

26 February 2026

Steve O'Donoghue
Director
NSW Department of Planning, Housing and Infrastructure
12 Darcy Street
Parramatta NSW 2150

Re: SSD-11826681 & SSD-11826621 - Request for additional information - response to recommendations in Independent Expert Advisory Panel for Mining advice

Dear Steve,

1 Introduction

I refer to your correspondence dated 6 February 2026 requesting a written response to the recommendations contained within the Independent Expert Advisory Panel for Mining (the Panel) advice on the Hunter Valley Operations (HVO) Continuation Project. The Panel advice was provided in response to the HVO Continuation Project Amendment Report (EMM 2025a) (amended Project) including the supporting Greenhouse Gas (GHG) Assessment (EMM 2025b).

2 Background

On 10 December 2025, the NSW Department of Planning, Housing and Infrastructure (DPHI) requested the Panel provide advice in relation to the amended Project. Amendments made to the Project aimed to significantly reduce GHG emissions through avoidance of coal extraction within gas Domain 1, a reduction in the total amount of coal mined, a reduction in the annual production limit at HVO and a reduction in the overall life of the Project.

DHPI sought advice from the Panel on the following:

- the impact of the amendments on the Panel's previous advice with respect to avoiding, mitigating and offsetting Scope 1 fugitive and diesel GHG emissions, and
- the nature and significance of new matters relating to Scope 1 fugitive and diesel GHG emissions, if any, that arise from the revised application and that are not covered by the Panel's previous advice.

The Panel reported back to DPHI on 3 February 2026. It made the following conclusions and recommendations.

In summary, the Panel makes the following conclusions and recommendations:

Conclusions

1. *HVO has made considerable reductions in Scope 1 CO₂-e emissions through avoidance of mining gas Domain 1.*
2. *HVO has made a commitment to further reduce CO₂-e emissions from diesel through optimisation of haulage.*
3. *The origin of N₂ in gas test results is not deemed material in the current HVO project.*

Recommendations

1. *A detailed, and material prefeasibility study should be prepared that addresses pre-drainage of gas Domain 3. Should the project be approved, the scope of this prefeasibility study should be submitted to DPHI within two months and agreed upon to the satisfaction of the Planning Secretary.*
2. *Due to the avoidance of mining gas Domain 1, a test gas content borehole is no longer needed adjacent to the Hunter Valley Dyke.*
3. *HVO should publish its responses to Zephyr's evaluation*
4. *Prior to determination, HVO should clarify how and to whom it will report the 3 yearly review of technology improvements for GHG mitigation.*

3 Response to recommendations

A response to the Panel's recommendations is provided below.

A detailed, and material prefeasibility study should be prepared that addresses pre-drainage of gas Domain 3. Should the project be approved, the scope of this prefeasibility study should be submitted to DPHI within two months and agreed upon to the satisfaction of the Planning Secretary.

HVO accepts the Panel's recommendation and commits to preparing the scope for a prefeasibility study that addresses pre-drainage of gas within Domain 3. Further, HVO accepts and commits to providing this prefeasibility scope to DPHI within two months of commencement of the Project and developed to the satisfaction of the Planning Secretary.

As included in the HVO Continuation Project Amendment Report (EMM 2025a), HVO has previously made, and maintains again here, the commitment to conduct a trial of gas pre-drainage in areas identified with higher potential, to investigate the feasibility and effectiveness of gas pre-drainage. The design of the trial will be developed in consultation with relevant stakeholders to the satisfaction of the Planning Secretary and be provided within two years of commencement of the Project.

Revised mitigation and management and monitoring commitments for the Project, incorporating the Panel's recommendations, is discussed in Section 4.

Due to the avoidance of mining gas Domain 1, a test gas content borehole is no longer needed adjacent to the Hunter Valley Dyke.

This recommendation is noted.

HVO should publish its responses to Zephyr's evaluation.

HVO's responses to Zephyr Environmental's (Zephyr) independent review or evaluation of the draft GHG Assessment were provided in Section 3.8, Table 3.17 of the GHG Assessment.

