



DOC24/477635-2

4 July 2024

NSW Department of Planning, Housing and Infrastructure
Attention: Joe Fittell

Email: Via the Major Projects Portal

Dear Joe,

HVO North and South Open Cut Coal Continuation Projects (SSD-11826681 and SSD-11826621) - EPA Comments on Proponent's Additional Information for Noise and Air Quality

Thank you for the request for advice from Public Authority Consultations (PAE-72203710 and PAE-72202713), requesting a review by the NSW Environment Protection Authority (EPA) on the proponent's response to matters raised by the EPA in relation to air quality and noise dated the 30 May 2024 (DOC23/994609-13).

The EPA has reviewed the following documents:

- Response prepared by EMM to Department of Planning, Housing and Infrastructure (DPHI) dated the 13 June 2024 on the HVO Continuation Projects (SSD-11826681 and SSD-11826621)

The response to the EPA's previous comments on air quality have generally been addressed. However, the EPA has attached comments in **Attachment A** for the Department of Planning, Housing and Infrastructure's (DPHI) consideration in their assessment of the projects in relation to air quality. The EPA notes the proponent's response to comments regarding noise and has no further comments. The EPA requests to be consulted on any proposed draft conditions, or if the project is modified.

Should you require any further information, please contact Chris Marsh in Environment Protection Planning, on telephone 02 9995 6461 or email environmentprotection.planning@epa.nsw.gov.au.

Yours sincerely

DARREN WALLETT
Manager - Environment Protection Planning
NSW Environment Protection Authority

ATTACHMENT A - EPA Comments on the Proponent's response to matters raised by EPA on the Submissions Report

Air Quality

- 1) Dwellings subject to existing acquisition rights under other projects should be informed of the additional air quality impacts because of the HVO Projects.

Exceedances of the EPA's impact assessment criteria are predicted at private dwellings with existing noise and/or air quality acquisition rights. These receptors are generally located in Camberwell to the northeast of the Projects.

The EPA notes that the Trigger Action Response Plan (TARP) is not designed to minimise impacts at these private residential receptors, as the TARP is only designed to be implemented when wind is from the direction of either Hunter Valley Operations (HVO) North or South towards Maison Dieu or Jerrys Plains.

The Projects can contribute significantly to predicted concentrations at these receptors despite being located 5 km or more from the project boundary (**Attachment B**). As previously recommended, these private dwellings subject to acquisition rights under other projects should be informed of:

- The additional contributions due to the HVO continuation proposal.
- The increase in predicted cumulative impacts due to HVO continuation proposal.
- The increase in the number of predicted additional exceedances per year of operation of the HVO continuation project.
- The increase in the number of years of daily exposure to particulate matter emissions due to HVO continuation proposal.
- This is particularly the case for those private dwellings that only have noise acquisition rights.

The EPA recommends DPHI ensures receptors with acquisition rights under other projects are informed of the proposal's additional contributions, cumulative impacts and exceedances.

- 2) Categorisation of sensitive receptors under the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW*.

Four receptors which were not subject to acquisition rights were predicted to have exceedances of the EPA's impact assessment criteria as follows:

- *Daracon Mining Pty Ltd (R735) – industrial workplace*
 - The Projects are predicted to contribute PM₁₀ concentrations ranging between 11 – 26 µg/m³ at this receptor, equivalent to 22% - 52% of the 24 hour average PM₁₀ impact assessment criteria of 50 µg/m³.
 - The number of predicted exceedances in a single year at this receptor ranges between 6 (year 18) and approximately 150 (year 3 and year 7) (see **Attachment B**).
- *Warkworth: Community (R264 – St. Phillips church) and Private Commercial (R833 - Hunter Valley Glider Club) receptors*
 - The Projects are predicted to contribute PM₁₀ concentrations ranging between 11 – 73 µg/m³ at these receptors. This means the Projects alone are predicted to contribute concentrations above the 24-hr PM₁₀ impact assessment criterion of 50 µg/m³.
 - The number of predicted exceedances in a single year at these receptors could be up to 30 and 109, respectively (see **Attachment B**).

