

IN THE MATTER of the Resource Management Act 1991 (**RMA**)

AND

IN THE MATTER of the resource consent application by New Zealand Steel Limited to replace the existing air discharge consent at Glenbrook Steel Mill (DIS60376538).

S.41C RMA HEARING DIRECTION #2 FROM THE HEARING PANEL

1. The hearing on NZ Steel Limited's resource consent application (seeking to replace existing air discharge permits 14317 - DIS60266277 and DIS60363772 at Glenbrook Steel Mill that expired on 1 November 2021) was adjourned on Thursday 28 October 2022. In part that was so that the Panel could consider whether it required further information.
2. Having reflected on that question the Panel has decided that it does require further information and, pursuant to s.41C RMA, directs the attached questions to the Applicant and Council (Mr Crimmins) as indicated.
3. Responses to those questions should be received no later than 4pm, Friday 18 November 2022 unless leave for further extension is granted.
4. The Panel also notes the discussion had during the hearing with regard to the imminent coming into force of the Resource Management Amendment Act 2020 Commencement Order 2021.
5. While the Panel has yet to deliberate on the specific matters raised by Dr Hewison, it notes the reality that GreenHouse Gas emission considerations will be at issue during the life of any consent granted and, of course (as agreed), the current application covers all discharges including GHGs – and which are not inconsiderable.
6. Taking a “real world” approach, as is so often proposed by the Courts, the Panel wishes to ensure that, in any consent granted, that matter is able to be addressed subsequently.
7. The Panel therefore invites the Applicant to consider how that might be unambiguously addressed in the draft conditions – notwithstanding the present restriction placed by s.104E RMA.

Any enquiries regarding these Directions or related matters should be directed to the Council's Hearing Advisor, by email at sam.otter@aucklandcouncil.govt.nz.



David Hill
Chairperson
Hearing Panel

4 November 2022

Questions for Auckland Council

1. Proposed condition AQ18 of the proposed consent requires the consent holder to submit a feasibility study investigating emissions reductions from:
 - a. *The emissions control of handling and recovery of Reduced Primary Concentrate and Char (RPCC) produced by the Kilns that cannot be immediately processed by the Melters, including by the installation of an in-line crushing system for direct recovery of RPCC and/or additional buffer storage capacity.*
 - b. *The emissions capture and control systems for the Vanadium Recovery Unit within the Steel Plant.*

However, S8.4.1.3 (page 81) of the Air Quality Assessment states that up to 50% emissions reductions are possible from in-line crushing of accretions for direct recovery of raw primary concentrate and char (RPCC).

Q1.

If the Panel is minded to grant consent, what % emission reduction would you recommend (and over what timeframe) in place of a further feasibility study (noting that (b) was required under the existing consent but a capture and control system deemed not feasible).

2. Existing (and proposed) conditions require the consent holder to monitor and record the level of sulphur and mercury in the coal used in the Multi Hearth Furnaces.

Q2.

In terms of understanding the utility of this proposed condition, did Council review those records? If so, what did they show?

3. The decision for resource consent for commercial plating (DIS60363772 dated 8 October 2020)¹ states that mitigation of adverse effects was BPO “given the limited timeframe of the proposal, being until 1 November 2021”.

The commercial plating decision further states “Should any dust eventually settle, it is unlikely to be noticeable”.

Q3.

In light of the increase in number of exceedances and dust complaints in recent years that coincided with the increased plating, does that conclusion hold?

4. The commercial plating decision also states that effects of iron deposition on aquatic ecosystems would have “negligible increase in overall TSP concentrations... any ecosystem effects from the additional commercial iron plating activities are considered to be negligible”.

Q4.

Is this still Council’s view?

5. As acknowledged during the Hearing, ‘targets’ in a consent condition are not enforceable per se.

Q5.

¹ Air Quality Assessment Appendix A, *Existing Resource Consents*

If the Panel decides to condition near-term emissions reductions (rather than leave that to the end of the consent period) how would you recommend doing that?

Questions for Applicant

Q1.

Please provide an annual emissions inventory (specify base year) for the identified key pollutants in Table A below.

