# PLANNING PANELS VICTORIA INQUIRY AND ADVISORY COMMITTEE (IAC) FINGERBOARDS MINERALS SANDS PROJECT (Project)

# SUBMISSIONS ON BEHALF OF ENVIRONMENT PROTECTION AUTHORITY VICTORIA

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### Introduction

- These submissions are made on behalf of the Environment Protection Authority of Victoria (EPA). The EPA is an independent statutory authority. Its objective is to protect human health and the environment by reducing the harmful effects of pollution and waste.
- 2. In relation to the Environment Effects Statement (**EES**) for the Project and proposed Planning Scheme Amendment 156 to the East Gippsland Planning Scheme (**Amendment**), EPA appears before the IAC as a submitter. In relation to the application for a works approval (**WAA**) for the discharge to groundwater and surface water associated with the Project, the EPA appears in order to provide advice on the status of the assessment of the WAA and to provide preliminary observations. These observations do not indicate the likely outcome of the EPA's assessment of the WAA or fetter its discretion.
- 3. From 1 July 2021, the WAA will be deemed to be a development licence application.<sup>1</sup> It will be assessed under the *Environment Protection Act 2017* as amended by the *Environment Protection Amendment Act 2018* (the **New EP Act**).<sup>2</sup> Given the IAC's report will be prepared after this date, the remainder of these submissions adopts the terminology under the New EP Act unless stated otherwise.
- 4. These submissions address the following matters:
  - (a) further comments on the consequences of the New EP Act coming into effect;
  - (b) the development licence application and the EPA's request for further information;
  - (c) the importance of transparency, timely provision of reliable information and community consultation;
  - (d) the new MOU due to be entered into between EPA and Earth Resources Regulation (**ERR**);
  - (e) the EPA's recommendations in relation to specific environmental effects; and
  - (f) comments on the incorporated document.

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<sup>&</sup>lt;sup>1</sup> New EP Act, ss 470 and 474.

<sup>&</sup>lt;sup>2</sup> New EP Act, s474(3).

### The New Environment Protection Act 2017

5. It is now evident that this Project must be assessed against, and will need to comply with, the requirements of the New EP Act and its associated regulatory framework including the recently made *Environment Protection Regulations 2021* (**Regulations**) and Environment Reference Standard (**ERS**).

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- 6. Since the EPA presented its opening submissions, further material has been released with respect to the New EP Act and the supporting regulatory framework. The chief of these is the formal making of the ERS and Regulations.
- 7. Key new documents relevant to the Project include:
  - (a) the ERS, which were published in the government gazette on 26 May 2021 (a copy is **attached** to these submissions);
  - (b) the Environmental Protection Regulations 2021 and the Environmental Protection Transitional Regulations 2021;<sup>3</sup>
  - (c) **EPA Publication 1753.2** *Guide to the Environment Protection Regulations* (May 2021), which provides an overview of the Regulations.<sup>4</sup> It is a navigational guide and does not explain the compliance requirements;
  - (d) **EPA Publication 1757.2** *Summary of noise framework* (May 2021), which explains at a high level the regulatory framework for noise pollution; and
  - (e) **EPA Publication 1826.4**: Noise limit and assessment protocol for the control of noise from commercial, industrial and trade premises and entertainment venues (May 2021).<sup>5</sup>
- 8. It is to be noted that EPA Publication 1826 is a Protocol, not a guideline. It is given mandatory effect through the Regulations, which direct that the prediction, measurement, assessment or analysis of noise must be conducted in accordance with the Noise Protocol. The other key noise publication by the EPA relevant to the issues under consideration for this Project is Chapter 4 of **EPA Publication 1834** *Civil construction, building and demolition guide*, which was made in November 2020 (after exhibition of the EES).

<sup>&</sup>lt;sup>3</sup> Which can be accessed from <a href="https://www.legislation.vic.gov.au/as-made/statutory-rules">https://www.legislation.vic.gov.au/as-made/statutory-rules</a>

<sup>&</sup>lt;sup>4</sup> Available for download: <a href="https://www.epa.vic.gov.au/about-epa/publications/1757-2">https://www.epa.vic.gov.au/about-epa/publications/1757-2</a>

<sup>&</sup>lt;sup>5</sup> Available for download: https://www.epa.vic.gov.au/about-epa/publications/1826-4

<sup>&</sup>lt;sup>6</sup> Environment Protection Regulations 2021, reg 113.

<sup>&</sup>lt;sup>7</sup> Available for download: <a href="https://www.epa.vic.gov.au/about-epa/publications/1834">https://www.epa.vic.gov.au/about-epa/publications/1834</a>

- 9. Further, a number of the documents have now been tabled by the Proponent, including Publication 1823 which was referred to by the EPA it its opening submissions:
  - (a) Doc 340: **EPA publication 1741.1** *Industry guidance: Supporting you to comply with the General Environmental Duty* (October 2020);
  - (b) Doc 341: **EPA Publication 1856** Reasonably practicable (September 2020);
  - (c) Doc 372: **EPA Publication 1823** *Mining and quarrying Guide to preventing harm to people and the environment* (October 2020).
- 10. Attachment A to these submissions provides a list of some additional documents that provide further guidance on matters including the classification of waste and further guidance in relation to noise, particularly noise reduction measures. As the EPA is constantly updating its guidance and publications in relation to the new environment protection framework and industry specific guidance it will endeavour to draw the IAC's attention to any future publications that are released prior to the close of the hearing that may be of assistance to the IAC in understanding the new environment protection regime.

### The project documentation must be updated to reflect the new legislative regime

- 11. Noting that there is a lot of guidance available, and more will become available over the next few months, the EPA submits it is not the EPA's responsibility to correct the Proponent's documentation and to ensure that it accurately reflects the new legislative regime. The EPA is able to provide information about the new regime and to assist in locating relevant resources, but the obligation to comply, together with the choices as to how compliance will be achieved, are the responsibility of the Proponent.
- 12. The EPA will endeavour to provide comment and suggest corrections where it can, but ultimately it is the Proponent that should be ensuring the Project documentation has been updated appropriately.
- 13. The EPA has previously made a number of recommendations in its submissions to the EES that gave detailed and specific guidance about the introduction of the New EP Act. It also requested a consultation role in response to the updating of the documentation to reflect the New EP Act.

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<sup>&</sup>lt;sup>8</sup> See for example the recommendations set out at Submission 514, pp9-11.

- 14. With respect to the updating of the documentation, there is no longer a need to provide mechanisms to transition to the New EP Act. That act will be in place *prior* to any of the Project documentation being finalised. It is therefore imperative that all of the documents be updated to correctly reference the new laws and relevant publications.
- 15. The EPA no longer seeks a consultation role in relation to these changes as it is of the view this is not necessary given the Project will not be transitioning from the old regime to the new one, but rather will be determined and, if it is to proceed, will operate, under the New EP Act from the outset. Likewise, it is no longer appropriate to provide a transition mechanism: the documentation should simply be updated to be fully compliant with the new regulatory regime.

