

NZ Steel – Glenbrook Steel Mill Air Discharge Permit Replacement Application

Appendix L to the Assessment of Effects on the Environment Comparison of Existing Conditions to Proposed Conditions

Definitions

Council	Means Auckland Council (including the nominated personnel such as monitoring and compliance officer(s)).
Site	Means all of the land owned by NZ Steel (including the farmland which provides a buffer around the Operational Area) and shown on Figure 1.
Operational Area	Means the area within the Site used for the production of iron and steel and shown on Figure 1.

Existing Condition No #	Existing Condition ¹	Proposed Condition	Proposed Condition No #	Comment or Change from existing condition (where applicable)
General Conditions				
1	That the servants or agents of the Council shall be permitted access to the relevant parts of the property at all reasonable times, for the purpose of carrying out inspections, surveys, investigations, tests, measurements or taking samples.	Council shall be permitted access to the relevant parts of the Site at all reasonable times, for the purpose of carrying out inspections, surveys, investigations, tests, measurements or taking samples.	2	The proposed wording has been updated to current standard practice, the purpose of the condition remains unchanged.
2	That the Consent Holder shall, operate the plant and associated processes generally in accordance with the documentation submitted to Council as part of application number 14317, where not amended by the conditions of this resource consent. No alterations shall be made to the plant or processes that do not, or are not likely to, comply with the provisions of this consent, a regional rule, or regulations under the Resource Management Act 1991, except as approved by the manager in accordance with Conditions 41, 46 and 47.	The Consent Holder shall undertake operation of the Steel Mill and its associated processes generally in accordance with the documentation submitted to Council as part of application [insert reference number], where not amended by the conditions of this resource consent. This shall not preclude changes to plant or processes where the effects are the same or similar in character, intensity, and scale to the effects described by the application documents.	1	The proposed wording is similar to the existing wording. The second half of the condition has been amended to ensure that the existing provision for alterations to the plant is retained, but with an effects based approach. It is proposed that this condition be General Condition 1, consistent with current practice.
2A	<i>Under section 125 of the RMA, this consent lapses twelve (12) months after the date it is granted unless: a. The consent is given effect to; or b. The council extends the period after which the consent lapses.</i>			Not applicable. As this is an application for a replacement resource consent, and the discharges to air currently occur, there is no requirement for a section 125 lapse condition.
2B	<i>Under section 123 of the RMA, this consent expires on 1 November 2021, unless it has been surrendered or been cancelled at an earlier date pursuant to the Resource Management Act.</i>	Under section 123 of the RMA, this consent expires on [insert date] [35 years from commencement of consent], unless it has been surrendered or been cancelled at an earlier date pursuant to the Resource Management Act.	3	This condition is proposed to be added to reflect current practice for setting the expiry date. Consent is sought for 35 years, and therefore it is proposed that the date included in this condition is 35 years from the commencement date.

¹ Note that the Existing Conditions listed are the conditions of Permit 14317. Where there are additional relevant conditions/changes made by other permits/variations (including the Commercial Iron Plating Permit and variation R/VCC/2014/4218), these are included/shown in *italics*.

Existing Condition No #	Existing Condition ¹	Proposed Condition	Proposed Condition No #	Comment or Change from existing condition (where applicable)
2C	<p>The consent holder shall pay the council an initial consent compliance monitoring charge of \$1020 (inclusive of GST), plus any further monitoring charge or charges to recover the actual and reasonable costs incurred to ensure compliance with the conditions attached to this consent.</p> <p><u>Advice note:</u> The initial monitoring deposit is to cover the cost of inspecting the site, carrying out tests, reviewing conditions, updating files, etc., all being work to ensure compliance with the resource consent. In order to recover actual and reasonable costs, monitoring of conditions, in excess of those covered by the deposit, shall be charged at the relevant hourly rate applicable at the time. The consent holder will be advised of the further monitoring charge. Only after all conditions of the resource consent have been met, will the council issue a letter confirming compliance on request of the consent holder.</p>	<p>The Consent Holder shall pay the Council an initial consent compliance monitoring charge of \$[insert amount] (inclusive of GST), plus any further monitoring charge or charges to recover the actual and reasonable costs incurred to ensure compliance with the conditions attached to this consent.</p> <p><u>Advice note:</u> The initial monitoring deposit is to cover the cost of inspecting the site, carrying out tests, reviewing conditions, updating files, etc., all being work to ensure compliance with the resource consent. In order to recover actual and reasonable costs, monitoring of conditions, in excess of those covered by the deposit, shall be charged at the relevant hourly rate applicable at the time. The Consent Holder will be advised of the further monitoring charge. Only after all conditions of the resource consent have been met, will the council issue a letter confirming compliance on request of the Consent Holder.</p>	4	This condition is proposed to be added to reflect current practice.
3	That the Consent Holder shall be responsible for discharges of contaminants to air from the Site and shall make any person undertaking activities on site, on its behalf, aware of any relevant conditions of this consent.	That the Consent Holder shall be responsible for discharges of contaminants to air from the Site and shall make any person undertaking activities on the Site, on its behalf, aware of any relevant conditions of this consent.	5	Largely unchanged from existing condition, amended to refer to "the Site".
4	That the Consent Holder shall at all times operate, maintain, supervise, monitor and control all processes on site so that emissions authorised by this consent are maintained at the minimum practicable level.	All processes on Site must be operated, maintained, supervised, monitored and controlled using the best practicable option to ensure that all emissions authorised by this consent are maintained at the minimum practicable level.	6	The proposed wording is Standard Condition 1 of Auckland Council Conditions Manual – Controlling emissions which addresses the matters in Existing Conditions 4 and 5. Therefore it is proposed to replace Existing Conditions 4 and 5 with Standard Condition 1.
5	That the Consent Holder shall adopt the best practicable option to remove or minimise any adverse effects on the environment beyond the boundary of the Site that arise from the exercise of this consent.			Refer above comment regarding Existing Condition 4.
Environment Committee				
		The Consent Holder shall continue to maintain the established Glenbrook Steel Mill Environment Committee for the duration of the consent in accordance with Condition 8. Membership of the Committee shall include Auckland Council compliance team, Auckland Regional Public Health, the Franklin Local Board, Ngāti Tamaoho and Ngāti Te Ata.	7	NZ Steel operates a long-established Environment Committee, and this is proposed to continue. Conditions are proposed to detail requirements associated with the Environment Committee in the consent.
		<p>The Consent Holder must use its best endeavours to ensure that the Environment Committee meets at least annually, and the Consent Holder shall annually present the following information to the Environment Committee:</p> <ul style="list-style-type: none"> (a) A summary of the process monitoring data collected in accordance with Condition 24. (b) A summary of the emission testing data provided to Council in accordance with Condition 25, details of any exceedances of the limits in Condition 9, and any subsequent action to investigate and if necessary to remedy any exceedances. (c) A summary of all ambient air quality and meteorological monitoring undertaken in accordance with Conditions 28, 29 and 30, and summary details of exceedances notified to Council in accordance with Condition 32. (d) A summary of any complaints received and provided to Council in accordance with Condition 38. 	8	

