

Comments on the Step 7 – Evaluation of Short-List Sites and Identification of Preferred Site Report

By Wendy Bracken

On Monday December 3, 2007 the peer review consultants for Clarington presented their reviews of Step 7 – Evaluation of Short-List Sites and Identification of Preferred Site to Clarington's GPA Committee. The Clarington staff produced Report PSD-141-07 which included those peer review reports and Clarington Council voted to send a copy to MOE so the MOE should already have these. In the most professional way the Clarington peer reviewers exposed the major flaws in the Step 7 Report. **All** of the peer review consultants **agreed together** that there are major flaws in the Site Selection report – major flaws which included serious concerns with overall methodology and approach, concerns with the very high reliance on the consultants' professional judgement instead of on quantitative site specific data (because site specific studies were not complete), concerns with how the criteria were not weighted to reflect the public's concerns, and identification of errors in calculations and omissions which once corrected and included could have resulted in the selection of a different site.

Some highlights from peer reviewer Stephen Rowe's conclusions are the following. Two of the significant issues he identifies (and there are many more) are:

- Flaws in the way “advantages and disadvantages” are identified, aggregated, and considered in the site comparison. Advantages and disadvantages do not necessarily represent advantages and disadvantages to the environment, as required by the EA Act, and this has the potential to affect the site comparison.

- The effect of the selected evaluation methodology in reducing the relative significance of the air quality and natural environment criteria rated highest by the public through the consultation process, by trading these criteria off against each other.

These concerns and others were echoed in the reports from the other peer review consultants for Clarington. The **peer review consultants made the statement that the site evaluation has “reduced the importance of public health and safety”**, yet the public rated that as the number one priority to protect. Leading the concerns on public health and safety were concerns about the impact on our air shed. Many delegations and letters from the public, the doctors, and the peer consultants (as said by Mr. Van der Vooren from AMEC –the peer reviewer specializing in air quality) identified air quality impact as a key concern in this environmental assessment. The AMEC report stated there are “serious concerns related to the overall process and the current availability of key data and information necessary to make a final determination of the preferred site”. We know there are problems with our air shed. St. Mary's Cement is a major polluter. Dr. Debra Jefferson reported to Councils that we have the second highest rate of asthma in Ontario as reported by ICES in their 2006 report. When you look at the following table of National Pollutant Release Inventory data which one can find in Annex A of the Regions' Site Selection Report you can understand the problem. Industries report their emissions to Environment Canada who keep this National Pollutant Release Inventory. Tables 3.7 and 3.9 of Annex A of the Step 7 report summarize the industrial criteria air

pollutant emissions (in metric tonnes per year) within 20 km of the Clarington 01 and East Gwillimbury sites respectively. **The differences between the Clarington 01 (Courtice) and East Gwillimbury air sheds are extreme.** These totals show the total industrial emissions of some of the criteria air pollutants (tonnes/year) within 20 km of each site.

<i>Industrial Emissions</i>	CO	NOx	PM	PM ₁₀	PM _{2.5}	SO ₂	VOC
Clarington Totals	4392.0	6089.0	700.0	571.0	274.0	8703.0	4525.0
E. Gwillimbury Totals	50.2	5.1	77.1	81.9	41.2	0.3	1137.3

(Note: CO – Carbon Monoxide, NO_x – Oxides of Nitrogen, PM – Particulate Matter, PM₁₀ – Particulates ≤ 10 microns, PM_{2.5} – Particulates ≤ 2.5 microns, SO₂ – Sulfur Dioxide, VOC – Volatile Organic Compounds)

When one looks at the data for Clarington 01, it is very concerning to see what a huge polluter St. Mary’s Cement is. And when comparing the totals for the two air sheds one is struck by the great magnitude of the differences between Clarington and East Gwillimbury for the various emissions. In the case of oxides of nitrogen (NO_x), the total of those emissions for Clarington is 6089 metric tonnes. The total NO_x emissions for East Gwillimbury is only 5 tonnes! What an incredible difference. And NO_x emissions have well known health impacts. Dr. David Pengelly said the following in his peer review of the Halton Business Case:

We have already demonstrated to Halton Public Health that NO₂ is responsible for a substantial burden of premature mortality in the Region. The introduction of another major source of fine particles and oxides of nitrogen by virtue of siting a large EFW facility where it is proposed may not be an acceptable choice for the health of the population living within this airshed.

It is not only the oxides of nitrogen totals between the two sites that show incredible differences. Across the board there are huge differences in the emissions totals for carbon monoxide, particulate matter of all sizes, sulfur dioxide and volatile organic compounds. Those tables only take into account criteria industrial emissions. They do not take into account air toxics. Once highway emissions are taken into account, the gap would widen with Clarington 01 having the 400 series and 35/115 highways so close. When you look at the emissions totals and the high values for Clarington it is clear we should not be ADDING to an already over burdened airshed nor should we be siting it virtually next door to the most major polluter, St. Mary’s Cement. With public health and environment identified as the public’s paramount concern, and with thermal treatment identified as the alternative with the greatest impact on the air shed (that is from the “Alternatives To” document), the comparison of air sheds should have been given the greatest consideration, a much greater weighting. That did not happen in Step 7. It should be incredible to everyone that, despite all of this information, on Impact on Air Quality, the Regions’ consultants gave Clarington 01 and East Gwillimbury the

same overall rating – NEUTRAL. Part of what contributed to this overall rating was Clarington 01 being identified as ADVANTAGED when it came to truck hauling emissions, however, the peer review consultants for Traffic Impact Analysis, TSH, have found significant errors in the way the traffic calculations were done and waste values were assumed which once adjusted could very well change the ranking and have East Gwilliambury identified as the ADVANTAGED site under truck haulage emissions criteria. The peer reviewers indicated this could well have changed the site selection.

On July 6, 2009 another set of Clarington peer review reports were released. There were a number of outstanding issues that had not been resolved with the Study Team and the peer reviewers had not accepted their dispositions for a number of very important issues and many of the 2007 site selection issues were still unresolved. Clarington peer reviewer Stephen Rowe reported in Clarington Council chambers that, despite spending considerable time with the Study Team, he was not able to follow a traceable rationale for arriving at some of their conclusions in the Site Selection report.

I urge the MOE to read all of the 2007 and 2009 Clarington peer review reports very carefully and question the quality of the information given not only in the Step 7 report, but in all the reports. In my opinion, the decision on Site Selection has had great impact on the results of the Air Quality Assessment and the Human Health and Ecological Risk Assessment. I believe evidence of a poor site selection is captured in those reports.