### Updated recommendation:

The EPA recommends that all relevant documentation, including the EMF, mine Work Plan, Incorporated Document, Mitigation Register and Development Licence application be updated to reflect the new environment protection regulatory framework that applies from 1 July 2021. This is to include consistent reference to the *Environment Protection Act 2017* (not 2018 which is an amending act) and, where necessary reference to the general environmental duty, environmental protection regulations, the Environment Reference Standard and relevant EPA Publications.

16. It is also EPA's practice to request that specific documents be referred to where relevant – for example instead of generically referring to the "relevant Environment Protection Authority Victoria (EPA) Noise Control Guidelines" the practice is to provide specific reference be given to the correct publication, eg "Chapter 4 of EPA Publication 1834 Civil construction, building and demolition guide".

### The 11 principles of environment protection

17. Part 2.3 of the New EP Act sets out the 11 principles of environment protection. The Proponent in its Part B submissions drew the IAC's attention to the principles of integration (s13) and proportionality (s14)<sup>9</sup>. Other relevant principles include the principles of:

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<sup>&</sup>lt;sup>9</sup> Kalbar Part B Submissions, Document 358 at [23] and [25].

- (a) primacy of prevention (s15) in which prevention is preferred to remedial or mitigation measures;
- (b) polluter pays (s17) whereby those who generate pollution and waste should bear the cost of containment, avoidance and abatement;
- (c) evidence-based decision making (s19) whereby actions or decisions under the New EP Act should be based on the best available evidence in circumstances that are relevant and reliable; and
- (d) principles of accountability (s22) whereby the public is to have access to reliable and relevant information, be engaged and given opportunities to participate in decisions made under the act and have their interests taken into account in decision under the New EP Act.

### The GED and the ERS

- 18. The EPA, the Proponent and Mine Free Glenaladale (**MFG**) have already addressed the IAC in detail on the provisions relating to the general environmental duty at s25 of the New EP Act (the **GED**), the definition of "harm" (s4), the concept of minimising risks of harm to human health and the environment (s6(1)) and the meaning of "reasonably practicable" (s6(2)). <sup>10</sup>
- 19. With respect to the ERS, it is a new legislative instrument made under the New EP Act. The ERS is not a compliance standard (it does not set requirements that must be met by duty holders), rather it is an environmental reporting and assessment benchmark. It provides a reference for assessing potential impacts to human health and the environment used to inform decision-making.
- 20. This is clear from the provisions of the New EP Act, and in particular Chapter 5 where the key provisions relating to the ERS are found. Section 93 of the New EP Act empowers the making of the ERS "to be used to assess and report on environmental conditions in the whole or any part of Victoria".
- 21. How the ERS is to be applied is further explained by the EPA in a range of publications. For example, it is explained that:

"The ERS provides a reference to help make decisions. It does not:

<sup>10</sup> EPA Opening Submissions, Document 249 at [35] to [49]; Kalbar Part B Submissions, Document 358 at [23] to [27] and [62] to [65] and MFG Submission 3 June 2021, Document 451, at [226] to [228].

- create specific obligations you must follow
- set out enforceable compliance limits
- describe levels that it is okay to pollute up to.

This reflects an important shift in approach of the Environment Protection Act 2017. Instead of using standards to create obligations or set limits, now everyone must minimise risks of harm to human health and the environment from their activities. This is known as the general environmental duty (GED). The GED will encourage better environmental performance over time. "11

22. In the case of a development licence application, the ERS must be considered by the EPA when making its decision, <sup>12</sup> and by VCAT if there is a review of that decision. <sup>13</sup> It is noted that the EPA will be seeking further information from the Proponent about the development licence application with respect to the GED and the ERS through a request for information to be issued under s50(3) of the New EP Act (a **draft** copy of this notice is **attached** to these submissions). This is discussed later in this submission.

### The failure to consider and engage with the GED

- 23. Under cross-examination, a number of the experts called by the Proponent were remarkably frank in admitting that they were not familiar with, and indeed in some instances had not considered, the forthcoming new legislative provisions, including the GED.
- 24. Whilst the Proponent seeks to make light of this, arguing that the Project's design and assessment process have "intrinsically adopted a risk-based approach of harm minimisation consistent with the new duties that will apply", 14 with the greatest of respect the failure to engage with the new legislative regime at an early stage of the design process is a significant one, particularly in light of the fact that the *Environment Protection Amendment Act 2018*15 was assented to on 28 August 2018. Thus, there has been plenty of time for those involved in the preparation of the EES to consider how this legislation would be likely to impact its activities and to start to design and plan its Project accordingly.
- 25. The ERS are reference standards, not compliance limits. The Project must ensure that impacts are reduced wherever reasonably practicable. Even where predicted impacts are

<sup>&</sup>lt;sup>11</sup> Refer to <a href="https://www.epa.vic.gov.au/about-epa/laws/epa-tools-and-powers/environment-reference-standard/applying-the-standard">https://www.epa.vic.gov.au/about-epa/laws/epa-tools-and-powers/environment-reference-standard/applying-the-standard</a>

<sup>&</sup>lt;sup>12</sup> New EP Act, s69(3)(b).

<sup>&</sup>lt;sup>13</sup> New EP Act, s 435(c).

<sup>&</sup>lt;sup>14</sup> Kalbar Part B Submission, Document 358 at [67].

<sup>&</sup>lt;sup>15</sup> A copy of which has been tabled: Document 342.

below the relevant objective specified for a particular indicator (eg if  $PM_{10}$  emissions are below the 50  $\mu g/m^3$  per day objective specified in Table 2.2 of the ERS), there is still a requirement to further reduce air impacts below these levels where reasonably practicable.

- 26. It is not enough to establish that the relevant quantitative or qualitative objectives set out in the ERS for relevant indicators will be met, it is also necessary to comply with the GED and to ensure that risks of harm to human health or the environment from pollution or waste will be eliminated or, if that is not reasonably practicable, that the risks are reduced as far as reasonably practicable.
- 27. The GED will require a proactive approach to risk identification and minimisation on an ongoing basis. EPA's view in relation to compliance by the Project with the GED is that:
  - (a) for a high-risk project, satisfaction of the GED will require a level of diligence that is proportionate to those potential impacts; and
  - (b) as technologies, design, construction and operational methods improve, it will be necessary to incorporate reasonably practicable measures to ensure the GED is continually satisfied.
- 28. Compliance with the Project documents, such as the mine Work Plan and the Incorporated Document will be necessary but alone is not sufficient to discharge the GED. In particular:
  - (a) the approval of various regulatory compliance frameworks, such as the approval of the mine Work Plan by ERR or compliance with the EMF and the Mitigation Register (regardless of whether those documents are enforceable), does not of itself mean that the GED is discharged; and
  - (b) persons constructing and operating the Project will need to actively consider new instruments prepared under the New EP Act, as well as developments in the state of knowledge relevant to determining what is reasonably practicable to minimise risks of harm to the environment and human health from pollution or waste.

