

ASSESSMENT REPORT

BlueScope Steel Waste Gas Cleaning Plant (DA 26-02-01 MOD 2) Section 75W Modification

1. BACKGROUND

BlueScope Steel Pty Ltd (the Proponent) operates the Port Kembla steelworks, located at Port Kembla in the Wollongong local government area (see **Figure 1**).

This report assesses a modification request by the Proponent to amend a number of conditions of consent for the Waste Gas Cleaning Plant (WGCP), which forms part of the steelworks infrastructure.

The Proponent is Australia's largest steel manufacturer, and at its peak, the Port Kembla steelworks employed around 30,000 people. The site now employs a significantly smaller workforce of around 3,500 employees and production has also dropped by around 50%.

The steelworks are located on around 742 hectares of land adjacent to Port Kembla Harbour. The harbour has been highly modified to support a range of industrial uses including as an export location for coal mined in the southern and western regions of New South Wales. The closest residential suburbs to the steelworks are Mount St Thomas and Cringila.



Figure 1: Bluescope steelworks – local context

1.1 Site History – Development Approvals

A number of consents and approvals exist for the steelworks. The steelworks site contains extensive infrastructure (see **Figure 2**) that has been progressively constructed and updated since 1928, including the Sinter Plant which was commissioned in 1975. The Sinter Plant produces sinter which is composed of fine iron ore particles and is central to the production of iron (in the blast furnace).



Figure 2: Extensive steel making infrastructure at the Port Kembla steelworks

In 2001, it was established that the Sinter Plant technology was outdated and the existing air quality mitigation measures (dry precipitators) were not enabling the Proponent to meet requirements for dust and dioxin emission reduction. The WGCP was initially proposed in consultation with the Environment Protection Authority (EPA) as part of the implementation of a Pollution Reduction Plan (PRP) placed on the steelworks site's Environment Protection Licence (EPL), to enable the Proponent to meet its emission limits.

On 1 August 2001, the then Minister for Planning granted development consent to the Proponent for the construction and operation of the WGCP within the broader steelworks site. The WGCP is connected to and downstream of the Sinter Plant. It commenced operation in 2003.

The WGCP is extensive and occupies a footprint area of approximately 6,000 square metres (m²) (110m long by 54m wide). It has a 100m high air emissions exhaust stack (see **Figure 3**).

1.2. Existing Operations

The WGCP currently 'cleans' gas emissions from the Sinter Plant using carbon adsorption technology. The carbon 'collects' dust, dioxins, sulfur oxides (SO_x) and oxides of nitrogen (NO_x) - reducing the load of pollutants discharged to the atmosphere. Since 2004, the WGCP has reduced dust emissions by 80% and dioxins by 97%. A waste product from the 'cleaning' process is 'sulfur rich gas' (SRG), which under the original consent, was to be utilised by the nearby Incitec facility at Port Kembla to manufacture sulfuric acid.

1.3. Modifications

The option to pipe SRG to the Incitec site was not implemented at the site. A modification to the development consent (MOD 1) was approved by the Department on 22 September 2005

(MOD 50-4-2005) for the development of a Gypsum Plant to utilise SRG in the manufacture of gypsum. Under the modified consent, gypsum is transported to Boral Cement at New Berrima by road for use in the manufacture of cement.

