

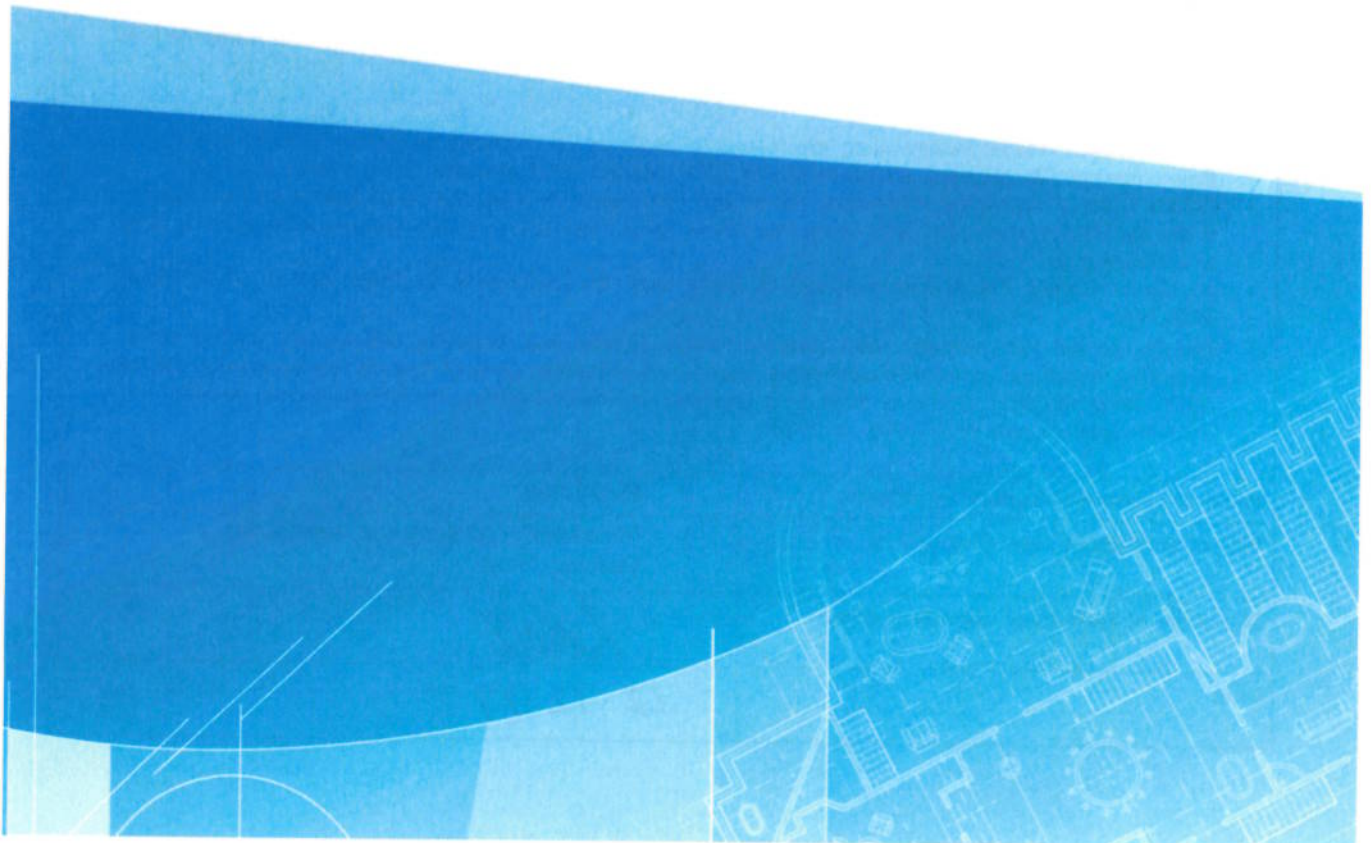


BlueScope Steel Sinter Plant Waste Gas Cleaning Plant  
(DA – 26- 02- 01, MOD 2),


Gypsum Plant (DA – 26-02-01 MOD 50-4-2005-i)

Ore Preparation Upgrade Project (MP 06-0229 Mod 1) -  
Triennial Review

Reporting Period - 01st July 2014 to 30th June 2017



**Table 1 – Triennial Review**

<b>Name of operation</b>	BlueScope Steel Sinter Plant Waste Gas Cleaning Plant; Gypsum Plant Ore Preparation Upgrade Project
<b>Name of operator</b>	BlueScope Steel
<b>Development consent / project approval #</b>	<ul style="list-style-type: none"> <li>• BlueScope Steel Sinter Plant Waste Gas Cleaning Plant (DA – 26- 02- 01, MOD 2),</li> <li>• Gypsum Plant (DA – 26-02-01 MOD 50-4-2005-i) –</li> <li>• Ore Preparation Upgrade Project (MP 06-0229 Mod 1)</li> </ul>
<b>Name of holder of development consent / project approval</b>	BlueScope Steel
<b>Mining lease #</b>	N/A
<b>Name of holder of mining lease</b>	N/A
<b>Water licence #</b>	N/A
<b>Name of holder of water licence</b>	N/A
<b>MOP/RMP start date</b>	N/A
<b>MOP/RMP end date</b>	N/A
<b>Triennial Review start date</b>	1st July 2014
<b>Triennial Review end date</b>	30th June 2017
<p>I, David Scott, certify that this audit report is a true and accurate record of the compliance status of [INSERT OPERATION NAME] for the period [INSERT REPORTING PERIOD] and that I am authorised to make this statement on behalf of [INSERT OPERATOR NAME].</p> <p><i>Note.</i></p> <p>a) <i>The Triennial Annual Review is an ‘environmental audit’ for the purposes of section 122B (2) of the Environmental Planning and Assessment Act 1979. Section 122E provides that a person must not include false or misleading information (or provide information for inclusion in) an audit report produced to the Minister in connection with an environmental audit if the person knows that the information is false or misleading in a material respect. The maximum penalty is, in the case of a corporation, \$1 million and for an individual, \$250,000.</i></p> <p>b) <i>The Crimes Act 1900 contains other offences relating to false and misleading information: section 192G (Intention to defraud by false or misleading statement—maximum penalty 5 years imprisonment); sections 307A, 307B and 307C (False or misleading applications/information/documents—maximum penalty 2 years imprisonment or \$22,000, or both).</i></p>	
<b>Name of authorised reporting officer</b>	<ul style="list-style-type: none"> <li>• David Scott</li> </ul>
<b>Title of authorised reporting officer</b>	<ul style="list-style-type: none"> <li>• Manager Cokemaking and Ironmaking, Manufacturing</li> </ul>
<b>Signature of authorised reporting officer</b>	
<b>Date</b>	12.12.17

## 1 Statement of compliance

The Triennial Review verified that there have been 14 non-compliances recorded against requirements in the Sinter Plant Waste Gas Cleaning Plant and Ore Preparation Upgrade Project Development Consent during the reporting period. A summary of non-compliance details are presented in **Table 2** and **Table 3** that highlights the compliance status of the operation with its relevant approval conditions, as at the end of the reporting period.

**Table 2 – Statement of compliance**

Were all conditions of the relevant approval(s) complied with?	
BlueScope Steel Sinter Plant Waste Gas Cleaning Plant (DA – 26- 02- 01, MOD 2)	NO
BlueScope Steel Gypsum Plant (DA – 26- 02- 01, MOD 50-4-2005-i))	YES
BlueScope Steel Sinter Plant Ore Preparation Upgrade Project (MP 06-0229 Mod 12)	NO

**Table 3 – Non-compliances**

Relevant Approval	Condition (CC)	Condition description (summary)	Compliance Status	Comment	Where addressed in Triennial Review
DA-26-02-01 MOD 2DC #	W3.3	The Applicant must ensure that a copy of the Environmental Management Plan is submitted to Council and is publicly available.	Non-Compliant	<ul style="list-style-type: none"> <li>This CC was not verified in the previous IEA reports for 2013 and 2010. 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.</li> <li>This non-compliance is unlikely to result in any risk of environmental harm since it is largely administrative. This non-compliance is unlikely to result in any risk of environmental harm since it is largely administrative. The DP&amp;E has not recommended that this CC be removed or amended.</li> </ul>	Page 29



<p>MP 06-0229 Mod 12</p>	<p>O-5.4</p>	<p>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:</p> <ul style="list-style-type: none"> <li>(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;</li> <li>(b) a copy of this approval and each relevant environmental approval, licence or permit required and obtained in relation to the project;</li> <li>(c) a copy of each strategy, plan and program required under this approval; and</li> <li>(d) the outcomes of compliance tracking in accordance with condition 4.1 of this approval.</li> </ul>	<p>Non-Compliant.</p>	<ul style="list-style-type: none"> <li>• This was identified as a non-compliance in previous 2013 IEA.</li> <li>• 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&amp;E has not recommended that this CC be removed or significantly amended.</li> </ul>	<p>Page 30</p>
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DA – 26- 02- 01 MOD 2DC #	W-4.55	<p>Prior to the commencement of construction activities for the Waste Gas Cleaning Plant, the Applicant shall arrange:</p> <ul style="list-style-type: none"> <li>• 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,</li> <li>• a postal address where written complaints can be lodged.</li> </ul>	Non -Compliant	<ul style="list-style-type: none"> <li>• Complaints are received via the general enquiries toll free number (1800 800 789), which can be found on the 'Contact Us' website page; <a href="http://www.bluescopesteel.com.au/ourcompany/contact-us">http://www.bluescopesteel.com.au/ourcompany/contact-us</a>).</li> <li>• 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 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.</li> <li>• BSL advised that they do occasionally receive complaints by post. An example hand written letter was sighted (Dated Dec 14). The postal address can be found on the 'Contact Us' website page <a href="http://www.bluescopesteel.com.au/our-company/contactus">http://www.bluescopesteel.com.au/our-company/contactus</a>).</li> <li>• An advertisement was posted in newspaper (Dated 20 February 2008. 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 'Non-Compliant'; however, with increased access to the internet and use of the general switchboard number for enquiries, this was considered to be a low risk non-compliance. The DP&amp;E has not recommended that this CC be removed or amended.</li> </ul>	Page 31
MP 06-0229 Mod 12	0-5.2	<p>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</p>	Non-Compliant	<ul style="list-style-type: none"> <li>• 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</li> </ul>	Page 32

<p>DA – 26- 02- 01, MOD 2</p>	<p>W-4.11 [Also EPL # 04.17]</p>	<p>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.</p>	<p>Non -Compliant</p>	<p>low risk non-compliance.</p> <ul style="list-style-type: none"> <li>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 (<a href="http://www.bluescopesteel.com.au/our-company/contactus">http://www.bluescopesteel.com.au/our-company/contactus</a>)</li> <li>BSL would prefer a dedicated single point of contact for submitting complaints and this is easier to manage through the phone number. The DP&amp;E has not recommended that this CC be removed or Amended.</li> </ul>	<p>Page 33</p>
		<p>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.</p>		<p>EPL 6092 O4.17 is as follows:</p> <ul style="list-style-type: none"> <li>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).</li> <li>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: Apr-Jun 2013 in an Air Quality Report (Copy provided, reported measured results = 3.9 and 5.4 mg/Nm3). Oct-Dec</li> </ul>	



DA – 26- 02- 01, MOD 2	O-2.2 [Also EPL # 03.1]	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.	Non - Compliant	<p>2015 via the 'EHS Data Monitor Pro' web-based application. April 2012 to February 2016 on the 'Monitoring Data' page of the BSL website <a href="https://prod.bluescope.com/sustainability/reports/nsw-monitoring-data/">https://prod.bluescope.com/sustainability/reports/nsw-monitoring-data/</a>. These reported monitoring results confirm a total particulate matter measurement less than the 20 mg/Nm<sup>3</sup> 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/Nm<sup>3</sup> at the outlet (Refer to. It was noted in the 2013 IEA that compliance with the 20 mg/Nm<sup>3</sup> criterion does not necessarily mean that the emissions are not visible.</p> <ul style="list-style-type: none"> <li>An action included in the 2013 IEA to investigate and resolve this apparent inconsistency does not appear to have been closed 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.</li> </ul>	<p>During the site inspection on 10 and 24 March 2016, the Sinter Plant was observed to be maintained in a manner that minimised dust generation. For example:</p> <ul style="list-style-type: none"> <li>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. .</li> <li>Water carts were observed to wet down roads (Note: This was observed near the Sinter Plant car park rather than the WGCP).</li> <li>Although there was some dust observed in the Sinter Plant building, this building is vented to the Sinter Machine Room Dedusting System.</li> <li>There we no obvious dust emissions from plant or equipment at the Sinter Plant outside the main building such as the mixing rolling drum. .</li> </ul> <p>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.</p>	Page 34
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DA – 26- 02- 01, MOD 2	W-4.17 & O-2.6 [Also EPL # L3.4]	<p>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.</p> <p>NOTE: TABLE HAS NOT BEEN REPRODUCED IN THIS REPORT – Refer to Conditions of Development Consent / EPL for further information.</p> <p>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.</p>	Non - Compliant	<p>Current discharge limits are specified in EPL 6092 - 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: (<a href="https://prod.bluescope.com/sustainability/reports/nsw-monitoring-data/">https://prod.bluescope.com/sustainability/reports/nsw-monitoring-data/</a>).</p> <p>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:</p> <ul style="list-style-type: none"> <li>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).</li> <li>An exceedance at Point 107 (Maximum reading of 50 mg/Nm3) in December 2015. This exceedance occurred during plant start-up.</li> </ul> <p>This CC has been assessed as 'Non-Compliant' due to the exceedance of the limit for solid particulates at Point 2 (Sinter Machine Room De-dusting 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.</p> <p>Note: The DP&amp;E has agreed that CC # W-4.17 can be removed and CC # O-2.6 is to be amended as follows: The Proponent shall install and operate equipment in line with best practice to ensure that the project complies with all load limits, air quality criteria and air quality monitoring requirements as specified in the EPL for the site.</p>	Page 35, 36,37
DA – 26- 02- 01, MOD 2	W-4.31 [Also EPL # L3.5]	<p>Interim Iron Making East Drain Water Concentration Limits.</p> <p>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</p>	Non-Compliant	<ul style="list-style-type: none"> <li>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</li> </ul>	Page 38, 39

		<p>exception of 'pollutant colour':  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.</p>		<p>undertaken as part of the effluent characterisation program required by PRP 112 – SPWGPC Effluent Characterisation Program.</p> <p>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: (<a href="https://prod.bluescope.com/sustainability/reports/nswm/monitoring-data/">https://prod.bluescope.com/sustainability/reports/nswm/monitoring-data/</a>).</p> <p>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).</p> <p>It is reported in the current EPL that:</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• PRP 175 required BSL to complete a Pollution Study into the Diversion of Iron Ore Road Drain, and 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.</li> <li>• 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.</li> <li>• 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).</li> </ul> <p>Note: The DP&amp;E has agreed to replace this CC with the following:  The Applicant shall ensure that all licensed surface water discharges from the site comply with the discharge limits (volume</p>
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DA – 26- 02- 01, MOD 2	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.	Non-Compliant	<p>and quality) set for the development in any EPL or the relevant provisions of the POEO Act.</p> <p>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 <a href="https://prod.bluescope.com/sustainability/reports/nswmonitoring-data/">https://prod.bluescope.com/sustainability/reports/nswmonitoring-data/</a>.</p> <ul style="list-style-type: none"> <li>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). 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.</li> </ul>	Page 40
DA – 26- 02- 01, MOD 2	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.	Non-Compliant	<ul style="list-style-type: none"> <li>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).</li> <li>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.</li> </ul>	Page 41



DA – 26- 02- 01, MOD 2	W-4.45	All chemicals being transported to the site must follow the route set out in the SEE.	Non-Compliant	<p>The route specified in the SMERP Transport of Hazardous Materials Study (Dated 2002, copy provided) for Ammonia deliveries is as follows:</p> <ul style="list-style-type: none"> <li>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 Wahrenoonga. After exiting the Sydney Newcastle Freeway at Wahrenoonga, 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 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).</li> <li>The driver advised that the route followed was "F6, M2, M7, Hume highway, 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) -&gt; Sydney via M1 (formally M3) -&gt; M2 -&gt; M7 -&gt; M31 (i.e. Hume Highway) -&gt; Masters Rd -&gt; B65(i.e. Springhill Road and Five Islands Road) -&gt; Flinders St -&gt;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). This was assessed as a low risk non-compliance since following main roads such as the M7 rather than the more populated Cumberland Highway would be expected to be preferable for the transport of ammonia.</li> </ul>	Page 42
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DA – 26- 02- 01, MOD 2	W-4.47	<p>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.</p>	Non-Compliant	<ul style="list-style-type: none"> <li>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. 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.</li> <li>This should be raised with the DP&amp;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.</li> </ul>	Page 43
DA – 26- 02- 01, MOD 2	W-4.49	<p>Stockpiles of sand, gravel, soil and the like must be located to ensure that the material:</p> <ul style="list-style-type: none"> <li>does not spill onto the road pavement; and</li> <li>is not placed in drainage lines or water courses, and cannot be washed into these areas.</li> </ul> <p>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.</p>	Non-Compliant	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	Page 44
DA – 26- 02- 01, MOD 2	W-4.50	<p>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.</p>	Non-Compliant	<p>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:</p> <ul style="list-style-type: none"> <li>Some debris (including Gypsum) was observed near the drain at the Gypsum storage area.</li> <li>There was evidence of sandbags being damaged near one of the drains, which could allow entry of sediments to the drains.</li> </ul> <p>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.</p>	Page 44



**Compliance Status Key for Table 3.**

<b>Risk level</b>	<b>Colour code</b>	<b>Description</b>
<b>High</b>	Non-compliant	Non-compliance with potential for significant environmental consequences, regardless of the likelihood of occurrence
<b>Medium</b>	Non-compliant	Non-compliance with: <ul style="list-style-type: none"> <li>• potential for serious environmental consequences, but is unlikely to occur; or</li> <li>• potential for moderate environmental consequences, but is likely to occur</li> </ul>
<b>Low</b>	Non-compliant	Non-compliance with: <ul style="list-style-type: none"> <li>• potential for moderate environmental consequences, but is unlikely to occur; or</li> <li>• potential for low environmental consequences, but is likely to occur</li> </ul>
<b>Administrative non-compliance</b>	Non-compliant	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. INTRODUCTION

### **SINTER PLANT WASTE GAS CLEANING PLANT – (DA 26-02-01)**

Development approval was granted by the Minister of Urban Affairs and Planning on the 1st August 2001 for the construction and operation of a downstream Waste Gas Cleaning Plant at the existing Sinter Plant, based on a moving packed char (carbon) bed. DA – No.26-02-01 lodged with the Department of Urban affairs and Planning on 7<sup>th</sup> February 2001, accompanied by a Statement of Environmental Effects prepared for the Applicant by Sinclair Knight Mertz Pty. Ltd, dated January 2001.

