

PLANNING CONSULTATION RESPONSE

Responding Officer:	Greg Kearney
Date:	1 st December 2015
Planning Ref No:	15/1653/FUL
M3 Ref No:	WK/201523236
Description of Development:	<p>Chemistry Department, Lensfield Road, Cambridge, CB2 1EN</p> <p>Relocation of the existing liquid nitrogen (LN2) tank, Denios unit and cycle parking facilities, and scheme of archaeological investigative works additional noise assessment for LN tank</p>

Cross one:

- ☒ The development proposed is **acceptable** subject to the imposition of the condition(s)/informative(s) outlined below.
- ☐ The development proposed is **unacceptable** and should be refused for the reason(s) set out below.
- ☐ It is not possible to comment on the proposed development and the additional information set out below will be required in order to provide comments.

List of required conditions/Informatives:

• Bespoke Conditions:

- i. Prior to commencement of development / No nitrogen shall be put into the relocated tank hereby approved until the details and specifications of the acoustic attenuation measures within the new tank enclosure, as recommended in the Sandy Brown technical note reference M005-C dated 17th November 2015 (or details of a similar noise insulation scheme) have been submitted to and approved in writing by the local planning authority. The approved acoustic attenuation measures shall be fully installed / implemented prior to commencement of use and shall be maintained in that condition thereafter. **(to be confirmed -Prior to commencement of development)**
- ii. Deliveries of nitrogen shall be made only to the existing fill point south of the Chemistry building as indicated on the plan detailed in the University of Cambridge Estate Management letter dated 27th November 2015. No filling activities shall take place at the new tank location hereby permitted, and, for the avoidance of doubt, and notwithstanding the references in submitted drawing CQN 2021 rev02 to bollards and a delivery lorry position, no

permission is hereby given for delivery vehicles to be positioned alongside the proposed relocated nitrogen tank at any time.

- iii. Deliveries to the fill point for the nitrogen tank shall take place only between the hours of 0900 and 1700 on Mondays to Fridays. There shall be no deliveries of nitrogen on Saturdays, Sundays, or Bank Holidays.
- iv. No more than three deliveries of nitrogen to the fill point shall take place in any Monday to Friday week.
- v. When a nitrogen delivery is made to the fill point, filling activities (including opening gates, vehicle entry, pressure release and pipe connection, disconnection and stowage) shall be completed within 40 minutes. If the delivery vehicle remains on site beyond this time period, the engine shall be switched off. Nitrogen delivery vehicles shall leave the site within one hour of the start of any delivery slot.
- vi. No new two-tier or 'double-stacker' cycle storage racks shall be installed until full details, including measures to minimise noise and a management plan to control the use of the cycle parks, have been submitted in writing to, and approved by, the local planning authority. Racks shall be installed and their use managed only in accordance with the approved details, and shall be maintained thereafter to remain in accordance with those details.
- vii. No construction of the nitrogen tank enclosure including installation of the tank shall be carried out or plant operated other than between the following hours: 0800 hours and 1800 hours on Monday to Friday, 0800 hours and 1300 hours on Saturday and at no time on Sundays, Bank or Public Holidays.
- viii. Prior to the installation of any artificial lighting, details of the lighting shall be submitted to and approved in writing by the local planning authority.

The artificial lighting shall be installed in accordance with the approved details and retained thereafter.

Reason for all: In the interests of amenity. (Cambridge Local Plan 2006 policies 3/11 and 4/15)

Background information/additional comments:

My previous planning consultation memo dated the 19th November 2015 concluded that the application did not demonstrate with a reasonable degree of certainty that noise associated with the proposals will not give rise to a significant or other adverse impact on the quality of life / amenity of existing neighbouring noise sensitive residential premises at 17 to 23 Panton Street.

For this reason the development was considered unacceptable and refusal was recommended.

The main environmental health related material consideration is the noise impacts and effects of the proposals and in particular noise associated with:

- Refuelling / refilling of the relocated liquid nitrogen tank (LN2 tank)

- tank noise - opening of vaporizers valves to release pressure
- refuelling vehicle noise - arrival / departure, engine, pump / compressor
- Liquid nitrogen tank operational noise: ancillary pumps, pressure regulators and pressure release valves
- Use of 2 tier racking system in cycle parking areas 1 and 2
 - of steel construction and potential impact noises associated with use, raising and lowering or similar

Application Amendments to Address Noise Concerns

Following discussions and in response to our concerns about unacceptable noise impacts the applicants have now amended the proposals as detailed in a University of Cambridge Estate Management letter dated 27th November 2015.

In the amended scheme, no direct deliveries to refill the new nitrogen tank would take place immediately adjacent to the tank itself, as previously proposed.

Instead, the exiting fill point to the south of the Chemistry building (in the existing general delivery area) would be retained, and all deliveries would be made at that point, and the nitrogen pipework would be modified to connect to the to the proposed tank.

In addition the following noise mitigation measures are proposed:

- Acoustic attenuation measures within the new tank enclosure, as described in the Sandy Brown technical note (ref. M005-C, 17/11/15)
- Restrictions to hours of deliveries to between 9am to 5pm Monday to Friday (no weekends or Bank Holidays).
- Restrict deliveries to no more than 3 instances in any given week.
- Each delivery to last no more than 40 minutes for filling activities (engines/compressors etc to be turned off when filling is not occurring)

Environmental Health Review of Application Amendments

Nitrogen Tank Noise

The main noise source / activity which has the potential to result in a significant adverse noise impact is the nitrogen tank refilling activity adjacent to the proposed new location.