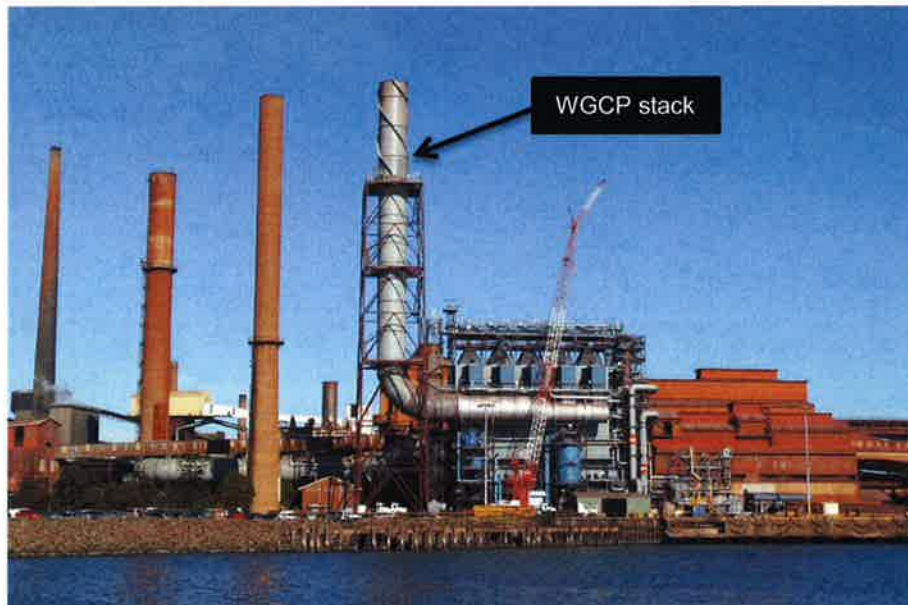


Figure 3: The Waste Gas Cleaning Plant, and main exhaust emissions stack

2. PROPOSED MODIFICATION

On 27 June 2014, the Proponent submitted a modification request (DA 26-02-01 MOD 2) under Section 75W of the the *Environmental Planning and Assessment Act 1979* (the EP&A Act) to modify the WGCP consent, including:

- removal of conditions that it considers are no longer relevant to its operations, especially those that are related to construction, commissioning or verification activities;
- removal of any air, noise and water monitoring and reporting requirements from the consent which are duplicated in the WGCP Environment Protection Licence (EPL 6092), which is regulated by the EPA; and
- rationalise and streamline its annual reporting requirement from annually to tri-annually.

The modification request is described in full in the letter from the Proponent included in **Appendix B**.

The Department notes that the key issues addressed by the existing conditions of consent include measures to manage, monitor and minimise:

- air quality – to limit and monitor emissions from the WGCP, including dust, dioxins, sulfur and oxides of nitrogen, SRG and radionuclides;
- waste – to manage the disposal of non-liquid, liquid and gaseous waste from the waste gas cleaning plant,
- noise – including construction noise, and ongoing monitoring of noise impacts;
- hazards and risks – that is to minimise potential impacts on surrounding land, and
- stormwater.

There is also an annual reporting requirement to document compliance with all statutory approvals relating to the WGCP.

The modification request was placed on hold by the Proponent in October 2014. The Department recommenced its assessment of the modification request in February 2016.

2.1 Modification Need and Justification

The Proponent considers that it has invested significant time, resources and capital into improving the environmental performance of the WGCP, since the commencement of operations in 2003. This includes entering into a number of PRPs with the EPA which are now completed.

The 2001 development consent included the EPA's general terms of approval which formed the basis for the EPL. The EPL has since been amended a number of times and is no longer consistent with the development consent. The Proponent is now seeking to remove a number of conditions in the development consent that have either been satisfied or are inconsistent with the requirements in the EPL.

The Proponent also considers that its reporting obligations to the Department are onerous given the number of consents and approvals that currently exist for the Bluescope site. The Proponent considers that reducing its reporting frequency and removing redundant conditions would assist in reducing the complexity, time and cost involved in reporting against the consent requirements.

3. STATUTORY CONTEXT

3.1. Section 75W Modification

Under Clause 8J(8) of the *Environmental Planning and Assessment Regulation 2000*, a development consent granted by the Minister for Planning under *State Environmental Planning Policy No 34 – Major Employment Generating Development* is to be modified under Section 75W of the EP&A Act. Despite the repeal of Part 3A of the EP&A Act, the effect of Section 75W is continued for such consents by the operation of clause 12 of Schedule 6A of the EP&A Act.

The Department is satisfied that the proposed modification is within the scope allowed under Section 75W of the Act, and that Section 75W is the appropriate approval pathway for the modification. The proposal does not represent a new development in its own right. The Department notes that:

- the approved development would not change as a result of the proposed modification; and
- any potential environmental impacts would be minimal and appropriately managed through the existing or modified conditions of consent and the EPL.

3.2 Delegated Authority

The Minister was the consent authority for the original development application, and is consequently the approval authority for this modification request.

However, as reportable political donations were made by the Proponent, the application will be determined by the Planning Assessment Commission (the Commission) in accordance with the Minister's Instrument of Delegation, dated 14 September 2011.

4. CONSULTATION AND SUBMISSIONS

4.1 Consultation

Under Section 75W of the EP&A Act, the Department is not required to notify or exhibit the application. Upon receipt, the application was placed on the Department's website and following a review of the application, the Department did not consider that further consultation was necessary. Notwithstanding, the Department sought comments from the Environment Protection Authority (EPA) and Wollongong City Council (Council).

4.2 Submissions

The EPA raised no concerns with the Proponent's proposed modifications, as the majority of consent conditions have been addressed via a PRP or are also listed in EPL conditions. The EPA did recommend that conditions relating to the potential use of SRG in fertiliser manufacture should be retained, should the Proponent wish to pursue this option in the future.