### **GYPSUM PLANT - (DA – 26-02-01 MOD 50-4-2005-I)**

Development approval was granted by the Minister of Urban Affairs and Planning on the 1st August 2001 for the construction and operation of a downstream Waste Gas Cleaning Plant at the existing Sinter Plant, based on a moving packed char (carbon) bed. Modification of the development consent to permit the construction and operation of a Gypsum Plant to treat sulfur rich gas from the Waste Gas Cleaning Plant, with the production of gypsum for sale.

### **ORE PREPARATION UPGRADE PROJECT (MP 06-0229 MOD 1)**

Upgrade and increase in the production capacity of the Sinter Plant from 5.5 million tonnes to 6.6 million tonnes per annum. The upgrade to the Sinter Plant includes construction of new infrastructure to improve operational efficiencies. The proposal is declared a Major Project under section 75B(1) (a) of the Environmental Planning and assessment Act 1979, because it is a development of a kind that is described in clause 9(a) of schedule 1 to State Environmental Planning Policy (Major Projects) 2005.

### **MAPS SHOWING OPERATIONAL AREAS & GEOGRAPHICAL LOCATIONS**

Maps showing the location of the Sinter Plant Waste Gas Cleaning Plant, Gypsum Plant and Ore Preparation Upgrade facilities and their regional context (aspects relevant to the community such as residential areas or other key relevant land uses), development consent boundary and current operational disturbance footprint are shown in "Attachment 1".

### **CONTACT DETAILS OF BLUESCOPE STEEL PERSONNEL RESPONSIBLE FOR ENVIRONMENTAL MANAGEMENT OF THE OPERATIONS.**

CONTACT	POSITION	CONTACT No.
Mr. David Scott	Manufacturing - Manager Cokemaking and Ironmaking.	42757522
Mr. Richard Lorenc	Ore Preparation & Bulk Ops Manager	42757522

## 3 DEVELOPMENT CONSENT APPROVALS

- BlueScope Steel Sinter Plant Waste Gas Cleaning Plant (DA–26-02-01, MOD 2) ,
- Gypsum Plant (DA – 26-02-01 MOD 50-4-2005-I), and
- Ore Preparation Upgrade Project (MP 06-0229 Mod 1).

## 4 OPERATIONS SUMMARY

The Sinter Plant Waste Gas Cleaning Plant Development Consent (DA–26-02-01, MOD 2) and the Gypsum Plant (DA–26-02-01 MOD 50-4-2005-i) do not include any Approved Production limits.

The Ore Preparation Upgrade Project (DA–MP-06-0229 Mod 1) provided approval to increase in the production capacity of the Sinter Plant from 5.5 million tonnes to 6.6 million tonnes per annum.

Sinter Production rates over the Triennial Reporting Period are as follows in Table 4:

**Table 4.**

<b>FY Period</b>	<b>Sinter Production (t Sinter/yr)</b>
FY 14	3,449,431
FY 15	3,550,606
FY 16	3,550,606

\* Annual Sinter Production rates did not exceed the 6.6 million tonnes per annum limit.

## **5 ACTIONS REQUIRED FROM PREVIOUS ANNUAL REVIEW**

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 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).

The status of corrective actions resulting from the IEA review conducted by ARRISCAR Risk Engineering Solutions is presented in Table 5.

**Table 5 - Status of Actions from the previous Annual Review conducted at the Sinter Plant Emission Reduction Project Waste Gas Cleaning Plant, Gypsum Plant & Ore Preparation Upgrade Project.**

<b>Action No.</b>	<b>Corrective Action Description</b>	<b>BSL Response &amp; Proposed Action Plan</b>	<b>Where Discussed in Annual Review</b>
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).	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	Page 25
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).	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	Page 25
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).	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	Page 25
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).	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	Page 25
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).	WGCP Environmental details will be made publically available on the BSL in the Illawarra website. Who: L. Zammit When: 30/08/2016	Page 25



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).	OPUP Environmental details will be made publically available on the BSL in the Illawarra website. Who: L. Zammit When: 30/08/2016	Page 25,26
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).	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	Page 26
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).	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	Page 26
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).	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	Page 26, 27
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.16Roads and Traffic, CC # W-4.47).	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	Page 27

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).	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	Page 27
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).	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	Page 27,28
2016/13	The leaking valve at the Gypsum Plant should be repaired. (Refer to Section 7.3 – Table 12, ID # 3).	This valve has been repaired. Who: H. Dux When: 10/06/2016	Page 28
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).	BSL Ore Preparations to arrange to extract the alkaline liquid out of the bunded area. Who: M. Walsh When: 30/06/2016	Page 28
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).	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 minimize 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	Page 28



2016/16	<p>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. O4.17. This inconsistency should be resolved with the DP&amp;E and EPA (e.g. by amending the relevant conditions). (Refer to Section 8 – Table 13, ID # W1 (OBS).</p>	<p>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</p>	Page 28, 29
2016/17	<p>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).</p>	<p>BSL Ore Preparations to update their Environmental Management Systems to include No.3 Sinter Machine stack. Who: D. Jones When: 30/09/2016</p>	Page 29

## 6 - ENVIRONMENTAL PERFORMANCE – SINTER PLANT WASTE GAS CLEANING PLANT (SPWGCP) – (DA 26-02-01) & GYPSUM PLANT - (DA – 26-02-01 MOD 50-4-2005-I), Ore Preparation Upgrade (MP 06-0229 Mod 1) - Reporting Period - 01st July 2014 TO 30 th June 2017.

The Environmental Performance for the Developments for the reporting period have been prepared in compliance with condition 7.4 & 7.2 of Development Consents DA 26-02-01, DA – 26-02 01 MOD 50-4-2005-I & Ore Preparation Upgrade Project MP 06-0229 Mod 1.

Operation of the WGCP has continued throughout the Reporting Period in accordance with the Consent and relevant conditions of Environment Protection Licence No.6092 for the Port Kembla Steelworks (Licence). Operation of the WGCP will continue over the next three years in accordance with the Consent and Licence. No structural modification of the WGCP is currently proposed.

### NOISE:

Environmental Noise surveys conducted in 2011, 2012 & 2013 verified that noise levels from SP WGCP complied too Development Consent and EPA Licence limits of 70dBA. The noise survey results also confirmed that noise levels had not changed since the previous noise survey compliance check in 2011, that noise from the WGCP is not tonal and complies with the noise limits set out in the EPL Licence 6092 (Condition L6.5). "Attachment 2 & 3" for further details.

Environmental Noise Surveys conducted in 2009 as per requirement under Condition 3.3 of the Ore Preparation Upgrade Project (OPUP) Development Consent was transferred into the BlueScope EPL 6092 licence under Pollution Reduction Program PRP 130 "Pollution Reduction Program "Noise Assessment of the Ore Preparation Upgrade Including the Sinter Plant Upgrade".

The noise study conducted under PRP 130 verified that there were no noise complaints received during all stages of construction, commissioning and operation of equipment associated with the OPUP project and that the project had achieved compliance with the Noise Objectives given in the Development Consent. A copy of the "Executive Summary" out of the OPUP Nose Study is referenced in *Attachment 4*. A full copy of this Noise Study report can be provided upon request. We advise that there has not been any further follow up noise surveys conducted for the OPUP upgrade and there are no OPUP related Noise Operating Limit and or Monitoring Conditions in the EPL 6092 licence.

BlueScope has not received any noise complaints relating to the SPWGCP, Gypsum Plant and Ore Preparation Upgrade Project during the Reporting Period.

### AIR QUALITY - SPWGCP & GYPSUM Plant

Data obtained from air monitoring during the Reporting Period is included as "*Attachment 5*".

The monitoring requirements and concentration limits for the WGCP are specified in conditions L2.4, L3.4, L6, O1.4 and M1.9 of the Licence. Monitoring requirements were met and no exceedances of concentration limits occurred during the Reporting Period. Air monitoring results from the Reporting Period were broadly comparable with monitoring results from previous years; since the WGCP commenced operation monitoring results show air emissions are consistently well below the concentration limits prescribed by the Licence.

The Statement of Environmental Effects (SEE) for the WGCP contained the following specific objectives relevant to air quality:

- Reduction of dust emissions to less than 20mg/Nm<sup>3</sup>;
- Reduction in dioxin emissions to less than 0.3ng/ITEQ/Nm<sup>3</sup> with a design limit of 0.1ng ITEQ/Nm<sup>3</sup>;
- Reduction in emissions of SO<sub>x</sub> in excess of 750 tonnes per year from the Sinter Plant; and



- Reduction in visual impact of the gas plume from the stack, with the aim of no visible emissions.

During the reporting period, the WGCP has met the SEE objective relating to dust and dioxin emissions and SOx annual mass load reduction. Annual mass load data for SOx is presented in Table 1 below:

**Table 6 – WGCP SOx Mass Emission Loads and Annual Reduction**

<b>Sinter Production (t Sinter/yr)</b>	<b>FY Period</b>	<b>SOx Mass Load - Total (t SOx/yr)</b>	<b>SOx Mass Load - Reduction from FY07 (t SOx/yr)</b>
5,418,766	FY07*	3,227	-
5,233,837	FY08	1,450	1877
3,914,219	FY09	879	2348
5,405,630	FY10	767	2460
5,912,421	FY11	1,274	1953
3,978,124	FY12	839	2388
3,968,002	FY13	560	2667
3,449,431	FY14	485	2742
3,550,606	FY15	1,010	2217
3,688,728	FY16	1,884	1343
3,697,651	FY17	940	2287

\*The WGCP Gypsum plant, the final stage of the development, was commissioned in FY07 and in operation from FY08.

The SEE objective of reducing the visual impact of the gas plume from the stack, with the aim of no visible emissions, has also been achieved. In accordance with the Licence (condition O4.16), the WGCP has been operated so that there are no visible emissions from the exhaust stack (Discharge Point 107) under normal operations. Compliance with this requirement is assessed against compliance with the EPL limit condition for Discharge Point 107 of 20 mg/Nm<sup>3</sup> for particulate matter. Further, no complaints were received by BlueScope relating to the WGCP visibility during the Reporting Period.

Analysis of monitoring data (specifically, air monitoring data – refer to "Attachment 5") shows results to be generally consistent. Any variations are consistent with normal variations in raw material feed and plant operations. The WGCP has achieved the objectives relating to dust, dioxin emissions, SOx and reduced visual impact set out in the SEE. The reduction in dust and dioxin emission concentrations and the demonstrated reductions in SOx annual mass load significantly exceed the reduction objectives outlined in the SEE, as evidenced by the data presented in Table 7.

**Table 7 – WGCP Comparison of Actual Emissions Data\*\* with Reduction Objectives**

Pollutant	Reduction Objective	Minimum	Mean	Maximum	No. of samples
Dust (mg/Nm <sup>3</sup> )	20	3.0	8.9	20****	103
Dioxins (ng/Nm <sup>3</sup> , ITEQ)	0.3	0.00003	0.0061	0.022	46
SOx load (t/yr)	750	1343	2218	2742	10***

\*\* Attachment 1 data source.

\*\*\* Totals (10) calculated from minute by minute data collected throughout the reporting period.

\*\*\*\*1 sample on 13/11/2008.

### **AIR QUALITY – OPUP “SINTER PLANT ROOM DE-DUSTING” EP ID POINT 2 MONITORING DETAILS:**

Data obtained from Air Monitoring during the Reporting Period is included as “Attachment 6”. The monitoring requirements and concentration limits for stack EP ID Point 2 are specified in EPL 6092 conditions L3.4, L3.4, L6, O1.4 and M1.9 of the Licence. Monitoring requirements were met.

We advise that EP- ID point 2 does not have EPL 6092 load limits. With the exception of two environmental non-compliances recorded at EP ID Point 2 (refer to Table 9 in Section 10 of this report for details), air monitoring results over the reporting period, were broadly comparable with monitoring results from previous years; and consistently well below the concentration limits prescribed by the EPL 6092 Licence.

WGCP SOx mass emission loads and annual reduction details provided in Table 6, verify that the Sinter Plant has been operating and producing sinter tonnage rates (post OPUP upgrade), resulting in significant reductions in NOx and SOx per tonne of Sinter make.

BlueScope maintains that the predictions stated in the OPUP EA have been complied with and or exceeded. It should be noted that OPUP (MP 06-0229 Mod 1) was designed to increase production from 5.5MT/a to 6.6MT/a. Since 2011 the Sinter Plant has consistently operated below 4MT/a. This is significantly less than pre-OPUP prediction levels.

### **7 - WATER MANAGEMENT - IRONMAKING EAST DRAIN (IMED) EPL ID POINT 89.**

A summary of IMED water monitoring trends for the reporting period is presented in “Attachment 7”. “Attachment 8” shows the IMED discharge point location. Monitoring requirements and concentration limits for the SP WGCP are specified in DA Condition 4.30 and EPL 6092 conditions L1, L3, M2.5, M8. Monitoring requirements are conducted in accordance with EPL 6092 (8 day cycle) monitoring requirements. Monitoring results obtained over the reporting period verified that the concentration of pollutants discharged via the IMED into the Port Kembla Harbour have been consistently below EPL 6092 concentration limits, with the exception of the following incidents:

- a) On the 1st July 2016 there were two non-compliances to EPL concentration limits (dry weather limits) for Total Suspended Solids and Total Iron at the IMED EP EPA ID Point 89. These exceedances were



- related to one incident, a liquid discharge originating from the cleaning of out of solids in pipework adjacent to the Ironmaking East Drain discharge point; and,
- b) On the 1<sup>st</sup> July 2017 elevated concentrations Total Suspended Solids and Mercury contained in liquid discharges in the IMED resulted from the re-suspension of solids in liquid discharge under a heavy storm-water event.

These non-compliances were not related to Sinter Plant WGCP and or Gypsum plant operating equipment and have been recorded into BlueScope's Annual Statement of Environmental Compliance for the FY 16-17 period as per EPL 6092 licence reporting requirement.

## 8 REHABILITATION

Not applicable to the developments.

## 9 COMMUNITY

There were twenty-eight complaints that were received by BlueScope in response to the fire at the WGCP on 13 October 2014, all related to fallout from the fire. No other complaints were received by BlueScope relating to Sinter Plant WGCP, Gypsum Plant and Ore Preparation Upgrade Project operations during the reporting period.

## 10 INDEPENDENT AUDIT

An Independent Audit was conducted at the SPWGCP, Gypsum and OPUP by Mr. Phillip Skinner from ARRISCAR Risk Management Solutions, on the 15th June 2016. BlueScope had received approval from the DPE in 2016 for Mr. Skinner to conduct the (IEA) audit. The next IEA audit to be conducted at the SPWGCP, Gypsum and OPUP will be conducted in 2019.

A summary of findings from the Compliance Assessment (*extracted from the ARRISCAR risk Management Solutions Audit Report – (Page 5)*) is as follows:

- 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;
- 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. The DP&E has agreed that many of the Consent Conditions can be removed / amended.
- 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. 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 each of the identified Non-Compliances 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.

We advise that all corrective actions from the previous IEA conducted in 2016 with the exception of 2016/10, have been completed. BlueScope intends to approach the DP&E, seeking to amend development consent requirements to address ongoing compliance to corrective actions, 2016/7, 2016/9 & 2016/10. The Corrective Actions & Proposed Action Plan is presented in Table 8.



