quality agreement or perhaps the Boundary Waters Treaty due to air deposition of pollutants into the boundary waters. Again, the City of Windsor is not listed as officially filing an objection during the comment period which precludes us from filing a petition at this time.

However, the Zero Waste Detroit coalition is working with the Great Lakes Environmental Law Clinic at Wayne State University (public advocacy law clinic) to file a petition with the US EPA. Two organizations most active on this are the Sierra Club and Ecology Center.

### **4. FINANCIAL MATTERS:**

N/A

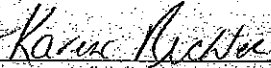
### **5. CONSULTATIONS:**

- Legal Department
- Citizens Environmental Alliance of Southwestern Ontario
- Ecology Centre
- Sierra Club Southeast Michigan Group

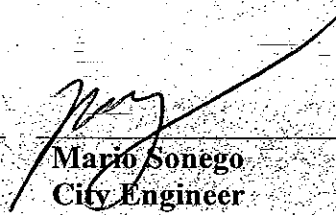
### **6. CONCLUSION:**

The City of Windsor does not currently have standing to file a petition as an official objection was not received by the City of Windsor during the comment period of April 12 to June 3, 2010, though the City of Windsor supported the objection by the Citizen's Environmental Alliance of Southwestern Ontario.

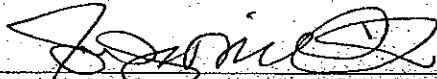
The Zero Waste Detroit coalition will be proceeding with a petition to the US EPA on the Renewable Operating Permit (ROP) for the Detroit Renewable Power, LLC, formerly known as the Greater Detroit Resources Recovery Facility (Detroit Incinerator).



**Karina Richters**  
Environmental Coordinator



**Mario Sonogo**  
City Engineer



**George Wilkki**  
City Solicitor and Corporate Leader  
Economic Development and Public Safety

**APPENDICES:**

**Appendix 1. Objections from Citizen's Environment Alliance of Southwestern Ontario's Objection to the Renewable Operating Permit for the Greater Detroit Resource Recovery Facility SRN M4148, Wayne County**

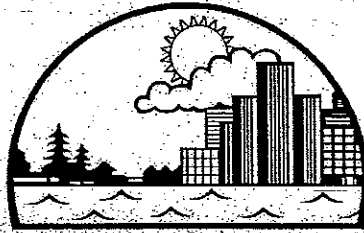
**DEPARTMENTS/OTHERS CONSULTED:**

Name:

Phone #: 519 ext.

**NOTIFICATION :**

Name	Address	Email Address	Telephone	FAX



phone: 519-973-1116

fax: 519-973-8360

**CITIZENS ENVIRONMENT ALLIANCE**  
of southwestern Ontario

May 11, 2010

Mr. Remilando Pinga  
DNRE, AQD Detroit Field Office  
3058 West Grand Boulevard Suite 2-300  
Detroit, MI 48202  
Via Fax: 313-456-4692

Re: Renewable Operating Permit for the Greater Detroit Resource Recovery Facility,  
SRN M4148, Wayne County

The Citizens Environment Alliance of southwestern Ontario urges the Michigan Department of Natural Resources and Environment (MDNRE) to deny the proposed renewable operating permit (ROP) for the Greater Detroit Resource Recovery Facility based upon the significant adverse impacts on the surrounding and downwind communities.

The Greater Detroit Resource Recovery Facility, also known as the Detroit Municipal Waste Incinerator ("the Municipal Incinerator"), began operating in 1991. By most accounts, it is the largest waste-to-energy incinerator in the United States.

The MDNRE estimates that the Municipal Incinerator annually emits 263.52 tons of carbon monoxide, 1,729.89 tons of nitrogen oxides, 199.74 tons of sulfur dioxide, 12.14 tons of particulate matter, 3.62 tons of volatile organic compounds, 0.03 tons of lead, and more than 41 tons of other hazardous air pollutants. A study by the Detroit Free Press noted that the Municipal Incinerator released 396 pounds of lead into the air between 1998 and 2001, and soil tests in the neighborhood to the east of the Incinerator showed high lead levels along three streets, of between 532 and 604 ppm. In addition, EPA estimated that in 1999 the Municipal Incinerator released approximately 320 pounds of mercury, making it the third largest source of mercury emissions in the state. The facility has a long history of substantial air emissions.

Windsor and Essex County, Ontario are downwind of the Municipal Incinerator. Each year in Ontario, transboundary air pollution causes 2,700 premature deaths, puts almost 12,000 people into hospital and causes minor illness symptoms in about 2.7 million others. (Ministry of the Environment (MOE): *Transboundary Air Pollution in Ontario*, June 2005).

It is responsible for an estimated \$5.2 billion in damage to Ontario's population, economy and environment. (MOE website:

<http://www.ene.gov.on.ca/en/air/tap/index.php#info>)

The pollutants emitted by the Municipal Incinerator can have significant health impacts. Lead poisoning among Detroit's children is a serious public health crisis, and the ZIP code surrounding the Incinerator had the highest percentage of Detroit children who were tested and diagnosed with elevated blood lead levels. (Detroit Free Press, January 21-26, 2003 special report, [www.freep.com/lead](http://www.freep.com/lead)). Exposure to particulate matter can trigger asthma attacks and aggravate other lower respiratory diseases, and is related to increased rates of lower respiratory and heart disease and to higher mortality from these illnesses. (EPA website: [www.epa.gov/oar/aqtrnd97/brochure/pm10.html](http://www.epa.gov/oar/aqtrnd97/brochure/pm10.html)). Exposure to high levels of nitrogen dioxide (NO<sub>2</sub>) can irritate the lungs and may contribute to acute respiratory illnesses. (EPA website: [www.epa.gov/oar/aqtrnd95/no2.html](http://www.epa.gov/oar/aqtrnd95/no2.html)). Sulfur dioxide (SO<sub>2</sub>) can make breathing difficult and exacerbate respiratory illness and existing cardiovascular disease. (EPA website: [www.epa.gov/oar/aqtrnd95/so2.html](http://www.epa.gov/oar/aqtrnd95/so2.html)). Exposure to ground level ozone, which is caused when volatile organic compounds (VOCs) react with nitrogen oxides, significantly reduces lung function and causes respiratory inflammation, even in healthy individuals. Long term exposure can cause permanent lung damage. Mercury exposure can damage brain functioning and can also cause damage to the kidneys. (ATSDR website: [www.atsdr.cdc.gov/tfacts46.html](http://www.atsdr.cdc.gov/tfacts46.html)).

Many of these pollutants are particularly harmful to vulnerable populations, such as children, the elderly and those who are already suffering from respiratory or heart diseases. This last fact makes these emissions even more significant, because Detroit residents and the community directly surrounding the facility have significantly poorer general public health than surrounding communities.

The ROP should consider the cumulative effects of all the pollution sources affecting the residents of this community and those downwind of the facility. The Municipal Incinerator is far from the only pollution source in this community. Its emissions must be considered in conjunction with the pollution created by other sources. Because of the significant number of pollution sources in the community and the poor public health already existing in the community, the emissions from the Municipal Incinerator, which is one of the largest pollution sources in the area, must be considered adverse.

Sincerely,



Derek Coronado

Coordinator, Citizens Environment Alliance of southwestern Ontario