Council raised no concerns with the modification request.

5. ASSESSMENT

The Department has assessed the merits of the proposed modification. During this assessment, the Department has considered the:

- letter prepared in support of the modification request (see **Appendix B**);
- Department's assessment report for the original development application;
- existing consent conditions;
- submissions (see **Appendix C**);
- relevant environmental planning instruments, policies and guidelines; and
- requirements of the EP&A Act, including the objects of the EP&A Act.

The Department's assessment found the key issue associated with the modification relates to the removal of a large number of conditions detailing air quality emissions monitoring and concentration limits. In addition, the Department has carefully considered the Proponent's request to amend its reporting frequency so that it can submit environmental reports to the Department every three years instead of annually. These issues are considered below. **Table 2** provides consideration of the remainder of the conditions which the Proponent is seeking to delete from its consent.

5.1 Air emissions

The Proponent is seeking to remove all references to air quality monitoring, emissions verification and load based licencing requirements from the development consent. As discussed in Section 2.1, in 2001, Ministerial consents incorporated the EPA's general terms of approval in full. These general terms of approval formed the basis for the future Environment Protection Licence (EPL) for the site.

Current practice is for detailed air quality requirements to be included in an EPL only (not development consents), which are administered by the EPA under the *Protection of the Environment Operations Act 1997* (POEO Act). Development consents now include a standard condition which requires an applicant to install and operate equipment in line with best practice to ensure that the development complies with all load limits, air quality criteria and air quality monitoring requirements as specified in the EPL for the site.

As discussed above, the WGCP formed part of the implementation of a PRP, prepared in consultation with the EPA. The EPL (containing the PRP requirements) and consent conditions were developed with the aim to significantly reduce the impact of the Sinter Plant stack emissions on surrounding areas.

The 2001 consent specifies a number of discharge limits for the WGCP exhaust stack. It also included detailed conditions covering the commissioning of the technology, which occurred over several stages in 2003 as follows:

1. individual plant devices were tested to ensure they were operating as designed prior to the introduction of waste gas from the Sinter Plant;
2. the waste gas duct from the existing Sinter Plant main fans were connected to the new WGCP;
3. waste gas was introduced to the WGCP and immediately a series of tests were undertaken to ensure the WGCP was functioning as specified; and

4. performance tests were carried out approximately three months after the introduction of waste gases, and again after eighteen months, to ensure that the criteria set out in the consent and PRP were being met.

The Proponent considers that the WGCP has been designed to maximise pollution reduction and has achieved a maximum reduction of emissions of dust, dioxins, SO_x and NO_x within the constraints of the technology. Table 1 below summarises the relevant air quality conditions of consent that are recommended by the Proponent to be deleted, as they are now either satisfied or addressed within the EPL.

Table 1: Air emissions conditions

Stage	Relevant Conditions to be deleted
Commissioning (i.e., maximising the reduction of emissions)	4.13, 4.15, 4.19, 4.20, 4.21, 4.23 and 4.24
Operation (i.e. discharge limits)	4.16, 4.17, 4.18 and 4.25
Environmental monitoring and reporting conditions	All conditions in Chapter 6

The Department notes the EPL has evolved over time and in doing so has become inconsistent with the conditions of consent. In addition, the EPA has raised no concerns with the development consent being modified to refer to the EPL (6092) for all matters relating to air emissions as the EPA will continue to regulate air emissions through the licence conditions.

The Department agrees the conditions relating to commissioning, emission limits and environmental monitoring and reporting of air quality in **Table 1** should be deleted from the consent. The majority of these conditions were general terms of approval recommended by the EPA in 2001. It is recommended the standard condition requiring the Proponent to manage air emissions in accordance with the EPL is inserted instead of these conditions.

The Department is satisfied that the EPA is the appropriate authority to monitor air emissions from the WGCP and ensure compliance with the current statutory framework in NSW, including the POEO Act.

5.2 Annual Reporting

Condition 7.4 requires the Proponent to prepare and submit an annual environmental management report (EMR). The Proponent has requested this condition be amended to allow it to submit the EMR on a triennial basis (every three years). The Proponent considers the provision of an annual EMR is an unjustified cost to the company, given the extent to which the EPL has now superseded the consent and because it is required to submit an 'Annual Return' to the EPA.

The EPA does not object to the Proponent's proposal to reduce the frequency of reporting to the Department and considers the Annual Return is a suitable mechanism for annual reporting on the environmental performance of the development. In addition, the Department notes no issues have been raised recently by either the Department or the EPA with regards to environmental performance.