**Table 8.**

Action No.	Corrective Action Description	BSL Response & Proposed Action Plan	Current Status
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).	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	The WGCP Construction Certificate has been obtained from M. Russell and has been stored into Ore Preparations Environmental Management Systems. <b>Completed.</b>
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).	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	Copy of WGCP Occupation Certificate has been obtained from M. Russell and stored into Ore Preparations Environmental Management Systems. <b>Completed.</b>
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).	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	A copy of WGCP Wind Load records has been obtained from M. Russell and stored into Ore Preparations Environmental Management Systems. <b>Completed.</b>
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).	WGCP Environmental details will be made publically available on the BSL in the Illawarra website. Who: L. Zammit When: 30/08/2016	WGCP Environmental details are now publically available on the "BSL in the Illawarra" website address - <a href="https://www.bluescopeillawarra.com.au/">https://www.bluescopeillawarra.com.au/</a> <b>Completed.</b>
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	OPUP Environmental details will be made publically available on the BSL in the Illawarra website. Who: L. Zammit When: 30/08/2016	OPUP Environmental details are now be made publicly available on the "BSL in the Illawarra" website address - <a href="https://www.bluescopeillawarra.com.au/">https://www.bluescopeillawarra.com.au/</a> <b>Completed.</b>

	Section 7.1 - Table 10 - C.1 Provision of Information, CC # O-5.4).		
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).	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	Signage has been installed at major entrances to the Ore Preparations facility to denote "the Telephone No. and Address for receiving complaints" relevant to the SPWGCP, Gypsum & OPUP activities and equipment. <b>Completed.</b> BlueScope considers that this development consent condition was mainly applicable during the construction period of the Ore Preparation Upgrade Project OPUP and as this development was completed in 2007, this requirement is no longer required. BlueScope will be seeking approval from the Department of Planning and Environment in future to modify this development consent condition and to delete this condition.
2016/8	The roadway between the Sinter Plant offices and the Sinter Plant building should be routinely swept to minimize 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).	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	This section of roadway was cleaned up immediately and is swept in accordance with routine sweeping schedules. <b>Completed.</b>
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	BSL Ore Preparations to verify with contractor drivers with transport routes set out in the SEE for: <ul style="list-style-type: none"> <li>• chemicals transported to the site (CC # W-4.45);</li> <li>and</li> <li>• non-liquid waste from the site (CC # 4.46).</li> </ul>	Follow up discussions with IXOM Pty. Ltd representatives has verified that RIVET Pty. Ltd sub-contractor chemical delivery drivers are following the routes specified in the SEE for the delivery of chemicals to the Sinter Plant. <b>Completed.</b> BlueScope advises that it does



	to Section 7.1 - Table 10 - E.16 Roads and Traffic, CC # W-4.45 and W-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	not have any jurisdiction over road closures external to the BSL Port Kembla Steelworks site. Therefore, BSL will be seeking approval from the Department of Planning and Environment in future to modify this development consent condition to cater for external changes or road closures that may not consistent with routes specified in the SPWGCP SEE.
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.16Roads and Traffic, CC # W-4.47).	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	BlueScope advises that this development consent condition mainly related to vehicle interaction at the Christy Drive Carpark during the period of construction of the SP WGCP. The Christy Drive Carparking is a shared area that is visited by BlueScope employees, contractor employees and members of the Community. Compliance with this condition is therefore impractical. BSL seeks clarification from the DPE on whether the requirements of this condition are still required, with the view of seeking approval from the DP&E to delete / modify this development consent condition in future.
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).	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	The debris near the drain at the Gypsum storage area has been cleaned up. This area is routinely inspected and maintained to eliminate / minimize spillages to ground. <b>Completed.</b>
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).	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	The spillage from the broken bags was cleaned up. Spent char bags are routinely inspected and maintained to eliminate / minimize spillages to ground. <b>Completed.</b>

2016/13	The leaking valve at the Gypsum Plant should be repaired. (Refer to Section 7.3 – Table 12, ID # 3).	This valve has been repaired. Who: H. Dux When: 10/06/2016	<b>Completed.</b>
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).	BSL Ore Preparations to arrange to extract the alkaline liquid out of the bunded area. Who: M. Walsh When: 30/06/2016	The alkaline liquid has been extracted out of the bunded area. <b>Completed.</b>
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).	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 minimize 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	<ul style="list-style-type: none"> <li>• Sandbags were damaged as they had been permanently placed around drains exposing them to weathering and being driven over vehicles on site.</li> <li>• Sandbags are now only placed around internal drains as a control to minimise ingress of liquid discharges resulting from process water discharges.</li> </ul> <b>Completed.</b>
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	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.	In accordance with the Licence (condition O4.16), the WGCP has been operated so that there are no visible emissions from the exhaust stack (Discharge Point 107) under normal operations. Compliance with this requirement is assessed against compliance with the EPL limit condition for Discharge Point 107 of 20 mg/Nm <sup>3</sup> for particulate matter.



	compliant with EPL Condition No. O4.17. 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).	Who: M. Imber / L. Zammit When: 30/10/2016	Further, no complaints were received by BlueScope relating to the WGCP visibility during the Reporting Period. <b>Completed.</b>
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).	BSL Ore Preparations to update their Environmental Management Systems to include No.3 Sinter Machine Stack. Who: D. Jones When: 30/09/2016	Ore Preparations Environmental Aspects and Impacts have been transferred into the Managing All Risks (MARS) OHSE Management System. The No.3 Sinter Machine has been included into MARS OHSE system. <b>Completed.</b>

## 11 INCIDENTS AND NON-COMPLIANCES DURING THE REPORTING PERIOD

### INCIDENTS:

On 13 October 2014 a fire at the WGCP resulted the in the WGSP stack burning down. The fire was reported to the Department of Planning and Environment on 14 October 2014 in accordance with Condition 5.9 of the Consent. Following the fire, the original WGCP fibreglass stack was replaced with a stack made of steel construction.

There have been no significant incidents at the Sinter Plant post OPUP, that can be related to OPUP operating equipment and that required reporting to the DPE as per requirement under Condition 7.1 of the OPUP Development consent.

### NON-COMPLIANCE FROM PREVIOUS IEA 2016:

Non Compliance details are presented in Table 9 of this report.

**Table 9 – NON COMPLIANCE DETAILS FROM THE 2016 IEA AUDIT**

Relevant Approval	Condition	Condition description (summary)	Compliance Status	Comment	Current Status
DA – 26- 02- 01 MOD 2DC #	W3.3	The Applicant must ensure that a copy of the Environmental Management Plan is submitted to Council and is publicly available.	Non-Compliant.	<ul style="list-style-type: none"> <li>This CC was not verified in the previous IEA reports for 2013 &amp; 2010. 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.</li> <li>This non-compliance is unlikely to result in any risk of environmental harm since it is largely administrative. This non-compliance is unlikely to result in any risk of environmental harm since it is largely administrative .The DP&amp;E has not recommended that this CC be removed or Amended.</li> </ul>	<ul style="list-style-type: none"> <li>WGCP Environmental details are now publically available on the "BSL in the Illawarra" website address - <a href="https://www.bluescopeillawarra.com.au/">https://www.bluescopeillawarra.com.au/</a></li> </ul>



MP 06-0229 Mod 12	O-5.4	<p>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:</p> <p>(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;</p> <p>(b) a copy of this approval and each relevant environmental approval, licence or permit required and obtained in relation to the project;</p> <p>(c) a copy of each strategy, plan and program required under this approval; and</p>	Non-Compliant	<ul style="list-style-type: none"> <li>• This was identified as a non-compliance in previous 2013 IEA.</li> <li>• 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&amp;E has not recommended that this CC be removed or significantly amended.</li> </ul>	<ul style="list-style-type: none"> <li>• OPUP Environmental details are now publicly available on the "BSL in the Illawarra" website address - <a href="https://www.bluescopeillawarra.com.au/">https://www.bluescopeillawarra.com.au/</a></li> </ul>
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DA – 26- 02- 01 MOD 2DC #	W-4.55	<p>Prior to the commencement of construction activities for the Waste Gas Cleaning Plant, the Applicant shall arrange:</p> <ul style="list-style-type: none"> <li>• 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,</li> <li>• a postal address where written complaints can be lodged.</li> </ul>	Non -Compliant	<ul style="list-style-type: none"> <li>• Complaints are received via the general enquiries toll free number (1800 800 789), which can be found on the 'Contact Us' website page; <a href="http://www.bluescopesteel.com.au/ourcompany/contact-us">http://www.bluescopesteel.com.au/ourcompany/contact-us</a>).</li> <li>• 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 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.</li> <li>• BSL advised that they do occasionally receive complaints by post. An example hand written letter was sighted (Dated Dec 14). The postal address can be found on the 'Contact Us' website page <a href="http://www.bluescopesteel.com.au/our-company/contactus">http://www.bluescopesteel.com.au/our-company/contactus</a>).</li> <li>• An advertisement was posted in newspaper (Dated 20 February 2008. 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 was considered to be a low risk non-compliance. The DP&amp;E has not recommended that this CC be removed or amended.</li> </ul>	<ul style="list-style-type: none"> <li>• Signage has been installed at major entrances to the Ore Preparations facility to denote "the Telephone No. and Address for receiving complaints" relevant to the SPWGCP, Gypsum &amp; OPUP activities and equipment.</li> </ul>
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<p>MP 06-0229 Mod 12</p>	<p>0-5.2</p>	<p>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):</p> <ul style="list-style-type: none"> <li>(a) a telephone number on which complaints and enquiries about construction and operational activities at the site may be registered;</li> <li>(b) a postal address to which written complaints and enquiries may be sent; and</li> <li>(c) an email address to which electronic complaints and enquiries may be transmitted.</li> </ul> <p>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.</p>	<p>Non-Compliant</p>	<ul style="list-style-type: none"> <li>• 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 was considered to be a low risk non-compliance.</li> <li>• 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 (<a href="http://www.bluescopesteel.com.au/our-company/contactus">http://www.bluescopesteel.com.au/our-company/contactus</a>)</li> <li>• BSL would prefer a dedicated single point of contact for submitting complaints and this is easier to manage through the phone number. The DP&amp;E has not recommended that this CC be removed or Amended.</li> </ul>	<ul style="list-style-type: none"> <li>• As per response for W-4.55.</li> </ul>
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DA – 26-02-01, MOD 2	W-4.11 [Also EPL # 04.17]	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.	Non-Compliant	<p>EPL 6092 O4.17 is as follows:</p> <ul style="list-style-type: none"> <li>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/Nm<sup>3</sup> for particulate matter. Note: Normal operation excludes the first two hours of operation following start up. Therefore, EPL # 04.17 is similar to CC # W-4.11, but adds a 20 mg/Nm<sup>3</sup> 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).</li> <li>BSL monitor compliance through continuous and quarterly stack testing, as required to comply with EPL # 04.17 and the use of cameras. Stack testing results were sighted for: Apr-Jun 2013 in an Air Quality Report (Copy provided), reported measured results = 3.9 and 5.4 mg/Nm<sup>3</sup>). Oct-Dec 2015 via the 'EHS Data Monitor Pro' web-based application. April 2012 to February 2016 on the 'Monitoring Data' page of the BSL website <a href="https://prod.bluescope.com/sustainability/reports/nsw-monitoring-data/">https://prod.bluescope.com/sustainability/reports/nsw-monitoring-data/</a>. These reported monitoring results confirm a total particulate matter measurement less than the 20 mg/Nm<sup>3</sup> 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/Nm<sup>3</sup> at the outlet (Refer to. It was noted in the 2013 IEA that compliance with the 20 mg/Nm<sup>3</sup> criterion does not necessarily mean that the emissions are not visible.</li> <li>An action included in the 2013 IEA to investigate and resolve this apparent inconsistency does not appear to have been closed and visible emissions have been reported. Therefore, this has been assessed as a 'Non-Compliance' with W-4.11, despite being 'Compliant' with EPL # 04.17. This non-compliance was assessed to pose a low risk of environmental harm.</li> </ul>	<ul style="list-style-type: none"> <li>In accordance with the Licence (condition O4.16), the WGCP has been operated so that there are no visible emissions from the exhaust stack (Discharge Point 107) under normal operations. Compliance with this requirement is assessed against compliance with the EPL limit condition for Discharge Point 107 of 20 mg/Nm<sup>3</sup> for particulate matter. Further, no complaints were received by BlueScope relating to the WGCP visibility during the Reporting Period.</li> </ul>
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<p>DA – 26- 02- 01, MOD 2</p>	<p>O-2.2 [Also EPL # 03.1]</p>	<p>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.</p>	<p>Non - Compliant</p>	<p>During the site inspection on 10 and 24 March 2016, the Sinter Plant was observed to be maintained in a manner that minimised dust generation. For example:</p> <ul style="list-style-type: none"> <li>• 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. .</li> <li>• Water carts were observed to wet down roads (Note: This was observed near the Sinter Plant car park rather than the WGCP).</li> <li>• Although there was some dust observed in the Sinter Plant building, this building is vented to the Sinter Machine Room Dedusting System.</li> <li>• There we no obvious dust emissions from plant or equipment at the Sinter Plant outside the main building such as the mixing rolling drum. .</li> </ul> <p>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.</p>	<ul style="list-style-type: none"> <li>• This section of roadway was cleaned up immediately and is swept in accordance with routine sweeping schedules.</li> </ul>
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DA – 26- 02-01, MOD 2	W-4.17 & O-2.6 [Also EPL # L3.4]	<p>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.</p> <p>NOTE: TABLE HAS NOT BEEN REPRODUCED IN THIS REPORT – Refer to Conditions of Development Consent / EPL for further information.</p> <p>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.</p>	Non - Compliant	<p>Current discharge limits are specified in EPL 6092 - 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; (<a href="https://prod.bluescope.com/sustainability/reports/nsw-monitoring-data/">https://prod.bluescope.com/sustainability/reports/nsw-monitoring-data/</a>).</p> <p>As at 4<sup>th</sup> 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:</p> <ul style="list-style-type: none"> <li>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).</li> <li>An exceedance at Point 107 (Maximum reading of 50 mg/Nm3) in December 2015. This exceedance occurred during plant start-up.</li> </ul> <p>This CC has been assessed as 'Non-Compliant' due to the exceedance of the limit for solid particulates at Point 2 (Sinter Machine Room De-dusting 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.</p> <p>Note: The DP&amp;E has agreed that CC # W-4.17 can be removed and CC # O-2.6 is to be amended as follows:</p> <p>The Proponent shall install and operate equipment in line with best practice to ensure that the project complies with all load limits, air quality criteria and air quality monitoring requirements as specified in the EPL for the site.</p>	<p><u>Non – Compliance at EPA ID Point 2 - 14/02/2014</u></p> <ul style="list-style-type: none"> <li>This exceedance resulted from a failure of an insulator in one of the zones of the electrostatic precipitator and the controls in place around use of the Sinter Plant Machine when three as opposed to four zones in the precipitator were operating.</li> <li>The out of service precipitator plate was repaired and maintenance strategies updated to include regular precipitator plate inspections.</li> </ul> <p><u>Non – Compliance at EPA ID Point 2 - 26/02/2014</u></p> <ul style="list-style-type: none"> <li>In response to the non-compliance at ID Point 2 on the 4/02/2014, follow-up stack monitoring was conducted at the stack to determine the relationship between dust loading in the stack with in-line opacity instrumentation.</li> <li>An 100% percentile exceedance of the solid particle concentration limit at the stack was recorded during this investigative process.</li> <li>Further investigations were conducted as part of Pollution Reduction Program "PRP 172 Evaluation of Continuous Monitoring at the Sinter Plant". These investigations</li> </ul>
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resulted in improved understanding of the relationship of Total Particulate Matter loading Versus % Opacity monitoring in the stack.

The Sinter Plant Room De-Dusting procedure has been amended to ensure that the room de-dusting system is maintained and operated within an acceptable range of opacity values to ensure that dust loading in the stack, does not result in exceedances of the TPM concentration limit at the stack. The procedure will continue to be applied and corrective actions taken when opacity moves outside the typical operating range. Actions may include, but not necessarily limited to, additional stack monitoring, the introduction of additional dust suppressant sprays, rapping of electrostatic precipitator, fan adjustments and plant shutdown. The current limit of 8% Opacity defined in the procedure remains the trigger that initiates shutdown to allow remedial action. No further non compliances have been recorded at EP ID Point 2 since the implementation of this procedure.

<p><u>Exceedance at Point 107 (Maximum reading of 50 mg/Nm3) in December 2015.</u></p>	<ul style="list-style-type: none"> <li>This Total Particulate Matter TPM exceedance was recorded on the on line continuous emission monitor at the stack during plant start-up.</li> </ul> <p>Condition O4.16 of the EPL 6092 licence stipulates that the "WGCP must be operated so that there are no visible emissions from the stack under normal operations. Compliance with this requirement is to be assessed against compliance with EPL limit condition for Discharge Point 107 of 20mg/Nm3 for particulate matter". Note: Normal operation excludes the first two hours of operation following start-up"</p> <p>This equipment is indicative only and as such this exceedance does not constitute an Environmental Licence Non-Compliance.</p>



<p>DA – 26- 02- 01, MOD 2</p>	<p>W-4.31 [Also EPL # L3.5]</p>	<p>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: 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.</p>	<p>Non-Compliant</p>	<ul style="list-style-type: none"> <li>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 – SPWGPCP 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: (<a href="https://prod.bluescope.com/sustainability/reports/nswm/monitoring-data/">https://prod.bluescope.com/sustainability/reports/nswm/monitoring-data/</a>).</li> <li>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 that: <ul style="list-style-type: none"> <li>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.</li> <li>PRP 175 required BSL to complete a Pollution Study into the Division of Iron Ore Road Drain, and 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.</li> <li>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.</li> </ul> </li> </ul>	<p><u>Non – Compliance at EPA ID 89 - 1st July 2014</u></p> <ul style="list-style-type: none"> <li>This exceedance resulted from the loss of containment of Coke Ovens Gas Condensate into the Ironmaking East Drain EPL ID point 89. This non-compliance is not related to Sinter Plant operations and has been addressed via works and investigations conducted under Pollution Reduction Programs PRP 175 &amp; PRP 176.</li> </ul> <p>The risk of COG condensate discharges into the Ironmaking East Drain has been minimised as a result of improved management of COG seal pots at Energy Services and the re-division of Ironmaking East Drain into No. 2 Blower Station Drain EPL ID point 79. These pollution reduction programs have been completed.</p>
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• 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: 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.