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		(e) Details of any identified emerging trends with respect to the information presented in accordance with subclauses (a) to (d) above, and including as a result of comparison with data previously collected and reported where relevant.																																																											
Limit Conditions																																																													
6	<p>That without prejudice to the generality of Condition 4, the discharge of specified air pollutants from the specified sources shall not exceed the corresponding emission rates set out hereto:</p> <table border="1" data-bbox="341 625 1133 1581"> <thead> <tr> <th>SOURCE</th> <th>Pollutant</th> <th>Emission not to exceed (mg/m³)</th> </tr> </thead> <tbody> <tr> <td>Multiple hearth furnaces</td> <td>Particulate matter</td> <td>75</td> </tr> <tr> <td rowspan="2">Kilns</td> <td>Particulate matter</td> <td>75</td> </tr> <tr> <td>Carbon monoxide</td> <td>3750</td> </tr> <tr> <td>Vanadium Converter</td> <td>Particulate matter</td> <td>25</td> </tr> <tr> <td>Melter metalside baghouse</td> <td>Particulate matter</td> <td>50</td> </tr> <tr> <td>Melter slagside baghouse</td> <td>Particulate matter</td> <td>50</td> </tr> <tr> <td rowspan="2">KOBM primary waste gas scrubber (Flare stack)</td> <td>Particulate matter</td> <td>200</td> </tr> <tr> <td>Particulate matter (annual average of all results)</td> <td>160</td> </tr> <tr> <td>Pipe mill zinc blow-out system</td> <td>Particulate matter</td> <td>125</td> </tr> <tr> <td>Pipe mill zinc pot Baghouse</td> <td>Particulate matter</td> <td>10</td> </tr> <tr> <td>Millscale & iron sand drier (SteelServ)</td> <td>Particulate matter</td> <td>125</td> </tr> <tr> <td>Acid Regeneration Plant</td> <td>Hydrogen chloride</td> <td>45</td> </tr> <tr> <td>Pickle line fume scrubber</td> <td>Hydrogen chloride</td> <td>20</td> </tr> </tbody> </table> <p>All emission concentrations shall be corrected to zero degrees Celsius, one atmosphere pressure and dry gas basis. All individual tests shall not exceed the above limit conditions.</p>	SOURCE	Pollutant	Emission not to exceed (mg/m ³)	Multiple hearth furnaces	Particulate matter	75	Kilns	Particulate matter	75	Carbon monoxide	3750	Vanadium Converter	Particulate matter	25	Melter metalside baghouse	Particulate matter	50	Melter slagside baghouse	Particulate matter	50	KOBM primary waste gas scrubber (Flare stack)	Particulate matter	200	Particulate matter (annual average of all results)	160	Pipe mill zinc blow-out system	Particulate matter	125	Pipe mill zinc pot Baghouse	Particulate matter	10	Millscale & iron sand drier (SteelServ)	Particulate matter	125	Acid Regeneration Plant	Hydrogen chloride	45	Pickle line fume scrubber	Hydrogen chloride	20	<p>That without prejudice to the generality of Condition 6, the discharge of specified air pollutants from the specified sources shall not exceed the concentrations below:</p> <table border="1" data-bbox="1157 625 1949 1035"> <thead> <tr> <th>SOURCE</th> <th>Contaminant</th> <th>Emission not to exceed (mg/m³)</th> </tr> </thead> <tbody> <tr> <td>Multiple hearth furnaces</td> <td>Particulate matter</td> <td>75</td> </tr> <tr> <td rowspan="2">Kilns</td> <td>Particulate matter</td> <td>75</td> </tr> <tr> <td>Carbon monoxide</td> <td>3750</td> </tr> <tr> <td>Melter metalside baghouse</td> <td>PM_{2.5}</td> <td>15</td> </tr> <tr> <td>Melter slagside baghouse</td> <td>PM_{2.5}</td> <td>15</td> </tr> </tbody> </table> <p>All emission concentrations shall be corrected to zero degrees Celsius, one atmosphere pressure and dry gas basis. All individual tests shall not exceed the above limit conditions.</p>	SOURCE	Contaminant	Emission not to exceed (mg/m ³)	Multiple hearth furnaces	Particulate matter	75	Kilns	Particulate matter	75	Carbon monoxide	3750	Melter metalside baghouse	PM _{2.5}	15	Melter slagside baghouse	PM _{2.5}	15	9	<p>The condition is proposed to be amended as follows:</p> <ul style="list-style-type: none"> Update language in first part of condition to plain English. Change 'Pollutant' in Column 2 heading to read 'Contaminant', consistent with Proposed Condition 25. Removal of the following sources as the AQA confirms that they are not causing any material off-site effect and the effectiveness/efficiency of the emission control equipment are monitored in other ways (such as through operational procedures): <ul style="list-style-type: none"> Pipe mill zinc blow-out system Pipe mill zinc pot Baghouse Millscale & iron sand drier (SteelServ) Acid Regeneration Plant Pickle line fume scrubber Removal of the Vanadium Converter from the source list because it was never built. Removal of the KOBM flare stack as stack testing is a significant safety hazard. In addition, the particulate and gaseous emissions from this stack are not significant in relation to other emissions on Site. Change of contaminant of Melter metalside baghouse and Melter slagside baghouse from particulate matter to PM_{2.5}, as this is the contaminant of most interest with regard to health impacts, and PM_{2.5} is proposed to be addressed in the NES in the future. The concentration limits for both sources are proposed to be 15 mg/m³. <p>With the exception of the above, there are no proposed changes to the Existing Consent limits. Even though testing is required for NO_x at MHFs, Kilns and slab reheat furnace in accordance with Proposed Condition 25, limits have not been proposed as the results are being monitored to evaluate trends over time (to be reported to Environment Committee and in five-yearly report).</p>
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7	<p>That beyond the boundary of the Site there shall be no odour, dust, particulate, smoke, ash or fume caused by discharges from the Iron and Steel Zone which, in the opinion of an enforcement officer, is noxious, dangerous, offensive or objectionable.</p>	<p>With the exception of emissions anticipated in the application and water vapour, there shall be no noxious, dangerous, objectionable or offensive visible emissions, hazardous air pollutants, odour or dust arising from any activity on Site, to the extent that they cause an adverse effect at or beyond the boundary of the Site.</p>	10	<p>The proposed wording has the same intent as the existing wording (to control noxious, dangerous, objectionable or offensive emissions beyond the boundary of the Site) but has been updated to combine Existing Conditions 7, 8 and 9 to avoid repetition, and to reflect the recommended condition</p>																																																									

Existing Condition No #	Existing Condition ¹	Proposed Condition	Proposed Condition No #	Comment or Change from existing condition (where applicable)
				for managing off-site effects of diffuse dust in the Good Practice Guide for Assessing and Managing Dust.
8	That no discharges from any activity on site shall give rise to visible emissions, other than water vapour and clean steam, to an extent which, in the opinion of an enforcement officer, is noxious, dangerous, offensive or objectionable.			Existing Condition 8 is proposed to be removed as it has been incorporated in Proposed Condition 10.
9	That beyond the boundary of the Site there shall be no discharge into air of any hazardous air pollutant, caused by discharges from the Iron and Steel Zone, which is present at a concentration that is, or is likely to be, detrimental to human health or the environment.			Existing Condition 9 is proposed to be removed as it has been incorporated in Proposed Condition 10.
Process Conditions				
10	That dust generation by vehicle movements shall be maintained at the minimum practicable level. The measures adopted shall include procedures for watering unsealed roads, watering or cleaning of sealed roads, and restricting vehicle speeds on unsealed roads.	That dust generation by vehicle movements shall be maintained at the minimum practicable level. The measures adopted shall include procedures for watering unsealed roads and yards, watering or cleaning of sealed roads, and restricting vehicle speeds on unsealed roads and yards.	11	Largely unchanged from existing condition. Reference has been added to unsealed yards.
11	That fugitive emissions of particulate matter from pollution control equipment and from handling and transfer of dusty materials shall be maintained at the minimum practicable level. In particular, conveyors carrying dusty materials shall be fitted with drop chutes, and enclosures or covers as appropriate.	That fugitive emissions of particulate matter from manufacturing processes, pollution control equipment and from handling and transfer of dusty materials shall be maintained at the minimum practicable level. In particular, conveyors carrying dusty materials shall be fitted with drop chutes, and enclosures or covers as appropriate.	12	Largely unchanged from existing condition. Reference has been added to "manufacturing processes".
12	That emissions arising from the dumping of raw primary concentrate and char (RPCC), and from the plating of molten iron shall be kept to a practicable minimum.	That emissions arising from the tipping of reduced primary concentrate and char (RPCC) shall be kept to a practicable minimum.	13	The proposed wording has been updated to refer to 'tipping' rather than 'dumping' and from 'raw' to 'reduced' to reflect language used by NZ Steel on site. Reference to iron plating has been removed from this condition as this is proposed to be managed by Proposed Condition 14.
12A	<i>The consent holder shall ensure that the maximum daily volume of Commercial Iron Plating produced does not exceed 500 tonnes per day and to a maximum of 210 tonnes an hour</i>	For the first 12 months following commencement of the consent, the Consent Holder shall ensure that emissions arising from iron plating associated with process disruptions are kept to a practicable minimum. Within 12 months of commencement of the consent, the Consent Holder shall ensure that a minimum of 90% of all iron plating activities (including both process disruption and Commercial Iron Plating) will be subject to fume suppression.	14	It is proposed to remove the existing daily volume limit for commercial iron plating, and replace it with a requirement for fume suppression for a minimum of 90% of all process disruption and commercial iron plating. This requirement is more directly related to management of effects. As the fume suppression equipment is in a commissioning phase, a 12 month implementation period has been proposed, including applying a similar requirement to that in Proposed Condition 13 for emissions associated with process disruption until fume suppression equipment is in place.
13	That the flaring of melter gas shall be kept to a practicable minimum.	That the flaring of melter gas shall be kept to a practicable minimum.	15	Unchanged from existing condition.
14	That Oxygen Steel Making Furnace (KOBM) primary waste gas flare outages and Melter flare outages shall be kept to a practicable minimum to ensure discharges of unburnt carbon monoxide are minimised.	That Oxygen Steel Making Furnace (KOBM) primary waste gas flare outages and Melter flare outages shall be kept to a practicable minimum to ensure discharges of unburnt carbon monoxide are minimised.	16	Unchanged from existing condition.

Existing Condition No #	Existing Condition ¹	Proposed Condition	Proposed Condition No #	Comment or Change from existing condition (where applicable)
15	That the Consent holder shall ensure that no material is disposed of by open burning in the Iron and Steel Zone.	That the Consent Holder shall ensure that no material is disposed of by open burning on the Site.	17	The proposed wording has been updated to remove reference to the historical 'Iron and Steel Zone', which has been replaced in this application with the term 'Operational Area'.
16	That the sulphur content of the coal used in the Multi Hearth Furnaces shall not exceed 0.5% by weight.	That the sulphur content of the coal in the feed to the Multi Hearth Furnaces shall not exceed 0.5% by weight.	18	Largely unchanged from existing condition. Wording has been amended to ensure that it is clear that the sulphur content control applies to the coal fed into the MHFs. This enables a blend of coals to be used.
Operation of Air Pollution Control Equipment				
17	That, with the exception of the Pan Conveyer scrubbers, no part of the process shall commence operation without the associated air pollution control equipment being fully operational and functioning correctly. Should a breakdown of control equipment occur during processing, the Consent Holder shall cease operation of all associated plant as soon as practicable and shall repair the control equipment as soon as practicable.	That, with the exception of the Pan Conveyer scrubbers, no part of the process shall commence operation without the associated air pollution control equipment being fully operational and functioning correctly. Should a breakdown of control equipment occur during processing, the Consent Holder shall cease operation of all associated plant as soon as practicable and shall repair the control equipment as soon as practicable.	19	Unchanged from existing condition.
18	That the Pan Conveyer scrubbers shall be fully operational and functioning correctly as much as practicable when the pan conveyer systems are operating. Any scrubber down-time that occurs during process operation shall be for maintenance purposes only.	That the Pan Conveyer scrubbers shall be fully operational and functioning correctly as much as practicable when the pan conveyer systems are operating. Any scrubber down-time that occurs during process operation shall be for maintenance purposes only.	20	Unchanged from existing condition.
19	That all air pollution control equipment and associated ducting shall be maintained in good condition and as far as practicable be free from leaks in order to prevent the escape of fugitive emissions.	That all air pollution control equipment and associated ducting shall be maintained in good condition and as far as practicable be free from leaks in order to prevent the escape of fugitive emissions.	21	Unchanged from existing condition.
20	That all ducting to air pollution control equipment shall draw sufficient negative pressure to ensure that fugitive emissions are kept to a practicable minimum.	That all ducting to air pollution control equipment shall draw sufficient negative pressure to ensure that fugitive emissions are kept to a practicable minimum.	22	Unchanged from existing condition.
21	That the paint coating line afterburner(s) shall be operated so that all waste gases from solvent-based paint application and curing are held at a minimum temperature of 750 C for the prime line afterburner and 650° C for the finish line afterburner, in excess oxygen for a minimum period of 0.5 seconds. (Amended to reflect the variation granted ² 4 November 2014 to reduce the temperature of the afterburner at the Finish Line to 650 degrees.)	That the paint coating line afterburner(s) shall be operated so that all waste gases from solvent-based paint application and curing are held at a minimum temperature of 750° C for the prime oven incinerator and 650° C for the finish oven incinerator, in excess oxygen for a minimum period of 0.5 seconds.	23	Unchanged from existing condition except minor naming change to align with NZ Steel nomenclature.
Monitoring Conditions				
Process Monitoring				
22	The Consent Holder shall monitor and record: (a) The flaring of Melter gas as a percentage of total Melter gas produced. (b) The mass of raw primary concentrate and char (RPCC) that is dumped and the amount of plating that occurs on a daily basis, and the reasons for each dumping or plating incident. (b) <i>The amount of Commercial Iron Plating that occurs on a daily basis</i> (c) Pan Conveyer scrubber maintenance downtimes.	The Consent Holder shall monitor and record: (a) The flaring of Melter gas as a percentage of total Melter gas produced (this monitoring and recording shall only be undertaken until 12 months of readings are recorded where the flaring of Melter gas is less than 10% of total Melter gas produced). (b) The mass of reduced primary concentrate and char (RPCC) that is tipped and the reason for each incident. (c) The amount of plated iron on a daily basis including:	24	The condition is proposed to be amended as follows: <ul style="list-style-type: none"> The proposed wording has been updated to reflect language used by NZ Steel on site (i.e., 'raw' has been replaced with 'reduced' in Clause (b)). Existing Condition 22(a) has been amended to include provision for monitoring and recording of the flaring of Melter gas to cease after 12 months of readings are recorded below 10% of the total.