- *Camberwell: Community (R623– St. Clements Church)*
 - The Projects are predicted to contribute PM₁₀ concentrations ranging between 9 – 23 µg/m³, equivalent to 20% - 46% of the impact assessment criteria of 50 µg/m³.
 - The number of predicted exceedances in a single year at this receptor ranges between 10 and 23 (see **Attachment B**).

The air quality impact assessment did not consider these receptors to be sensitive receptors on the basis that are only occupied periodically for short periods of time or are a business supplying or connected to the operations of surrounding mines.

However, the EPA considers these locations to be sensitive receptors as the definition of a sensitive receptor in the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (Approved Methods)* is “a location where people are likely to work or reside; this may include a dwelling, school, hospital, office or public recreational area.”

The result of the proponent’s classification of receptors is that the TARP was not assessed at these receptors and the proponent has therefore not demonstrated “no additional exceedances” of the EPA’s impact assessment criteria at these receptors (R735, R264, R833 and R623).

The EPA recommends that DPHI considers the additional exceedances at these receptors and that the TARP has not demonstrated impacts will be minimised at these receptors in their assessment of the Projects.

3) The Hunter Valley Gliding Club’s submission should be considered by DPHI

Condition 47 in Schedule 3 of the existing HVO South Project Approval requires that HVO maintains an agreement with the Hunter Valley Gliding Club (HVGC, R833) to address potential impacts of the mine on the use and operation of the HVGC’s facilities. Condition 49 of the Approval requires the development of an amenity management plan for HVGC’s facilities within HVO. HVO has committed to update the agreement and management plan following approval of the Projects.

The HVGC lodged a submission regarding the proposed HVO continuation projects. The EPA notes the submission including comments regarding how frequently the club is used, the use of overnight accommodation facilities, issues relating to dust impacts, the definition of sensitive receptor used in the Projects’ assessments and the significance of air quality impacts to HVGC.

The EPA recommends that DPHI considers the Hunter Valley Gliding Club submission together with the results of the air quality impact assessment for this receptor which showed a significant number of exceedances of the EPA’s impact assessment criteria.

ATTACHMENT B – Summary of predicted air quality impacts

The following tables present a summary of the predicted air quality impacts at receivers taken from the proponent's Air Quality Impact Assessment and subsequent information provided including the Submissions Report and Additional Information. The reactive control analysis in the tables below indicate if the receptors assessed for the TARP (R308, R161 and R328) can be considered representative of impacts at other receptors not currently included in the TARP assessment.

The number of receptors where cumulative impacts are predicted to result in additional exceedances are not limited to those listed in Table 1. This table does not include the identification of receptors where 1 – 4 exceedances were predicted meaning the total number of receptors with additional exceedances is higher than presented in Table 1.

Table 1: Number of days where the predicted cumulative impacts exceed the 24-hr PM₁₀ impact assessment criterion (50 µg/m³) for **5 or more days**.