Q2.

Please provide a graph of total annual production for 2008 – 2021 (this data will be held in confidence if commercially sensitive) against annual PM₁₀ emissions (for specified base year and any available previous years).

Data in Figure 1 and Table 2 provided by Ms Simpson (supplementary) does not match published data.

Q3.

Please provide tabulated annual average PM₁₀ concentrations for 2008 – 2021 measured at:

- 64 GBR
- Glenbrook School
- Sandspit Reserve

We invite long-term trend assessment and/or commentary by the Applicant and Council on this new information.

Q4.

Please provide annual average PM_{2.5} measured at 64 GBR for 2021.

Q5.

Please provide further evidence of how the existing emission controls and management practices comply with BPO as defined under the RMA.

Q6.

Where is the “lid” to contain N₂ for iron plating fume suppression in Fig 8.1 of the Air Quality Assessment (s8.4.1.1, page 78).

S8.4.1.3 (page 81) of the Air Quality Assessment states that up to 50% emissions reductions are possible from in-line crushing of accretions for direct recovery of raw primary concentrate and char (RPCC).

Q7.

What % reduction in emissions does NZ Steel consider achievable (and over what timeframe) should the Panel consider imposing such as a condition of consent?

The application is not seeking to authorise changes to nature or scale of discharges to air from site compared with currently consented activities.

The Air Quality Assessment (s7.2.2.2 page 58) states that a background concentration of PM₁₀ of 15.2 µg/m³ has been estimated.

Q8.

What is the basis/reference for this please? This is an important detail because this number has been subtracted from measured levels at GBR to estimate the impacts of fugitive sources (but it doesn't appear to be explained anywhere).

Slag Tipping

The Air Quality Assessment (Section 8.3.1.2, page 74) describes discharges to air from slag tipping as “flashing of steam with entrained particulate”. It was acknowledged in the Hearing that the fume generated is actually PM₁₀ and PM_{2.5} as opposed to TSP or ‘nuisance dust’.

Q9.

Why is it not assessed as such? (Currently located in section 8 nuisance dust)

RPCC losses

The Air Quality Assessment (section 8.3.1.3, page 74) describes discharges to air from RPCC losses (tipping of 30,000 – 35,000 tonnes/year) as “fine particulate in steam”. These are also in the ‘nuisance dust’ section. ‘Fallout’ is discussed in relation to complaints (often received if plume travels offsite) with facilitated clean-up ensuing. However, the PM_{2.5} discharges are not discussed.

Q10.

What are the potential impacts of PM_{2.5} from this source?

Fugitive Dust

Fig 8.5 of the Air Quality Assessment (s8.5.1, page 85) suggests elevated winds (>7 m/s) occur from WSW, W and WNW (potentially affecting residences to east) around 4.5% of the year. This is 394 hours and possibly quite significant to the neighbours getting dust fallout on their property. But in fact, dust pick up starts to occur from much lower wind speeds; 4.5 – 5 m/s so the above is an underestimate of hours when issues could arise.

Q11.

What is the frequency of winds > 5m/s from WSW, W and WNW please?

Table A. Draft New Zealand Steel Emissions Inventory

Source	PM ₁₀	PM _{2.5}	NO _x	SO ₂	CO	HCL	Benzene	Mercury	Cadmium
Stack Sources	(tonnes/year)						(kg/year)		
4 x Multi Hearth Furnaces (MHF)									
4 x Kilns									
Metalside b/h									
Slagside b/h									
Steel Plant (KOBM) b/h									
KOBM Flare									
Slab Reheat Furnace									
Pipe Mill Blowdown scrubber									
Pipe Mill Galvanising b/h									
Acid Regeneration Plant									
Primary Concentrate Drier b/h									
Pickle Line scrubber									
2 x Paint Line Prime Oven Incinerator									
Paint Line Finish Oven Incinerator									
9 x Generators									
Other Sources	(tonnes/year)						(kg/year)		
Iron Plate tipping									
RPCC dumping									
Unsealed roads									
Unsealed areas									
Other									
Total (All Sources)									