

24 July 2019

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City of Yarra
Accounts Payable
PO Box 168
RICHMOND VIC 3121

Attention: Peter Mollison

Dear Peter

Amendment C247 - Victorian Distillery and Silos Development Application Acoustic Review

SLR Consulting Pty Ltd (SLR) has been retained by the City of Yarra to provide a review of the acoustic assessment report supporting the proposed Amendment C247 for the Victorian Distillery and Silo site at 21 Northumberland Street and 26 Wellington Street, Collingwood (VDAS).

It is understood that the matter relates to residential occupancy in parts of the VDAS site that were not nominated in the original permit for residential occupancy, yet have been developed and used as residential uses over the last 10-20 years. The VDAS site is within a C2Z zone which does not allow for residential use (other than caretaker type residences). The proposed amendment seeks to make these residential uses lawful within the VDAS site.

Details of the acoustic report provided to support the amendment are as follows:

- Title: Victorian Distillery and Silos, Acoustic Assessment
- Reference: 20181422.1/1501A/R0/MS
- Date: 15 January 2019
- Prepared for: Best Hooper Lawyers
- Prepared by: Acoustic Logic Consultancy (ALC)

We provide below a summary of key sections of the acoustic report and our comments.

SLR also undertook a site inspection on 9 July 2019 to assist with this review.

1 Site Description (Section 2 of Acoustic Report)

This section of the report describes the location, surrounding uses and preliminary comments based on observation undertaken during a site inspection. Key aspects identified include:

- Main sources of local noise potentially impacting the site as follows:
 - Porsche Centre Melbourne (109-111 Victoria Pde), with carwash entrance noted to be approximately 20 m east of the subject site,

- Melbourne Pathology building (103 Victoria Pde) exhaust fans and roof plant (20-30 m from subject site).
- Jetstar building (79 Victoria Pde) roof mechanical plant, approximately 45 m south-west of the subject site.
- Observations undertaken by the consultant as follows:
 - Telstra exchange site on the other side of Northumberland Street currently undergoing significant redevelopment. The author notes this development will need to ensure compliance at the VDAS site in relation to SEPP N-1 and SEPP N-2 related aspects.
 - Noise from mechanical plant and equipment associated with the subject site was not audible during the inspection. Plant and equipment for the site is indicated to be related to individual apartment use.
 - Other commercial uses (apart from those identified above) in the area were noted to not generate audible noise at the development. Several 'domestic style' condensing units were observed but considered to not cause impact due to their operation times (normal office hours).
 - No music venues were noted to be within the immediate area that would result in audible music noise at the site.
 - ALC were advised by the VDAS Body Corporate that no complaints from residents had been received with respect to existing plant and equipment serving surrounding commercial uses.

SLR Comments:

The site location and surrounding uses are generally well described.

It is not clear at what time any site inspections were undertaken upon which most of the assumptions were made about mechanical plant and equipment that could impact the site.

In relation to the Telstra Exchange Site, while it is technically correct that that development is now responsible for achieving compliance with SEPP N-1 and SEPP N-2 at VDAS, it potentially places a more onerous obligation on them than had the VDAS site not been used for residential dwellings. However, as the noise generator, with new plant and equipment, we would have to agree that the obligation is now on the Telstra site operator to comply.

In relation to the comment re. complaints from residents in VDAS, Body Corporate records may not necessarily reflect all potential noise complaints (residents would normally complain to Council, EPA or even directly to the commercial operator).

SLR undertook an inspection of the area on 9 July 2019 between 2 pm and 3.30 pm. We did not identify any other significant noise sources beyond those identified by ALC.

2 Measured Noise Levels (Section 5 of Acoustic Report)

ALC undertook a series of noise measurements on and around the site for the purposes of establishing existing noise levels at the subject site. Noise measurements included noise from:

- The Porsche Carwash
- Melbourne Pathology Exhaust Fans and roof top plant
- Jetstar plant

- Various other locations around the site

A noise monitor was also left on the site from 19-25 October 2018 for the purposes of determining general background noise levels during the day, evening and night periods.