² Application reference: R/VCC/2014/4218

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	<p>(d) The times and dates that explosion flap lifts occur at kilns and Multi Hearth Furnaces, including the reason for the flap lift incident and any remedial action taken to minimise recurrence.</p> <p>(e) The temperature of the waste gases at the exit of the (or each) afterburner (incinerator) shall be continuously monitored and recorded.</p> <p>(f) Daily inspections of the KOBM baghouse for visible emissions and damaged bags.</p>	<p>i. The purpose of the plating event (i.e., process disruption or Commercial Iron Plating); and</p> <p>ii. The use of fume suppression, as a percentage of total plated iron.</p> <p>(d) Pan Conveyer scrubber maintenance downtimes, when process operation continues.</p> <p>(e) The temperature of the waste gases at the exit of the (or each) afterburner (incinerator).</p> <p>(f) Daily inspections of all baghouses for visible emissions.</p> <p>(g) The following parameters on the KOBM primary off-gas treatment system:</p> <p>(i) Secondary scrubber differential pressure;</p> <p>(ii) Scrubber water flow rate; and</p> <p>(iii) Flame out at times when CO concentration exceeds 30% by volume.</p> <p>(h) The following parameters on the Acid Regeneration Plant:</p> <p>(i) Acid regeneration flow rate;</p> <p>(ii) Scrubber flow rate; and</p> <p>(iii) Scrubber water pH.</p> <p>(i) The sulphur content of coal in the feed to the Multi Hearth Furnaces, in percent by weight.</p>		<ul style="list-style-type: none"> A new Clause (c) has been added to separate iron plating from Clause (b) and include a requirement for monitoring and recording fume suppression, as a percentage of total plated iron. Existing Condition 22(c) has been updated to clarify that pan conveyor scrubber maintenance downtimes are to be monitored and recorded when they occur when process operation continues. Existing Condition 22(d) has been removed on the basis that, while flap lifts are an unplanned event, the reasons flap lifts occur are well understood. There is no management benefit in maintaining this record. It is noted that the overpressure that results in the flap lifts occurring is required to be released for health and safety reasons and the associated discharge is brief. Existing Condition 22(e) has been amended to remove duplication of requirement to monitor and record. Existing Condition 22(f) has been amended to extend requirement for daily inspections to all baghouses. A new Clause 22(g) has been added to include a requirement for monitoring relevant parameters associated with the KOBM primary off-gas treatment system, given replacement of stack testing with operational controls. A new clause 22(h) has been added to include a requirement for monitoring relevant parameters associated with the ARP, given replacement of stack testing with operational controls. A new Clause 22(i) has been added to include a requirement for monitoring and recording the sulphur content of coal, to enable assessment of compliance with Proposed Condition 18. Clauses have been renumbered (a) to (i). 																								
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23	<p>That in addition to the regular process monitoring, emission tests shall be conducted on the sources specified below, in accordance with the specified frequency to determine compliance with Condition 6:</p> <table border="1"> <thead> <tr> <th>SOURCE</th> <th>Contaminant</th> <th>Minimum Test Frequency</th> </tr> </thead> <tbody> <tr> <td>Multiple hearth furnaces</td> <td>Particulate matter</td> <td>6 monthly</td> </tr> <tr> <td></td> <td>Oxides of nitrogen</td> <td>1 yearly</td> </tr> <tr> <td>Kilns</td> <td>Particulate matter</td> <td>6 monthly</td> </tr> </tbody> </table>	SOURCE	Contaminant	Minimum Test Frequency	Multiple hearth furnaces	Particulate matter	6 monthly		Oxides of nitrogen	1 yearly	Kilns	Particulate matter	6 monthly	<p>That in addition to the regular process monitoring, emission tests shall be conducted on the sources specified below, in accordance with the specified frequency to determine compliance with Condition 9:</p> <table border="1"> <thead> <tr> <th>SOURCE</th> <th>Contaminant</th> <th>Minimum Test Frequency</th> </tr> </thead> <tbody> <tr> <td>Multiple hearth furnaces</td> <td>Particulate matter</td> <td>6 monthly</td> </tr> <tr> <td></td> <td>Oxides of nitrogen</td> <td>1 yearly</td> </tr> <tr> <td>Kilns</td> <td>Particulate matter</td> <td>6 monthly</td> </tr> </tbody> </table>	SOURCE	Contaminant	Minimum Test Frequency	Multiple hearth furnaces	Particulate matter	6 monthly		Oxides of nitrogen	1 yearly	Kilns	Particulate matter	6 monthly	25	<p>The condition is proposed to be amended as follows:</p> <ul style="list-style-type: none"> Removal of the following sources as (a) long term existing monitoring has established that they are not causing any material off-site effect and (b) the effectiveness/efficiency of the emission control equipment is monitored in other ways (such as through operational procedures): <ul style="list-style-type: none"> Pipe mill zinc blow-out system Pipe mill Baghouse Millscale & iron sand drier (SteelServ)
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		Carbon monoxide	6 monthly		Oxides of nitrogen	1 yearly		<ul style="list-style-type: none"> ○ Acid Regeneration Plant ○ Pickle line fume scrubber See Section 10.2 of the AQA. <ul style="list-style-type: none"> • Removal of the Vanadium Converter from the source list because it was never built. • Removal of the KOBM flare stack as stack testing is a significant safety hazard. In addition, the particulate and gaseous emission is not significant in relation to other emissions on Site. NO_x emission testing should not be required, as this is a function of the process/material additions and cannot be materially altered. • Removal of the Acid Regeneration Plant as there are issues with accurately undertaking this testing. It is more appropriate to use process monitoring to confirm ongoing performance of this plant, as set out in the AQMP. • Change of contaminant of Melter metalside baghouse and Melter slagside baghouse from particulate matter to PM_{2.5}. The performance of the baghouses is monitored through visual observation and regular checking of condition of the bags. • Added requirement to provide results to Council within 30 working days.
		Oxides of nitrogen	1 yearly		Carbon monoxide	6 monthly		
	Melter metalside baghouse	Particulate matter	3 monthly	Melter metalside baghouse	PM _{2.5}	3 monthly		
	Melter slagside baghouse	Particulate matter	3 monthly	Melter slagside baghouse	PM _{2.5}	3 monthly		
	Vanadium Converter	Particulate matter	3 monthly	Slab re-heat furnace	Oxides of nitrogen	1 yearly		
		Oxides of nitrogen	1 yearly	The results of this emission testing shall be provided to Council within 30 working days.				
	KOBM primary waste gas scrubber (Flare stack)	Particulate matter	3 monthly					
		Oxides of nitrogen	1 yearly					
	Pipe mill zinc blow-out system	Particulate matter	3 monthly					
	Pipe mill Baghouse	Particulate matter	annually					
	Slab re-heat furnace	Oxides of nitrogen	1 yearly					
	Millscale & iron sand drier	Particulate matter	6 monthly					
	Acid Regeneration Plant	Hydrogen chloride	3 monthly					
	Pickle line fume scrubber	Hydrogen chloride	annually					
24	All emission tests carried out in accordance with Condition 23 shall: <ul style="list-style-type: none"> (a) Be conducted during process conditions that are representative of normal process emissions. (b) Comprise not less than three separate samples taken on the same day with the concentration results corrected to zero degrees Celsius, one atmosphere pressure and a dry gas basis. (c) Be carried out by person/s who are IANZ accredited for the sampling methods. 			All emission tests carried out in accordance with Condition 25 shall: <ul style="list-style-type: none"> (a) Be conducted during process conditions that are representative of normal process emissions. (b) Comprise not less than three separate samples (except where obtaining three samples may not be possible). (c) Be designed and undertaken by an appropriately qualified agency (i.e., holding accreditation from IANZ or an equivalent body for the particular testing method being used, unless no agency or body in New Zealand holds accreditation for that particular test). (d) Be undertaken at sampling points where safe access is maintained, such that it is available for the purpose of carrying out sampling whenever testing is required. 			26	The condition is proposed to be amended as follows: <ul style="list-style-type: none"> • Existing Condition 24(b) amended to remove duplication of requirement in Existing Condition 6, and to add "(except where obtaining three samples may not be possible)". • Existing Condition 24(c) amended to reflect current practice. • Added new Clause (d) to require that safe access is maintained to sampling points to ensure that sampling is able to be undertaken. This incorporates Existing Condition 25.
25	The Consent Holder shall maintain permanent and safe access to all sampling points that are necessary to enable compliance with Condition 23.							Existing Condition 25 is proposed to be removed as safe access has been addressed in new proposed sub-clause (d) for Existing Condition 24.
26	The Consent Holder shall ensure that dye testing of the Iron making and Steelmaking baghouses is conducted when the associated plant is not operating and where vent emissions are visible or a stack limit is exceeded. As a minimum, testing will be done at least once every twelve months.			The Consent Holder shall ensure that dye testing of each of the Iron Plant and Steel Plant baghouses and the Primary Concentrate Drier and ARP baghouses is conducted when the associated plant is not operating and where vent emissions are visible, or a stack limit is exceeded. As a minimum, testing will be done at least once every twelve months.			27	Largely unchanged from existing condition, wording amendments to clarify the applicable baghouses.

