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18th January 2012

Dear Mr. Rothery,

Planning Application ref.: 11/02835/FUL

We have considered very carefully the above planning application and have taken account of the information supplied at our meeting with you and your colleague. We have, as already indicated, concluded that the proposed development is not in itself objectionable and we support the principle of such development. Nevertheless, we have very grave concerns over the potential impact that this proposal or a future as yet unknown occupier of the building could have on the viability of the Diamond Synchrotron given the wide range of potential uses that could lawfully be carried out under a permission granted pursuant to this application. The Diamond Synchrotron, as you are aware, is a project of national significance. When planning permission was granted for the Synchrotron it was done also in the national interest. The location was important because of the need to ensure a location which had suitable physical properties, especially freedom from vibration. It would, therefore, be contrary to an acknowledged planning purpose for development to be permitted which had an adverse impact on that purpose, or which had the potential for such an impact in the future.

It is therefore clearly highly relevant to planning that no development now, or in the future, should be able to cause vibration that would seriously reduce the scientific capability of the Diamond Light Source.

The current proposal as set out in the planning application, although it may not in itself include any proposal which would cause harmful vibration, is of a scale and configuration that provides large general purpose space with associated large vehicular access points that could accommodate a wide range of activities that might in the future cause just such harmful vibration. This could be done without the need for planning permission and so unless conditions are put in place now, no control would be available to safeguard the continuing operation of the Diamond Light Source.

Vibration is similar to noise and there are model conditions which are frequently imposed to control noise where it is considered to be likely to have an adverse impact on noise sensitive development. As with noise there are recognised scientific measures of vibration and it would therefore be entirely feasible to monitor and measure, very accurately, the vibration environment around the vibration sensitive development.

The Diamond Light Source is a vibration sensitive facility and very sophisticated vibration monitoring instruments are already used to measure local conditions. This monitoring would be employed to measure the impact of external influences from the applicant's site on vibration levels at the Diamond Light Source. It is possible to be very precise about the level of vibration which is acceptable.

A condition which seeks to maintain vibration at acceptable levels would be reasonable in all other respects as it would not be unduly restrictive and would not prevent the use of the building for normal office, laboratory and other research and development activities. Indeed, it would only control the use of the building for other activities to a level necessary to prevent the adverse effects from vibration outlined above.

I would therefore ask that you impose conditions in accordance with the advice in Circular 11/95 similar to the model conditions for noise as follows:

- **The level of vibration measured at the floor of the Diamond Light Source Synchrotron experimental hall shall not, at any time, exceed the vibration criteria VC-G (0.78 micrometers per second) caused by equipment, machinery and activities in the building hereby approved.**

Vibration criteria VC-G together with current measured levels are shown in the enclosed document. Related reference information is set out in British Standard BS5228-2:2009 Code of practice for noise and vibration control on construction and open sites, Part 2 Vibration - Annex B section B5, Fig B.2 and Table B.3.

- **Development shall not commence until a scheme for protecting the UK National Synchrotron Facility from vibration exceeding the vibration criteria VC-G (0.78 micrometers per second) both during construction and the during use of any of the buildings hereby approved has been submitted to and approved by the Local Planning Authority in consultation with the Diamond Light Source Ltd, and all works which form part of the scheme shall be completed in accordance with the programme forming part of the approved scheme. Measures to implement the scheme shall be maintained at all times thereafter.**

I should be most grateful if you would please confirm that you will be recommending that these conditions are imposed if the application is to be approved.

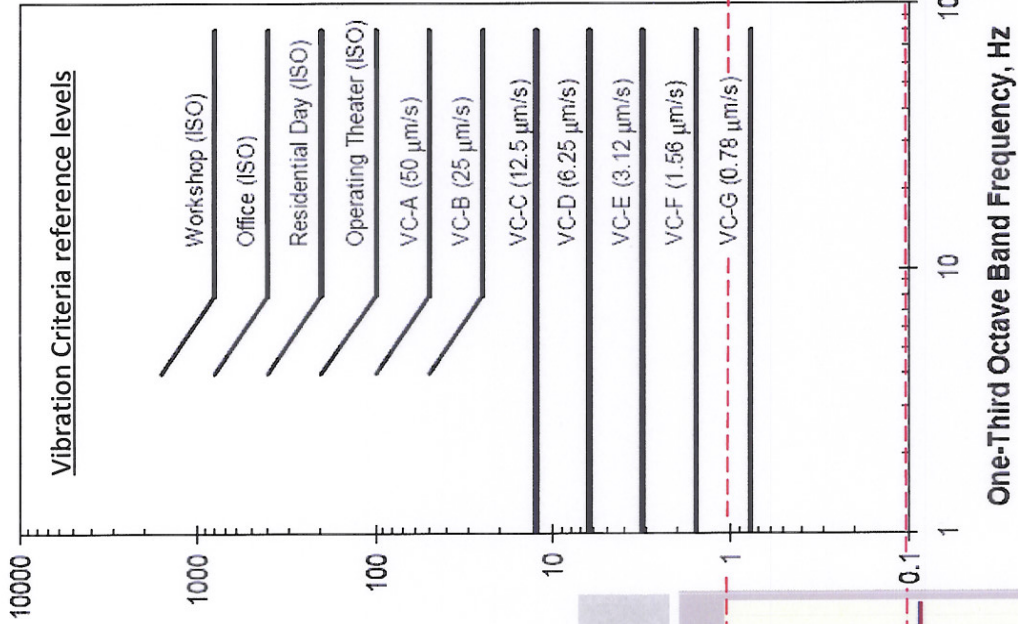
In addition I would be grateful if you could notify me if the application is to be taken to committee or determined under delegated powers. Either way I would also be grateful if you could advise me before any decision is issued for this application.

Your Sincerely,

A handwritten signature in dark ink, appearing to read "P. Barrett".

Paul Barrett
Commercial Manager

Enclosures (1)



Measured vibration data
Diamond Experimental Hall

