Independent Environmental Audit (2016)

Audit Report

For BlueScope Steel Ltd

15 June 2016







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Independent Audit Certification Form				
Development Name	Sinter Plant Emission Reduction Project (Waste Gas Cleaning Plant); Gypsum			
	Plant; and, Ore Preparation Upgrade Project			
Development Consent No.	DA No 26-02-01; DA No 26-02-01, MOD-50-4-2005-I; and DA No 06-0229.			
Description of Development	Sinter Plant, including Waste Gas Cleaning Plant and Gypsum Plant			
Development Address	Lot 1 DP 606434, Port Kembla Steelworks			
Operator	BlueScope Steel Ltd			
Operator Address	Port Kembla Steel Works, Five Islands Road, Port Kembla, NSW 2505			
Independent Audit				
Title of Audit	Independent Environmental Audit (2016)			

I certify that I have undertaken the independent audit and prepared the contents of the attached independent audit report and to the best of my knowledge:

- The audit has been undertaken in accordance with relevant approval condition(s) and in accordance with the auditing standard AS/NZS ISO 19011:2014 and Post Approval Guidelines – Independent Audits;
- The findings of the audit are reported truthfully, accurately and completely;
- I have exercised due diligence and professional judgement in conducting the audit;
- I have acted professionally, in an unbiased manner and did not allow undue influence to limit or over-ride objectivity in conducting the audit;
- I am not related to any owner or operator of the development as an employer, business partner, employee, sharing a common employer, having a contractual arrangement outside the audit, spouse, partner, sibling, parent, or child;
- I do not have any pecuniary interest in the audited development, including where there is a reasonable likelihood or expectation of financial gain or loss to me or to a person to whom I am closely related (i.e. immediate family);
- Neither I nor my employer have provided consultancy services for the audited development that were subject to this audit except as otherwise declared to the lead regulator prior to the audit; and
- I have not accepted, nor intend to accept any inducement, commission, gift or any other benefit (apart from fair payment) from any owner or operator of the development, their employees or any interested party. I have not knowingly allowed, nor intend to allow my colleagues to do so.

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Date:	15 June 2016	



Summary

Overview

BlueScope Steel (BSL) operates a Sinter Plant for preparing the iron ore for blast furnace feed at its Port Kembla steelworks (PKSW) in NSW.

Arriscar Pty Ltd (Arriscar) was engaged by BSL in 2016 to undertake an IEA for the Sinter Plant Emission Reduction Project (WGCP), Gypsum Plant and Ore Preparation Upgrade Project (OPUP). The IEA was undertaken to primarily assess BSL's compliance with the requirements of the relevant regulatory approvals for these facilities (i.e. Primarily the conditions in the relevant Development Consents and Environment Protection Licence). However, the general requirement to assess the environmental performance of the development, and its effects on the surrounding environment was also considered. The previous IEAs for these facilities were undertaken in 2013, as follows:

- Sinter Plant Emission Reduction Project (Waste Gas Cleaning Plant) The previous IEA for the WGCP was undertaken in June-July 2013, as required by Condition 7.6 of Development Consent DA No 26-02-01 (Issued 1 August 2001).
- **Gypsum Plant** Construction and operation of the Gypsum Plant was approved as a modification to the Development Consent for the WGCP (DA No 26-02-01, MOD-50-4-2005-i, issued 22 September 2005). Therefore, an IEA is also required for the Gypsum Plant in accordance with the Condition 7.6 of DA No 26-02-01.
 - The previous IEA for the WGCP (see above) also included the Gypsum Plant.
- Ore Preparation Upgrade Project The previous IEA for the OPUP was undertaken in June-July 2013, as required by Condition 4.1 of Development Consent DA No 06-0229 (Issued on 3 July 2007).

This report addresses all of the required IEAs for the Sinter Plant Emission Reduction Project (WGCP), Gypsum Plant and OPUP.

The IEA was undertaken in accordance with the methodology outlined in AS/NZS ISO 19011:2014 *Guidelines for Auditing Management Systems* [Ref. 10] and the NSW Government's *Independent Audit Guideline, Post-Approval Requirements for State Significant Developments* [Ref. 9]. It included four major verification activities:

- Agency and community consultation (Undertaken prior to site visit);
- Personnel interviews;
- Document reviews; and
- Site and equipment inspections.

Site visits were conducted on 8-10 and 24 March 2016.



Summary of Findings from Compliance Assessment

The compliance status was reviewed for all Consent Conditions (Refer to Section 7.1); however, the scope of the 2016 IEA did not include a detailed assessment of compliance with the Consent Conditions for the construction, commissioning and initial operations phases since these are either no longer applicable or have been closed out in earlier IEAs (Note: The DP&E has also recently agreed that that many of these Consent Conditions can now be removed [Ref. 3 and 5]).

There are more than 150 Consent Conditions for the Sinter Plant Emission Reduction Project (WGCP), Gypsum Plant and OPUP. In some cases, the specific requirements for equivalent Consent Conditions are different for each development and may differ from the equivalent condition in the Environment Protection Licence (EPL). This significantly increased the complexity of the audit.

BSL has submitted an application to the DP&E to remove/amend the Consent Conditions and the DP&E has completed an assessment of this application [Ref. 3 and 4]. The DP&E has agreed that many of the Consent Conditions can be removed / amended.

Additional relevant conditions from the EPL were also considered during the audit (Refer to Section 7.2) and observations were recorded from the site inspections (Refer to Section 7.3).

The status of each corrective action and observation identified in the previous IEAs was reviewed with BSL (Refer to Section 8).

The compliance status for each relevant requirement was assessed in accordance with the criteria from the NSW Government's Independent Audit Guideline [Ref. 9]. The number of findings in each category is listed in the following table:

Number of Findings Compliance Conditions of Development Consent Assessment Add. EPL Site **Previous Total Part Part Part Part Part Part Part** Category **Conditions** Inspection **IEAs** В C D Ε F G Α Compliant 11 6 3 1 46 29 17 3 0 0 116 Not Verified 6 1 1 4 9 0 1 0 0 0 22 Non-Compliant 0 3 0 10 0 0 0 2 3 19 1 Admin. Non-0 0 0 0 0 0 0 0 0 0 0 Compliance Not Triggered 1 0 0 0 3 2 0 12 0 0 18 Observation 0 0 0 0 0 0 0 0 2 0 2 Note 0 0 0 0 0 0 0 0 0 1 1 **Total** 8 7 5 68 18 3 18 32 15 4 178

Table 1 **Summary of Findings**

If it was not possible to verify all requirements of some Consent Conditions within the scope of this IEA, then these Consent Conditions have been categorised as 'Not Verified' in accordance with the DP&E's assessment criteria (Refer to Section 2.3). Generally, no evidence was found to suggest that the operation is non-compliant with these Consent Conditions; however, if a non-compliance was identified, then this was recorded accordingly.



The majority of the additional relevant conditions in the EPL were added after the WGCP stack fire in 2014. These conditions have not been triggered since the Sinter Plant has not been bypassed since were added to the EPL in September 2015.

The majority of the complaints recorded during the period 1-Jul-13 to 8-Mar-16 occurred as a result of the WGCP stack fire in 2014 (Refer to Section 4.1) and were related to the fallout of particulates (burnt fibre reinforced polymer) from this fire. Relatively few complaints were recorded at other times (Refer to Section 4.2).

Due to duplication of some requirements (i.e. Very similar Consent Conditions are included for the three projects), the number of equivalent Non-Compliances is actually lower than the 19 reported in Table 1. The equivalent number of Non-Compliances is 11, as shown in Table 2.

BSL demonstrated proactive monitoring of compliance and active and open self-reporting of potential non-compliances to the regulatory authorities and to a community consultation panel. BSL has also completed numerous pollution reduction programs. Despite the Non-Compliances identified during the audit and the WGCP stack fire, the overall level of compliance and environmental performance for the Sinter Plant Emission Reduction Project (WGCP), Gypsum Plant and OPUP is good.

Risk Levels for Identified Non-Compliances

Risk levels for each of the identified Non-Compliances are listed in the following table. These risk ratings are consistent with the NSW Government's *Independent Audit Guideline* [Ref. 9] (Refer to Section 2.3).

The risk levels for all but one of the identified Non-Compliances were assessed to be 'low' or of an 'administrative' nature (Refer to Table 2). These Non-Compliances were considered to pose a low potential for environmental harm.

Only one non-compliance was assessed to be a 'moderate' risk; however, this was due to an exceedance of the discharge limits from the Iron Making East Drain (Point 89), which was attributed to a release of Coke Ovens Gas (COG) condensate from another plant (Note: Not from Sinter Plant). An additional Pollution Reduction Program (PRP 176 - IMED Drainage Diversion Project (Environmental Improvement Program)) is included in the current EPL to mitigate future incidents.

 Table 2
 Risk Levels for Identified Non-Compliances

	Non-Compliance			
ID No/s.	Description	Risk Level	Comments	
CC # W-3.3	BSL must ensure that a copy of the Environmental Management Plan is submitted to Council and is publicly available.	ANC	This non-compliance is unlikely to result in any risk of environmental harm since it is largely administrative.	
	(Refer to Section 7.1 - Table 10 - B.2 Environmental Management Plan).			



	Non-Compliance		
ID No/s.	Description	Risk Level	Comments
CC # O-5.4 and IEA # O1 (NC)	BSL is required to publish and maintain project-related information on a website for the life of the project. (Refer to Section 7.1 - Table 10 - C.1 Provision of Information).	ANC	This non-compliance is unlikely to result in any risk of environmental harm since it is largely administrative.
CC # W-4.55 and CC # O- 5.2	BSL is required to display the telephone number and postal address for receiving complaints. This should be displayed near the entrance to the site, in a position visible from the nearest public road. (Refer to Section 7.1 - Table 10 - C.2 Systems for Receiving Complaints and Enquiries).	L	With increased access to the internet and use of the general switchboard number for enquiries, this is considered to be a low risk non-compliance.
CC # W-4.11 and IEA # W1 (OBS)	It was noted in the 2013 IEA that compliance with the 20 mg/Nm³ criterion does not necessarily mean that the emissions are not visible. An action included in the 2013 IEA to investigate and resolve this apparent inconsistency does not appear to have been closed (Refer to Section 8 - Table 13, ID # W1 (OBS)) and visible emissions have been reported. (Refer to Section 7.1 - Table 10 - E.5 Air Quality – Operations Phase).	L	This has been assessed as a 'Non-Compliance' with W-4.11, despite being 'Compliant' with the equivalent condition from the EPL (# O4.17). This non-compliance was assessed to pose a low risk of environmental harm.
CC # O-2.2	BSL is required to operate and maintain the project in a manner that minimises or prevents the emission of dust from the site including windblown and traffic generated dust. (Refer to Section 7.1 - Table 10 - E.5 Air Quality – Operations Phase).	L	This was assessed as a low risk non-compliance since only the one roadway area near the offices at the Sinter Plant was observed with some dust build up and this area is shielded by the Sinter Plant building (i.e. is less likely to be a source of an off-site dust emission).
CC # W-4.17 and CC # O- 2.6 [Also EPL # L3.4]	BSL is required to ensure that emissions from the Sinter Plant WGCP Exhaust Stack (Point 107) and Sinter Machine Room Dedusting Stack (Point 2) comply with the specified discharge limits. (Refer to Section 7.1 - Table 10 - E.5 Air Quality – Operations Phase).	L	Only three exceedances were reported for April 2012 to February 2016. This was assessed as a low environmental risk, and a recommendation has not been included, as no further exceedances have been recorded at Point 2 since February 2014 and the exceedance at Point 107 was during start-up.



	Non-Compliance			
ID No/s.	Description	Risk Level	Comments	
CC # W-4.31 [Also EPL # L3.5] and CC # O-2.12	BSL is required to ensure that emissions from the Iron Making East Drain (Point 89) comply with the specified discharge limits. (Refer to Section 7.1 - Table 10 - E.9 Pollution of Waters).	M	Only one exceedance was reported for April 2012 to February 2016. This exceedance was attributed to a release of Coke Ovens Gas (COG) condensate (Note: Not from Sinter Plant). A recommendation has not been included as no further exceedances have been recorded since July 2014 and an additional PRP (PRP 176 - IMED Drainage Diversion Project (Environmental Improvement Program)) is included in the current EPL. The IMED Drainage Diversion Project is currently in progress with a due date of 30 June 2016 (As stipulated in Condition # U6.1 of the current EPL).	
CC # W-4.38, CC # W-4.49 and SI # 2	BSL is required to implement measures to minimise the environmental impact of incidents involving spillage of materials such as waste dusts and char. (Refer to Section 7.1 - Table 10 - E.14 Spillage Response and E.17 Site Management).	L	Some bags of spent char were observed to be damaged on the roadway near the Gypsum Plant (Refer to Photograph 15 in Section 7.3). Since the roadway drains discharge to the 4BF Thickener, sediment / debris would be expected to be intercepted before any discharge off-site. Therefore, this was assessed as a low risk non-compliance.	
CC # W-4.45	All chemicals being transported to the site must follow the route set out in the Statement of Environmental Effects (SEE). (Refer to Section 7.1 - Table 10 - E.16 Roads and Traffic).	L	The route specified in the 'Loading of Ammonia from Road Tanker' procedure does not appear to match the route specified in the 2002 transport study (which was supplied by BSL as defining the route set out in the SEE – Since the SEE was not provided, it is not clear if this transport study is consistent with the SEE).	
CC # W-4.47	No vehicles associated with the proposed development are to park along Christy Drive or Old Port Road. (Refer to Section 7.1 - Table 10 - E.16 Roads and Traffic).	L	It was observed during the site visit that some vehicles were being parked near the gate on Christy Drive. This would appear to be noncompliant with CC # W-4.47; however, it is not clear if this restriction was only intended to apply during the construction phase (when many more vehicles would be present) or whether this was meant to be an ongoing restriction.	



	Non-Compliance			
ID No/s.	Description	Risk Level	Comments	
CC # W-4.50, SI # 1 and IEA # W3 (ANC)	Drains, gutters, access ways and roadways must be maintained free of sediment and any other material. (Refer to Section 7.1 - Table 10 - E.16 Roads and Traffic, Section 7.3 - Table 12 and Section 8 - Table 13).	L	Some debris (including Gypsum) was observed near the drain at the Gypsum storage area (Refer to Photograph 14 in Section 7.3) and there was evidence of sandbags being damaged near one of the drains, which could allow entry of sediments to the drains (Refer to Photograph 20 in Section 8). Since these drains discharge to the 4BF	
			Thickener, sediment / debris would be expected to be intercepted before any discharge off-site. Therefore, this was assessed as a low risk non-compliance.	

Legend: CC # = Consent Condition Number, EPL # = EPL Condition Number, SI # = Site Inspection Number, IEA # =
Corrective Action Number from a Previous Independent Environmental Audit, H = High, M = Medium, L = Low,
ANC = Administrative Non-Compliance.

Corrective Actions

The corrective actions identified from the IEA are listed in Table 3 together with BSL's initial response and proposed action plan. Each action is categorised as one of the following: Non-Compliant (NC); Administrative Non-Compliance (ANC); Not Verified (NV) or an Observation (OBS). These categories are consistent with the compliance assessment criteria in the NSW Government's *Independent Audit Guideline* [Ref. 9].

Table 3 Corrective Actions and Proposed Action Plan

Action	Corrective Action		DSI Bashansa & Dranasad Action Dian
No.	Description	Cat.	BSL Response & Proposed Action Plan
2016/1	BSL should locate the construction certificate for the WGCP and to ensure it is available for future reference. (Refer to Section 7.1 - Table 10 - A.5 Structural Adequacy, CC # W-1.5).	NV	Copy of WGCP Construction Certificate will be obtained from M. Russell and be stored into Ore Preparations Environmental Management Systems. Who: M. Russell / L. Zammit / D. Jones When: 30/08/2016
2016/2	BSL should locate the occupation certificate for the WGCP and to ensure it is available for future reference. (Refer to Section 7.1 - Table 10 - A.5 Structural Adequacy, CC # W-1.6).	NV	Copy of WGCP Occupation Certificate will be obtained from M. Russell and be stored into Ore Preparations Environmental Management Systems. Who: M. Russell / L. Zammit / D. Jones When: 30/08/2016



Action	Corrective Action		DCI D
No.	Description	Cat.	BSL Response & Proposed Action Plan
2016/3	BSL should locate the relevant compliance certificates for construction of the WGCP and ensure these are available for future reference. (Refer to Section 7.1 - Table 10 - A.5 Structural Adequacy, CC # W-1.7).	NV	Copy of WGCP Compliance Certificates will be obtained from M. Russell and be stored into Ore Preparations Environmental Management Systems. Who: M. Russell / L. Zammit / D. Jones When: 30/08/2016
2016/4	BSL should locate the wind load design records for the WGCP and ensure these are available for future reference. (Refer to Section 7.1 - Table 10 - A.5 Structural Adequacy, CC # W-1.8).	NV	Copy of WGCP Wind Load records will be obtained from M. Russell and be stored into Ore Preparations Environmental Management Systems. Who: M. Russell / L. Zammit / D. Jones When: 30/08/2016
2016/5	Information relating to the WGCP should be made publically available (e.g. on a public website) as required by the relevant condition of development consent (Refer to CC # W-3.3). (Refer to Section 7.1 - Table 10 - B.2 Environmental Management Plan, CC # W-3.3).	NC	WGCP Environmental details will be made publically available on the BSL in the Illawarra website. Who: L. Zammit When: 30/08/2016
2016/6	Information relating to the OPUP should be made publically available (e.g. on a public website) as required by the relevant condition of development consent (Refer to CC # O-5.4). (Refer to Section 7.1 - Table 10 - C.1 Provision of Information, CC # O-5.4).	NC	OPUP Environmental details will be made publically available on the BSL in the Illawarra website. Who: L. Zammit When: 30/08/2016
2016/7	The telephone number and postal address for receiving complaints should be displayed near the entrance to the site, in a position visible from the nearest public road. (Refer to Section 7.1 - Table 10 - C.2 Systems for Receiving Complaints and Enquiries, CC # W-4.55 and O-5.2).	NC	Signage will be designed and installed at major entrances to the Ore Preparations facility to denote "the telephone number and address for receiving complaints" relevant to OPUP activities and equipment. Who: L. Zammit When: 30/08/2016
2016/8	The roadway between the Sinter Plant offices and the Sinter Plant building should be routinely swept to minimise the generation of windblown and traffic generated dust. (Refer to Section 7.1 - Table 10 - E.5 Air Quality – Operations Phase, CC # O-2.2).	NC	S. Kitanovski to ensure that roadway between the Sinter Plant offices and the Sinter Plant building is swept in accordance with routine sweeping schedules. Who: S. Kitanovski When: 30/08/2016



Action	Corrective Action		
No.	Description	Cat.	BSL Response & Proposed Action Plan
2016/9	BSL should ensure compliance with the transport routes set out in the SEE for: (i) chemicals transported to the site (CC # W-4.45); and (ii) non-liquid waste from the site (CC # 4.46). Alternatively, BSL should seek approval for alternative routes to be followed. (Refer to Section 7.1 - Table 10 - E.16 Roads and Traffic, CC # W-4.45 and W-4.46).	NC	BSL Ore Preparations to verify with contractor drivers with transport routes set out in the SEE for: (i) chemicals transported to the site (CC # W-4.45); and (ii) non-liquid waste from the site (CC # 4.46). If it is established that these routes have varied over the years, then BSL should seek approval from the DPE for alternative routes to be followed. Who: M. Walsh When: 30/08/2016
2016/10	It was observed during the site visit that some vehicles were being parked near the gate on Christy Drive. This would appear to be non-compliant with CC # W-4.47; however, it is not clear if this restriction was only intended to apply during the construction phase (when many more vehicles would be present) or whether this was meant to be an ongoing restriction. This should be raised with the DP&E and resolved accordingly. (Refer to Section 7.1 - Table 10 - E.16 Roads and Traffic, CC # W-4.47).	NC	BSL Environmental Advisor to clarify compliance requirements with DPE in order to ensure that future compliance requirements will be met. Who: L. Zammit When: 30/09/2016
2016/11	BSL should ensure debris near the drain at the Gypsum storage area is routinely maintained (or investigate alternative solutions to limit discharge of debris to the drainage system). (Refer to Section 7.3 – Table 12, ID # 1).	NC	BSL Ore Preparations to ensure that fugitive dust / debris near the drain at the Gypsum storage facility is cleaned up and routinely maintained in future. Who: D. Cowgill When: 30/08/2016
2016/12	BSL should inspect all bags of spent char stored on site. Any leaking bags should be repacked / repaired to ensure spent char is not discharged to the site drainage system. (Refer to Section 7.3 – Table 12, ID # 2).	NC	BSL Ore Preparations to ensure that any spillage from leaking bags of spent char is cleaned up and that in future any leaking bags should be repacked / repaired to ensure spent char is not discharged to the site drainage system. Who: D.Cowgill When: 30/08/2016
2016/13	The leaking valve at the Gypsum Plant should be repaired. (Refer to Section 7.3 – Table 12, ID # 3).	OBS	This valve has been repaired. Who: H. Dux When: 10/06/2016
2016/14	The alkaline liquid in the bund at the Waste Water Plant should be removed as soon as practicable. (Refer to Section 7.3 – Table 12, ID # 4).	OBS	BSL Ore Preparations to arrange to extract the alkaline liquid out of the bunded area. Who: M. Walsh When: 30/06/2016



Action	On Corrective Action		DCI Doomouse & Duomoused Astism Dism
No.	Description	Cat.	BSL Response & Proposed Action Plan
2016/15	BSL should ensure sandbags used to limit discharge of particulates to the drains are routinely maintained (or investigate alternative solutions to limit discharge of particulates to the drainage system). (Refer to Section 8 – Table 13, ID # W3 (ANC)).	NC	BSL Ore Preparations to arrange to have these sandbags taken away from internal drains. All local stormwater discharges collected from drains around Ore Preparations Sinter Plant are diverted into No.4 thickener for process water treatment prior to discharge into Port Kembla Harbour. Sandbags were damaged as they had been permanently placed around drains exposing them to weathering and being driven over by vehicles on site. In future sandbags will be placed around internal drains only as a control to minimise ingress of liquid discharges resulting from process water discharges e.g. prevention of spills, leakages and/or water cleaning activities. Who: T.Bates When: 30/08/2016
2016/16	Emissions from the WGCP may be visible despite complying with the relevant condition from the EPL for the WGCP Stack (EPL Point 107). Consequently, the operation of the WGCP Stack (EPL Point 107) may be non-compliant with Consent Condition No. 4.11 for the WGCP, despite being compliant with EPL Condition No. 04.17. This inconsistency should be resolved with the DP&E and EPA (e.g. by amending the relevant conditions). (Refer to Section 8 – Table 13, ID # W1 (OBS)).	NC	BSL Environmental Department representatives will discuss this inconsistency between the SPWGCP DA Condition 4.11 and condition O4.17 of the BSL EPL 6092 licence with representatives of Wollongong branch of the Environmental Protection Authority and the DPE. Who: M. Imber / L. Zammit When: 30/10/2016
2016/17	The No. 3 Sinter Machine Stack (EPL Pt 3) should be included in the Environmental Aspects and Impacts Register / MARS for the Sinter Plant. (Refer to Section 6).	OBS	BSL Ore Preparations to update their Environmental Management Systems to include No.3 Sinter Machine stack. Who: D. Jones When: 30/09/2016



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Notation

Abbreviation	Description	
A/G	Above Ground	
AC	Active Char	
Arriscar	Arriscar Pty Limited	
AS	Australian Standard	
BANZ	BlueScope Australia and New Zealand	
BSL	BlueScope Steel Ltd	
СС	Consent Condition	
со	Carbon Monoxide	
CO ₂	Carbon Dioxide	
DA	Development Application	
DCS	Distributed Control System	
DG	Dangerous Good	
Dioxin/Furans	polychlorinated dibenzo-p-dioxins (PCDD) and polychlorinated dibenzo furans (PCDF) as 2,3,7,8 tetrachloro-dibenzo-p-dioxin [(TCDD) as NATO toxic equivalency factors (TEF)]	
DP&E	NSW Department of Planning and Environment	
EMP	Environmental Management Plan	
EPA	NSW Environment Protection Authority	
EPL	Environment Protection Licence	
FDMS	Fugitive Dust Management System	
g/m3	Grams per cubic metre	
H₂O	Water	
HCI	Hydrochloric Acid	
HSEC	Health, Safety, Environment and Community	
IBC	Intermediate Bulk Container	
IEA	Independent Environmental Audit	
IMED	Iron Making East Drain	
ITP	Inspection and Test Plan	
kPag	Kilopascal (gauge)	



Abbreviation	Description	
LA10(15minute)	The sound pressure level that is exceeded for 10 per cent of the time, when measured over a 15-minute period	
LAWWNE	Land Air Water Waste Noise Energy	
LBL	Load Based Licence	
m	Metres	
MARS	Management of All Risks System	
mg/l	Milligrams per litre	
mg/Nm³	Milligrams per cubic metre	
MoC	Management of Change	
MSDS	Material Safety Data Sheet	
Mtpa	Million tonnes per annum	
N ₂	Nitrogen	
NH ₃	Ammonia	
NO _x	Oxides of Nitrogen (e.g. Nitrogen Dioxide)	
PD	Position Description	
P&ID	Piping & Instrumentation Diagram	
РНА	Preliminary Hazard Analysis	
PKSW	Port Kembla Steelworks	
PLC	Programmable Logic Controller	
POEO Act	NSW Protection of the Environment Operations Act	
PPE	Personal Protective Equipment	
ppm	Parts per million	
PRP	Pollution Reduction Program (As detailed in EPL)	
PURS	Process User Requirement Specification	
RPZ	Reduced Pressure Zone	
SCBA	Self-Contained Breathing Apparatus	
SEE	Statement of Environmental Effects	
SHI	Sumitomo Heavy Industries	
SMERP	Sinter Machine Emission Reduction Project	
SMS	Safety Management System	



Abbreviation	Description	
SS	Suspended Solids	
SO ₂	Sulphur Dioxide	
SO _x	Oxides of Sulphur (e.g. Sulphur Dioxide, Sulphur Trioxide)	
SOP	Standard Operating Procedure	
SRG	Sulphur Rich Gas	
tpa	Tonnes per annum	
UPS	Uninterrupted Power Supply	
VESDA	Very Early Smoke Detection Alarm	
voc	Volatile Organic Compound	
WGCP	Waste Gas Cleaning Plant	
WHS or WH&S	Work Health and Safety	
wo	Work Order	



1 Introduction

1.1 Background

BlueScope Steel (BSL) operates a Sinter Plant for preparing the iron ore for blast furnace feed at its Port Kembla steelworks (PKSW) in NSW.

The Sinter Plant produces Sulphur Rich Gas (SRG) containing sulphur dioxide (SO₂), which is treated in a Waste Gas Cleaning Plant (WGCP) and used to produce Gypsum (Solid Calcium Sulphate) as a by-product in a Gypsum Plant. These facilities (Refer to Sections 1.1.1 to 1.1.3) are subject to conditions of development consent, which require a periodic Independent Environmental Audit (IEA).

Arriscar Pty Ltd (Arriscar) was engaged by BSL in 2016 to undertake an IEA for the Sinter Plant Emission Reduction Project (WGCP), Gypsum Plant and Ore Preparation Upgrade Project (OPUP). The previous IEAs were undertaken in 2013, as follows:

- Sinter Plant Emission Reduction Project (Waste Gas Cleaning Plant) The previous IEA for the WGCP was undertaken in June-July 2013, as required by Condition 7.6 of Development Consent DA No 26-02-01 (Issued 1 August 2001).
- **Gypsum Plant** Construction and operation of the Gypsum Plant was approved as a modification to the Development Consent for the WGCP (DA No 26-02-01, MOD-50-4-2005-i, issued 22 September 2005). Therefore, an IEA is also required for the Gypsum Plant in accordance with the Condition 7.6 of DA No 26-02-01.
 - The previous IEA for the WGCP (see above) also included the Gypsum Plant.
- Ore Preparation Upgrade Project The previous IEA for the OPUP was undertaken in June-July 2013, as required by Condition 4.1 of Development Consent DA No 06-0229 (Issued on 3 July 2007).

This report addresses all of the required IEAs for the Sinter Plant Emission Reduction Project (WGCP), Gypsum Plant and OPUP.

The auditor for the 2016 IEA (Refer to Section 1.4) was approved by the Department of Planning and Environment (DP&E) and the audit was undertaken on 8-10 and 24 March 2016.

This report includes the findings of the audit (Refer to Section 7); a review of environmental incidents and complaints since the previous IEAs (Refer to Section 4); and, an initial program for implementation of the identified corrective actions (Refer to Summary). The status of the corrective actions from the previous IEA reports was also reviewed (Refer to Section 8).

1.1.1 Sinter Plant Emission Reduction Project (Waste Gas Cleaning Plant)

As part of its environmental improvement and sulphur recovery program, a Development Application (DA) for a new Waste Gas Cleaning Plant (WGCP) was submitted by BSL to the Department of Urban Affairs and Planning in 2001 (DA No 26-02-01).

The purpose of the WGCP is to remove sulphur dioxide (SO_2) , nitrogen oxides (NO_x) , Volatile Organic Compounds (VOCs) and any dust not captured by the precipitators from the sinter gas before it is discharged to the atmosphere.

Consent was granted for the DA subject to the conditions listed in the notice of Determination of a Development Application Pursuant to Section 80 of the Environmental Planning and Assessment Act 1979 - Application No. 26-02-01.



The WGCP was built in 2003.

On 13 October 2014, a fire occurred on the fibreglass stack at the WGCP (Refer to Section 4.1). This stack has now been replaced and the Environment Protection Licence (EPL) has been modified to permit a temporary diversion of the waste gas to another stack if the need arises in the future (Refer to Section 7.2).

1.1.2 Gypsum Plant

Construction and operation of a Gypsum Plant was approved in 2005 as a modification to the Development Consent for the WGCP (DA No 26-02-01, MOD-50-4-2005-i). This plant treats Sulphur Rich Gas (SRG) from the WGCP and produces solid Gypsum (Calcium Sulphate) for sale.

The Gypsum Plant was commissioned in 2007.

1.1.3 Ore Preparation Upgrade Project

The reline of the No.5 Blast Furnace in 2009 presented the opportunity to upgrade the Sinter Plant and to thereby lower operating cost and fuel rate by supplying more sinter to the furnaces.

This modification, known internally as the Ore Preparation Upgrade Project (OPUP), involved:

- Lengthening the strand on the No.3 Sinter Machine (Refer to Photograph 1) from 84 to 96 m to increase the grate area and increasing the bed height by increasing the strand side plates from 500mm to 700mm. The existing strand width and main fans were retained.
- Widening the cooler and adding a fourth cooler fan to achieve the required cooling capacity for the higher sinter levels.
- Replacing the existing line burner with a new ignition furnace. The new furnace uses four burner rows and is fuelled by Natural Gas.
- Replacing the strand feeder with a new feed unit.
- Rebuilding the electrostatic precipitators (After thirty years of service) to include a fourth zone and to minimise the particulate load to the WGCP.
- Some changes to incoming and outgoing conveying systems.

Consent was granted for the DA subject to the conditions listed in the Project Approval under Section 79J of the Environmental Planning and Assessment Act 1979 - Application No. DA No 06-0229 (Issued on 3 July 2007).





Photograph 1 No.3 Sinter Machine

All work was complete in 2009. However, in 2011 a decision was made to greatly reduce production at the PKSW by closing No.6 Blast Furnace. The Sinter Plant now runs at approximately 40% of its capacity; however, the plant the equipment that was installed as part of OPUP continues to be used.

The No.3 Sinter Machine was originally commissioned in 1975 and is the only Sinter Machine currently in operation at the Sinter Plant. It is the only internal supply of Sinter Fines for the No.5 Blast Furnace.