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		Bags identified, as leaking, from the dye test will be replaced as soon as practicable.		
Ambient Air Monitoring				
27	The Consent Holder shall continuously measure and record wind speed and direction in the vicinity of the Glenbrook Steel Mill. The data shall be in a form that is immediately retrievable.	The Consent Holder shall continuously measure and record wind speed and direction in the vicinity of the Glenbrook Steel Mill. The data shall be in a form that is immediately retrievable.	28	Unchanged from existing condition.
28	The Consent Holder shall measure total suspended particulate (TSP) at two sites in the vicinity of the Glenbrook Steel Mill. The monitoring shall be undertaken using equipment taking continuous measurements from 1 February 2007. The monitoring method and location of the sites shall be determined through consultation with the ARC and the Consent Holder.	The Consent Holder shall measure total suspended particulate (TSP) at one site in the vicinity of the Glenbrook Steel Mill (Training Centre). The monitoring shall be undertaken using equipment taking continuous measurements.	29	The proposed wording is similar to the existing wording with the following amendments: <ul style="list-style-type: none"> Removal of establishment date and consultation requirement to establish method and location as monitoring was established in accordance with Existing Condition 28, and is ongoing. Reduction of TSP monitoring sites from two (Training Centre and Boundary Road) to one (Training Centre only) as it is proposed to change the Boundary Road monitoring site from TSP to PM₁₀. TSP measurements at the Training Centre monitoring location are proposed to be retained. Elevated TSP levels at this site is not necessarily indicative of an adverse effect beyond the boundary of the Site, but it is useful as a prompt for proactive management of dust sources.
29	The Consent Holder shall measure PM ₁₀ at three locations in the vicinity of the Glenbrook Steel Mill. One of these locations will use the existing site at Glenbrook School. Each monitoring site shall continuously measure and record wind speed and direction. The monitoring shall be undertaken as follows: <ol style="list-style-type: none"> The monitoring shall be undertaken using continuous measurements at one site from 1 February 2007. That the monitoring shall be undertaken using continuous measurements from all three sites from 1 June 2007. Any new monitors shall be run concurrently with the existing monitors for a minimum period of three months. The monitoring method and location of the sites shall be determined through consultation with the ARC and the Consent Holder. 	The Consent Holder shall measure PM ₁₀ and PM _{2.5} at the monitoring site at 64 Glenbrook Beach Road and PM ₁₀ at the monitoring site at Boundary Road (as shown on Figure 1) using continuous measurements. The monitoring sites shall continuously measure and record wind speed and direction. Any changes to the monitoring method and location of the monitoring sites shall be certified by Council as appropriate. With regard to location of monitoring sites, this shall take into account the available monitoring location options and the purpose of the monitoring site.	30	The proposed wording is similar to the existing wording with the following amendments: <ul style="list-style-type: none"> Removal of establishment dates and consultation requirement to establish method and location as monitoring was established in accordance with Existing Condition 29, and is ongoing. Reduction of PM₁₀ monitoring sites from three to two. It is proposed to retain the existing 64 Glenbrook Beach Road monitoring site, and establish PM₁₀ monitoring at the Boundary Road monitoring site (currently used for TSP monitoring). The other two existing PM₁₀ monitoring sites (Glenbrook School and Sandspit) are proposed to be disestablished. The existing monitoring has established that the Glenbrook School monitoring site is not materially influenced by the Steel Mill's emissions and has consistently shown compliance with all limits. The existing Sandspit monitoring site has proven to be unreliable as a background monitor, because it experiences abnormal wind patterns and is influenced from Waiuku township. It is not otherwise useful as a monitoring site as it has no influence from the Steel Mill. Added a PM_{2.5} monitoring site at 64 Glenbrook Beach Road. PM_{2.5} is proposed to be addressed in the NES in the future. NZ Steel proposes to commence

Existing Condition No #	Existing Condition ¹	Proposed Condition	Proposed Condition No #	Comment or Change from existing condition (where applicable)
				<p>measurements of PM_{2.5} and considers it appropriate to include this in conditions.</p> <ul style="list-style-type: none"> Added reference to Figure 1 which shows location of monitoring sites. Amended to require any changes to PM₁₀ and PM_{2.5} monitoring method and location to be certified by Council.
30	That after 12 months of continuous monitoring the Consent Holder shall undertake an analysis of the results of the monitoring required under Conditions 28 and 29. A report shall be provided to the Manager by 1 September 2008 outlining the results of the analysis.			Existing Condition 30 is not proposed to be included as the monitoring programme is now well established. Changes to the ambient monitoring programme as a result of this application will not result in the need for analysis.
31	In the event that monitoring in accordance with Condition 28 shows that TSP levels exceed 80µg/m ³ , the Consent Holder shall conduct an investigation into the cause of the elevated levels. If the cause of the elevated levels of total suspended particulate is identified as being an activity undertaken within the Iron and Steel Zone, then as far as practicable, action shall be taken by the Consent Holder to reduce discharges from that activity. Any action taken shall be to the satisfaction of the Manager.	In the event that monitoring in accordance with Condition 29 shows that TSP levels exceed a 1-hour average of 250µg/m ³ , the Consent Holder shall conduct an investigation into the cause of the elevated levels. If the cause of the elevated levels of TSP is identified as being an activity undertaken within the Operational Area, then as far as practicable, action shall be taken by the Consent Holder to reduce discharges from that activity.	31	<p>The proposed wording is similar to the existing wording with the following amendments:</p> <ul style="list-style-type: none"> Removal of reference to "80 µg/m³" and replacement with reference to "250 µg/m³ as a 1-hour average" as this is the relevant TSP level for moderate sensitivity receiving environments as specified in MfE's Good Practice Guidance. In particular, this is the most up to date guideline relevant to short term nuisance dust effects (rather than 24 hour exposure). Removal of reference to the historical 'Iron and Steel Zone', which has been replaced in this application with the term 'Operational Area'. Removal of requirement for any action to be to the satisfaction of the Manager, as the activity will be undertaken in accordance with the requirements of the consent.
32	In the event that monitoring in accordance with Condition 29 shows that PM ₁₀ levels exceed 33µg/m ³ at Glenbrook School or 50µg/m ³ at any other site, the Consent Holder shall conduct an investigation into the cause of the level of PM ₁₀ at those sites. If the cause of the elevated levels is identified as being an activity undertaken within the Iron and Steel Zone, the Consent Holder shall prepare and submit to the Manager a remedial action plan within 3 months of the exceedance detailing methods to reduce PM ₁₀ levels to below relevant levels. The remedial action plan shall include a discussion on the contributions of the KOBM baghouses. The remedial action plan shall be to the satisfaction of the Manager.	<p>In the event that monitoring in accordance with Condition 30 shows that PM₁₀ levels exceed 50µg/m³ as a 24-hour average the Consent Holder shall conduct an investigation into the cause of the level of PM₁₀. If the cause of the elevated levels is identified as being an activity undertaken within the Operational Area, the Consent Holder shall:</p> <ol style="list-style-type: none"> Within three working days of verified result, notify the Council; and Within one month undertake a further investigation and submit this to Council, with such investigation to include: <ol style="list-style-type: none"> A review of operational conditions; A review of meteorological conditions; A review of any influences not related to the activities authorised by this consent that may have contributed to elevated levels; Details of actions taken to reduce PM₁₀ levels. 	32	<p>The proposed wording is similar to the existing wording with the following amendments:</p> <ul style="list-style-type: none"> Removal of reference to "33µg/m³" and replacement with reference to "50µg/m³ as a 24-hour average" as this is the relevant PM₁₀ level for moderate sensitivity receiving environments as specified in MfE's Good Practice Guidance. The current reference to 33µg/m³ is not a relevant effects-based level. Removal of reference to Glenbrook School as Condition 30 proposes monitoring at 64 Glenbrook Beach Road. Removal of reference to the historical 'Iron and Steel Zone', which has been replaced in this application with the term 'Operational Area'. Amendment to update the actions to be taken by NZ Steel in the event of an exceedance including notification of Council within three working days, and an investigation to be undertaken and submitted to Council within one month.

