

ASSESSMENT REPORT

Section 75W Modification Tooheys Brewery, Lidcombe – Heineken Brewing Expansion (06_0303 Mod2)

1. PROJECT BACKGROUND

The Tooheys brewery at Lidcombe has been operating since the 1960s and was initially used as a packaging facility (see Figure 1). Brewing commenced at the site in 1978.

In July 2007, the then Minister for Planning approved a major upgrade to the brewery which included:

- a new Beer Processing Building and upgrade of the associated beer processing equipment;
- a new Bright Beer Tank (BBT) Cellar and BBTs;
- an increase in production capacity of up to 3.3 hectolitres of beer per annum; and
- upgrade of utility services including the heating, refrigeration and compressed air plant.

The upgrade works, which have been completed, included significant works to reduce the electricity and natural gas consumption of the brewery.



Figure 1: Regional Context

In 2010 a modification was approved (06_0303 MOD1) to install a 2MW Cogeneration Facility at the Lidcombe site in order to further reduce the brewery's consumption of grid electricity. The cogeneration plant is to work in conjunction with the two highly efficient boilers approved as part of the 2007 upgrade.

2. PROPOSED MODIFICATION

Due to a general market shift to premium brands in the brewing industry, the required volume of Heineken brand produced at Tooheys Lidcombe Brewery is increasing. Heineken has a longer process time of 30 days compared to Tooheys brands at 10 days. To enable the brewery to produce the required volume of Heineken brand, in addition to producing its Tooheys brands, additional fermentation vessels are required, as are other minor changes to the site layout.

The upgrade would not increase the total capacity of the brewery or result in any changes to the working arrangements at the brewery.

Tooheys Pty Ltd (Tooheys) proposes to modify the existing approval (MP 06_0303) to allow for the longer processing time for the Heineken product. The proposed modification has a capital investment value (CIV) of \$710,000.00 and includes the following components:

- the installation of a block of four standard vertical fermentation vessels. The 400kL vessels are approximately 25m high and 6m in diameter. There are currently 48 vertical vessels present on the brewery site of varying size - the additional vessels are identical to the four vessels that were installed on the site in 2006;
- removal of the existing waste earth handling facility. This facility was made redundant by the installation of the approved membrane filters in 2009. The proposed vertical fermentation vessels would be erected in its place adjacent to the existing tank farm;
- the installation of one additional Heineken 'HORAP' horizontal fermentation vessel suspended above the existing two HORAP vessels. The 400kL vessel is approx 25m long and 5m in diameter. A development consent issued by Auburn Council on 02/09/2004 (DA No 215/04) covered the installation of 3 HORAP vessels, but only two have been installed to date; and
- the construction of a crane footing area (adjacent to the existing HORAP vessels) to enable the installation of these vessels, and a temporary crane access road.

The proposed location of the vessels is shown in Figure 2. A cross section and elevation of the proposed vessels is shown in Figure 3.

