Statements of Agreed Opinions and Facts

Whittlesea Planning Scheme Amendment C241wsea: Shenstone Park PSP – Dust Conclave

Date: 11th November 2020

Time: 2:00 pm – 3:15 pm

Introduction

Planning Panels Victoria (PPV) directed a conclave occur in relation to dust for Whittlesea Planning Scheme Amendment C241wsea: Shenstone Park PSP.

The following experts participated in the dust conclave relating to the two quarries (Woody Hill Quarry and Phillips Quarry):

- Iain Cowan (ERM)
- Michael Asimakis (GHD)
- Peter Ramsay (Peter J Ramsay & Associates)

The following relevant Government staff attended.

- Robert Szymanski (Department of Jobs, Precincts and Regions)

It is also noted that the EPA was invited to attend but declined the invite to participate in the conclave.

The conclave was conducted virtually over MS Teams.

This statement highlights points of agreement and disagreement between the experts.

Key Issues

1. Applicable regulatory limits
   - 1.1 Current limits for quarries
   - 1.2 Future limits for quarries
2. EPA recommended separation distances
   - 2.1 Applicable separation distance guideline
   - 2.2 Recommended separation distances
   - 2.3 The area from which separation distances are drawn
   - 2.4 Measuring separation distances
   - 2.5 Applicable separation distances
   - 2.6 Type of amenity
3. Appropriate non-sensitive uses within the relevant buffer, and subject to what (if any) conditions
   - 3.1 Land uses to be located within the separation distances
   - 3.2 Concrete batching plant located at Woody Hill Quarry
4. Site-specific variation to separation distances methodology
   - 4.1 Site-specific variation methodology
   - 4.2 Transitioning of the industry
   - 4.3 Plant equipment and operation

Description of issue	Agreed or not agreed?	Iain Cowan view	Michael Asimakis view	Peter Ramsay view
1. Applicable regulatory limits				
1.1 Current limits for quarries The *State Environment Protection Policy (Ambient Air Quality)* (SEPP AAQ), the *State Environment Protection Policy (Air Quality Management)* (SEPP AQM) are the relevant air quality policies. The *Protocol for Environmental Management: Mining and extractive industries* (Mining PEM) is an incorporated document under the SEPP AQM is also relevant.	Agreed	Agreed	Agreed	Agreed
1.2 Future limits for quarries EPA Victoria (EPA) is planning to introduce environment reference standards (ERS) under the new Environment Protection Act intended to commence on 1 July 2021. This may result in the air quality limits for PM_{10} and $PM_{2.5}$ quarries listed in the Mining PEM being replaced with the limits similar to those outlined in the SEPP AAQ. For the PM_{10} 24-hour average this will be: - Current: 60 µg/m³ - Future: 50 µg/m³ For the $PM_{2.5}$ 24-hour average this will be: - Current: 36 µg/m³ - Future: 25 µg/m³ No changes are expected for respirable crystalline silica (RCS) and dust deposition.	Agreed	Agreed	Agreed	Agreed
2. EPA recommended separation distances				
2.1 Applicable separation distance guideline EPA guideline *Recommended Separation Distances for Industrial Residual Air Emissions* (Publication 1518) is the relevant guideline.	Agreed.	Agreed Agreed that the guideline provides recommended separation distances.	Agreed Agreed that the guideline provides recommended separation distances.	Agreed. Agreed that the guideline provides recommended separation distances. Peter noted that the term default buffers are not referenced in the EPA guidelines.
2.2 Recommended separation distances Publication 1518 outlines the following distances for “quarrying, crushing, screening, stockpiling and conveying of rock”: - Without blasting: 250 m - With blasting: 500 m - With RCS: 500 m	Agreed	Agreed	Agreed	Agreed
2.3 The area from which separation distances are drawn The separation distances should be drawn from the activity boundary relevant to that separation distance. For example, a 250 m buffer could be drawn from the boundary processing/crushing plant, and a 500 m buffer could be drawn from the extraction area within the same quarry. The 500 m recommended separation distance for blasting should be drawn from the extraction boundary and not the Works Authority boundary.	Agreed	Agreed	Agreed	Agreed
2.4 Measuring separation distances	Agreed	Agreed	Agreed	Agreed