DA – 26- 02-01, MOD 2	O-2.12	<p>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.</p>	Non-Compliant	<p>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 <a href="https://prod.bluescope.com/sustainability/reports/nswmonitoring-data/">https://prod.bluescope.com/sustainability/reports/nswmonitoring-data/</a>.</p> <ul style="list-style-type: none"> <li>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). 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.</li> </ul>	As per response for W-4.31 [Also refer to EPL # L3.5].
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DA – 26- 02-01, MOD 2	W-4.38	<p>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.</p>	<p>Non-Compliant</p>	<ul style="list-style-type: none"> <li>• 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).</li> <li>• 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.</li> </ul>	<p><u>Non – Compliance</u> <u>10th March 2016</u></p> <ul style="list-style-type: none"> <li>• The spillage from the broken bags was cleaned up. Spent char bags are routinely inspected and maintained to eliminate / minimise spillages to ground.</li> </ul>
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DA – 26- 02-01, MOD 2	W-4.45	All chemicals being transported to the site must follow the route set out in the SEE.	Non-Compliant	<p>The route specified in the SMERP Transport of Hazardous Materials Study (Dated 2002, copy provided) for Ammonia deliveries is as follows:</p> <ul style="list-style-type: none"> <li>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. 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 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).</li> <li>The driver advised that the route followed was "F6, M2, M7, Hume highway, 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) -&gt; Sydney via M1 (formally M3) -&gt; M2 -&gt; M7 -&gt; M31 (i.e. Hume Highway) -&gt; Masters Rd -&gt; B65 (i.e. Springhill Road and Five Islands Road) -&gt; Flinders St -&gt; 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). This was assessed as a low risk non-compliance since following main roads such as the M7 rather than the more populated</li> </ul>	<ul style="list-style-type: none"> <li>Follow up discussions with IXOM Pty. Ltd representatives has verified that RIVET Pty. Ltd sub-contractor chemical delivery drivers are following the routes specified in the SEE for the delivery of chemicals to the Sinter Plant.</li> <li>BlueScope advises that it does not have any jurisdiction over road closures external to the BSL Port Kembla Steelworks site. Therefore, BSL will be seeking approval from the Department of Planning and Environment in future to modify this development consent condition to cater for external changes or road closures that may not be consistent with routes specified in the SPWGGCP SEE.</li> </ul>
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DA – 26- 02-01, MOD 2	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.	Non-Compliant	Cumberland Highway would be expected to be preferable for the transport of ammonia.	<ul style="list-style-type: none"> <li>BlueScope maintains that this development consent condition related to vehicle interaction at the Christy Drive Carpark during the period of construction of the SP WGCP. The Christy Drive Carparking is a shared area that is visited by BlueScope employees, contractor employees and members of the community. Compliance with this condition is therefore impractical. BSL seeks clarification from the DP&amp;E on whether the requirements of this condition are still ongoing with the view of seeking approval from the DP&amp;E to accordingly delete / modify this development consent condition in future.</li> </ul>
		<ul style="list-style-type: none"> <li>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. 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.</li> <li>This should be raised with the DP&amp;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.</li> </ul>			



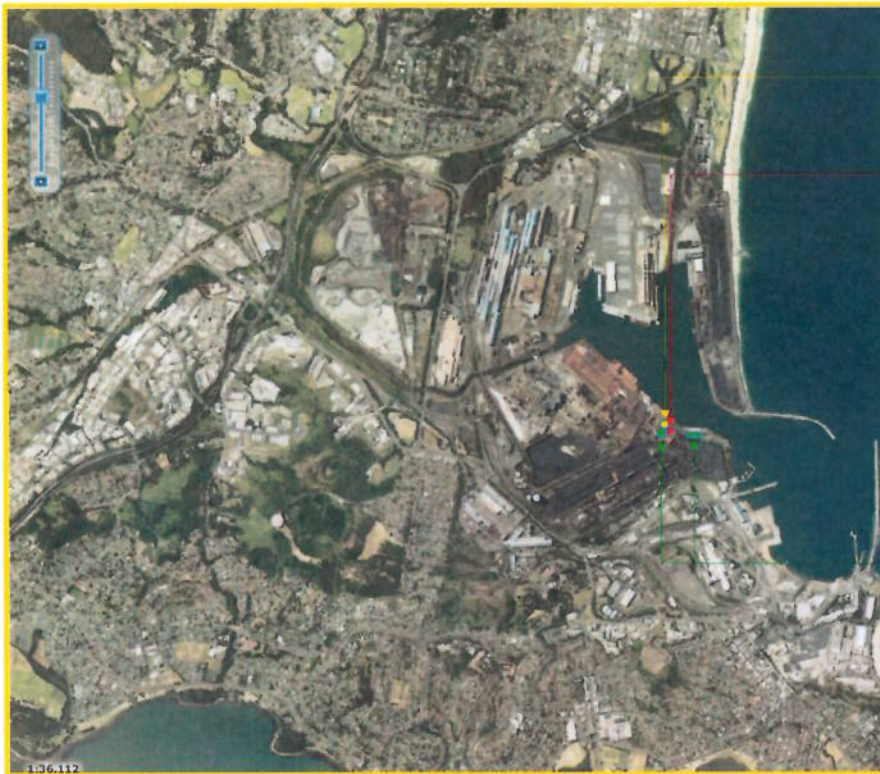
DA – 26- 02- 01, MOD 2	W-4.49	<p>Stockpiles of sand, gravel, soil and the like must be located to ensure that the material:</p> <ul style="list-style-type: none"> <li>• does not spill onto the road pavement; and</li> <li>• is not placed in drainage lines or water courses, and cannot be washed into these areas.</li> </ul> <p>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.</p>	Non-Compliant	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• The spillage from the broken bags was cleaned up. Spent char bags are routinely inspected and maintained to eliminate / minimise spillages to ground.</li> </ul>
DA – 26- 02- 01, MOD 2	W-4.50	<p>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.</p>	Non-Compliant	<p>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:</p> <ul style="list-style-type: none"> <li>• Some debris (including Gypsum) was observed near the drain at the Gypsum storage area.</li> <li>• There was evidence of sandbags being damaged near one of the drains, which could allow entry of sediments to the drains.</li> </ul> <p>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.</p>	<ul style="list-style-type: none"> <li>• Sandbags were damaged as they had been permanently placed around drains exposing them to weathering and being driven over vehicles on site.</li> <li>• Sandbags are now only placed around internal drains as a control to minimise ingress of liquid discharges resulting from process water discharges</li> </ul>

## 12 ACTIVITIES TO BE COMPLETED IN THE NEXT REPORTING PERIOD – DA 7.4 (a)

The WGCP was itself constructed as an outcome of a pollution reduction program agreed between the EPA and BlueScope, with the objectives detailed earlier in this report to reduce the environmental impacts, particularly on air quality, of the Sinter Plant. Where practicable, BlueScope will continue to implement additional, incremental improvements in the operation of the WGCP; in particular, as with the remainder of the Port Kembla Steelworks, BlueScope is committed to identifying opportunities to reduce electricity and energy consumption at the Sinter Plant and the WGCP.

The intent of the Ore Preparation Upgrade Project was to upgrade and increase the production capacity of the Sinter Plant from 5.5 million tonnes to 6.6 million tonnes per annum. This included construction of new infrastructure to improve operational efficiencies. We advise that all plant equipment installations and commissioning associated with the OPUP were completed in 2007 and there are no plans to make any further plant upgrades to OPUP related plant infrastructure in the next reporting period.

Attachment 1. SINTER PLANT WASTE GAS CLEANING & GYPSUM PLANT & ORE PREPARATION UPGRADE PROJECT



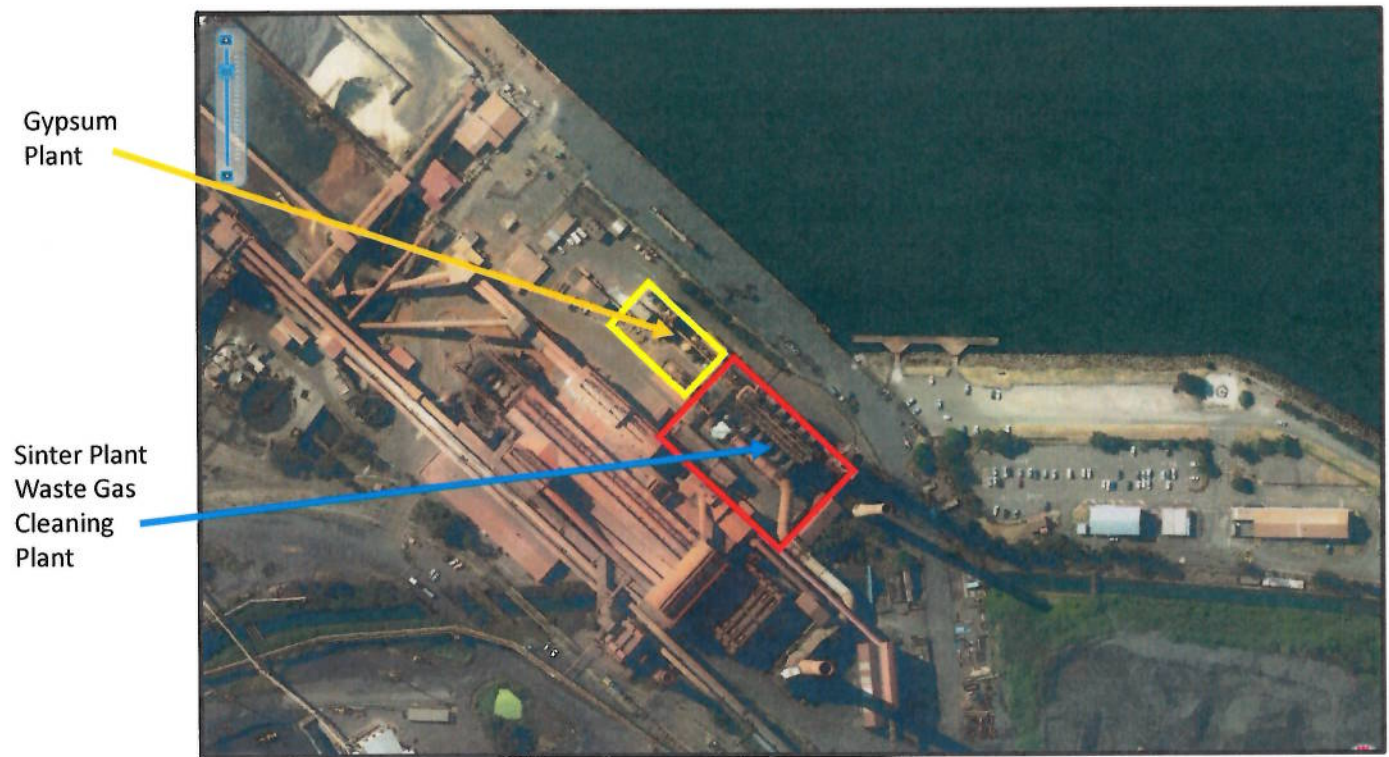
Gypsum Plant

Sinter Plant Waste  
Gas Cleaning Plant

Ore Preparation  
Upgrade Project  
that includes  
Carparking Area



Attachment 1. SINTER PLANT WASTE GAS CLEANING PLANT & GYPSUM PLANT DEVELOPMENT CONSENT BOUNDARY



Attachment 1. ORE PRPARATION UPGRADE PROJECT DEVELOPMENT CONSENT BOUNDARY INCLUDING CARPARKING AREA



Project Memo

H-315593

24 May 2013

To: Lorrie Zammit

From: Colin Tickell

cc:

**BlueScope Steel  
Port Kembla Steelworks**

**SMERP Annual Noise Compliance Assessment 2013**

As a requirement for the Sinter Machine Emissions Reduction Project (SMERP), verification of development approval noise limit of 70dBA at the boundary is required to be performed periodically. The location for the measurement of Sinter Plant verification is at the Gabriella Memorial on Christy Drive, Inner Harbour, Port Kembla. Figure 1 shows an aerial view of the area and measurement location.

Environmental noise levels were measured at the site on 16 April 2013 during normal operations. Ship loading of bulk materials was also occurring at the No. 1 Finished Product Berth during the period of the measurements and this influenced the received sound levels.

The 15 minute period results are shown in the attached table and the graph in Figure 2 shows the one-third octave band spectrum of the measurements.

The results indicate that the statistical environmental sound level at the Gabriella Memorial was  $L_{Aeq,15-min}$  63 dBA for the 15-minute measurement interval. The maximum level recorded of 70 dBA was caused by a passing vehicle.

This statistical result indicates compliance with the development approval limit. It should be noted that this value has not changed significantly from the previous compliance checks that were performed in June 2012 and September of 2011.

The one-third octave band spectra for the measurements indicate no tonality was present in the measured sound.

If there are any questions regarding this, please contact Colin Tickell.

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If you disagree with any information contained herein, please advise immediately.



Safety • Quality • Sustainability • Innovation

H-315593-ENVMEM1098, Rev. A  
Page 1





Figure 1: BlueScope Steel Port Kembla - SMERP Environmental Noise Compliance Monitoring location

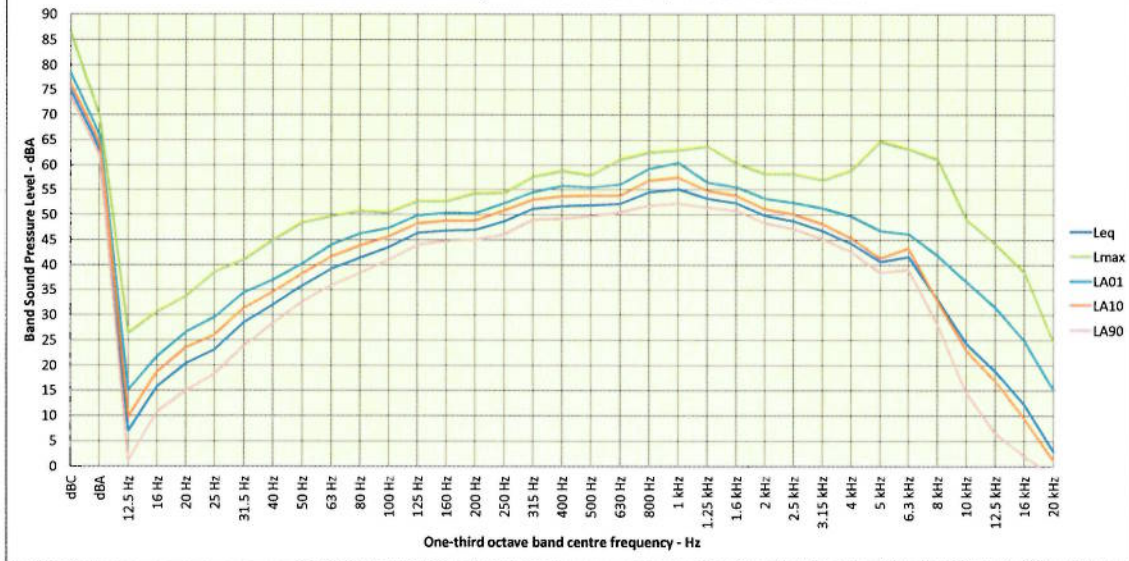
BlueScope Steel Port Kembla

Environmental Noise compliance monitoring for SMERP Plant - 16 April 2013

Location	Date	Time start	Period hh:mm:ss	Sound Level - dBA 15-minute statistics					Comments
				L <sub>AEQ,15-min</sub>	L <sub>A90,15-min</sub>	L <sub>A05,15-min</sub>	L <sub>A10,15-min</sub>	L <sub>A95,15-min</sub>	
Gabriella Memorial	16-Apr-13	11:36 AM	0:15:00	63	70	66	64	62	Overcast, mid to low level cloud height, wind 1 to 3m/s S to SW, ~ 18°C
Christy Drive, Port Kembla			Pre-cal	93.8					ambient level 62-3
			Post cal	93.9					Passing cars 63-69
			Met Data - Site	WS km/hr	WD deg	Temperature °C	Sigma	Humidity % rH	
			11:30:00 AM	18.6	193.3	18.2	21.5	84.0	Ship loading noise (chute transfer noise)
			11:33:00 AM	20.0	196.9	18.3	21.0	82.9	of rocks or coal lumps + vacuum pump
			11:36:00 AM	15.1	197.2	18.3	19.0	82.5	noise from Smerp plant
			11:39:00 AM	19.8	194.9	18.4	21.5	80.8	Ship was being loaded at No.1 Finished
			11:42:00 AM	16.6	195.7	18.2	21.6	80.5	Products Berth (closest to Christy Drive gate) using portable conveyors.
			11:45:00 AM	16.6	182.1	18.1	31.8	80.3	Material unknown but had lumps.
			11:48:00 AM	20.5	195.4	18.0	19.1	80.0	
			11:51:00 AM	18.8	201.9	17.9	21.2	80.4	
			11:54:00 AM	19.1	188.7	17.9	17.0	79.9	
			Average 11:36 to 11:51 AM	17.9 m/s	194.5	18.1	22.3	80.7	
				5.0					

Note: No tonality identified in any one-third octave band. Highest was 4.8 dB at 6.3kHz, more likely insect caused.