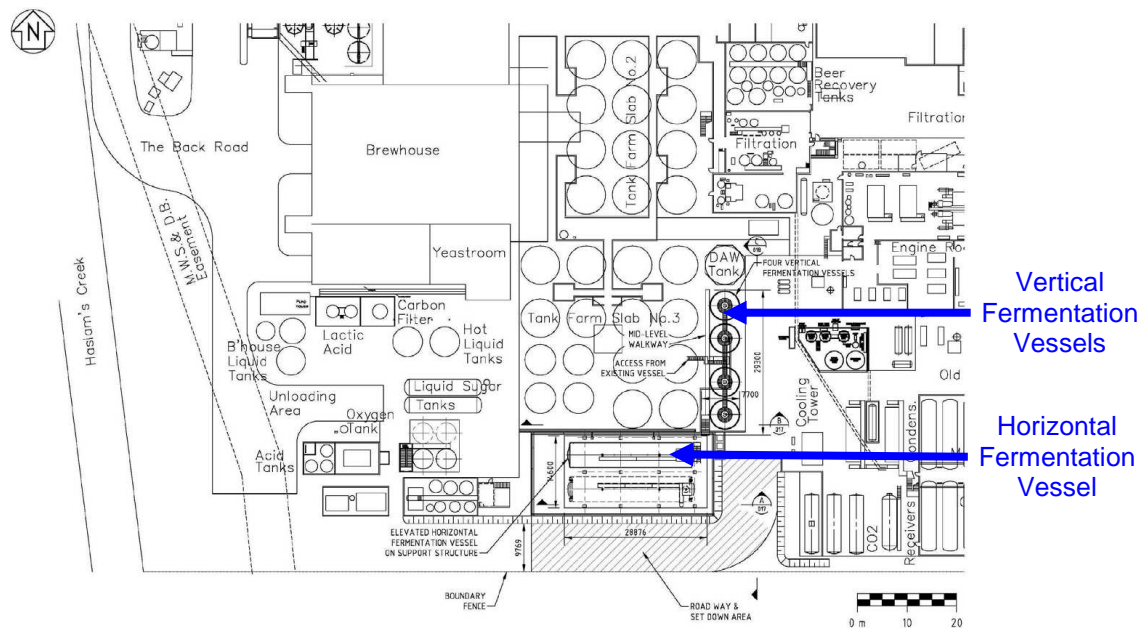


Figure 2: Proposed Layout

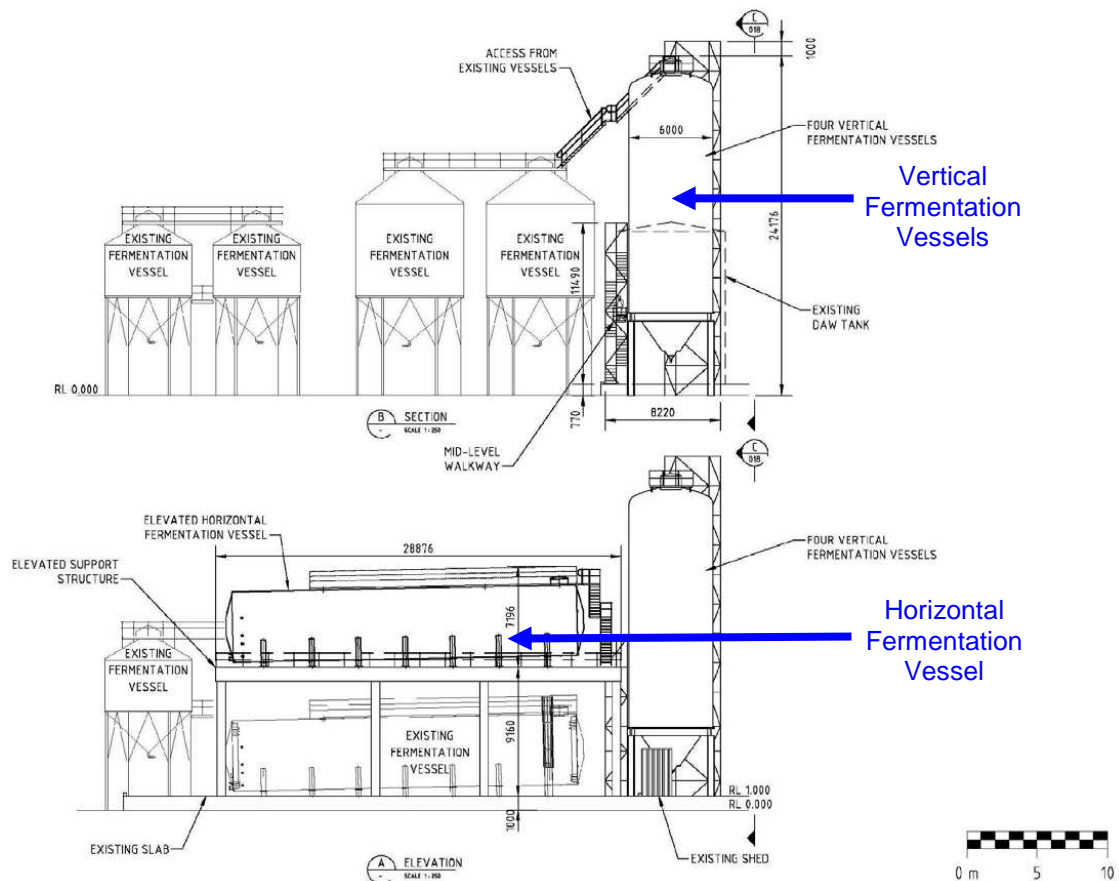


Figure 3: Cross Section and Elevation of the Proposed Fermentation Vessels

Prior to site erection of the fermentation vessels the following construction works would be undertaken:

- the waste earth handling facility and associated services / infrastructure would be decommissioned and removed;
- excavation of fill would be undertaken and removed off site;
- a concrete slab would be constructed for the vertical vessels;
- a structural frame for the horizontal vessel would be erected;
- a crane footing would be installed; and
- a temporary crane access road would be constructed.