Description of issue	Agreed or not agreed?	Iain Cowan view	Michael Asimakis view	Peter Ramsay view
Separation distances should be determined by measuring from the 'activity boundary' for the industrial activity to the nearest sensitive land use. Method 1 – the urban method as outlined in Publication 1518 is the relevant method.				
2.5 Applicable separation distances The Woody Hill Quarry contains mudstone which contains RCS. Therefore a 500 m recommended separation distance is applicable to this site from all activity boundary areas (i.e. from the processing plant boundary and the extraction boundary). The Phillips Quarry does not contain mudstone and therefore will not contain RCS. Therefore, the appropriate separation distances are 250 m from the processing plant and 500 m from the extraction boundary. As the 250 m processing plant separation distance is encompassed within the 500 m extraction boundary separation distance, a simplified 500 m buffer is considered appropriate at present. However, it is noted that this may be reduced in the future to the north as blasting activities (and the 500 m separation distance) move to the south.	Agreed	Agreed	Agreed	Agreed
2.6 Type of amenity The separation distances applicable to the quarries are in relation to dust amenity.	Agreed	Agreed	Agreed	Agreed
3. Appropriate non-sensitive uses within the relevant buffer, and subject to what (if any) conditions				
3.1 Land uses to be located within the separation distances The description outlined in Table 5 of Publication 1518 is considered appropriate. Childcare centres, education centres and hotels are considered a sensitive use and should not be located within a 500 m separation distance. However, have the potential to be able to be located within industrial zoned land outside of the 500 m separation distance.	Agreed	Agreed	Agreed	Agreed
3.2 Concrete batching plant located at Woody Hill Quarry Publication 1518 outlines a 100 m separation distance for the production of concrete, while Clause 53.10 recommends a 300 m separation distance for a concrete batching plant.. The 100 m and 300 m separation distances are fully encompassed by the 500 m separation distance and therefore is considered an appropriate interface land use. It is noted that a concrete batching plant may have adverse amenity potential, however, is considered appropriate so long as the 100 m EPA separation distance is fully encompassed by the 500 m separation distance.	Agreed	Agreed	Agreed	Agreed
4. Site-specific variation to separation distances methodology				
4.1 Site-specific variation methodology Table 4 in Publication 1518 outlines the appropriate methodology to vary a recommended separation distance.	Agreed	Agreed	Agreed	Agreed
4.2 Transitioning of the industry Currently not applicable.	Agreed	Agreed	Agreed	Agreed
4.3 Plant equipment and operation Currently not applicable. In the future at Phillips Quarry the mobile crushing plant will be replaced with a fully enclosed permanent crushing plant. This piece of equipment will have a higher	Agreed	Agreed	Agreed	Agreed

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standard of control and therefore the recommended separation distance may be able to be reduced, once blasting activities have moved south enough for this this to be considered.				
4.4 Size of the plant Currently not applicable.	Agreed	Agreed	Agreed	Agreed
4.5 Likelihood of industrial residual air emissions (IRAEs) Particular IRAEs are either highly likely or highly unlikely to occur. Currently not applicable as operations at quarries are generally not likely to result in either increased or decreased likelihood of IRAEs	Agreed in part	Agreed	Agreed. However acknowledged that without having first hand been to the site and seen how they operate cannot specifically agree but agrees in principal for quarries in general.	Agreed
4.6 Environmental risk assessment (modelled scenario) The methodology (dispersion modelling of quarry operations) used by Iain in his assessment used this criterion as a basis for site-specific variation to separation distances	Not agreed.	Agreed with the methodology used. Does not believe an upset scenario can be modelled as it is not applicable to the quarry operations. Considers an upset condition to be a factor outside of the quarry's control such as mechanical breakdown. If this were to occur then operations (and therefore dust generation) would cease. Blasting also not considered to generate more dust because of something unusual and water trucks are used on haul roads which to the site's personnel's knowledge haven't broke down and additional water trucks are available for hire if needed. The only unusual event is considered to be meteorology, which is covered within the 5 years assessment. Iain agrees that the ERA outcome shows that the 500 m separation distance is appropriate. Iain confirmed that the 500 m was scribed from extraction boundary along the eastern side of Woody Hill.	Agreed with the overall methodology used, however does not agree with the modelled routine operation scenario and therefore the outcomes of the ERA. As the purpose of separation distances are for upset conditions, Michael considered that the model scenario should account for upset or abnormal events. An example was given to be poor management practices resulting in the water cart not being utilised on haul road during strong winds. Michael concurred with Peter's comments regarding Iain's Figure 1.2 where the standard separation distance appears to be less than 500 m.	Agreed that the methodology used by Iain Cowan for the environmental risk assessment is appropriate. Peter considers that Iain's ERA outcome shows that dust impacts are contained within the 500 m separation distance from the extraction boundary and is therefore adequate. Peter also noted that Iain's standard 500 m separation distance in Figure 1.2 appears to be less than 500 m, in particular from the eastern extraction boundary at Woody Hill.