### The development licence application

- 29. As the Proponent has already acknowledged,<sup>16</sup> under the New EP Act the Project will require a development licence and operating licence pursuant to the requirements of sections 44 and 45 of the New EP Act. Only the development licence application is being considered at present, the operating licence application will follow at a later stage.
- 30. Extractive Industry (including mineral sands mining) is a prescribed activity pursuant to regulation 16(1)-(2) and item 37 (C01 Extractive industry and mining) of the Table to Schedule 1 of the Environment Protection Regulations 2021 (**EP Regulations**). A list of exceptions are set out in the Table to Schedule 1, including an exemption for activities discharging solely to land or solely to the atmosphere that are in accordance with the Mineral Resources (Sustainable Development) Act 2006 (the **MRSD Act**).
- 31. For the current project, the discharges are not solely to land or the atmosphere. The discharges include:
  - (a) the discharge of surface water to the Mitchell River (from the DAF plant via the Freshwater Dam); and
  - (b) the discharge of water (leachate) seeping from the tailings to the groundwater.
- 32. Accordingly, a development licence is required. A development licence will also be required if the Proponent wishes to seek approval for a discharge to the Perry River, but that is not something the Proponent is currently seeking. If the Proponent later determines it will be necessary to discharge to the Perry River, then it will need to apply for a development licence at that time and that application will be subject to the usual provisions of the New EP Act, including the provisions as to advertising and consultation.
- 33. The Proponent's modelling predicts that leachate from tailings returned to the mine voids will cause a groundwater mound to form, both horizontally and vertically, under the mine voids. Such leachate would be a discharge of waste to groundwater, which triggers the need for an EPA permission. Accordingly, the development licence application must be updated to reflect this. This has been addressed in the draft s50(3) notice.

<sup>&</sup>lt;sup>16</sup> Kalbar Part B Submission, Document 358 at [63].

- 34. The EPA does not accept that the development licence is only required in relation to the discharge of wastewater treated by the Dissolved Air Flotation water treatment plant (**DAF plant**). It is important that the additional trigger of the discharge to groundwater be acknowledged and addressed.<sup>17</sup> The EPA further addresses the issue of the discharge to groundwater in its submissions below on the predicted impacts to groundwater.<sup>18</sup>
- 35. It is also noted that the draft s50(3) notice includes a section requesting further analytical data from the Proponent regarding whether the discharges to groundwater or surface water are a radiation source. This information is necessary because s7(2) of the New EP Act provides that the Act does not apply to a "radiation sources within the meaning of the Radiation Act 2005 unless a serious risk to human health or the environment from pollution or waste has arisen or is likely to arise".<sup>19</sup>

# The draft s50(3) notice and requirement for further information

- 36. On the material currently before the IAC, there are a number of matters where the information and material is insufficient to satisfy the EPA that it has before it the relevant information necessary to determine the application. The key areas of uncertainty relate to the identification and assessment of the risks associated with the discharges of waste to surface water and groundwater. The EPA seeks to ensure that these risks have been accurately identified and that where potential risks of harm to human health or the environment have been identified that these have been eliminated or reduced as far as reasonably practicable.
- 37. The EPA requires further relevant information necessary to determine the development licence application. It has sought and is seeking this:
  - (a) first, by way of a s22 notice issued under the EP Act 1970 on 22 December 2020 (s22 notice); and
  - (b) second, by way of a s50(3) under the New EP Act that is intended to be issued on or shortly after 1 July 2021 under the New EP Act, a **draft** copy of which is **attached** to this submission.

<sup>19</sup> The wording of s7(2) of the New EP Act is slightly different to the equivalent at s2(2) of the EP Act 1970, which states the Act does not apply to a radiation source "unless a condition of pollution or an environmental hazard has

arisen or is likely to arise.'

<sup>&</sup>lt;sup>17</sup> For the avoidance of doubt, it is the EPA's submission that the discharge of treated water from the DAF/freshwater storage dam to the Mitchell River is not the only aspect that currently requires approval and that approval is also required for the discharge of the leachate from the tailings discharges to groundwater. See Kalbar's Part A submission at table 1 on pp 40-41.

<sup>&</sup>lt;sup>18</sup> See 'Groundwater' section of these submissions, at paragraph [84] onwards.

- 38. A copy of the final notice will be provided to the IAC once it is issued. The EPA reserves its right to make any changes it considers necessary prior to issuing the s50(3) notice in final form. The provision of the draft notice in no way fetters the EPA's powers to request further information or to exercise its powers.
- 39. By way of summary, the matters covered in the draft s50(3) notice includes seeking further information regarding:
  - (a) demonstrated compliance with the GED;
  - (b) the impact of the proposed activities upon the relevant environmental values identified in the ERS;
  - (c) the predicted quality of discharge into the Mitchell River at the point of discharge and immediately downstream;
  - (d) detailed information about the proposed surface water discharges, including as to timing, circumstances, anticipated quality and discharge points;
  - (e) monitoring planned for the DAF plant to ensure it operates as designed;
  - (f) the predicted quality of leachate from the tailings returned to mine voids and potential environmental effects to groundwater resources;
  - (g) further modelling, information and other details to establish that the potential impacts to groundwater quality are sufficiently understood;
  - (h) the long term average process water quality, management and disposal options for the centrifuge centrate and the potential impact on water entrained with, and leaching from, the tailings;
  - (i) further testing and information to inform an assessment of the potential quality of process water entrained in the tailings and quality of rainfall infiltration through the remediated mine pit;
  - (j) design and operational details of the centrifuges, including details regarding flocculants;
  - (k) fines tailings cake stockpiling impacts, including management of runoff and prevention of recirculation of ultra-fines;

- (l) clarification as to how the process water and tailings filter cake runoff or leachate will be prevented from entering and mixing with mine contact water treated in the DAF plant or water stored in the Freshwater Dam;
- (m) updated GHG and noise emissions arising from the introduction of the centrifuges;
- (n) further detail about the proposed dams, including any proposed transfer of waters between them, the prevention of exceedance of capacity/spillage;
- (o) further water balance and rainfall data justifications and explanations;
- (p) details regarding the potential presence of a "radiation source" within the meaning of the Radiation Act 2005; and
- (q) description and classification of DAF solids, tailings and centrate materials from the DAF plant and centrifuges under the New EP Act and the Radiation Act 2005.
- 40. Whilst the EPA acknowledges it requires substantial further information before it can determine the development licence application, the question as to whether the information that has been provided to date is sufficient for the IAC in relation it its Terms of Reference is a matter for the IAC to determine. The EPA does not seek to influence it in that regard, albeit the extent of advice that the IAC can provide in relation to the development licence application will necessarily be limited by the absence of relevant information.