The Department acknowledges the requirement to submit an Annual Return under the EPL. This is considered to be a statement of compliance and does not require the Proponent to report on other matters such as trends in emissions over time, or proposed improvements to environmental performance. In contrast, the EMR provides a mechanism for the Proponent to review the environmental performance of the development, which the Department considers is still relevant to the Proponent's operations.

As there are numerous consents (and approvals) across the steelworks site, the Proponent is required to submit a large number of reports (independent audits and environmental reports) to the Department every year. The Department agrees with the Proponent that its reporting burden to the Department is significant.

Given there have been no compliance issues with the WGCP and the EPA has agreed to the Proponents request, the Department has recommended the consent be modified to reduce the EMR reporting period to every three years.

An independent environmental audit is still required to be submitted for the development every three years. This will provide additional ongoing certainty the facility is being operated in accordance with the conditions of consent.

The Department recommends the next EMR be submitted in October of 2017, which is approximately one year following the submission of an Independent Environmental Audit report for the WGCP. This would enable the Proponent to report on any actions taken as a result of the independent audit.

5.3 Other conditions

The Proponent has requested to delete a number of other conditions which it states are either satisfied, redundant or duplicated in the EPL.

These conditions are considered in **Table 2** below.

Table 2: Other conditions which the Proponent has requested to delete from the consent

Issue	Conditions	Consideration
Construction	3.1, 3.2A, 4.2, 4.3, 4.4, 4.5, 4.8, 4.9, 4.32, 4.35, 4.36,	<ul style="list-style-type: none"> The construction of the WGCP and Gypsum Plant were both completed by the end of 2007. The conditions requiring a Construction Management Plan (3.1, 3.2A) are no longer relevant to the site as they have been fulfilled. Likewise, the conditions for construction hours (4.2-4.4), construction noise (4.5), construction dust (4.8-4.9) erosion and sediment controls (4.32) and soil remediation (4.35, 4.36) are no longer required as the conditions have either been satisfied or are no longer relevant to the operational phase of the development. The Department agrees that construction is completed and recommends that these conditions are deleted. Should the Proponent seek to undertake further construction works in the future, any approval would consider the need to manage construction related impacts through new conditions.
SRG pipeline conditions	4.21, 4.26, 4.27	<ul style="list-style-type: none"> The Proponent has requested that conditions (4.21, 4.26 and 4.27) relating to the installation of the SRG pipeline between the WGCP and the nearby Incitec site are deleted. The Proponent stated the option to pipe waste SRG to the Incitec site was not pursued or implemented at the site, and instead the Gypsum Plant was built to reuse SRG in the manufacturing of gypsum. This was confirmed by the EPA in its submission. As such, the Department recommends that these conditions are deleted.
Wastewater Treatment Plant	4.28, 4.29	<ul style="list-style-type: none"> Conditions 4.28 and 4.29 relate to a Wastewater Treatment Plant and Blowdown Water reuse, which the Proponent stated were never realised at the WGCP. As this has been confirmed by the EPA in its submission, the Department considers that these conditions are not relevant to the current operations and recommends they be deleted.
Water quality monitoring	4.31, 6.10	<ul style="list-style-type: none"> Conditions 4.31 and 6.10 require the Proponent to monitor wastewater discharged from the site. The Proponent has requested these conditions be deleted from the consent as they have been duplicated in the EPL. The EPA confirmed these monitoring requirements are no longer consistent with the EPL (pollutants and frequency of monitoring). As such, the Department has recommended these conditions be deleted. It is recommended that a new condition 4.31 is inserted to require the Proponent to ensure that licenced surface water discharges from the site comply with the discharge limits in the EPL.