Existing Condition No #	Existing Condition ¹	Proposed Condition	Proposed Condition No #	Comment or Change from existing condition (where applicable)
				<ul style="list-style-type: none"> Removal of requirement for any action to be to the satisfaction of the Manager as the actions will be in accordance with the requirements of the consent.
General monitoring				
33	All monitoring undertaken in accordance with Conditions 28 and 29 shall be undertaken by an IANZ accredited agency.	All monitoring undertaken in accordance with Conditions 29 and 30 shall be undertaken by monitoring methods for ambient air quality as specified in Schedule 2 of the National Environmental Standards for Air Quality, where relevant, or an equivalent method approved by the Council	33	The proposed wording has the same intent as Existing Condition 33 (ensuring the quality of monitoring undertaken), however it has been amended to refer to Schedule 2 of the NES, or an equivalent method approved by the Council.
34	All monitoring and testing shall be carried out to the satisfaction of the Manager.			Existing Condition 34 is not proposed to be included as the other proposed conditions contain all the necessary standards for monitoring and testing.
Logging and Reporting Conditions				
35	That all documentation, records, monitoring and test results that are required by the conditions of this consent shall be made available on request, during operating hours, to an enforcement officer.	That all documentation, records, monitoring and test results that are required by the conditions of this consent shall be made available on request.	34	The proposed wording is similar to the existing wording but has been updated to be consistent with Standard Condition 5 of Auckland Council Conditions Manual – Inspection, records and monitoring reports.
36	That all ambient monitoring and stack emission test results including raw data, all calculations, and assumptions that are required by the conditions of this consent shall be kept for at least the duration of this consent; and all other logs and records that are required by the conditions of this consent shall be kept for a minimum period of 24 months from the date of each entry.	That all ambient monitoring and stack emission test results including raw data, all calculations, and assumptions that are required by the conditions of this consent shall be kept for at least the duration of this consent; and all other logs and records that are required by the conditions of this consent shall be kept for a minimum period of 24 months from the date of each entry.	35	Unchanged from existing condition.
37	That the Consent Holder shall notify an enforcement officer as soon as practicable in the event of any significant increase in the discharge of contaminants into air which may result in adverse effects on the environment.	The Council must be notified as soon as practicable in the event of any significant discharge to air, which results or has the potential to result in a breach of these conditions. The following information must be supplied: a. Details of the nature of the discharge; b. An explanation of the cause of the incident; and c. Details of remediation action taken.	36	The proposed wording has the same intent as Existing Condition 37 (notification of Council), however it has been updated to reflect Standard Condition 6 of Auckland Council Conditions Manual – Significant breaches or unexpected emissions, with the exception of reference to “these conditions”, due to the comprehensive nature of the conditions proposed.
38	That the Consent Holder shall log all air pollution complaints received. The complaint details shall include: (a) The date, time, position and nature of the complaint. (b) The name, phone number and address of the complainant, unless the complainant elects not to supply these details. (c) The details of any investigation, the cause of the complaint and corrective actions undertaken in response to the complaint.	That the Consent Holder shall log all air pollution complaints received. The complaint details shall include: (a) The date, time, position and nature of the complaint, unless the complainant elects not to supply these details, and it is not otherwise possible to ascertain the information. (b) The name, phone number and address of the complainant, unless the complainant elects not to supply these details. (c) The details of any investigation into the circumstances leading to the complaint including (where relevant) any determined cause of the complaint and corrective actions undertaken in response to the complaint.	37	The proposed wording is similar to the existing wording with the exception of the addition to (a) of wording to provide for scenarios where all of the information required by (a) is not available, and clarification of requirements in (c).
39	Details of any complaints received shall be provided to the Manager within 24 hours or as soon as practicable after the receipt of the complaint.	Details of any complaints received shall be provided to the Council within 3 working days, or as soon as practicable after the receipt of the complaint.	38	The proposed wording is similar to the existing wording with the exception of replacement of reference to “Manager” with reference to “Council”, and amendment of timeframe from 24 hours to 3 working days. This additional allowance provides sufficient time to collate the “complaint details” required by (a), (b) and (c) in Proposed Condition 37, and ensures that

Existing Condition No #	Existing Condition ¹	Proposed Condition	Proposed Condition No #	Comment or Change from existing condition (where applicable)
				information provided to Council is useful. In particular, it is often not possible to complete an investigation and identify a root cause within 24 hours.
40	<p>A summary of all information required by the conditions of this consent shall be provided to the Manager at least once every three months, unless otherwise stated.</p> <p>The summary shall include:</p> <p>(a) Results of the ambient monitoring and meteorological monitoring, including details of any exceedences of ambient monitoring trigger levels and any subsequent action to investigate and if necessary to remedy the exceedences.</p> <p>(b) Provide an electronic copy of all raw data from ambient air and weather monitoring stations.</p> <p>(c) That the Consent Holder shall report at least annually on the peak concentrations and the annual mass emissions of PM₁₀ and NO_x (as NO₂). The report for the previous calendar year shall be submitted to the Manager as part the next three monthly report required by this condition. Any major changes, both increases and decreases, in the potential mass emissions shall be included in the latest three monthly report.</p> <p>(d) Results of stack emissions testing as specified in Condition 23.</p> <p>(e) A summary of process monitoring as specified in Condition 22 including all process monitoring exceptions.</p> <p>(f) A summary of any complaints received.</p> <p>(g) A report on progress on implementation of either Condition 46 or Condition 47, as required by Condition 45.</p> <p>The format of the report shall be agreed with the Manager and the first report shall be provided to the Manager within three months from the commencement of this consent.</p>			Existing Condition 40 is proposed to be replaced by Proposed Condition 39, which combines the requirements of Existing Conditions 40, 41 and 44. Refer to Section 11 of the AEE for further discussion.
41	<p>The Consent Holder shall review all site major sources of air emissions and their associated pollution control equipment, including the KOBM baghouse. The information provided in the review should include but not be limited to:</p> <p>(a) The techniques applied to control emissions</p> <p>(b) The current emission concentration after the control equipment</p> <p>(c) The current emission concentration before the control equipment</p> <p>(d) The current emission rate after the control equipment</p> <p>(e) A rank of best to worst performing control equipment</p> <p>(f) Relevant best practice</p> <p>The review shall evaluate the results and compare them to current best practice. Where the results of the review are not the BPO, the report shall also address the steps to be taken to adopt the BPO and a timetable in which those steps shall be taken. The first review shall be submitted to the Manager for his approval by 30 September 2008 and every three years thereafter.</p> <p>Note: the Manager may review (internally or externally) the assessment required by this condition. The cost of any such review will be borne by the Consent Holder.</p>			Existing Condition 41 is proposed to be replaced by Proposed Condition 39, which combines the requirements of Existing Conditions 40, 41 and 44. Refer to Section 11 of the AEE for further discussion.

Existing Condition No #	Existing Condition ¹	Proposed Condition	Proposed Condition No #	Comment or Change from existing condition (where applicable)
42	<p>That the Consent Holder shall, with the agreement of the Manager, determine the major point sources of PM₁₀ and NO_x and major fugitive sources of PM₁₀ from the Site. The Consent Holder shall then provide the Manager, by 31 December 2006 with either:</p> <p>(a) A measurement of maximum daily and annual mass emissions of PM₁₀ and NO_x from all major point and fugitive sources, or</p> <p>(b) If measurements are not practicable, an estimate of maximum daily and annual mass emissions of PM₁₀ and NO_x from all major point and fugitive sources based on robust emissions factors or proxy measurements.</p> <p>Details of any measurements and the calculation methods used, including specifying all assumptions made and outlining the accuracy of any emission factors used, shall also be included with this information.</p>			Existing Condition 42 is no longer applicable as it required an action that has previously been completed which does not need to be repeated.
43	<p>That the Consent Holder shall model the effects of PM₁₀ emitted from all major sources on the site. The modelling shall be done using the PM₁₀ emissions provided as part of consent Condition 41. The results shall be compared to known ambient PM₁₀ field measurements and shall be submitted by 30 March 2007. The type of modelling and the methodology shall be submitted to the Manager for approval.</p>			Existing Condition 43 is no longer applicable as it required modelling to be undertaken after the grant of the Main Air Permit. In this case, modelling has been undertaken prior to lodgement of this application and results have been incorporated in the AQA.
44	<p>That the Consent Holder shall review the PM₁₀ and NO_x emissions for all the major point and fugitive sources in September 2008 and every 3 years thereafter. If the mass emissions of PM₁₀ from any one of these major sources is found to be more than 25% higher than a previous review, or if there appears to be a major source of PM₁₀ on site not accounted for in a previous review, then further modelling may be required at the discretion of the Manager.</p> <p>Note: The requirement for additional modelling will not be initiated without prior consultation with the Consent Holder.</p>			Existing Condition 44 is proposed to be replaced by Proposed Condition 39, which combines the requirements of Existing Conditions 40, 41 and 44. Refer to Section 11 of the AEE for further discussion.
		<p>The Consent Holder shall prepare a monitoring report on a five yearly basis for the duration of this consent. The report shall be prepared by a suitably qualified person. As a minimum the report shall include all information in Part 1, and, in the event that any effects are identified in Part 1(e)(iv), all information in Part 2.</p> <p>Part 1</p> <ul style="list-style-type: none"> (a) A summary of the process monitoring data collected in accordance with Condition 24; (b) A summary of the emission testing data provided to Council in accordance with Condition 25, details of any exceedances of the limits in Condition 9, and any subsequent action to investigate and if necessary to remedy, or avoid future, exceedances. (c) A summary of all ambient air quality and meteorological monitoring undertaken in accordance with Conditions 28, 29 and 30, and summary details of exceedances notified to Council in accordance with Condition 32. For any continuously recorded air quality parameters, the summary shall include relevant statistical analysis. (d) A summary of any complaints received and provided to Council in accordance with Condition 37. 	39	It is proposed to replace Existing Conditions 40, 41 and 44 with this condition. Refer to Section 11 of the AEE for discussion of this proposed amendment.

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		<p>(e) Taking into account the information provided in (a) to (d), commentary regarding compliance with the conditions of this consent, and, in the event of any non-compliances, commentary regarding actual and potential adverse effects associated with those non-compliances.</p> <p>The commentary shall:</p> <ul style="list-style-type: none"> (i) Compare data with previously collected and reported results; (ii) Identify and comment on any emerging trends; (iii) Critically evaluate the performance of the procedures and physical mechanisms in place to minimise any adverse effects associated with the exercise of this consent, identify any improvements undertaken and make recommendations on any additional improvements needed, with respect to procedures or mechanisms relating to the exercise of this consent; and, (iv) Identify any effects beyond those identified in the application for this consent. <p>(f) Any other issue considered important by the Consent Holder.</p> <p>Part 2</p> <ul style="list-style-type: none"> (g) A review of all significant sources of emissions relevant to the effects identified in Part 1(e)(iv). The review shall include: <ul style="list-style-type: none"> (i) The techniques applied to control emissions. (ii) Description of alternative methods for minimising the discharge compared to that currently used at the site. (iii) Identification of any of the alternative methods in (ii) that would significantly reduce adverse effects. (iv) The feasibility, including financial implications of adopting the methods identified in (iii). (v) An overall evaluation of whether current practice is the best practicable option. (h) Where current practice is no longer the best practicable option as identified in Part 2(g)(v), the steps to be taken to adopt the best practicable option, and a timetable in which those steps shall be taken. <p>The report shall be forwarded to the Council by 31 August every fifth year for the duration of the consent. The Council may review (internally or externally) the monitoring report required by this condition. The cost of any such review will be borne by the Consent Holder.</p>		
		<p>The Council may require an out-of-cycle monitoring report in accordance with all or part of Condition 39, where there is a significant adverse effect on the environment arising from the exercise of the consent, which was not foreseen at the time of the application.</p>	40	