# The importance of transparency, timely provision of reliable information and community consultation

- 41. Whilst on the topic of further information, to the extent that the Proponent has been forthcoming with information in a timely fashion, that has been greatly appreciated by the EPA. However, the EPA does express concern at the extent to which some relevant documents and additional material have been provided much later than is appropriate or necessary, adding significantly to the time, complexity and cost for the IAC and submitters (including the EPA).
- 42. It is also concerned by the inaccuracies that have been identified in some of the data in the advertised EES and the degree of ongoing uncertainty and need for further modelling, monitoring and information.

43. In such circumstances it is difficult to engage with the material fully and to make the most of the important consultation and assessment opportunities provided through the IAC hearing process.

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# 44. To name a few examples:

- (a) TN01 dated 18 January 2021,<sup>20</sup> was the first time the Proponent explicitly put forward the possibility of using centrifuges to dewater fines tailings, despite centrifuges having been actively considered by Kalbar since at least 2018;<sup>21</sup> and
- (b) despite the provisions of technical notes 22 and 26, there has yet to be a clear and logical explanation of the changes to the water balance that predicted the total water in the combined coarse and fine tailings streams would decrease from 23,450 ML/year to 19, 060 ML/year.<sup>22</sup> The water saving of 4,390 ML/year has yet to be explained in a manner that the EPA's technical experts can be confident is correct.
- 45. The New EP Act further strengthens the importance of community consultation for the EPA, requiring it to prepare a Charter of Consultation. The draft Charter of Consultation recently prepared by the EPA makes it clear that consultation is central to the principle of accountability.<sup>23</sup>
- 46. Without the transparent, open and timely provision of information, proper opportunities for community consultation and submitter consideration of relevant materials may be hampered.
- 47. That said, it is important to note that the EPA will ensure it has all the necessary information, via its powers to request further information, prior to making a decision on the development licence. When it receives the completed response to the EPA's requests for further information it will consider the material and if it considers it necessary will further consult with the community to ensure appropriate community engagement and consultation.

<sup>21</sup> See Appendix B to Document 130, the expert witness statement of Dr Saracik. Appendix B is an Alfa Laval Laboratory Spin Test Report of the Fingerboards Minerals Sands Slimes Tailings Dewatering test for Decanter Centrifuge dated 8 October 2018.

<sup>&</sup>lt;sup>20</sup> Document 43a (being the version revised on 3 May 2021).

<sup>&</sup>lt;sup>22</sup> See Table 2.1 'Model changes to apply centrifuge', Document 132, the supplementary expert witness statement of Mr Muller. The water in the combined sand and fines tails feeds was 23,450 ML/year in the EES data (17,850 water in sand tails cyclone feed + 5,600 water in fine tails feed), whereas for the new data it was 19,060 ML/year (11,790 water in sand tails cyclone feed + 7,270 water in fine tails feed).

<sup>&</sup>lt;sup>23</sup> See Draft Chamber of Consultation, September 2019 at pdf 5 and discussion above regarding the principles of environment protection.

# The MOU between ERR and EPA

- 48. The Proponent has provided a copy of the current MOU between ERR and the EPA as part of its response set out at Technical Note 25.<sup>24</sup> That document is in the process of being revised and has a limited "shelf life". Whilst the exact date for a new MOU to be completed has not been given, negotiations and drafting of the document are well under way and have been for some time. This is addressed in some detail in the VAGO report.<sup>25</sup>
- 49. It is still too early to pre-empt entirely the content and final arrangements that will be in place following the execution of that MOU and there may be some aspects of the arrangement that are quite different to what is currently in place.
- 50. The EPA will provide the new MOU to the IAC if that occurs prior to the completion of its report..

# EPA's Recommendations with respect to specific environmental effects

- 51. The EPA looks forward to the provision of revised documentation from the Proponent, to ensure that the recommendations outlined in its submissions 514 and 514b are satisfactorily addressed. Preliminary signs are promising that a number of the recommendations sought by the EPA will be accepted by the Proponent or can be responded to through the s50(3) notice process.
- 52. The specific wording of the EPA's recommendations will need to be refined as a result of the substantial changes made to the Project through the iterative process, the additional evidence and information that has been adduced through the hearing process and because the New EP Act will apply, so references need to be updated and transition provisions deleted.
- 53. The substance of the EPA's recommendations as set out in its submission to the EES largely remain (albeit adapted to reflect the introduction of the centrifuges and the commencement of the New EP Act). The discussion that follows concentrates on the areas understood to be in contention between the Proponent and the EPA, as well as the identification of some modified recommendations in light of the EPA's consideration of the oral and written expert evidence.

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<sup>&</sup>lt;sup>24</sup> Document 390.

<sup>&</sup>lt;sup>25</sup> VAGO Rehabilitating Mines Report (August 2020), Document 409, pdf pages 17-18, 39, 74, 76-77 and 81.

### Air

- 54. Mr Welchman's written evidence responded to, and largely accepted, the EPA's recommendations.<sup>26</sup> Provided the recommendations set out in his evidence are reflected in amendments to relevant project documentation, and noting that the Proponent has indicated its acceptance of these recommendations, then the key outstanding areas of dispute between the EPA and the Proponent on air quality impacts (excluding GHG emissions) are:
  - (a) whether a vehicle speed limit of 10-20km an hour on sealed roads should be imposed;
  - (b) whether continuous visual observation monitoring is economically viable (there is no dispute that it should be required if it is); and
  - (c) the appropriate risk assessment categorisation for risk ID 37 and 38 as set out at pdf 55 of the revised draft Work Plan at Document 198.
- 55. With respect to the vehicle speed limits, the EPA has considered the evidence of Mr Welchman in cross examination, together with the advertising materials of examples of dust suppressants filed by the Proponent.<sup>27</sup> The EPA considers there is merit in Mr Welchman's evidence that visual dust observations combined with modified driver behaviour and use of appropriate dust suppressants could be adopted to minimise dust impacts, particularly those offsite. The EPA's focus is to ensure the offsite amenity impacts caused by dust are minimised as far as reasonably practicable.
- 56. In place of a strict 10-20km speed limit across the entire project area for unsealed roads, a control the combines reduced speed limits close to sensitive areas together with an obligation upon drivers to reduce speeds in response to their visual observation of dusty roads is acceptable to the EPA.

# Modified recommendation (to replace 10-20 km/hr speed limit)

"EPA recommends that the 50km/hr vehicle speed limit on unsealed project roads as described in the Airborne and Deposited Dust Risk Treatment Plan (Table 7-1) be amended to 20km/hr within 500m metres of sensitive areas<sup>28</sup> and 50km/hr elsewhere.

