



Community Consultative Committee – Out of Session Update 3

12 June 2020

BlueScope would like to provide an update on the Sinter Plant bypass project, following the Out of Session Updates delivered on 27 April, 2 May 2020 and discussion at the Community Consultative Committee meeting held on 21 May 2020.

One of the actions that was undertaken as part of the investigation into the elevated dioxin/furan results was to engage an external consultant to undertake a review of the Health Risk.

The following executive summary from this report is provided below.

Executive Summary

Environmental Risk Sciences Pty Ltd (enRiskS) has been commissioned by BlueScope Steel (BlueScope) to undertake a review of risks to human health associated with emissions to air from some variations to the operation of the Sinter Plant located in the Port Kembla Steelworks.

BlueScope Steel operates an integrated steel plant at Port Kembla. As part of the steel making process, iron is first subjected to a blast furnace process. The blast furnace is fed with iron bearing raw materials, including iron ore pellets, lump iron ore and sinter, with sinter making up approximately 80% of the feed. Emissions from the blast furnace and related processes are put through a range of pollution control equipment to ensure compliance with licence limits specified by the NSW EPA. This equipment includes the waste gas cleaning plant which was introduced at the site in 2003.

When preventative maintenance is undertaken on parts of the waste gas cleaning plant, some parts of the pollution control equipment must be taken offline – “bypass”. Such a bypass occurred between late February and early May 2020 to allow work on elevated ducting (about 40 m above ground), the stack and other equipment. While the plant is in bypass, the waste gases from the sinter plant are only cleaned using electrostatic precipitators rather than the full waste gas cleaning process.

Some of the weekly results (while in bypass) have exceeded the relevant licence limit for dioxin like chemicals. An assessment is required to evaluate potential health risks due to these short-term exceedances of the licence limit. These exceedances occurred in March and April 2020 while the plant was on bypass.

This assessment has shown that results provide the following information:

- Inhalation only exposure
 - o Risks due to inhalation exposures only are at least 10000 fold lower than the maximum acceptable level.
 - o The difference in risks for operations under bypass conditions for 12 months compared to normal operations for 12 months is about 15 fold.
 - o The difference in risks between normal operations for 12 months and a year with 4 months of bypass and 8 months of normal operations is about 6 fold.
- All exposure pathways combined
 - o Risks due to exposure via all pathways for children are at least 300 fold lower than the maximum acceptable level assuming bypass occurs all year with emissions at the highest concentration measured during the recent bypass period.
 - o Risks due to exposure via all pathways for adults are at least 1000 fold lower than the maximum acceptable level assuming bypass occurs all year with emissions at the highest concentration measured during the recent bypass period.
 - o Risks due to exposure for infants are at least 100 fold lower than the maximum acceptable level assuming bypass occurs all year with emissions at the highest concentration measured during the recent bypass period.

- o The difference in risks for operations under bypass conditions for 12 months compared to normal operations for 12 months is about 20 fold.
- o The difference in risks between normal operations for 12 months and a year with 4 months of bypass and 8 months of normal operations is about 6 fold.

These differences in risk are negligible, particularly given how far the estimated risks are below the recommended maximum acceptable level.

Environmental Risk Sciences Pty Ltd, 2020, " *Review of Human Health Risks – Emissions from Sinter Plant* "