3. STATUTORY CONTEXT

3.1 Approval Authority

Section 75W of the EP&A Act confers on the Minister an implicit obligation to be satisfied that the modification request falls within this section of the EP&A Act.

The Department notes that:

- the proposed modification does not seek approval for a new and different project for which approval was granted; and
- any potential impacts would be minimal and could be appropriately managed through the existing or modified conditions of approval.

It is therefore recommended that the Executive Director, Major Projects Assessment under the Ministers delegation of 25 January 2010, agree that the modification request falls within section 75W and the request can be determined.

3.2 Exhibition and Notification

Under Section 75W of the EP&A Act, the Department is not required to notify or exhibit the application. Following a review of the modification application, the Department determined that the proposed modification should be referred to the Department of Environment, Climate Change and Water (DECCW) and Auburn City Council (Council). Consultation with other government agencies and neighbouring sites was considered unnecessary, as the environmental impacts of the proposal would essentially remain unchanged from the approval project.

The DECCW did not object to the proposed modification however, issues were raised regarding soil contamination, odour, and stormwater/spill containment. The DECCW noted that there have been two failures of Tooheys' trade waste water pump out system that have resulted in spills. Further, Tooheys must ensure that the system has the capacity to manage spills to from the new vessels and is working in a proper and efficient manner at all times.

Council raised no concerns in relation to the proposed modification provided that all relevant recommendations associated with various specialist reports prepared for the development are satisfied by way of inclusion of appropriate conditions of development consent.

The Department has considered Council's and the DECCW's comments in the assessment of the proposed modification.

4. ASSESSMENT

The following provides the Department's assessment of the key issues associated with the project. All other issues are considered to be minor and able to be managed through the implementation of standard safeguards and measures.

Table 1. Summary of Issues

Issue	Assessment	Recommendation
Noise	<ul style="list-style-type: none">It is anticipated that the construction of the facility would require 43 truck deliveries to site. Five of these would be at night for the delivery of the fermentation vessels via Percy Street.The proposed construction time period is 12 weeks and would take place during standard construction hours (with the exception of the vessel deliveries).Considering the predominantly industrial surrounding land uses, the additional truck movements over the nominated time period are considered to have a low impact in terms of construction traffic noise.Tooheys proposes to; inform surrounding residents of the program of construction works prior to the commencement of the project; and to direct night time construction traffic along Percy Street (in an industrial area) and not along the residential streets.Operational noise from the brewery is not expected to be significantly altered and would comply with the existing noise limits for the brewery.The Department is satisfied that the operation of the proposed Heineken Brewing Expansion would comply with existing noise limits for the site. In regard to construction traffic noise, the Department is satisfied that the existing conditions of approval are adequate and measures outlined in Tooheys Traffic Management Plan would ensure construction traffic would have minimal impact on surrounding residents.	<ul style="list-style-type: none">No further conditions required.
Air Quality and Odour	<p>Local Air Quality</p> <ul style="list-style-type: none">The 2007 air quality assessment for the Brewery expansion showed that PM10 was the critical pollutant in terms of local air quality impacts from the site. For NO2 and CO, the original assessment showed that ground level concentrations were well below the relevant criteria.The operation of the proposed fermentation vessels is not expected to result in any change to PM10, NO2 and CO emissions from the site.	<p>Recommended conditions require Tooheys to:</p> <ul style="list-style-type: none">operate the facility in a manner which complies with the air emission limits specified in EPL No. 1167, issued under the POEO Act.