<sup>&</sup>lt;sup>26</sup> Expert Witness Statement and supplementary statement of Mr Welchman, Documents 84 and 139. See in particular Document 84 at paragraphs [62]-[77] and appendix B (issues #8-17). See too Document 139 at [18]-[20]

<sup>&</sup>lt;sup>27</sup> Documents 355, 356 and 357.

<sup>&</sup>lt;sup>28</sup> This 500m distance from sensitive receptors is consistent with the EPA's recommended separation distances for large excavation activities.

# Induction processes are to include ensuring drivers are advised to further reduce speeds when dusty conditions are observed."

- 57. The EPA continues to press its recommendation for video monitoring as part of the suite of controls for ensuring dust impacts arising from the activities are monitored and responded to in a timely fashion. Mr Welchman agrees with this recommendation, but included the proviso words "if economically viable". The EPA submits that in the context of this Project, video monitoring is reasonably practicable given the environmental and health risks associated with dust.
- 58. With respect to the assessment of dust risk, it continues to be the EPA's opinion that the risk IDs 37 and 38 as set out at the revised draft Work Plan (Risk Management Plan) should be revised from "unlikely" to "possible" and the inherent risk, consequence and residual risk ratings should be updated.<sup>30</sup>

### Noise

- 59. The key issues for the EPA in relation to noise are:
  - (a) ensuring noise and vibration emissions will be minimised as far as reasonably practicable, in accordance with the GED;
  - (b) ensuring noise modelling and mitigation strategies continue to be developed to respond to immediate and future changes to the Project and its design to implement best practice and minimise noise emissions; and
  - (c) the need for substantial revision of the project documentation relating to noise.
- 60. The EPA continues to seek recommendations that align with the substance of the recommendations made in relation to its submissions 514 and 514b with respect to noise, but will suggest further changes in terms of how these are drafted to improve clarity and reflect the relevant provisions of the New EP Act, ERS, the Environment Protection Regulations 2021,the Noise Protocol (EPA publication 1826) and EPA Publication 1834.
- 61. The EPA strongly opposes the proposition put forth by Council and MFG during their cross-examination of Mr Delaire that EPA consent be obtained whenever night time

<sup>30</sup> See risk ID 37 and 37 at the risk matrix contained in Document 198 at pdf 55. See also the original EPA recommendation in relation to this risk at Document 514, p21.

<sup>&</sup>lt;sup>29</sup> Expert Witness Statement of Mr Welchman, Document 84 at [68].

construction activities are to be undertaken. This would place an unnecessary burden upon EPA and is inconsistent with the "polluter pays" principle at section 17 of the New EP Act. Any benefits of having the EPA perform this role are outweighed by the cost considerations given the finite resources of the EPA.

- 62. Moreover, the role of approving unavoidable works is to be undertaken by the relevant authority (not the EPA), as is clearly set out in EPA Publication 1834, which states as follows:<sup>31</sup>
- Unavoidable works are works which pose an unacceptable risk to life or property or a
  major traffic hazard and can be justified. Includes an activity which has commenced but cannot
  be stopped. You will need to demonstrate that planned unavoidable works cannot be
  reasonably moved to normal work hours. This requires additional consideration of potential
  noise and vibration generating activities and controls to minimise noise and vibration. These
  can be recorded within the noise and vibration management plan (may be part of a broader
  environmental management plan).

You must contact the relevant authority and seek any necessary approvals for unavoidable works. You should notify affected <u>sensitive receivers</u> of the intended work, its duration and times of occurrence. A noise and vibration management plan may need to be prepared or reviewed by a suitably qualified acoustic consultant or practitioner to address unavoidable works (see <u>Work with an environmental consultant</u>, EPA website).

- 63. Justifying that works are unavoidable is not an environmental consideration and therefore it should not be for EPA to approve what is unavoidable or not. This is something to be assessed by a person who has skills and expertise in risk/safety assessment (such as a health and safety specialist) who can determine whether the works "pose an unacceptable risk to life or property or a major traffic hazard that can be justified". That person needs to have no prior involvement in either the planning or delivery of the project and who can make decisions free from any influence or pressure related to the delivery of the project.
- 64. EPA Publication 1834 also refers to 'low noise impact works' and 'managed-impact works' as potential considerations for night time construction. There should be a framework in place for justification of these, with approval from a person independent to the Project. Again any approval of "Low-noise impact works" and "Managed-impact works" should be obtained from the relevant authority, not the EPA. This is consistent with the guidance at EPA Publication 1834 on these matters which states:

<sup>31</sup> EPA Publication 1834 Civil construction, building and demolition guide (November 2020) at pdf 33 (p27) https://www.epa.vic.gov.au/about-epa/publications/1834

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- Low-noise impact works these are inherently quiet or unobtrusive, for example, manual
  painting, internal fitouts, and cabling. Low-noise works do not have intrusive characteristics
  such as impulsive noise or tonal movement alarms. The relevant authority must be contacted,
  and any necessary approvals sought.
- Managed-impact works works where the noise emissions are managed through actions specified in a noise and vibration management plan (may be part of a broader environmental management plan), to minimise impacts on sensitive receivers. Managed-impact works do not have intrusive characteristics such as impulsive noise or tonal movement alarms.
  You must contact the relevant authority and seek any necessary approvals. A noise and vibration management plan may need to be prepared or reviewed by a suitably qualified acoustic consultant or practitioner (see Work with an environmental consultant, EPA website).
- 65. If the Proponent considers there is need for unavoidable night-time construction works to occur in circumstances where they may be audible inside dwellings or likely to impact other sensitive areas at night, the EPA submits this ought to be granted by an independent environmental auditor, not the EPA. Such an approach is consistent with the recommendation sought by the EPA in response to this EES and is consistent with the approach recently adopted by the Minister for Planning for the North East Link Project (**NELP**) and the IAC for the Crib Point Gas Import Jetty Project.
- 66. For example in NELP, the only night time construction works that were permitted were works that would be inaudible within a habitable room of any premises or, for noisier works they had to be unavoidable works verified by an Independent Environmental Auditor. In Crib Point the IAC recommended a similar environment performance requirement, namely "Ensure out of hours works comply with EPA publication 1254 and must be Unavoidable Works' or approved Low Noise or Managed Impact Works', which must be approved by an independent environmental auditor." Note that Section 2 of Publication 1254 has now been replaced by EPA Publication 1834.

