Pollution sources and receptors

Policy CE10 – Pollution sources and receptors

Impact of existing pollution on new development

1) Development proposals should be appropriate to their location and should be designed to ensure that the occupiers of a new development will not be subject to individual and/or cumulative adverse affect(s) of pollution.

2) Proposals will need to avoid or provide details of proposed mitigation methods to protect occupiers of a new development from the adverse impact(s) of pollution.

3) Unless there is a realistic potential for appropriate mitigation, development will not be permitted if it is likely to be adversely affected by pollution. Factors can include, but are not limited to:

   a) noise or vibration;

   b) smell, dust, odour, gases and other emissions;

   c) air pollution, contamination of the site or its surroundings (see Policy CE12 (Soils and contaminated land)) and hazardous substances nearby;

   d) artificial light (see Policy CE11 (Light pollution and dark skies));

   e) land instability; and

   f) any other relevant types of pollution.

Impact of new development on health, nature and neighbouring environments

4) Development proposals must be designed to ensure that they will not result in significant adverse impacts on human health, the natural or historic environment and/or the amenity of neighbouring uses. Both individual and cumulative impacts of development will be considered when assessing development proposals. The merits of development

proposals will be balanced against the adverse impact on human health, the natural and historic environment and/or local amenity, including the following sources of pollution:

a) noise or vibration;

b) smell, dust, odour, gases and other emissions;

c) air pollution, contamination of the site or its surroundings (see Policy CE12 (Soils and contaminated land)) and hazardous substances nearby;

d) artificial light (see Policy CE11 (Light pollution and dark skies));

e) land instability; and

f) any other relevant types of pollution.

Agent of Change

5) Planning proposals must acknowledge the agent of change principle and ensure new development is designed to mitigate any potential adverse impacts from established noise and other nuisance-generating uses. Proposals must ensure these uses are able to continue to operate and grow without restriction.

Hazardous Substances

6) Proposals for development which involves the use, movement or storage of hazardous substances will be referred to the Health and Safety Executive and/or the Environment Agency.

7) Proposals for development within the vicinity of an installation or pipeline involving hazardous substances or activities will be referred to the Health and Safety Executive and/or the Environment Agency.

8) In the case of either 6 or 7, development will only be permitted if the impact on health and safety of occupants of that development is acceptable.

9) The council will seek to reduce the potential for conflicting land uses and promote safety of people and protection of the environment.

Nuclear Restoration Services (NRS) Harwell

10) All development proposals within the boundary of the NRS Harwell nuclear licensed site will be referred to the Office for Nuclear Regulation (ONR). The following proposals for development within the Outer Consultation Zone (OCZ) for NRS Harwell (as shown on the Policies Map) will also be referred to ONR:

a) any new residential development of 200 dwellings or greater;

b) any re-use or re-classification of an existing development that will lead to a material increase in the size of an existing development (greater than 500 persons);

c) any new non-residential development that could introduce vulnerable groups to the OCZ; and

d) any new development, re-use or re-classification of an existing development that could pose an external hazard to the site.

4.56 New development should be designed and located appropriately so that no adverse impacts arise from either existing or potential pollution sources. Policy CE10 (Pollution sources and receptors) will ensure that new development considers any potential adverse impacts from sources of pollution and mitigates these where appropriate.

4.57 “Pollution” is a common adverse impact of development, and includes anything that affects the quality of land, air, water or soils, which might lead to an adverse impact on human health, the natural environment or general amenity. The term “pollution” covers a variety of potential sources listed in this policy, including noise, vibration, odour and dust, as well as other relevant pollutants such as light and air pollution which are covered in more detail by their own polices.

4.58 Planning applicants for development within 800m of an existing sewage treatment works or within 15m of a sewage pumping station, should liaise with Thames Water to establish if an odour impact assessment is required, completed with the input of Thames Water. The odour impact assessment should confirm that:

a) there is no adverse amenity impact on future occupiers of the proposed development; or

b) the development can be mitigated to ensure that any potential for adverse amenity impact is avoided.

4.59 This policy also includes a requirement relating to the agent of change principle, which applies where the operation of an existing business or community facility could have a significant adverse affect on new development in its vicinity (including changes of use). The applicant (or 'agent of change') should be required to provide suitable mitigation before the development has been completed. This helps to ensure that the responsibility of mitigating existing noise and other nuisance-generating uses is placed on the new development, rather than existing businesses or facilities.

4.60 Green infrastructure can be utilised to mitigate the impacts of pollution, particularly to mitigate noise and air quality impacts. The integration of greening interventions, if implemented correctly, can have significant noise abatement benefits which should be considered. Green infrastructure can also help to improve air quality where it is provided along key transport corridors to reduce impacts from vehicle emissions.

4.61 This policy also ensures that the health and safety of occupants is prioritised when applications involving hazardous substances are considered. It sets out when applications will need to be referred to the Health and Safety Executive and/or the Environment Agency where relevant, or in circumstances relating to Nuclear Restoration Services (NRS) Harwell, when a referral to the Office for Nuclear Regulation (ONR) is needed.

Light pollution and dark skies

Policy CE11 – Light pollution and dark skies

1) All proposals for development should be designed to minimise light pollution, both external lighting and as a consequence of light leakage from the interior of buildings. Proposals should be accompanied by a lighting design proportionate to the scale of the development.

2) Proposals for external lighting schemes will be permitted if they meet the following criteria:

   a) the lighting shows a clear need and justification;

b) the lighting proposed is the minimum appropriate for its purpose;

c) they satisfy requirements set out in the South Oxfordshire and Vale of White Horse Lighting Design Guidance. This should be in accordance with their Environmental Zone (where relevant) as shown on the Policies Map or equivalent up to date document);

d) where appropriate, that the lowest possible illuminance is achieved for the task and it has considered appropriate professional standards;

e) it is demonstrated that the number, luminous flux, intensity and height and timing of lighting is necessary to achieve its locationally appropriate purpose is proposed;

f) suitable timing and control systems are in place to ensure light is only on when needed;

g) it has been designed to minimise light glare, light trespass and spillage into neighbouring properties and would not dazzle or distract drivers or pedestrians using nearby highways;

h) it has been designed to minimise sky glow by the appropriate use of luminaires with zero upward light;

i) the lighting uses the best available technology and solutions to minimise light pollution and conserve energy;

j) the lighting achieves the lowest appropriate colour temperature for its location and biodiversity;

k) the lighting scheme would not be visually detrimental to its immediate or wider setting or to landscape character, particularly intrinsically dark landscapes;

l) it is not a nuisance and does not adversely impact living conditions;

m) it does not have an adverse impact on attractive and/or sensitive views or from vantage points;

n) it is designed to minimise disturbance to wildlife, biodiversity and their food sources; and

o) any development affecting protected species or habitats or in close proximity, follows relevant specific guidance on lighting.

3) Proposals for external lighting within areas of the dark light environmental zone (E1) will only be permitted where they adhere to the above requirements and where they can demonstrate that there will be no significant[a] adverse effects on the visibility of the night sky or its intrinsically dark landscapes.

4) Within National Landscapes (formerly AONBs), proposals for development should reflect the guidance set out in the North Wessex Downs Position Statement on Dark Skies and Artificial Light[b] and supporting guidance found in Dark Skies of North Wessex Downs AONB: A Guide to Good External Lighting[c], as well as lighting guidance set out in the Chilterns AONB Management Plan[d] (or any future equivalent guidance of those listed).

5) In addition to other requirements set out in this policy, proposals within areas of the dark light environmental zone (E1) will be required to meet the following principles to reduce internal light spill through glazing:

   a) glazing should not exceed 25% of the wall area;

   b) avoid single continuous areas of glazing such as multi-floor to eaves glazing;

   c) glazing should not be on roofs or ceilings without sufficient mitigation;

   d) a maximum target upper visible light transmission (VLT) limit of 0.65 +/-0.05 should be applied in all glazing applications; and

   e) high impact commercial greenhouses or equivalent buildings or structures should be avoided.

6) Where possible, development proposals are encouraged to support the restoration and improvement of areas to enhance and or extend dark skies, and/or upgrade existing sources of light pollution on, and/or in, the vicinity of the development to reduce light pollution in the area.

[a] The level of significant adverse impacts depends on the design, extent and surrounding environment. Plans should provide an assessment of adverse impact.

[b] North Wessex Downs AONB (2021) Position Statement on Dark Skies and Artificial Light, available at: www.northwessexdowns.org.uk/wp-content/uploads/2021/11/Position-Statement-on-Dark-Skies-and-Artificial-Light-Final.pdf

[c] North Wessex Downs AONB (2021) A Guide to Good External Lighting, available at: www.northwessexdowns.org.uk/wp-content/uploads/2021/11/Lighting_Guide_07-05_MEDRES.pdf

[d] Chilterns Conservation Board (2019) Chilterns AONB Management Plan, available at: www.chilternsaonb.org/what-we-do/future-proofing-the-chilterns/management-plan/

4.62 Light pollution is known to have a significant impact on both wildlife and humans. Our districts are predominately rural, so it is important to minimise light pollution to reduce the impact on our environment, nature, people and landscapes. The darkest areas of our districts are those areas with little to no light pollution, often known as “dark skies” areas. Their darkness is an important element of landscape character and tranquillity, and as a result they are particularly vulnerable to light pollution.

4.63 Policy CE11 (Light pollution and dark skies) will help to minimise light pollution across our districts and protect our darkest skies from the impacts of light pollution. Where possible, this policy will also support the restoration and improvement of areas to enhance and or extend the districts' dark skies.

4.64 To protect the dark skies in our districts, we commissioned a Dark Skies Assessment. This identifies the darkest areas of our districts which need the strongest protection from light pollution, and it also identifies how polluted the other areas of our districts are from light, so we can prevent light pollution worsening in all areas.

4.65 The Dark Skies Assessment used satellite data to measure and map the sky quality of the districts. This can be found on the Policies Map, which shows that there are areas of good sky quality across South and Vale where the milky way is visible, but that there is also light pollution present. This assessment also established ambient lighting environment zones (E-zones) based upon the satellite data (also found on the Policies Map), which reflect the environmental zones already defined by the ILP (Institute of Lighting Professionals)[21]. These zones help to inform the recommended lighting appropriate for these areas. The environmental zones are as follows, from darkest to brightest:

- Natural dark zone (E1)
- Rural low district brightness zone (E2)
- Suburban medium district brightness (E3)
- Urban high district brightness zone (E4)

4.66 The districts mostly have areas of E1 zones with E2 and E3 zones in and around urban areas. However, whilst this mapping establishes general zones, it does not always reflect the level of lighting development and control of light pollution is needed in these areas. Applicants should always aim to reduce light pollution as much as possible whichever zone the development falls within, only using the minimum lighting necessary for the purpose of the scheme, and only where needed and justified. The

[21] Institution of Lighting Professionals (2021) Guidance Note 1 for the reduction of obtrusive light, available at: https://theilp.org.uk/publication/guidance-note-1-for-the-reduction-of-obtrusive-light-2021/

councils may also determine that the development needs to be designed to a zone lower than the one it is situated in, in order to adequately address light pollution. This policy has been shaped using the five principals of responsible outdoor lighting at night (ROLAN)[22] which should be taken into account when considering lighting for new developments.

4.67 The councils also have a comprehensive Lighting Design Guidance to support this policy and provide information about what applicants should include in their applications. The Lighting Design Guidance sets out industry best practice requirements to reduce light pollution district wide and foster a positive behavioural change that does not negatively impact dark skies. This means applicants should be addressing the impacts of light pollution beyond the immediate areas to be lit and ensuring that relevant standards, other professional guides set out in the Lighting Design Guidance are followed. This policy also requires applicants to submit a lighting design at a scale proportionate to the development. This design should be informed by the Lighting Design Guidance and should follow the relevant structure for a lighting design as set out in the guidance, including being accompanied with relevant checklists where appropriate.

Soils and contaminated land

Policy CE12 – Soils and contaminated land

Protecting and enhancing soils

1) Development should be directed to suitable brownfield land wherever possible. Where development of agricultural land is demonstrated to be necessary, areas of poorer quality land (Agricultural Land Classification grades 3b, 4 and 5) should be preferred to those of a higher quality (grades 1, 2 and 3a). Proposals for development on the best and most versatile agricultural land[a] must include a soil handling plan and sustainable soil management strategy based on detailed soil surveys.

2) Development must recognise and seek to protect the many benefits provided by soils (including for ecological connectivity, carbon storage and drainage). Harm to soils of high environmental value (such as wetland and peatland) must be avoided.

[22] DarkSky (2022) Responsible Outdoor Lighting at Night (ROLAN) manifesto for lighting, available at: https://darksky.org/news/responsible-outdoor-lighting-at-night-rolan-manifesto-for-lighting/

3) Development in South Oxfordshire and Vale of White Horse must protect and enhance soils and the ecosystem services they provide by:

a) minimising soil disturbance;

b) taking opportunities to remediate despoiled, degraded, derelict or contaminated land;

c) taking opportunities to reuse soil on site wherever possible, to avoid the need to manage waste off site;

d) maximising permeable surfaces that allow water to infiltrate and soil to respire;

e) minimising soil compaction, the addition of low-quality fill dirt, burying waste on site and the erosion of unprotected topsoil, particularly on areas identified for the provision of green infrastructure; and

f) protecting, separating, and preserving the topsoil during construction by avoiding mixing, inverting or burying it, and where topsoil is to be stored, the size of the bunds should be limited to avoid anoxic conditions in the centre of large bunds which degrade soils.