1.2 Objectives

The overall objective was to undertake an IEA for the Sinter Plant Emission Reduction Project (WGCP), Gypsum Plant and OPUP, as required by the relevant condition/s from the Development Consent (i.e. Conditions 7.6 & 7.7 of Development Consent DA No 26-02-01 and Condition 4.1(c) of Development Consent DA No 06-0229 - Reproduced below).

The IEA was undertaken to primarily assess BSL's compliance with the requirements of the relevant regulatory approvals (i.e. Primarily the conditions in the relevant Development Consents and Environment Protection Licence). However, the general requirement to assess the environmental performance of the development, and its effects on the surrounding environment (See Consent Condition 7.6(c) below) was also considered.

Conditions 7.6 & 7.7 of Development Consent DA No 26-02-01 (Issued 1 August 2001)

Within 12 months of commissioning the Waste Gas Cleaning Plant, and every three years thereafter, unless the Director-General directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit.



The Independent Environmental Audit must:

- (a) be conducted by a suitably qualified, experienced, and independent person whose appointment has been endorsed by the Director-General;
- (b) be consistent with ISO 14010 Guidelines and General Principles for Environmental Auditing, and ISO 14011 Procedures for Environmental Auditing, or updated versions of these guidelines/manuals ¹;
- (c) assess the environmental performance of the development, and its effects on the surrounding environment;
- (d) assess whether the development is complying with the relevant standards, performance measures, and statutory requirements;
- (e) review the adequacy of the Applicant's Environmental Management Plan, and Environmental Monitoring Program; and, if necessary,
- (f) recommend measures or actions to improve the environmental performance of the plant, and/or the environmental management and monitoring systems.

Within 2 months of commissioning the audit, the Applicant must submit a copy of the audit report to the Director-General. After reviewing the report, the Director-General may require the Applicant to address certain matters identified in the report. The Applicant must comply with any reasonable requirements of the Director-General.

Condition 4.1(c) of Development Consent DA No 06-0229

The Proponent shall develop and implement a Compliance Tracking Program to track compliance with the requirements of this approval. The Program shall include, but not necessarily be limited to:

- a) provisions for periodic review of the compliance status of the project against the requirements of this approval;
- b) provisions for periodic reporting of compliance status to the Director-General;
- a program for independent environmental auditing at least annually, or as otherwise agreed by the Director-General, in accordance with ISO 19011:2002 -Guidelines for Quality and/ or Environmental Management Systems Auditing; and
- mechanisms for rectifying any non-compliance identified during environmental auditing or review of compliance.

1.3 Audit Scope

The scope of the IEA included all operational areas included in the relevant DAs for the Sinter Plant Emission Reduction Project (WGCP), Gypsum Plant and OPUP. It covered the period since the previous IEAs were undertaken in 2013 and included all organisational units, activities and processes that are referred to in the Consent Conditions (e.g. noise monitoring, community consultation, wastewater treatment processes, etc.).

The scope included all relevant Consent Conditions from Development Consent DA No 26-02-01 (Including MOD-50-4-2005-i) and Development Consent DA No 06-0229. However:

-

ISO 14010 and ISO 14011 have now been replaced by ISO 19011:2011 – Guidelines for Auditing Management Systems.



- The Consent Conditions relating to Hazards and Risk Management were not assessed in the IEA since compliance with these Consent Conditions is assessed separately during the periodic Hazard Audit (c.f. Consent Condition 5.10 in DA No 26-02-01).
- Some Consent Conditions for the construction, commissioning and initial operations (c. first 12 months) phases are no longer applicable. Therefore, only the status of each Consent Condition applicable to the ongoing operations was assessed in the 2016 IEA.

Note: For completeness, all of the Consent Conditions have been listed in Section 7; however, the 2016 IEA did not include a detailed assessment of compliance with the Consent Conditions for the construction, commissioning and initial operations phases. A statement of compliance in an earlier IEA and/or confirmation of completion of a Pollution Reduction Plan (PRP) in the EPL was generally accepted as sufficient evidence of compliance for these Consent Conditions and was recorded accordingly in Section 7. If this evidence was not available, then this was generally recorded as 'Not Verified' rather than 'Compliant' or 'Non-Compliant' in accordance with the DP&E's assessment criteria (Refer to Section 2.3). However, it is expected that these are more likely to be 'Compliant' than 'Non-Compliant' since these requirements should have been considered in more than one previous audit.

BSL has submitted an application to the DP&E remove/amend the obsolete Consent Conditions. The DP&E has completed an assessment of this application [Ref. 4 and 5] and many of the obsolete Consent Conditions are to be removed / amended.

The scope of the IEA also included:

- Consideration of the feedback received from the agency and community consultation undertaken prior to the site visit (Refer to Section 2.4.1).
- A review of environment related incidents and complaints since the previous IEAs (Refer to Section 4).
- Consideration of any environmental related matters following the WGCP stack fire in 2014 (Refer to Section 4.1). For example: how the burnt material was disposed of; the subsequent addition of new conditions to the EPL (Refer to Section 7.2); etc.
- A review of BSL's environmental aspects and impacts register (Refer to Section 6).
- A review of the status of the corrective actions included in the previous IEAs (Refer to Section 8).

The scope of the IEA did not include a review of implementation of the prevention and mitigation measures arising from the investigation of the WGCP stack fire since these were reviewed in the previous Hazard Audit.

1.4 Auditor

The audit was carried out by Mr Philip Skinner, as the lead auditor, from Arriscar.

Mr Skinner is a chemical engineer with 25 years' experience in management system implementation and auditing. He is a certified lead environmental auditor and has undertaken numerous audits and safety / environmental projects for a wide range of industries.

Prior written approval for Mr Skinner to lead the audit was obtained from the Department of Planning and Environment.



2 METHODOLOGY

2.1 Introduction

The IEA was undertaken in accordance with the methodology outlined in AS/NZS ISO 19011:2014 *Guidelines for Auditing Management Systems* [Ref. 10] and the NSW Government's *Independent Audit Guideline, Post-Approval Requirements for State Significant Developments* [Ref. 9].

2.2 Audit Criteria

The conditions of development consent and the conditions of the EPL were the principal criteria against which compliance was assessed in the IEA. The conditions of development consent also refer to other documents that were considered during the audit (e.g. Environmental Management Plan, Statements of Environmental Effects, etc.).

To provide a structure for the audit, Arriscar utilised an audit protocol (Refer to Table 10 in Section 7.1) based on the conditions of development consent, as summarised in Table 4 below. Where a condition from the EPL is already included (partly or in full) in a condition of development consent, the audit findings were listed in the audit protocol under the relevant consent condition (With a cross-reference to the condition number from the EPL). Conditions from the EPL that are additional to the conditions of development consent were also considered during the audit and are listed in a separate table (Refer to Table 11 in Section 7.2).

Two of the conditions of development consent for the Gypsum Plant replace the equivalent conditions of development consent for the WGCP (i.e. Condition Nos. 1.2 and 3.4). In this case, only the conditions of development consent for the Gypsum Plant are listed in the following table and the audit protocol. The additional conditions of development consent for the Gypsum Plant are identified by an "A" subscript (e.g. Condition No. 1.2A). In one case, the condition of development consent (No. 4.32) for the Gypsum Plant is additional to the corresponding condition of development consent for the WGCP.

'General and Mandatory Conditions for all EPA Licences' are included in Attachment A of the development consent for the WGCP. These are listed in Table 4 with an "A" prefix (e.g. A1.1).

Table 4 Conditions of Development Consent

		Relevant Condition/s of Development Consent			
Part	Description	WGCP (DA No 26-02-01)	Gypsum Plant (DA No 26-02-01, MOD-50-4-2005-i)	OPUP (DA No 06-0229)	
<u>A</u>	GENERAL / ADMINISTRATIVE CONDITIONS	1.1, 1.3-1.9, 4.1, A1.1-A1.2 & A4.1	1.2 & 1.2A	1.1-1.6	
<u>B</u>	ENVIRONMENTAL MANAGEMENT PLANS	3.1-3.3	3.2A & 3.4	6.1-6.3	
<u>C</u>	COMMUNITY INFORMATION, CONSULTATION AND INVOLVEMENT / COMPLAINTS	4.55 & A2.1-A2.2	-	5.1-5.4	
D	COMPLIANCE MONITORING AND REPORTING	2.1-2.4	-	4.1	



		Relevant Condition/s of Development Consent			
Part	Description	WGCP (DA No 26-02-01)	Gypsum Plant (DA No 26-02-01, MOD-50-4-2005-i)	OPUP (DA No 06-0229)	
<u>E</u>	ENVIRONMENTAL STANDARDS AND CONDITIONS	4.2-4.54	4.21A, 4.21B & 4.32	2.1-2.15	
<u>F</u>	ENVIRONMENTAL MONITORING / AUDITING AND RECORDING CONDITIONS	6.1-6.11 & 6.13- 6.31 (Note: 6.12 is not used)	-	3.1-3.4	
G	ENVIRONMENTAL REPORTING	7.1-7.7 & A3.1- A3.8	-	7.1-7.3	

2.3 Compliance Assessment

The compliance status for each relevant requirement is reported in Section 7 and was assessed in accordance with the following criteria from the NSW Government's *Independent Audit Guideline* [Ref. 9].

 Table 5
 Compliance Assessment Criteria [Ref. 9]

Category	Description	
Compliant	Where the auditor has collected sufficient verifiable evidence to demonstrate that the intent and all elements of the requirement of the regulatory approval have been complied with within the scope of the audit.	
Not Verified	Where the auditor has not been able to collect sufficient verifiable evidence to demonstrate that the intent and all elements of the requirement of the regulatory approval have been complied with within the scope of the audit. In the absence of sufficient verification, the auditor may in some instances be able to verify by other means (visual inspection, personal communication, etc.) that a requirement has been met. In such a situation, the requirement should still be assessed as not verified. However, the auditor could note in the report that they have no reasons to believe that the operation is non-compliant with that requirement.	
Non-Compliant	Where the auditor has collected sufficient verifiable evidence to demonstrate that the intent of one or more specific elements of the regulatory approval have not been complied with within the scope of the audit.	
Administrative Non-Compliance	A technical non-compliance with a regulatory approval that would not impact on performance and that is considered minor in nature (e.g. report submitted but not on the due date, failed monitor or late monitoring session). This would not apply to performance-related aspects (e.g. exceedance of a noise limit) or where a requirement had not been met at all (e.g. noise management plan not prepared and submitted for approval).	



Category	Description
Not Triggered	A regulatory approval requirement has an activation or timing trigger that had not been met at the time of the audit inspection, therefore a determination of compliance could not be made.
Observation	Observations are recorded where the audit identified issues of concern which do not strictly relate to the scope of the audit or assessment of compliance. Further observations are considered to be indicators of potential non-compliances or areas where performance may be improved.
Note	A statement or fact, where no assessment of compliance is required.

The risk level for each identified Non-Compliance is reported in the Summary section and was assessed in accordance with the following criteria from the NSW Government's *Independent Audit Guideline* [Ref. 9].

Table 6 Risk Levels for Non-Compliances [Ref. 9]

Risk Level	Colour Code	Description	
High		Non-compliance with potential for significant environmental consequences, regardless of the likelihood of occurrence.	
Medium		Non-compliance with: potential for serious environmental consequences, but is unlikely to occur; or potential for moderate environmental consequences, but is likely to occur	
Low		Non-compliance with: • potential for moderate environmental consequences, but is unlikely to occur; or • potential for low environmental consequences, but is likely to occur	
Administrative Non-Compliance		Only to be applied where the non-compliance does not result in any risk of environmental harm (e.g. submitting a report to government later than required under approval conditions)	

2.4 Verification Process

The audit comprised four major verification activities:

- Agency and community consultation (Undertaken prior to site visit);
- Personnel interviews;
- Document reviews; and
- Site and equipment inspections.



Site visits were conducted on 8-10 and 24 March 2016.

2.4.1 Agency and Community Consultation

Prior to the commencement of the site inspection (refer to Section 2.4.4), the auditor contacted (by phone) each of the key agencies with a role in regulating the development to obtain their feedback and to draw the auditor's attention to any key issues. This included representatives of the:

- Department of Planning and Environment (DP&E);
- Environment Protection Authority (EPA);
- Department of Health (Health NSW);
- Office of Environment and Heritage; and

The auditor also contacted (by phone) the chair of the community consultative committee (Who is also the mayor of the local council). This committee was formed after the WGCP stack fire in 2014.

Overall, the feedback received was positive. For example, the EPA representative noted that environmental issues for these facilities (e.g. visibility of stack emissions) are infrequent, and that BlueScope had demonstrated ongoing improvement in this regard. The chair of the community consultative committee also noted that BlueScope was very open and helpful at the scheduled committee meetings and had provided detailed information whenever requested by the committee members.

No major concerns or complaints were raised by any of the contacted representatives; however, the WGCP stack fire in 2014 was noted by some representatives, including the subsequent inclusion of new conditions in the EPL licence (Refer to Section 4.1).

2.4.2 Personnel Interviews

Personnel with various responsibilities were interviewed during the site visits. All interviewed personnel were extremely helpful and open during the audit.

The main personnel interviewed during the site visit are listed in Table 7. Additional operational personnel were also interviewed during the site inspections and the close-out meeting was attended by Dave Bell (Coke and Ironmaking Manager) and Matthew Imber (Environment Manager).

Table 7 Personnel Interviewed

Name	Title
Sasho Kitanovski	Acting Ore Preparation Operations Manager/ Operations Engineer
Lawrence Zammit	Senior Environmental Advisor
David Jones	Business Engineer
Greg Adams	Process Development Engineer
Mirek Gudz	Section Specialist Leader Air Quality
John Heslin	By-products Recycling Engineer
Matt Hunter	Asset Strategy Engineer



2.4.3 **Document Reviews**

Samples of corporate and site-specific procedures were reviewed. Random checks of completed forms were also undertaken to check the degree of completion and to assess the effectiveness of the systems in place.

A full listing of the documentation reviewed during the audit is provided in Appendix A.

2.4.4 **Site and Equipment Inspections**

Site inspections were carried out on 10 and 24 March 2016. All operational locations (As listed in Section 3) were observed during these inspections.

The Sinter Plant (Including the WGCP) was not operating during the inspection on 10 March. Therefore, a second inspection was undertaken on 24 March when the Sinter Plant (Including the WGCP) was operating.

The findings and recommendations from the site and equipment inspections are listed in Table 12 (Refer to Section 7.3).



3 OVERVIEW OF FACILITY AND OPERATIONS

3.1 Location and Layout of Sinter Plant

The Sinter Plant (Including the WGCP and Gypsum Plant) is located on land close to Christy Drive, Port Kembla, NSW. A site location map is shown in Figure 1 and a layout diagram of the Sinter Plant (Including the WGCP and Gypsum Plant) is shown in Figure 2.

The Sinter Plant (Including the WGCP and Gypsum Plant) includes the following main components:

- Sinter gas booster fans (to increase pressure of sinter gas from Sinter Plant to WGCP);
- Moving bed carbon adsorbers;
- Char regenerator;
- Char Conveyors, Storage & Make-up system;
- Dedusting & Dust Collection system;
- Anhydrous ammonia storage, vaporiser and injection system;
- Sulphur Rich Gas Handling & Caustic storage (Treatment chemical);
- Water Treatment Plant;
- Gypsum plant;
- Shared utilities; and
- Control room, electrical switches room, workshop and offices.

There are four licenced discharge points associated with these facilities:

- Point 2 = Sinter machine room dedusting stack
- Point 107 = Sinter Plant Waste Gas Cleaning Plant Stack
- Point 151 = Number 3 Sinter Machine Stack (Discharge point during Sinter Plant Waste Gas Cleaning Plant Bypass)
- Point 89 = Ironmaking east drain (012) overflow of weir adjacent to sign marked "Ironmaking East Drain"

The following photograph shows the Sinter Plant (right of photo) and the WGCP (left of photo). The relatively small Gypsum Plant is also shown on this photo (front centre).

Point 107 is the stack at the left of the photo (WGCP) and Point 151 is the stack at the centre rear of this photo









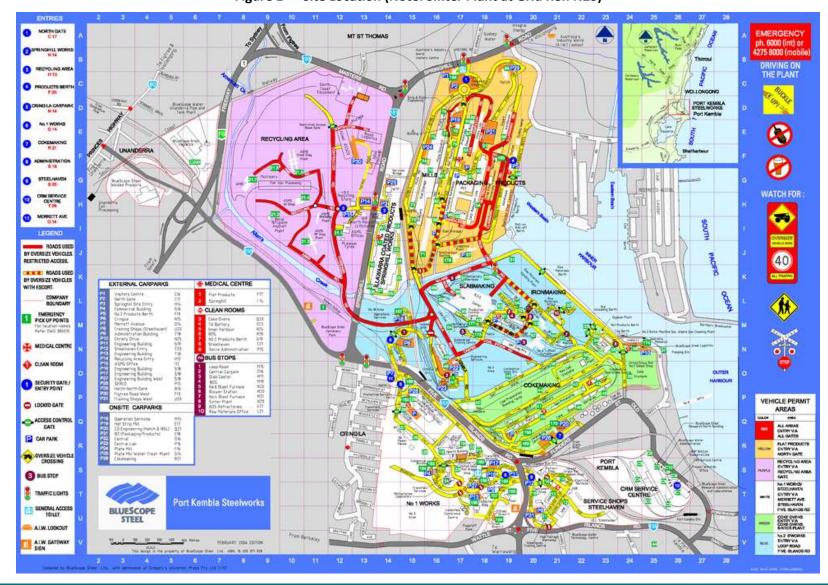


Figure 1 Site Location (Note: Sinter Plant at Grid Ref. N23)



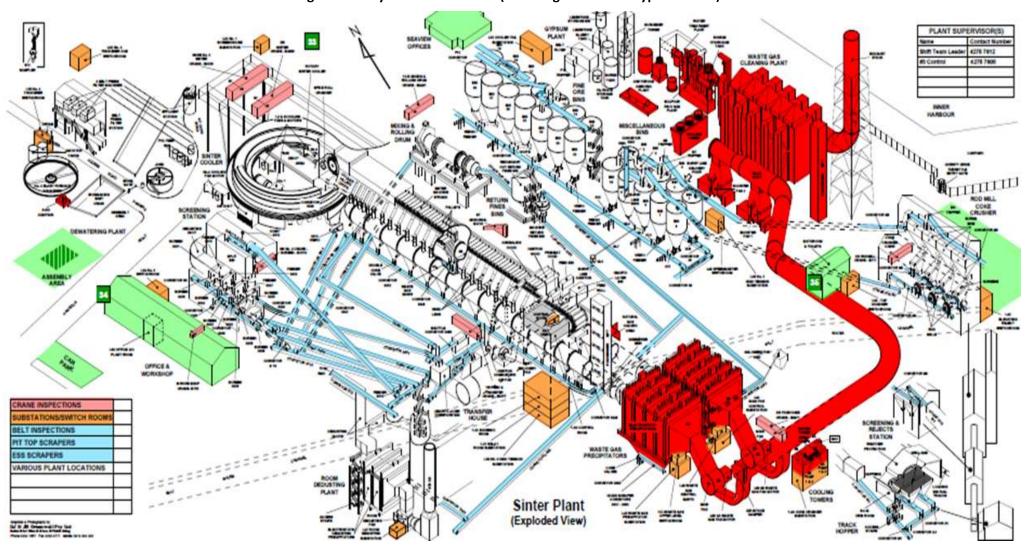


Figure 2 Layout of Sinter Plant (Including WGCP and Gypsum Plant)



3.2 Process Description – Sinter Plant

A brief description of the Sinter Plant process is provided in this section of the report. This process is relatively straightforward and is shown on the process flow diagram for the WGCP (Refer to Figure 3 in Section 3.3). It involves the transfer of raw materials (iron ore, coke breeze, sinter fines and limestone) to a mixing and rolling drum and then to a feed unit on the Sinter Machine. The waste gas from the Sinter Machine passes through electrostatic precipitators before being further treated in the WGCP.

3.2.1 Strand and Ignition Furnace

Granulated iron ore fines are mixed with suitably sized coke and fluxes and ignited under suction on a moving grate. The natural gas fuelled ignition furnace, which was installed as part of the OPUP, is shown igniting the surface of the bed on the following photograph.



Photograph 3 Ignition Furnace (24 March 2016)

The speed of the strand is adjusted to ensure the "burn through point" is at the end of the strand. This is achieved in practice by controlling the temperature of the waste gas into the precipitators within a narrow band.

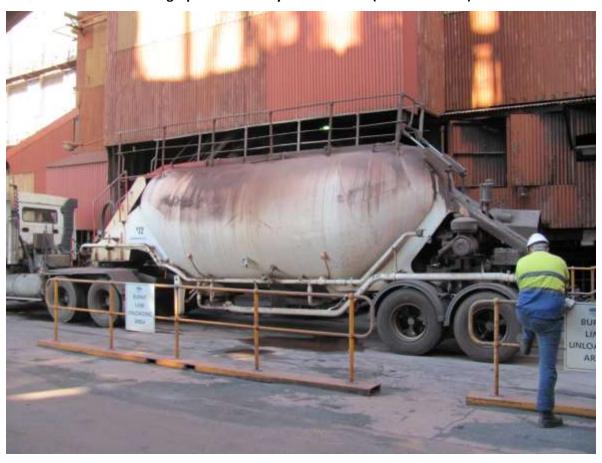
3.2.2 Electrostatic Precipitators and Sinter Machine Fans

Waste gas is drawn from the sintering process by two sinter machine main fans through two electrostatic precipitators, which remove the majority of dust from the waste gas. The main fan vanes control the volume of waste gas to suit the sintering process.



3.2.3 Burnt Lime

Burnt lime is used to increase productivity by improving on-strand permeability. It is delivered by road tanker (Refer to Photograph 4).



Photograph 4 Delivery of Burnt Lime (24 March 2016)

3.2.4 Sinter Machine Room Dedusting System

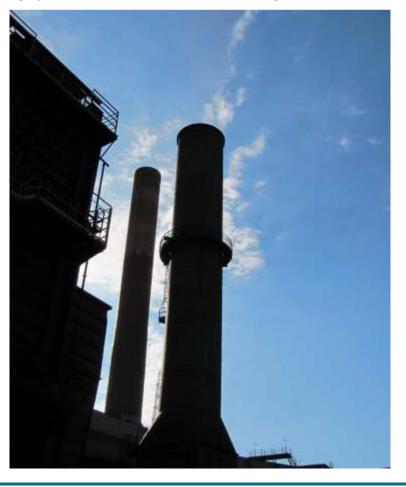
The Sinter Plant building is equipped with a ventilation system to collect air borne dust. The air drawn from the building is passed through precipitators (Refer to Photograph 5) and then discharged to atmosphere via the Sinter Machine Room Dedusting Stack (EPL Point 2 – Refer to Photograph 6).



Photograph 5 Precipitators for Sinter Machine Room Dedusting System (24 March 2016)



Photograph 6 Sinter Machine Room Dedusting Stack (24 March 2016)





3.3 Process Description – Waste Gas Cleaning Plant

A brief description of the WGCP process is provided in this section of the report. A process flow diagram is shown in Figure 3.

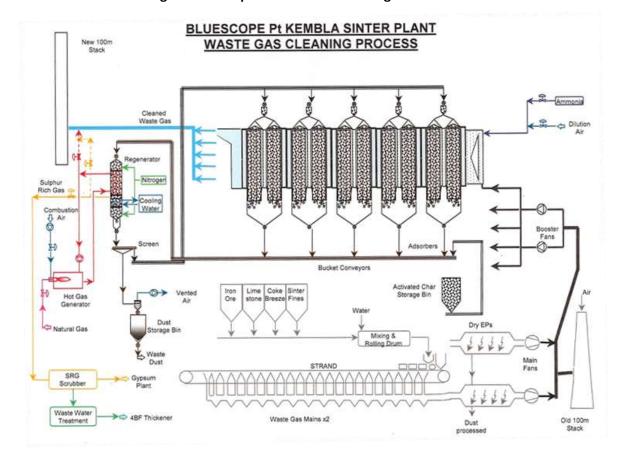


Figure 3 Simplified Process Flow Diagram for WGCP

3.3.1 Waste Gas Feed to Adsorbers

The inlet gas duct to the WGCP is a 6 metre diameter insulated duct that transports the waste gas from the outlet manifold of the main fans to the inlet of the WGCP booster fans. The two booster fans raise the waste gas pressure at the adsorber inlet manifold to overcome the pressure drop of the activated char bed and push the gas through the adsorbers. The waste gas temperature is controlled by the addition of air through a damper.

The adsorber inlet manifold allows even distribution of gas through the adsorbers.

The gas, after passing through the adsorbers, flows into the outlet duct and is carried to the clean gas stack.

3.3.2 Activated Char Bed Adsorbers

There are five (5) char bed adsorbers operating in parallel, with four (4) currently in service. Each adsorber has 3 sequential beds of chars, each moving at a different speed. The SO_2 is adsorbed on the char from the waste gas and dust filtered, and the clean gas is directed to the stack.

For environmental reasons, ammonia gas is injected into the waste gas at the top half of the adsorbers in order to elevate the activity of the char and to remove some nitrogen oxides (NO_x) in



the waste gas by their reduction reactions with ammonia. The NO_x reacts in the presence of the activated char with ammonia (NH_3) to form nitrogen (N_2) and water (H_2O).

3.3.3 Char Regeneration

After the char has passed through the adsorbers, it is transferred to the regenerator. Within the regenerator, the char passes through the tube side of two shell and tube heat exchangers in series. In the first, a hot gas passing around the outside of the tubes indirectly heats the char. This elevates the char temperature to 400° C, desorbs collected SO_2 and decomposes small quantities of dioxins are collected.

The char is then indirectly cooled in the second heat exchanger to less than 140°C by a closed circuit cooling system prior to being discharged to the activated char screen.

The char side of the tube of both the heating and cooling sections of the regenerator are purged with nitrogen to assist in SO_2 desorption and flushing, and to prevent air ingress while the char is hot.

The regenerated char is conveyed to the adsorbers, completing the cycle.

3.3.4 Hot Gas Generator

The hot gas required for regeneration is generated by burning natural gas in a combustion chamber, and using the hot inert flue gas (mainly CO_2 and N_2) for regeneration.

The hot gas generator is equipped with a fully automated burner management system, programmed with a purge cycle for start-up.

3.3.5 Sulphur Rich Gas Handling

The gas desorbed in the regenerator is referred to as Sulphur Rich Gas (SRG). SRG predominantly contains SO_2 (normally ~7% and potentially up to 16-20%), but contains impurities such as N_2 , CO_2 , hydrogen chloride, hydrogen fluoride, unreacted ammonia (NH₃) and dust. The SRG washing System is designed to wash the desorbed gas using water, thereby cooling it from 420°C, and cleaning it at the same time. The purified SRG is directed to the Gypsum Plant, which was commissioned in 2007 (Refer to Section 3.4).

The SRG handling system consists of a series of scrubber towers and their ancillary equipment such as recirculation pumps, heat exchangers to cool the gas, neutralisation tank for primary waste water treatment, mist precipitator for final dust and liquid removal from SRG, and SRG fan to transport the gas to the Gypsum Plant.

3.3.6 Dust Collection System

The dust collected from the undersize of the active char screen, and from spillage in conveyor casings, is pneumatically transported and is collected and stored in a dust storage bin.

The dust is discharged from the dust storage bin to a specially designed truck for transport to an area for further processing prior to disposal. Approximately 1 truck load of dust is produced each day.



3.3.7 Ammonia System

Anhydrous ammonia is stored under pressure in a 25-tonne horizontal pressure vessel. The product is received in bulk road tankers and transferred to the storage vessel by compressed ammonia vapour, using the installed compressor.

The ammonia is withdrawn from the tank, passed through a vaporiser. The vaporiser consists of a bath of warm water (return water from the regenerator cooling section), which heats and vaporises the liquefied ammonia.

Ammonia vapour is injected into the inlet hood of waste gas to each adsorber via injection nozzles. The distribution of the ammonia between the adsorbers is controlled by the back pressure of the waste gas in the adsorber inlet hoods.

The tank is fenced with authorised access only using a swipe card system.

The tank, compressor and tanker unloading bay are equipped with water spray systems. The water sprays can be activated locally from the Ammonia Emergency Water Station or from the control room.

3.4 Process Description – Gypsum Plant

The Gypsum Plant was designed to remove sulphur dioxide from the Sulphur Rich Gas (SRG). During normal operation, SRG is drawn from a Mist Precipitator to the Gypsum Plant. The SRG enters the Gypsum Plant Scrubber Tower where it is reacted with limestone slurry and recycled filtrate to produce Gypsum (Solid Calcium Sulphate). Any residual gas is drawn from the Gypsum Plant Scrubber Tower by a variable speed SRG Fan and then discharged to the WGCP stack.



Photograph 7 Gypsum Plant (10 March 2016)





Photograph 8 Storage of Gypsum (10 March 2016)

3.5 Services

Natural gas

Natural gas to the sinter machine ignition furnace and hot gas generator is received by pipeline at 1000 kPag and is let down to the required operating pressure by a set of self-regulating valves, designed to gas industry standard.

Nitrogen

Nitrogen is received as a gas from the site nitrogen supply and stored in two receiver vessels (each 90 m³ at 600 kPag) which provide buffer capacity for the WGCP.

There is an extensive array of nitrogen pipework providing nitrogen as the carrier gas for the regenerator, sealing of the regenerator inlet and outlet rotary valves, sealing of the SRG fan, air intake damper operation for the WG, and for emergency inerting of the adsorbers. Nitrogen gas is also supplied as required to the AC storage bin, dust storage bin, hot gas generator purge cycle, SRG washing facility inlet purge, and the ammonia supply facility and loading area.

Compressed Air

Compressed air is supplied via pipe line and may be used as a power supply for pneumatic hand tools in various areas. It is not directly used in the process.



Instrument Air

Compressed air is supplied via pipeline, is dehumidified by air dryers, and then used as instrument air. Instrument air is stored in a dedicated receiver (90m³ at 600 kPag). The instrument air is used to operate all the pneumatically actuated equipment (valves, dampers) around the plant.

Potable Water

Potable water is supplied via pipeline and is used for drinking fountains, safety showers and eye wash stations.

Industrial Water

Industrial water is supplied via pipe line and is mainly used for regenerator cooling water makeup (after demineralisation), water seals around the plant, ancillaries cooling water makeup, water supply for the ammonia scrubber sprays and makeup to the scrubber basin, water sprays to suppress ammonia dispersion from accidental leaks, make up water for SRG quench vessel, flushing for pump seals etc.

The supply is connected to the rest of the industrial water system via a Reduced Pressure Zone (RPZ) Valve that prevents backflow and contamination of the upstream supply.

Industrial water is also used for general and fire services.

3.6 Control Room

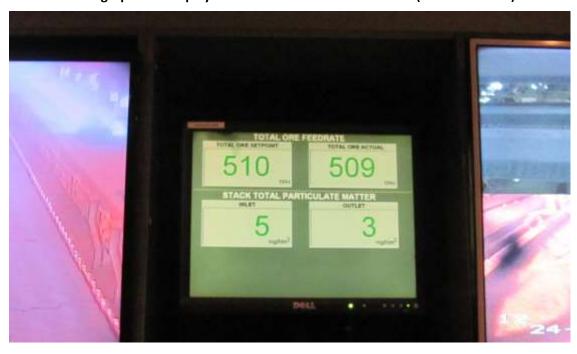
The Sinter Plant (Including the WGCP and Gypsum Plant) is controlled from the Sinter Plant control room, located at the strand level in the Sinter Plant building. The control room is normally occupied at all times by a process operator.

Historical trend data for process variables is available on screen (and from electronic archive) to assist in plant performance analysis. A log of all alarms, trips, set point changes or keystroke entries is maintained in electronic form for use in incident analysis.

Audible alarms are generated by the PLC in the control room, to warn the operator of high or low process parameter values, so corrective actions can be taken. Valve open / close positions of essential valves are also indicated on the screen.