Receptor ID	Description (more detailed descriptions in the text after Table 3)	Distance from HVO (km)*	Y3	Y7	Y11	Y18	Y22	Range of predicted project only contribution (µg/m ³)	Covered by 'reactive control' analysis @ R308, R161, R328
596	Private - Subject to Acquisition Rights Rixs Creek North PA08_0102 (air quality and noise), Integra Underground PA08_0101 (noise)	10.2	173	178	169	0	0	5 - 15	Unclear. The location of this receptor is not provided.
735	Private - Commercial (Daracon mining)	6.0	150	157	72	6	0	11 – 26	N/A
833	Private - Commercial (HVGC)	0.7	82	109	86	62	0	30 – 73	No. This is located to the south. Trigger levels do not account from HVO contribution when winds come from the North.
862	Private - Subject to Acquisition Rights Rixs Creek North PA08_0102 (noise)	8.6	32	47	14	0	0	8 – 22	Unclear. The location of this receptor is not provided.
863	Private - Subject to Acquisition Rights Rixs Creek North PA08_0102 (noise)	8.8	34	47	15	0	0	7-20	Unclear. The location of this receptor is not provided.
102	Private - Subject to Acquisition Rights Warkworth SSD6464 (air quality and noise)	3.4	36	27	24	0	0	11 – 27	No. This is located to the south. Trigger levels do not account from HVO contribution when winds come from the North.
861	Private - Subject to Acquisition Rights Rixs Creek North PA08_0102 (noise), Glendell DA80/952	9.1	24	30	18	0	0	7 – 19	Unclear. The location of this receptor is not provided.
264	Community Infrastructure (St Phillips Church)	3.6	30	27	24	0	0	11 – 24	No. This is located to the south. Trigger levels do not account from HVO contribution when winds come from the North.
626	Private - Subject to Acquisition Rights Mount Owen SSD-5850 (air quality); Rixs Creek South SSD 6300 (air quality). Note -acquisitions apply to both contiguous lots 1/8/758214 and 2/8/758214	7.7	15	25	10	0	0	8 – 22	Unlikely. Located to the Northeast. Trigger levels do not account for contributions from the North HVO complex when winds come from the west.

Receptor ID	Description (more detailed descriptions in the text after Table 3)	Distance from HVO (km)*	Y3	Y7	Y11	Y18	Y22	Range of predicted project only contribution ($\mu\text{g}/\text{m}^3$)	Covered by 'reactive control' analysis @ R308, R161, R328
621	Private - Subject to Acquisition Rights Rixs Creek North PA08_0102 (noise); Ashton DA309-11-2001-I (air quality)	7.5	16	24	17	1	0	8 – 25	<u>Unlikely.</u> Located to the Northeast. Trigger levels do not account for contributions from the North HVO complex when winds come from the west.
624	Private - Subject to Acquisition Rights Mount Owen SSD-5850 (air quality); Rixs Creek South SSD 6300 (air quality). Note -acquisitions apply to all 9 contiguous lots 1//248748, 2/9/758214, 3/9/758214, 4/9/758214, 5/9/758214, 6/9/758214, 7/9/758214, 8/9/758214, 9/9/758214	7.5	12	24	8	0	0	9 – 23	<u>Unlikely.</u> Located to the Northeast. Trigger levels do not account for contributions from the North HVO complex when winds come from the west.
860	Private - Subject to Acquisition Rights Rixs Creek North PA08_0102 (noise), Glendell DA80/952	8.1	14	24	13	0	0	7 – 21	Unclear. The location of this receptor is not provided.
623	Community Infrastructure (St Clements Church)	7.3	11	23	10	0	0	9-23	<u>Unlikely.</u> Located to the Northeast. Trigger levels do not account for contributions from the North HVO complex when winds come from the west.
627	Private - Subject to Acquisition Rights Mount Owen SSD-5850 (air quality); Rixs Creek South SSD 6300 (air quality).	7.8	13	23	8	0	0	8-22	<u>Unlikely.</u> Located to the Northeast. Trigger levels do not account for contributions from the North HVO complex when winds come from the west.
628	Private - Subject to Acquisition Rights Mount Owen SSD-5850 (air quality); Rixs Creek South SSD 6300 (air quality).	7.9	13	21	6	0	0	8-21	<u>Unlikely.</u> Located to the Northeast. Trigger levels do not account for contributions from the North HVO complex when winds come from the west.
629	Private - Subject to Acquisition Rights Mount Owen SSD-5850 (air quality); Rixs Creek South SSD 6300 (air quality). Note -acquisitions apply to both contiguous lots 103//852484 and 104//852484	8.1	11	21	4	0	0	8-22	<u>Unlikely.</u> Located to the Northeast. Trigger levels do not account for contributions from the North HVO complex when winds come from the west.
471	Private - Subject to Acquisition Rights Ashton DA309-11-2001-I (air quality and noise); Ravensworth Operations DA 09_0176 (air quality)	5.0	8	18	17	7	0	10-26	<u>Unlikely.</u> Located to the Northeast. Trigger levels do not account for contributions from the North HVO complex when winds come from the west.
619	Private - Subject to Acquisition Rights Mount Owen SSD-5850 (air quality); Rixs Creek South SSD 6300 (air quality)	8.1	2	13	0	0	0	8-20	Unclear. The location of this receptor is not provided.
499	Private - Subject to Acquisition Rights Rixs Creek North PA08_0102 (noise) (lots 2//1111313 & 3//1111313); Ashton DA309-11-2001-I (air quality and noise); Rixs Creek South SSD 6300 (air quality) (lots 2//1111313 & 3//1111313)	5.7	3	9	7	0	0	8-24	<u>Unlikely.</u> Located to the Northeast. Trigger levels do not account for contributions from the North HVO complex when winds come from the west.
599	Private - Subject to Acquisition Rights Mount Owen SSD-5850 (air quality)	13.0	7	7	4	0	0	4 – 10	Unclear. The location of this receptor is not provided.