Figure 2: BlueScope Steel Port Kembla - SMERP Environmental Noise Compliance Monitoring Gabriella Monument Christy Drive Port Kembla 16 April 2013 11:36 to 11:52am





Internal Memo

25 June 2012

TO: Lorrie Zammit

FROM: Steve Collings

cc: Colin Tickell

**BlueScope Steel  
PRP 100**

**SMERP Development Approval Noise Compliance 2012**

**1. Summary**

As a requirement for the Sinter Machine Emissions Reduction Project (SMERP), verification of development approval noise limit of 70dBA at the boundary is required to be performed periodically. The location for the measurement of Sinter Plant verification is at the Gabriella Memorial on Christy Drive, Inner Harbour, Port Kembla.

The 15 minute period results are shown in the attached Assessment report in Appendix A. The results indicate that the statistical environmental sound level at the Gabriella Memorial was  $L_{Aeq,15-min}$  61 dBA for two measurement intervals. This result indicates compliance with the development approval limit. It should be noted that this value has not changed from the previous compliance check that was performed in September of 2011. Appendix B displays the one-third octave band spectra for the measurements that were performed on the day, to indicate if tonality was present in the measured sound. Once again, there is no tonality observed although there was noise from compressed air activity being emitted from the Gypsum Plant.

If there are any questions regarding this, please contact either Stephen Collings or Colin Tickell.

SRC: SRC  
Attachments



## Appendix A: Table of Results



## Appendix B: Tonality assessment graphs



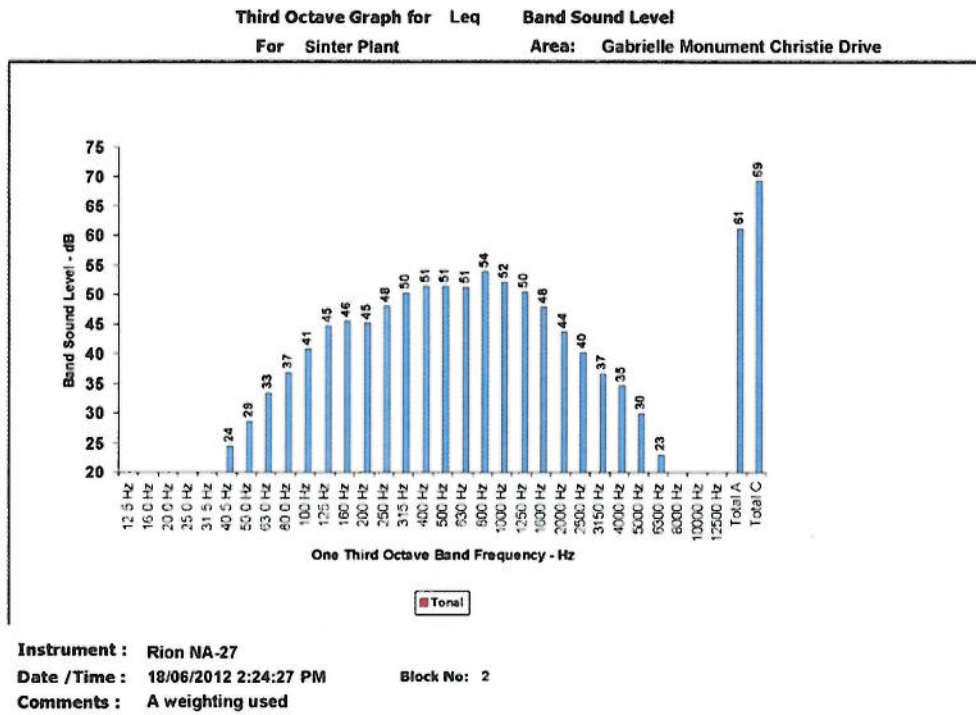


Figure B.1 The first measurement (Block No 2) spectrum performed at the Gabriella Memorial

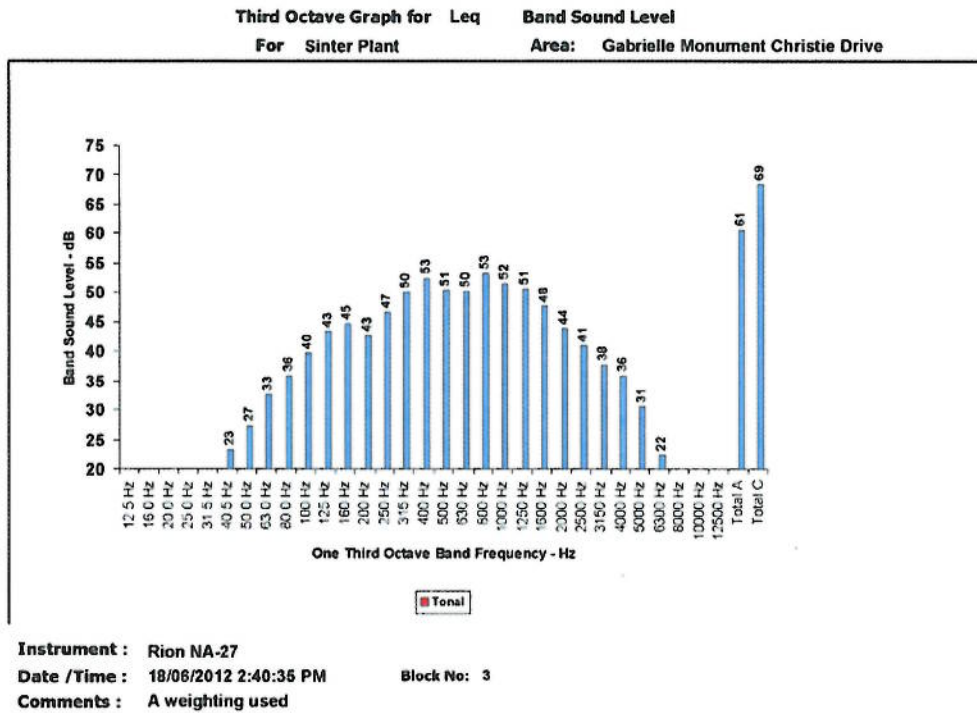


Figure B.2 The second measurement (Block No 3) performed at the Gabriella Memorial

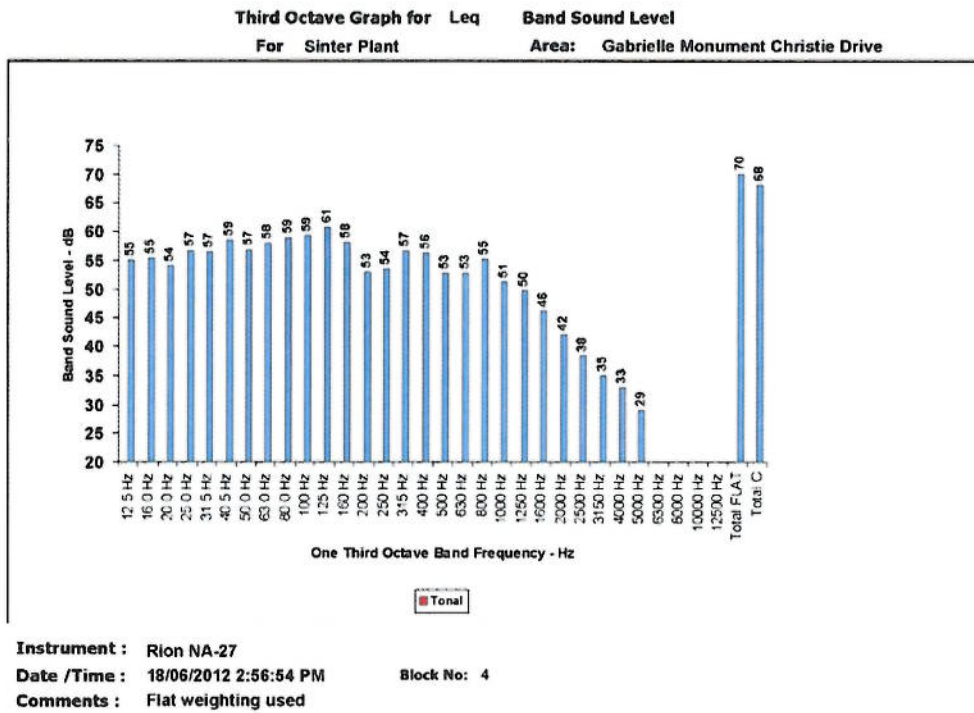


Figure B.3 The tonality check spectrum performed at the Gabriella Memorial

## 1. EXECUTIVE SUMMARY

This document has provided results of the sound levels measured for the new No.4 Fan at the Sinter Cooler at Port Kembla, installed as a part of the OPUP Project. Other noise sources associated with the project are not significant or are located within enclosing surroundings that restrict noise emission.

The noise compliance objectives for this source were for it to achieve a contribution sound level of not greater than 35 dB(A). Also, the sound emission is to be non-tonal.

Measurements of the sound levels of the No.4 fan operating show it to have a non-tonal sound spectrum.

The total calculated sound level from all components of the new fan is 27 dB(A) at the nearest residential receiver in Merrett Avenue Cringila, and 16 dB(A) at the nearest residential receiver in Home Street Port Kembla. This indicates that the contribution objective sound level has been achieved.

The measured environmental sound level at the Gabriella Memorial in Christy Drive, during full operation of the Sinter Plant, including SMERP, was 57 dB(A)  $L_{Aeq,15-min}$ , compared to the SMERP objective at that location, of 70 dB(A). This indicates that the OPUP Project has not caused the noise emissions from the Sinter Plant to increase above limit conditions.

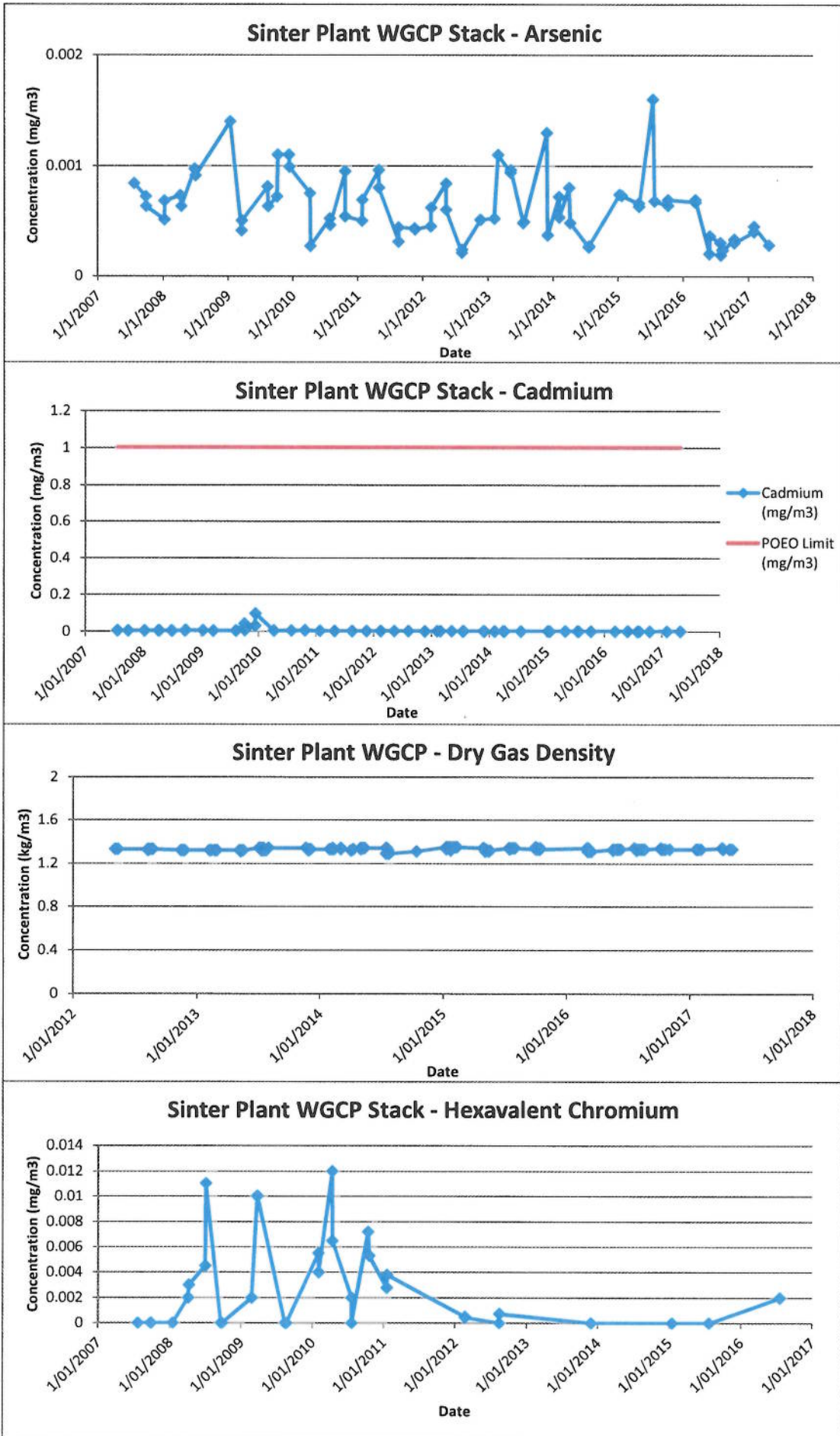
The measured long-term environmental statistical sound levels for the nearest residential receiver locations show no significant change in long-term statistical sound levels has occurred.

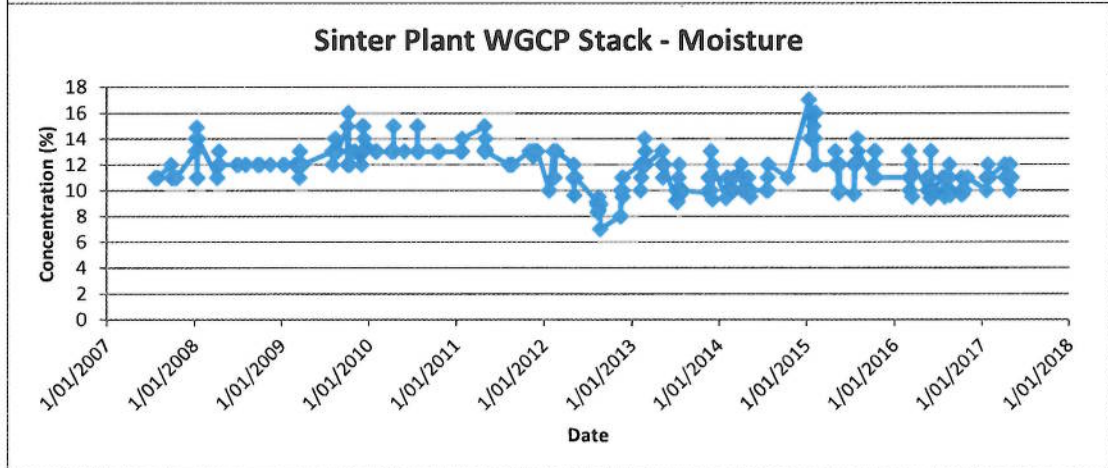
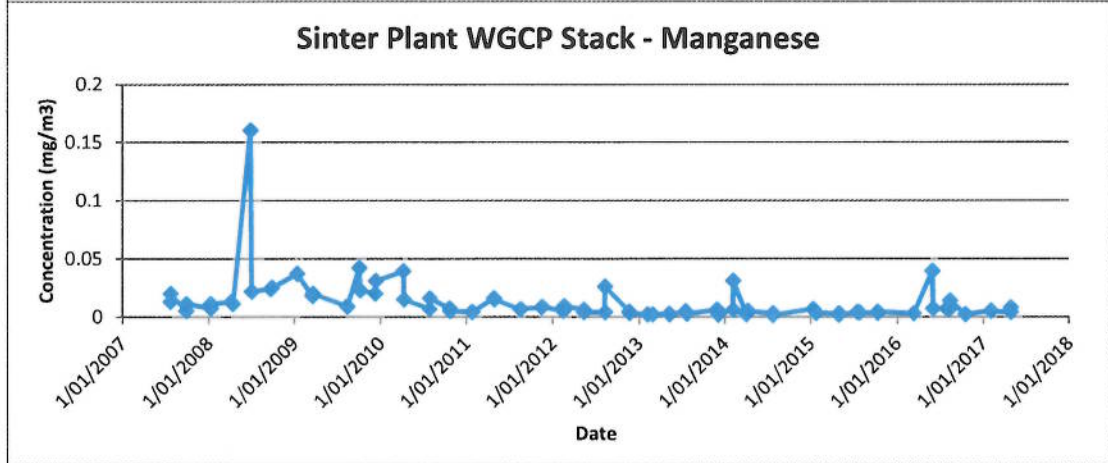
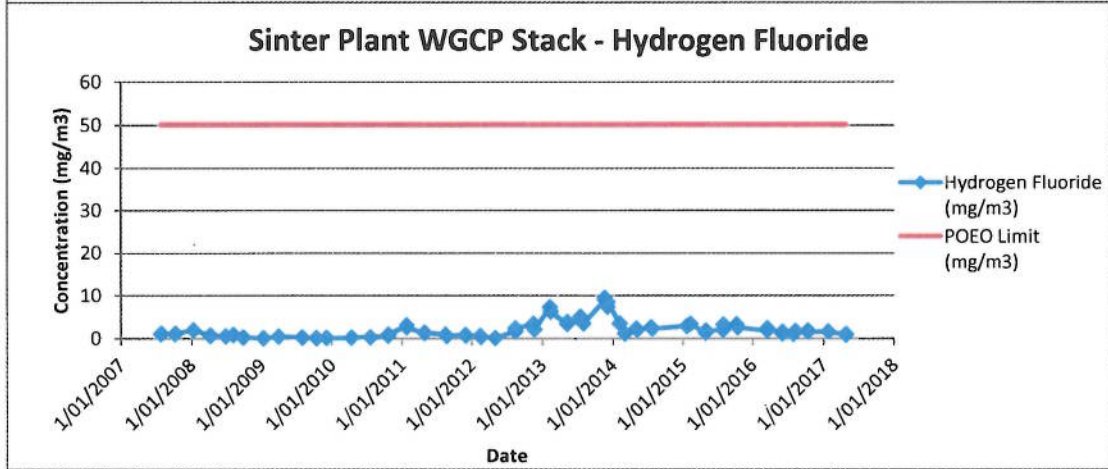
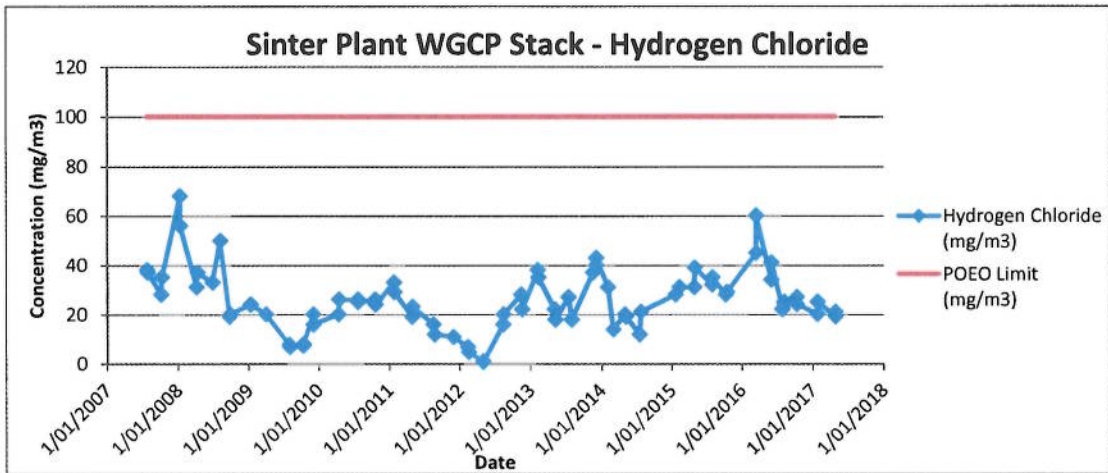
It is the considered view of this study that these assessments indicate that the OPUP Project has achieved compliance with the noise objectives given in the development consent.