Existing Condition No #	Existing Condition ¹	Proposed Condition	Proposed Condition No #	Comment or Change from existing condition (where applicable)
Proposed Plant Modifications or upgrade and peer review				
45	Should the proposed modification to the vanadium extraction and slabmaking facilities (referred to in the documentation submitted by the Consent Holder to the Council in June 2006 as addendum to 1999 AEE) proceed, then Condition 46 shall apply. In the event that the proposed plant modifications are not to proceed then Condition 47 shall apply. The Consent Holder shall report progress on implementation of either Condition 46 or 47 in the three - monthly compliance reports to the to the council, which are required by Condition 40.			The proposed modifications addressed in this condition did not occur and are no longer proposed, therefore this condition is no longer applicable.
46	Within 6 months of commissioning the Vanadium Converter the Consent Holder shall provide the Council with a report on reductions in Slabmaking Plant air emissions (including product dumping and KOBM Baghouse emissions). The Consent Authority may request that the report be independently reviewed by a suitably qualified person or person(s) (the Peer Reviewer) approved by the Manager.			The proposed modifications addressed in this condition did not occur and are no longer proposed, therefore this condition is no longer applicable.
47	In the event that the proposed plant modifications do not proceed then the Consent Holder shall investigate options for upgrading the air pollution control facility of the existing Vanadium Recovery Station in order to reduce mass emissions. The Consent Holder shall select one of those options for implementation and shall prepare a report to the Consent Authority on the investigation undertaken, the options available, the option selected and a timetable for implementation. The report shall be lodged with the Consent Authority not later than 31 December 2009.			The proposed modifications addressed in this condition did not occur and are no longer proposed, therefore this condition is no longer applicable.
48	The Consent Holder shall provide the Manager with all records, plans, designs and other information referred to in Conditions 41, 46 and 47 that the Peer Reviewer(s) require(s) to be able to undertake their peer review(s).			The proposed modifications addressed in this condition did not occur and are no longer proposed, therefore this condition is no longer applicable.
Environmental Management System / Air Quality Management Plan Conditions				
49	<p>That the Consent Holder shall maintain an Environmental Management System (EMS) to an ISO 14000 or an equivalent standard. The EMS shall be updated to make it consistent with the conditions of this consent and shall be submitted to the Manager for review within 12 months of the consent being granted. The Manager will advise the Consent Holder in writing if any aspects of the Plan are considered to be inconsistent with achieving the provisions of this consent. The EMS shall accurately record all management and operational procedures, methodologies and contingency plans necessary to comply with the conditions of this consent including, but not limited to, the following:</p> <p>(a) Methods to ensure that air pollution control systems are functioning correctly and consistently in accordance with Conditions 17, 18, 19, 20, and 21, (including but not limited to: preventative maintenance; critical process checks; responses to faults or alarm conditions; discharge monitoring; and preventative checks or inspections of interlocks, sensors, level controllers, switches etc).</p> <p>(b) Actions that will be taken in response to any faults or alarm conditions that have the potential to effect discharges to air.</p>	<p>Within 6 months of the date of commencement of this consent an Air Quality Management Plan (AQMP) must be submitted to the Council for certification. The Consent Holder must meet the costs of the production, certification and review of the AQMP.</p> <p>The overall objective of the AQMP is to describe the practices and procedures to be adopted to ensure compliance with these consent conditions.</p> <p>The AQMP shall:</p> <ul style="list-style-type: none"> (a) Identify the main point sources of discharges of contaminants into air and include a map showing the location of each source; (b) Describe how the management and operational procedures, methodologies and contingency plans necessary to comply with the conditions of this consent are implemented by an Environmental Management System (compliant with ISO 14001 or equivalent) that includes: <ul style="list-style-type: none"> (i) Procedures to minimise stack emission discharges of contaminants into air, including the details of the inspection, maintenance, monitoring and contingency procedures in place for all emissions control equipment, including (but not limited to): 	41	Existing Condition 49 has been amended to make provision for the AQMP.

Existing Condition No #	Existing Condition ¹	Proposed Condition	Proposed Condition No #	Comment or Change from existing condition (where applicable)
	<p>(c) Daily visual inspections of all stacks and vents discharging to air, including the KOBM bag house.</p> <p>(d) At least 12-monthly dye testing of the Iron and Steelmaking bag houses to detect any bag failures.</p> <p>(e) Monitoring of gas leaks around the Kilns Co-generation Plant by-pass damper to ensure that carbon monoxide emissions are kept to a practicable minimum.</p> <p>(f) Setting objectives and targets to minimise waste and process interruptions, as agreed with the Manager, and shall include the following:</p> <p>i) Methods to ensure that fugitive dust emissions are maintained at a minimum practicable level as required by conditions 10, 11, 19 and 20.</p> <p>ii) Targets and methods for limiting dumping of raw primary concentrate and char (RPCC) to a practicable minimum as per condition 12.</p> <p>iii) Targets and methods for limiting plating.</p> <p>iv) Targets and methods for lowering the number of pressure release flap lift incidents at the material-hearth furnaces.</p> <p>vi) Targets and methods for minimising the flaring of melter gas as a percentage of total melter gas produced.</p> <p>vii) Targets and methods for minimising the frequency of flare failures on the melters and on the KOBM primary waste gas ventilation.</p> <p>viii) Targets and methods for minimising the frequency of Pan Conveyer scrubber maintenance downtimes.</p>	<p>(a) Daily visual inspections of all baghouses discharging to air.</p> <p>(b) At least 12-monthly dye testing of the Iron and Steelmaking bag houses to detect any bag failures.</p> <p>(c) Monitoring of gas leaks around the Kilns Co-generation Plant by-pass damper to ensure that carbon monoxide emissions are kept to a practicable minimum.</p> <p>(d) Monitoring of the ARP and KOBM scrubber operating parameters to ensure ongoing performance is within the expected range for each parameter, as set out in the AQMP.</p> <p>(ii) Actions that will be taken in response to any faults or alarm conditions that have the potential to effect discharges to air.</p> <p>(iii) Procedures to minimise fugitive emissions of contaminants into air, including the details of inspection, maintenance, monitoring and contingency procedures.</p> <p>(c) Set out procedures for recording the frequency of fugitive emissions from RPCC losses, and flaring of melter gas, and the operational or management measures to minimise these emissions to the extent practicable;</p> <p>(d) Describe the procedures for ambient air quality and meteorological monitoring to meet the requirements of this consent, including:</p> <p>(i) monitoring methods and locations;</p> <p>(ii) record-keeping and reporting;</p> <p>(iii) trigger levels, notification and contingency procedures;</p> <p>(e) Identify employee role and responsibilities in relation to the AQMP;</p> <p>(f) Set out procedures for the receipt, recording and handling of air quality complaints received; and</p> <p>(g) Set out the management of change process for any modifications to the processes and activities set out in the Consent Application, including assessment of whether changes are material (Condition 43) and whether changes ensure the effects are the same or similar in character, intensity, and scale to the effects described by the application documents (Condition 1).</p>		
		The Operational Area must be managed in accordance with the certified AQMP.	42	Proposed additional standard condition, to require implementation of the AQMP.
		The AQMP must be reviewed at least on a five yearly basis. In the event that any material changes to the certified AQMP are made, they must be submitted to the Council for certification prior to implementation. The Council will advise the Consent Holder in writing if any aspects of the AQMP are considered to be inconsistent with the conditions of this consent.	43	Proposed additional standard condition, to require a minimum review period for the AQMP, and to require material changes to be submitted to the Council for certification.
Review Condition				
50	That the conditions of this consent may be reviewed by the Manager pursuant to Section 128 of the Resource Management Act 1991, by the giving of notice pursuant to Section 129 of the Act, in August 2007 and during every second August thereafter in order:	Under Section 128 of the RMA, the conditions of this consent may be reviewed by the Manager Resource Consents at the Consent Holder's cost in order to:	44	The proposed wording is similar to the existing wording but has been updated for consistency with the section 128 review condition included on the Commercial Iron Plating Permit, and has been amended to refer to "avoid remedy and mitigate

Existing Condition No #	Existing Condition ¹	Proposed Condition	Proposed Condition No #	Comment or Change from existing condition (where applicable)
	<p>(a) Deal with any significant adverse effect on the environment arising from the exercise of the consent, which was not foreseen at the time the application, was not considered and which is appropriate to deal with at the time of the review.</p> <p>(b) Consider the adequacy of conditions which prevent adverse effects beyond the boundary of the site, particularly if regular or frequent complaints have been received and validated by an enforcement officer.</p> <p>(c) Consider developments in control technology and management practices that would enable practical reductions in the discharge of contaminants into air.</p> <p>(d) To require the Consent Holder to adopt the best practicable option to remove or reduce any adverse effect on the environment arising from the exercise of this consent.</p> <p>(e) Alter the monitoring requirements, including further monitoring, or increasing or reducing the frequency of monitoring.</p> <p>(f) Consider the adequacy of conditions in the event that the ambient monitoring undertaken indicates that exceedances of the Resource Management (National Environmental Standards relating to Certain Air Pollutants, Dioxins, and Other Toxics) Regulations 2004 (NES) and any subsequent amendments have occurred or are likely.</p> <p>The Consent Holder shall meet the reasonable costs of any such reviews in accordance with section 36 of the RMA.</p>	<p>(a) Deal with any significant adverse effect on the environment arising from the exercise of the consent, which was not foreseen at the time the application was considered, and which is appropriate to deal with at the time of the review.</p> <p>(b) Consider the adequacy of conditions which avoid, remedy and mitigate adverse effects beyond the boundary of the site, particularly if regular or frequent complaints have been received and validated by an enforcement officer.</p> <p>(c) Consider developments in control technology and management practices that would enable practical reductions in the discharge of contaminants into air.</p> <p>(d) To require the Consent Holder to adopt the best practicable option to remove or reduce any adverse effect on the environment arising from the exercise of this consent.</p> <p>(e) Alter the monitoring requirements, including further monitoring, or increasing or reducing the frequency of monitoring.</p> <p>(f) Consider the adequacy of conditions in the event that the ambient monitoring undertaken indicates that exceedances of the Resource Management (National Environmental Standards relating to Certain Air Pollutants, Dioxins, and Other Toxics) Regulations 2004 (NES) and any subsequent amendments have occurred or are likely.</p> <p>(g) Take into account any Act of Parliament, regulation, national policy statement, regional policy statement or relevant regional plan that relates to limiting, recording or mitigating emissions by this consent.</p> <p>Additionally, the conditions of this consent may be reviewed by the Manager Resource Consents at any time, if it is found that the information made available to the Council in the application contained inaccuracies which materially influenced the decision and the effects of the exercise of the consent are such that it is necessary to apply more appropriate conditions.</p>		<p>adverse effects” in (b), rather than “prevent adverse effects” to ensure that all conditions relating to the management of adverse effects are addressed, rather than only those conditions relating to prevention of adverse effects.</p>

NZ Steel – Glenbrook Steel Mill Air Discharge Permit Replacement Application

Appendix L to the Assessment of Effects on the Environment Proposed Conditions of Consent

PROPOSED CONDITIONS FOR AUCKLAND COUNCIL

RESOURCE CONSENT

DEFINITIONS:

Council:	Means Auckland Council (including the nominated personnel such as monitoring and compliance officer(s)).
Site:	Means all of the land owned by NZ Steel (including the farmland which provides a buffer around the Operational Area) and shown on Figure 1.
Operational Area:	Means the area within the Site used for the production of iron and steel and shown on Figure 1.