The readings from the continuous total particulate monitoring device on the WGCP stack are also displayed in the control room (Refer to Photograph 9).





Photograph 9 Display of Stack Total Particulate Matter (24 March 2016)

3.7 Materials and Quantities

The maximum storage quantities of Dangerous Goods (DGs) for the Sinter Plant are shown in Table 8. These depots are primarily associated with the WGCP.

Depot	Туре	DG Class	Material	Max. Capacity
BF6	A/G Tank	8	Hydrochloric Acid	13,500 litres
BF7	A/G Tank	8	Sodium Hydroxide	25,000 litres
BF8	A/G Tank	2.3	Anhydrous Ammonia	25,000 kg
BF9	A/G Tank	8	Sodium Hydroxide	1,500 litres
BF10	Tank - IBC	8	Hypochlorite Solution	1,500 litres

Table 8 Storage of Dangerous Goods at Sinter Plant

3.8 Staffing

The Sinter Plant (Including WGCP and Gypsum Plant) operates 24 hours per day, 365 days per year. The management, operations leadership and plant inspection and maintenance are all part of the Sinter Plant as a whole. Operators work on a 12 hour, rotating shift roster.

Staffing level during normal operations includes:

- Ore Preparation Operations Manager;
- Operations Crew Team Leader (one for each shift crew);
- Instrument/ Electrical fitter;
- Ore Preparation Maintenance Manager;
- Maintenance personnel;



- Process Engineer (Sinter Plant); and
- Operations support staff.

3.9 Summary of Changes since Previous Independent Environmental Audits

The following changes/modifications have been identified since the previous IEAs in 2013.

Site Location and Separation to Neighbours:

• No significant changes since previous IEAs in 2013.

Site Changes

No significant changes since previous IEAs in 2013.

Process Plant / Equipment and Operations:

No significant changes since previous IEA in 2013, other than the installation of a new steel stack and some additional instrumentation following the fire in October 2014 (Refer to Section 4.1). The new instrumentation includes: additional thermocouples in the regenerator and adsorbers; pressure transmitters; tribo electric system for monitoring dust from the outlets on the adsorbers; and, infra-red scanners for monitoring the char temperature.

Utilities:

No significant changes since previous IEAs in 2013.

Communications:

• No significant changes since previous IEAs in 2013.

Emergency Systems:

No significant changes since previous IEAs in 2013.

Security:

No significant changes since previous IEAs in 2013.

Staffing Levels/Organisational Changes/Management Structure:

No significant changes since previous IEAs in 2013.



4 ENVIRONMENT RELATED INCIDENTS AND COMPLAINTS

4.1 WGCP Stack Fire

On 13 October 2014, fibre reinforced polymer stack at the WGCP stack was destroyed by fire. As a result of this fire, BSL recorded the following:

- One self-report to the EPA.
- 29 complaints, all of which related to the fallout of particulates (burnt fibre reinforced polymer) from the fire.

The following overview of this incident is based on BSL's incident investigation report [Ref. 1].

The fibre reinforced polymer stack at the WGCP was heated by hot air from Adsorber 1. Ambient air was pressurised by Booster Fan No. 1 and heated in Adsorber No. 1 by very hot activated char. None of the existing 48 thermocouples in the adsorber detected a higher than normal temperature.

Several hypotheses were explored during the investigation. The two most likely scenarios, operating either independently or in combination, were concluded to be:

- (1) Hot char passing undetected from the regenerator to the adsorbers and creating hot spots; and/or,
- (2) Stagnant char within the adsorbers developing into hot spots.

The first scenario involves the undetected transfer of very hot char pellets from the regenerator to the adsorbers. This scenario involves overheating of the pellets in the regenerator by ambient air leakage into the sulphur rich gas (SRG) hot zone and movement of these pellet(s) through the regenerator cooling section, discharge hopper, activated char screen and into the top of the adsorber being filled. If the pellet(s) descended to the waste gas flow path, then the gas velocity and oxygen content may potentially increase the oxidation rate, heating the surrounding pellets and propagating the exothermic oxidation/combustion of the char. The mass of hot char would then be available to heat the air/flue gas from Booster Fan 1. This hot mass could remain undetected until it descended to the top row of thermocouples.

The second scenario involves the formation of hot spots within the adsorbers due to stagnant char. Stagnant char occurs when char stops descending through the adsorber, resulting in decreased permeability of char. As the permeability decreases, the gas flow in this area reduces, which can result in a hot spot. Stagnant char is a known cause of hot spots in activated char waste gas cleaning systems.

The transfer of hot char from the regenerator may have acted in combination with stagnation of char within the adsorbers to result in the incident on 13 October 2014.

The investigation report included some other factors that may have contributed to hot char within the adsorbers:

- Negative operating pressure in the regenerator leading to air ingress;
- Migration of char from the middle zone to the front zone, which may have prevented the downward flow of char from the top of the front zone;
- Cessation of char circulation for periods during plant shutdowns coinciding with Blast Furnace shut downs;
- Certain physical characteristics of the Tetsugen char, which was introduced to the adsorbers since April 2014; and



The ignition temperature of char being lower than the temperature specified by all char suppliers, particularly when air is blown onto the char.

Of these five other factors, the first relates to the potential for hot char to be transferred undetected from the regenerator to the adsorbers, while the remaining four factors are potentially relevant to both the transfer of hot char from the regenerator to the adsorbers and the creation of stagnant char within the adsorbers.

After the fire, the waste gas from the Sinter Plant was temporarily diverted from the Sinter Plant Waste Gas Cleaning Plant Stack (EPL Point 107) to the Number 3 Sinter Machine Stack (EPL Point 151). This required a modification to the EPL. New conditions were subsequently added to the EPL to allow this to occur in the future (Refer to Section 7.2). BSL advised that this has not been required since the WGCP was brought back online following completion of the repairs / modifications to the WGCP after the fire.

4.2 **Other Environment Related Incidents and Complaints**

The IEA included a review of environment related incidents and complaints reported for the Sinter Plant (Including the WGCP and Gypsum Plant) during the period 1-Jul-13 to 8-Mar-16. In addition to the self-reports and complaints recorded during the stack fire (Refer to Section 4.1), BSL recorded the following for the Sinter Plant:

- Thirteen self-reports to the EPA to notify that the SRG treatment system / Gypsum Plant is off-line. This is a condition of the EPL (Licence Condition No. O4.19) and the development consent (Consent Condition No. 4.25 in DA No 26-02-01) since it will result in a discharge of SRG to atmosphere.
- Three complaints and enquiries from the EPA regarding visible emissions from the Sinter Plant WGCP Stack (EPL Point 107).
- One self-report to the EPA of visible emissions from the Sinter Plant WGCP Stack (EPL Point 107) due to a fire in an adsorber (September 2014)
- Two self-reports to the EPA of visible emissions from the Sinter Plant WGCP Stack (EPL Point 107) on plant start-up following maintenance.
- Two complaints and one self-report to the EPA regarding visible emissions from the Sinter Machine Room Dedusting stack (EPL Point 2).
- One self-report to the EPA of failure of the opacity meter on the Sinter Machine Room Dedusting stack (EPL Point 2).
- One self-report to the EPA of a spill of 10 tonnes of iron sands into the Harbour. Note: This is not directly related to the OPUP, WGCP or Gypsum Plant.
- One self-report to the EPA of a fire on a conveyor in the raw materials yard. Note: This is not directly related to the OPUP, WGCP or Gypsum Plant.
- One self-report to the EPA of dead fish in the IMED, two self-reports to the EPA of discolouration of the harbour and/or IMED and one self-report to the EPA of Coke Ovens Gas condensate being discharged into the IMED. Note: These were not directly related to the OPUP, WGCP or Gypsum Plant.



5 OVERVIEW OF HSE MANAGEMENT SYSTEM

Health, Safety and Environmental (HSE) management is governed at BSL in accordance with the following hierarchy of documentation:

- 1. Bond.
- 2. Health, Safety, Environment and Community (HSEC) Policy.
- 3. Safety Beliefs and Environmental Principles.
- 4. HSE Standards.
- 5. Corporate Policies, Procedures, Codes of Practice and Guidelines.
- 6. Business and Sub-Business Policies, Procedures, Codes of Practice and Guidelines.

BSL operates with fourteen corporate health, safety and environment standards. The stated objectives of the HSE standards are to:

- Support BlueScope Steel's Bond, HSEC Policy, Safety Beliefs and Environmental Principles;
- Set expectations for progressive development and implementation of HSE policies, processes and procedures;
- Drive continual improvement.

There are 14 standards:

- 1. Leadership and Accountability
- 2. Legal and Other Requirements
- 3. Risk Management (Note: Includes management of change)
- 4. Fit for Work
- 5. Training and Competency
- 6. Engagement, Consultation and Communication
- 7. Document and Record Control

- 8. Material Supply and Contractor Management
- 9. Project Management
- 10. Process, Plant and Equipment integrity
- 11. Emergency Preparedness and Response
- 12. Incident Management
- 13. Preventive and Corrective Action
- 14. Measurement and Verification



6 Environmental Aspects and Impacts

BSL has identified the following environmental aspects and impacts (*Ore Preparation Lawwne Aspects Register*, DS.DH-IM-ADM-05.03, dated August 2013, copy provided):

 Table 9
 Environmental Aspects and Impacts for Sinter Plant

Aspect	Impact/s
AIR	
WGCP stack (EPL Pt 107)	Discharge of fine particulates & emissions of dioxins, NO _x , SO _x and CO ₂
Room dedusting stack (EPL Pt 2)	Dust emissions from stack
Cooler	Sinter plant dust generation
Electricity consumption	Greenhouse gases from electricity generation
Anhydrous ammonia	Localised air emission
Monitoring devices	Failure to maintain or calibrate monitoring devices
WASTE	
WGCP dust	Waste dust contains fine activated char and captured Sinter Plant waste gas dust contains heavy metals (EPA classified immobilised solid)
Asbestos	Hazardous waste during and after maintenance
WATER	
Stormwater	Contamination of harbour
Anhydrous ammonia	Liquid ammonia leak to drain
Water treatment plant reject slurry	Solids containing component of SRG washing liquid
Water treatment plant discharge	SRG washing liquid after treatment discharged to 4BF Thickener
Main fan cooling towers	Legionella bacteria
Ancillaries cooling tower	Legionella bacteria
LAND	
General maintenance waste	Waste materials to landfill
Spills	Contaminated solid from spillages of fuels, lubricants, hydraulic oils and chemicals
NOISE	
Local noise	Local noise to surrounding area



7 AUDIT FINDINGS

The findings and corrective actions for each relevant condition, based on the personnel interviews and document reviews, are listed in Table 10 (Conditions of Development Consent) and Table 11 (Additional Conditions from EPL). The findings and recommendations from the site and equipment inspections (27-29 April 2015) are listed in Table 12.

The corrective actions are also included in the Summary section of this report, together with the facility management's proposed action plan.



7.1 Conditions of Development Consent

Table 10 Audit Findings (Conditions of Development Consent)

CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
A. GE	NERAL / ADMINISTRATIVE CONDITIONS	'		
\.1 Ob	ligation to Minimise Harm to the Environment / Undertak	e Activities in a Competent Manner		
W-1.1	The Applicant must implement all practicable measures to prevent or minimise any harm to the environment that may result from the construction, operation, and where relevant, the decommissioning of the development.	Controls are listed in the Environmental Aspects and Impacts Register (DS.DH-IM-ADM-05.03, dated August 2013, copy provided). This information is also included in the on-line hazard register (MARS), which was sighted and appeared to correlate with the information in the Environmental Aspects and Impacts Register. MARS is a 'living system', which includes the audit history for the listed controls. The listed controls are mainly for the operation phase. BSL advised that if construction (or decommissioning) was to be required, then a separate risk assessment would be undertaken to identify the required controls. A relatively large number of Pollution Reduction Programs are listed in the EPL (The most recent being PRP 176 for the IMED diversion project). This indicates an ongoing program of implementing additional risk reduction measures. Some controls listed in the Environmental Aspects and Impacts Register were spot-checked during the site inspections (Refer to Section 7.3).	Compliant	
W-4.1	The Waste Gas Cleaning Plant must be designed and operated with the objective that emissions from the Sinter Plant do not result in any adverse impacts to the environment or human health in the adjacent community.	This broad, objective-based, Consent Condition (CC), is difficult to assess in isolation and is therefore addressed through the assessment of compliance with the other CCs and the conditions of the EPL (i.e. As covered in Section 7 of this report). Meeting this overall objective is also evidenced through:	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
		 Relatively few identified non-compliances in the previous IEA (Refer to Section 8) and this IEA; Relatively few incidents / complaints associated with the WGCP since the previous IEA (Other than the fire in 2014 – Refer to Section 4.1); and Active communication with the EPA (BSL advised that they attend 6-weekly liaison meetings with EPA – not verified) and the via the Community Consultation Committee (Minutes sighted for March, June and September 2015, copies provided). 		
W-A1.1 [Also EPL # O1.1]	Licensed activities must be carried out in a competent manner. This includes: the processing, handling, movement and storage of materials and substances used to carry out the activity; and the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the	It is difficult to assess this CC in isolation, however, ongoing competency is demonstrated through compliance with the CCs and the conditions of the EPL (i.e. As covered in Section 7 of this report). The systems used to ensure competency of plant operation and contractors were also reviewed during the IEA. Plant Operations	Compliant	
	activity.	Operations are audited with compliance tracked by BSL on a monthly basis. An example monthly compliance report was provided for the Sinter Plant (Jan-16), which specifically includes a reference to the general EPL condition # O1.1 and lists examples of the actions / evidence required to demonstrate compliance.		
		The Level 3 Accreditation Matrix for the WGCP was sighted (Dated Sept 2015, copy not provided). An example assessment for operating the WGCP Waste Treatment Plant was also sighted. One part of this assessment is the 'Water Treatment Plant Check List' assessment sheet (MA-OPSP-TRA-KWTP-003, copy not provided), which includes questions such as "why is the water treatment plant		



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
		required?", "what is the role of TUF system?" (Note: TUF = filter system), "List at least three safety and environment features associated with the WTP". Many questions were included to assess competency and this assessment appeared to be comprehensive. Training records were selected at random for two operators. These records showed that the L3 water treatment plant training had been completed for one and was "not held" for the other. Contractors		
		Contractors are audited with compliance tracked by BSL on a monthly basis. An example monthly compliance report was provided for TAPC (Feb-16, copy provided), which specifically includes a reference to the general EPL condition # O1.1 and lists examples of the actions / evidence required to demonstrate compliance (e.g. training up-to-date).		
A.2 Ter	ms of Approval			
G-1.2 & G-1.2A	The Applicant must carry out the development generally in accordance with:	It is difficult to verify compliance with all aspects of this CC, therefore a sampling approach was adopted as follows:	Not Verified	
(Supercedes W-1.2)	 (a) DA No. 26-02-01 submitted to the Department of Urban Affairs and Planning; (b) SEE, titled 'Sinter Plant Waste Gas Cleaning Plant - Statement of Environmental Effects - Final', dated January 2001, and prepared by Sinclair Knight Merz Pty Ltd; (c) additional information titled 'Preliminary Hazard Analysis - Waste Gas Cleaning Plant - Sinter Emission Reduction Project, BHP Port Kembla'; dated 19 March 2001, and prepared by Orica Engineering Pty Ltd; 	(a), (b), (c) and (e) The WGCP (Including Gypsum Plant) was visited during the site inspection (Refer to Section 3.3). Any relevant observations are recorded in Section 7.3. (d) BSL advised that the discussion with EPA resulted in the monitoring of noise at the Gabriella Monument on Christy Drive (Also refer to EPL condition # L6.5). An example survey report was sighted (By Hatch, dated 25 June 2012, copy provided), which showed compliance with the 70 DB(A) noise criterion. This location was also visited during the site inspection.		



CC#		Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	(d)	additional information in the fax titled 'Relocation of Noise Monitoring Reference Point', dated 10 April 2001, and prepared by the Applicant;	(f) The Gypsum Plant was visited during the site inspection (Refer to Section 3.4). Any relevant observations are recorded in Section 7.3.		
	(e)	relevant prescribed conditions in clause 98 of the Environmental Planning and Assessment Regulation 2000;	(g) This is covered in Section 7 of this report. As it was not possible to verify all requirements of this CC within the scope of this audit, it has been categorised as		
	(f)	modification application MOD-50-4-2005-i, accompanied by 'Proposed Sulphur Rich Gas Treatment Modification, Utilising Gypsum Manufacture - Supplementary Statement of Environmental Effects', dated July 2004, and prepared by the Applicant; and	'Not Verified' in accordance with the DP&E's assessment criteria (Refer to Section 2.3). However, no evidence was found to suggest that the operation is non-compliant with this CC.		
	(g)	the conditions of this consent.			
	In tl	ne event of an inconsistency between:			
	(a)	the conditions of this consent and any document listed from condition 1.2(a) to 1.2(f) inclusive, the conditions of this consent shall prevail to the extent of the inconsistency; and			
	(b)	any document listed from condition 1.2(a) to 2(f) inclusive, and any other document listed from condition 1.2(a) to 1.2(f) inclusive, the, most recent document shall prevail to the extent of the inconsistency			
O-1.1 & O-1.2		Proponent shall carry out the project generally in ordance with the:	It is difficult to verify compliance with all aspects of this CC, therefore a sampling approach was adopted as follows:	Not Verified	
	(a) (b)	Major Project Application 06_0229; Ore Preparation Upgrade Project - Environmental Assessment dated February 2007, and prepared by CH2M HILL Australia Pty Ltd;	 (a), (b) and (c) The Sinter Plant (Including facilities covered by the OPUP) was visited during the site inspection (Refer to Section 3.2). Any relevant observations are recorded in Section 7.3. (d) This is covered in Section 7 of this report. 		



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	(c) Correspondence titled BlueScope Steel's Proposed Ore Preparation Plant Upgrade - Reference: 06- 0229 dated 2 May 2007 and containing Attachment 1: Response to Issues Raised in Submissions and Additional Statement of Commitments; and	As it was not possible to verify all requirements of this CC within the scope of this audit, it has been categorised as 'Not Verified' in accordance with the DP&E's assessment criteria (Refer to Section 2.3). However, no evidence was found to suggest that the operation is non-compliant with this CC.		
	(d) the conditions of this approval.			
	In the event of an inconsistency between:			
	(a) the conditions of this approval and any document listed from condition 1.1a) to 1.1 c) inclusive, the conditions of this approval shall prevail to the extent of the inconsistency; and			
	(b) any document listed from condition 1.1 a) to 1.1 c) inclusive, and any other document listed from condition 1.1 a) to 1.1 c) inclusive, the most recent document shall prevail to the extent of the inconsistency.			
O-1.3	The Proponent shall comply with any reasonable requirement(s) of the Director-General arising from the Department's assessment of: (a) any reports, plans or correspondence that are submitted in accordance with this approval; and	BSL advised that the DP&E has not requested specific additional requirements, but have had correspondence to clarify actions from previous audits (IEAs and Hazard Audits). Example correspondence following the IEA in 2013 was sighted (copy not provided). Mostly this related to clarifying aspects of the action plan.	Compliant	
	(b) the implementation of any actions or measures contained in these reports, plans or correspondence.	BSL advised that an updated action plan for the previous Hazard Audit is to be submitted to DP&E by end April. The last version submitted to DP&E in Nov 2014 was sighted (Copy not provided).		
		This observation is consistent with the consultation with the DP&E prior to audit (Refer to Section 2.4.1).		



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
A.3 Lim	nits of Approval			
0-1.4	This approval shall lapse five years after the date on which it is granted, unless the works the subject of this approval are physically and substantially commenced on or before that time.	Approval for OPUP was dated 3 July 2007. The plant associated with the OPUP was commissioned in June 2009 (Refer to Section 1.1.3).	Compliant	
0-1.5	The maximum production capacity from the upgraded Sinter Plant shall be limited to 6.6 million tonnes per annum.	The daily production data is reported on the BSL intranet (Sighted, copy not provided). The data for 7 March 2016 showed production of 11,424 tonnes per day, which equates to 4.2 million tonnes per annum.	Compliant	
		The Sinter Plant is being operated below its capacity since the PKSW is currently only operating one blast furnace (Refer to Section 1.1.3).		
A.4 Env	vironment Protection Licence / Statutory Requirements			
W-1.3	Prior to the commencement of any construction activities, the Applicant must apply to the EPA for a licence variation for the development.	BSL has a current EPL licence (EPL 6092, dated 1-Feb-16, copy provided). A historical listing of the EPL revisions issued to BSL is	Compliant	
		included on the EPA website (Sighted). A licence variation was issued by the EPA in June 2007, which confirms that variations were being included as a result of this development.		
W-1.4	The Applicant must, in the opinion of the EPA, be a fit and proper person to hold a licence under the Protection of the Environment Operation Act 1997, having regard to the matters in Section 83 of that Act.	BSL has a current EPL licence (EPL 6092, dated 1-Feb-16, copy provided). No issues were raised by the EPA representative prior to the IEA (Refer to Section 2.4.1).	Compliant	
W-A4.1 [Also EPL # G1.1 to G1.3]	Copy of licence kept at the premises or on the vehicle or mobile plant.	This Consent Condition is the same as included in the EPL; however, the EPL only refers to keeping licence at the site (i.e. not on the "vehicle or mobile plant"), which would appear to be more relevant in this case.	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	A copy of this licence must be kept at the premises or on the vehicle or mobile plant to which the licence applies.	A copy of the EPL is held by the BSL environment department (Sighted) and is available on the BSL intranet (Sighted).		
	The licence must be produced to any authorised officer of the EPA who asks to see it.	A hyperlink is included on the shared Environment intranet page, which links to the EPL on EPA website (i.e. to ensure		
	The licence must be available for inspection by any employee or agent of the licensee working at the premises or operating the vehicle or mobile plant.	always up-to-date). It was verified during the audit that this link is working.		
O-1.6	The Proponent shall ensure that all licences, permits and approvals are obtained and kept up-to-date as required throughout the life of the development. No condition of this approval removes the obligation for the Proponent to obtain, renew or comply with such licences, permits or approvals. The Proponent shall ensure that a copy of this approval and all relevant environmental approvals are available on the site at all times during the project.	BSL has a current EPL licence (EPL 6092, dated 1-Feb-16, copy provided), which is available on the EPA website. There have been recent variations to the EPL to accommodate the bypass of the Sinter Plant WGCP Stack (Refer to Section 7.2). Also refer to CC # W-A4.1 above.	Compliant	
A.5 Str	uctural Adequacy			
W-1.5	Before the commencement of construction work on any aspect of the development, the Applicant must obtain a construction certificate for this aspect of the development in accordance with Sections 109C and 109D of the Environmental Planning and Assessment Act 1979.	The construction certificate could not be located during the audit and the previous IEA in 2013 did not report on the status of this Consent Condition. However, the WGCP was constructed in 2003 and it is expected that failure to obtain the required certificate would have been identified in a previous audit (i.e. BSL is more likely to be compliant than non-compliant despite failure to produce the required evidence).	Not Verified	2016/1 – BSL should locate the construction certificate for the WGCP and to ensure it is available for future reference.
		As it was not possible to verify compliance with this CC within the scope of this audit, it has been categorised as 'Not Verified' in accordance with the DP&E's assessment criteria (Refer to Section 2.3).		

Doc Number: J-000185-REP-002



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
		It would still be appropriate for BSL to locate the construction certificate and to ensure it is available for future reference.		
W-1.6	Before commencement of operations permitted by this consent, the Applicant must obtain an occupation certificate for the buildings and structures which comprise the development, in accordance with Sections 109C and 109D of the Environmental Planning and Assessment Act 1979.	The occupation certificate could not be located during the audit and the previous IEA in 2013 did not report on the status of this Consent Condition. However, the WGCP was constructed in 2003 and it is expected that failure to obtain the required certificate would have been identified in a previous audit (i.e. BSL is more likely to be compliant than non-compliant despite failure to produce the required evidence). As it was not possible to verify compliance with this CC within the scope of this audit, it has been categorised as 'Not Verified' in accordance with the DP&E's assessment criteria (Refer to Section 2.3). It would still be appropriate for BSL to locate the occupation certificate and to ensure it is available for future reference.	Not Verified	2016/2 – BSL should locate the occupation certificate for the WGCP and to ensure it is available for future reference.
W-1.7	 Prior to commencement of work, the person having the benefit of the Development Consent and a Construction Certificate shall: appoint a Principal Certifying Authority and notify Council and the Director-General of the appointment (if Council is not appointed); and notify Council and Director-General of their intention to commence the erection of the building (at least 2 days' notice is required). The Principal Certifying Authority shall determine when inspections and compliance certificates are required. 	Evidence of appointing a Principal Certifying Authority and notifying Council and the DP&E could not be located during the audit and the previous IEA in 2013 did not report on the status of this Consent Condition. However, the WGCP was constructed in 2003 and it is expected that failure to comply with this consent condition would have been identified in a previous audit (i.e. BSL is more likely to be compliant than non-compliant despite failure to produce the required evidence). As it was not possible to verify compliance with this CC within the scope of this audit, it has been categorised as 'Not Verified' in accordance with the DP&E's assessment criteria (Refer to Section 2.3).	Not Verified	2016/3 – BSL should locate the relevant compliance certificates for construction of the WGCP and ensure these are available for future reference.

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		It would still be appropriate for BSL to locate the compliance certificates and to ensure they available for future reference.		
W-1.8	To prevent any damage by wind uplift, adequate fixing and bracing is to be provided to structures to withstand the loading requirements of AS 1170.1 and AS1170.2.	Design records could not be located during the audit and the previous IEA in 2013 did not report on the status of this Consent Condition. However, the WGCP was constructed in 2003 and it is expected that failure to comply with this consent condition would have been identified in a previous audit (i.e. BSL is more likely to be compliant than noncompliant despite failure to produce the required evidence). It is reported in the 2015 Hazard Audit report [Ref. 1], that: "The engineering calculations report and basis of design report for the new stack were sighted (copies provided – part only). These were prepared by SOTO Consulting Engineers and appeared to be comprehensive. For example, the engineering calculations report included finite element analysis results for the new stack, including for each step of the stack construction sequence and the basis of design report included various load combinations (wind, earthquake, etc.)". As it was not possible to verify compliance with this CC	Not Verified	2016/4 – BSL should locate the wind load design records for the WGCP and ensure these are available for future reference.
		within the scope of this audit, it has been categorised as 'Not Verified' in accordance with the DP&E's assessment criteria (Refer to Section 2.3).		
		It would still be appropriate for BSL to locate the original structural design records for the WGCP and to ensure they available for future reference.		
W.1.9	Demolition activities shall comply with the requirements of AS 2601-1991.	BSL advised that there have been no significant demolition activities at the WGCP (including following the fire in 2014).	Not Triggered	

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CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
A.5 Ma	intenance and Operation of Plant and Equipment			
W-A1.2 [Also EPL # O1.2]	All plant and equipment installed at the premises or used in connection with the licensed activity: • must be maintained in a proper and efficient condition; and • must be operated in a proper and efficient manner.	This is a general EPL condition (i.e. same as EPL # O1.2). Two environmental protection systems were reviewed during the audit: (i) continuous total particulate monitoring device on the WGCP stack; and, (ii) the sinter machine room dedusting system. Total Particulate Monitoring Device on WGCP Stack The continuous total particulate monitoring device on the WGCP stack does a self-calibration check every 8 hrs (zero and full range). This is shown on the "green spikes" on the following figure (Sample data for a 24-hour period). Figure 4 Self-Check of Particulate Monitoring Device The lens is cleaned every 13 weeks, with WO records showing it was last cleaned on 7 February 2016. The maintenance strategy and maintenance plan (SP1296) were also sighted (Copy not provided).	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
		Sinter Machine Room Dedusting System		
		The room dedusting (RDD) precipitators are inspected and repaired by a third party contractor (TAPC).		
		The maintenance plan for the RDD precipitators was sighted (Copy provided) and includes a service every 13 weeks and cleaning every c.26 weeks based on performance (Next scheduled clean in May 2016).		
		Not all components are checked every 13 weeks. The frequency of each individual task (cleaning, lubrication, checking, etc.) is specified for each component (Extract sighted, copy provided).		
		The procedure for cleaning the RDD precipitators was also sighted (Doc. No. 167858, dated 23 September 2015, copy provided) and appeared to be comprehensive.		
B. EN	VIRONMENTAL MANAGEMENT PLANS			
B.1 Coi	nstruction Management Plan			
W-3.1	The Applicant must prepare and implement a Construction Management Plan for the development. This plan must: (a) describe the proposed construction works;	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC has been assessed as 'Compliant' since:	Compliant	
	(b) outline the proposed construction work program;(c) identify all the relevant statutory requirements	A CMP was prepared for construction of Gypsum Plant (Copy provided).		
	and conditions of consent that apply to the construction phase of the development;	The DP&E has agreed that construction is completed and has recommended that this CC be		
	(d) set standards and performance measures for each of the relevant environmental matters associated with the construction work;	removed [Ref. 5]. If BSL undertakes construction work in the future, then any approval would consider the need to manage construction related impacts through new conditions [Ref. 5].		
	(e) describe what actions and measures will be implemented to mitigate the potential impacts of	The DP&E required a hazard audit, but did not require an updated CMP for the replacement of the		



CC#		Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
		the construction works, and to ensure that these works will comply with the relevant standards and performance measures;	stack following the fire in 2014 (Sighted letter from DP&E to BSL requesting a hazard audit, dated 10 December 2014, copy provided).		
	(f)	describe in detail what measures and procedures will be implemented to:			
		 manage construction traffic; 			
		 manage construction noise; 			
		 mitigate any potential dust impacts; 			
		 prevent soil contamination; 			
		 register and respond to complaints during the construction period; 			
		 ensure the occupational health and safety of construction workers; and 			
		 respond to any emergencies; 			
	(g)	explain how the environmental performance of the construction works will be monitored, and what actions will be taken if any non-compliance is detected;			
	(h)	describe the role, responsibility, authority, accountability, and reporting of key personnel involved in the construction of the development; and			
	(i)	include the following:			
		 a Construction Noise Management Plan (see Condition 4.5); 			
		a Dust Management Plan (see Condition 4.9)			
		 an Erosion and Sediment Control Plan (see Condition 4.32); 			



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	 a Stormwater Management Plan (see Condition 4.33); and 			
	 a Remedial Action Plan (if required under Condition 4.35). 			
	No construction work may occur on any aspect of the proposal before the Construction Management Plan for that particular aspect of the development has been approved by the Director-General.			
	The Applicant must ensure that a copy of the Construction Management Plan is submitted to Council and is publicly available.			
0-6.1	Prior to the commencement of construction of the project, the Proponent shall prepare and implement a Construction Environmental Management Plan to outline environmental management practices and procedures to be followed during construction of the project. The Plan shall be prepared in accordance with Guideline for the Preparation of Environmental Management Plans (DIPNR 2004) and shall include, but not necessarily be limited to: (a) a description of all activities to be undertaken on the site during construction including an indication of stages of construction, where relevant; (b) statutory and other obligations that the Proponent is required to fulfil during construction including all approvals, consultations and agreements required from authorities and other stakeholders, and key legislation and policies;	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC has been assessed as 'Compliant' since it is marked as complete in the 2013 IEA (Refer to Section 1.3). Note: The DP&E has agreed that construction is completed and has recommended that this CC be removed [Ref. 4]. If BSL undertakes construction work in the future, then any approval would consider the need to manage construction related impacts through new conditions [Ref. 4].	Compliant	
	(c) details of how the environmental performance of the construction works will be monitored, and what actions will be taken to address identified			