Issue	Assessment	Recommendation
	<p>Odour</p> <ul style="list-style-type: none"> The fermentation stage of the brewing process produces volatile organic compounds (VOCs) (ethanol and ethyl acetate), which would be collected and passed through a gas scrubber. The scrubber is included in the CO₂ recovery package that was updated and re-automated during the first stage of the plant upgrade. The new vessels would utilise the CO₂ recovery system which is used as part of the CO₂ capture and re-use process. Both the Department and the DECCW consider that the additional vessels should not have any air quality or odour impacts. 	
Hazards	<ul style="list-style-type: none"> The Preliminary Hazard Analysis (PHA) identified the main hazards with this project in the areas of transportation, installation and operations of the fermentation vessels. A qualitative risk assessment was carried out by Tooheys, the resultant risk from the consequences and the likelihood scored at medium level, with identified/proposed safeguards there would be no off-site impacts to the surrounding land uses. The Department is satisfied that the conclusions of the PHA are reasonable. Notwithstanding, the Department has recommended a number of conditions of consent relating to hazards. 	<p>Recommended conditions require Tooheys to:</p> <p>Pre-construction</p> <ul style="list-style-type: none"> prepare a Construction Safety Study, consistent with the Department of Planning's Hazardous Industry Planning Advisory Paper No.7, 'Construction Safety Study Guidelines'. <p>Pre-commissioning</p> <ul style="list-style-type: none"> update the site Safety Management System, to take into account the proposed modification.
Soil Contamination	<ul style="list-style-type: none"> Some excavation would occur as part of the proposed works to remove the embankment and enable the slabs, upon which the fermentation tank would be located, to be constructed. Tooheys has committed to testing the soil prior to excavation to assess the likely waste classification and disposal of fill offsite in accordance with the NSW DECCW <i>Waste Classification Guidelines</i>. The Department and the DECCW is satisfied that, with these safeguards in place, the proposed excavation works would not result in any environmental impacts. 	<p>Recommended conditions require Tooheys to:</p> <ul style="list-style-type: none"> Undertake testing of the soil prior to excavation in accordance with DECCW's <i>Waste Classification guidelines</i> (DECCW 2009). Dispose of the excavated soil from the site to an appropriately licensed facility.
Spill Containment System	<ul style="list-style-type: none"> The new vessels would rely on the current stormwater containment system that utilises an automated 'trade waste water pit pump out system' in the event of a spill. There have been two failures of Tooheys trade waste water pump out system that have resulted in spills to the creek. Tooheys have assured the Department that the system has the capacity to manage spills from the new vessels and is working in a proper and efficient manner. The Department considers suitable measures are in place to prevent further spills. The DECCW advises that failure to comply with the provisions of the <i>Protection of the Environment Operations Act</i> or the environmental protection license (EPL) for the site may result in the DECCW taking appropriate regulatory action. 	<p>No further conditions required.</p>
Visual	<ul style="list-style-type: none"> The four vertical fermentation vessels are proposed to be installed adjacent to 48 existing vertical vessels. The dimensions and appearance of these vessels are identical to the vessels installed in 2006. The horizontal vessel is proposed to be installed above 	<p>No further conditions required.</p>

Issue	Assessment	Recommendation
	<p>the two existing horizontal vessels.</p> <ul style="list-style-type: none"> ▪ The final height of the horizontal vessel would be below the current height of the adjoining vertical vessels (approximately 25m high). ▪ The additional vessels would be set back from Nyrang Street and would not physically alter this frontage. ▪ The Department is satisfied that the new vessels would be generally consistent visually in terms of size, bulk and appearance with the existing fermentation vessels and other tanks on the site, and would not increase the visual impact of the site. 	

The Department has assessed the project, in accordance with the requirements of Clause 8B of the *Environmental Planning and Assessment Regulation 2000*, and considers that all potential impacts of the project can be suitably managed to ensure an acceptable level of environmental performance.

5. RECOMMENDED CONDITIONS OF APPROVAL

The Department considers that the proposal represents a minor modification of the project as approved and would not have any impacts beyond that assessed and approved.

The Department has recommended a minor amendment to the current development consent to include the modification application within the terms of the approval.

6. CONCLUSION

The Department has assessed the merits of the proposal in accordance with the requirements in Clause 8B of the EP&A Regulation. This assessment has found that the proposed modification is minor and is unlikely to cause any significant impacts beyond that assessed and approved.

Consequently, the Department is satisfied that the modification should be approved.

7. RECOMMENDATION

It is RECOMMENDED that the Executive Director, Major Projects Assessment:

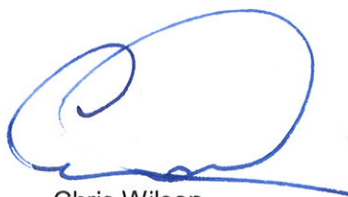
- approve of the proposed modification under Section 75W of the EP&A Act; and
- sign the attached instrument (tagged A).

Christine Chapman
Industry



Chris Ritchie
Manager - Industry
Mining & Industry Projects

5/7/10.



Chris Wilson
Executive Director
Major Projects Assessment

6.7.10