

# APPENDIX A

Cheshire East Local Plan

# Environmental Protection SPD

Adoption version  
February 2024







<b>1 Introduction</b> .....	<b>3</b>
<b>2 Planning policy framework</b> .....	<b>4</b>
National policy .....	4
Local policy .....	7
<b>3 Making an application</b> .....	<b>12</b>
Pre-application advice .....	12
Environmental Impact Assessments .....	12
<b>4 Air quality</b> .....	<b>13</b>
Local air quality management .....	13
Air quality objectives .....	13
Air quality assessments .....	14
Planning conditions and mitigation .....	17
Air quality during the construction phase .....	18
Heating appliances .....	19
<b>5 Contaminated land</b> .....	<b>21</b>
What is contaminated land? .....	21
Contaminated land and planning .....	23
Site investigations and risk assessments .....	27
<b>6 Noise</b> .....	<b>31</b>
Acceptable noise levels .....	31
Noise sensitive developments .....	34
Noise generative developments .....	35
Noise impact assessments .....	35
Mitigation measures .....	36
Noise during the construction phase .....	37
<b>7 Light</b> .....	<b>38</b>
What is light pollution? .....	38
Light and planning .....	38
Sources of light pollution .....	38
Lighting assessments .....	39
Mitigation measures .....	39



Planning conditions .....	40
Light during the construction phase .....	40
<b>8 Odour .....</b>	<b>41</b>
Requirements for hot food premises .....	41
Odour impact assessments .....	41
<b>9 Glossary .....</b>	<b>43</b>



# 1 Introduction

**1.1** Supplementary Planning Documents (SPDs) add further detail to the policies in the development plan and are used to provide guidance for development on specific sites, or on particular issues. SPDs may be a material planning consideration in planning decisions but are not part of the development plan.

**1.2** This Environmental Protection SPD adds detail to existing development plan policies from the Cheshire East Local Plan Strategy (LPS) (adopted July 2017), Site Allocations and Development Policies Document (SADPD) (adopted December 2022) and ‘saved’ policies from the Cheshire Minerals Local Plan and the Cheshire Waste Local Plan.

**1.3** The SPD provides guidance on the council’s approach to Environmental Protection issues when considering planning applications. The SPD is limited to matters that fall within the remit of the council’s Environmental Protection Team. The specific areas covered in the SPD are:

- Air quality (including dust pollution)
- Contaminated land
- Noise
- Light pollution
- Odour pollution

**1.4** All these issues have the potential to impact on the health and wellbeing of Cheshire East’s residents, businesses and visitors. This SPD sets out the relevant technical advice aimed at preventing or reducing the impact of proposed developments and protecting public health, wellbeing and amenity across the borough. Other environmental matters, such as climate change, ecology and landscape are outside the scope of this SPD but are addressed by policies in the development plan.

**1.5** The guidance and technical advice set out in this SPD will enable applicants to make sure that their proposed development meets policy requirements and is designed to minimise the impacts on public health, wellbeing and amenity. The SPD constitutes formal planning guidance and will be taken into account as a material consideration when determining relevant planning applications.



## 2 Planning policy framework

**2.1** Planning applications must be determined in accordance with the development plan unless material considerations indicate otherwise<sup>(1)</sup>. Material considerations can include national planning policy and adopted SPDs, where relevant.

### National policy

#### The National Planning Policy Framework

**2.2** The National Planning Policy Framework (NPPF)<sup>(2)</sup> sets out the government's planning policies for England and how these should be applied.

**2.3** Paragraph 8 sets out three overarching objectives for the planning system. As part of the environmental objective, the NPPF seeks to minimise pollution.

**2.4** Paragraph 180 requires planning policies and decisions to contribute to and enhance the natural and local environment by: “...*(e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and (f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.*”

**2.5** Paragraphs 189-194 consider ground conditions and pollution:

*“189. Planning policies and decisions should ensure that:*

- a. a site is suitable for its proposed use taking account of ground conditions and any risks arising from land instability and contamination. This includes risks arising from natural hazards or former activities such as mining, and any proposals for mitigation including land remediation (as well as potential impacts on the natural environment arising from that remediation);*
- b. after remediation, as a minimum, land should not be capable of being determined as contaminated land under Part IIA of the Environmental Protection Act 1990; and*
- c. adequate site investigation information, prepared by a competent person, is available to inform these assessments.*

*190. Where a site is affected by contamination or land stability issues, responsibility for securing a safe development rests with the developer and/or landowner.*

---

1 Section 38(6) of the Planning and Compulsory Purchase Act 2004 and section 70(2) of the Town and Country Planning Act 1990

2 <https://www.gov.uk/guidance/national-planning-policy-framework>. Paragraph references in this section refer to the December 2023 version of the NPPF.