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	adverse environmental impacts. In particular, the following environmental performance issues shall be addressed in the Plan:			
	 i. measures to monitor and manage dust emissions; 			
	 ii. measures to monitor and minimise soil erosion and the discharge of sediment and other pollutants to lands and or waters during construction activities; and 			
	iii. measures to monitor and control noise emissions during construction works.			
	(d) a description of the roles and responsibilities for all relevant employees involved in the construction of the project;			
	(e) the additional studies listed under condition 6.2 of this approval; and			
	(f) complaints and enquiries handling procedures during construction.			
	The Plan shall be submitted for the approval of the Director-General no later than one month prior to the commencement of any construction works associated with the project, or within such period otherwise agreed by the Director-General. Construction works shall not commence until written approval has been received from the Director-General.			
0-6.2	As part of the Construction Environmental Management Plan for the project required under condition 6.1 of this approval, the Proponent shall prepare and implement the following: (a) where soil testing prior to the commencement of construction identifies the presence of acid sulfate	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC has been assessed as 'Compliant' since it is marked as complete in the 2013 IEA (Refer to Section 1.3), subject to confirmation that this CC is no longer relevant (Refer to	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	soils, an Acid Sulfate Soil Management Plan prepared in accordance with guidance provided in Acid Sulfate Soil Manual (Acid Sulfate Soil Management Advisory Committee, 1998); (b) a Construction Water Management Plan to detail how surface water, groundwater and stormwater will be managed on the site during construction. The Plan shall include use of appropriately-sized stormwater controls, in accordance with Managing Urban Stormwater: Soils and Construction (Landcom, 2004). The Plan shall include specific measures to avoid sediment-laden storm water from entering Port Kembla Inner Harbour, and a monitoring program for stormwater leaving the site;	Section 8). The DP&E has agreed that construction is completed and has recommended that this CC be removed [Ref. 4]. If BSL undertakes construction work in the future, then any approval would consider the need to manage construction related impacts through new conditions [Ref. 4].		
	(c) a Construction Noise Management Plan to detail how construction noise and vibration impacts would be minimised and managed, including. but not necessarily limited to:			
	 i. details of construction activities and a schedule for construction works; ii. identification of construction activities that have the potential to generate noise and/or vibration impacts on surrounding land uses. particularly residential areas; 			
	iii. a detailed description of what actions and measures would be implemented to ensure that these works would comply with the relevant noise and vibration criteria / guidelines;			
	iv. procedures for notifying residents of construction activities that are likely to effect			



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	their noise and vibration amenity, as well as procedures for dealing with and responding to noise complaints and enquiries; and v. a description of how the effectiveness of these actions and measures would be monitored during the proposed works, clearly indicating how often this monitoring would be conducted, how the results of this monitoring would be recorded; and, if any non-compliance is detected. (d) a Construction Traffic Management Plan to detail how heavy vehicle movements associated with the project would be managed during the construction phase of the development. The Plan shall specifically address the management of construction traffic along the existing heavy vehicle routes within the Wollongong local government area. measures to minimise the impact of construction traffic along the classified road network, restrictions to the hours of heavy vehicle movements to avoid road use conflicts, movement of oversize loads to and from the site, and the transport of construction waste materials. The Traffic Management Plan must be prepared in consultation with the RTA and Council.			
B.2 Env	vironmental Management Plan			
W-3.2	The Applicant must prepare and implement an Environmental Management Plan for all operations at the site. This plan must: (a) describe the proposed operations;	There is no standalone EMP. The required information is included in various documents. (a) and (b) Is addressed in the Ore Preparation Department Handbook (Dated April 2014, copy provided) and Process User Requirement Specification (PURS) manual.	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	 (b) identify all the relevant statutory requirements that apply to the operation of the development; (c) set standards and performance measures for each of the relevant environmental issues; (d) describe what actions and measures will be implemented to mitigate the potential impacts of the development, and to ensure that the development meets these standards and performance measures; (e) describe what measures and procedures will be implemented to: register and respond to complaints; ensure the operational health and safety of the 	(c) and (d) The OPUP Enviro Aspects and Impacts Register (DS.MA-OPD-01-03-01) was sighted (Also refer to Section 6). This information is also included in the MARS database. Sighted 'MARS Risk Scenarios' (Nov 14) and specifically Hazard 141.4 – Spill and/or Emission in MARS. MARS does not include legal requirements (i.e. anything that could be interpreted to be a standards / performance targets) since these are included in other systems – e.g. CCs, EPL conditions etc. BSL can generate a 'Monthly Environment Report' from MARS (Sighted example report for Ore Preparation for February 2016, copy provided). Performance can be compared against previous years.		
	 versure the operational health and safety of the workers; and respond to potential emergencies, such as plant failure; (f) describe the role, responsibility, authority, and accountability of all the key personnel involved in the operation of the development; (g) include the following: a Waste Management Plan (Condition 4.39); a Contingency Plan (Condition 5.11). The Environmental Management Plan must be approved by the Director-General before the Waste Gas Cleaning Plant may be commissioned. 	Targets are set at a coke and ironmaking level (which are then cited in the relevant position descriptions – see (f) below). (e) Incidents are categorised by type and location and incident category. An example report sighted during the audit showed that air emissions are the principal aspect. (f) Organisational chart was sighted (DS.DH-OPD-05.2, dated February 2016, copy not provided). Included new Business Engineer (David Jones), who had only been added recently (in last few weeks). Also sighted list of position descriptions (PDs) in Documentum and sighted that example PD for an 'Ore Prep Process Controller' includes requirements for: 1 enviro audit per month; and to ensure team delivers on all environmental requirements.		
		(g) It is reported in BSL's Annual Environmental Management Report (Dated 4 October 2013, copy provided) that the Waste Management Plan was sent to the Office of Environment and Heritage, Council and the Department of Planning in c. January - March 2003 and approved by the		



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
		Department of Planning on 13 May 2003 (Dept. Ref. SOO/01294 – not verified). Similarly, it is reported that the Contingency Plan was submitted (recipient not identified) on 6 Jan 2003.		
G-3.2A	The Construction Management Plan referred to under condition 3.2 of this consent shall be updated or remade from, time to time to reflect any approved modification of the development involving construction works. The updated or remade Plan shall be applied to the construction works the subject of the modification for the duration of construction works. The Applicant' shall make a copy of the updated or remade Plan available for inspection by Director-General upon request.	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. This CC has been assessed as 'Not Verified' since it is not included in the 2013 IEA (Refer to Section 1.3). Note: The DP&E has agreed that construction is completed and has recommended that this CC be removed [Ref. 5]. If BSL undertakes construction work in the future, then any approval would consider the need to manage construction related impacts through new conditions [Ref. 5].	Not Verified	
W-3.3	The Applicant must ensure that a copy of the Environmental Management Plan is submitted to Council and is publicly available.	This CC was not verified in the previous IEA reports for 2013 (copy provided) and 2010 (copy provided). No evidence could be found during the current audit to demonstrate that all documents constituting the EMP have been submitted to Council. It is also not clear if this information has ever been made publically available (e.g. during the construction / commissioning phases) and it does not appear to be included on the current website. This non-compliance is unlikely to result in any risk of environmental harm since it is largely administrative. The DP&E has not recommended that this CC be removed or amended [Ref. 5].	Non-Compliant	2016/5 – Information relating to the WGCP should be made publically available (e.g. on a public website) as required by the relevant condition of development consent (Refer to CC # W-3.3).
G-3.4 (Super- cedes W- 3.4)	The Applicant shall maintain and update the Environmental Management Plan referred to under condition 3.2 of this consent from time to time to reflect modifications to the development and any changes in	The example documents comprising the EMP that were sighted during the audit appear to have been maintained and updated (Refer to W-3.2 & G-3.2A above).	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	the environmental management of the development. The Applicant shall make a current version of the Plan available for inspection by the Director-General upon request.			
O-6.3	Prior to the commencement of recommissioning of the Ore Preparation area, the Proponent shall demonstrate to the satisfaction of the Director-General that it has updated environmental and safety management systems for the Steelworks to reflect the works subject of this Approval.	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC has been assessed as 'Compliant' since it is marked as complete in the 2013 IEA (Refer to Section 1.3).	Compliant	
c. co	MMUNITY INFORMATION, CONSULTATION AND INVOLVE	MENT / COMPLAINTS		
C.1 Pro	ovision of Information			
0-5.1	Subject to commercial confidentiality, the Proponent shall make all documents required under this approval available for public inspection on request.	In the 2013 IEA, this CC was interpreted to be only relevant to the construction phase, with provision of ongoing information addressed by CC # O-5.4 (See below). Therefore, it was marked as complete in the 2013 IEA. However:	Not Verified	
		This CC does not appear to be only relevant to the construction phase.		
		 The DP&E has not recommended that this CC be removed or amended [Ref. 4]. 		
		This CC has been assessed as 'Not Verified' since it is not known if any requests for this information have been received and actioned. However, it is noted that some information was provided on a website (See CC # O-5.4 below) and information is being provided through the Community Consultative Committee.		

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O-5.4	The Proponent shall establish and maintain a new website, or dedicated pages within its existing website for the provision of electronic information associated with the proposal. The Proponent shall publish and maintain up-to-date information on this website or dedicated pages for the life of the project and include, but not necessarily be limited to: (a) a copy of the documents referred to under condition 1.1 of this approval, and any documentation supporting modifications to this approval that may be granted from time to time; (b) a copy of this approval and each relevant environmental approval, licence or permit required and obtained in relation to the project; (c) a copy of each strategy, plan and program required under this approval; and (d) the outcomes of compliance tracking in accordance with condition 4.1 of this approval.	This was identified as a non-compliance in previous 20133 IEA. The current proposal was sighted to add additional information to the website for the community website following the WGCP fire. However, this does not include all of the listed information (some of which was on an earlier OPUP website, but this website was removed in Sept 2009). This non-compliance is unlikely to result in any risk of environmental harm since it is largely administrative. The DP&E has not recommended that this CC be removed or significantly amended [Ref. 4].	Non-Compliant	2016/6 – Information relating to the OPUP should be made publically available (e.g. on a public website) as required by the relevant condition of development consent (Refer to CC # O-5.4).
C.2 Sys	stems for Receiving Complaints and Enquiries			
W-4.55	Prior to the commencement of construction activities for the Waste Gas Cleaning Plant, the Applicant shall arrange: • a toll free number for the purpose of receiving any complaints from members of the public in relation to activities conducted at the site, unless otherwise specified in an environment protection licence issued by the EPA; and • a postal address where written complaints can be lodged.	Complaints are received via the general enquiries toll free number (1800 800 789), which can be found on the 'Contact Us' website page (http://www.bluescopesteel.com.au/our-company/contact-us). A complaint received by the switchboard is required to be forwarded to the Environment Department in accordance with the Divisional Complaints Procedure (MA-ENV-11-01, dated March 2014, copy provided). The complaint is recorded in MARS (Sighted "Complaint" tab in MARS which includes: list of complaints with Reference Number / Title / Received Date / Status - all noted to be	Non-Compliant	2016/7 – The telephone number and postal address for receiving complaints should be displayed near the entrance to the site, in a position visible from the nearest public road.



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	The Applicant must notify the public of the telephone number and postal address via an advertisement in the appropriate local newspaper prior to commencement of site preparation works. The telephone number and postal address shall be displayed near the entrance to the site, in a position visible from the nearest public road.	marked as complete). Selecting a complaint provides more detail, including finding of investigation and actions. BSL will then go back to complainant as required. An example was sighted and appeared to be complete. Note: Self reports are not included in the annual return, but are still tracked internally. BSL advised that they do occasionally receive complaints by post. An example hand written letter was sighted (Dated Dec 14, copy not provided). The postal address can be found on the 'Contact Us' website page (http://www.bluescopesteel.com.au/our-company/contactus).		
		An advertisement was posted in newspaper (Dated 20 February 2008, copy provided). The telephone number and postal address were not observed to be displayed at any of the entrance gates during the site inspections on 10 and 24 March 2016. Therefore, this CC was assessed to be a 'Non-Compliant'; however, with increased access to the internet and use of the general switchboard number for enquiries, this is considered to be a low risk non-compliance. The DP&E has not recommended that this CC be removed or amended [Ref. 5].		
W-A2.2 [Also EPL # M7.1 to M7.3]	The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence. The licensee must notify the public of the complaints line telephone number and the fact that it is a	Same as EPL # M7.1 to M7.3. Refer to CC # W-4.55 above. Note: Unlike CC # W4.55, this CC was assessed as 'Compliant' as it does not require the telephone number and postal address to be displayed at any of the entrance gates	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	complaints line so that the impacted community knows how to make a complaint. This condition does not apply until three months after this condition takes effect.			
0-5.2	Prior to the commencement of construction of the project, the Proponent shall ensure that the following are available for community complaints and enquiries for the life of the project (including construction and operation): (a) a telephone number on which complaints and enquiries about construction and operational activities at the site may be registered; (b) a postal address to which written complaints and enquiries may be sent; and (c) an email address to which electronic complaints and enquiries may be transmitted. The telephone number, the postal address and the email address shall be displayed on a sign near the entrance to the site, in a position that is clearly visible to the public, and which clearly indicates the purposes of the sign. This information is also to be provided on the Proponent's website.	Refer to CC # W-4.55 above. The telephone number and postal address were not observed to be displayed at any of the entrance gates during the site inspections on 10 and 24 March 2016. Therefore, this CC was assessed to be a 'Non-Compliant'; however, with increased access to the internet and use of the general switchboard number for enquiries, this is considered to be a low risk non-compliance. BSL advised that it is very rare to receive complaint via email. There is no specific email address for complaints; however, an electronic submission could be made using the 'Enquiry Form' on the 'Contact Us' website page (http://www.bluescopesteel.com.au/our-company/contact-us). BSL would prefer a dedicated single point of contact for submitting complaints and this is easier to manage through the phone number. The DP&E has not recommended that this CC be removed or amended [Ref. 4].	Non-Compliant	Refer to 2016/7 (Section 7.1 - Table 10, CC # W-4.55).
C.3 Rec	cording of Complaints and Follow-up Actions			
W-A2.1 [Also EPL # M6.1 to M6.4]	The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies. The record must include details of the following: • the date and time of the complaint;	Complaints are recorded in MARS (Sighted "Complaint" tab in MARS). Selecting a complaint provides more detail, including finding of investigation and actions. BSL will then go back to complainant as required. An example was sighted and appeared to be complete. Info recorded includes: reference number, title, date and time, method, personal details (unless an anonymous	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	 the method by which the complaint was made; any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; the nature of the complaint; the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and if no action was taken by the licensee, the reasons why no action was taken. The record of a complaint must be kept for at least four years after the complaint was made. The record must be produced to any authorised officer of the EPA who asks to see them. 	complaint is received), nature of complaint, action taken, status, etc. MARS is c. 4-5 yrs old so records have been maintained as required by this CC. Records since 1 July 2013 were sighted (Copy provided) and are summarised in Section 4.2. Note: In the 2013 Environmental Management Report (Dated 4 October, copy provided), it is reported that there were no substantiated complaints since 27 December 2007.		
O-5.3	The Proponent shall record details of all complaints and enquiries received through the means listed under condition 5.2 of this approval in an up-to-date Complaints and Enquiries Register. The Register shall record, but not necessarily be limited to: (a) the date and time, where relevant, of the complaint and enquiry; (b) the means by which the complaint and enquiry was made (telephone, mail or email); (c) any personal details of the complainant and/or enquirer that were provided, or if no details were provided, a note to that effect; (d) the nature of the complaint and enquiry; (e) record of operational and meteorological condition contributing to complaint;	Refer to W-A2.1.	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	(f) any action(s) taken by the Proponent in relation to the complaint and enquiry, including any follow-up contact with the complainant and/or enquirer; and			
	(g) if no action was taken by the Proponent in relation to the complaint and enquiry, the reason(s) why no action was taken.			
	The Complaints and Enquiries Register shall be made available for inspection by the Director-General upon request.			
D. CO	MPLIANCE MONITORING AND REPORTING			
W-2.1	Throughout the life of the development, the Applicant must secure, renew, maintain, and comply with all the relevant statutory approvals applying to the development.	It is difficult to verify compliance with all aspects of this CC; therefore, it has been assessed as 'Not Verified'; however: • BSL has a current EPL licence (EPL 6092, dated 1-Feb-16, copy provided), which is available on the EPA website. There have been recent variations to the EPL to accommodate the bypass of the Sinter Plant WGCP Stack (Refer to Section 7.2). There have been regular EPL variations (typically every c. 1-2 months). Sighted most recent notification (by email) dated 5 February 2016. Then internal process (Management of Change) for the environmental advisors to amend the monthly compliance report (Sighted).	Not Verified	
		 BSL actively monitors compliance with these CCs (Refer to CC # O-4.1). Relatively few non-compliances with the CCs have been identified in this, and previous, IEAs. 		
0-4.1	The Proponent shall develop and implement a Compliance Tracking Program to track compliance with	(a) Monthly compliance reports are completed and signed off by the relevant manager. Example monthly compliance reports were provided for OPUP (February 2016), Sinter	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	the requirements of this approval. The Program shall include, but not necessarily be limited to: (a) provisions for periodic review of the compliance status of the project against the requirements of this approval; (b) provisions for periodic reporting of compliance status to the Director-General; (c) a program for independent environmental auditing at least annually, or as otherwise agreed by the Director-General, in accordance with ISO 19011:2002 - Guidelines for Quality and/ or Environmental Management Systems Auditing; and (d) mechanisms for rectifying any non-compliance identified during environmental auditing or review of compliance.	Plant (January 2016), Gypsum Plant (February 2016), OPUP – Asset Maintenance / Development (January 16) and an example contractor (viz. TAPC, February 2016). These reports list examples of the actions / evidence required to demonstrate compliance (e.g. training up-to-date) for some of the CCs. BSL advised that this system has been in place since 2007 (Not verified). (b) An Annual Environmental Management Report is submitted to DP&E to demonstrate compliance with the CCs. The last Environmental Management Report was submitted in 2013 (copy provided). It has not been submitted annually since BSL submitted an application for amendment of the CCs (Submitted to DP&E on 27 June 2014, sighted, copy not provided). This variation to the timing was agreed with DP&E (Sighted email from DP&E dated 30 April 2014 that confirms this arrangement, copy provided). (c) The previous IEA was undertaken in 2013 (Copy provided). An annual IEA for OPUP has not been undertaken since 2013; however, this is as per the agreement with DP&E (Sighted email from DP&E dated 30 April 2014 that confirms this arrangement, copy provided). It is noted that the period for IEA has now been amended to be every three years [Ref. 4]. (d) if a non-conformance is identified then it is entered into MARS for tracking and follow-up. Will liaise with local EPA. Sighted information in MARS for example recent incident at the IMED (Self-report incident where dead fish were found in IMED – Refer to Section 4.2). Note: This was not caused by the Sinter Plant. Sighted record in MARS (Incident Number I454839, 26 May 2014) and email correspondence		



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
		with EPA (Which triggered PRP 176 – seal pots at energy services used to discharge directly into the IMED). BSL advised that the seal pots will be diverted to the settling basin and pumped out from the IMED to the No.2 blower station drain to achieve greater dilution. The IMED will not normally overflow into the harbour (i.e. It will now effectively be a retention basin except in an unusual storm event).		
W-2.2	The Applicant must ensure that all contractors and sub- contractors are aware of, and comply with, the conditions of this consent and the approved Construction Management Plan (see Condition 3.1).	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. BSL advised that this was communicated during the construction phase; however, evidence could not be provided during the audit. Therefore, it was assessed as 'Not Verified'. Note: Contractors are audited with compliance tracked by BSL on a monthly basis. An example monthly compliance report was provided for TAPC (Feb-16), which lists examples of the actions / evidence required to demonstrate compliance (e.g. training up-to-date).	Not Verified	
W-2.3	Prior to construction on any aspect of the development commencing, the Applicant must certify in writing, to the satisfaction of the Director-General, that it has obtained all the necessary statutory approvals for the construction works, and complied with all the relevant conditions of this consent and/or any other statutory requirements for this development pertaining to that aspect of the development to be constructed.	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. Evidence could not be provided during the audit. Therefore, it was assessed as 'Not Verified'.	Not Verified	
W-2.4	Prior to commencement of operations of the development, the Applicant must certify in writing, to the satisfaction of the Director-General, that it has	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases.	Not Verified	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	obtained all the necessary statutory approvals for operations, and complied with all the relevant conditions of this consent and/or any other statutory requirements for this development.	Evidence could not be provided during the audit. Therefore, it was assessed as 'Not Verified'.		
E. EN	VIRONMENTAL STANDARDS AND CONDITIONS			
E.1 Ho	urs of Operation			
W-4.2 [Also EPL # L6.2]	Unless otherwise agreed with the Director-General, noisy construction activities will be restricted to the following times: • Monday to Friday 7am to 6pm; • Saturday 7am to 1pm; and • there must be no construction activities that generate offensive noise on Sundays or Public Holidays.	Note: This is the same as specified in EPL # L6.2 except the restriction on Saturday applies from 8:00 am to 1:00 pm. The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. This CC has been assessed as 'Not Verified' since it is not included in the 2013 IEA (Refer to Section 1.3). BSL advised that no major construction activities have been undertaken since completion of the OPUP in 2009. The new WGCP stack installed after the fire in 2014 (Refer to Section 4.1) was prefabricated off site and therefore only a crane was used to install it. The structure was retained and reinforced. Note: The DP&E has agreed that construction is completed and has recommended that this CC be removed [Ref. 5]. If BSL undertakes construction work in the future, then any approval would consider the need to manage construction related impacts through new conditions [Ref. 5].	Not Verified	
W-4.3	Noisy construction activities may be conducted outside the times specified in Condition 4.2, if: a delivery of material is required, outside the hours specified, by Police or another authority for safety reasons; and/or	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. This CC has been assessed as 'Not Verified' since it is not included in the 2013 IEA (Refer to Section 1.3).	Not Verified	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	the operation or personnel or equipment is endangered; and prior notification is provided to the EPA, Council and affected residents within a reasonable time limit.	Note: The DP&E has agreed that construction is completed and has recommended that this CC be removed [Ref. 4]. If BSL undertakes construction work in the future, then any approval would consider the need to manage construction related impacts through new conditions [Ref. 4].		
W-4.4	The approved hours as specified in Condition 4.2 may be varied with the prior written consent of the EPA and the Council, only where the EPA is satisfied that the amenity of residents in the locality will not be adversely affected. If the approved hours are varied under this condition, the Applicant is to provide the Department with a copy of the EPA's written consent.	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. This CC has been assessed as 'Not Verified' since it is not included in the 2013 IEA (Refer to Section 1.3). Note: The DP&E has agreed that construction is completed and has recommended that this CC be removed [Ref. 4]. If BSL undertakes construction work in the future, then any approval would consider the need to manage construction related impacts through new conditions [Ref. 4].	Not Verified	
E.2 No	ise – Construction Phase		<u>.</u>	
W-4.5	Prior to commencing construction activities at the site the Applicant must submit a Construction Noise Management Plan detailing measures to be implemented to minimise the potential to generate offensive noise. The document shall include details about: compliance standards; community consultation; complaints handling monitoring/system; site contact person to follow up complaints; mitigation measures; 	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. This CC has been assessed as 'Compliant' since it is marked as complete in the 2013 IEA (Refer to Section 1.3). Note: The DP&E has agreed that construction is completed and has recommended that this CC be removed [Ref. 4]. If BSL undertakes construction work in the future, then any approval would consider the need to manage construction related impacts through new conditions [Ref. 4].	Compliant	
	 design/orientation of the proposed mitigation methods demonstrating best practice; 			



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	 construction times; contingency measures where noise complaints are received; and monitoring methods and program. Note: The Noise Management document must also address large concrete pours, which may commence in the early morning and be completed in the late evening. 			
0-2.8	The Proponent shall only undertake construction activities associated with the project that would generate an audible noise at any residential premises between the following hours: a) 7:00 am to 6:00 pm, Mondays to Fridays, inclusive; b) 8:00 am to 1:00 pm on Saturdays; and c) at no time on Sundays or public holidays. This condition does not apply in the event of a direction from police or other relevant authority for safety or emergency reasons. Note: 'safety or emergency reasons' refers to emergency works which may need to be undertaken to avoid loss of life, property loss and/or to prevent environmental harm.	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC has been assessed as 'Compliant' since it is marked as complete in the 2013 IEA (Refer to Section 1.3). Note: The DP&E has agreed that construction is completed and has recommended that this CC be removed [Ref. 4]. If BSL undertakes construction work in the future, then any approval would consider the need to manage construction related impacts through new conditions [Ref. 4]. Also refer to CC # W-4.2 above.	Compliant	
W-4.6 [Also EPL # L6.5 & L6.6]	During operation, noise from the Waste Gas Cleaning Plant must not exceed at any time an LA10 (15 minute) noise emission criterion of 70 dB(A) when measured at those sites nominated in the figure accompanying the fax from the Applicant of 10 April 2001 titled 'Relocation of Noise Monitoring Reference Point'.	This is the same as specified in EPL # L6.5. The EPL notes that the EPA approved monitoring site is nominated in the plan titled "Figure 4 – Layout of Proposed Sinter Plant Waste Gas Cleaning Plant" 281963A6". This is the Gabriella Memorial site on Christy Drive (Visited during site inspection – Refer to Figure 1, Grid Reference N25).	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	Note: For the purpose of noise measures for Condition 4.6, the LA10 noise level must be measured or computed at the sites nominated, over a period of 15 minutes using "FAST" response on the sound level meter. For the purpose of the noise measurements referred to in Condition 4.6, 5dB(A) must be added to the measured level if the noise is substantially tonal or impulsive in character. Note: ELP # L6.6 is as follows: For the purpose of the noise measurements referred to in condition L6.5, 5dB(A) must be added to the measured level if the noise is substantially tonal and impulsive in character. Noise monitoring must use the "FAST" response on the sound level meter.	BSL advised that multiple noise reports have been submitted to the DP&E and have demonstrated compliance with this condition over multiple years with no noise complaints. The last report 'SMERP Development Approval Noise Compliance 2012' was sighted (Dated 25 June 2012, copy provided). It is reported that the noise is not tonal. BSL has not recorded any noise complaints since the 2013 IEA (Refer to Section 4.2) and noise was not identified as a concern during consultation prior to the audit (Refer to 2.4.1).		
W-4.7	Noise impacts that may be enhanced by temperature inversions shall be addressed by: documenting noise complaints received to identify any higher level of impacts or patterns of temperature inversions; and where levels of noise complaints indicate a higher level of impact then actions to quantify and ameliorate any enhanced impacts under temperature inversions conditions should be developed and implemented.	BSL has not recorded any noise complaints since the previous IEA in 2013 (Refer to Section 4.2) and noise was not identified as a concern during consultation prior to the audit (Refer to 2.4.1).	Compliant	
O-2.9	The Proponent shall design, construct, operate and maintain the project so that the project does not exceed a noise contribution at the nearest affected residence of 35 dB{A} when measured as LAeq(15 minute). Noise monitoring locations and methodologies to establish compliance with this condition shall meet the requirements of the EPA, as may be specified in an	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC has been marked as complete in the 2013 IEA for the construction phase (Refer to Section 1.3). BSL has not recorded any noise complaints since the previous IEA in 2013 (Refer to Section 4.2) and noise was not	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	Environment Protection Licence applicable to the project.	identified as a concern during consultation prior to the audit (Refer to 2.4.1).		
		The EPL does not currently nominate a location or DB(A) limit for monitoring noise at the nearest affected residence.		
0-2.10	For the purpose of assessment of noise contributions specified under condition 2.9 of this consent, noise from the project shall be:	BSL advised that this has been superseded by an agreed noise monitoring program with EPL, which is reflected by EPL condition # L6.	Compliant	
	a) measured at the most affected point on or within the site boundary at the most sensitive receiver to determine compliance with LAeq(15 minute) night noise limits;	The only monitoring site listed in the EPL (Condition # L6) is the location nominated in the plan titled "Figure 4 – Layout of Proposed Sinter Plant Waste Gas Cleaning Plant" 281963A6". This is the Gabriella Memorial site on Christy		
	b) measured at one metre from the dwelling facade to determine compliance with LA1(1 minute) noise limits; and	Drive (Visited during site inspection – Refer to Figure 1, Grid Reference N25). The specified L _{Aeq(15 minute)} noise limit is 70 DB(A).		
	c) subject to the modification factors provided in Section 4 of the New South Wales Industrial Noise Policy (EPA, 2000), where applicable. Notwithstanding, should direct measurement of noise from the development be impractical, the Proponent may employ an alternative noise assessment method deemed acceptable by the EPA (refer to Section 11 of	The EPL does not currently nominate a location or DB(A) limit for monitoring noise at the nearest affected residence. The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC has been marked as complete in the 2013 IEA for the construction phase (Refer to Section 1.3).		
	the New South Wales Industrial Noise Policy (EPA, 2000), where applicable. Details of such an alternative noise assessment method accepted by the EPA shall be submitted to the Director-	BSL has not recorded any noise complaints since the previous IEA in 2013 (Refer to Section 4.2) and noise was not identified as a concern during consultation prior to the audit (Refer to 2.4.1).		
	General prior to the implementation of the assessment method.	and does not include an L _{A1(1 minute)} noise limit for the Sinter Plant.		



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
E.4 Air	Quality – Construction Phase			
	All activities occurring during the construction phase of the development must be carried out in a manner that will minimise the generation of dust.	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. This CC has been assessed as 'Not Verified' since it is not included in the 2013 IEA (Refer to Section 1.3). Note: The DP&E has agreed that construction is completed	Not Verified	
		and has recommended that this CC be removed [Ref. 4]. If BSL undertakes construction work in the future, then any approval would consider the need to manage construction related impacts through new conditions [Ref. 4].		
the proponent must doc	Prior to commencing construction activities at the site, the proponent must document and implement measures to indicate how compliance with Condition 4.8 will be achieved.	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. This CC has been assessed as 'Not Verified' since it is not included in the 2013 IEA (Refer to Section 1.3).	Not Verified	
		Note: The DP&E has agreed that construction is completed and has recommended that this CC be removed [Ref. 4]. If BSL undertakes construction work in the future, then any approval would consider the need to manage construction related impacts through new conditions [Ref. 4].		
E.5 Air	Quality – Operations Phase			
W-4.10	The Applicant must operate the Waste Gas Cleaning Plant in a proper and efficient manner with the objective of preventing air pollution.	This broad, objective-based, Consent Condition (CC), is difficult to assess in isolation and is therefore addressed through the assessment of compliance with the other CCs and the conditions of the EPL (i.e. As covered in Section 7 of this report).	Refer to relevant CCs below	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
0-2.1	The Proponent shall not permit any offensive odour, as defined under section 129 of the Protection of the Environment Operations Act 1997, to be emitted beyond the boundary of the site.	BSL has not recorded any odour complaints for Sinter Plant (Including the OPUP) since the previous IEA in 2013 (Refer to Section 4.2). Note: This facility is not generally a source of odour emissions, which is evidenced by the absence of specific odour limits in the EPL.	Compliant	
W-4.11 [Also EPL # O4.17]	The Waste Gas Cleaning Plant must be designed and operated so that there should be no visible emissions from the Waste Gas Cleaning Plant exhaust stack under normal operations. Note: Normal operation excludes the first two-hours of operation following start up.	EPL # O4.17 is as follows: The WGCP must be operated so that there are no visible emissions from the exhaust stack (Discharge Point 107) under normal operations. Compliance with this requirement is to be assessed against compliance with the EPL limit condition for Discharge Point 107 of 20 mg/Nm3 for particulate matter. Note: Normal operation excludes the first two hours of operation following start up. Therefore, EPL # O4.17 is similar to CC # W-4.11, but adds a 20 mg/Nm3 criterion for particulate matter to enable an assessment of 'visibility'. There have been several 'visible emission' enquiries from the EPA since the 2013 IEA, with the last one recorded in July 2014 (Sinter Plant Self Reports and Complaints, copy provided). BSL advised that the pollutants appear to have 'reacted with the air' as the visible portion is 'detached' from the top of the WGCP Stack (Sighted example photos, copies not provided). BSL monitor compliance through continuous and quarterly stack testing, as required to comply with EPL # O4.17 and the use of cameras. Stack testing results were sighted for:	Non-Compliant (CC # W-4.11)	Refer to 2016/16 (Section 8 - Table 13, ID # W1 (OBS)).