### Revised Recommendation for night time works

The EPA recommends that in relation to night time works (NV17 and Table 6-1) the outdated reference to EPA Publication 1254 be updated and that the recommendation be clarified and modified as follows:

The EPA recommends that NV17 and the acceptance criteria in Table 6-1 of the Environmental Noise Risk Treatment Plan (ENRTP) be amended and/or new mitigation measures be added as follows: "Construction noise that is audible inside a habitable room of a residence is permissible if approved by an independent environmental auditor as meeting the definitions of 'unavoidable works' or 'low-noise or managed impact works' in EPA Publication 1834. The

ENRTP must either include a clear rationale for defining works or a list of the type of planned works that constitute "unavoidable works" or "low-noise or managed impact works" and response strategies to mitigate the impacts of these works.

Add a new mitigation measure in the ENRTP and Mitigation Register as follows: "Appoint an independent and qualified environmental auditor to review and approve 'unavoidable works' or 'low-noise or managed impact works' as meeting the definitions in EPA Publication 1834 and the rationale for unavoidable works set out in the ENRTP".

Add a new mitigation measure in the ENTRP and Mitigation Register as follows: "Notify residents at least 24 hours prior to "unavoidable works" or "lownoise or managed impact works" commencing".

- 67. In cross examination by the EPA, Mr Delaire's evidence was that he was "still getting my head around" the ERS and EPA Publication 1826 (the Noise Protocol).<sup>32</sup> His evidence was that his assessment was based on the *Noise from Industry in Regional Victoria* (**NIRV**) and that he was unaware that the new regulations would require consideration of any campgrounds, tourist establishments or caravan parks in the areas.
- 68. Given this evidence, it is clear that further work is required to ensure that the potential impacts of the Project have been considered in relation to the revised documentation, including the identification of all relevant noise receptors as defined by "noise sensitive areas" (which now explicitly includes tourist establishments, caravan parks, child care centres, kindergartens and primary schools)<sup>33</sup> and the consideration of the noise impacts on natural areas (including Limpyer's State Forest) consistent with the definition in the ERS of "natural areas", within which the environmental value of 'human tranquillity and enjoyment outdoors' is to be considered.
- 69. The EPA is content to rely on the IAC's views as to when the additional considerations need to occur.

<sup>&</sup>lt;sup>32</sup> Evidence of Mr Delaire under cross-examination by the EPA 13 May 2021, approximately 2:14:09 onwards.

<sup>&</sup>lt;sup>33</sup> Consistent with the definitions of "noise sensitive area" at regulation 4 under the Environment Protection Regulations 2021.

# Surface water and groundwater – preliminary observations about the requirement for further information, monitoring and modelling

- 70. Surface water and groundwater impacts are the two key factors relevant to the EPA's consideration and assessment of the development licence. The evidence and additional materials that have been presented since it made its previous submissions have not resolved the issues previously identified by the EPA. It largely presses the substance of the previous recommendations, except as specifically identified in these submissions.<sup>34</sup>
- 71. The experts called by the parties in relation to matters pertinent to surface water and groundwater impacts largely agree that additional monitoring, modelling and data is required.
- 72. From the EPA's perspective, it is in no doubt that further relevant information is necessary for it to determine the development licence application and thus that the additional information the EPA requires will need to be provided as requested in the s50(3) notice so it can be appropriately considered well before 31 December 2021, the date by which the development licence application is currently due to be determined.<sup>35</sup>
- 73. With respect to the uncertainty that has arisen as a result of changes to the water balance, it was unfortunate that Mr Muller had not adequately interrogated the figures that the Proponent's process engineers had provided. Mr Muller acknowledged that the seepage and entrainment rates were critical to the water balance model and that these figures "went in as is" from the spreadsheet provided to him by the Proponent.<sup>36</sup>
- 74. The EPA has considered the additional information presented during oral evidence together with the subsequent provision of Technical Notes 22 and 26. Whilst that information is helpful for understanding the seepage processes after the tailings have been emplaced, it does not help explain:
  - (a) the changes in the water balance; nor
  - (b) why the introduction of the centrifuges are purported to reduce seepage, given the fines tailings were not predicted to have any seepage in the advertised EES.

<sup>&</sup>lt;sup>34</sup> Submission 514, 514b and its opening submission document 249.

<sup>&</sup>lt;sup>35</sup> Pursuant to the s678A agreement: see Document 225.

<sup>&</sup>lt;sup>36</sup> Mr Muller, cross-examination by Council, 6 May 2021, approximately 1:10:00 onwards.

75. As matters presently stand, there is uncertainty and a lack of clear information about the likely impacts to surface water and groundwater associated with the Project. Specific areas of concern are outlined below with respect to surface water and groundwater.

### Surface water

- 76. Generally, the EPA's recommendations with respect to the proposed surface water discharges have not been sufficiently resolved at this point in time and the EPA continues to press for the recommendations set out in its submissions 514 and 514(b), albeit outdated references to SEPP(Waters) will need to be updated and the further information will need to be provided through s50(3) process.
- 77. For example, in relation to the surface water discharges and the circumstances under which they will occur, there remains insufficient information to enable the EPA to consider and assess the development licence application, including the potential effects and acceptability of the proposed discharges. <sup>37</sup>
- 78. For the most part, the recommendations sought by the EPA in relation to surface water matters are not understood to be controversial, although it was somewhat surprising that the EPA's submissions on surface water were largely overlooked by a number of the experts called by the Proponent.<sup>38</sup>
- 79. Recommendations that are not anticipated to be controversial include:
  - (a) that the EMF be updated to refer to the development licence required for the discharge of surface water following treatment by the DAF plant and the discharge to groundwater;
  - (b) that further information is to be provided, albeit later than originally envisaged;
  - (c) that water quality monitoring of the Mitchell and Perry Rivers will be conducted at sites both up and downstream of the mine and that this should include the monitoring parameters identified by the EPA; and
  - (d) that the relevant water quality objective should be the background levels where those levels are better than the levels specified in the ERS and that the word "worse" is more appropriate than "greater" in this context.

<sup>&</sup>lt;sup>37</sup> Hence the requests for further information in the s22 notice and the section 50(3) notice.

<sup>&</sup>lt;sup>38</sup> For example, the EPA's recommendations were not specifically addressed by Mr Weidmann or Mr Cheetham in their evidence. Mr Sweeny's evidence responds to some, but not all of the EPA recommendations regarding surface water.

- 80. With respect to spillage from dams, the EPA continues to seek its recommendation that the water management dams be designed with sufficient capacity to prevent spills being less than 1%. At present it is understood dam capacity will be designed to the 1% flood event but that as dams are not likely to be empty at the time a flood event occurs, the risk of spillage of untreated water is higher than this up to a 3.4% risk of spills to the Mitchell River in Year 8.
- 81. On the basis of the information that has been presented to date, the EPA considers the spill risk unacceptable given the water quality of untreated mine contact water.