Receptor ID	Description (more detailed descriptions in the text after Table 3)	Distance from HVO (km)*	Y3	Y7	Y11	Y18	Y22	Range of predicted project only contribution ($\mu\text{g}/\text{m}^3$)	Covered by 'reactive control' analysis @ R308, R161, R328
613	Private - Subject to Acquisition Rights Mount Owen SSD-5850 (air quality) vacant lots 31//6842 and 2//1175728 within landholding only	13.0	7	7	4	0	0	4-10	Unclear. The location of this receptor is not provided.
614	Private - Dwelling	13.0	7	7	4	0	0	4-10	Unclear. The location of this receptor is not provided.
308	Private - Subject to Acquisition Rights United Wambo JV SSD7142 (noise)	2.5	3	2	6	2	0	16 -27	Yes

Table 2: Top 5 receptors with the highest predicted 24-hour average PM₁₀ concentration - Ranked by project increment.

Receptor ID	Description (more detailed descriptions in the text after Table 3)	Distance from HVO (km)*	Project increment ($\mu\text{g}/\text{m}^3$)					Covered by 'reactive control' analysis @ R308, R161, R328
			Y3	Y7	Y11	Y18	Y22	
833	Private – Commercial (HVGC)	0.7	61	69	66	73	30	<u>No.</u> This is located to the south
328	Private - Dwelling	4.2	10	15	22	37	35	Yes
327	Private - Dwelling	4.5	10	16	24	36	32	Yes
331	Community Infrastructure (Pony Club Shed)	4.3	10	15	21	35	34	Yes
326	Private - Dwelling	4.4	10	16	23	35	32	Yes

Table 3: Top 5 receptors with the highest predicted cumulative 24-hour average PM₁₀ concentration

Receptor ID	Description (more detailed descriptions in the text after Table 3)	Distance from HVO (km)*	Cumulative concentration (µg/m ³)					Range of predicted project only contribution (µg/m ³)	Covered by 'reactive control' analysis @ R308, R161, R328
			Y3	Y7	Y11	Y18	Y22		
735	Private - Commercial (Daracon)	6.0	132	132	89	55	42	11 – 26	NA
833	Private - Commercial (HVGC)	0.7	97	104	92	87	45	30 - 73	No. This is located to the south. Trigger levels do not account from HVO contribution when winds come from the North.
596	Private - Subject to Acquisition Rights Rixs Creek North PA08_0102 (air quality and noise), Integra Underground PA08_0101 (noise)	10.2	94	94	94	45	41	5 - 15	Unclear. The location of this receptor is not provided.
862	Private - Subject to Acquisition Rights Rixs Creek North PA08_0102 (noise)	8.6	66	71	60	49	41	8 – 22	Unclear. The location of this receptor is not provided.
471	Private - Subject to Acquisition Rights Ashton DA309-11-2001-I (air quality and noise); Ravensworth Operations DA 09_0176 (air quality)	5.0	61	69	66	59	41	10-26	Unlikely. Located to the Northeast. Trigger levels do not account for contributions from the North HVO complex when winds come from the west.