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
		 Apr-Jun 2013 in an Air Quality Report (Copy provided, reported measured results = 3.9 and 5.4 mg/Nm3). 		
		 Oct-Dec 2015 via the 'EHS Data Monitor Pro' web- based application (Copy not provided). 		
		 April 2012 to February 2016 on the 'Monitoring Data' page of the BSL website (https://prod.bluescope.com/sustainability/reports/nsw-monitoring-data/). 		
		These reported monitoring results confirm a total particulate matter measurement less than the 20 mg/Nm3 criterion (The only exceedance was during start-up).		
		The continuous monitoring reading at the control room was also sighted during the site inspection on 24 March 2016 and was observed to be 3 mg/Nm3 at the outlet (Refer to Photograph 9 in Section 3.6).		
		It was noted in the 2013 IEA that compliance with the 20 mg/Nm3 criterion does not necessarily mean that the emissions are not visible. An action included in the 2013 IEA to investigate and resolve this apparent inconsistency does not appear to have been closed (Refer to Section 8 - Table 13, ID # W1 (OBS)) and visible emissions have been reported. Therefore, this has been assessed as a 'Non-Compliance' with W-4.11, despite being 'Compliant' with EPL # O4.17.		
		This non-compliance was assessed to pose a low risk of environmental harm.		
W-4.12 [Also EPL # 03.1]	The Waste Gas Cleaning Plant must be installed and operated with the objective of preventing visible dust emissions from materials handling, plant, equipment and associated operational activities. All areas in or on	During the site inspection on 10 and 24 March 2016, the WGCP was observed to be maintained in a manner that minimises dust generation. For example:	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	the premises must be maintained in a manner that will minimise the generation, or emission from the premises, of wind-blown or traffic generated dust, using the measures proposed in the SEE.	 The roadways appeared to have been swept by the mobile sweepers, with relatively little surface dust build up (Refer to Photograph 10). Water carts were observed to wet down roads (Note: This was observed near the Sinter Plant car park rather than the WGCP). There we no obvious dust emissions from plant or equipment at the WGCP. The reading for the continuous total particulate monitoring device on the WGCP stack, which is displayed in the control room, was relatively low (Refer to Photograph 9 in Section 3.6). Photograph 10 Roadways at WGCP (24 March 2016) 		



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
W-4.13	Prior to hot commissioning the Applicant must document and implement measures that demonstrate how the objective in Condition 4.12 will be achieved.	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. This CC has been assessed as 'Compliant' since it is marked as complete in the 2013 IEA (Refer to Section 1.3).	Compliant	
O-2.2 [Also EPL # O3.1]	The Proponent shall design, construct, commission, operate and maintain the project in a manner that minimises or prevents the emission of dust from the site including windblown and traffic generated dust.	 During the site inspection on 10 and 24 March 2016, the Sinter Plant was observed to be maintained in a manner that minimises dust generation. For example: Most roadways appeared to have been swept by the mobile sweepers, with relatively little surface dust build up. Only one small roadway near the Sinter Plant offices did not appear to have been recently swept (Refer to Photograph 11). Water carts were observed to wet down roads (Note: This was observed near the Sinter Plant car park rather than the WGCP). Although there was some dust observed in the Sinter Plant building, this building is vented to the Sinter Machine Room Dedusting System (Refer to Section 3.2.4). There we no obvious dust emissions from plant or equipment at the Sinter Plant outside the main building (Such as the mixing rolling drum - refer to Photograph 19 in Section 8). This was assessed as a low risk non-compliance since only the one roadway area near the offices at the Sinter Plant was observed with some dust build up and this area is shielded by the Sinter Plant building (i.e. is less likely to be a source of an off-site dust emission). This area should be routinely swept. 	Non-Compliance	2016/8 – The roadway between the Sinter Plant offices and the Sinter Plant building should be routinely swept to minimise the generation of windblown and traffic generated dust.



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
		Photograph 11 Roadway Near Offices at Sinter Plant (10 March 2016)		
O-2.3 [Also EPL # O3.4]	The Proponent shall take all practicable measures to ensure that all vehicles entering or leaving the site, carrying a load that may generate dust, are covered at all times, except during loading and unloading. Any such vehicles shall be covered or enclosed in a manner that will prevent emissions of dust from the vehicle at all times, to the extent practicable.	BSL advised that it is not compulsory for trucks to be covered (Note: EPL # O3.4 does not require covering of trucks). However, dust emissions are required to be managed in accordance with the Fugitive Dust Management System (FDMS) (Divisional procedure MA-ENV-02-02, dated January 2014, copy provided), which requires additional controls on a case-by-case basis (i.e. a truck may be covered if it is identified as a source of potential dust emissions). No trucks with loads that may generate dust were observed at the Sinter Plant (Including WGCP and Gypsum Plant) during the site inspections on 10 and 24 March 2016. Therefore, this was assessed as 'Not Verified'. However, BSL would appear to have a system to manage these types of potential dust emissions and BSL has not recorded any	Not Verified	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
		complaints regarding dust emissions from the vehicles at the Sinter Plant (Refer to Section 4.2).		
0-2.4	All activities on the site shall be undertaken with the objective of preventing visible emissions of dust beyond the boundary of the site. Should such visible dust emissions occur at any time, the Proponent shall identify and implement all practicable dust mitigation measures, including cessation of relevant works, as appropriate.	Dust emissions are required to be managed in accordance with the Fugitive Dust Management System (FDMS) (Divisional procedure MA-ENV-02-02, dated January 2014, copy provided), which requires additional controls on a case-by-case basis (e.g. a truck may be covered if it is identified as a source of potential dust emissions). There we no obvious visible dust emissions beyond the boundary of the site during the site inspections on 10 and 24 March 2016.	Compliant	
0-2.5	The Proponent shall control dust emissions on all internal roads, trafficable areas and manoeuvring areas to minimise the potential for dust generation by sealing, or otherwise treating surfaces in a manner acceptable to the Director-General.	During the site inspection on 10 and 24 March 2016, the majority of the internal roads, trafficable areas and manoeuvring areas at the Sinter Plant were observed to be sealed. Only the car parking area near the Sinter Plant offices was not sealed and water carts were observed wetting down this area to minimise the potential for dust generation.	Compliant	
W-4.14	The Applicant must operate the Waste Gas Cleaning Plant with an objective of maximising the destruction of Dioxin and related substances.	BSL advised that destruction of dioxins is maximised by operating the regenerator with a char temperature of at least 400 deg. C and a char recirculation rate that does not exceed 17.5 tonnes per hour.	Compliant	
		The current operating conditions were discussed during the site inspection. BSL advised that the hot gas regenerator was operating at 420 deg. C with a recirculation rate of 12.5 tph (Not verified).		
		Quarterly and monthly monitoring results sighted during the audit (Copy provided) indicate that dioxins are well below the EPL limit of 0.3 ng/m3.		



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
		Additional monitoring was undertaken following the stack fire in 2014 (Sighted, copy provided). There was a slight increase in the dioxin concentration, but it was still below EPL limit of 0.3 ng/m3. The max concentration measured at Point 151 (i.e. old stack) during diversion from Sinter Plant WGCP stack (Point 107) was 0.095 ng/m3 (Sighted monitoring results, copy provided).		
W-4.15	The Applicant shall investigate changes to the start-up methods and operations for the Waste Gas Cleaning Plant in order to reduce dust emission levels during startup. No later than 21 months after the end of hot commissioning, the Applicant shall submit a report to the EPA, which provides the results of this investigation.	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC has been marked as complete in the 2013 IEA for the construction phase (Refer to Section 1.3).	Compliant	
W-4.16	The Waste Gas Cleaning Plant should be designed to meet a concentration of 0.1 ng/m3 of gaseous and particulate phase polychlorinated dibenzo-p-dioxins (PCDD) and polychlorinated dibenzofurans (PCDF) as tetrachloro-dibenzo-dioxin (TCDD) equivalent, NATO (TEF), dry, 101.3 kPa, 273 K, 15.7% O2 in waste gases from the Sinter Plant Waste Gas Cleaning Plant exhaust stack. Note: The EPA notes that 0.1 ng/m3 represents contemporary best available control technology.	BSL advised that, the design at time of construction could only achieve 0.3 ng/m3, which is current EPL limit (As per EPL # L3.4]. The maximum concentration measured at Point 151 (i.e. old stack) during diversion from Sinter Plant WGCP stack (Point 107) was 0.095 ng/m3 (Sighted monitoring results for 16 October 2014 to 29 January 2015, copy provided), which is lower than the 0.1 ng/m3 indicated in CC # W-4.16. Note: The DP&E has agreed that this CC can be removed since it is addressed separately in the EPL [Ref. 4].	Compliant	
W-4.17 & O-2.6 [Also EPL # L3.4]	The Proponent shall design, construct, operate and maintain the project to ensure that emissions from the Sinter Plant Waste Gas Cleaning Plant Exhaust Stack comply with the discharge limits specified in Table 1. NOTE: TABLE HAS NOT BEEN REPRODUCED IN THIS REPORT – Refer to Conditions of Development Consent / EPL for further information.	Current discharge limits are specified in EPL # L3.4 for Point 2 (Sinter Machine Room Dedusting Stack) and Point 107 (Sinter Plant WGCP Exhaust Stack). The limit for solid particulates is 50 mg/Nm3 at Point 2 and 20 mg/Nm3 at Point 107. Monitoring results for Point 2 and Point 107 are reported monthly on the 'Monitoring Data' page of the BSL website (https://prod.bluescope.com/sustainability/reports/nsw-	Non-Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	Note: In relation to the above dioxin limit the EPA has proposed to the Proponent that upon completion of the current investigations aimed at reducing levels of dioxins in the Sinter Plant Waste Gas Cleaning Plant dust, the above limit will be reviewed with a view to reducing the dioxin limit.	monitoring-data/). As at 4 May 2016, this website was observed to include monthly reports for April 2012 to February 2016. These reports indicate compliance with the EPL discharge limits except for: • An exceedance at Point 2 (Two out of 9 samples, with maximum reading of 120 mg/Nm3) in February 2014. This exceedance was attributed to an electrical short circuit in one of the zones in the RDD precipitator and resulted in a visible emission, which was identified by the EPA (Refer to Section 4.2). The EPA subsequently requested a formal investigation (Not verified). • An exceedance at Point 107 (Maximum reading of 50 mg/Nm3) in December 2015. This exceedance occurred during plant start-up. This CC has been assessed as 'Non-Compliant' due to the exceedance of the limit for solid particulates at Point 2 (Sinter Machine Room Dedusting Stack). It has been assessed as a low environmental risk, and a recommendation has not been included, as no further exceedances have been recorded at Point 2 since February 2014 and the exceedance at Point 107 was during start-up. Note: The DP&E has agreed that CC # W-4.17 [Ref. 4] can be removed and CC # O-2.6 is to be amended as follows [Ref. 4]: The Proponent shall install and operate equipment in line with best practice to ensure that the project complies with		
W-4.18	For the discharge point specified in the heading of the table below, the annual mass load of pollutant	requirements as specified in the EPL for the site. EPL # L2.4 includes the same annual mass load limit of 240 tonnes per annum for Point 107 (Sinter Plant WGCP Exhaust	Compliant	
[Also EPL # L2.4]	table select, the difficult mass load of political	Stack) and specifies the same Load Calculation Protocol.		



CC#	C	ondition	of Dev	elopment (Consent	Finding/s	Compliance Assessment	Corrective Action/s
	discharged at that point must not exceed the total mass limits specified for that pollutant in the following table.					The last annual Environmental Management Report submitted to DP&E (Dated 4 October 2013, copy provided) reports a total annual discharge of 66.3 tonnes, which		
	Pollutan	+	nits of easure	Total Mass Limit	Method	complies with the specified annual mass load limit. In 2014, the total annual mass was estimated by BSL to be		
	Solid Particl	es Toni anni	nes per um	240	Load Calculation Protocol for use by holders of NSW EPL	51.3 tonnes. Similarly, in 2015 the total annual mass was estimated to be 31.4 tonnes (Sighted data in email dated 1 March 2016, copy provided). Note: The DP&E has agreed that this CC can be removed since it is addressed separately in the EPL [Ref. 4].		
W-4.19	The Waste Gas Cleaning Plant must be operated with the objective of reducing existing emissions of NOx and SO2 to atmosphere from the Sinter Plant. The Applicant must provide documentation to the EPA to demonstrate that the following minimum annual mass load reductions of NOx and SO2 detailed in the table below are being achieved after the commencement of hot commissioning of the Waste Gas Cleaning Plant. Total Annual Mass Emission Reduction for SO2 and NOx (as NO2) from the Sinter Plant Waste Gas Cleaning Plant Exhaust Stack				sions of NOx and int. The Applicant PA to demonstrate eass load the table below ement of hot ling Plant. In for SO2 and NOx	 Variation Notice No. 1064132 (Dated 27-Jun-07). Licence Variation Notice No. 1502091 (Dated 19-Oct-11) includes the following: "Condition L2.5 requires the licensee to show that sulphur dioxide emissions from the Sinter Plant Waste Gas Cleaning Plant stack have been reduced by a minimum of 	Not Verified	
	Pollutant	Units	Total Mass		Method	Consequently, L2.5 has been removed from the licence." The DP&E has agreed that this CC can be removed since it has also been removed from the EPL [Ref. 4]. Therefore, compliance with this now obsolete CC was not verified.		
		Tonnes per annum	748	calculated	ions are to be using a gy approved by			
	NO ₂)	Tonnes per annum	314	The reduct calculated	ions are to be using a			



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	methodology approved by the EPA			
	Note: The EPA has assessed the mass emissions of NOx and SO2 as a result of the operation of the PCI facility in conjunction with expected environmental performance of the Waste Gas Cleaning Plant. In addition, the EPA has considered the implications of any potential increases as a result of the reuse of Sulfur Rich Gas (SRG). In order to demonstrate compliance with this condition the Applicant must monitor both the inlet and outlet of the Sinter Plant Waste Gas Cleaning Plant. Details on the methodology in undertaking this monitoring would need to be provided in the mass load monitoring program outlined in Condition 6.20.			
0-2.7	The Proponent shall conduct investigations into the use of spare capacity in the room de-dusting system to manage and treat additional dust loads from the Sinter Cooler. Twelve months following recommissioning, the Proponent shall provide the EPA and the Director-General with a report that: a) identifies and reviews technically feasible and practicable options for diverting Sinter Cooler waste gases to the room de-dusting system; b) provides a cost benefit analysis to the options identified in 2.7a); c) estimates the reduction in particulate emissions from the sinter cooler and the increase in emissions from the de-dusting stack; d) estimates the increase in electrostatic precipitator	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC has been assessed as 'Compliant' since this was addressed as part of PRP 127, which was sighted as being complete in the EPL (Completed Nov 2010), and the CC is marked as complete in the 2013 IEA (Refer to Section 1.3).	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	e) if the investigations reveal feasible waste gas management options, then the Proponent must provide recommendations and an implementation program.			
E.6 Sul	phur Rich Gas Management			
W-4.20 [Also EPL # O4.18]	The plant must be designed and operated with the objective of ensuring the maximum practicable recovery of sulfur rich gas (SRG) for treatment and subsequent reuse.	BSL built the Gypsum Plant to maximise recovery of SRG. This was off-line following the stack fire in 2014 and SRG recovery was reduced accordingly. BSL has made self-reports to EPA when SRG recovery is not available (Refer to Section 4.2). BSL track 'SRG availability' (i.e. availability of Gypsum Plant) and the data for May 2013 to November 2015 was sighted (Copy provided). It was noted that there has been lower availability during May 2015 to September 2015 due to various unplanned equipment repairs, which were principally follow-up repairs from the stack fire in 2014 (e.g. most of these repairs related to ongoing repairs to the regenerator). The reported availability for October and November 2015 has improved (viz. 90% and 99.8% availability) and is more consistent with the availability data prior to the stack fire in 2014. This has been assessed as an 'Compliant' since BSL appear to be attempting to operate the plant to ensure maximum practicable recovery and are self-reporting to the EPA when SRG recovery is not available.	Compliant	
W-4.21	Within 3 months of the date of this consent, or as otherwise agreed by the Director-General, subject to dot-point four herein, the Applicant shall prepare and submit to the Director-General a Sulfur Rich Gas Management Plan. The plan, to be prepared in	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this	Not Triggered	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	consultation with the EPA and Council, shall address the following matters:	CC has been assessed as 'Not Triggered' since BSL did not proceed with the proposed pipeline to the Incitec Plant.		
	 confirmation of an agreement between the Applicant and Incitec for the SRG from the Waste Gas Cleaning Plant to be piped to and processed at the Incitec Plant; 	BSL constructed a Gypsum Plant instead of piping SRG to the Incitec Plant. Therefore, W-4.21 has been superseded by G-4.21A and G-4.21B (See below).		
	 details of the proposed pipeline from the Waste Gas Cleaning Plant to the Incitec site; and, 			
	 the management and use of the SRG within the Incitec site; or 			
	 should the proponent not be able to reach agreement with Incitec on the disposal of SRG to the Incitec site, the plan must outline what measures will be put in place to ensure compliance with Condition 4.20. 			
	The Plan must be approved prior to the issue of a construction certificate for this aspect of the development.			
G-4.21A	The Applicant shall construct the gypsum plant the subject of modification application MOD-50-4-2005-ir and shall operate that plant so as.to accept and react. the maximum practicable quantity of sulfur rich gas generated within the development.	Refer to CC # W-4.20 above.	Compliant	
G-4.21B	All off-gas from the gypsum plant the subject of modification application MOO-50-4-2005-i shall be discharged to atmosphere through the Sinter Plant, Waste Gas Cleaning Plant Exhaust Stack (refer to condition 4.17 of this consent).	BSL advised that this is hard piped to the WGCP exhaust stack (Not verified).	Not Verified	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
W-4.22	The Applicant must implement measures to minimise the potential for air pollution that may be caused by venting of sulfur rich gas (SRG) to atmosphere.	Refer to CC # W-4.20 above.	Compliant	
W-4.23	At least six months prior to hot commissioning the Applicant must develop a document that demonstrates how compliance with Condition 4.22 will be achieved. The document will address: conditions that may impact on the integrity of the Sinter Plant Gas Cleaning Plant resulting in venting of gas to atmosphere; and measures and procedures to minimise air pollution in those circumstances. The measures and procedures must include but should not necessarily be limited to details on: identification of potential situations where SRG would be recirculated; identification of procedures that would be implemented by the Applicant for SRG recirculation; identification of any physical or chemical parameters that can be monitored and would indicate plant integrity being compromised; identification of the decision making pathway for venting of gas to atmosphere; identification of procedures to rectify the plant to minimise the venting of gas to atmosphere; and reporting and notification procedures.	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC has been assessed as 'Compliant' since the CC is marked as complete in the 2013 IEA (Refer to Section 1.3). Note: The DP&E has agreed that this CC can be removed [Ref. 4].	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
W-4.24	The Applicant must review the procedure as outlined in Condition 4.23 after the first twelve months of operation following hot commissioning to assess the adequacy of this procedure in light of any new information on the performance of the plant obtained during the optimisation period. This review should be completed no later than fourteen months after hot commissioning and a copy supplied to the EPA. Note: The EPA may include the program and review referred to in Condition 4.23 as a PRP on the EPL.	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC has been assessed as 'Compliant' since it is reported in the 2013 IEA that the updated procedures developed to satisfy this requirement had been sighted. Note: The DP&E has agreed that this CC can be removed [Ref. 4].	Compliant	
W-4.25 [Also EPL # O4.19]	The Applicant must notify the EPA of any venting of sulfur rich gas (SRG) to atmosphere.	This is almost the same as EPL # O4.19, which specifies that the Licensee must notify the EPA of any venting of SRG to atmosphere that exceeds 24 continuous hours. BSL advised that the 24-hour period was added to the EPL after the EPA had reviewed the historical SRG outage data (Not verified). BSL has made self-reports to EPA when SRG recovery is not available (Refer to Section 4.2). Note: The DP&E has agreed that this CC can be removed since it is addressed separately in the EPL [Ref. 4].	Compliant	
W-4.26	Subject to clause 4.21, the proposed SRG pipeline to Incitec shall be located within the southern footpath area of the road reserve of Old Port Road to minimise any disruption to the cycleway which is also located along the road reserve. The installation of the pipeline must be undertaken in full consultation with Council's Manager - Property Division and Manager - Works Division.	This CC has been assessed as 'Not Triggered' since BSL did not proceed with the proposed pipeline to the Incitec Plant (i.e. for production of fertiliser). BSL constructed a Gypsum Plant instead. Note: The DP&E has agreed that this CC can be removed [Ref. 4].	Not Triggered	
W-4.27	Subject to clause 4.21, the Applicant must enter into a license agreement with Council for the installation of	This CC has been assessed as 'Not Triggered' since BSL did not proceed with the proposed pipeline to the Incitec Plant	Not Triggered	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	the pipeline. The Applicant must also pay an annual fee to Council as set down in Council's fees and charges.	(i.e. for production of fertiliser). BSL constructed a Gypsum Plant instead. Note: The DP&E has agreed that this CC can be removed [Ref. 4].		
E.7 Wa	stewater Treatment Plant			
W-4.28	The Applicant must submit full details of the Waste Water Treatment Plant for approval by the EPA, Council and the Director-General prior to the issue of a Construction Certificate for this stage of the development.	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC has been assessed as 'Compliant' since the CC is marked as complete in the 2013 IEA (Refer to Section 1.3). Note: The DP&E has agreed that this CC can be removed	Compliant	
		[Ref. 4].		
E.8 Blo	owdown Water Reuse Strategy		·	
W-4.29	The Applicant must submit a report to the EPA no later than 24 months after hot commissioning of the Waste Gas Cleaning Plant detailing investigations to beneficially reuse blowdown waters from the Waste Gas Cleaning Plant recirculating system. The report must include a strategy to reduce the amount of blow down waters discharged to Port Kembla Harbour. The report must include details on but need not necessarily be limited to the following: • characterisation of the types of pollutants in the blow down waters; • frequency of sampling and analysis of blow down waters;	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC has been assessed as 'Compliant' since this was addressed as part of PRP 107 (SMERP – Blowdown Water Reuse Strategy), which was sighted as being complete in the EPL (Completed December 2009), and the CC is marked as complete in the 2013 IEA (Refer to Section 1.3). Note: The DP&E has agreed that this CC can be removed [Ref. 4].	Compliant	
	 identification of options to beneficially reuse blowdown waters to minimise the amount of blowdown water being discharged; 			



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	 assessment of the feasibility and cost of these options; 			
	selection of options for implementation;			
	time table for implementation of the selected options; and			
	inclusion of any other recommendations.			
	Note: The implementation of the Blowdown Water Strategy may be advanced in consultation with the Applicant depending on the outcomes of the Effluent Characterisation Program detailed in Condition 6.13.			
	The EPA may include the program referred to in Condition 4.29 as a PRP on the EPL.			
E.9 Pol	llution of Waters			
W-4.30	The premises and activities carried out therein must not pollute surface or groundwater except as specified in the EPL for the premises.	Some incidents have been reported involving the potential pollution of surface waters; however, these were not directly related to the OPUP, WGCP or Gypsum Plant (Refer Section 4.2).	Compliant	
		The EPL includes requirements for a Groundwater Monitoring Program; however, this does not appear to relate to the Sinter Plant (Including WGCP and Gypsum Plant).		
		The stormwater / process water collection / treatment facilities for the Sinter Plant (including the IMED) were observed during the site inspection on 10 March 2016 and no deficiencies were observed. Operational areas (including roadways) appeared to be sealed and DGs were stored in bunded areas, thereby limiting the potential for pollution of groundwater.		



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
W-4.31 [Also EPL # L3.5]	Interim Iron Making East Drain Water Concentration Limits The existing table nominated as Point 89 on the EPL which specifies the water concentration limits for the Iron making East Drain shall be deleted, and replaced with the following table, with the exception of 'pollutant colour': NOTE: TABLE HAS NOT BEEN REPRODUCED IN THIS REPORT — Refer to Conditions of Development Consent / EPL for further information. Note: The interim limits detailed in the above table are based on current monitoring data for the Iron Making East Drain and the estimated contribution of pollutants as a result of the commissioning of the Sinter Plant Waste Gas Cleaning Waste Water Treatment Plant. Prior to any waters being discharged from the Waste Gas Cleaning Plant the Applicant will need to apply to vary the EPL to include the above interim limits. The discharge limits will be reviewed by the EPA not less than 21 months after hot commissioning of the plant, taking into account monitoring undertaken as part of the effluent characterisation program detailed in Condition 6.13.	The limits specified in CC # 4.31 for Point 89 (Iron Making East Drain) have been superseded by the limits listed in EPL # L3.5. The EPL also includes the following note: Note: 1. The discharge limits for Point 89 (Iron Making East Drain) are based on monitoring data available in 2001 for this Point and the estimated contribution of pollutants from the Sinter Plant Waste Gas Cleaning Plant. It is proposed that these limits will be reviewed by the EPA taking into account monitoring undertaken as part of the effluent characterisation program required by PRP 112 - SPWGCP Effluent Characterisation Program. BSL envisage that once water is diverted from the IMED, they will ask for Point 89 to be removed from the EPL. Monitoring results for Point 89 are reported monthly on the 'Monitoring Data' page of the BSL website (https://prod.bluescope.com/sustainability/reports/nsw-monitoring-data/). As at 4 May 2016, this website was observed to include monthly reports for April 2012 to February 2016. These reports indicate compliance with the EPL discharge limits except for one exceedance of the cyanide limit (One out of nine samples, with maximum reading of 0.28 mg/l) in July 2014. This exceedance was attributed to a release of Coke Ovens Gas (COG) condensate (Note: Not at Sinter Plant), which was self-reported to the EPA (Refer to Section 4.2). It is reported in the current EPL (Copy provided) that: PRP 175 (Pollution Study) was proposed by the licensee following the discharge of Coke Ovens Gas (COG) condensate from a seal pot to IMED on 1 July 2014. PRP 175 required BSL to complete a Pollution Study into the Diversion of Iron Ore Road Drain, and	Non-Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
		provide a report to the EPA by 27 February 2015. A report was provided by the due date which assessed a number of different options.		
		 BSL selected an option 'Modification of 7A Settling Basin to Re-direct flow to CORB' as the preferred option, and outlined a timeframe to complete review and design, application for capital funding, pre-work and fabrication, and installation and commissioning 		
		This CC has been assessed as 'Non-Compliant' due to the exceedance of the limit for cyanide at Point 89 (IMED). A recommendation has not been included as no further exceedances have been recorded since July 2014 and an additional PRP (PRP 176 - IMED Drainage Diversion Project (Environmental Improvement Program)) is included in the current EPL. The IMED Drainage Diversion Project is currently in progress with a due date of 30 June 2016 (As stipulated in Condition # U6.1 of the current EPL).		
		Note: The DP&E has agreed to replace this CC with the following [Ref. 4]: The Applicant shall ensure that all licensed surface water discharges from the site comply with the discharge limits (volume and quality) set for the development in any EPL or the relevant provisions of the POEO Act.		
E.10 Ero	sion and Sediment Control			
W-4.32 & G-4.32	The Applicant must prepare an Erosion and Sediment Control Plan which describes the measures that will be employed to minimise soil erosion and the discharge of sediment and other pollutants to lands and/or waters during construction activities. The document should be prepared in accordance with the requirements outlined	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. This CC has been assessed as 'Compliant' since it is marked as complete in the 2013 IEA (Refer to Section 1.3).	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	in Managing Urban Stormwater: Soils and Construction (available from the Department of Housing). The Erosion and Sedimentation Control Plan shat! be applied to all soil-disturbing works the subject of this consent, as originally approved and as may be modified from time to time.	Note: The DP&E has agreed that construction is completed and has recommended that this CC be removed [Ref. 4]. If BSL undertakes construction work in the future, then any approval would consider the need to manage construction related impacts through new conditions [Ref. 4].		
E.11 Sto	ormwater Management		<u>, </u>	
W-4.33	Prior to construction, the Applicant must prepare a detailed Stormwater Management Plan for the site, which has been prepared in consultation with the EPA and Council, to mitigate the impacts of stormwater runoff from the development and its operations. The plan should be consistent with the Stormwater Management Plan for the catchment. Where a Stormwater Management Plan has not yet been prepared for the catchment, the plan should be consistent with the guidance contained in "Managing Urban Stormwater: Council Handbook" (available from the EPA). The plan shall be submitted for approval as part of the Construction Management Plan (see Condition 3.1).	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC has been assessed as 'Compliant' since it is marked as complete in the 2013 IEA (Refer to Section 1.3).	Compliant	
W-4.34	As part of the Stormwater Management Plan outlined in Condition 4.33, the Applicant must document and implement measures that will minimise the discharge of pollutants from the Waste Gas Cleaning Plant during wet weather and to meet Licence Limit conditions for wet weather detailed in the EPL.	Stormwater from Sinter Plant area (Including WGCP and Gypsum Plant) is directed to the 4BF Thickener for clarification before discharge to the IMED. It is reported in the 2013 IEA that a stormwater improvement plan was part of PRP 134 (Stockpile Related Dust and Runoff, completed February 2013). Wet weather conditions are defined in the EPL as "weather conditions in which ten or more millimetres of rain falls	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
		within a 24-hour period". Some licenced discharge points in the EPL require a sample to be taken following a rainfall event of more than 10mm in a 24-hour period (if this condition is met). However, this requirement does not apply to the licensed discharge points associated with the Sinter Plant (Including WGCP and Gypsum Plant), including the IMED (Point 89).		
0-2.11	The Proponent shall install stormwater drains, stormwater ponds, settlement ponds and/or storage ponds and other erosion, sediment and pollution controls as may be appropriate to manage stormwater on the site. The Proponent shall maintain all erosion, sediment and pollution control infrastructure at or above design capacity for the duration of construction of the project and until such time as all ground disturbed by the works has been stabilised and rehabilitated so that it no longer acts as a source of sediment.	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC is marked as complete in the 2013 IEA (Refer to Section 1.3). The stormwater / process water collection / treatment facilities for the Sinter Plant (including the IMED) were observed during the site inspection on 10 March 2016.	Compliant	
O-2.12	Except as may be expressly provided under the provisions of an Environment Protection Licence for the project, the Proponent shall comply with section 120 of the Protection of the Environment Operations Act 1997 which prohibits the pollution of waters.	Section 120 of the POEO Act relates to the prohibition of the pollution of waters and a person who pollutes any waters is guilty of an offence. Monitoring data is reported monthly on the 'Monitoring Data' page of the BSL website (https://prod.bluescope.com/sustainability/reports/nsw-monitoring-data/). As at 4 May 2016, this website was observed to include monthly reports for April 2012 to February 2016. These reports indicate compliance with the EPL discharge limits except for one exceedance of the cyanide limit (One out of nine samples, with maximum reading of 0.28 mg/l) in July 2014. This exceedance was attributed to a release of Coke Ovens Gas (COG) condensate	Non-Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
		(Note: Not at Sinter Plant), which was self-reported to the EPA (Refer to Section 4.2). This CC has been assessed as 'Non-Compliant' due to the exceedance of the limit for cyanide at Point 89 (IMED) (Refer to CC # W-4.31 above). A recommendation has not been included as no further exceedances have been recorded since July 2014 and an additional PRP (PRP 176 - IMED Drainage Diversion Project (Environmental Improvement Program)) is included in the current EPL. The IMED Drainage Diversion Project is currently in progress with a due date of 30 June 2016 (As stipulated in Condition # U6.1 of the current EPL). The stormwater / process water collection / treatment facilities for the Sinter Plant (including the IMED) were observed during the site inspection on 10 March 2016 and no deficiencies were observed.		
E.12 Soi	I Remediation			
W-4.35	The Applicant shall submit a report to the satisfaction of the Director-General, incorporating an assessment of contamination of any soils proposed to be excavated as part of the development. Should this assessment indicate that remediation of soils is required, the Applicant shall prepare and implement a Remedial Action Plan for the development. This plan must: • be prepared by a suitably qualified and experienced person; • be prepared in accordance with the EPA's Guidelines for Consultants Reporting on Contaminated Sites;	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. This CC has been assessed as 'Compliant' since it is marked as complete in the 2013 IEA (Refer to Section 1.3). Note: The DP&E has agreed that construction is completed and has recommended that this CC be removed [Ref. 4]. If BSL undertakes construction work in the future, then any approval would consider the need to manage construction related impacts through new conditions [Ref. 4].	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	 consider the potential for on-site land farming as opposed to off-site disposal of any contaminated soils; 			
	 describe the proposed remediation works in detail; 			
	outline the proposed remediation work program;			
	 identify the relevant statutory approvals and requirements for this work; 			
	 specify standards and/or performance measures for the work; 			
	 describe what actions and measures will be implemented to minimise any potential impacts associated with the remediation works, and ensure that these works will comply with the specified standards and performance measures; 			
	describe how the environmental performance of the works will be monitored, and what actions will be implemented if any non-compliance is detected;			
	describe how the completed remediation works will be evaluated and validated; and			
	describe the role, responsibility, authority, accountability, and reporting arrangements of key personnel involved in the program.			
W-4.36	The Applicant shall not carry out any remediation work on the site before the Director-General has approved the Remedial Action Plan as outlined in Condition 4.35.	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. This CC has been assessed as 'Compliant' since it is marked as complete in the 2013 IEA (Refer to Section 1.3).	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
		Note: The DP&E has agreed that construction is completed and has recommended that this CC be removed [Ref. 4]. If BSL undertakes construction work in the future, then any approval would consider the need to manage construction related impacts through new conditions [Ref. 4].		
E.13 Ra	dionuclides		·	
W-4.37	The Applicant must operate the Waste Gas Cleaning Plant with an objective of minimising levels of radionuclides emitted in water discharges and air emissions (particulate and gaseous phase) from the Waste Gas Cleaning Plant.	It is reported in an earlier notice of variation to the EPL licence (Notice No. 1110309, File Number 280032, dated 19-Mar-2010, copy available on EPA website) that: The aim of PRP 113 (SMERP – Radionuclide Monitoring Program) was to ensure the SMERP is operated with an objective of minimising levels of radionuclides emitted in water discharges and air emissions (particulate and gaseous phase) from the SMERP.	Compliant	
		1. No later than the 11 August 2003 the Licensee must develop and implement a radionuclide monitoring program that demonstrates how the Licensee will comply with the aim of this PRP.		
		The program must include details on but need not necessarily be limited to the following:		
		a) monitoring methodologies and standards to be employed to assess radionuclides and their pathways in any air emissions and water discharges during plant operations;		
		b) radionuclide species;		
		c) monitoring location(s);		
		d) monitoring frequency;		
		e) representativeness of the sampling;		
		f) assessment of results, including Australian and International Standards;		



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
		g) reporting; h) process description and variability; i) issues relevant to particle size distribution of particulate materials and j) opportunities to integrate with other monitoring programs. 2. After hot commissioning (11 August 2003) the applicant must implement the program referred to above to provide information and data for at least the first 12 months of		
		operation on whether the Licensee is complying with the aim of this PRP. 3. The Licensee must prepare and submit a report to the EPA no later than 31 December 2009 on the findings of the Radionuclide Monitoring Program. The licence may be varied subject to the findings and recommendations of the program. This CC has been assessed as 'Compliant' since PRP 113 is marked as complete in the current EPL (Completed		
E.14 Spi	llage Response	December 2009), there are no limits included in the current EPL that specifically relate to radionuclides, and the CC is marked as complete in the 2013 IEA (Refer to Section 1.3).		
W-4.38	Prior to hot commissioning measures must be developed and implemented to minimise the environmental impact of incidents involving spillage of materials such as waste dusts and char. The measures must include but should not necessarily be limited to those for immediate cleaning of the site and reporting.	During the site inspection on 10 March 2016, some bags of spent char were observed to be damaged on the roadway near the Gypsum Plant (Refer to Photograph 15 in Section 7.3). Since the roadway drains discharge to the 4BF Thickener, sediment / debris would be expected to be intercepted before any discharge off-site. Therefore, this was assessed as a low risk non-compliance.	Non-Compliance	Refer to 2016/13 (Section 7.3 – Table 12, ID # 2).