GENERAL CONDITIONS:

1. The Consent Holder shall undertake operation of the Steel Mill and its associated processes generally in accordance with the documentation submitted to Council as part of application [insert reference number], where not amended by the conditions of this resource consent. This shall not preclude changes to plant or processes where the effects are the same or similar in character, intensity, and scale to the effects described by the application documents.
2. Council shall be permitted access to the relevant parts of the Site at all reasonable times, for the purpose of carrying out inspections, surveys, investigations, tests, measurements or taking samples.
3. Under section 123 of the RMA, this consent expires on [insert date] ***[35 years from commencement of consent]***, unless it has been surrendered or been cancelled at an earlier date pursuant to the Resource Management Act.
4. The Consent Holder shall pay the Council an initial consent compliance monitoring charge of \$[insert amount] (inclusive of GST), plus any further monitoring charge or charges to recover the actual and reasonable costs incurred to ensure compliance with the conditions attached to this consent.

Advice Note:

The initial monitoring deposit is to cover the cost of inspecting the site, carrying out tests, reviewing conditions, updating files, etc., all being work to ensure compliance with the resource consent. In order to recover actual and reasonable costs, monitoring of conditions, in excess of those covered by the deposit, shall be charged at the relevant hourly rate applicable at the time. The Consent Holder will be advised of the further monitoring charge. Only after all conditions of the resource consent have been met, will the Council issue a letter confirming compliance on request of the Consent Holder.

5. That the Consent Holder shall be responsible for discharges of contaminants to air from the Site and shall make any person undertaking activities on the Site, on its behalf, aware of any relevant conditions of this consent.
6. All processes on Site must be operated, maintained, supervised, monitored and controlled using the best practicable option to ensure that all emissions authorised by this consent are maintained at the minimum practicable level.
7. The Consent Holder shall continue to maintain the established Glenbrook Steel Mill Environment Committee for the duration of the consent in accordance with Condition 8. Membership of the Committee shall include Auckland Council compliance team, Auckland Regional Public Health, the Franklin Local Board, Ngāti Tamaoho and Ngāti Te Ata.
8. The Consent Holder must use its best endeavours to ensure that the Environment Committee meets at least annually, and the Consent Holder shall annually present the following information to the Environment Committee:
 - (a) A summary of the process monitoring data collected in accordance with Condition 24.
 - (b) A summary of the emission testing data provided to Council in accordance with Condition 25, details of any exceedances of the limits in Condition 9, and any subsequent action to investigate and if necessary, to remedy the exceedances.
 - (c) A summary of all ambient air quality and meteorological monitoring undertaken in accordance with Conditions 28, 29 and 30, and summary details of exceedances notified to Council in accordance with Condition 32.
 - (d) A summary of any complaints received and provided to Council in accordance with Condition 38.
 - (e) Details of any emerging trends with respect to the information presented in accordance with subclauses (a) to (d) above and including as a result of comparison with data previously collected and reported where relevant.

LIMIT CONDITIONS:

9. That without prejudice to the generality of Condition 6, the discharge of specified air pollutants from the specified sources shall not exceed the concentrations below:

SOURCE	Contaminant	Emission not to exceed (mg/m³)
Multiple hearth furnaces	Particulate matter	75
Kilns	Particulate matter	75
	Carbon monoxide	3750
Melter metalside baghouse	PM _{2.5}	15
Melter slagside baghouse	PM _{2.5}	15

All emission concentrations shall be corrected to zero degrees Celsius, one atmosphere pressure and dry gas basis. All individual tests shall not exceed the above limit conditions.

10. With the exception of emissions anticipated in the application and water vapour, there shall be no noxious, dangerous, objectionable or offensive visible emissions, hazardous air pollutants, odour or dust arising from any activity on Site, to the extent that they cause an adverse effect at or beyond the boundary of the Site.

PROCESS CONDITIONS:

11. That dust generation by vehicle movements shall be maintained at the minimum practicable level. The measures adopted shall include procedures for watering unsealed roads and yards, watering or cleaning of sealed roads, and restricting vehicle speeds on unsealed roads and yards.
12. That fugitive emissions of particulate matter from manufacturing processes, pollution control equipment and from handling and transfer of dusty materials shall be maintained at the minimum practicable level. In particular, conveyors carrying dusty materials shall be fitted with drop chutes, and enclosures or covers as appropriate.
13. That emissions arising from the tipping of reduced primary concentrate and char (RPCC) shall be kept to a practicable minimum.
14. For the first 12 months following commencement of the consent, the Consent Holder shall ensure that emissions arising from iron plating associated with process disruptions are kept to a practicable minimum. Within 12 months of commencement of the consent, the Consent Holder shall ensure that a minimum of 90% of all iron plating activities (including both process disruption and Commercial Iron Plating) will be subject to fume suppression.
15. That the flaring of melter gas shall be kept to a practicable minimum.

16. That Oxygen Steel Making Furnace (KOBM) primary waste gas flare outages and Melter flare outages shall be kept to a practicable minimum to ensure discharges of unburnt carbon monoxide are minimised.
17. That the Consent Holder shall ensure that no material is disposed of by open burning on the Site.
18. That the sulphur content of the coal in the feed to the Multi Health Furnaces shall not exceed 0.5% by weight.

Operation of Air Pollution Control Equipment

19. That, with the exception of the Pan Conveyer scrubbers, no part of the process shall commence operation without the associated air pollution control equipment being fully operational and functioning correctly. Should a breakdown of control equipment occur during processing, the Consent Holder shall cease operation of all associated plant as soon as practicable and shall repair the control equipment as soon as practicable.
20. That the Pan Conveyer scrubbers shall be fully operational and functioning correctly as much as practicable when the pan conveyer systems are operating. Any scrubber down-time that occurs during process operation shall be for maintenance purposes only.
21. That all air pollution control equipment and associated ducting shall be maintained in good condition and as far as practicable be free from leaks in order to prevent the escape of fugitive emissions.
22. That all ducting to air pollution control equipment shall draw sufficient negative pressure to ensure that fugitive emissions are kept to a practicable minimum.
23. That the paint coating line afterburner(s) shall be operated so that all waste gases from solvent-based paint application and curing are held at a minimum temperature of 750°C for the prime oven incinerator and 650°C for the finish oven incinerator, in excess oxygen for a minimum period of 0.5 seconds.

MONITORING CONDITIONS:

Process Monitoring

24. The Consent Holder shall monitor and record:

- (a) The flaring of Melter gas as a percentage of total Melter gas produced (this monitoring and recording shall only be undertaken until 12 months of readings are recorded where the flaring of Melter gas is less than 10% of total Melter gas produced).
- (b) The mass of reduced primary concentrate and char (RPCC) that is tipped and the reason for each incident.
- (c) The amount of plated iron on a daily basis including:
 - (i) The purpose of the plating event (i.e., process disruption or Commercial Iron Plating); and
 - (ii) The use of fume suppression, as a percentage of total plated iron.
- (d) Pan Conveyer scrubber maintenance downtimes, when process operation continues.
- (e) The temperature of the waste gases at the exit of the (or each) afterburner (incinerator).
- (f) Daily inspections of all baghouses for visible emissions.
- (g) The following parameters on the KOBM primary off-gas treatment system:
 - i. Secondary scrubber differential pressure;
 - ii. Scrubber water flow rate; and
 - iii. Flame out at times when CO concentration exceeds 30% by volume.
- (h) The following parameters on the Acid Regeneration Plant:
 - i. Acid regeneration flow rate;
 - ii. Scrubber flow rate; and
 - iii. Scrubber water pH.
- (i) The sulphur content of coal in the feed to the Multi Hearth Furnaces, in percent by weight.

Stack Emission Testing

25. That in addition to the regular process monitoring, emission tests shall be conducted on the sources specified below, in accordance with the specified frequency to determine compliance with Condition 9:

SOURCE	Contaminant	Minimum Frequency	Test
Multiple hearth furnaces	Particulate matter	6 monthly	
	Oxides of nitrogen	1 yearly	
Kilns	Particulate matter	6 monthly	
	Oxides of nitrogen	1 yearly	
	Carbon monoxide	6 monthly	
Melter metalside baghouse	PM _{2.5}	3 monthly	

Melter slagside baghouse	PM _{2.5}	3 monthly
Slab re-heat furnace	Oxides of nitrogen	1 yearly

The results of this emission testing shall be provided to Council within 30 working days.

26. All emission tests carried out in accordance with Condition 25 shall:
- Be conducted during process conditions that are representative of normal process emissions.
 - Comprise not less than three separate samples (except where obtaining three samples may not be possible).
 - Be designed and undertaken by an appropriately qualified agency (i.e., holding accreditation from IANZ or an equivalent body for the particular testing method being used, unless no agency or body in New Zealand holds accreditation for that particular test).
 - Be undertaken at sampling points where safe access is maintained, such that it is available for the purpose of carrying out sampling whenever testing is required.
27. The Consent Holder shall ensure that dye testing of each of the Iron Plant and Steel Plant baghouses and the Primary Concentrate Drier and ARP baghouses is conducted when the associated plant is not operating and where vent emissions are visible, or a stack limit is exceeded. As a minimum, testing will be done at least once every twelve months. Bags identified, as leaking, from the dye test will be replaced as soon as practicable.