  Consistent with the EPA's existing recommendations, the risk should be reduced to 1% for the Mitchell River and not just the Perry River.
- 82. The recommendation that measures to avoid adverse impacts to the environment in the event of catastrophic failure of the centrifuges continues to be sought.
- 83. The EPA calls for the predicted surface water impacts to be remodelled to reflect the current design before the IAC, with the now redundant TSF removed. Removing the TSF from the modelled terrain will reduce the storage available for rain capture. The EPA considers this change might not adversely affect flooding compared to the existing case given removal of the TSF will significantly reduce the disturbance footprint of the mining activities at any point in time such that the existing landforms can be more readily maintained as mining progresses. However, the absence of this modelling represents a further uncertainty with respect to the Project.

#### Groundwater

- 84. As with surface water, the key EPA recommendation with respect to groundwater has been for the provision of additional information, modelling and monitoring to ensure that the risks to groundwater are appropriately understood and to increase confidence that mitigation measures can be successfully implemented to minimise risks of harm to human health or the environment.
- 85. The EPA's key concerns in respect of groundwater are:
  - (a) to ensure that the quality and quantity of leachate from the tailings entering the groundwater does not pose risks of harm to human health or the environment, and if it does that those risks can be sufficiently managed through mitigation measures;

- (b) to ensure that the changes to groundwater movement, including increased daylighting of groundwater to the Mitchell River or other land outside the Project area, will not result in unacceptable risks of harm to human health or the environment that cannot be sufficiently managed; and
- (c) to ensure that the project is designed and operated so as to ensure impacts to groundwater are minimised as far as reasonably practicable.
- 86. The EPA is not satisfied in relation to any of these three matters at present and continues to seek further information through the proposed s50(3) notice.
- 87. The EPA, in its cross examination of Mr Saracik and Mr O'Loughlin made inquiries as to whether centrifuges could be used to dewater the coarse sands tailings. Mr O'Loughlin considered it was technically feasible but queried why it would be done. The EPA is of the view that if the use of centrifuges to dewater sands tailings was found to be reasonably practicable, it would have the benefits of improved water recovery and would minimise or possibly eliminate groundwater mounding and water quality risks associated with the leachate seeping to groundwater. Given additional centrifuges would significantly increase the capital and operating costs of the Project, as well as the GHG emissions, the EPA acknowledges it may not be a reasonably practicable option, however it continues to seek further information through the draft s50(3) notice so that the EPA can be satisfied the Proponent has adequately demonstrated that consideration has been given to whether this is a reasonably practicable measure.
- 88. As with surface water, the experts uniformly agreed that there is a need for additional work to be undertaken, with the dispute being about when that work is required. The EPA does not seek to enter the debate regarding timing, that is a matter for the IAC in respect of the EES, however, with respect to matters for the development licence application, the EPA will need sufficient information before it when it comes to making its decision on the development licence application. The EPA must refuse to issue a development licence if it "considers that the activity that is subject of an application poses an unacceptable risk of harm to human health or the environment". It is self-evident that uncertainty and lack of reliable and accurate data by that time would be relevant to the EPA's assessment of the application and whether the risk of harm to human health or the environment are sufficiently understood and eliminated or minimised as far as reasonably practicable.

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<sup>&</sup>lt;sup>39</sup> New EP Act, s69(4).

- 89. With respect to some of the other recommendations, there will need to be modifications to reflect the introduction of the centrifuges and changes associated with the New EP Act, but these will generally be dealt with at the detailed drafting stage.
- 90. With respect to the monitoring of water leaching from the tailings, the EPA would appreciate further detail from Kalbar as to the practicality of being able to monitor the water leaching from the tailings prior to their placement in the mine void or Perry Gully. As EPA has stated, this is its preferred option if that is not reasonably practicable and the monitoring of the water recovered from the sumps is the best that can be achieved, EPA would appreciate a more detailed explanation as to why this is the case.
- 91. The EPA strongly endorses the agreed actions for further work to be undertaken as set out in the groundwater expert conclave. To the extent that these actions address specific matters raised by the EPA, such as calculations to "quantify the potential effect of recycling process water on dissolved concentrations of metals and salts" the EPA seeks the provisions of this information prior to its determination of the development licence application.
- 92. The EPA continues to seek a recommendation that corrective actions should be implemented if the water quality monitoring exceeds specified risk-based trigger levels. It encourages Kalbar to include provision for this in revised versions of the Water Quality and Hydrology Risk Treatment Plan. This requirement would appear to be relevant both to groundwater and surface water quality and ought to be included in Table 7-1 and Table 7-2 or elsewhere in the Project documentation provided the control is enforceable. It is anticipated that the actual nature of these corrective actions would be set out in the Surface Water and Groundwater Monitoring and Management plans likely to be required as conditions of any future development and operating licence, if the applications are successful.
- 93. The only recommendation in relation to groundwater that is no longer sought is the request for further information on the storage of fine tailings between mining commencing and the availability of mine voids for tailings disposal. The EPA is now satisfied that it understands what is proposed, namely that the tailings will be permanently placed in the Perry Gully along with overburden. This understanding has given rise to an additional recommendation as follows.

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<sup>&</sup>lt;sup>40</sup> Groundwater Expert Meeting Statement, Document 255 at 5.25 (pdf 13).

Additional recommendation: Mitigation Measures for the Perry Gully:

The EPA recommends that filling of the Perry Gully with overburden and mine tailings be subject to appropriate protection measures reflective of the risks to surface water and groundwater. Generally, these are expected to be similar to a number of the measures being implemented with respect to the return of materials to the mine voids.

## Greenhouse Gas (GHG) emissions

- 94. The Proponent has provided a document titled "Kalbar commitment to Carbon Reduction at the Fingerboards Project" (Doc 339), however, it is not clear if or how these commitments will be reflected in the Project documentation.
- 95. Following receipt of the amended Project documentation, EPA will consider further the specific wording of the GHG mitigation measures.

### **Incorporated Document**

- 96. The EPA strongly endorses amendments proposed to the Incorporated Document at clause 5 that require the use and development of the 'Infrastructure Area' to be carried out in accordance with the EMF, including the Mitigation Measures and all plans required by them. This change is essential to enable those documents to be enforceable where they apply to the Infrastructure Area.
- 97. Care will need to be taken to ensure that the EMF is not left with 'gaps' where its provisions are unenforceable, whether this is through ensuring provisions are incorporated into the mine Work Plan or documents under that plan or by other means.
- 98. It will also be essential to ensure that the controls are applied to the correct areas. The position of the water pipeline as shown in the presentation by Mr Wolmarans did not appear to accord with the proposed mapping for the Specific Controls Overlay (SCO). It is the EPA's understanding this pipeline will serve the dual purpose of enabling water to be transferred from the Mitchell River to the Freshwater Dam during the winterfill period (subject to obtaining the necessary approvals from the water authority) and to allow discharge from the Freshwater Dam to the Mitchell River, including discharge of mine contact water treated by the DAF plant.