Waste	4.41, 4.43 4.44	<ul style="list-style-type: none"> • Conditions 4.43 and 4.44 require the Proponent to prepare and implement a Non-liquid Waste Minimisation Strategy. The Proponent has requested these conditions be deleted as they have been satisfied. • The EPA has confirmed this requirement has been satisfied through a PRP (111). As such, the Department agrees to delete this requirement from the consent. • In addition, the Department has recommended that condition 4.41 should be replaced by a new condition which requires the Proponent to classify and dispose of waste in accordance with the EPA's current waste guidelines.
Dangerous goods, incident reporting and Hazard Audit	5.5, 5.9, 5.10	<ul style="list-style-type: none"> • Existing condition 5.5 relates to the <i>Dangerous Goods Act 1975</i>. This Act is no longer in force. The Proponent sought clarification from the Department as to whether this condition should be updated. • The Department recommends that condition 5.5 should be deleted and instead replaced with the standard condition relating to obtaining relevant licences, permits and approvals for the life of the development. The Proponent has accepted this new condition. • In addition, the Department has recommended replacing condition 5.9 (Incident Reporting) with a new condition consistent with current requirements. The current standard condition requires the Proponent to notify the Secretary within 24 hours of an incident that that causes (or may cause) harm to the environment. The Proponent has accepted this updated condition. • Finally, condition 5.10 requires the Proponent to prepare and submit a Hazard Audit (HA) every three years, or prepare a HA as directed by the Secretary. The most recent HA was undertaken in 2015, as directed by the Secretary, following the WGCP stack fire in October 2014. • The Proponent has requested that the next HA be prepared and submitted in June 2019, consistent with the date the next Independent Environmental Audit is required to be submitted. Although this would be four years after the submission of the 2015 HA, the Department agrees to amend the timing to align these reporting requirements. Should any hazard or risk issues arise during this time, the amended condition will retain the ability for the Department to require a further HA at any time.
Noise verification and monitoring	6.31	<ul style="list-style-type: none"> • The Proponent has requested to remove ongoing noise monitoring requirements from the consent and instead defer to the EPA for the ongoing regulation of operational noise impacts. • The Proponent is currently required to ensure that operational noise does not exceed the limit specified in condition 4.6. Condition 6.31 of the development consent requires the Proponent to implement a noise verification program to demonstrate compliance with condition 4.6. • As required by condition 6.31, a number of monitoring reports have been lodged over the years detailing the results of noise surveys. These reports have all confirmed the plant was operating as expected and operational noise is acceptable at the nearest residents at Mt St Thomas and Cringila North. • Noise limits are also detailed in Condition L6 of EPL 6092, however the EPL does not require routine noise monitoring. The EPA stated in its submission that the Proponent has verified noise emissions from the WGCP and it raised no concerns with the Proponent's request. • The Department is satisfied that noise impacts from the WGCP remain consistently below the relevant criteria at the nearest residential areas. As such, the Department has recommended the noise verification condition 6.31 be deleted.
SRG use for fertiliser production	6.25, 6.26	<ul style="list-style-type: none"> • Conditions 6.25 and 6.26 allow the Proponent to consider using SRG in the production of fertiliser. Should the Proponent consider this option, the existing conditions require the Proponent to consult with the Department of Agriculture (now NSW Department of Primary Industries, NSW DPI) and the NSW Department of Health (now NSW Health). • As SRG is currently used to manufacture Gypsum (used in the manufacture of cement), the Proponent requested to delete these conditions. • The EPA maintained the consent should retain these conditions, as the Proponent may change its mind and wish to reactivate this option in the future. The EPA therefore recommended this condition is amended to reflect the current situation. • The Proponent agreed with the EPA, therefore the Department has recommended a new condition 4.20 under the heading '<i>Sulfur Rich Gas Management</i>' in line with the EPA's comments (i.e. SRG use for fertiliser production requires the prior approval of the EPA, in consultation with NSW DPI and NSW Health). Conditions 6.25 and 6.26 are recommended to be deleted.

Annual return requirement	7.1-7.3	<ul style="list-style-type: none"> • The Proponent has requested to delete conditions 7.1 to 7.3 from the consent. • Condition 7.1 requires the Proponent to submit an Annual Return to the EPA, and conditions 7.2 and 7.3 require the Proponent to submit progress reports relating to commissioning. • The Department notes the requirement to submit an Annual Return is included in the EPL for the site. • The EPA did not object to the Proponent's proposal to remove these conditions from the consent. • The Department notes that conditions 7.2 and 7.3 are commissioning-related and were satisfied many years ago. • The Department has therefore recommended the deletion of conditions 7.1 to 7.3 from the consent.
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6. CONCLUSION

The Department considers the modification request provides an opportunity to rationalise the consent including minimising reporting responsibilities.

By updating or deleting conditions, the Department aims to:

- ensure that standard definitions are applied to the site;
- reduce duplication and inconsistency with the EPL by deferring to the EPL for setting concentration limits and monitoring requirements for pollutants; and
- simplify compliance and reporting requirements for the approved development.

The Department considers the modification would not result in an increase in environmental impacts from the approved development. Consequently the Department is satisfied the proposed modifications to the consent are minor, in the public interest and should be approved, as set out in the recommended modifying instrument at **Appendix A**.

RECOMMENDATION

It is RECOMMENDED the Planning Assessment Commission:

- consider the findings and recommendations of this report;
- approve the proposed modification under Section 75W of the EP&A Act; and
- sign the attached modifying instrument (in **Appendix A**).

Kerry Hamann
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