SLR Comments:

The measurements appear reasonable in terms of their general location and approach to quantifying noise to the VDAS site, there is however minimal technical information in relation to duration and time of measurements, and specific distances from sources. We also note there were no measurements along the northern boundary of the site, but this area is being redeveloped in any case (Telstra Exchange site) and is effectively a building construction site. In any case, the general observations appear to be in line with our own observations on site and our review of available aerial photography.

The noise logging data is not presented in its entirety; Table 1 of the document provides a single background level determined for the day, evening and night. We would recommend that the report includes the full logging data and basis for determining the presented background levels (i.e. is it the quietest single day of monitoring or average over numerous days).

3 Assessment Criteria (Section 6 of Acoustic Report)

ALC determine the SEPP N-1 zoning levels and corresponding noise limits at the subject site based on land use zoning and the collected background levels.

The zoning levels and noise limits are presented as follows:

Period	Measured Background Level, dBA	Zoning Level, dBA	Noise Limit, dBA
Day	46	59	57
Evening	42	53	50
Night	39	48	48

NOTE: 'Zoning levels' are determined based on the procedure in SEPP N-1 and are directly related to the proportion of industrial, commercial and residential type zoning within 400 m of a specific residence; the more commercial / industrial usage ratio the higher the zoning levels. The final noise limits determined under SEPP N-1 take into account the zoning levels and the existing background levels in the area. Residential uses in commercial zones, or abutting commercial / industrial zones effectively have high zoning levels and corresponding noise limits – i.e. a balance of reduced amenity for the residents and ability for industries / commercial operators to generate more noise than if they were in a predominantly residential zoned area.

SLR Comments:

Our own calculations of the Zoning Levels match those of ALC, and if the ALC background levels are adopted, we also obtain the same noise limits. We note that the day and evening background levels are 'low' under the SEPP N-1 definitions, and the night period background level is 'neutral' under the SEPP N-1 definitions. We note that any drop in the night period background level would also result in 'low' background levels at night, and corresponding reduced night period noise limits. It is critical that the night period background data collected represents the minimum background collected over a single day of the monitoring period rather than averaging of numerous days of data.

4 Noise Assessment (Section 7 of Acoustic Report)

ALC determine that two of the sources in the area exceed the SEPP N-1 noise limits at the subject site.

A 3 dBA excess is determined for the Porsche carwash (day period operation only) and a 6 dBA excess is determined for the Melbourne Pathology Undercroft Exhaust Fans during night period operations.

ALC conclude that these exceedances are unlikely to impact existing residents and this is supported by the lack of complaints from VDAS since 2001.

SLR Comments:

We generally agree that a 3 dB excess during the day does not represent a critical impact to residential receivers, and ultimately, if complaints were to occur, it should not be a significant impost on the business in the area to address this with generally minor acoustical works.

The night period excess of 6 dBA is more substantial. It would appear that the cause of this excess, being the Melbourne Pathology Undercroft fans, could also be readily addressed with relatively basic noise control works, in the event of complaints.

If the residential development was a new application in these circumstances, it would be highly desirable that an 'agent of change' approach be adopted in that the new apartment developer wears the cost of acoustic works to achieve compliance. As the status of the building occupancy is not clear in all parts of the building VDAS site, it is difficult to determine if this is an appropriate or reasonable approach.

5 Conclusion (Section 9 of Acoustic Report)

The conclusion of the report is that the site is not significantly impacted by noise from existing surrounding commercial operations and the residents of the site have coexisted with the surrounding commercial development without complaint since 2001.

6 SLR Summary and Additional Comments

We make the following general comments and summary:

- If the residents in the development have not been affected or complained about noise (as indicated in the ALC report) since 2001, that is a potential indicator that the use can reasonably co-exist with existing commercial operations. However, this does not necessary support use of additional parts of the site for residential use as those locations could be more exposed to noise sources than existing residential uses.

