



Action Plan Executive Summary – DRAFT

This Action Plan Report has been prepared to support the Owens Corning Guelph Glass request for a site-specific annual standard for hexavalent chromium under Section 32 of Ontario Regulation 419/05: Air Pollution – Local Air Quality (O. Reg. 419/05). The report has been prepared in accordance with the methodology provided by the MOECC in the document “*Guide to Requesting an Alternative Air Standard*” (GRAAS), December, 2007, to meet the requirement of Section 33(4) sub paragraph 4. The Action Plan identifies and provides the timing for the planned steps that will be implemented to reduce point of impingement (POI concentrations) of hexavalent chromium.

The Owens Corning facility is located at 247 York Road in Guelph Ontario. The facility produces textile glass yarn and fiberglass for reinforcements for commercial and industrial markets worldwide. This facility is the sole producer of fiberglass for reinforcements in Ontario and Canada and has been operating in Guelph since 1951. Due to the nature of the process, the facility operates continuously 24 hours per day, 365 days per year. Detailed process descriptions and documentation of emission estimates are located in the Emission Summary and Dispersion Modeling (ESDM) Report.

This is one of the companion documents to the ESDM Report where modeling indicates that the facility would not meet the future hexavalent chromium standard and that a site-specific standard is necessary. The facility has completed the required elements of a Technology Benchmarking Report (TBR) identifying all commercially available and technically feasible emission control technologies (and combinations of technologies) to reduce the concentrations of hexavalent chromium. The resulting pollution control strategies that can reduce the maximum predicted POI concentration were then assessed using an Economic Analysis methodology acceptable to the MOECC. Several of the technically feasible pollution control strategies that are predicted to achieve significant reductions in predicted POI concentrations were excluded from further consideration due to the outcome of the economic feasibility assessment. However, Owens Corning is committed to reducing POI concentrations of hexavalent chromium, and has selected a combination of options for implementation that are expected to reduce the predicted off-site POI concentration more than 85% by 2016. These options have been incorporated into the Action Plan outlined in the following table.

The facility has a production ‘re-build’ scheduled for early 2016 to shut-down the continuous glass making process and install the technologies indicated below. Owens Corning is requesting a site specific standard for a 10 year time span to reflect the investment and operation cycle of the furnace which dictates that 2026 will be the next available opportunity to install new reduction technologies.

Action Plan Summary for Reducing POI Concentrations of Hexavalent Chromium

Timeline	Actions
Early 2016	<p>Replace the existing furnace with a new smaller furnace with improved technology.</p> <p>Install state of the art combustion controls system and use improved construction techniques on all remaining sections of the process (forehearths).</p> <p>Re-engineer the following stacks to overcome site specific dispersion challenges:</p> <ul style="list-style-type: none"> • furnace stacks • remaining forehearth stack • general ventilation exhauster for the new furnace
2017 - 2018	Evaluate reductions using source testing.
Ongoing 2017- 2026	Review operational life span of the remaining furnace hall general ventilation exhausters and replace with re-engineered exhausters to improve dispersion.
Ongoing 2015 - 2023	<p>Continue to evaluate, research and implement new technologies to prevent formation of hexavalent chromium at the source and limit emissions including:</p> <ul style="list-style-type: none"> • research impact of air/gas combustion in the forehearths on formation of hexavalent chromium • monitor effectiveness of further combustion control improvements/changes • drive innovation with suppliers of low sublimation chromium (LSC) refractory including quantification of the potential to reduce the formation of hexavalent chromium • monitor the development/emergence of technologies that decrease formation or improve capture of hexavalent chromium emissions