Notwithstanding this, HVO requested Zephyr provide a response to the Panel's recommendation. A copy of this response is provided in Attachment A. Zephyr's response states:

In accordance with Section 4.7 of the NSW Guide for Large Emitters, the Zephyr GHG review focused on the:

- *assessment of the emissions boundary*
- *source of emissions associated with the full life cycle of the project*
- *mitigation assessment*
- *offset strategy.*

As part of this process, Zephyr:

- *conducted an initial review of the GHG emissions calculations and the draft report (May 2025)*
- *met with HVO and their consultants to seek additional information where required (May 2025)*
- *changes were made to the draft report to reflect these responses in the final report dated August 2025, to which Zephyr's independent review is attached as Annexure E*
- *provided a final review of the updated GHG report where issues were clarified and the additional information was incorporated (August 2025).*

These clarifications were generally minor, such as references for data sources, wording for better understanding, or typographical errors. Others required further explanation such as:

- *reasons for excluding SF6 and employee travel emission sources*
- *assumptions for travel distances for product*
- *clarification on whether future mitigation technologies, uncertainty and/or offsets strategies had been considered in the GHG emission calculations*

A summary of all the issues raised, and responses provided by HVO is found in Section 3.8, Table 3.17 of the GHG report. The table notes either the direct response or where the response is addressed in the report. For convenience, this table is reproduced in full as Appendix A.

No further comments were provided or needed following Zephyr's finalisation of its independent review report. HVO accepted the findings and conclusions of the report.

Prior to determination, HVO should clarify how and to whom it will report the 3 yearly review of technology improvements for GHG mitigation.

As stated in the GHG Assessment for the amended Project, HVO committed to:

... continue to undertake regular reviews of technologies and abatement measures to reduce GHG emissions from the Amended Project, including whether these measures are reasonable and feasible to implement at HVO. These reviews will be undertaken every three years and will include consideration of

the use of alternative fuels (including biofuels and hydrogen), and the transition to an electric-powered fleet, as these technologies advance and more information becomes available. Consistent with the above commitment, HVO will ensure to include discussion of the equipment replacement or upgrade opportunities as part of the periodic review process.

Further to this commitment, HVO would prepare a *GHG Technology and Abatement Review Report* (or equivalent) every three years from the commencement of the Project, summarising the outcomes of the review to the satisfaction of the Planning Secretary. The outcomes of the review report would also be incorporated into HVO's Annual Review in the year that the report is finalised.

Revised mitigation and management and monitoring commitments for the Project, incorporating the Panel's recommendations, is discussed in Section 4.

4 Revised summary of commitments

The revised GHG mitigation and management and monitoring commitments for the Project, incorporating the Panel's recommendations, is presented in Table 4.1. New mitigation measures or management measures that have changed substantially since the submission of the HVO Continuation Project Amendment Report (EMM 2025a) are shown as bold text.

Table 4.1 Revised GHG mitigation and management measures

ID	Mitigation, management and monitoring commitments
GHG1	HVO will prepare a scope for a prefeasibility study that addresses gas pre-drainage within Domain 3. This prefeasibility scope will be provided to DPHI within two months of commencement of the Project and developed to the satisfaction of the Planning Secretary. HVO will conduct a trial of gas pre-drainage in areas identified in Domain 3 with higher potential, to investigate the feasibility and effectiveness of gas pre-drainage. The design of the trial will be informed by the prefeasibility study and will be developed in consultation with relevant stakeholders to the satisfaction of the Planning Secretary and be provided within two years of commencement of the Project.
GHG2	HVO will continue to undertake regular reviews of technologies and abatement measures to reduce GHG emissions from the Project, including whether these measures are reasonable and feasible to implement at HVO. These reviews will be undertaken every three years and be documented within a GHG Technology and Abatement Review Report (or equivalent) summarising the outcomes of the review. The GHG Technology and Abatement Review Report will include consideration of the use of alternate fuels including biofuels and hydrogen, and the transition to an electric powered fleet, as these technologies advance and more information becomes available. The GHG Technology and Abatement Review Report will be provided to the Planning Secretary every three years from the commencement of the Project. The outcomes of the review report would also be incorporated into HVO's Annual Review in the year that the report is finalised.
GHG3	A greenhouse gas mitigation plan will be developed to reflect the amended Project and will include an action plan (updated every 3 years) for investigating and implementing all reasonable and feasible abatement measures to minimise GHG emissions.
GHG4	To meet the requirements of the Safeguard Mechanism, HVO will implement abatement activities identified by mitigation measure, or purchase carbon offsets such as Australian carbon credit units (ACCUs) or Safeguard Mechanism credit units (SMCs), whichever is cost effective and practical at the time.
GHG5	HVO will make additional voluntary contribution towards the NSW emission-reduction targets to reflect consideration of the NZF Act. With this in mind, HVO proposes that the emissions of the Amended Project are aligned, so far as practicable, with the NZF Act emission-reduction targets, including by using offsets to reduce the amended Project's net GHG emissions where it is not feasible to avoid, reduce or substitute emissions.

