

SINTER PLANT WASTE GAS CLEANING PLANT - BYPASS UPDATE

2 May 2020

Following the fire at the Sinter Plant Waste Gas Cleaning Plant (WGCP) stack in late 2014, BlueScope occasionally needs to temporarily bypass the machine in order to undertake necessary maintenance on the equipment to ensure its safe and efficient operation. This is conducted under strict EPA licence conditions for the duration of any bypass which includes additional air quality monitoring.

The WGCP has been in 'bypass mode' since 18th February 2020 to undertake a 12-week schedule of activities, including the repair and preventative maintenance on the ductwork of the WGCP stack. On closer inspection, following the cleaning of the inside of the duct and stack, there were significant areas that were identified as needing replacement rather than maintenance or repair. This extended scope of work will now need to be completed in a future bypass.

Stack Testing Results:

During the period 18 February to now, BlueScope has conducted continuous air monitoring for particulate matter, and weekly samples for dioxins/furans (PCDD/F), heavy metals, combustion gases, hydrogen chloride, hydrogen fluoride and sulphur trioxide.

The sinter plant stack emission sampling program has progressed to plan with all results published (as they become available) on the [BlueScope in the Illawarra website](#).

Six weeks into the bypass, a result of 0.43ng/m³ for dioxins/furans was recorded from a sample taken on the 26 March 2020, exceeding the licence limit of 0.3ng/m³. The results of this test were received from the laboratory mid-April. BlueScope immediately notified the EPA of the exceedance and was instructed by the EPA to increase the frequency of testing for dioxins/furans from weekly to daily, as well as provide an update to BlueScope's Community Consultative Committee (CCC), outside of its normal meeting cycle.

Subsequent to that elevated reading, results received this week confirm more exceedances of the licence limit for dioxins/furans (limit of 0.3ng/m³) samples collected on: 6 April 2020 result of 0.35ng/m³; 20 April 2020 result of 0.45ng/m³ and 23 April 2020 result of 0.52ng/m³.

Results currently available for all other tests have remained within the strict EPA set licence limits.

BlueScope Response

BlueScope has taken a number of actions in response to the exceedances, including some actions (outlined below), which are in addition to those required by the EPA, including:

- Increased sampling frequency for dioxins/furans to daily.
- Reducing Sinter Plant production rates as far as practicable to minimise the potential of emissions exceeding licence limits whilst continuing to service the Blast Furnace.
- Bringing forward the restart of the WGCP from the original EPA approved date of 14th May.
- Investigating the cause of the elevated results (including an incident report to be provided to the EPA), the scope of which has been extended to include the most recent results.
- Engaging an external consultant to undertake a review and advise on any health impacts from the results.
- Updating air emission modelling of the elevated results to determine the estimated ground level concentrations; and
- Faster turn-around time between sampling and receipt of dioxin/furan results (to the extent the laboratory conducting the testing is able to do so).

Next Steps:

In light of the most recent results, the completion date for the bypass for the WGCP has been brought forward and is now planned to be back in service earlier than originally planned.

BlueScope has also taken the decision to stop the Sinter Plant from 5:30pm Saturday 2nd May.

The Blast Furnace will continue to operate through this period and there will be no supply impact to customers.

It is anticipated the Sinter Plant and the WGCP will return to normal operations on the 8th May.

As previously mentioned, due to unforeseen repair and maintenance that needs to be completed, and now with the bypass completion date moved forward, some of the work will need to be carried out in the next bypass or Sinter Plant shutdown.

The EPA has been advised of the interim arrangement and most recent results.

For more information, please check www.bluescopeillawarra.com.au or call our Environmental Hotline on 1800 640 252.

FURTHER INFORMATION ABOUT

Sinter Machine

The Blast Furnace process cannot use fine raw materials (small particles) because gasses need to circulate through the furnace, so these are baked together into a hard, porous (has holes through it so gas can pass through) rock called sinter – which is then placed into the furnace.

The Waste Gas Cleaning Plant (WGCP)

The construction of a waste gas cleaning plant attached to the Sinter Machine in the early 2000s significantly reduced emissions from the Sinter Plant. From time-to-time the WGCP needs to be temporarily bypassed to conduct necessary maintenance on equipment to ensure its safe and efficient operation.