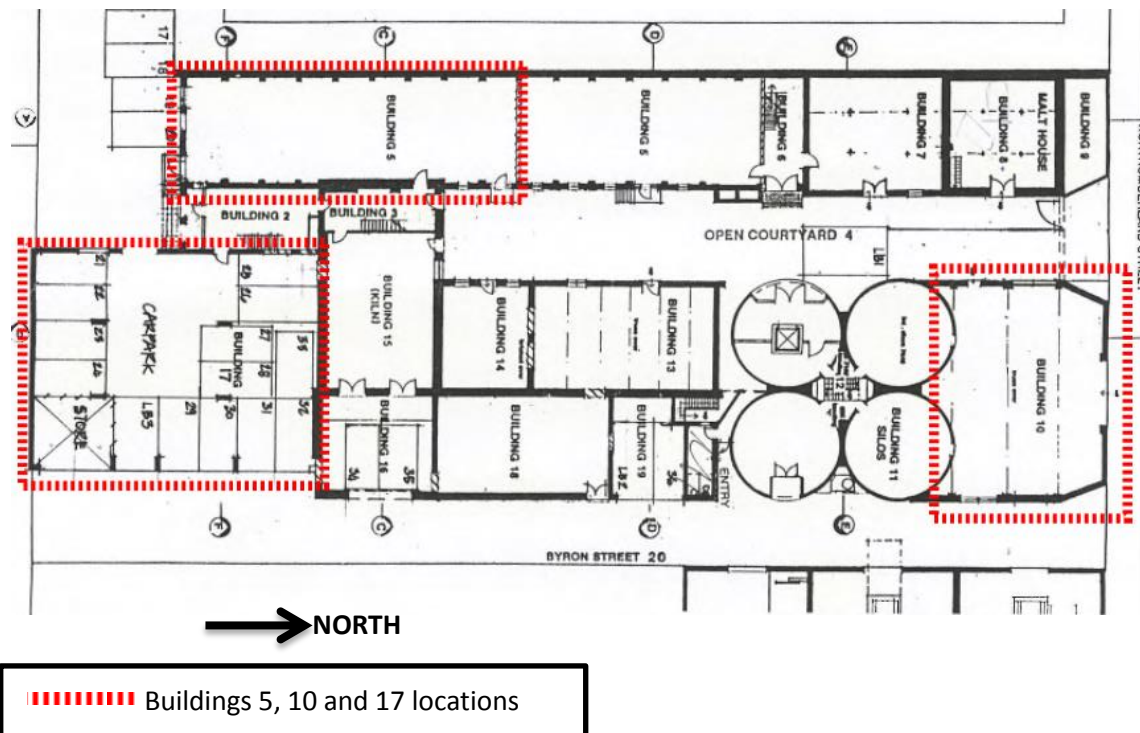
It is not clear what basis the claim of no complaints is made on – i.e. survey of all residents, or from records within the VDAS management. Residents can complain to Council, or EPA, or the commercial operator itself, and occupants can also change over time, so it is not clear how Body Corporate could have a record of all such complaints. The VDAS records may not be fully conclusive in relation to this.

- Under the SEPP N-1 and SEPP N-2 policies, noise is assessed to residential dwelling type uses, and in particular and relevant to the VDAS site, outside a caretakers residence window. As such, the noise policies would only apply to those parts of the VDAS site that have allocated caretakers/dwelling use. From review of the silo and distillery building drawings and original permit documents (1998) we observe that caretaker/ dwelling components are distributed to various parts of the site. It is however not completely clear as to exactly which parts of the site (particularly in the distillery buildings) are allocated residential / caretakers use. The excerpt below provides a summary of allocated caretaker/residential uses for the various building in the VDAS site.

The Distillery Proposed Subdivision Area Schedule

Building Reference Name	Building Number	Warehouse Storage M2	Light Industry Manufacture M2	Office M2	Caretaker Residential M2	Subdivision Lot Number	Gross Area M2
Germinating Building	5A		96	60		1	156
	5B			60	163	2	223
	5C			60	163	3	223
	5D		65	45		4	110
	5E			50	75	5	125
	5F			50	75	6	125
Loft Unit (Stair 2)	6			10	88	7	98
Grainstore	7	68	68	68	135	8	338
Distillery Tower	8	55	55	55	164	9	328
Machine Room	10	60	60	60		10	180
Silos	11A			45	318	11	363
	11B			45	318	12	363
	11C			45	334	13	379
Maintenance Workshops	13		89	45	89	14	223
Baney Store	14		126		84	15	167
Lower Kiln	15A	83		83	83	16	249
Upper Kiln	15B	55		28	208	17	291
Roasting Room	17	140	78	221		18	439
Bagged Mat Store	18	84			175	19	259
Totals				1030		1 to 19	4639
Substation		9				20	
Carparking		36 Cars					
Total Number of Units		19					

The above schedule suggests that there is no allocation of caretaker residential use to Buildings 5A, 5D, 10 and 17. These building are highlighted (in red) in the excerpt below:



However, we also understand that additional permit drawings showing caretakers / residential use may be inconsistent with the above schedule. As such, it is not completely clear which specific parts of the building are legally being used for residential purposes.