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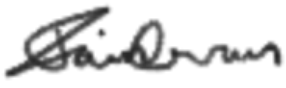
4.7 Environmental risk assessment (meteorology) The methodology (dispersion modelling of quarry operations) used by Iain in his assessment used this criterion as a basis for site-specific variation to separation distances. The meteorological data recorded at the Bureau of Meteorology operated automatic weather station at Melbourne Airport was not considered representative by Iain of the study area. Iain utilised EPA publication *Construction of input meteorological data files for EPA Victoria's regulatory air pollution model (AERMOD)* (Publication 1550) (October 2013) which states that "the directly measured parameters … must be within [a] 5 KM radius of the application site" Michael notes that subsequent to the release of the October 2013 version of Publication 1550, two versions of this publication were released in 2014 (July and September), which stated that a 25 km radius of the application site should be utilised. This version of Publication 1550 is not available on the EPA website.	Not agreed.	Iain has not seen the additional two versions of 1518. Unless the publication is publicly available on the EPA website or there is written approval to use the document from EPA then it should not be considered.	Michael noted that previous personal communications with EPA have stated that the July and September 2014 versions of Publication 1550 can be utilised.	Peter has not seen the additional two versions 1550. Unless the publication is publicly available on the EPA website or there is written approval to use the document from EPA then it should not be considered.
4.8 Topography or meteorology There are exceptional topographic or meteorological characteristics which will affect dispersion of IRAEs. The methodology (directional buffer) used by Michael in his assessment used this criterion as a basis for site-specific variation to separation distances	Not agreed.	Does not agree with the methodology used. Table 4 of Publication 1518 states that this should only be used for "exceptional" conditions. Therefore, the meteorology and/or topography should be "exceptional". Does not consider the topography and/or the meteorology to at the quarry sites to be exceptional.	Agreed with the methodology used. Considers the word "exceptional" to be relied upon too much. Considers the meteorology across Victoria to be vastly different and therefore the local wind regime should always be taken into consideration, regardless if it is located in an "exceptional" location or not i.e. in a valley. Michael also noted Kilmore Gap to the north squeeze's winds north-south and therefore meteorology should be taken into account. Michael noted that the radial buffer does not account for reality as a sensitive use located to the west will not have the same likelihood of being exposed to IRAEs as a sensitive use located to the north/south.	Does not agree with the methodology used in Michael's assessment. Table 4 of Publication 1518 states that this should only be used for "exceptional" conditions, for example in in a severe valley, and this is considered exceptional. Peter does not consider the topography and/or the meteorology at the quarry sites to be exceptional.
5. Site-specific variation to separation distances (assessment results)				
5.1 Site-specific separation distances The applicable separation distance once the criteria to vary a separation distance has been taken into consideration.	Not agreed.	The result of Iain's risk assessment affirmed the 500 m radial recommended separation distance.	The directional buffer outlined in Michael's report is appropriate.	The result of Iain's risk assessment supports that the EPA recommended 500 m separation distance from the extraction boundary is appropriate.
6. Proposed land uses in the PSP				

Description of issue	Agreed or not agreed?	Iain Cowan view	Michael Asimakis view	Peter Ramsay view
6.1 <u>The current proposed land use in the PSP</u> The current proposed land use in the PSP has sensitive land uses located 550 m from the quarry extraction boundary based on the directional buffer.	Not agreed.	Supports the PSP in its current form. If the PSP were to be amended such that sensitive uses were located 500 m from the quarry extraction boundary instead of 550 m then Iain would also support this.	Supports the PSP in its current form. Supports sensitive uses located outside of the directional buffer area.	Peter does not support the buffers in the PSP. The PSP should be amended such that sensitive uses can be located 500 m from the quarry extraction boundary in line with the recommended separation distance in EPA Publication 1518.

Signed by



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