Ambient Air Monitoring:

28. The Consent Holder shall continuously measure and record wind speed and direction in the vicinity of the Glenbrook Steel Mill. The data shall be in a form that is immediately retrievable.
29. The Consent Holder shall measure total suspended particulate (TSP) at one site in the vicinity of the Glenbrook Steel Mill (Training Centre). The monitoring shall be undertaken using equipment taking continuous measurements.
30. The Consent Holder shall measure PM₁₀ and PM_{2.5} at the monitoring site at 64 Glenbrook Beach Road and PM₁₀ at the monitoring site at Boundary Road (as shown on Figure 1) using continuous measurements. The monitoring sites shall continuously measure and record wind speed and direction.
- Any changes to the monitoring method and location of the monitoring sites shall be certified by Council as appropriate. With regard to location of monitoring sites, this shall take into account the available monitoring location options and the purpose of the monitoring site.

31. In the event that monitoring in accordance with Condition 29 shows that TSP levels exceed a 1-hour average of $250\mu\text{g}/\text{m}^3$, the Consent Holder shall conduct an investigation into the cause of the elevated levels. If the cause of the elevated levels of TSP is identified as being an activity undertaken within the Operational Area, then as far as practicable, action shall be taken by the Consent Holder to reduce discharges from that activity.
32. In the event that monitoring in accordance with Condition 30 shows that PM_{10} levels exceed $50\mu\text{g}/\text{m}^3$ as a 24-hour average the Consent Holder shall conduct an investigation into the cause of the level of PM_{10} . If the cause of the elevated levels is identified as being an activity undertaken within the Operational Area, the Consent Holder shall:
- (a) Within three working days of verified result, notify the Council; and
 - (b) Within one month undertake a further investigation and submit this to Council, with such investigation to include:
 - i. A review of operational conditions;
 - ii. A review of meteorological conditions;
 - iii. A review of any influences not related to the activities authorised by this consent that may have contributed to elevated levels;
 - iv. Details of actions taken to reduce PM_{10} levels.

General Monitoring

33. All monitoring undertaken in accordance with Conditions 29 and 30 shall be undertaken by monitoring methods for ambient air quality as specified in Schedule 2 of the National Environmental Standards for Air Quality, where relevant, or an equivalent method approved by the Council.

LOGGING AND REPORTING CONDITIONS

34. That all documentation, records, monitoring and test results that are required by the conditions of this consent shall be made available on request.
35. That all ambient monitoring and stack emission test results including raw data, all calculations, and assumptions that are required by the conditions of this consent shall be kept for at least the duration of this consent; and all other logs and records that are required by the conditions of this consent shall be kept for a minimum period of 24 months from the date of each entry.
36. The Council must be notified as soon as practicable in the event of any significant discharge to air, which results or has the potential to result in a breach of these conditions. The following information must be supplied:
- (a) Details of the nature of the discharge;
 - (b) An explanation of the cause of the incident; and
 - (c) Details of remediation action taken.

37. That the Consent Holder shall log all air pollution complaints received. The complaint details shall include:
- (a) The date, time, position and nature of the complaint, unless the complainant elects not to supply these details, and it is not otherwise possible to ascertain the information.
 - (b) The name, phone number and address of the complainant, unless the complainant elects not to supply these details.
 - (c) The details of any investigation into the circumstances leading to the complaint including (where relevant) any determined cause of the complaint and corrective actions undertaken in response to the complaint.
38. Details of any complaints received shall be provided to the Council within 3 working days, or as soon as practicable after the receipt of the complaint.
39. The Consent Holder shall prepare a monitoring report on a five yearly basis for the duration of this consent. The report shall be prepared by a suitably qualified person. As a minimum the report shall include all information in Part 1, and, in the event that any effects are identified in Part 1(e)(iv), all information in Part 2.

Part 1

- (a) A summary of the process monitoring data collected in accordance with Condition 24;
- (b) A summary of the emission testing data provided to Council in accordance with Condition 25, details of any exceedances of the limits in Condition 9, and any subsequent action to investigate and if necessary to remedy, or avoid future exceedances.
- (c) A summary of all ambient air quality and meteorological monitoring undertaken in accordance with Conditions 28, 29 and 30, and summary details of exceedances notified to Council in accordance with Condition 32. For any continuously recorded air quality parameters, the summary shall include relevant statistical analysis.
- (d) A summary of any complaints received and provided to Council in accordance with Condition 37.
- (e) Taking into account the information provided in (a) to (d), commentary regarding compliance with the conditions of this consent, and, in the event of any non-compliances, commentary regarding actual and potential adverse effects associated with those non-compliances.

The commentary shall:

- i. Compare data with previously collected and reported results;
 - ii. Identify and comment on any emerging trends;
 - iii. Critically evaluate the performance of the procedures and physical mechanisms in place to minimise any adverse effects associated with the exercise of this consent, identify any improvements undertaken and make recommendations on any additional improvements needed, with respect to procedures or mechanisms relating to the exercise of this consent; and,
 - iv. Identify any effects beyond those identified in the application for this consent.
- (f) Any other issue considered important by the Consent Holder.

Part 2

- (g) A review of all significant sources of emissions relevant to the effects identified in Part 1(e)(iv). The review shall include:
- i. The techniques applied to control emissions.
 - ii. Description of alternative methods for minimising the discharge compared to that currently used at the site.
 - iii. Identification of any of the alternative methods in (ii) that would significantly reduce adverse effects.
 - iv. The feasibility, including financial implications of adopting the methods identified in (iii).
 - v. An overall evaluation of whether current practice is the best practicable option.
- (h) Where current practice is no longer the best practicable option as identified in Part 2(g)(v), the steps to be taken to adopt the best practicable option, and a timetable in which those steps shall be taken.

The report shall be forwarded to the Council by 31 August every fifth year for the duration of the consent. The Council may review (internally or externally) the monitoring report required by this condition. The cost of any such review will be borne by the Consent Holder.

40. The Council may require an out-of-cycle monitoring report in accordance with all or part of Condition 39, where there is a significant adverse effect on the environment arising from the exercise of the consent, which was not foreseen at the time of the application.

ENVIRONMENTAL MANAGEMENT SYSTEM / AIR QUALITY MANAGEMENT PLAN CONDITIONS

41. Within 6 months of the date of commencement of this consent an Air Quality Management Plan (AQMP) must be submitted to the Council for certification. The Consent Holder must meet the costs of the production, certification and review of the AQMP.

The overall objective of the AQMP is to describe the practices and procedures to be adopted to ensure compliance with these consent conditions.

The AQMP shall:

- (a) Identify the main point sources of discharges of contaminants into air and, including a map showing the location of each source;
- (b) Describe how the management and operational procedures, methodologies and contingency plans necessary to comply with the conditions of this consent are implemented by an Environmental Management System (to ISO 14001 or equivalent) that includes:
 - i. Procedures to minimise stack emission discharges of contaminants into air, including the details of the inspection, maintenance, monitoring and contingency procedures in place for all emissions control equipment, including (but not limited to):
 - (a) Daily visual inspections of all baghouses discharging to air.
 - (b) At least 12-monthly dye testing of the Iron and Steelmaking bag houses to detect any bag failures.

- (c) Monitoring of gas leaks around the Kilns Co-generation Plant by-pass damper to ensure that carbon monoxide emissions are kept to a practicable minimum.
 - (d) Monitoring of the ARP and KOBM scrubber operating parameters to ensure ongoing performance is within the expected range for each parameter, as set out in the AQMP.
- ii. Actions that will be taken in response to any faults or alarm conditions that have the potential to effect discharges to air.
 - iii. Procedures to minimise fugitive emissions of contaminants into air, including the details of inspection, maintenance, monitoring and contingency procedures.
- (c) Set out procedures for recording the frequency of fugitive emissions from RPCC losses, and flaring of melter gas, and the operational or management measures to minimise these emissions to the extent practicable.
 - (d) Describe the procedures for ambient air quality and meteorological monitoring to meet the requirements of this consent, including:
 - i. monitoring methods and locations;
 - ii. record-keeping and reporting;
 - iii. trigger levels, notification and contingency procedures;
 - (e) Identify employee role and responsibilities in relation to the AQMP; and
 - (f) Set out procedures for the receipt, recording and handling of air quality complaints received; and
 - (g) Set out the management of change process for any modifications to the processes and activities set out in the Consent Application, including assessment of whether changes are material (Condition 43) and whether changes ensure the effects are the same or similar in character, intensity, and scale to the effects described by the application documents (Condition 1).
42. The Operational Area must be managed in accordance with the certified Air Quality Management Plan (AQMP).
43. The Air Quality Management Plan (AQMP) must be reviewed at least on a five yearly basis. In the event that any material changes to the certified AQMP are made, they must be submitted to the Council for certification prior to implementation. The Council will advise the Consent Holder in writing if any aspects of the AQMP are considered to be inconsistent with the conditions of this consent.

REVIEW CONDITION:

44. Under Section 128 of the RMA, the conditions of this consent may be reviewed by the Manager Resource Consents at the Consent Holder's cost in order to:
- (a) Deal with any significant adverse effect on the environment arising from the exercise of the consent, which was not foreseen at the time the application was considered, and which is appropriate to deal with at the time of the review.
 - (b) Consider the adequacy of conditions which avoid, remedy and mitigate adverse effects beyond the boundary of the site, particularly if regular or frequent complaints have been received and validated by an enforcement officer.

- (c) Consider developments in control technology and management practices that would enable practical reductions in the discharge of contaminants into air.
- (d) To require the Consent Holder to adopt the best practicable option to remove or reduce any adverse effect on the environment arising from the exercise of this consent.
- (e) Alter the monitoring requirements, including further monitoring, or increasing or reducing the frequency of monitoring.
- (f) Consider the adequacy of conditions in the event that the ambient monitoring undertaken indicates that exceedances of the Resource Management (National Environmental Standards relating to Certain Air Pollutants, Dioxins, and Other Toxics) Regulations 2004 (NES) and any subsequent amendments have occurred or are likely.
- (g) Take into account any Act of Parliament, regulation, national policy statement, regional policy statement or relevant regional plan that relates to limiting, recording or mitigating emissions by this consent.

Additionally, the conditions of this consent may be reviewed by the Manager Resource Consents at any time, if it is found that the information made available to the Council in the application contained inaccuracies which materially influenced the decision and the effects of the exercise of the consent are such that it is necessary to apply more appropriate conditions.

Figure 1:

