

Clare Howe
Welwyn-Hatfield District Council
Development Control
The Campus
Welwyn Garden City
Hertfordshire
AL8 6AE

Our ref: NE/2021/133029/01-L01
Your ref: 6/2021/0671/MAJ
Date: 28 April 2021

Dear Clare,

South Side Former Shredded Wheat Factory, Broadwater Road, Welwyn Garden City.

Erection of 317 dwellings (class C3) with associated access, parking, landscaping and other supporting infrastructure, and outline planning for up to 404 dwellings (class C3) with all matters reserved for access.

Thank you for consulting us on the above application on 12 March 2021, and apologies for the delay in our response.

Please see the following with regards to Air Quality, Waste, Groundwater & Contaminated Land, and Water Resources as site-specific considerations within our planning remit.

Air Quality

Advice to LPA

Please consider the following advice closely with regards to the impacts on air quality arising from the close proximity between the proposed development and British Lead Mills (BLM), a site which operates under a permit from ourselves under The Environmental Permitting (England and Wales) Regulations 2016.

Following construction, the air quality at the development site may be adversely affected by the BLM site, which lies in close proximity to the proposed development. The BLM permitted site emits stack emissions at a similar elevation to the upper flats of the proposed development, which may have an adverse impact on human health. Such impacts and the requirement for any mitigation measures should be carefully considered by your Environmental Health department.

Planning policy requirements (paragraph 182 of the National Planning Policy Framework) states that new development should integrate effectively with existing businesses and not place unreasonable restrictions upon them. Where the operation of the BLM site may have significant adverse effects on new development, the applicant should be required to provide suitable mitigation for these effects.

Mitigation can be provided through the design of the new development to minimise

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exposure to the neighbouring BLM site and/or through financial contributions to the operator of the facility to support measures that minimise impacts.

As the “agent of change”, the applicant is responsible for the assessment and re-modelling of emissions from the stack, and for obtaining the most up to date available emissions data from British Leads Mills.

Environmental Permitting Regulations require operators to demonstrate that they have taken all reasonable precautions to mitigate impacts of their operations. This is unlikely to eliminate all emissions and there are likely to be residual impacts. In some cases, these residual impacts may cause local residents concern. There are limits to the measures that the operator can take to prevent impacts to residents. Consequently, it is important that planning decisions take full account of paragraph 182 of the NPPF. When a new development is built near to an existing permitted site, such as a Lead Mill, this does not automatically trigger a review of the permit.

Environmental Statement Chapter 8: Air Quality

We have the following comments to make with respect Chapter 8: Air quality, and associated appendices, as submitted as part of the submitted Environmental Statement, prepared by Entran Ltd.

The applicant has looked at emissions from two release points (A10 and A11), however the permit has more emission points which should be taken into consideration. The impacts of the emissions from the BLM site on the proposed redevelopment’s occupants should also be considered at both the ground level and upper elevations of flats.

It appears that actual emissions from BLM site have been modelled. We would advise that emissions should be modelled based on the ‘emissions limits’ which are set in the permit and which may be higher. For substances without emissions limits in the permit, an approach would be to model the impacts based on the actual emissions. However, the impacts of substances which have emission limits set in the permit should be modelled based on these limits.

Although lead impacts have been considered in appendix 8.5 of the submitted environmental statement, we note that appendix 8.4 fails to include lead and the Ambient Air Directive limit values.

Waste

Advice to Applicant

Requirement for an environmental permit

The reuse of waste on site associated with this development will require an environmental permit under the Environmental Permitting (England & Wales) Regulations 2016, from the Environment Agency, unless an exemption applies.

The applicant is advised to contact us on 03708 506 506 for further advice and to discuss the issues likely to be raised. You should be aware that there is no guarantee that a permit will be granted. Additional ‘Environmental Permitting Guidance’ can be found at: <https://www.gov.uk/environmental-permit-check-if-you-need-one>.

Waste on-site

The CL:AIRE Definition of Waste: Development Industry Code of Practice (version 2)

provides operators with a framework for determining whether or not excavated material arising from site during remediation and/ or land development works is waste or has ceased to be waste. Under the Code of Practice:

- excavated materials that are recovered via a treatment operation can be re-used on-site providing they are treated to a standard such that they fit for purpose and unlikely to cause pollution
- treated materials can be transferred between sites as part of a hub and cluster project
- some naturally occurring clean material can be transferred directly between sites

Developers should ensure that all contaminated materials are adequately characterised both chemically and physically, and that the permitting status of any proposed on-site operations are clear. If in doubt, the Environment Agency should be contacted for advice at an early stage to avoid any delays.

We recommend that developers should refer to:

- The [position statement](#) on the Definition of Waste: Development Industry Code of Practice
- The [waste management](#) page on gov.uk

Waste to be taken off-site

Contaminated soil that is (or must be) disposed of is waste. Therefore, its handling, transport, treatment and disposal are subject to waste management legislation, which includes:

- Duty of Care Regulations 1991
- Hazardous Waste (England and Wales) Regulations 2005
- Environmental Permitting (England and Wales) Regulations 2016
- The Waste (England and Wales) Regulations 2011

Developers should ensure that all contaminated materials are adequately characterised both chemically and physically in line with British Standard BS EN 14899:2005 'Characterization of Waste - Sampling of Waste Materials - Framework for the Preparation and Application of a Sampling Plan' and that the permitting status of any proposed treatment or disposal activity is clear.

If in doubt, we should be contacted for advice at an early stage to avoid any delays. If the total quantity of hazardous waste material produced or taken off-site is 500kg or greater in any 12 month period, the developer will need to register with us as a hazardous waste producer. Refer to the [hazardous waste](#) pages on GOV.UK for more information.

Groundwater and Contaminated Land

Advice to LPA/Applicant

We are currently operating with a significantly reduced resource in our Groundwater and Contaminated Land Team in Hertfordshire and North London Area. This has regrettably affected our ability to respond to Local Planning Authorities for some planning consultations. We are not providing specific advice on the risks to controlled waters for this site as we need to concentrate our local resources on the highest risk proposals.

The existing land use at this site suggests the potential presence of contamination. Since the site is situated in a vulnerable groundwater area, within Source Protection

Zone (SPZ) 3 and located above a Secondary A aquifer, these proposals need to be dealt with in a way which protects the underlying groundwater.

We recommend that the requirements of the [National Planning Policy Framework](#) and [National Planning Policy Guidance](#) (NPPG) are still followed.

This means that all risks to groundwater and surface waters from contamination need to be identified so that appropriate remedial action can be taken. This should be in addition to the risk to human health that your Environmental Health Department will be looking at.

We expect reports and Risk Assessments to be prepared in line with our “Approach to Groundwater protection” (commonly referred to as GP3) <https://www.gov.uk/government/publications/groundwater-protection-position-statements> and the updated guide is called [Land contamination: risk management](#) (LCRM). (LCRM is an update to the Model procedures for the management of land contamination (CLR11), which was archived in 2016)

In order to protect groundwater quality from further deterioration:

- No infiltration based sustainable drainage systems should be constructed on land affected by contamination as contaminants can remobilise and cause groundwater pollution. (E.g. Soakaways act as preferential pathways for contaminants to migrate to groundwater and cause pollution)
- Piling or any other foundation designs using penetrative methods should not cause preferential pathways for contaminants to migrate to groundwater and cause pollution.

The applicant should refer to the following sources of information and advice (non-exhaustive list) in dealing with land affected by contamination, especially with respect to protection of the groundwater beneath the site:

1. Follow the risk management framework provided in the updated guide is called [Land contamination: risk management](#) (LCRM), when dealing with land affected by contamination.
2. Refer to the [Environment Agency Guiding principles for land contamination](#) for the type of information that we required in order to assess risks to controlled waters from the site. The Local Authority can advise on risk to other receptors, such as human health.
3. Consider using the [National Quality Mark Scheme for Land Contamination Management](#) which involves the use of competent persons to ensure that land contamination risks are appropriately managed. <https://www.claire.co.uk/projects-and-initiatives/ngms-sqp-register>
The Planning Practice Guidance defines a "Competent Person (to prepare site investigation information): A person with a recognised relevant qualification, sufficient experience in dealing with the type(s) of pollution or land instability, and membership of a relevant professional organisation."
(<http://planningguidance.planningportal.gov.uk/blog/policy/achieving-sustainable-development/annex-2-glossary/>)”
4. Refer to the [contaminated land](#) pages on GOV.UK for more information.

5. We expect the site investigations to be carried out in accordance with best practice guidance for site investigations on land affected by land contamination.
E.g. British Standards when investigating potentially contaminated sites and groundwater, and references with these documents and their subsequent updates:
- BS5930:2015 Code of practice for site investigations;
 - BS 10175:2011+A2:2017 Code of practice for investigation of potentially contaminated sites;
 - BS ISO 5667-22:2010 Water quality. Sampling. Guidance on the design and installation of groundwater monitoring points;
 - BS ISO 5667-11:2009, BS 6068-6.11: 2009 Water quality. Sampling. Guidance on sampling of groundwaters (A minimum of 3 groundwater monitoring boreholes are required to establish the groundwater levels, flow patterns but more may be required to establish the conceptual site model and groundwater quality. See RTM 2006 and MNA guidance for further details).
 - BS ISO 18512:2007 *Soil Quality. Guidance on long-term and short-term storage of soil samples*
 - BS EN ISO 5667:3- 2018. *Water quality. Sampling. Preservation and handling of water samples*
 - Use MCERTS accredited methods for testing contaminated soils at the site.
 - Guidance on the design and installation of groundwater quality monitoring points Environment Agency 2006 Science Report SC020093 NB. The screen should be located such that at least part of the screen remains within the saturated zone during the period of monitoring, given the likely annual fluctuation in the water table. In layered aquifer systems, the response zone should be of an appropriate length to prevent connection between different aquifer layers within the system

A Detailed Quantitative Risk Assessment (DQRA) for controlled waters using the results of the site investigations with consideration of the hydrogeology of the site and the degree of any existing groundwater and surface water pollution should be carried out. This increased provision of information by the applicant reflects the potentially greater risk to the water environment. The DQRA report should be prepared by a "Competent person" E.g. a suitably qualified hydrogeologist.

<https://sobra.org.uk/accreditation/register-of-sobra-risk-assessors/>

In the absence of any applicable on-site data, a range of values should be used to calculate the sensitivity of the input parameter on the outcome of the risk assessment.

- GP3 version 1.1 August 2013 provided further guidance on setting compliance points in DQRAs. This is now available as online guidance:
<https://www.gov.uk/guidance/land-contamination-groundwater-compliance-points-quantitative-risk-assessments>
- Where groundwater has been impacted by contamination on site, the default compliance point for both Principal and Secondary aquifers is **50m**.
- For the purposes of our Approach to Groundwater Protection, the following default position applies, unless there is site specific information to the contrary: we will use the more sensitive of the two designations E.g. if secondary drift overlies principal bedrock, we will adopt an overall designation of principal.

Where leaching tests are used it is strongly recommended that BS ISO 18772:2008 is followed as a logical process to aid the selection and justification of appropriate tests based on a conceptual understanding of soil and contaminant properties, likely and worst-case exposure conditions, leaching mechanisms, and study objectives. During risk assessment one should characterise the leaching behaviour of contaminated soils using an appropriate suite of tests. As a minimum these tests should be:

- upflow percolation column test, run to LS 2 - to derive kappa values;
- pH dependence test if pH shifts are realistically predicted with regard to soil properties and exposure scenario; and
- LS 2 batch test - to benchmark results of a simple compliance test against the final step of the column test.

Following the DQRA, a Remediation Options Appraisal to determine the Remediation Strategy in accordance updated guide is called [Land contamination: risk management \(LCRM\)](#).

The verification plan should include proposals for a groundwater-monitoring programme to encompass regular monitoring for a period before, during and after ground works. E.g. monthly monitoring before, during and for at least the first quarter after completion of ground works, and then quarterly for the remaining 9-month period.)

- The verification report should be undertaken in accordance with in our guidance **Verification of Remediation of Land Contamination:** <http://publications.environment-agency.gov.uk/pdf/SCHO0210BRXF-e-e.pdf>

We only consider issues relating to controlled waters (groundwater and watercourses). Evaluation of any risks to human health arising from the site should be discussed with the relevant local authority Environmental Health Department.

Water Resources

Advice to Applicant

Increased water efficiency for all new developments potentially enables more growth with the same water resources. Developers can highlight positive corporate social responsibility messages and the use of technology to help sell their homes. For the homeowner lower water usage also reduces water and energy bills.

We endorse the use of water efficiency measures especially in new developments. Use of technology that ensures efficient use of natural resources could support the environmental benefits of future proposals and could help attract investment to the area. Therefore, water efficient technology, fixtures and fittings should be considered as part of new developments.

Residential developments

All new residential development are required to achieve a water consumption limit of a maximum of 125 litres per person per day as set out within [the Building Regulations &c. \(Amendment\) Regulations 2015](#).

However, we recommend that in areas of serious water stress (as identified in our report [Water stressed areas - final classification](#)) a higher standard of a maximum of 110 litres per person per day is applied. This standard or higher may already be a requirement of the local planning authority.

Final comments

Thank you for contacting us regarding the above application. Our comments are based on our available records and the information submitted to us. Please quote our reference number in any future correspondence. Please provide us with a copy of the decision notice for our records. This would be greatly appreciated.

Should you have any queries regarding this response, please contact me.

Yours sincerely,

George Goodby
Sustainable Places Planning Advisor

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E-mail HNL.SustainablePlaces@environment-agency.gov.uk