191. *Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should:*

- a. *mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development – and avoid noise giving rise to significant adverse impacts on health and the quality of life [See Explanatory Note to the Noise Policy Statement for England (Department for Environment, Food & Rural Affairs, 2010).];*
- b. *identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason; and*
- c. *limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.*

192. *Planning policies and decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and Clean Air Zones, and the cumulative impacts from individual sites in local areas. Opportunities to improve air quality or mitigate impacts should be identified, such as through traffic and travel management, and green infrastructure provision and enhancement. So far as possible these opportunities should be considered at the plan-making stage, to ensure a strategic approach and limit the need for issues to be reconsidered when determining individual applications. Planning decisions should ensure that any new development in Air Quality Management Areas and Clean Air Zones is consistent with the local air quality action plan.*

193. *Planning policies and decisions should ensure that new development can be integrated effectively with existing businesses and community facilities (such as places of worship, pubs, music venues and sports clubs). Existing businesses and facilities should not have unreasonable restrictions placed on them as a result of development permitted after they were established. Where the operation of an existing business or community facility could have a significant adverse effect on new development (including changes of use) in its vicinity, the applicant (or ‘agent of change’) should be required to provide suitable mitigation before the development has been completed.*

194. *The focus of planning policies and decisions should be on whether proposed development is an acceptable use of land, rather than the control of processes or emissions (where these are subject to separate pollution control regimes). Planning decisions should assume that these regimes will operate effectively. Equally, where a planning decision has been made on a particular development, the planning issues should not be revisited through the permitting regimes operated by pollution control authorities."*

**2.6** With specific reference to minerals, paragraph 216 requires planning policies to "set out criteria or requirements to ensure that permitted and proposed operations do not have unacceptable impacts on the natural and historic environment or human health, taking into account the cumulative effects of individual sites and/or a number of sites in a locality" and "when developing noise limits, recognise that some noisy short term activities, which may otherwise be regarded as unacceptable, are unavoidable to facilitate minerals extraction". Paragraph 211 requires minerals planning authorities to "ensure that any unavoidable noise, dust and particle emissions and any blasting vibrations are controlled, mitigated or removed



at source [National planning guidance on minerals sites sets out how these policies should be implemented.], and establish appropriate noise limits for extraction in proximity to noise sensitive properties".

## National Planning Policy for Waste

**2.7** The National Planning Policy for Waste (NPPW)<sup>(3)</sup> sets out detailed waste planning policies.

**2.8** When determining waste planning applications, paragraph 7 requires waste planning authorities to consider the likely impact on the local environment and on amenity against a number of criteria, including protection of water quality, land instability, air emissions (including dust), odours, noise, light, vibration and litter.

## Noise Policy Statement for England

**2.9** Paragraph 185 of the NPPF highlights the need to avoid giving rise to significant adverse impacts on health and the quality of life; and refers to the Explanatory Note to the Noise Policy Statement for England (NPSE)<sup>(4)</sup>.

**2.10** The Explanatory Note sets out various parameters from established toxicology concepts that are currently applied to noise impacts, which are:

- **NOEL** (No Observed Effect Level), which is the level below which no effect can be detected. In simple terms, below this level, there is no detectable effect on health and quality of life due to the noise.
- **LOAEL** (Lowest Observed Adverse Effect Level), which is the level above which adverse effects on health and quality of life can be detected.

**2.11** These concepts were extended by the NPSE to include:

- **SOAEL** (Significant Observed Adverse Effect Level), which is the level above which significant adverse effects on health and quality of life occur.