- The ALC report has assessed noise to the southernmost part of the site (next to Building 17 and 5) and determined the 6 dBA breach in SEPP N-1 in this area. If this part of the site already has legally allocated residential uses then the formal non-compliance is the current status and would ultimately be the responsibility of the commercial operator to address if complaints arise (or if enforced by Council or EPA).

If this part of the VDAS site did not have legally allocated residential uses (i.e. only used for commercial use) it would have potentially served as a useful buffer for noise from the south, and could effectively eliminate the non-compliance. The amendment would allow for lawful occupation of these buildings and a non-conformance to SEPP N-1 of existing commercial operations at Melbourne Pathology; placing a new legal obligation on them. While the breach is potentially addressed with relatively minor noise control works, they will still require some cost to implement – Council may want to consider an arrangement such that the VDAS contributes (or is fully responsible for) the cost of noise control works to bring the fans into compliance at the nearest residential use in the VDAS site should the amendment be approved in these circumstances.

Implications on Future Uses / Changes in Commercial Operations

- Obligation of compliance for existing or future commercial operators in the area will be driven by the nearest existing residential occupancy to a specific business’s operations. Unless the exact location of all legal residential uses currently within the VDAS site is available, it is not possible for us to determine the likelihood of any additional obligations on surrounding businesses with the amendment applied.

- If allocated residential uses are generally distributed to all allotments and all facades of the buildings, there will likely be negligible change in any additional obligations to businesses with the amendment in place.
- Conversely, if there are large parts (or entire facades) of the development with no residential allotment (eg. Buildings 17 or 10 if the Subdivision Area Schedule is correct) then change of use in such buildings could have a significant implication on nearby businesses. This would affect both the current status of compliance (as in the case of Melbourne Pathology) and potential future operations as any expansions, changes in operating hours, night time operations etc. would require detailed review and assessment to a more exposed receiver than would otherwise have been the case under the original permit.

Potential Treatment Options

- One aspect that can be implemented to provide some protection to existing commercial uses (and to allow for some potential changes in commercial uses in future) is to ensure that any new apartments or dwellings (or use of new buildings / areas for residential purposes) incorporate better than minimum noise attenuation treatments, or specifically address any local external noise sources. In particular, windows and external walls could be nominated to achieve a minimum acoustic rating. If this approach were to be considered by CoY, our suggestion would be to include conditions along the following:

Any new residential use or redevelopment is to incorporate:

- *External glazing to achieve not less than Rw 36 dB*
- *External walls to achieve not less than Rw 50 dB*
- *Ventilation paths (makeup air etc.) do not compromise the above ratings.*

AND be designed to achieve:

- *Not more than 30 dBA Leq (30 min) in bedrooms*
- *Not more than 35 dBA Leq (30 min) in living or other habitable rooms*
- *Not more than 55 dBA Lmax from commercial vehicle pass-bys and operations*

The above are to be determined with windows closed and must include character adjustments for the Leq based criteria (as per SEPP N-1 procedure).

The above requirements could potentially be implemented retrospectively to those parts of the building that were not originally allocated residential dwelling uses. This may require replacement or upgrade of glazing.

Note the above do not necessarily provide for a compliant outcome to SEPP N-1, but they do provide added protection to dwellings and potentially reduce the risk of nuisance and complaint. Provision of warning via a Section 173 agreement advising residents of noise impacts to their dwelling may also assist in reducing the likelihood of complaint.

- We make one final comment – we would expect that parts of the building used as dwellings (and not originally intended to do so) would be required to meet the appropriate current (or those applicable at the time of their conversion) building / BCA regulations. These would include acoustic requirements for partitions within the site between adjacent occupancies. A building surveyor would be able to confirm / clarify what requirements would be applicable.

Yours sincerely



Jim Antonopoulos BAppSc MAAS
Principal - Acoustics

Checked/ Authorised by: DW