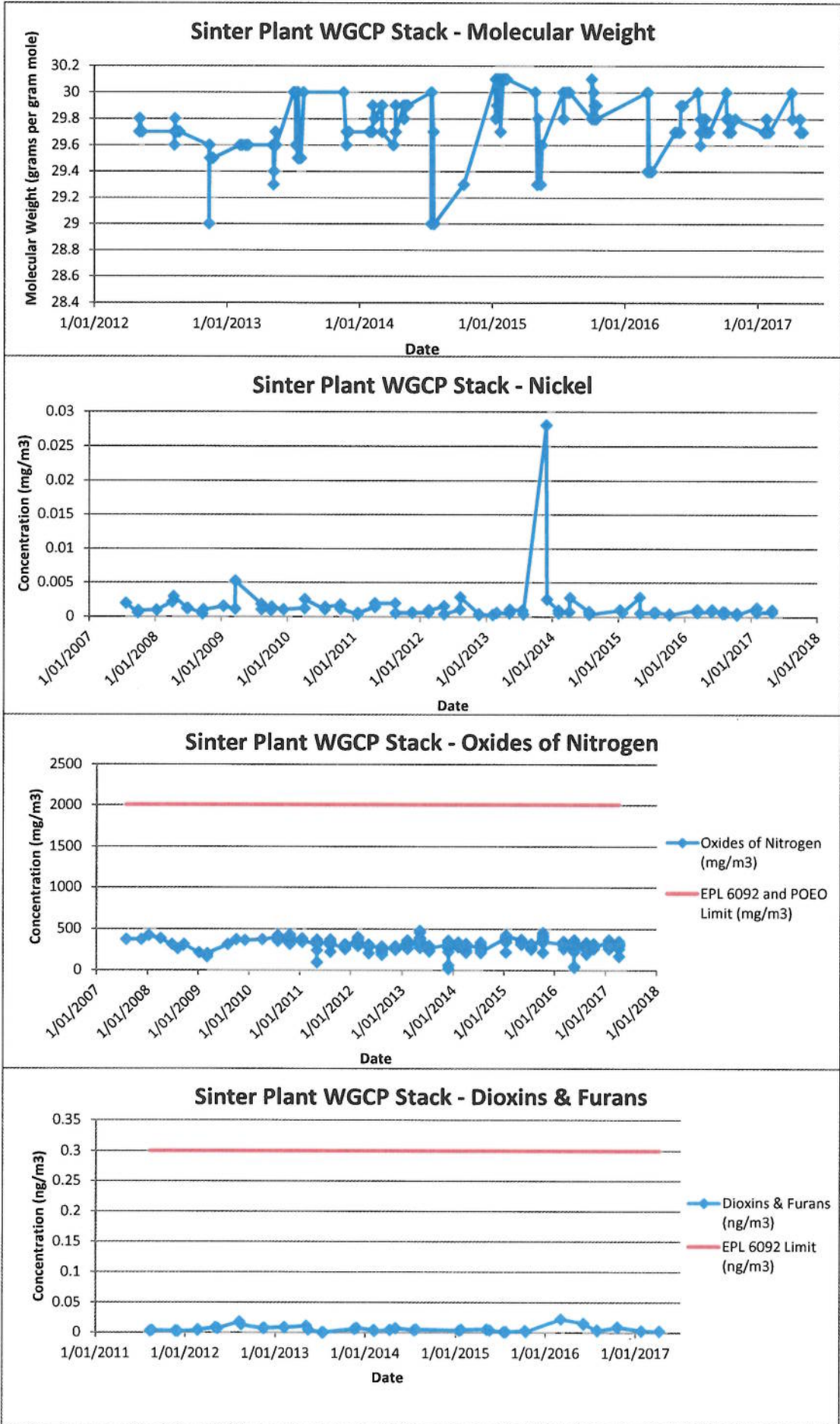
BlueScope Steel utilises an ongoing complaints and enquiries receiving and recording system. This has been in operation for many years to allow members of the community to report complaints or make enquiries about any aspect of the operations. No noise complaints have been received relating to the Ore Preparation Upgrade Project.



Attachment 5.

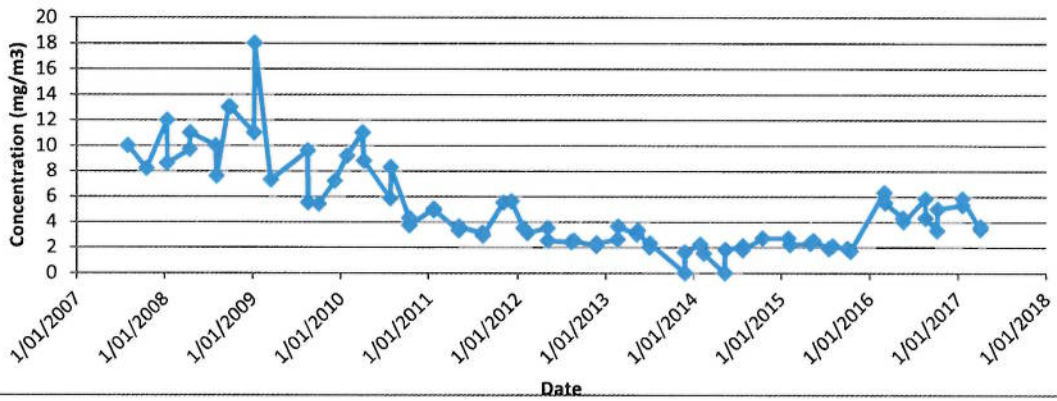




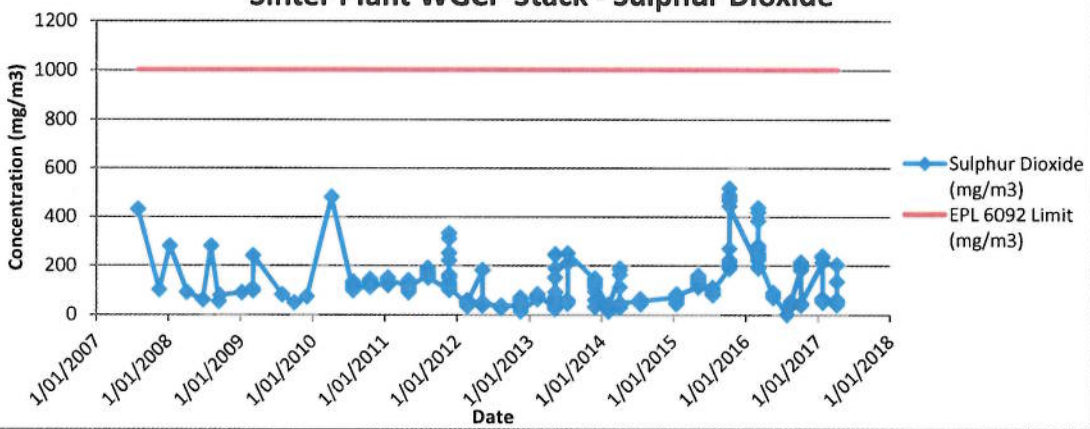




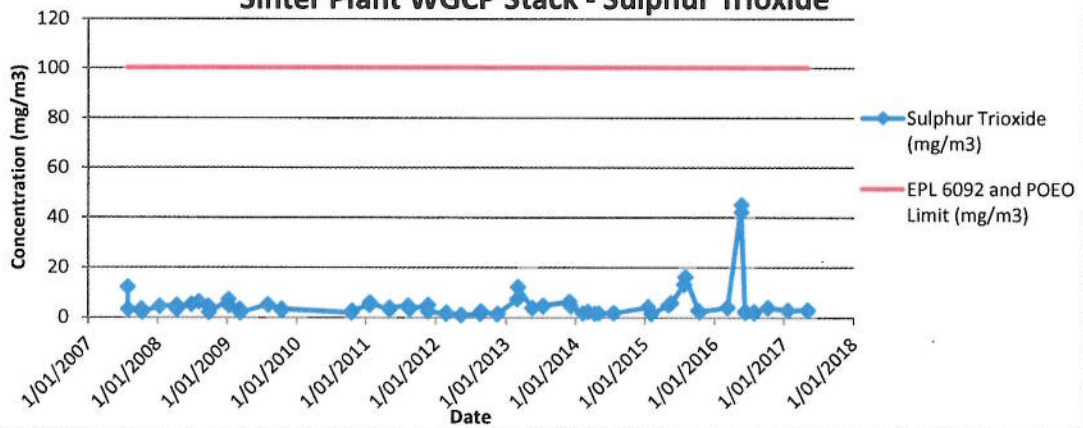
**Sinter Plant WGCP Stack - Particulate Matter below 10µm**



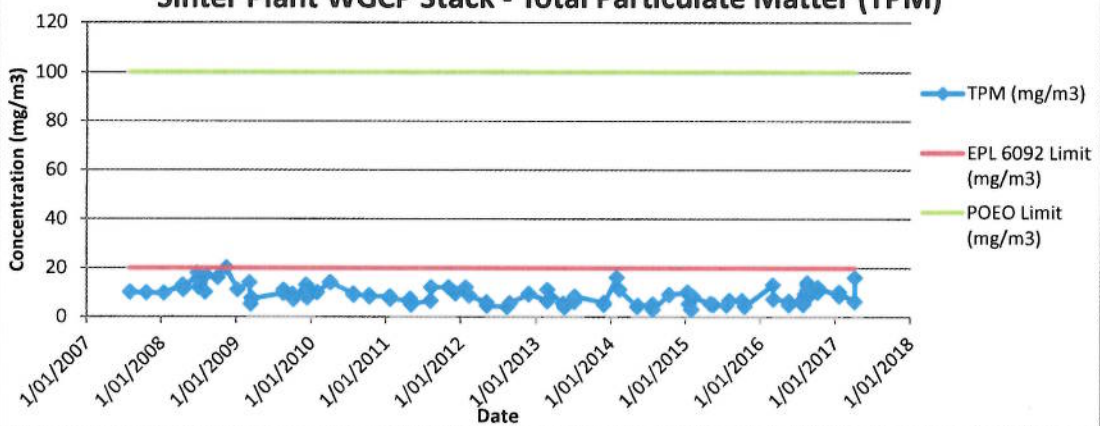
**Sinter Plant WGCP Stack - Sulphur Dioxide**

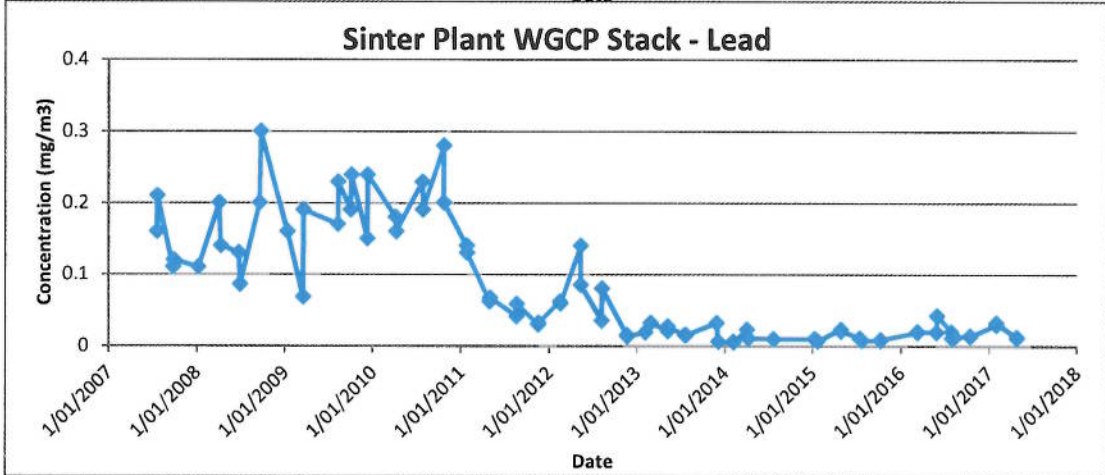
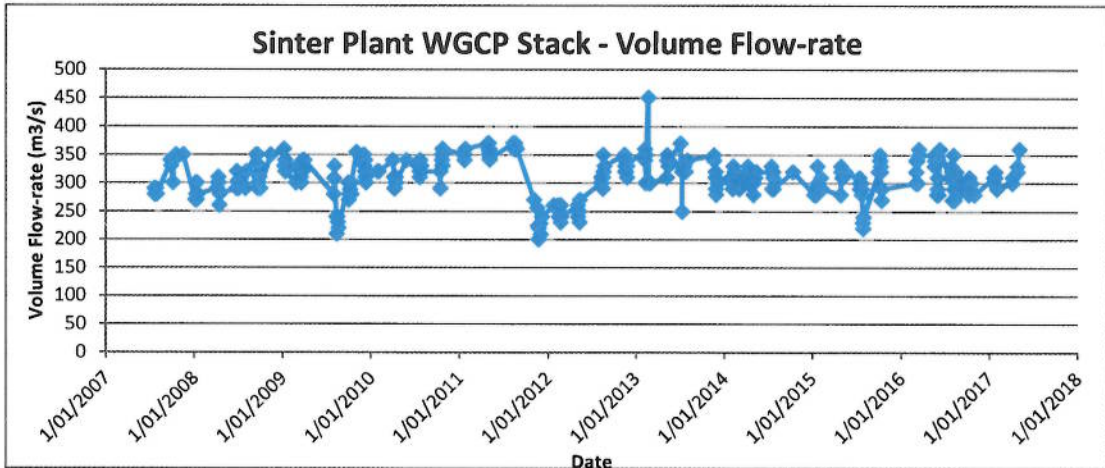


**Sinter Plant WGCP Stack - Sulphur Trioxide**



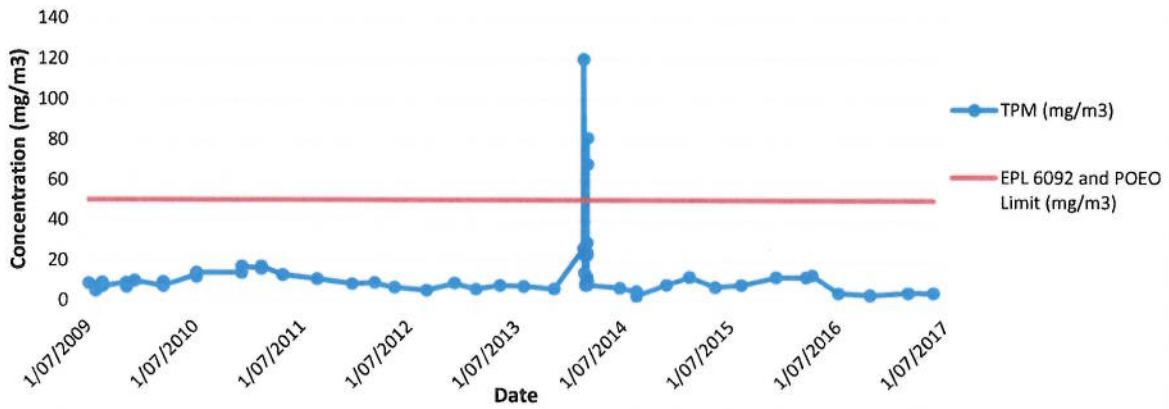
**Sinter Plant WGCP Stack - Total Particulate Matter (TPM)**



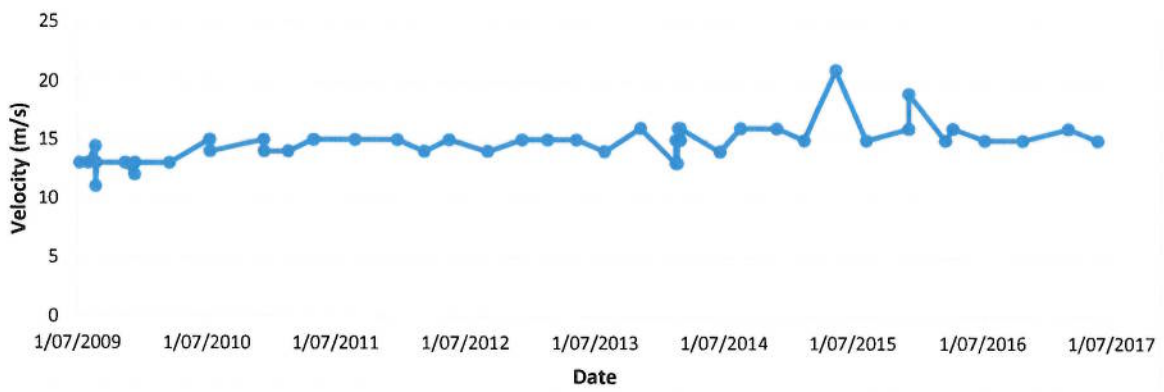


Attachment 6.