**2.12** The NPSE goes on to set out three aims, which are:

- *"To avoid significant adverse impacts on health and quality of life from environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development"*
- *Mitigate and minimise adverse impacts on health and quality of life from environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development.*
- *Where possible, contribute to the improvement of health and quality of life through the effective management and control of environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development."*

---

3 <https://www.gov.uk/government/publications/national-planning-policy-for-waste>

4 <https://www.gov.uk/government/publications/noise-policy-statement-for-england>



## National Planning Practice Guidance

**2.13** The government's National Planning Practice Guidance<sup>(5)</sup> also gives detailed guidance on several topics, including:

- Guidance on how planning can take account of the impact of new development on air quality.
- Guiding principles on how planning can deal with land affected by contamination. Advice on how to ensure that development is suitable to its ground conditions and how to avoid risks caused by unstable land or subsidence.
- Advice on light pollution and how to consider light within the planning system.
- Guidance on how planning can manage potential noise impacts in new development.

## Local policy

**2.14** Local planning policies are set out in the development plan for the area. The development plan for Cheshire East currently comprises:

- The Cheshire East Local Plan Strategy adopted July 2017
- Site Allocations and Development Policies Document adopted December 2022
- Saved policies from the Cheshire Replacement Minerals Local Plan 1999 and Cheshire Replacement Waste Local Plan 2007
- Completed neighbourhood plans.

**2.15** A Minerals and Waste Plan is also being prepared, which will set out planning policies on minerals and waste. Once adopted, these will replace the saved policies from the Cheshire Minerals Local Plan 1999 and the Cheshire Waste Local Plan 2007.

## Local Plan Strategy

**2.16** Within the LPS<sup>(6)</sup>, one of the four Strategic Priorities relates to 'Protecting and enhancing environmental quality'. This will be delivered by a range of measures, including addressing the local causes of water, air, light, noise and all other forms of pollution and the contamination of land.

**2.17** The key strategic policy relevant to Environmental Protection is **Policy SE 12 'Pollution, land contamination and land instability'**. This states:

---

5 <https://www.gov.uk/government/collections/planning-practice-guidance>

6 <https://www.cheshireeast.gov.uk/localplanstrategy>



## Policy SE 12

### Pollution, Land Contamination and Land Instability

1. The council will seek to ensure all development is located and designed so as not to result in a harmful or cumulative impact upon air quality, surface water and groundwater, noise, smell, dust, vibration, soil contamination, light pollution or any other pollution which would unacceptably affect the natural and built environment, or detrimentally affect amenity or cause harm. Developers will be expected to minimise, and mitigate the effects of possible pollution arising from the development itself, or as a result of the development (including additional traffic) during both the construction and the life of the development. Where adequate mitigation cannot be provided, development will not normally be permitted.
2. Development for new housing or other environmentally sensitive development will not normally be permitted where existing air pollution, soil contamination, noise, smell, dust, vibration, light or other pollution levels are unacceptable and there is no reasonable prospect that these can be mitigated against.
3. Development should support improvements to air quality, not contradict the Air Quality Strategy or Air Quality Action Plan and seek to promote sustainable transport policies.
4. Where a proposal may affect or be affected by contamination or land instability (including natural dissolution and/or brine pumping related subsidence), at the planning application stage, developers will be required to provide a report which investigates the extent of the contamination or stability issues and the possible affect it may have on the development and its future users, the natural and built environment. This report should be written in line with best practice guidance.
5. In most cases, development will only be deemed acceptable where it can be demonstrated that any contamination or land instability issues can be appropriately mitigated against and remediated, if necessary.

**2.18** Other strategic policies relevant to Environmental Protection include:

- **Policy SD 1 ‘Sustainable Development in Cheshire East’**, which requires that, where possible, development supports the health, safety, social and cultural well-being of the residents of Cheshire East.
- **Policy SD 2 ‘Sustainable Development Principles’**, which states that all development will be expected to use appropriate design, construction, insulation, layout and orientation to create developments that... minimise waste and pollution.
- **Policy SC 3 ‘Health and well-being’**, which requires screening assessments for all major development proposals, including a review of the possible health impacts.