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
E.15 Wa	ste Generation and Management			
W-4.39	The Applicant must prepare and implement a Waste Management Plan for the development in consultation with the EPA and Council. This plan must describe in detail the waste management system, including: • the types and quantities of waste which will be generated at the site; • how waste will be stored on-site, transported, and disposed of off-site; • management measures to sort, reuse or recycle materials. The Waste Management Plan prepared must be approved by the Director-General prior to commissioning of the development.	It is reported in BSL's Annual Environmental Management Report (Dated 4 October 2013, copy provided) that the Waste Management Plan was sent to the Office of Environment and Heritage, Council and the Department of Planning in c. January - March 2003 and approved by the Department of Planning on 13 May 2003 (Dept. Ref. SOO/01294 – not verified). This CC has been assessed as 'Compliant' since: The waste register was sighted (Extract provided) and appeared to confirm that the waste has been classified (Refer to CC # W-4.41 below). Segregation of waste materials into dedicated waste storage skips was observed on site during the site inspections on 10 March 2016 (Refer to CC # O-2.13 below).	Compliant	
W-4.40	After reviewing the Waste Management Plan, the Director-General may require the Applicant to address certain matters identified in the plan. The Applicant must comply with any reasonable requirements of the Director-General.	It is reported in BSL's Annual Environmental Management Report (Dated 4 October 2013, copy provided) that the Waste Management Plan was sent to the Office of Environment and Heritage, Council and the Department of Planning in c. January - March 2003 and approved by the Department of Planning on 13 May 2003 (Dept. Ref. SOO/01294 – not verified). This CC has been assessed as 'Compliant' since this CC is marked as complete in the 2013 IEA (Refer to Section 1.3).	Compliant	
W-4.41	All liquid and non-liquid wastes resulting from processes at the Waste Gas Cleaning Plant must be assessed, classified and managed in accordance with the EPA's Environmental Guidelines: Assessment, Classification	This CC has been assessed as 'Compliant' since this was addressed as part of PRP 114 (SMERP – Waste Management Program), which was sighted as being complete in the EPL (Completed June 2007), and the CC is marked as complete in the 2013 IEA (Refer to Section 1.3).	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	and Management of Liquid and Non-Liquid Wastes (1999), or any other EPA document superseding this guideline.	To comply with the divisional procedure, if a waste has not previously been classified, or there is evidence that the nature or concentration of contaminants in the waste have changed since it was previously classified, the waste must be sampled and analysed to determine the correct waste classification (<i>Management of Waste Material</i> , DIV-AR-RS-01, dated March 2014, copy provided). The waste register was sighted (Extract provided) and appeared to confirm that the waste has been classified.		
W-4.42	The Applicant must implement measures to minimise or eliminate the amount of non-liquid waste requiring disposal.	Segregation of waste materials into dedicated waste storage skips was observed on site during the site inspections on 10 March 2016 (Refer to O-2.13 below). If no recycling option exists for the material within BSL, then the divisional procedure requires identification of re-cycling options outside the company (<i>Management of Waste Material</i> , DIV-AR-RS-01, dated March 2014, copy provided).	Compliant	
W-4.43	At least 18 months after hot commissioning the Applicant must develop a Non-Liquid Waste Minimisation Strategy that demonstrates compliance with Condition 4.42 will be achieved. The strategy will include details on but need not necessarily be limited to the following: characterisation of the wastes including the types of pollutants and physical and chemical parameters; frequency of sampling, analysis and reporting of dioxins; 	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC has been assessed as 'Compliant' since this was addressed as part of PRP 114 (SMERP – Waste Management Program), which was sighted as being complete in the EPL (Completed June 2007), and the CC is marked as complete in the 2013 IEA (Refer to Section 1.3).	Compliant	
	 identification of options to eliminate off-site disposal of the non-liquid waste within 3 years of hot-commissioning, including options such as on 			



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	site storage and/ or on site disposal at BHP's 21 area; identification of options to minimise the amount of non-liquid waste which requires landfill disposal, including options to maximise beneficial reuse of the non-liquid waste; assessment of the feasibility and cost of these options; selection of options for implementation; a time table for implementation of the selected options; and inclusion of any other recommendations.			
W-4.44	The Applicant must prepare a report for submission to the EPA no later than 20 months after hot commissioning on the findings of the Non Liquid Waste Minimisation Strategy. Note: The EPA may include the program referred to in Conditions 4.43 and 4.44 as a PRP on the EPL.	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC has been assessed as 'Compliant' since this was addressed as part of PRP 114 (SMERP – Waste Management Program), which was sighted as being complete in the EPL (Completed June 2007), and the CC is marked as complete in the 2013 IEA (Refer to Section 1.3).	Compliant	
0-2.13	The Proponent shall maximise treatment and/or beneficial reuse of waste materials associated with the development to ensure minimisation of temporary storage of waste on the site and minimisation of waste volumes requiring disposal.	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC has been assessed as 'Compliant' since this was addressed as part of PRP 114 (SMERP – Waste Management Program), which was sighted as being complete in the EPL (Completed June 2007), and the CC is marked as complete in the 2013 IEA (Refer to Section 1.3).	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
		Segregation of waste materials into dedicated waste storage skips was also observed on site during the site inspections on 10 March 2016 (Refer to Photograph 12).		
		Photograph 12 Waste Storage Bins (10 March 2016)		
		SYEEL CHARLES OF THE PARTY OF T		
0-2.14	The Proponent shall not cause, permit or allow any	EPL # L5.1 includes the list of permitted wastes.	Compliant	
[Also EPL # L5.1]	waste generated outside the site to be received at the site for storage, treatment, processing, reprocessing, or disposal on the site, except as expressly permitted by a	BSL advised that is not normal to receive wastes generated from off-site and that this has not occurred since the 2013 IEA.		
	licence under the Protection of the Environment Operations Act 1997, if such a licence is required in	BSL advised that if waste is to be received then the EPA		
	relation to that waste.	process requires obtaining approval and transport certificates. NSW and Victoria now effectively have a		
		paperless system – apply for approval, create transport		
		certificate on EPA website, sign off that material was received. Consignment number belongs to state that		
		receives the material. This is only for classified wastes listed		



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
		in the EPL. A transport certificate is still required even if it is not a classified waste listed in the EPL.		
0-2.15	The Proponent shall ensure that all liquid and/or non-liquid waste generated and/or stored on the site is assessed and classified in accordance with Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes (DEC, 2004), or any future guideline that may supersede that document.	To comply with the divisional procedure, if a waste has not previously been classified, or there is evidence that the nature or concentration of contaminants in the waste have changed since it was previously classified, the waste must be sampled and analysed to determine the correct waste classification (<i>Management of Waste Material</i> , DIV-AR-RS-01, dated March 2014, copy provided). The waste register was sighted (Extract provided) and	Compliant	
		appeared to confirm that the waste has been classified.		
E.16 Ro	ads and Traffic			
W-4.45	All chemicals being transported to the site must follow the route set out in the SEE.	The route specified in the SMERP Transport of Hazardous Materials Study (Dated 2002, copy provided) for Ammonia deliveries is as follows: From the Incitec Depot at Kooragang, the tankers leave the industrial estate via Tourle St and then turn right into Industrial Drive. From here, the tankers make their way to the Newcastle link road by turning right into Maitland Rd (Pacific Highway) and then left into Wallsend Road at Sandgate. The trucks then turn left into Main Rd and drive south to the intersection with Newcastle road, where they turn right and then left into Thomas St which becomes the Newcastle Link Road. From here, the truck follows the road into the Sydney Newcastle Freeway and proceeds to Wahroonga.	Non-Compliant	2016/9 — BSL should ensure compliance with the transport routes set out in the SEE for: (i) chemicals transported to the site (CC # W-4.45); and (ii) nonliquid waste from the site (CC # 4.46). Alternatively, BSL should seek approval for alternative routes to be followed.
		After exiting the Sydney Newcastle Freeway at Wahroonga, the tankers turn left on to the Cumberland Highway (Pennant Hills Road) and follow it through to North Parramatta where they turn right into James Ruse Drive and rejoin the Cumberland Highway as they turn left into Hart		



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
		Road. The route continues south until the tankers turn right into the Hume Highway at Liverpool. The tankers then turn right into the Great Southern Motorway at Casula and then follow this south to Wilton, where they exit by turning left on to the Picton road which joins into Mt Ousley Road at the top of Mt Ousley.		
		An audit was undertaken by BSL on 3 September 2013 to confirm the route being followed by the Ammonia delivery drivers (Audit report 9.6.1.4a from MARS, copy provided). The driver advised that the route followed was "F6, M2, M7, Hume hway, Picton road, Mount Ousley road, Springhill Road, Five Islands Road".		
		The route designated by BSL is included in the 'Loading of Ammonia from Road Tanker' procedure (SP-OPSP-KAMS-004, sighted, copy not provided), which requires confirmation with the driver that the following route was followed: Newcastle (F6) -> Sydney via M1 (formally M3) -> M2 -> M7 -> M31 (i.e. Hume Highway) -> Masters Rd -> B65 (i.e. Springhill Road and Five Islands Road) -> Flinders St -> BSL.		
		The route specified in the 'Loading of Ammonia from Road Tanker' procedure appears to match the audit record; however, these do not appear to match the route specified in the 2002 transport study (which was supplied by BSL as defining the route set out in the SEE – Since the SEE was not provided, it is not clear if this transport study is consistent with the SEE). For example, the route specified in the transport study pre-dates the construction of the M7, which		
		now appears to be used by Ammonia tanker drivers. This was assessed as a low risk non-compliance since following main roads such as the M7 rather than the more		



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
		populated Cumberland Highway would be expected to be preferable for the transport of ammonia. However,		
W-4.46	The transport route for the non-liquid waste leaving the site must follow the route set out in Figure 5.4 of the SEE.	The SEE was not provided (Refer to CC # W-4.45); therefore, this was not verified. However, given that there is some uncertainty with the transport of chemicals to the site, it would be appropriate for BSL to undertake a review to ensure compliance.	Not Verified	Refer to 2016/9
W-4.47	The developer must ensure that sufficient parking is provided on site for all vehicles associated with the construction and operation of the plant. No vehicles associated with the proposed development are to park along Christy Drive or Old Port Road.	BSL advised that two additional car parks were provided outside the Sinter Plant Administration Building to ensure sufficient parking is available for contractors and BSL employees (Refer to Figure 5). However, it was observed during the site visit that some vehicles were also parked near the gate on Christy Drive. It is unclear whether the restriction on parking along Christy Drive was only intended to apply during the construction phase (when many more vehicles would be present) or whether this was meant to be an ongoing restriction. This should be raised with the DP&E and resolved accordingly. This was assessed as a low risk non-compliance since relatively few vehicles were being parked on Christy Drive and the additional car parks outside the Sinter Plant Administration Building were observed to be in use.	Non-Compliance	2016/10 – It was observed during the site visit that some vehicles were being parked near the gate on Christy Drive. This would appear to be noncompliant with CC # W-4.47; however, it is not clear if this restriction was only intended to apply during the construction phase (when many more vehicles would be present) or whether this was meant to be an ongoing restriction. This should be raised with the DP&E and resolved accordingly.



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
		Figure 5 Car Parking Areas at Sinter Plant		
W-4.48	The developer must consult with the relevant authorities (i.e. Council, Roads and Traffic Authority and WorkCover) regarding the transportation of heavy equipment, wide loads and hazardous goods prior to the planned transport event.	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. This CC has been assessed as 'Compliant' since it is marked as complete in the 2013 IEA (Refer to Section 1.3).	Compliant	
E.17 Site	e Management			
W-4.49	Stockpiles of sand, gravel, soil and the like must be located to ensure that the material: does not spill onto the road pavement; and is not placed in drainage lines or water courses, and cannot be washed into these areas.	During the site inspection on 10 and 24 March 2016, the majority of the drains and roadways at the WGCP were observed to be clear of stockpiles of sand, gravel, soil and the like. However: • Some bags of spent char were observed to be damaged on the roadway near the Gypsum Plant (Refer to Photograph 15 in Section 7.3).	Non-Compliance	Refer to 2016/13 (Section 7.3 – Table 12, ID # 2).



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	If soil or other materials are spilled accidentally onto the road or gutter, they must be removed prior to the completion of the day's work.	Since the roadway drains discharge to the 4BF Thickener, sediment / debris would be expected to be intercepted before any discharge off-site. Therefore, this was assessed as a low risk non-compliance.		
W-4.50	Drains, gutters, access ways and roadways must be maintained free of sediment and any other material. Gutters and roadways must be swept/scraped regularly to maintain them in a clean state.	 During the site inspection on 10 and 24 March 2016, the majority of the drains, gutters, access ways and roadways at the WGCP were observed to be mostly free of sediment and any other material. However: Some debris (including Gypsum) was observed near the drain at the Gypsum storage area (Refer to Photograph 14 in Section 7.3). There was evidence of sandbags being damaged near one of the drains, which could allow entry of sediments to the drains (Refer to Photograph 20 in Section 8). Since these drains discharge to the 4BF Thickener, sediment / debris would be expected to be intercepted before any discharge off-site. Therefore, this was assessed as a low risk non-compliance. 	Non-Compliance	Refer to 2016/11 (Section 7.3 – Table 12, ID # 1). Refer to 2016/15 (Section 8 - Table 13, Audit ID # W3 (ANC)).
W-4.51	Building operations such as brick cutting, the washing of tools or paint brushes, or other equipment and the mixing of mortar must not be carried out on the roadway or public footpath or any other locations which could lead to the discharge of materials into the stormwater drainage system or natural watercourse.	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. This CC has been assessed as 'Compliant' since it is marked as complete in the 2013 IEA (Refer to Section 1.3). Note: No activities of this type were observed during the site inspections on 10 and 24 March 2016.	Compliant	
E.18 De	sign and Lighting		1	1
W-4.52	The colours and materials used in the proposed Sinter Plant Waste Gas Cleaning Plant must be in accordance	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. This CC has	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	with the BHP Environmental Improvement Program – Masterplan for the Steelworks Site.	been assessed as 'Compliant' since it is marked as complete in the 2013 IEA (Refer to Section 1.3).		
W-4.53	The Applicant must ensure that any external lighting associated with the development is mounted, screened, and directed in such a manner so as not to create a nuisance to surrounding land uses. The lighting must be the minimum level of illumination necessary.	BSL has not recorded any complaints from the local community or neighbouring port users regarding lighting at the WGCP since the previous IEA in 2013 (Refer to Section 4.2) and this was not identified as a concern during consultation prior to the audit (Refer to 2.4.1).	Compliant	
E.19 Env	vironmental Awareness Training			
W-4.54	All staff including contractors and subcontractors must be trained in environmental awareness and responsibility required under the POEO Licence both generally and specific to the Applicant's activities. The training program must be developed and implemented prior to any works at the site.	The six module eLearning training course was sighted (Copy not provided). BSL advised that this was required for all employees and appeared to be comprehensive. Environmental awareness is included in the induction for contractors (Sighted induction information for Ore Preparation). This is also an eLearning module. Non-compliance was identified in 2013 IEA for WGCP. Therefore, BSL modified the 'Illawarra Site General Enviro Awareness Refresher Training' (Copy provided) to include a reference to the POEO Act and EPL.	Compliant	
F. EN	VIRONMENTAL MONITORING / AUDITING AND RECORDIN	G CONDITIONS		
F.1 Mc	onitoring Records			
W-6.1 [Also EPL # M1.1]	The results of any monitoring required to be conducted by this consent, or a licence under the Protection of the Environment Operations Act 1997, in relation to the development or in order to comply with the load calculation protocol must be recorded and retained as set out in Conditions 6.2 and 6.3.	Refer to CC # W-6.2 and W-6.3 below.		
W-6.2	All records required to be kept by the licence must be:	Effectively same as EPL # M1.2 (Although this does not include requirement for graphical electronic data).	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
[Also EPL # M1.2]	 in a legible form, or in a form that can readily be reduced to a legible form; kept for at least four years after the monitoring or event to which they relate took place; produced in a legible form to any authorised officer of the EPA who asks to see them; and any monitoring data must also be available in an electronic form with data presented graphically. 	The Annual Return for 2014–2015 was sighted (Dated 24 August 2015, copy provided). Monitoring data is reported monthly on the 'Monitoring Data' page of the BSL website (https://prod.bluescope.com/sustainability/reports/nsw-monitoring-data/). As at 4 May 2016, this website was observed to include monthly reports for April 2012 to February 2016. Data dating back to 2005 was also sighted to be available at the laboratory. The 'EHS Data Monitor Pro' web-based application (Sighted, copy not provided) can present the data graphically.		
W-6.3 [Also EPL # M1.3]	The following records must be kept in respect of any samples required to be collected: the date(s) on which the sample was taken; the time(s) at which the sample was collected; the point at which the sample was taken; and the name of the person who collected the sample.	Sampling data is recorded in an Excel spreadsheet (Sighted, copy not provided) and then transferred to the 'LIMS Solutions' database (Sighted, copy not provided) and the 'EHS Data Monitor Pro' web-based application (Sighted, copy not provided). All of the information required to comply with CC # W-6.3 was sighted to be recorded.	Compliant	
	sting Methods – Concentration Limits			
W-6.4 [Also EPL # M3.1]	Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this consent, or a licence under the POEO Act 1997, in relation to the development or in order to comply with a relevant local calculation protocol must be done in accordance with: • any methodology which is required by or under the POEO Act 1997 to be used for the testing of the concentration of the pollutant; or	Same as EPL # M3.1. Personnel interviewed during the audit were able to produce a copy of the EPA's Approved Methods for Sampling and Analysis of Air Pollutants in NSW (Copy not provided). Evidence was also sighted of an approval from the EPA (Letter dated 17/11/15, copy not provided) to vary TM-13 (As BSL did not want to use method 8).	Compliant	
	if no such requirement is imposed by or under the POEO Act 1997, any methodology which the general terms of approval or a condition of the			



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	 licence or the protocol (as the case may be) requires to be used for that testing; or if no such requirement is imposed by or under the POEO Act 1997 or by the general terms of approval or a condition of the licence or the protocol (as the case may be), any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place. Note: The Clean Air (Plant and Equipment) Regulation 1997 requires testing for certain purposes to be conducted in accordance with test methods contained in the publication Approved Methods for the Sampling and Analysis of Air Pollutants in NSW. 			
F.3 Loa	ad Based Licensing Scheme			
W-6.5 [Also EPL # M8.2]	The Waste Gas Cleaning Plant will be incorporated into the Load Based Licensing scheme once a licence variation has been issued under the Protection of the Environment Operations Act 1997. Using the Load Calculation Protocols, the licensee will then be required to monitor each of these assessable pollutants, calculate pollutant loads, and pay the pollutant load fee in conjunction with other assessable pollutant loads calculated for the entire steelworks. The assessable pollutants applicable to this activity are given in the table below. NOTE: TABLE HAS NOT BEEN REPRODUCED IN THIS	All of the assessable pollutants (air) listed in CC # W-6.5 are also listed in EPL # M8.2 for Point 107 (Sinter Plant WGCP Exhaust Stack). The unit of measure specified in the EPL is tonnes per annum. Only TSS and total Zn are listed in the EPL # M8.2 as being assessable pollutants (water) for Point 89 (IMED). The unit of measure specified in the EPL is tonnes per annum. The Annual Return to the EPA for 2014-2015 was sighted (Dated 24 August 2015, copy provided), which includes the annual load based licensing assessment for the PKSW.	Compliant	
	REPORT – Refer to Conditions of Development Consent / EPL for further information. Note: Chromium for the purpose of calculating the assessable pollutant in the above table must be reported			

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CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	as per "Guide to Licensing Under the POEO Act Part B" Appendix 8.			
W-6.6	Notwithstanding Condition 6.5, monitoring must be undertaken for all assessable pollutants listed in the table in Condition 6.5 for a period of 12 months after the hot commissioning of the Waste Gas Cleaning Plant.	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC has been assessed as 'Compliant' since it is marked as complete in the 2013 IEA (Refer to Section 1.3).	Compliant	
W-6.7	For the purpose of assessing compliance with LBL Load Limits and determining pollutant load fees, the assessable pollutant monitoring data for the Waste Gas Cleaning Plant will be combined with other assessable pollutant loads from the premises.	The Annual Return to the EPA for 2014-2015 was sighted (Dated 24 August 2015, copy provided), which includes the annual load based licensing assessment for the PKSW. This shows all pollutants for entire PKSW (i.e. data for the Waste Gas Cleaning Plant will be combined with other assessable pollutant loads from the premises).	Compliant	
F.4 Mo	onitoring of Concentration of Pollutants Discharged			
W-6.8 [Also EPL # M2.2]	For the discharge point specified below, the Applicant must monitor the concentration of each pollutant specified in the table below. The Applicant must use the sampling method, units of measure and frequency of sampling specified in the table below unless otherwise approved in writing by the EPA. NOTE: TABLE HAS NOT BEEN REPRODUCED IN THIS REPORT – Refer to Conditions of Development Consent / EPL for further information. Note: All methods are as specified in the "Approved Methods for the Sampling and Applying of Air Pollutants	Monitoring data is reported monthly on the 'Monitoring Data' page of the BSL website (https://prod.bluescope.com/sustainability/reports/nsw-monitoring-data/). Personnel interviewed during the audit were able to produce a current copy of the EPA's Approved Methods for Sampling and Analysis of Air Pollutants in NSW.	Compliant	
	Methods for the Sampling and Analysis of Air Pollutants in New South Wales" and all monitoring must be conducted strictly in accordance with the requirements outlined in this document. To assess the performance of the CEM the Applicant must carry out quarterly emissions testing in accordance			



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	with the reference method or otherwise as specified by the manufacture of the CEM instrument.			
W-6.9	The Applicant must undertake a stack-monitoring program in accordance with the following table using the sampling methods specified unless otherwise approved by the EPA. **NOTE: TABLE HAS NOT BEEN REPRODUCED IN THIS REPORT - Refer to Conditions of Development Consent / EPL for further information. Note: All methods are as specified in the "Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales" and all monitoring must be	Monitoring data is reported monthly on the 'Monitoring Data' page of the BSL website (https://prod.bluescope.com/sustainability/reports/nsw-monitoring-data/). Personnel interviewed during the audit were able to produce a current copy of the EPA's Approved Methods for Sampling and Analysis of Air Pollutants in NSW.	Compliant	
	conducted strictly in accordance with the requirements outlined in this document.			
0-3.1	To establish compliance with condition 2.6 of this Approval, the Proponent shall monitor the emissions from the Room Dedusting Stack and the Waste Gas Cleaning Plant Exhaust Stack at the monitoring points listed by the EPA in the existing Environment Protection Licence. Monitoring shall be undertaken within 3 months following recommissioning of the Plant, and then at a frequency specified in the Environment Protection Licence and utilising test methods agreed with the EPA.	Monitoring data is reported monthly on the 'Monitoring Data' page of the BSL website (https://prod.bluescope.com/sustainability/reports/nsw-monitoring-data/). As at 4 May 2016, this website was observed to include monthly reports for April 2012 to February 2016. This data includes the Room Dedusting Stack and the Waste Gas Cleaning Plant Exhaust Stack.	Compliant	
0-3.2	Within 28 days of conducting the recommissioning monitoring referred to under condition 3.1 of this approval, the Proponent shall provide the Director-General and the EPA with a copy of the report. If the monitoring identifies significant deviance from the predictions made in the documents referred to under condition 1.1 or any exceedance of limits in accordance	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. This CC has been assessed as 'Compliant' since it is marked as complete in the 2013 IEA (Refer to Section 1.3).	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	with condition 2.6, the Proponent shall detail what additional measures would be implemented to address these exceedances. The Proponent shall clearly indicate who would implement these measures, when these measures would be implemented, and how the effectiveness of these measures would be assessed and reported to the Director-General.			
W-6.10 [Also EPL # M2.5 & M8.1]	Prior to commencement of hot commissioning the EPA will delete the table nominated as Point 89 on the existing EPL which specifies water monitoring requirements for the Iron Making East Drain and replace with the following table: NOTE: TABLE HAS NOT BEEN REPRODUCED IN THIS REPORT – Refer to Conditions of Development Consent / EPL for further information.	EPL # M2.5 includes the revised table. This has some different frequencies (e.g. Ammonia, Cyanide and TSS is every 4 days in CC and every 8 days in EPL) and some different pollutants are listed (e.g. Chromium in CC, but not in EPL). The requirement to monitor total flow (KI) is included in EPL # M8.1, which also lists the approved method as a Weir structure and level sensor. This is categorised as a 'Note' since no assessment of compliance is required.	Note	
F.5 Mo	onitoring Program – PRP 53 (Sinter Plant) Compliance Mon	itoring Program	1	
W-6.11	Six months prior to hot commissioning the Applicant shall develop a monitoring and reporting program to demonstrate how compliance with the requirements of PRP 53 will be achieved. The program, must include details on but need not necessarily be limited to the following: • the monitoring methodologies and standards to be employed to assess compliance with PRP 53; • monitoring location(s); • monitoring frequency representativeness of the sampling; • assessment of results; and	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC has been assessed as 'Compliant' since PRP 53 was sighted as being complete in the EPL (Completed December 2002), and the CC is marked as complete in the 2013 IEA (Refer to Section 1.3).	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	opportunities to integrate the monitoring program with other monitoring programs.			
	The plan must be implemented once hot commissioning of the plant commences.			
	Note: Reporting requirements for the program referred to in Condition 6.11 is specified in Condition 7.2. The EPA may include the program referred to in Condition 6.11 as a PRP on the EPL.			
F.6 Mo	onitoring Program – Effluent Characterisation Program			
W-6.13	The Applicant must develop a monitoring program no later than three months after the end of hot commissioning to characterise the pollutants, determine the whole effluent toxicity in discharges from the Waste Gas Cleaning Plant Waste Water Treatment Plant and assess compliance with Condition 4.30. The program must be prepared in consultation with the EPA and include details and procedures on, but need not necessarily be limited to the following:	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC has been assessed as 'Compliant' since this was addressed as part of PRP 112 (SMERP Effluent Characterisation Program), which was sighted as being complete in the EPL (Completed July 2011), and the CC is marked as complete in the 2013 IEA (Refer to Section 1.3).	Compliant	
	the concentrations and mass discharges of individual pollutants from the Waste Gas Cleaning Plant Waste Water Treatment Plant into the Iron Making East Drain and from the combined discharge into Port Kembla Harbour through the Iron Making East Drain outfall. The pollutants selected must be those expected to be in the effluent, including those referenced in the Statement of Environmental Effects;			
	the flow rate and dilution of the Waste Gas Cleaning Plant Waste Water Treatment Plant			