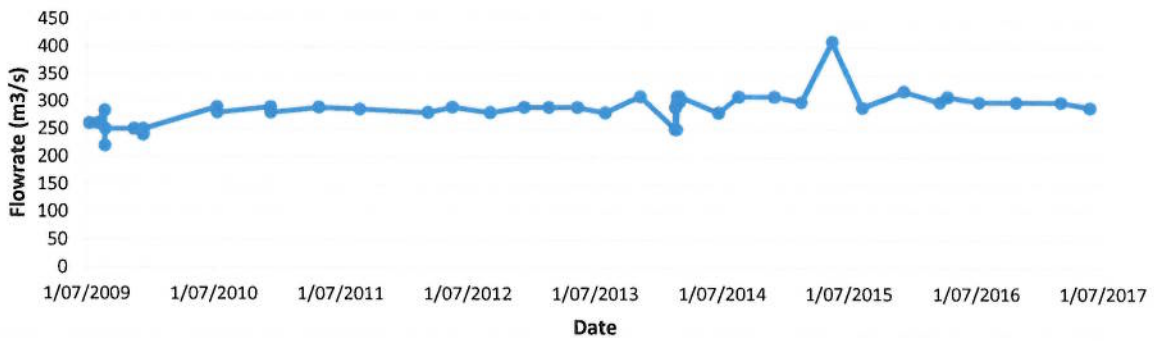
### Sinter Plant Room Dedusting Stack - Total Particulate Matter



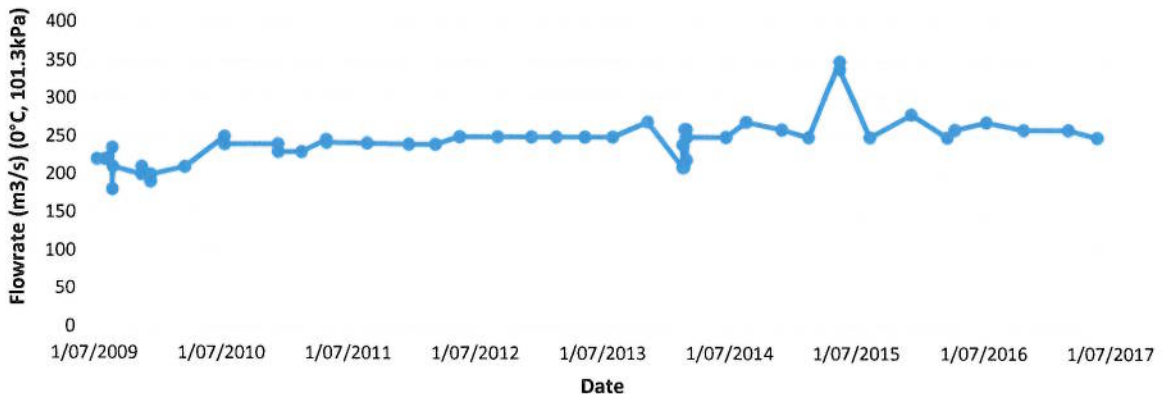
### Sinter Plant Room Dedusting Stack - Velocity



### Sinter Plant Room Dedusting Stack - Volume Flow-rate (Actual)



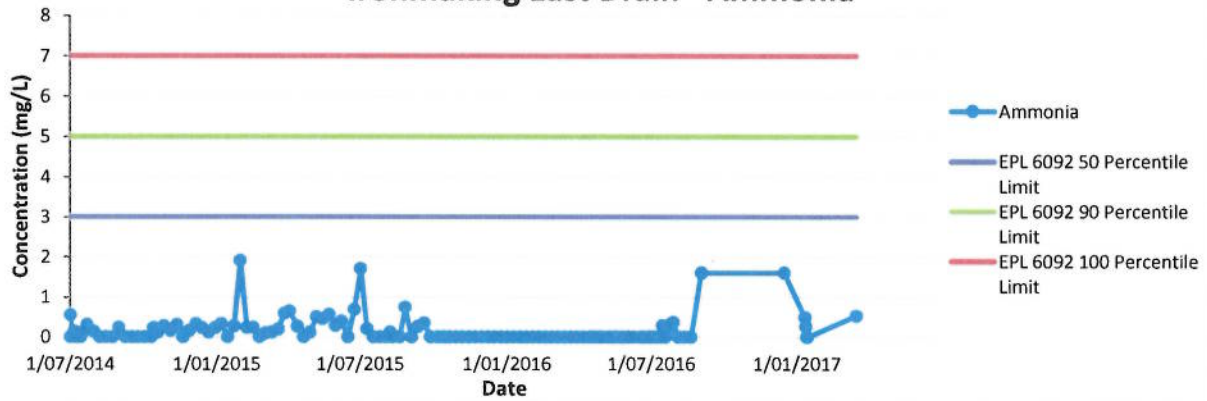
### Sinter Plant Room Dedusting Stack - Volume Flow-rate (Dry)



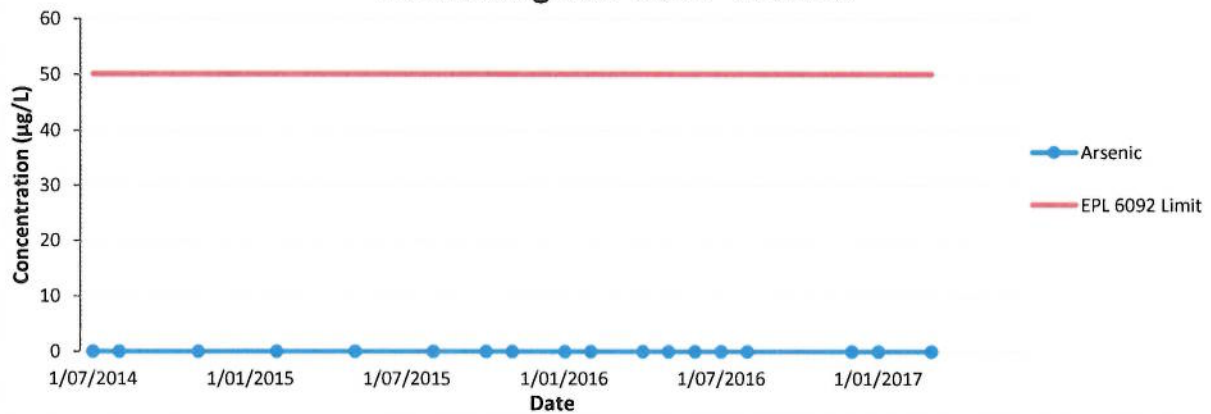


Attachment 7.

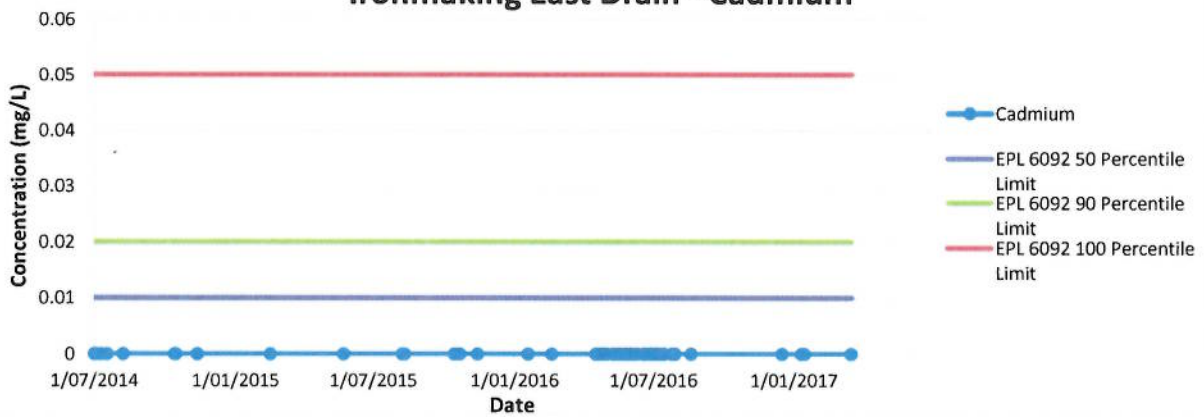
### Ironmaking East Drain - Ammonia



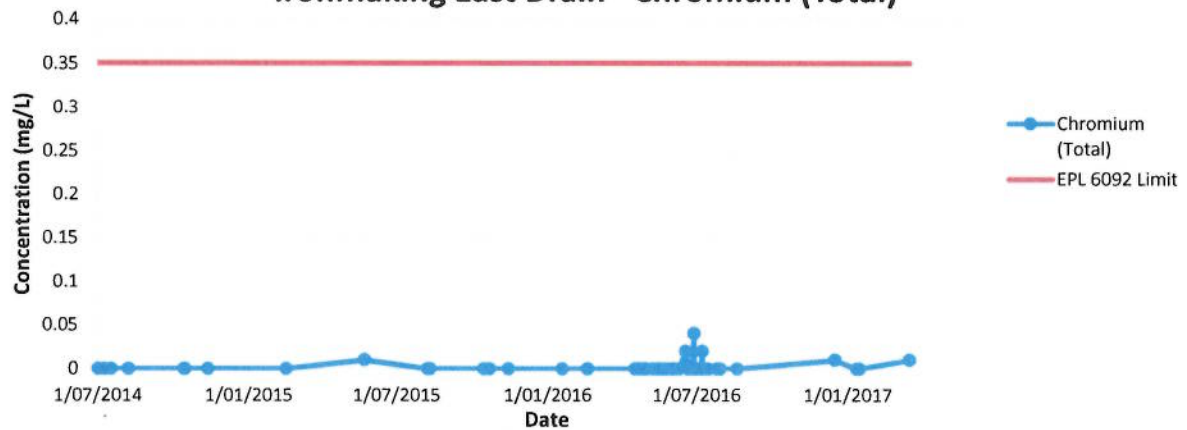
### Ironmaking East Drain - Arsenic



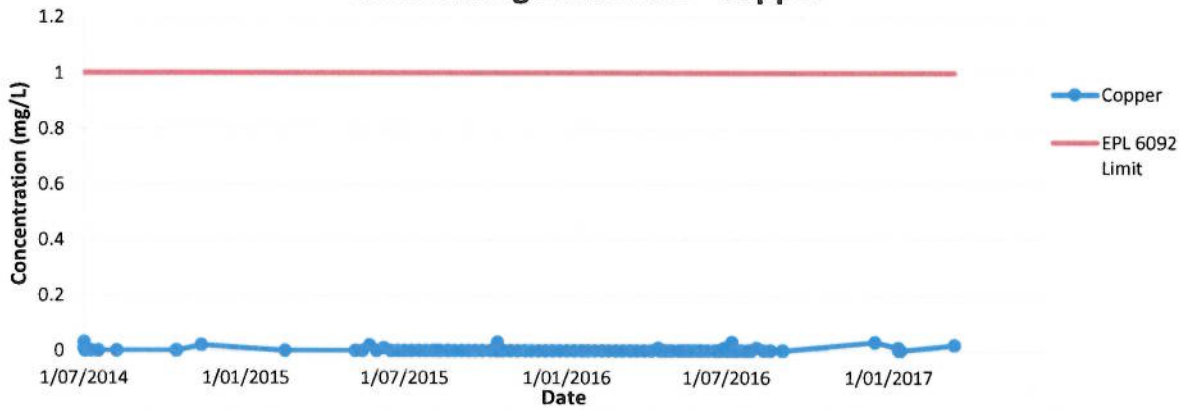
### Ironmaking East Drain - Cadmium



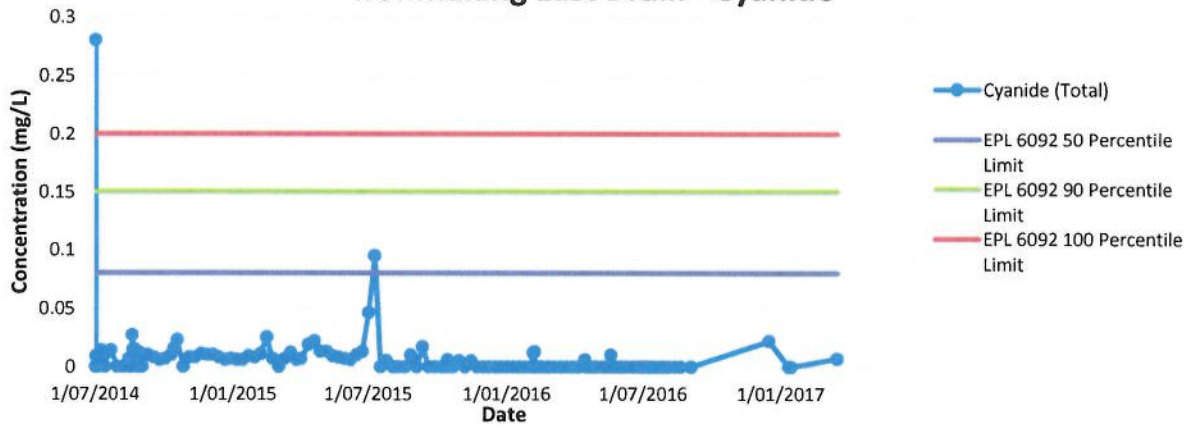
### Ironmaking East Drain - Chromium (Total)