## Site Allocations and Development Policies Document

**2.19** The SADPD<sup>(7)</sup> also includes a number of policies that are of relevance to Environmental Protection.

- **Policy ENV 9 'Wind energy'** expects sufficient distance to be maintained between the proposal and sensitive receptors to protect amenity, particularly with respect to noise and visual impacts.
- **Policy ENV 12 'Air quality'** requires an air quality assessment where proposals are likely to have an impact on local air quality. Permission will not be granted where the construction or operational characteristics of the development must not cause harm to air quality (including cumulatively) unless suitable measures are adopted to mitigate the impact.
- **Policy ENV 13 'Aircraft noise'** restricts sensitive developments in the areas subject to the highest levels of aircraft noise; and requires mitigation to achieve satisfactory internal ambient noise levels in other areas subject to aircraft noise. The policy also sets detailed criteria to consider in relation to a range of different development types.
- **Policy ENV 14 'Light pollution'** requires light spillage and glare to be minimised to an acceptable level; and there to be no significant adverse effect individually or cumulatively on residential amenity; pedestrians, cyclists, and other road users; specialist facilities; and individuals and groups.
- **Policy ENV 15 'New development and existing uses'** restricts new development in locations where it could be significantly adversely affected by the operation of an existing business or facility unless such impacts can be avoided through mitigation.
- Policies **RUR 1 'New buildings for agriculture and forestry'**, **RUR 2 'Farm diversification'**, **RUR 7 'Equestrian development outside of settlement boundaries'**, **RUR 8 'Visitor accommodation outside of settlement boundaries'**, **RUR 9 'Caravan and camping sites'**, and **RUR 10 'Employment development in the open countryside'** require that proposals do not unacceptably affect the amenity and character of the surrounding area or landscape (including visual impacts, noise, odour, design and appearance), either their own or cumulatively with other developments.
- Policies **RUR 6 'Outdoor sport, leisure and recreation outside of settlement boundaries'** and **RUR 7 'Equestrian development outside of settlement boundaries'** allow for artificial lighting only where strictly necessary, and highlight that its design and operation may be limited by condition to minimise light pollution in the open countryside.
- **Policy HOU 12 'Amenity'** does not allow development proposals that would cause unacceptable harm to the amenities of residential properties or sensitive uses due to environmental disturbance or pollution.
- **Policy RET 5 'Restaurants, cafés, pubs and hot food takeaways'** requires such uses to have no adverse effect, either individually or cumulatively on the amenities of residential occupiers. Conditions will be imposed relating to noise, odour and fumes.
- **Policy RET 9 'Environmental improvements, public realm and design in town centres'** seeks to promote the creative use of lighting to add drama to the night-time townscape (such as by illuminating landmark buildings) whilst avoiding excessive light glow.
- **Policy REC 4 'Day nurseries'** requires such uses not to unacceptably harm the amenity of local residents by virtue of noise.

7 <https://www.cheshireeast.gov.uk/sadpd>



## Saved policies

2.20 There are several saved policies relevant to Environmental Protection.

### Cheshire Minerals Local Plan 1999

2.21 Relevant policies in the Cheshire Minerals Local Plan<sup>(8)</sup> include:

- **Policy 9 'Planning applications'** requires applications to evaluate the direct and indirect effects of a proposal and propose mitigation measures addressing noise levels, dust levels, illumination levels, air-over pressure and peak particle velocity levels.
- **Policy 12 'Conditions'** highlights that conditions will be attached to planning consents to control noise, dust, illumination and vibration levels; and to ensure pollution control measures.
- **Policy 26 'Noise'** does not permit development where it would give rise to unacceptable levels of noise pollution.
- **Policy 27 'Noise'** seeks to control noise emissions by limited the length of time for engineering works, controlling hours of operation, requiring best practice vehicle and plant silencing and maintenance, requiring noise mitigation measures and setting noise limits.
- **Policy 28 'Dust'** allows development, only where it would minimise dust emission levels by phasing working and restoration, surface and maintain internal haul roads, sheet all mineral bearing lorries, seed screen mounds, use a water bowser or similar to damp down, use wheel cleaning facilities, regular sweep and spray of hard surfaces, limit the area of mineral stripped of soil/overburden ant any time, and monitor dust emissions where appropriate.
- **Policy 38 'Blasting'** only permits blasting where ground vibration is minimised, air over pressure is minimised, blasts are monitored, no secondary blasting occurs, and blasting is limited to between 0900 and 1800 hours Mondays to Fridays.