Assessing land contamination

4) Where land is known or suspected of being contaminated, any planning application will require at least a Phase One Contaminated Land Preliminary Risk Assessment prepared in accordance with the councils' latest guidance[b].

5) Where there is currently no information to suggest that contaminated land may be present, any planning application proposing uses that are particularly vulnerable to contamination[c] must be accompanied by a Contaminated Land Questionnaire[d].

6) Development should be designed to ensure that it will not contribute to land contamination. The individual and cumulative impacts of development on human health, groundwater and surface water, and the wider natural environment will be considered when assessing development proposals.

Addressing land contamination

7) If a proposal would otherwise result in an unacceptable level of risk to human health, groundwater and surface water and/or the wider natural environment from land contamination, applicants must provide proportionate remediation or mitigation to reduce risk to an acceptable level.

Land Stability

8) Development should not contribute to, or be put at unacceptable risk from, land instability. Where it applies, consideration should be given to South Oxfordshire District Council's Karst Susceptibility Hazard Map, available to view as part of the Policies Map.

[a] *The best and most versatile agricultural land is land in grades 1, 2 and 3a of the Agricultural Land Classification.*

[b] *The councils' current guidance is The Oxfordshire Contaminated Land Group Consortium (2020) Oxfordshire Planning advice note, Dealing with contamination during development: A guide for developers (Version 4), available at: http://www.whitehorsedc.gov.uk/wp-content/uploads/sites/3/2021/07/Oxfordshire-Planning-Advice-Note-Revision-Dec20-v2.pdf*

[c] *Uses classed as particularly vulnerable to land contamination include residential housing, nursing homes, allotments, schools, nurseries and crèches, children's playing areas and playing fields.*

[d] *Oxfordshire City Council, South Oxfordshire District Council and Vale of White Horse District Council Contaminated Land Questionnaire, available at: https://www.southoxon.gov.uk/south-oxfordshire-district-council/environment-and-neighbourhood-issues/environmental-advice/contaminated-land/ and www.whitehorsedc.gov.uk/wp-content/uploads/sites/3/2021/07/2020-Contaminated-Land-Questionnaire.pdf.*

4.68 South Oxfordshire and Vale of White Horse are predominantly rural districts, with large amounts of land in agricultural use. Protecting our best and most versatile agricultural land is an important part of ensuring food security and reducing food miles. It is important that appropriate weight is given to the possible loss of this finite resource in planning decisions, particularly as mitigation is often not possible.

4.69 More widely, it is also important to recognise soil as a valuable natural resource. Soil performs several important ecosystem services including supporting the districts' biodiversity, food growing, carbon sequestration and water storage. It is important to protect land with the best quality soils from development and, in places where development is permitted, to avoid harm to soils (such as loss and compaction).

4.70 The quality of our soils and land can be harmed by contamination. This includes legacy contamination from previous land uses. It is important that our communities and natural environment (including groundwater) and are protected from land contamination risks.

4.71 Where a site is affected by contamination or land stability issues, responsibility for securing a safe development rests with the developer and/or landowner. Proposals should avoid or provide assessments of and mitigation for all significant adverse impacts. Further information on requirements and standards is available from the councils' Environmental Protection Team.

Minerals safeguarding areas

Policy CE13 – Minerals safeguarding areas

1) Development in a Minerals Safeguarding Area that would prevent or otherwise hinder the possible future working of the mineral will only be permitted where it can be shown that:

   a) the site has been allocated for development in the Joint Local Plan or a made neighbourhood plan; or

   b) the need for the development outweighs the economic and sustainability considerations relating to the mineral resource; or

   c) the mineral will be extracted prior to the development taking place, where it is proportionate, practical and environmentally feasible to so.

2) Consideration will be given to the Minerals and Waste Local Plan[a] in determining planning applications for non-minerals development in Minerals Safeguarding Areas.

3) The minerals planning authority, Oxfordshire County Council, will be consulted on all planning applications for development within a Minerals Consultation Area.

[a] *Oxfordshire County Council (2017) Minerals and Waste Local Plan, available at https://www.oxfordshire.gov.uk/residents/environment-and-planning/planning/planning-policy/minerals-and-waste-policy*