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	discharge in the Iron Making East Drain and in Port Kembla Harbour after initial, or near field mixing;			
	 a sampling design showing the sampling and analytical methodologies, and statistical basis for the characterisation plan to produce representative data with a high level of statistical certainty; and 			
	 the whole effluent toxicity of the Iron Making East Drain outfall into Port Kembla Harbour which would include the combined discharge from the Waste Gas Cleaning Plant Waste Water Treatment Plant. 			
W-6.14	The Applicant must implement the program proposed in Condition 6.13 and on completion of the program, submit a report to the EPA no later than 21 months after the end of hot commissioning.	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC has been assessed as 'Compliant' since it is marked as	Compliant	
	Note: The EPA may include the program referred to in Condition 6.13 as a PRP on the EPL.	complete in the 2013 IEA (Refer to Section 1.3).		
	Based on the findings of the whole effluent toxicity program as indicated in Condition 6.13 the EPA may require the proponent to undertake a toxicity identification and reduction program at a later date.			
F.7 Mc	onitoring Program – Investigations for the Provision of Inst	antaneous Monitoring of Dioxin and Solid Particulates		
W-6.15	The Applicant must implement an ongoing monitoring program to demonstrate whether they are complying with Solid Particulate and Dioxin limits specified in Condition 4.17.	Monitoring results for Point 2 and Point 107 are reported monthly on the 'Monitoring Data' page of the BSL website (https://prod.bluescope.com/sustainability/reports/nsw-monitoring-data/). As at 4 May 2016, this website was observed to include monthly reports for April 2012 to February 2016.	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
W-6.16	No later than three months after the end of hot commissioning the Applicant must investigate the provision of monitoring to provide instantaneous data to assess compliance with Condition 6.15. The investigations must also include details on but need not necessarily be limited to the following: • identification of indicators such as chemical and/or physical parameters which correlate with	Quarterly and monthly monitoring results sighted during the audit (Copy provided) indicate that dioxins are well below the EPL limit of 0.3 ng/m3. Additional monitoring was undertaken following the stack fire in 2014 (Sighted, copy provided). There was a slight increase in the dioxin concentration, but it was still below EPL limit of 0.3 ng/m3. The max concentration measured at Point 151 (i.e. old stack) during diversion from Sinter Plant WGCP stack (Point 107) was 0.095 ng/m3 (Sighted monitoring results, copy provided). BSL advised that they have previously attempted to install continuous monitoring devices for SOx and dioxins (Not verified), but were not successful due to the corrosive nature of pollutants. Continuous monitoring is not a requirement of the current EPL, except for particulates at the WGCP stack (Refer to Section 3.6). The scope of the 2016 IEA did not include a detailed	Compliant	
	dioxin emission limits and could be used as a surrogate to provide instantaneous data on the efficiency of the plant in destroying dioxins; monitoring to provide instantaneous data for dioxin and particulates during plant operations; and preferred monitoring strategy.	assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC has been assessed as 'Compliant' since it is marked as complete in the 2013 IEA (Refer to Section 1.3).		
W-6.17	The Applicant must prepare a report for submission to the EPA no later than 7 months after hot commissioning on the findings of the investigations. Note: The EPA may include the program referred to in Conditions 6.15, 6.16 and 6.17 as a PRP on the EPL.	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC has been assessed as 'Compliant' since it is marked as complete in the 2013 IEA (Refer to Section 1.3).	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
F.8 Mo	nitoring Program – Visibility Monitoring			
W-6.18 [Also EPL # M9.2]	At least six months prior to hot commissioning the Applicant must develop a continuous or time lapse monitoring program to demonstrate that there is no visible stack emission during the operation of the plant and to assess compliance with Condition 4.11. A copy of the monitoring program must be submitted to the EPA three months prior to hot commissioning. The program must be implemented by the end of hot commissioning. Note: The EPA may include the program referred to in Condition 6.18 as a monitoring condition or PRP on the EPL.	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC has been assessed as 'Compliant' since: • This CC is marked as complete in the 2013 IEA (Refer to Section 1.3). • BSL have installed a video recording system in accordance with EPL condition # M9.2. The Sinter Plant is covered by the site-wide cameras located at the Mellor Centre building. The camera displays were sighted at the Mellor Centre building during the site inspection on 10 March 2016 (Refer to Photograph 13).	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
		Photograph 13 Camera Displays at Mellor Centre Building (10 March 2016)		
W-6.19	The Applicant must develop and implement a monitoring and reporting program to assess compliance with Condition 4.18 in relation to Total Mass Emission of Solid Particulate and Dioxin and compliance with Condition 4.19 in relation to reductions in NOx and SO2 emissions. The program must also include details on monitoring and reporting of annual mass emissions of NOx and SOx from the Waste Gas Cleaning Plant.	Refer to CC # W-4.18 and W-4.19.	Refer to CC # W- 4.18 (Compliant) and W-4.19 (Not Verified)	
W-6.20	At least six months prior to hot commissioning the Applicant must develop a monitoring and reporting program that demonstrates how compliance with Condition 6.19 will be achieved.	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC has been assessed as 'Compliant' since this was	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	 The program must include details on but need not necessarily be limited to the following details on: monitoring which demonstrates a net reduction in NOx and SO2 taking into account emissions from the operation of the PCI facility and Pre and Post operation of the Waste Gas Cleaning Plant; and opportunities which exist to integrate with other monitoring programs such as the PCI Mass Emission Reduction Program. 	addressed as part of PRP 106 (SMERP – Mass Emission Monitoring Program), which was sighted as being complete in the EPL (Completed December 2007), and the CC is marked as complete in the 2013 IEA (Refer to Section 1.3).		
W-6.21	 The Applicant must prepare reports for submission to the EPA 12 and 24 months after hot commissioning regarding the findings of the Mass Emission Monitoring Program. Both reports must also include: an assessment of annual mass emissions of NOx in relation to the Waste Gas Cleaning Plant and their contribution to the load emitted by the entire premises in meeting a NOX neutral level with the objective to reduce NOx emissions to 1998 levels to meet the actions specified in the NSW Government's 25-Year Air Quality Management Plan. an assessment of annual mass emissions of SOx in relation to the Waste Gas Cleaning Plant and their contribution to the load emitted by the entire premises in reducing SOx emissions to 1998 levels. 	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC has been assessed as 'Compliant' since it is marked as complete in the 2013 IEA (Refer to Section 1.3).	Compliant	
W-6.22	Any proposed monitoring program must be consistent with the Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales and EPA Load Calculation Protocol for use by holders of NSW EPLs when calculating assessable loads unless otherwise approved by the EPA.	Personnel interviewed during the audit were able to produce a current copy of the EPA's Approved Methods for Sampling and Analysis of Air Pollutants in NSW. Evidence was also sighted of an approval from the EPA (Letter dated 17/11/15, copy not provided) to vary TM-13 (As BSL did not want to use method 8).	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	Note: The EPA may include the program referred to in Conditions 6.20, 6.21 and 6.22 as a PRP on the EPL. Results of the findings of this program will be used to revise LBL Load Limits.			
F.10 M	onitoring Program – Dioxin Pathway Monitoring Program			
W-6.23	At least six months prior to the hot commissioning the Applicant must develop a dioxin pathway monitoring program to demonstrate that the Waste Gas Cleaning Plant is operated with the objective of maximising the destruction of Dioxins and related substances. The Applicant must consult with the EPA during the preparation of the program. This program must provide details on monitoring to track any residual dioxins in the SRG, any air emissions, water discharges or wastes and assess the performance of the plant in relation to destruction of dioxin. The program must also include details on but need not necessarily be limited to the following: • monitoring methodologies and standards to be employed to assess any residual dioxins in the SRG, any air emissions, water discharges or wastes during plant operations; • dioxin monitoring in relation to the processing of SRG; • monitoring location(s);	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC has been assessed as 'Compliant' since: • This CC was addressed as part of PRP 109 (SMERP – Dioxin Pathway Monitoring Program), which was sighted as being complete in the EPL (Completed December 2009); • This CC is marked as compliant in the 2013 IEA (Refer to Section 1.3); • Monitoring results for Point 2, Point 107 and Point 157 are reported monthly on the 'Monitoring Data' page of the BSL website (https://prod.bluescope.com/sustainability/reports /nsw-monitoring-data/). As at 4 May 2016, this website was observed to include monthly reports for April 2012 to February 2016 and these reports indicate that dioxins are well below the EPL limit of 0.3 ng/m3; and, • Additional monitoring was undertaken following the stack fire in 2014 (Sighted, copy provided)	Compliant	
	 monitoring frequency; representativeness of the sampling; an assessment on the process of dioxin destruction including its efficiency and a 	the stack fire in 2014 (Sighted, copy provided). There was a slight increase in the dioxin concentration, but it was still below EPL limit of 0.3 ng/m3. The max concentration measured at Point 151 (i.e. old stack) during diversion from Sinter		

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CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	 breakdown on the types of pollutants produced as a result of dioxin destruction; and opportunities to integrate the monitoring program with other monitoring programs. 	Plant WGCP stack (Point 107) was 0.095 ng/m3 (Sighted monitoring results, copy provided).		
W-6.24	The Applicant must implement the program referred to in Condition 6.23 after hot commissioning to provide information and data for at least the first 12 months of operation to assess compliance.	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC has been assessed as 'Compliant' since: • Monitoring results for Point 2, Point 107 and Point 157 are reported monthly on the 'Monitoring Data' page of the BSL website (https://prod.bluescope.com/sustainability/reports /nsw-monitoring-data/). As at 4 May 2016, this website was observed to include monthly reports for April 2012 to February 2016 and these reports indicate that dioxins are well below the EPL limit of 0.3 ng/m3; and, • Additional monitoring was undertaken following the stack fire in 2014 (Sighted, copy provided). There was a slight increase in the dioxin concentration, but it was still below EPL limit of 0.3 ng/m3. The max concentration measured at Point 151 (i.e. old stack) during diversion from Sinter Plant WGCP stack (Point 107) was 0.095 ng/m3 (Sighted monitoring results, copy provided).	Compliant	
W-6.25	The Applicant must discuss the findings of the monitoring program referred to in Condition 6.23 with NSW Department of Agriculture and NSW Department of Health in relation to the beneficial reuse of SRG in the production of fertilisers.	This CC has been assessed as 'Not Triggered' since BSL did not proceed with the proposed pipeline to the Incitec Plant (i.e. for production of fertiliser). BSL constructed a Gypsum Plant instead.	Not Triggered	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
W-6.26	No later than 18 months after hot commissioning the Applicant must submit a report for submission to the EPA on the findings of the program including the outcomes of consultation detailed in Condition 6.25. Note: The EPA may include the program referred to in Conditions 6.23 as a PRP on the EPL.	This CC has been assessed as 'Not Triggered' since BSL did not proceed with the proposed pipeline to the Incitec Plant (i.e. for production of fertiliser). BSL constructed a Gypsum Plant instead.	Not Triggered	
F.11 Mc	onitoring Program – Sinter Plant Electrostatic Precipitator (ESP) Outlet Dust Load Monitoring Program		
W-6.27	At least 6 months prior to hot commissioning the Applicant must document and implement a program to monitor dust load entering the Sinter Plant Waste Gas Cleaning Plant from the ESP. This program must also include an assessment of the plant efficiency in relation to dust load entering the plant when assessed against the plant's specification requirements. The program must include but need not necessarily be limited to details on the following: • plant specification; • monitoring methodologies; • monitoring location(s); • monitoring frequency • representativeness of the sampling; • assessment of results; • reporting; and • opportunities to integrate the monitoring program with other monitoring programs.	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC has been assessed as 'Compliant' since this CC is marked as complete in the 2013 IEA (Refer to Section 1.3).	Compliant	
W-6.28	Subject to the findings of the Sinter Plant ESP Outlet Dust Load Monitoring Program ongoing monitoring of	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	dust entering the Sinter Plant Waste Gas Cleaning Plant may be required on the EPL. Note: Report requirements for the program referred to in Condition 6.28 are specified in Condition 7.2. The EPA may include the program referred to in Condition 6.28 as a PRP on the EPL. The EPA is satisfied that the gas cleaning project pilot plant has demonstrated that the environmental performance objectives for total particulates could be met in relation to a full scale plant. However, the EPA concurs with the Applicant that ongoing works will be required to identify opportunities to reduce particulate loadings to the Waste Gas Cleaning Plant after commissioning thereby optimising the plant's environmental performance.	CC has been assessed as 'Compliant' since this CC is marked as complete in the 2013 IEA (Refer to Section 1.3).		
F.12 Mc	onitoring Program – Radionuclide Monitoring Program		L	
W-6.29	At least three months prior to hot commissioning the Applicant must develop and implement a radionuclide monitoring program that demonstrates how compliance with Condition 4.37 will be achieved. The program must include details on but need not necessarily be limited to the following: • monitoring methodologies and standards to be employed to assess radionuclides and their pathways in any air emissions and water discharges during plant operations; • radionuclide species; • monitoring location(s);	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC has been assessed as 'Compliant' since this was addressed as part of PRP 113 (SMERP – Radionuclide Monitoring Program), which was sighted as being complete in the EPL (Completed December 2009), and the CC is marked as complete in the 2013 IEA (Refer to Section 1.3).	Compliant	
	 monitoring focation(s), monitoring frequency; representativeness of the sampling; 			



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	 assessment of results, including Australian and International Standards; 			
	reporting;			
	 process description and variability; 			
	 issues relevant to particle size distribution of particulate materials; and 			
	 opportunities to integrate with other monitoring programs. 			
	After hot commissioning, for at least the first 12 months of operation, the Applicant must provide information and data from the Radionuclide Monitoring Program to establish compliance with Condition 4.37.			
W-6.30	The Applicant must prepare a report for submission to the EPA no later than 18 months after hot commissioning on the findings of the Radionuclide Monitoring Program. Note: The EPA may include the program referred to in Conditions 6.29 and 6.30 as a PRP on the EPL.	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC has been assessed as 'Compliant' since this was addressed as part of PRP 113 (SMERP – Radionuclide Monitoring Program), which was sighted as being complete in the EPL (Completed December 2009), and the CC is	Compliant	
		marked as complete in the 2013 IEA (Refer to Section 1.3).		
F.13 Mo	onitoring Program – Noise Monitoring			
W-6.31	No later than three months after the end of hot commissioning the Applicant must implement a noise-monitoring program to confirm performance and to assess compliance with Condition 4.6. The program must include details on but need not necessarily be limited to the following:	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC has been assessed as 'Compliant' since it is marked as complete in the 2013 IEA (Refer to Section 1.3).	Compliant	
	methodologies for noise monitoring;			
	location of noise monitoring;			



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	 frequency of noise monitoring; identification of monitoring sites at which pre and post development noise levels can be ascertained; and recommended noise reduction strategies including a time frame for implementation to achieve compliance with noise planning goals if required. The Applicant must prepare a report for submission to the EPA no later than eight months after hot commissioning on the findings of the program. Note: The EPA may include the program referred to in Condition 6.31 as a monitoring Condition or PRP on the EPL. 			
0-3.3	The Proponent shall undertake a program to confirm the noise performance of the project as referred to in condition 2.10. The noise program shall include, but not necessarily be limited to: a) noise monitoring, consistent with the guidelines provided in the New South Wales Industrial Noise Policy (EPA, 2000), to assess compliance with condition 2.9 of this Approval. b) methodologies, locations and frequencies for noise monitoring; c) identification of monitoring sites at which pre- and post-project noise levels can be ascertained; d) details of any complaints and enquiries received in relation to noise generated by the project within the first three months of operation; e) a statement of whether the site is in compliance with noise limits specified in condition 2.9; and	The EPL notes that the EPA approved monitoring site is nominated in the plan titled "Figure 4 – Layout of Proposed Sinter Plant Waste Gas Cleaning Plant" 281963A6". This is the Gabriella Memorial site on Christy Drive (Visited during site inspection – Refer to Figure 1, Grid Reference N25). BSL advised that multiple noise reports have been submitted to the DP&E and have demonstrated compliance with this condition over multiple years with no noise complaints. The last report 'SMERP Development Approval Noise Compliance 2012' was sighted (Dated 25 June 2012, copy provided). It is reported that the noise is not tonal. BSL has not recorded any noise complaints since the 2013 IEA (Refer to Section 4.2) and noise was not identified as a concern during consultation prior to the audit (Refer to 2.4.1). This CC is marked as complete in the 2013 IEA (Refer to Section 1.3).	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	f) any additional noise mitigation measures and timetables for implementation.			
	The noise program shall be documented in a report which shall be submitted at various times as specified in condition 3.4			
0-3.4	The Proponent shall provide the Director-General and the EPA with a report which includes the noise monitoring procedures and monitoring results referred to under condition 3.3 of this approval. The report is to be provided: a) six months prior to commencement of construction (draft monitoring procedures); b) four months prior to commencement of construction (final monitoring procedures); c) prior to the commencement of construction	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC has been assessed as 'Compliant' since it is marked as complete in the 2013 IEA (Refer to Section 1.3).	Compliant	
	(monitoring results); andd) three months after commissioning of the project (monitoring results).			
	If the noise monitoring report identifies any non-compliance with the noise limits imposed under this approval (refer to condition 2.9), the Proponent shall detail what additional measures would be implemented to ensure compliance, clearly indicating who would implement these measures, when these measures would be implemented, and how the effectiveness of these measures would be measured and reported to the Director-General and EPA.			



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	VIRONMENTAL REPORTING nual Return			
W-7.1	The Applicant must provide an annual return to the EPA in relation to the development as required by any licence under the POEO Act 1997 in relation to the development. In the return the Applicant must report on the annual monitoring undertaken (where the activity results in pollutant discharges), provide a summary of complaints relating to the premises which includes the development, report on compliance with licence conditions and provide a calculation of licence fees (administrative fees and, where relevant, load based fees) that are payable. If load based fees apply to the activity the Applicant will be required to submit load based fee calculation worksheets with the return.	The Annual Return for 2014–2015 was sighted (Dated 24 August 2015, copy provided) and included a certified Statement of Compliance, Monitoring and Complaints Summary and load based calculation worksheets. An acknowledgement was sighted from the EPA that the 2014 – 2015 Annual Return had been received (Dated February 2016, copy not provided) and the date of receipt for this return is reported to be 27 August 2015 on the EPA website for EPL 6092. The load based licensing data is also reported on the EPA website for EPL 6092 (Which includes data for every year from 1999).	Compliant	
W-A3.1 [Also EPL #R1.1]	The licensee must complete and supply to the EPA an Annual Return in the approved form comprising: • a Statement of Compliance; and • a Monitoring and Complaints Summary. A copy of the form in which the Annual Return must be supplied to the EPA accompanies this licence. Before the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.	The Annual Return for 2014–2015 was sighted (Dated 24 August 2015, copy provided) and included a certified Statement of Compliance and Monitoring and Complaints Summary. An acknowledgement was sighted from the EPA that the 2014 – 2015 Annual Return had been received (Dated February 2016, copy not provided) and the date of receipt for this return is reported to be 27 August 2015 on the EPA website. It is inferred from these acknowledgements that this return was on the form required by the EPA.	Compliant	
W-A3.2 [Also EPL # R1.2 to R1.4]	An Annual Return must be prepared in respect of each reporting, except as provided below Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete	The Annual Return for 2014–2015 was sighted (Dated 24 August 2015, copy provided). The next annual return is due in August 2016.	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	the Annual Return until after the end of the reporting period. Where this licence is transferred from the licensee to a new licensee:	The EPL has never been transferred to another licensee, surrendered or revoked. This appears to be consistent with the information for EPL 6092 on the EPA website.		
	 the transferring licensee must prepare an annual return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and 			
	 the new licensee must prepare an annual return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period. 			
	Note: An application to transfer a licence must be made in the approved form for this purpose.			
	Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an annual return in respect of the period commencing on the first day of the reporting period and ending on:			
	 in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or 			
	in relation to the revocation of the licence – the date from which notice revoking the licence operates.			
W-A3.3 [Also EPL # R1.5]	The Annual Return for the reporting period must be supplied to the EPA by registered post not later than 60 days after the end of each reporting period or in the	The Annual Return for 2014–2015 was sighted (Dated 24 August 2015, copy provided) together with acknowledgement from the EPA that the annual return had been received (Dated February 2016, copy not provided).	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').	The date of receipt for the 2014 – 2015 Annual Return is reported to be 27 August 2015 on the EPA website for EPL 6092. A copy of the electronic transfer information was sighted, which showed that LBL fee was paid on 31 August 2015 (Copy not provided).		
W-A3.4 [Also EPL # R1.6]	Where the licensee is unable to complete a part of the Annual Return by the due date because the licensee was unable to calculate the actual load of a pollutant due to circumstances beyond the licensee's control, the licensee must notify the EPA in writing as soon as practicable, and in any event not later than the due date. The notification must specify: • the assessable pollutants for which the actual load could not be calculated; and • the relevant circumstances that were beyond the	BSL advised that the Annual Return is issued by the due date and this would appear to be confirmed by the submission dates listed on the EPA website for EPL 6092 since the previous IEA in 2013.	Compliant	
W-A3.5 [Also EPL # R1.7]	control of the licensee. The licensee must retain a copy of the annual return supplied to the EPA for a period of at least 4 years after the annual return was due to be supplied to the EPA.	Annual returns were sighted for the previous three years (Copies not provided for 2012-2013 and 2013-2014). The annual return for 2011 to 2012 was not sighted during the audit; therefore, this CC was assessed as 'Not Verified'. This is not expected to be a non-compliance since BSL's record keeping appeared to be satisfactory.	Not Verified	
W-A3.6 [Also EPL # R1.8]	Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by: the licence holder; or by a person approved in writing by the EPA to sign on behalf of the licence holder.	The Annual Return for 2014–2015 was sighted (Dated 24 August 2015, copy provided) and included a certified Statement of Compliance and Monitoring and Complaints Summary.	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	A person who has been given written approval to certify a Statement of Compliance under a licence issued under the Pollution Control Act 1970 is taken to be approved for the purpose of this condition until the date of first review this licence.			
G.2 PR	P Progress Reports / Notification of Hot Commissioning			
W-7.2	Notwithstanding Condition 7.1 the Applicant must provide progress reports to the EPA 3, 6, 9, 12 and 16 months after hot commissioning on the monitoring and investigations to assess the environmental performance of the Waste Gas Cleaning Plant in meeting the requirements of PRP 53 (Sinter Plant) and Condition 6.11 "PRP 53 Compliance Monitoring Program". In addition, the reports must also report on the findings of the Sinter Plant ESP Outlet Dust Load Monitoring Program as outlined in Condition 6.28.	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC has been assessed as 'Compliant' since PRP 53 was sighted as being complete in the EPL (Completed December 2002), and the CC is marked as complete in the 2013 IEA (Refer to Section 1.3).	Compliant	
W-7.3	The Applicant must advise the EPA and Council in writing at least 24 hours before hot commissioning of the Waste Gas Cleaning Plant occurs.	The scope of the 2016 IEA did not include a detailed assessment of compliance with the CCs for the construction, commissioning and initial operations phases. However, this CC has been assessed as 'Compliant' since it is marked as complete in the 2013 IEA (Refer to Section 1.3).	Compliant	
G.3 An	nual Environmental Management Report			
W-7.4 [Also EPL # R4.1]	Twelve months after commissioning the Waste Gas Cleaning Plant, and annually thereafter for the duration of the development, the Applicant must submit an Annual Environmental Management Report to the Director-General, the EPA and the Council. This report must:	The last Annual Environmental Management Report was submitted to the DP&E in 2013 (copy provided). It has not been submitted in 2014 and 2015 since BSL submitted an application for amendment of the CCs (Submitted to DP&E on 27 June 2014, sighted, copy not provided). This variation to the timing was agreed with DP&E (Sighted email from DP&E dated 30 April 2014 that confirms this arrangement, copy provided).	Compliant	



CC#		Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	(a)	identify all the standards, performance measures, and statutory requirements the development is required to comply with;	Note: The DP&E has amended this CC and increased the submission period to be every 3 years, unless otherwise agreed by the Secretary [Ref. 4]		
	(b)	review the environmental performance of the development to determine whether it is complying with these standards, performance measures, and statutory requirements.			
	(c)	identify all the occasions during the previous year when these standards, performance measures, and statutory requirements have not been complied with;			
	(d)	include a summary of any complaints made about the development, and indicate what actions were taken (or are being taken) to address these complaints;			
	(e)	include the detailed reporting from the Environmental Monitoring Program, and identify any trends in the monitoring over the life of the project; and			
	(f)	where non-compliance is occurring, describe what actions are or will be taken to ensure compliance, who will be responsible for carrying out these actions, and when these actions will be implemented.			
W-7.5	Rep to a App	er reviewing the Annual Environmental Management ort, the Director-General may require the Applicant ddress certain matters identified in the report. The licant must comply with any reasonable uirements of the Director-General.	Additional requirements have not been raised since the last submission in 2013.	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
G.4 Inc	dependent Environmental Audit			
W-7.6	Within 12 months of commissioning the Waste Gas Cleaning Plant, and every three years thereafter, unless the Director-General directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit. The Independent Environmental Audit must:	An IEA was undertaken in 2010 (Copy provided) and 2013 (Copy provided).	Compliant	
	(a) be conducted by a suitably qualified, experienced, and independent person whose appointment has been endorsed by the Director-General;			
	(b) be consistent with ISO 14010 – Guidelines and General Principles for Environmental Auditing, and ISO 14011 – Procedures for Environmental Auditing, or updated versions of these guidelines/manuals;			
	(c) assess the environmental performance of the development, and its effects on the surrounding environment;			
	(d) assess whether the development is complying with the relevant standards, performance measures, and statutory requirements;			
	(e) review the adequacy of the Applicant's Environmental Management Plan, and Environmental Monitoring Program; and, if necessary,			
	(f) recommend measures or actions to improve the environmental performance of the plant, and/or the environmental management and monitoring systems.			



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
W-7.7	Within 2 months of commissioning the audit, the Applicant must submit a copy of the audit report to the Director-General. After reviewing the report, the Director-General may require the Applicant to address certain matters identified in the report. The Applicant must comply with any reasonable requirements of the Director-General.	An IEA was undertaken in 2010 (Copy provided) and 2013 (Copy provided). The status of the corrective actions identified in the 2013 IEA is reported in Section 8.	Compliant	
O-7.1	The Proponent shall notify the Director-General of any incident with actual or potential significant off-site impacts on people or the biophysical environment as soon as practicable after the occurrence of the incident. The Proponent shall provide written details of the incident to the Director-General within seven days of the date on which the incident occurred.	Reporting requirements are included in the Significant Environmental Incident Investigation and Reporting Process (MA-ENV-11-01, dated March 2014, copy provided). It is reported in Section 5.2 of this procedure that: In accordance with EPL 6092, reporting requirements exist for licence noncompliances and significant environmental incidents causing or threatening material harm. The Development Consents for some areas also require the Department of Planning to be notified of the significant incident and a report to be submitted in accordance with the Development Consent conditions. Contact the Environment Department for details. It is reported in the previous Hazard Audit report [Ref. 1] that: An email (copy provided) outlining the basic facts of the WGCP stack fire incident was sent to the DP&E office in Wollongong on 14-Oct-14 (i.e. within 24 hrs).	Compliant	
W-A3.7 [Also EPL # R2.1 to R2.2]	Note: The licensee or its employees must notify the EPA of incidents causing or threatening material harm to the environment as soon as practicable after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act. Notifications must be made by telephoning the EPA's Pollution Line service on 131 555.	Also refer to CC # O-7.1 above. Reporting of the WGCP stack fire, which occurred on 13 October 2014, was reviewed during the IEA. BSL's records of self-reports and complaints (Copy provided) includes an entry stating that the EPA was notified by phone on 13 October 2014. This appears to be consistent with the following statement in a variation to the EPL (Notice	Compliant	



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	The licensee must provide written details of the notification to the EPA within seven days of the date on which the incident occurred.	Number 1525198, File Number EF13/2639, dated 16 October 2014, available on EPA website for EPL 6092): On Monday 13 October 2014 BlueScope Steel (BSL) reported to Environment Protection Authority (EPA) that they had a fire in the Sinter Plant Waste Gas Cleaning Plant Stack. NSW Fire and Rescue attended the fire. It is reported in a letter from the EPA (Dated 23 October		
		2014, Ref. No. EF13/2639:DOC14/247595:GN, copy provided) that a meeting was held between EPA and BSL on 17 October 2014 and that BSL had provided a written submission on the same day.		
		It is also reported in the previous Hazard Audit report [Ref. 1] that: An email (copy provided) outlining the basic facts of the WGCP stack fire incident was sent to the DP&E office in Wollongong on 14-Oct-14 (i.e. within 24 hrs). A more detailed report was sent to the EPA on 6-Nov-14 (copy provided), with an update on 21-Nov-14 (copy provided).		
W-A3.8 [Also EPL # R3.1 to R3.4]	 Where an authorised officer of the EPA suspects on reasonable grounds that: where this licence applies to premises, an event has occurred at the premises; or where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence, 	Reporting of the WGCP stack fire, which occurred on 13 October 2014, was reviewed during the IEA. In addition to the reports cited in the Hazard Audit Report (Refer to CC # W-A3.7), a report sent to the EPA on 29 April 2015, which included an update on BSL's investigation and sought confirmation of completion of the 'Sinter Machine Short Term Operational Arrangements' (Refer to Section 7.2), was sighted (Copy provided).	Compliant	
	 and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event. 			



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
	The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.			
	The request may require a report which includes any or all of the following information:			
	• the cause, time and duration of the event;			
	 the type, volume and concentration of every pollutant discharged as a result of the event; 			
	 the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event; 			
	 the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort; 			
	 action taken by the licensee in relation to the event, including any follow-up contact with any complainants; 			
	 details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and 			
	any other relevant matters.			
	The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.			



CC#	Condition of Development Consent	Finding/s	Compliance Assessment	Corrective Action/s
0-7.2	The Proponent shall maintain a register of accidents, incidents and potential incidents with actual or potential significant off-site impacts on people or the biophysical environment The register shall be made available for inspection at any time by the independent qualified person or team conducting the Environmental Audit and / or the Director-General.	Incident details are recorded in BSL's MARS database, which was sighted during the audit. Once entered into MARS, the responsible department will rank the potential consequence and likelihood and determine corrective actions and key learnings. If the actual consequence is 3+ or the potential consequence is 4+ (As per BSL risk matrix), then the investigation is reviewed by a Level 3 manager. If the actual or potential consequence is 4+, then it is reviewed by a Level 4 manager and if it is 5+ it is reviewed by the chief executive. All of this information is recorded in MARS. The status of the actions and final close-out of the investigation is also recorded in MARS.	Compliant	
0-7.3	The Proponent shall meet the requirements of the Director-General to address the cause or impact of any incident, as it relates to this consent, reported in accordance with condition 7.1 of this consent, within such period as the Director-General may agree.	This condition was triggered following the WGCP stack fire in 2014. The DP&E subsequently requested BSL commission an independent hazard audit of the WGCP within three months of operation of the new (replacement) stack (Sighted letter dated 10 December 2014, copy not provided). The independent hazard audit was subsequently undertaken in April 2015 [Ref. 1].	Compliant	



7.2 Additional Conditions from Environment Protection Licence

Additional conditions from the EPL that are not covered by an equivalent Consent Condition are included in this Section (e.g. Additional EPL conditions relating to diversion of the WGCP stack, which were introduced following the WGCP fire in 2014).

Table 11 Audit Findings (Additional Conditions from EPL)

EPL#	Condition of EPL	Finding/s	Compliance Assessment	Corrective Action/s
O3 Dust				
O3.2 a) b) c) d)	The licensee must develop and comply with the licensee's Environmental Management Manual "Fugitive Dust Management System" (FDMS) (dated January 2014 or as varied with the prior written approval of the EPA). (The version dated January 2014 is filed on EPA file EF13/2639). The specifics within the FDMS are to be applied in accordance with this condition. For the purpose of this condition, "fugitive dust emissions" means dust emissions from a non-point source from or within any of the numbered areas detailed in the BlueScope Steel Port Kembla drawing 443942, provided by the licensee to the EPA on 6 September 2002 and filed on EPA file 280032B40. The licensee must conduct monitoring at all sites and complete a regular survey of the nominated sites in accordance with the FDMS. For the purposes of the FDMS: i) Dust Emission Ranking (DER) is obtained by using the descriptions shown at table 7.2 and numbered photograph plates detailed in the FDMS.	Also refer to W-4.12 and O-3.1 above. Dust emissions are required to be managed in accordance with the Fugitive Dust Management System (FDMS) (Divisional procedure MA-ENV-02-02, dated January 2014, copy provided), which requires additional controls on a caseby-case basis (e.g. a truck may be covered if it is identified as a source of potential dust emissions). The Weather Forecast Communications procedure (MA-ENV-07-01, dated March 2014, copy provided) includes the following requirement: Once an alert has been received, departments that manage unsealed roads and stockpiles should determine appropriate action according to the EWN control advice and the requirements outlined in the "Fugitive Dust Management System" (MA-ENV-02.02). Dust controls must be initiated proactively before the predicted high wind periods impact on the plant (not reactively once the winds have started). It is critical that the procedures for deployment of our fugitive dust controls are strictly followed and that 'we do what we say we will do'. There were no Sinter Plant related self-reports with a DER of 3 or greater since 1 July 2013 (Refer to Section 4.2).	Compliant	



EPL#	Condition of EPL	Finding/s	Compliance Assessment	Corrective Action/s
	 ii) No DER rating and reporting requirements apply when wind speeds exceed 25 knots (12.9 m/sec) measured on the licensed premises. 			
	Follow-up Actions			
	e) In the event that a DER 3 or greater, as set out in the FDMS, is observed then:			
	 i) Each such event must be reported in the licensee's incident reporting system, and 			
	ii) If the EPA requests, the licensee must demonstrate that measures were taken which complied with the FDMS to minimise those emissions.			
	f) Nothing in this condition affects the responsibility of the licensee to comply with condition O1.1 and condition O2.1.			
М9 С	ther monitoring and recording conditions			
M9.1	All continuous monitoring equipment must be operated and maintained with the aim of achieving 100% availability in each licence year. Where a monitoring device does not achieve 95% availability, the licensee will report reasons and corrective actions taken to the EPA	There is only one continuous monitoring device on a licensed discharge point. This is for measurement of particulates on the Sinter Plant WGCP exhaust stack (Point 107). Since July 2013, BSL has recorded one self-report relating to	Compliant	
	annually.	a device being off-line (Refer to Section 4.2). This was not for a continuous monitoring device.		