5 Closing

I trust that this letter adequately responds to the recommendations in the Panel's advice on the GHG Assessment of the amended Project. However, should you require any additional information, please do not hesitate to contact the undersigned.

Yours sincerely



Nicole Armit

Director

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References

EMM 2025a, *HVO Continuation Project, Amendment Report*, EMM Consulting Pty Ltd.

EMM 2025b, *HVO Continuation Project Amendment, Greenhouse gas assessment*, EMM Consulting Pty Ltd.

Attachment A

Response by Zephyr Environmental

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23 February 2026

Response to comments from the Independent Expert Advisory Panel for Mining – IEAPM Ref: 2026-02-L2

1. BACKGROUND

In August 2025, Zephyr Environmental Pty Ltd (Zephyr) completed an independent review (the Zephyr GHG review) of the Greenhouse Gas (GHG) Assessment Report and Mitigation Plan (the GHG report) prepared for the proposed HVO Continuation Project Amendment ('the Project'). The Zephyr GHG review was completed in accordance with Section 4.7 of the *NSW Guide for Large Emitters: Guidance on how to prepare a greenhouse gas assessment as part of the NSW environmental planning process* (Large Emitters Guide).

The GHG report was submitted to the NSW Department of Planning, Housing and Infrastructure (DPHI) as part of the broader Project application. In December 2025, DPHI sought advice from the Independent Expert Advisory Panel for Mining (IEAPM) in relation to the application, and this was provided to HVO on 3 February 2026.

This letter is in response to the comment in Section 5.2.3.1 of the IEAPM advice, and Recommendation 3, that relate specifically to the independent review completed by Zephyr. The comment and recommendation are provided below for context.

5.2.3.1 Zephyr Environmental Pty Ltd assessment

The Panel notes the Expert review by Zephyr Environmental Pty Ltd ('Zephyr') (Annexure E of Appendix E Greenhouse gas assessment' within the Amendment Report (August 2025).

The report states there were several queries resolved by discussion with HVO, but the details of the query, response and resolution were not given. The Panel recommends that the full response by HVO made to Zephyr on its findings be made explicit so that DPHI may sight them prior to determination.

Recommendation 3: HVO should publish its responses to Zephyr's evaluation

2. REVIEW AND CONSULTATION PROCESS

In accordance with Section 4.7 of the NSW Guide for Large Emitters, the Zephyr GHG review focused on the:

- assessment of the emissions boundary
- source of emissions associated with the full life cycle of the project
- mitigation assessment
- offset strategy.

As part of this process, Zephyr:

- conducted an initial review of the GHG emissions calculations and the draft report (May 2025)
- met with HVO and their consultants to seek additional information where required (May 2025)
- changes were made to the draft report to reflect these responses in the final report dated August 2025, to which Zephyr's independent review is attached as Annexure E
- provided a final review of the updated GHG report where issues were clarified and the additional information was incorporated (August 2025).

These clarifications were generally minor, such as references for data sources, wording for better understanding, or typographical errors. Others required further explanation such as:

- reasons for excluding SF₆ and employee travel emission sources
- assumptions for travel distances for product
- clarification on whether future mitigation technologies, uncertainty and/or offsets strategies had been considered in the GHG emission calculations

A summary of all the issues raised, and responses provided by HVO is found in Section 3.8, Table 3.17 of the GHG report. The table notes either the direct response or where the response is addressed in the report. For convenience, this table is reproduced in full as Appendix A.

3. CLOSURE

I trust the above meets your requirements in relation to this query. Please contact the undersigned if you require further information.