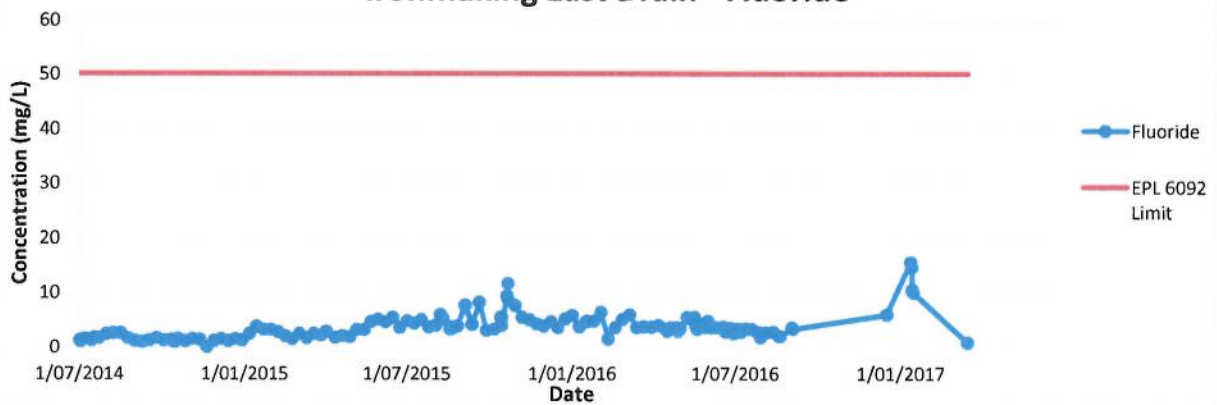
### Ironmaking East Drain - Copper



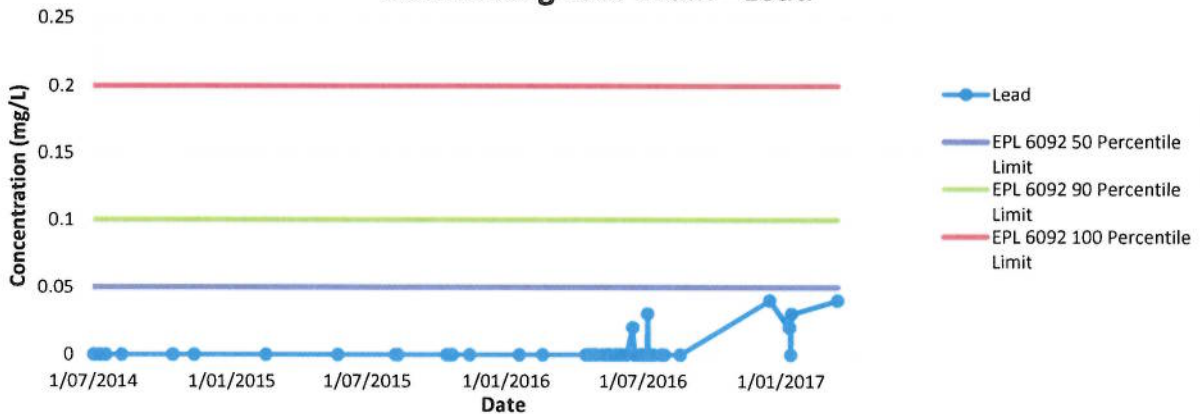
### Ironmaking East Drain - Cyanide

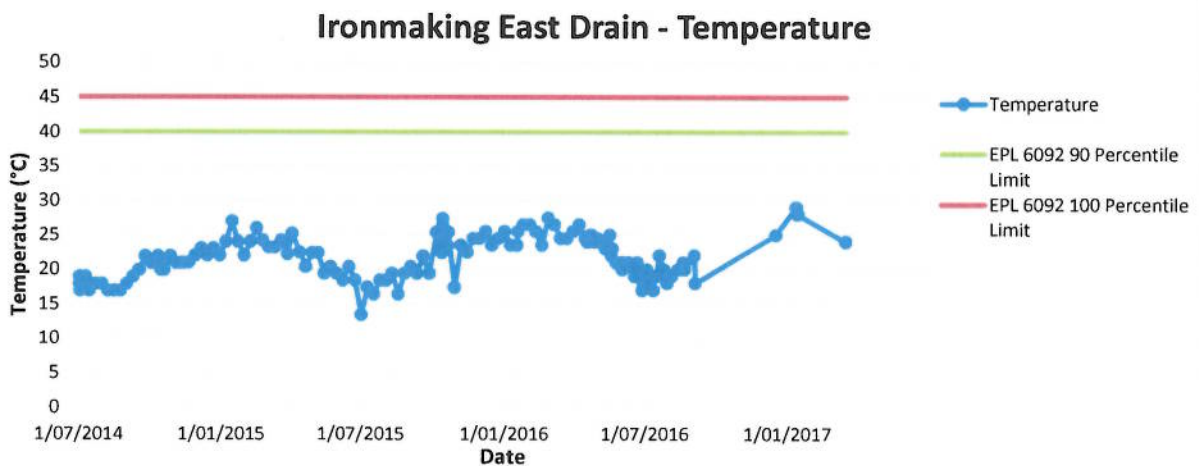
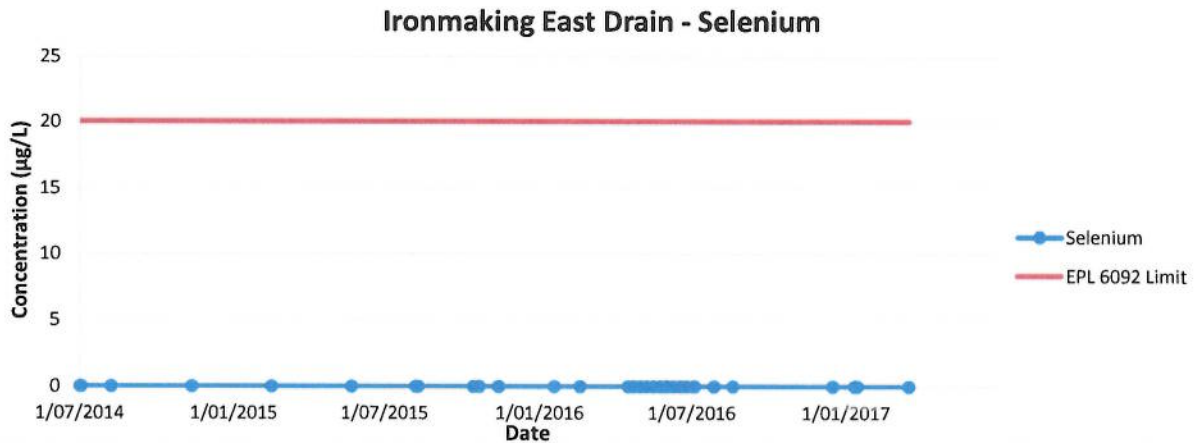
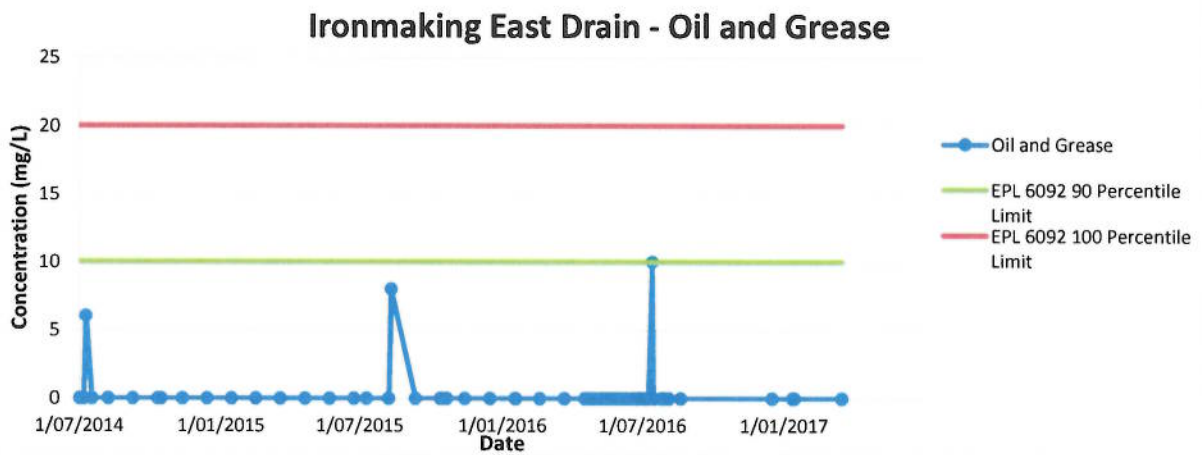
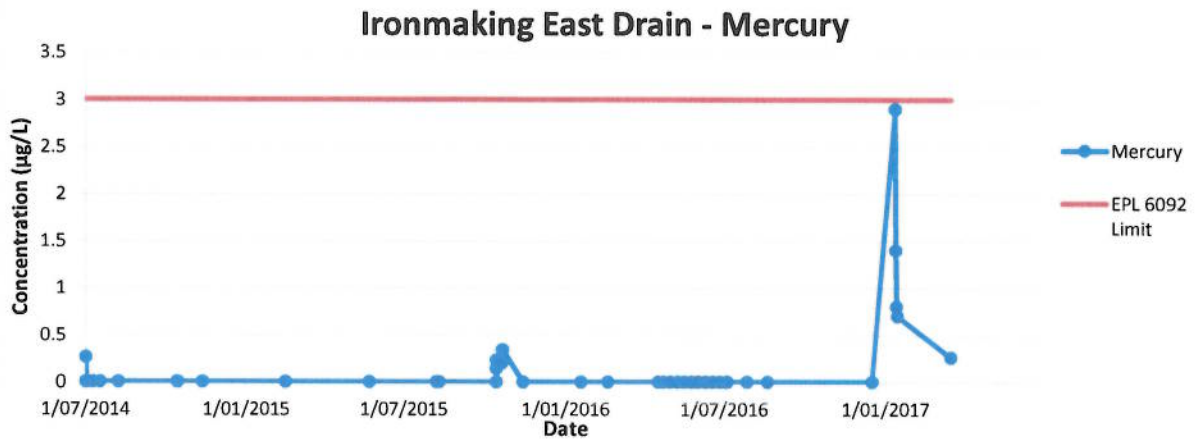


### Ironmaking East Drain - Fluoride



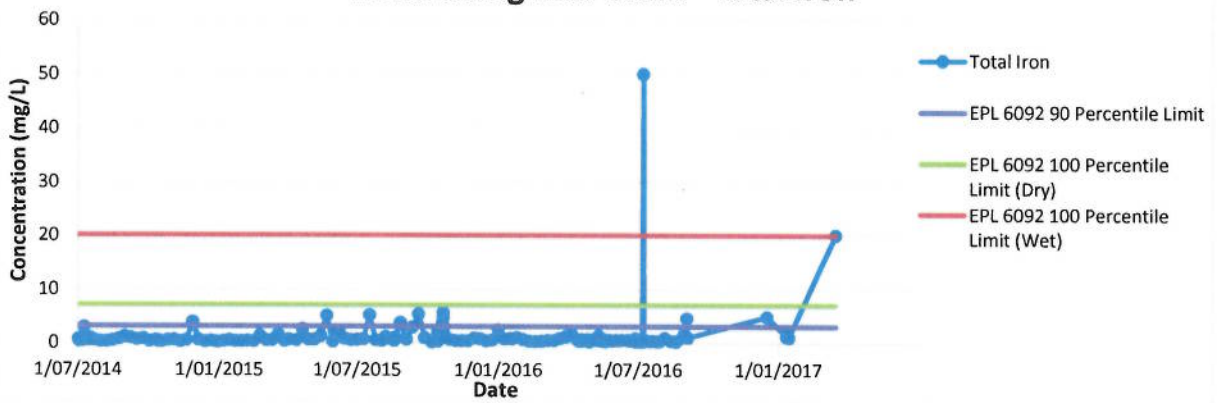
### Ironmaking East Drain - Lead



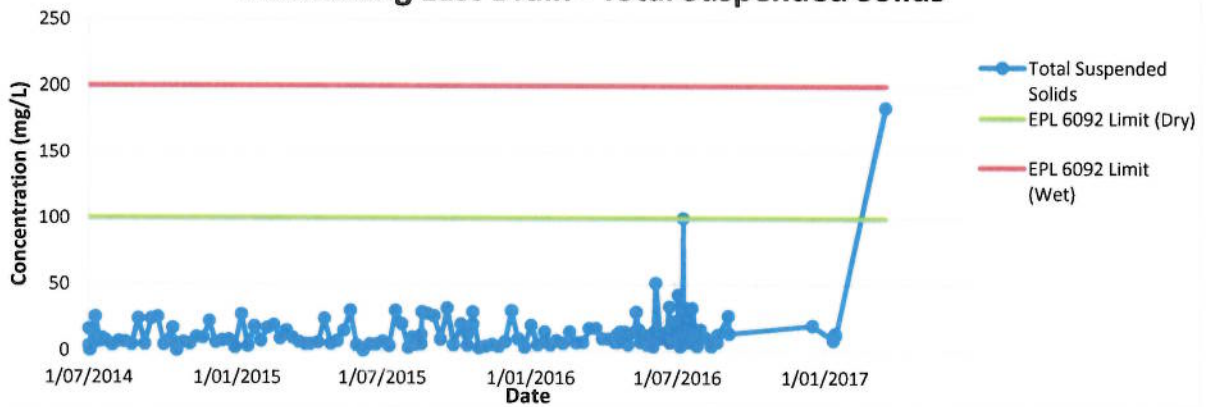




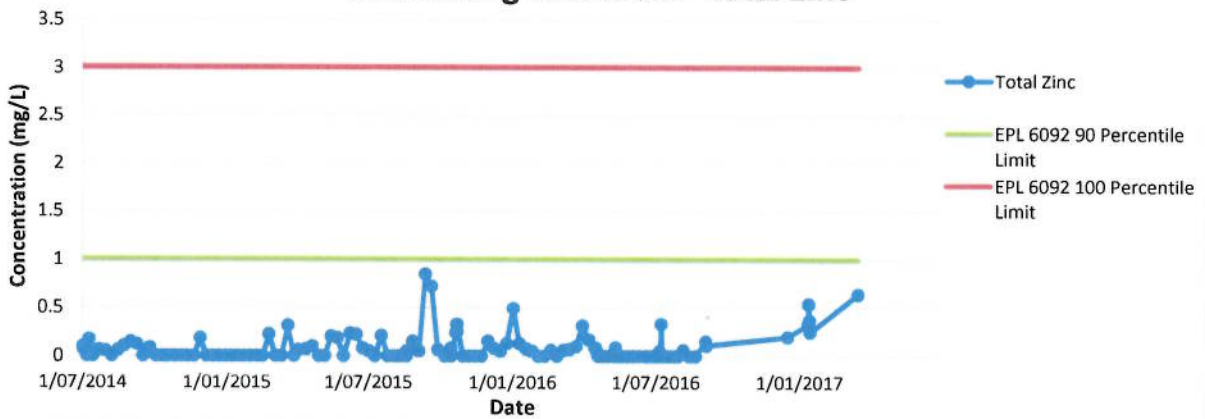
### Ironmaking East Drain - Total Iron



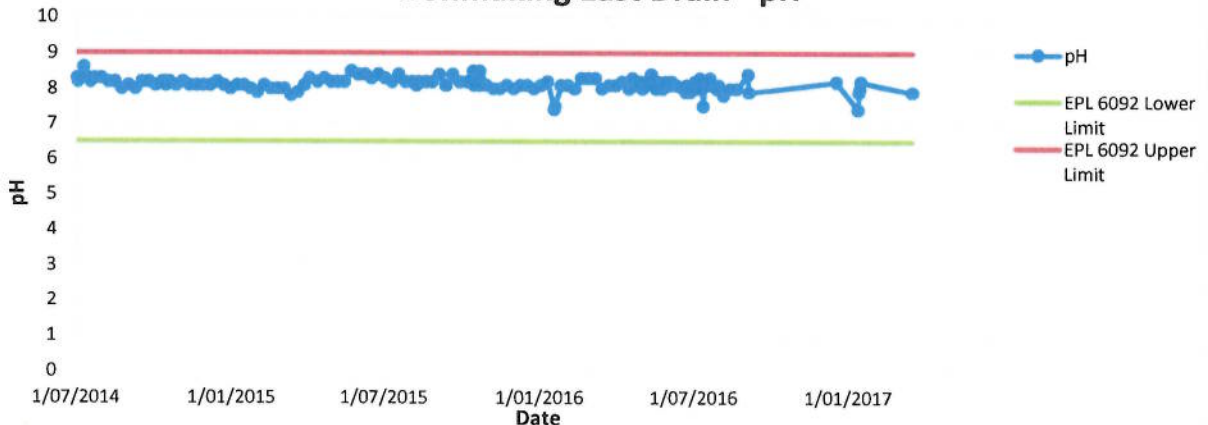
### Ironmaking East Drain - Total Suspended Solids



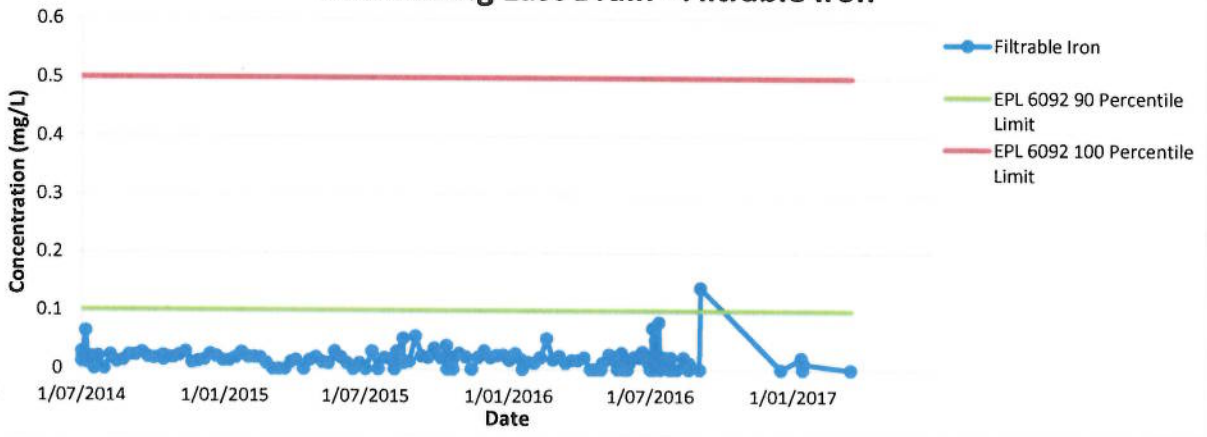
### Ironmaking East Drain - Total Zinc



### Ironmaking East Drain - pH



### Ironmaking East Drain - Filtrable Iron



Attachment 8.



IRONMAKING EAST DRAIN  
EPA ID POINT 89 LOCATION