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- 99. As previously identified in its submissions 514, where EPA input is required on plans to be endorsed under the Incorporated Document, this should be in a consultation role and not an approval role. In short, the reasons for this is that a consultation role is sufficient to enable an appropriate level of EPA input and engagement without imposing unnecessary additional costs and resources upon the EPA.<sup>41</sup>
- 100. The EPA wishes to be consulted on the Construction Management Plan required pursuant to clause 5.6.3 (in addition to the Noise Management Plans).
- 101. There are other minor drafting refinements and corrected references to the New EP Act that EPA will put forward as part of the without prejudice drafting process. There will be no need to provide for a "transition" to the New EP Act as the Incorporated Document will be finalised and operate under the New EP Act and will not require transition provisions as previously anticipated.<sup>42</sup>

### Conclusion

- 102. It is imperative that the mitigation measures and Project design is developed to ensure the appropriate minimisation of risks to human health and the environment in the event the Project proceeds. It is also imperative that the commitments and obligations are legally enforceable.
- 103. The EPA looks forward to the receipt of revised Project documentation from the Proponent and to detailed submissions from the Proponent engaging with the issues to date.
- 104. Following receipt of the Project documentation (namely the amended Incorporated Document, mine Work Plan, EMF and Mitigation Register) EPA will work with the Proponent to agree on specific drafting to address EPA's submissions. If agreement cannot be reached, EPA will make submissions on drafting as part of its Closing Submissions and/or the without prejudice drafting process.
- 105. With respect to the EPA's consideration and assessment of the Development Licence application, the EPA has identified a series of relevant and necessary information that it

<sup>&</sup>lt;sup>41</sup> Attached to this submission is a copy of the EPA's submissions dated 16 September 2019 for the North East Link Project which go into further detail as to why a consultation role rather than an approval ("to the satisfaction") role is appropriate for the EPA. These submissions were accepted by the IAC assessing that Project.

<sup>&</sup>lt;sup>42</sup> Refer to the previous submission related to this issue at paragraphs [14] to [15] above.

needs in order to determine the application. The EPA is committed to working with all stakeholders so that this information can be obtained and considered in a transparent and accountable manner consistent with its obligations under the New EP Act, including the Charter of Consultation.

106. The EPA will then assess the Development Licence in light of the IAC's assessment and the EPA's legislative and policy arrangements.

### **SERENA ARMSTRONG**

Isaacs Chambers
Instructed by Environment Protection Authority of Victoria
7 June 2021

# List of Attachments

- 1. Attachment A List of EPA resources in addition to those footnoted in the submissions
- 2. Draft s50(3) that will be issued on or after 1 July 2021 under the New EP Act
- 3. Environment Reference Standard in *Victoria Government Gazette: Special*, No S 245, 26 May 2021.
- 4. Draft Charter of Consultation (September 2019)
- 5. Submissions of the EPA to the North East Link Project IAC Hearing dated 16 September 2019 pages 1-2

### ATTACHMENT A

The following is a list of hyperlinks to EPA publications and resources in addition to those referenced in EPA's submissions. It is not intended to be an exhaustive list but is intended to assist the IAC to quickly reference EPA publications should it need to do so.

### **INDUSTRY SPECIFIC - MINING**

https://www.epa.vic.gov.au/for-business/find-your-industry/energy-petroleum-and-extractive-industries. List of resources likely to be relevant to the mining, energy and extractive industries

### **NOISE**

- 2. <a href="https://www.epa.vic.gov.au/about-epa/publications/1888">https://www.epa.vic.gov.au/about-epa/publications/1888</a> EPA Publication 1888: Noise: mufflers or exhaust silencers (March 2021) Using mufflers or exhaust silencers to eliminate or reduce the risk of harm from noise.
- 3. <a href="https://www.epa.vic.gov.au/about-epa/publications/1892">https://www.epa.vic.gov.au/about-epa/publications/1892</a> EPA Publication 1892: Noise: vibration isolation (March 2021) Using vibration isolation to eliminate or reduce the risk of harm from noise
- 4. <a href="https://www.epa.vic.gov.au/about-epa/publications/1885">https://www.epa.vic.gov.au/about-epa/publications/1885</a> EPA Publication 1885: Noise: acoustic louvres (March 2021) Using acoustic louvres to eliminate or reduce the risk of harm from noise.
- 5. <a href="https://www.epa.vic.gov.au/about-epa/publications/1890">https://www.epa.vic.gov.au/about-epa/publications/1890</a> EPA Publication 1890: Managing noise from reversing alarms (March 2021) Eliminating or reducing the risk of harm from reversing alarms.
- 6. <a href="https://www.epa.vic.gov.au/about-epa/publications/1891">https://www.epa.vic.gov.au/about-epa/publications/1891</a> EPA Publication 1891: Managing truck noise (March 2021) Eliminating or reducing the risk of harm from truck noise.
- 7. <a href="https://www.epa.vic.gov.au/about-epa/publications/1886">https://www.epa.vic.gov.au/about-epa/publications/1886</a> EPA Publication 1886: Noise: barriers and enclosures (March 2021) Using barriers and enclosures to eliminate or reduce the risk of harm from noise.

8. <a href="https://www.epa.vic.gov.au/about-epa/publications/1887">https://www.epa.vic.gov.au/about-epa/publications/1887</a> EPA Publication 1887: Noise: duct attenuators or silencers (March 2021) Using duct attenuators or silencers to eliminate or reduce the risk of harm from noise.

### **WASTE**

- 9. <a href="https://www.epa.vic.gov.au/about-epa/publications/1756-2">https://www.epa.vic.gov.au/about-epa/publications/1756-2</a> EPA Publication 1756.2 Summary of waste framework (May 2021). Explains the waste framework in the Regulations
- 10. <a href="https://www.epa.vic.gov.au/about-epa/publications/1968">https://www.epa.vic.gov.au/about-epa/publications/1968</a> EPA Publication 1968 Guide to classifying industrial waste (April 2021)
- 11. <a href="https://www.epa.vic.gov.au/about-epa/publications/1827-2">https://www.epa.vic.gov.au/about-epa/publications/1827-2</a> 1827.2: Waste classification assessment protocol (March 2021)
- 12. <a href="https://www.epa.vic.gov.au/about-epa/publications/1828-2">https://www.epa.vic.gov.au/about-epa/publications/1828-2</a> 1828.2: Waste disposal categories characteristics and thresholds (March 2021) This publication lists criteria against which certain priority wastes are intended to be assessed to determine which waste disposal category applies (eg arsenic levels etc).
- 13. <a href="https://www.epa.vic.gov.au/about-epa/publications/1936">https://www.epa.vic.gov.au/about-epa/publications/1936</a> 1936: Proposed methodology for deriving background level concentration when assessing potentially contaminated land (February 2021) The proposed methodology comprises a set of requirements that must be met to substantiate that specified naturally occurring chemical substances are not present at a concentration above background levels.