The amendments retain the existing refill location and therefore no new noise impacts are likely to arise.

In the new tank enclosure any noise associated with operational noise: ancillary pumps, pressure regulators and pressure release valves will be minimised and mitigated by additional noise mitigation measures such as an acoustic enclosure, as recommended by Sandy brown acoustic consultants.

Currently existing deliveries are unrestricted and the applicants have offered conditions restricting delivery hours, duration and frequency per week.

Such measures are likely to result in a reduction in noise impact when compared with existing arrangements.

Providing the proposed amendments and acoustic / noise mitigation measures recommended are approved and secured by condition unacceptable adverse noise impact should not arise. This allays our concerns.

Noise: use of 2 tier cycle racking system in cycle parking areas 1 and 2

Existing cycle areas 1 and 2 will be altered to have a 2 tier racking system with unrestricted use. These will be of steel construction and the upper tier racks have various forms of mechanisms to raise and lower the tier to accommodate the bicycles.

The use of a 2 tier racking system therefore has the potential to generate additional noise impact such as banging and crashing impacts when they are used, raised and lowered or similar.

The noise consultant SBA states that consideration will be given when selecting the cycle rack to ensure that the effect of noise from metal-on-metal is minimised. Details of the proposed system will be submitted to the Local Authority for approval prior to installation.

The noise impact associated with these 2 tier cycle racking systems is difficult to quantify and no specific acceptability standard exists.

This is a lesser concern and the use is similar in principle to existing arrangements. Our preference would be for single tier in the middle cycle park 2 (where there is single tier currently).

However, the university have proposed a condition requiring the approval of the details of the cycle rack including the incorporation of noise mitigation.

We are aware that some proprietary 2 tier systems are marketed as having significant sound reduction from the upper tier, therefore removing a large amount of noise pollution.

In addition, the applicant have confirmed that it is their intention to control / restrict the use of cycle park 2 by electronic access pass and it would be reserved for staff or post-doctoral students only.

It is concluded that the cycle parks will not result in significant adverse impacts on amenity / quality of life.

The proposed noise mitigation measure for the cycle parks should also ensure that any other adverse impact will be mitigated and reduced to a minimum.

Conclusions

The amended the proposals as detailed in a University of Cambridge Estate Management letter dated 27th November 2015 should ensure that noise will not give rise to significant adverse impacts on health and amenity quality of life.

In addition, the noise mitigation measures proposed by the applicant should mitigate and reduce to a minimum any other adverse impact arising from noise.

Providing the conditions as recommended above are imposed, it is our view that the proposals are now in accordance with Cambridge Local Plan policy 4/13 Pollution and Amenity and the National Planning Policy Framework (NPPF, 2012) paragraphs 109, 120 and 123.

Regards,

Mr Greg Kearney
Environmental Health Officer (University)
Environmental Quality & Growth Team
Cambridge City Council

15/1653/FUL – Department of Chemistry

Recommended amendments and additions to the planning conditions set out on the amendment sheet

Following advice from the environmental health team, I recommend amendments to Conditions 6, 7 and 11 on the amendment sheet, so that they read as follows.

6. Prior to commencement of any works relating to the relocated nitrogen tank hereby approved, its enclosure or associated pipework, the details and specifications of the acoustic attenuation measures within the new tank enclosure, as recommended in the Sandy Brown technical note reference M005-C dated 17th November 2015 (or details of a similar noise insulation scheme) shall be submitted to and approved in writing by the local planning authority. The approved acoustic attenuation measures shall be fully implemented prior to commencement of use and shall be maintained in that condition thereafter.

Reason: To protect the amenity of neighbouring residents. (Cambridge Local Plan 2006 policies 3/4 and 4/13)

7. Deliveries of nitrogen shall be made only to the existing fill point south of the Chemistry building as indicated on the plan detailed in the University of Cambridge Estate Management letter dated 27th November 2015. No filling activities shall take place at the new tank location hereby permitted, and, for the avoidance of doubt, and notwithstanding the references in submitted drawing CQN 2021 rev02 to bollards and a delivery lorry position, no permission is hereby given for delivery vehicles to be positioned alongside the proposed relocated nitrogen tank at any time.

Reason: To protect the amenity of neighbouring residents. (Cambridge Local Plan 2006 policies 3/4 and 4/13)

11. No new two-tier or 'double-stacker' cycle storage racks shall be installed until full details, including measures to minimise noise and a management plan to control the use of the cycle parks, have been submitted in writing to, and approved by, the local planning authority. Racks shall be installed and their use managed only in accordance with the approved details, and shall be maintained thereafter to remain in accordance with those details.

Reason: To protect the amenity of neighbouring residents. (Cambridge Local Plan 2006 policies 3/4 and 4/13)

In addition, and also following advice from the environmental health team, I recommend two further conditions as follows.

15. No construction of the nitrogen tank enclosure including installation of the tank shall be carried out or plant operated other than between the following hours: 0800 hours and 1800 hours on Monday to Friday, 0800 hours and 1300 hours on Saturday and at no time on Sundays, Bank or Public Holidays.

Reason: To protect the amenity of the adjoining properties. (Cambridge Local Plan 2006 policy 4/13)

16. Prior to the installation of any artificial lighting, details of the lighting shall be submitted to and approved in writing by the local planning authority. The artificial lighting shall be installed in accordance with the approved details and retained thereafter.

Reason: In the interests of amenity. (Cambridge Local Plan 2006 policies 3/11 and 4/15)