EPL#	Condition of EPL	Finding/s	Compliance Assessment	Corrective Action/s
R4 C	Other reporting conditions			
R4.2	By 1 June 2016 monitoring data from ambient fine particle monitoring (TEOMs (PM10)) and weather stations must be available in real time on a publically accessible web site in a format approved by the EPA.	Not triggered as due date is 1 June 2016.	Not Triggered	
	Note: In establishing the web site, the licensee should consider the publishing requirements listed in EPA Requirements For Publishing Pollution Monitoring Data.			
R4.4	a) By 1 December 2016 the licensee must submit a review of the Ambient Air Monitoring Network.	Not triggered as due date is 1 December 2016.	Not Triggered	
	i) The review must assess all elements of the program including the number of monitors, locations, adequacy of the instrumentation to undertake the monitoring, the availability of more contemporary monitoring / analytical methods, monitoring frequency, pollutants monitored, and also propose a review frequency.			
	ii) In reviewing the pollutants monitored the process must include but may not be limited to:			
	a. the inclusion of PM2.5 and sulphur oxides into the network;			
	b. the premises contribution to the total pollutant load to the local air shed using contemporary emissions inventories (e.g. the NSW EPA emissions inventory database and the National Pollutant Inventory); and			
	c. other monitoring undertaken in the Port Kembla area (including e.g. ANSTO, Dustrak, OEH monitoring station).			
	b) By 1 December 2018, the licensee must submit an Independent Peer Review of the Ambient Air Monitoring Network. The review must be undertaken by an independent, suitably qualified & experienced third party			



EPL#	Condition of EPL	Finding/s	Compliance Assessment	Corrective Action/s
	approved by the EPA. The scope of the peer review and the reviewer must be approved by the EPA in advance. The peer review must assess the items listed in (i) and (ii) above and include comments, recommendations, and a statement on the adequacy of the review.			
R4.5	A change of colour in any waters does not need to be reported as a non-compliance. Whenever the licensee detects an abnormal colour change, a sample should be taken and analysed for the parameters applying at the discharge point to determine if there has been a licence breach. If a licence breach is not revealed by the analysis of the sample then there is no need to report it in the Statement of Compliance.	Two abnormal colour changes were self-reported to the EPA since 1 July 2013 (Refer to Section 4.2): • Discolouration of the harbour from the IMED on 9 July 2014. An exceedance of an EPL limit is reported for Point 89 (IMED) in the monthly monitoring data for July 2014 (https://prod.bluescope.com/sustainability/reports/nsw-monitoring-data/); however, this is understood to have been associated with a different incident (viz. discharge of COG condensate on 1 July 2104). • Discolouration of the harbour from the IMED on 14 October 2015. No exceedance of an EPL limit is reported for Point 89 (IMED) in the monthly monitoring data for October 2015 (https://prod.bluescope.com/sustainability/reports/nsw-monitoring-data/). No visible discolouration of the IMED or harbour was evident during the site inspection on 10 March 2016.	Compliant	
E4 S	inter Machine Short Term Bypass Arrangements			
E4.1	Background To facilitate the ongoing safe and effective operation of the Waste Gas Cleaning Plant (WGCP) serving the Sinter Plant, the following conditions permit emissions from the Sinter Plant to bypass the WGCP following treatment in	The conditions listed in Section E4 of the current EPL were added after the WGCP stack fire in 2014. These conditions have not been triggered since the Sinter Plant has not been bypassed since were added to the EPL in September 2015	Not Triggered	



EPL#	Condition of EPL	Finding/s	Compliance Assessment	Corrective Action/s
	the electrostatic precipitators. The bypass would occur for limited periods of time in the following circumstances: (a) for a proactive response to plant control data/indicators or emergency shutdown; or (b) for preventative maintenance.	(Notice No. 1532319, File Number EF13/2639, dated 18 September 2015, copy available on EPA website). Short term operational limits (with daily monitoring) were added to the EPL in October 2014 (Notice No. 1525198, File Number EF13/2639, dated 16 October 2014, copy available on EPA website). The monitoring periods were increased later in October 2014 in another amendment to the EPL (Notice No. 1525765, File Number EF13/2639, dated 22 October 2014, copy available on EPA website). The maximum concentrations measured at Point 151 (i.e. old stack) during diversion from Sinter Plant WGCP stack (Point 107) complied with the interim concentration limits specified by the EPA (Sighted monitoring results for 16 October 2014 to 29 January 2015, copy provided). The EPL variation in October 2014 also required the formation of the Community Consultative Committee (Refer to Section 2.4.1 and CC # W-4.1) and preparation of a Health Risk Assessment. BSL now to tracks compliance with this requirement as part of their internal monthly compliance report (Sighted, copy provided).		
E4.2	Requirements Unless otherwise agreed in writing by the EPA, the licensee must comply with the following conditions whenever the bypass occurs.	Not triggered – Refer to EPL # E4.1 above.	Not Triggered	
E4.3	Notification and Approval 1. Immediately after the licensee becomes aware of any WGCP bypass, which is not approved for preventative maintenance, the licensee must notify the EPA and provide all relevant information about it.	Not triggered – Refer to EPL # E4.1 above.	Not Triggered	



EPL#	Condition of EPL	Finding/s	Compliance Assessment	Corrective Action/s
	 The licensee must provide written details of the notification to the EPA within 7 days of the date on which the WGCP bypass occurred. The licensee must obtain approval in writing from the EPA prior to any preventative maintenance activities that require WGCP bypass. 			
E4.4	The following points referred to in the table below are identified in this licence for the purposes of monitoring and/or the setting of limits for the emission of pollutants to the air from the point. NOTE TABLE HAS NOT BEEN REPRODUCED IN THIS REPORT – Refer to EPL for further information.	Not triggered – Refer to EPL # E4.1 above.	Not Triggered	
E4.5	For each monitoring/discharge point or utilisation area specified in the table\s below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table. NOTE TABLE HAS NOT BEEN REPRODUCED IN THIS REPORT – Refer to EPL for further information.	Not triggered – Refer to EPL # E4.1 above.	Not Triggered	
E4.6	For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns: **NOTE TABLE HAS NOT BEEN REPRODUCED IN THIS REPORT - Refer to EPL for further information.** Note: Special Method 1 means continuously in accordance with US EPA Performance Specification 11	Not triggered – Refer to EPL # E4.1 above.	Not Triggered	



EPL#	Condition of EPL	Finding/s	Compliance Assessment	Corrective Action/s
	Specifications and Test Procedures for Particulate Matter Continuous Emission Monitoring Systems at Stationary Sources. Note: Type 1 substance means the elements antimony,			
	arsenic, cadmium, lead or mercury or any compound containing one or more of those elements.			
	Type 2 substance means the elements beryllium, chromium, cobalt, manganese, nickel, selenium, tin or vanadium or any compound containing one or more of those elements.			
	Limits for Type 1 and Type 2 substances are specified in the Protection of the Environment Operations (Clean Air) Regulation 2010.			
E4.7	Operation	Not triggered – Refer to EPL # E4.1 above.	Not Triggered	
	The duration of the WGCP bypass must be minimised as far as practicable.			
	2. The licensee must notify the EPA in writing as soon as practicable if the duration of the bypass is likely to exceed:			
	 a) 28 days for a proactive response or emergency shutdown; and 			
	b) 10 weeks for any preventative maintenance.			
E4.8	Duty to Minimise or Prevent Air Pollution	Not triggered – Refer to EPL # E4.1 above.	Not Triggered	
	During any bypass the licensee must carry on any activity or operate any plant by such practicable means as may be necessary to prevent or minimise air pollution. These practicable means may include, but not necessarily be limited to:			
	a) Dealing with materials in a proper and efficient manner at all times.			



EPL#	Condition of EPL	Finding/s	Compliance Assessment	Corrective Action/s
	b) Maintaining and operating plant and equipment in a proper and efficient manner.			
	c) Reductions in the nature and quantity of materials processed that could result in the discharge of substances likely to cause harm to the environment.d) Restrictions on the throughput (tonnes/per hour) of materials processed by the Sinter Plant.			
E4.9	Timely Public Access to Air Quality Data	Not triggered – Refer to EPL # E4.1 above.	Not Triggered	
	The licensee must operate a web based service to ensure the community has access to timely, relevant and meaningful continuous emission monitoring data for the Sinter Machine Short Term Operational Arrangements. This must include but not be limited to continuous particle monitoring at the following locations:			
	(a) In stack at point 151.			
	(b) Ambient air quality.			
	This service must be developed in consultation with the EPA.			
E4.10	Requirement to record bypasses of the WGCP	Not triggered – Refer to EPL # E4.1 above.	Not Triggered	
	The licensee must record the following details in relation to each bypass of the WGCP and provide the information to the EPA upon request:			
	a) The reason for the bypass;			
	b) The start time and date; and			
	c) The finish time and date.			



7.3 Site and Equipment Inspections

Some findings from the site and equipment inspections are included in Section 7.1. Additional findings are listed below.

Table 12 Audit Findings (Site and Equipment Inspections – 10 and 24 March 2016)

ID#	Finding/s	Compliance Assessment	Corrective Action/s
1	During the site inspections (10 and 24 March 2016), most areas around drains were observed to be relatively clear. However, there was some debris (including Gypsum) near one of the drains at the Gypsum storage area (Refer to Photograph 14). Since this drain discharges to the 4BF Thickener, debris would be expected to be intercepted before any discharge off-site. Therefore, this was categorised as a low risk non-compliance. Photograph 14 Debris Near Drain at Gypsum Storage Area (10 March 2016)	Non-Compliance	2016/11 – BSL should ensure debris near the drain at the Gypsum storage area is routinely maintained (or investigate alternative solutions to limit discharge of debris to the drainage system).



ID#	Finding/s	Compliance Assessment	Corrective Action/s
2	Some bags of spent char were observed to be damaged on the roadway near the Gypsum Plant (Refer to Photograph 15). Since the roadway drains discharge to the 4BF Thickener, this material would be expected to be intercepted before any discharge off-site. Therefore, this was assessed as a low risk non-compliance. Photograph 15 Damaged Bag of Spent Char Near Gypsum Plant (10 March 2016)	Non-Compliance	2016/12 – BSL should inspect all bags of spent char stored on site. Any leaking bags should be repacked / repaired to ensure spent char is not discharged to the site drainage system.



ID#	Finding/s	Compliance Assessment	Corrective Action/s
3 3	Finding/s A leaking valve was observed at the Gypsum Plant. The pipe was labelled water. Photograph 16 Leaking Valve at Gypsum Plant (10 March 2016) The pipe was labelled water. Photograph 16 Leaking Valve at Gypsum Plant (10 March 2016)		Corrective Action/s 2016/13 – The leaking valve at the Gypsum Plant should be repaired.



ID#	Finding/s	Compliance Assessment	Corrective Action/s
4	Liquid was observed in the bund at the Waste Water Plant. BSL tested this liquid with litmus paper and it was determined to be alkaline (c. pH 9). BSL advised that this had been caused due to a problem with a filter. Photograph 17 Alkaline Liquid in Bund at Waste Water Plant (10 March 2016)	Observation	2016/14 – The alkaline liquid in the bund at the Waste Water Plant should be removed as soon as practicable.



8 STATUS OF ACTIONS FROM PREVIOUS INDEPENDENT ENVIRONMENTAL AUDITS

The status of each corrective action and observation identified the previous independent environmental audits was reviewed with BSL and a summary is included in the following table. If a relevant action from the previous audit had not been adequately implemented, then an additional action was included in the current audit report (as shown in the 'Corrective Action/s' column).

Table 13 Status of Actions from Previous Independent Environmental Audits

Prior Audit ID#	Action	Findings	Status and Compliance Assessment	Corrective Action/s
W1 (NC)	Include specific references to POEO Act obligations within environmental training and employee/contractor training.	The following specific reference to the POEO Act obligations (and the EPL) has been added to the <i>Illawarra Site Environment Awareness Refresher Training</i> (Sighted, copy provided) and is discussed during the training sessions: • BSL is "Continuing to meet our legal obligations under (POEO Act 1997 and EPA licence 6092) to protect and improve the environment".	CLOSED	
W1 (ANC)	Procedures in control room need to be updated SP OPSP-07-10 to refer to new monitoring equipment.	The Procedure for Investigation of High Opacity Levels to the Inlet of the WGCP (SP-OPSP-07-10, copy provided) is dated 24 April 2010 and is marked 'Review Before Use – Expired on 24/5/16)'. This would appear to indicate that the procedure has not actually been updated. However, this is inconsistent with the Audit Detail Report (No. a265034, copy provided), which indicates this action was closed on 22 October 2013.	CLOSED	
		It is also possible that the 2013 IEA identified the wrong procedure. SP-OPSP-07-10 is for a high opacity at the <i>inlet of the WGCP</i> whereas the context of the minutes from the 2013 IEA appears to relate to the WGCP stack.		
		Since no other clarifications are provided in the 2013 IEA and the SP-OPSP-07-10 procedure already refers to opacity monitoring equipment, this action has been marked as 'Closed'.		



Prior Audit ID#	Action	Findings	Status and Compliance Assessment	Corrective Action/s
W2 (ANC) & O1 (ANC)	Investigate and control fugitive dust emissions from mixing rolling drum.	BSL advised that an investigation into this emission identified that the material in the mixing rolling drum was too hot. Therefore, the water sprays were increased and the mixing rolling drum is monitored from the control room. The mixing rolling drum was visited during the site inspection and the emissions appear to have been reduced (Refer to Photograph 18 from 2013 IEA and Photograph 19 from site inspection on 24 March 2016).	CLOSED	
		Photograph 18 Emissions from Mixing Rolling Drum (2013 IEA)		



Prior Audit ID#	Action	Findings	Status and Compliance Assessment	Corrective Action/s
		Photograph 19 Emissions from Mixing Rolling Drum Following Increase to Water Sprays (24 March 2016)		



Prior Audit ID#	Action	Findings	Status and Compliance Assessment	Corrective Action/s
W3 (ANC)	Improved maintenance of bunding around drains or investigate alternative solutions. Note: Some materials for recycling into feed was stockpiled under hoppers. Drain nearby was bunded with sandbags nearby but sandbags were broken from being run over.	During the site inspections (10 and 24 March 2016), most areas around drains were observed to be relatively clear. However, there was still evidence of sandbags being damaged near one of the drains (Refer to Photograph 20). Since this drain discharges to the 4BF Thickener, the particulates are expected to be intercepted before any discharge off-site. Therefore, this was categorised as a low risk non-compliance. Photograph 20 Damaged Sand Bags Around Drain (10 March 2016)	Non- Compliant	2016/15 – BSL should ensure sandbags used to limit discharge of particulates to the drains are routinely maintained (or investigate alternative solutions to limit discharge of particulates to the drainage system).



Prior Audit ID#	Action	Findings	Status and Compliance Assessment	Corrective Action/s
W4 (ANC)	Future audits of truck drivers to record information and issues relating to transport routes.	This action was raised in the 2013 IEA since it is recommended in document BSL.RP.WGCP.PROC. <i>Transport Study of Hazardous Materials</i> (2002) that the routes set out in the SEE should be used despite them being 5% longer than some other options considered. It was also noted that there is no way of knowing if these routes are being followed without actual records of vehicle travel routes (i.e. the drivers might potentially use a non-approved route, particularly if it is shorter). BSL is required to comply with the routes defined in the approval (i.e. as per the SEE – Refer to Section 7.1 – Table 10, CC # 4.11). An audit was undertaken on 3 September 2013 confirming the correct route is being followed (which follows the main roads to avoid built-up areas).	CLOSED	
W5 (ANC)	Investigate reasons for drainages holes in anhydrous ammonia plant and rectify as relevant.	BSL has sealed off these small drainage holes. This was verified during the site inspection on 10 March 2016 (Refer to Photograph 21). Photograph 21 Example Sealed Drainage Hole at NH3 Tank (10 March 2016)	CLOSED	



Prior Audit ID#	Action	Findings	Status and Compliance Assessment	Corrective Action/s
(ANC) notified a	to the list of agencies to be is set out in the divisional e for incident management.	The DP&E has been added to the divisional procedure (Dated March 2014, copy provided).	CLOSED	
W7 Update tl	ne MSDS located at the is ammonia plant.	BSL has provided a current MSDS at the ammonia tank. This was verified during the site inspection on 10 March 2016 (Refer to Photograph 21). Photograph 22 Updated MSDS at Ammonia Tank (10 March 2016) SAFETY DATA SHEET AMMONIA - ANHYDROUS SAFETY DATA SHEET AMMONIA - ANHYDROUS TOUCH MATERIAL AND SUPPLIES Product Name AMMONIA - ANHYDROUS Company Name ORCA AUSTRALIA PTY LTD (ABN 99 004 117 828) Additional Company Name ORCA AUSTRALIA PTY LTD (ABN 99 004 117 828)	CLOSED	



Prior Audit ID#	Action	Findings	Status and Compliance Assessment	Corrective Action/s
W1 (OBS)	There is a disconnect between the EPL and this consent condition. BSL could raise this as part of continuing dialogue with DoPI on its reporting and compliance requirements.	Note: This action refers to CC # W-4.11 and was raised because it was noted that emissions may be visible despite complying with the equivalent condition from the EPL for the WGCP Stack (EPL Point 107). The relevant condition from the EPL (Condition No. O4.17) is as follows: The WGCP must be operated so that there are no visible emissions from the exhaust stack (Discharge Point 107) under normal operations. Compliance with this requirement is to be assessed against compliance with the EPL limit condition for Discharge Point 107 of 20 mg/Nm3 for particulate matter. Note: Normal operation excludes the first two hours of operation following start up. There have been several 'visible emission' enquiries from the EPA since the 2013 IEA, with the last one recorded in July 2014 (Sinter Plant Self Reports and Complaints, copy provided). However, the example monitoring results sighted during the audit confirmed that the total particulate matter measurement is typically less than the 20 mg/Nm3 criterion (Refer to Section 7.1 – Table 10, CC # 4.11). BSL has submitted an application to the DP&E remove/amend the obsolete Consent Conditions. The DP&E has completed an assessment of this application [Ref. 5] and the relevant CC (CC # W-4.11) has not been identified to be removed or amended. As this apparent inconsistency does not appear to have been resolved with the DP&E / EPA (i.e. this action is still open) and visible emissions have been reported since the 2013 IEA, this has been assessed as a low risk non-Compliance (Note: This is effectively part of the same the 'Non-Compliance' reported in Section 7.1 – Table 10, CC # 4.11).	Non- Compliant	2016/16 – Emissions from the WGCP may be visible despite complying with the relevant condition from the EPL for the WGCP Stack (EPL Point 107). Consequently, the operation of the WGCP Stack (EPL Point 107) may be non-compliant with Consent Condition No. 4.11 for the WGCP, despite being compliant with EPL Condition No. 04.17. This inconsistency should be resolved with the DP&E and EPA (e.g. by amending the relevant conditions).



Prior Audit ID#	Action	Findings	Status and Compliance Assessment	Corrective Action/s
W2 (OBS) & O1 (OBS)	Investigate the possibility of undertaking a review and consolidation of OPUP (DA 06-0229) WGCP (DA 260201) and GP Plant (MOD5042005-i) DAs, IEA and existing EPL requirements in order to stream line compliance tracking process and obtain approval from the DoPI and EPA.	BSL has submitted an application to the DP&E remove/amend the obsolete Consent Conditions. The DP&E has completed an assessment of this application [Ref. 4 and 5] and many of the obsolete Consent Conditions are to be removed / amended. Although the new CCs have not been issued, BSL has completed the investigation and the DP&E has approved some amendments. Therefore, this action has been marked as closed.	CLOSED	
O1 (NC)	Details of project information made available on a BSL public website.	Information has been drafted for display on the BSL website and this has been discussed with the DP&E. However, this has not been finalised (Also refer to Section 7.1 – Table 10, CC ID # O-5.4). This non-compliance is unlikely to result in any risk of environmental harm since it is largely administrative.	OPEN Non- Compliant	Refer to 2016/6 (Section 7.1 - Table 10 - C.1 Provision of Information, CC ID # O-5.4)
O2 (ANC)	Clarification of construction status with DoPI to allow close out or otherwise of Condition 6.2.	The DP&E has agreed that construction is completed and has recommended that this CC be removed [Ref. 4]. If BSL undertakes construction work in the future, then any approval would consider the need to manage construction related impacts through new conditions [Ref. 4].	CLOSED	

Legend: NC = Non-Compliance, ANC = Administrative Non-Compliance, OBS = Observation.



9 REFERENCES

- 1 Arriscar Pty Ltd, June 2015, Waste Gas Cleaning Plant, Hazard Audit (2015).
- 2 BlueScope Steel Ltd, April 2015, *Investigations into the Sinter Plant Waste Gas Cleaning Plant Stack Fire October 2014 Incident*.
- 3 Department of Environment and Conservation NSW, January 2007, Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales.
- 4 Department of Planning and Environment, April 2016, Assessment Report, BlueScope Steel Ore Preparation Upgrade Project (MP_06_0229 MOD 1), Section 75W Modification and Modification of Minister's Approval, Section 75W of the Environmental Planning and Assessment Act 1979.
- Department of Planning and Environment, April 2016, Assessment Report, BlueScope Steel Waste Gas Cleaning Plant (DA 26-02-01 MOD 2), Section 75W Modification and Modification of Minister's Approval, Section 75W of the Environmental Planning and Assessment Act 1979.
- Department of Planning (22 September 2005), Determination of a Development Application Pursuant to Section 80 of the Environmental Planning and Assessment Act 1979 Application No. 26-02-01, MOD-50-4-2005-i.
- 7 Department of Planning (3 July 2007), Project Approval under Section 79J of the Environmental Planning and Assessment Act 1979 Application No. DA No 06-0229.
- 8 Department of Urban Affairs and Planning (1 August 2001), Determination of a Development Application Pursuant to Section 80 of the Environmental Planning and Assessment Act 1979 Application No. 26-02-01.
- 9 NSW Government, October 2015, *Independent Audit Guideline, Post-Approval Requirements for State Significant Developments*.
- 10 Standards Australia, AS/NZS ISO 19011:2014, Guidelines for Auditing Management Systems.



Appendices



Appendix A Documents Reviewed

Document Title	Document No.	Rev. No.	Date	Copy Taken? (Yes/No)
Air Quality Report, Sinter Plant WGCP Stack (ID107), April – June 2013	P00958-13	-	16-Jul-13	Yes
Assessment Report (BSI Audit)	-	-	31-Mar-14	Yes
Audit Detail Report	A276034	-	31-Jul-13	Yes
BlueScope (BSL) Community Consultative Committee (Minutes of meeting)	-	-	26-Mar-15	Yes
BlueScope (BSL) Community Consultative Committee (Minutes of meeting)	-	-	25-Jun-15	Yes
BlueScope (BSL) Community Consultative Committee (Minutes of meeting)	-	-	10-Sep-15	Yes
BSL Request for Variation to Air Emission Monitoring, Sinter Machine Short Term Operational Arrangement, Environment Protection Licence Number 6092 (Letter from EPA to BSL)	SF13 / 33236:DOC14 / 257281-01:WD	-	5-Nov-14	Yes
Coke and Iron Department Handbook	DH-CI-ADM-00	6	Apr-14	Yes
Community Complaint (Entry in MARS database)	ID C535639	-	Oct-14	Yes
Construction Management Plan Incorporating the Environmental Management Plan for Construction, Sinter Machine Emission Reduction Project	MP02056A	А	Jul-01	Yes
Corrective Action Status, HIPAP Audit and BSL Fire Investigation	-	-	1-Dec-15	Yes
Daily Production Data	-	-	7-Mar-16	No
Disposal Authorisation for Burnt Fibreglass Arising from Sinter Plant WGCP Stack Fire	10870		11-Nov-14	Yes
Environment Awareness Refresher Training	1SAP: 01 ENVIRAWARE			
Environmental Management Report, Development Approval No. 26 – 02 01	-	-	8-Sep-10	Yes
Environmental Management Report, Development Approval No. 26 – 02 01	-	-	4-Oct-13	Yes
EPA Licence	6092	-	1-Feb-16	Yes
Equipment History	MA-OPSP-17-02	4	5-Jan-16	Yes
Fugitive Dust Management System	MA-ENV-02-02	2	Jan-14	Yes
Incident Detail Report for Ironmaking (01/01/16 to 31/01/16)	-	-	2-Feb-16	Yes
Independent Environmental Audit Report, Sinter Ore Preparation Upgrade Project	-	Final	Jul-13	Yes



Document Title	Document No.	Rev. No.	Date	Copy Taken? (Yes/No)
Independent Environmental Audit Report, Sinter Plant - Waste Gas Cleaning Plant and Gypsum Plant	-	-	Jun-10	Yes
Independent Environmental Audit Report, Sinter Plant - Waste Gas Cleaning Plant and Gypsum Plant	-	Final	Jul-13	Yes
Instruction Manual, Electrostatic Precipitator Type F, Maintenance, Attachment 6 - Electrostatic Precipitator Maintenance Schedule and Specifications	-	-	-	Yes
Laboratory Report, Analysis of Bulk Material for the Purpose of Waste Classification	P02176-14	-	11-Nov-14	Yes
Letter from EPA acknowledging receipt of Annual Return for 2014-2015	-	-	Feb-16	No
Level 3 Accreditation Matrix for the WGCP	-	-	Sep-15	No
Licence Monitoring Data Monthly Summary Reports	-	-	Jul-13 to Feb-16	Yes
Maintenance Strategy and Maintenance Plan for Total Particulate Monitoring Device on WGCP Stack	SP1296	-	-	No
Management of Waste Material	DIV-AR-RS-01	11	Mar-14	Yes
Notice of Variation of Licence No. 6092	1051147	-	6-Feb-06	Yes
Notice of Variation of Licence No. 6092	1064132	1	27-Jun-07	Yes
Notice of Variation of Licence No. 6092	1075844	-	4-Dec-07	Yes
Notice of Variation of Licence No. 6092	1104047	-	12-Aug-09	Yes
Notice of Variation of Licence No. 6092	1110309	-	19-Mar-10	Yes
Notice of Variation of Licence No. 6092	1501202		22-Sep-11	Yes
Notice of Variation of Licence No. 6092	1502091	-	19-Oct-11	Yes
Notice of Variation of Licence No. 6092	1525198	-	16-Oct-14	Yes
Notice of Variation of Licence No. 6092	1525765	-	22-Oct-14	Yes
Notice of Variation of Licence No. 6092	1525974	-	31-Oct-14	Yes
Notice of Variation of Licence No. 6092	1532319	-	18-Sep-15	Yes
Ore Preparation – Asset Maintenance / Development, Monthly Compliance Report	-	-	Jan-16	Yes
Ore Preparation LAWWNE Aspects Register	DS.DH-IM-ADM- 05.03	4	Aug-13	Yes
Ore Preparation Operations Monthly Environment Report	-	-	Feb-16	Yes
Ore Preparations – Sinter Plant, Monthly Compliance Report	-	-	Jan-16	Yes



Document Title	Document No.	Rev. No.	Date	Copy Taken? (Yes/No)
Ore Preparations – Sinter Plant – FGD Gypsum Plant, Monthly Compliance Report	31876-530-001	-	Feb-16	Yes
Organisational Chart	DS.DH-OPD- 05.2	-	Feb-16	No
Our Health, Safety, Environment and Community (HSEC) Policy	BSL-MS-P-01	5	Jun-15	Yes
Port Kembla Steelworks Annual Return for 2012- 2013	-	-	-	No
Port Kembla Steelworks Annual Return for 2013- 2014	-	-	-	No
Port Kembla Steelworks Annual Return and Licensing Fees Payment	-	-	24-Aug-15	Yes
Position Description: Ore Prep Process Controller	-	-	-	No
Procedure for Investigation of High Opacity Levels to the Inlet of the Waste Gas Cleaning Plant	SP-OPSP-07-10	10	24-May-10	Yes
PRP176 – No 7A Settling Basin Drainage Improvement Works: Request to Amend Scope of Works (Letter from BSL to EPA)	-	-	27-Nov-15	Yes
PRP176 – No 7A Settling Basin Drainage Improvement Works (Letter from EPA to BSL)	EF13 / 2639:DOC15 / 485660-01:WD	-	15-Jan-16	Yes
Public Notice in Illawarra Mercury	-	1	20-Feb-08	Yes
RDD Precipitator Cleaning	167858-WDD	0	23-Sep-15	Yes
Safety Data Sheet - Ammonia	-		1-Mar-13	No
SCE Monthly Environmental Compliance Report	SF-OHS&E3- 01.1A	-	Jan-16	Yes
Significant Environmental Incident Investigation and Reporting Process	MA-ENV-11-01	2	Mar-14	Yes
Sinter Plant Self Reports, Complaints – Enquiries 01-07-2013 to date	-	-	-	Yes
Sinter Plant Waste Gas Cleaning Plant – Fire on 13 October 2014 – Further Investigation into Causes (Letter from BSL to EPA)	-	-	28-Apr-15	Yes
SMERP Development Approval Noise Compliance 2012	-	-	25-Jun-12	Yes
SRG Performance Graph (May-13 to Nov-15)	-	-	-	Yes
Standard Audit Report, SCE Industrial Services	MARS No. A525034	-	18-Sep-14	Yes
Statement of Environmental Effects, No 4 Blast Furnace Thickener Tank Farm, BlueScope Port Kembla Steelworks			27-May-15	Yes



Document Title	Document No.	Rev. No.	Date	Copy Taken? (Yes/No)
Submission on Proposed Modifications, Waste Gas Cleaning Plant (MOD 2) – Sinter Plant Upgrade Project (MOD 1), BlueScope Steel Port Kembla Steelworks (Letter from EPA to BSL)	EF13 / 2639:DOC14 / 121921-01:GN	-	1-Aug-14	Yes
Transport of Hazardous Materials Study Prepared for the Sinter Machine Emission Reduction Project	-	-	-	Yes
Variation to Air Emission Monitoring Frequencies, Sinter Plant Short Term Operational Arrangement, Environment Protection Licence Number 6092 (Letter from EPA to BSL)	EF13 / 2639:DOC14 / 247595:GN	-	23-Oct-14	Yes
Waste Gas Cleaning Plant (DA 26-01-01) Stack Fire on 13 October 2014 (Letter from DP&E)	-	-	10-Dec-14	No
Water Treatment Plant Check List (Assessment sheet)	MA-OPSP-TRA- KWTP-003	-	-	No
Weather Forecast Communications	MA-ENV-07-01	1	Mar-14	Yes