Yours sincerely,



Damon Roddis

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Appendix A

Table 3.17 from the GHG report with reviewer comments and responses

Comment no.	Comment	Response
1	Provide clarification as to where the raw data (input data) was sourced from.	Text added: <i>Input data were sourced from HVO's mine forecasting software, which provides estimates of diesel usage and electricity consumption, among other operational parameters.</i>
2	Provide clarification as to why the UK DEFRA EF were used for transport emissions instead of the Australia EFs for transport emissions.	Footnote added to Table A.10: <i>The DEFRA scope 1 emission factors were used for estimating transport emissions. The DEFRA database represents a comprehensive suite of emission factors that cover a wide range of activities, including energy, transport, water and waste disposal. These emission factors (most recently published in 2024) are more recent than those in the Australian NGER (Safeguard) Rule 2015, and are slightly more conservative.</i>
3	Provide clarification as to why the explosives were assumed to be the same as diesel emissions.	This refers to a note in the GHG calculation spreadsheet that is not applicable to the calculations. No action required.
4	Provide clarification on: - the assumed transport of materials distance being 30km (Annexure A.3.3) - the assumed two uses of product coal by end users (Annexure A.4.1) - the assumed international transport being to Japan and China - the assumed immateriality of excluded emission source (Table 3.2 in Section 3.2.1)	Text of section A.3.3 revised: <i>Emissions were also calculated for the transport of the materials to the HVO Complex site, with an assumed distance of 30 km. This represented the estimated distance from the HVO Complex to the places of business in the Singleton LGA.</i> Text of section A.4.1 revised: <i>The split between the quantity of thermal coal and the quantity of metallurgical coal was provided by HV Operations Pty Ltd, through its mine planning processes.</i> Text of section A.4.2 revised: <i>The distance by rail from the HVO Complex to the Port of Newcastle was 150 km. For the purpose of simplicity in the calculations, the international transport distance was estimated to be 8,000 km, based on an analysis (in a geographical information system) of the route between Newcastle and Japan by sea.</i> Japan is identified as the main destination for product coal in section 3.4.2 of the report. Text of section 3.2.1 revised: <i>Where a particular source was excluded from the assessment, this was either because it was not relevant, activity data for it were not readily available, or its emissions were unlikely to be material (i.e. they would have been low (<1% of total emissions) over the life of the Amendment to materially change the outcomes of the assessment or influence decision-making).</i>

Comment no.	Comment	Response
5	Provide clarification, besides future mitigation technologies, whether uncertainty has been considered for the GHG Assessment/calculations.	Text of section 3.3.3 revised: <i>The uncertainty in the emission estimates is underpinned by mine planning and geological parameters. The estimated emissions are likely to be conservative, as the calculations do not reflect potential measures for emissions reduction which may become practicable and feasible in the future, such as fleet electrification or alternative fuels.</i>
6	Provide clarification as to whether the offsets strategy has been considered in terms of timing of acquisition and surrender of credits.	As per item 13.
7	Provide clarification as to why SF6 has been excluded, noting that for NGERs reporting it is.	Footnote added to Table 3.2: <i>Emissions are expected to be less than 1% of the overall inventory based on data reported in the last two NGERs submissions.</i>
8	Provide a summary on the scenarios considered, and which scenarios include the mitigation measures.	To be provided in updated GHG assessment. <i>Refer to section 3.2.5.</i>
9	Provide clarification as to which substitution/reduction measures have been factored into calculations (see Section 3.4 of Report for mitigation measures).	To be provided in updated GHG assessment. <i>Refer to section 3.5.</i>
10	Discuss the feasibility and effectiveness considerations that were taken into account when preparing the GHG Assessment.	Refer to section 3.4.1 and Table 3.9. With respect to scope 1 emissions, the mitigation measures for fossil fuels are commonly implemented as best practice in the mining sector, and have been reflected in the emissions estimates. A counterfactual case (i.e. without these measures) has not been quantified, partly because it would not occur in practice, and partly because it could not be reliably characterised. The mitigation measures for fugitive emissions have been quantified, as the counterfactual case relevant to the Amendment is informed by the fugitive emission profile of the original HVO Continuation Project. With respect to the evaluation of additional mitigation measures (existing or emerging), section 3.4.1 part iii states that "Mitigation measures are assessed using a range of criteria, including estimated costs, emission-reduction potential and the practicability of deployment."
11	Provide clarification as to how the Offset Strategy will meet the requirements of the Commonwealth Carbon Credits Act 2011.	As per Section 3.7: Any carbon offsets and SMCs surrendered will be fully compliant with the requirements of the Safeguard Mechanism.
12	Provide clarification as to which carbon offsets will be considered, i.e. will the offset projects be Australian/NSW-based?	The following wording has been added to Section 3.7: <i>To meet its obligations, HVO Operations Pty Ltd will leverage its existing procurement strategies to secure offsets in a timely manner. These strategies typically account for market conditions, including supply, demand, pricing, volumes, timing, and the terms of purchase agreements. Reflecting the NSW EPA's preference for offsets from NSW-based projects, HVO Operations Pty Ltd will also consider purchasing NSW-based offsets where they are available and represent a cost-effective option.</i>

Comment no.	Comment	Response
13	Confirm the timing of offsets to be acquired and cancelled.	The differences between the gross scope 1 emissions and the SM or SM + NSW decline baselines reflect the maximum number of offsets that would be required, if reasonable and feasible measures to avoid, reduce, or substitute emissions are not identified during the project's life.
14	Confirm the expected number of offsets/SMCs that the project proposes to use.	As per item 13.