### Cheshire Waste Local Plan 2007

2.22 Relevant policies in the Cheshire Waste Local Plan<sup>(9)</sup> include:

- **Policy 1 'Sustainable waste management'** expects applications to demonstrate how the development would protect environmental assets.
- **Policy 12 'Impact of development proposals'** requires applications to evaluate the likely direct, indirect and cumulative impacts and set out mitigation measures for issues including air quality, noise levels, odour, dust levels, human health, litter and fly tipping, and illumination levels.
- **Policy 23 'Noise'** does not permit proposals that would give rise to unacceptable noise. Setting noise limits, controlling the hours of operation, requiring noise mitigation measures, use of best practice vehicle and plant silencing and maintenance, and limiting the length of time for engineering works will be used to control noise emissions where appropriate. Policy 24 'Air pollution: Air emissions including dust' does not permit proposals where

---

8 [https://www.cheshireeast.gov.uk/planning/spatial-planning/saved\\_and\\_other\\_policies/cheshire\\_minerals\\_local\\_plan/cheshire\\_minerals\\_local\\_plan.aspx](https://www.cheshireeast.gov.uk/planning/spatial-planning/saved_and_other_policies/cheshire_minerals_local_plan/cheshire_minerals_local_plan.aspx)

9 [https://www.cheshireeast.gov.uk/planning/spatial-planning/saved\\_and\\_other\\_policies/cheshire\\_waste\\_local\\_plan/cheshire\\_waste\\_local\\_plan.aspx](https://www.cheshireeast.gov.uk/planning/spatial-planning/saved_and_other_policies/cheshire_waste_local_plan/cheshire_waste_local_plan.aspx)



the impact of dust would have an unacceptable impact on amenity. Surfacing and maintenance of internal haul roads, regular sweeping and spraying of hard surfaced areas, use of a water bowser or similar to damp down areas, use of wheel cleaning facilities, sheeting of waste-carrying vehicles, seeding of screen mounds, and monitoring of air and dust emissions will be used to control dust emissions where appropriate.

- **Policy 25 'Litter'** does not permit proposals where litter would have an unacceptable impact on amenity. Applications should assess the potential for litter generation and propose mitigation measures.
- **Policy 26: 'Air pollution: Odour'** does not permit proposals where odour would have an unacceptable impact on amenity.

## Neighbourhood plans

**2.23** There are 38 completed neighbourhood plans<sup>(10)</sup> (at January 2024) in Cheshire East and some of these contain locally specific requirements in relation to Environmental Protection. These form part of the development plan and will be used alongside other Local Plan policies to determine planning applications.

10 <https://www.cheshireeast.gov.uk/planning/neighbourhood-plans/completed-neighbourhood-plans.aspx>



## 3 Making an application

**3.1** This SPD adds further detail to the policies in the development plan and provides guidance on Environmental Protection matters<sup>(11)</sup>. Whilst it does not form part of the development plan, its guidance will be a material consideration in the determination of planning applications, where relevant.

### Pre-application advice

**3.2** The council offers a pre-application advice service<sup>(12)</sup> and encourages potential applicants to discuss their scheme with planning officers prior to submission of an application. This is particularly important for large scale developments that will have a major impact on the surrounding area. This service is designed to assist applicants' understanding of planning issues and requirements to speed up the development process. This can help minimise subsequent planning application costs and avoid abortive applications.

**3.3** In addition, the council's Environmental Protection Team<sup>(13)</sup> will also provide advice regarding the methodology for undertaking relevant Environmental Impact Assessments. However, it should be noted that there will be a charge for reviewing any draft reports prior to submission as part of a planning application.

### Environmental Impact Assessments

**3.4** In accordance with the Town and Country Planning (Environmental Impact Assessment) Regulations 2017<sup>(14)</sup> it is a requirement that certain planning applications must include an Environmental Impact Assessment (EIA). An EIA is a procedure which serves to provide information about the likely effects of a proposed project on the environment, so as to inform the decision-making process as to whether the development should be allowed and if so, on what terms. Where an EIA is required, it should assess each relevant aspect relating to Environmental Protection in a comprehensive manner, as set out in this SPD.

**3.5** All reporting requirements set out in this SPD should be submitted with the planning application, as the council will not be using pre-commencement conditions, in line with national policy.

---

11 Matters within the remit of the council's Environmental Protection Team.

12 [https://www.cheshireeast.gov.uk/planning/view\\_a\\_planning\\_application/pre-application\\_advice/pre-application\\_advice.aspx](https://www.cheshireeast.gov.uk/planning/view_a_planning_application/pre-application_advice/pre-application_advice.aspx)

13 Email [environmentalprotection2@cheshireeast.gov.uk](mailto:environmentalprotection2@cheshireeast.gov.uk)

14 <https://www.legislation.gov.uk/ukxi/2017/571/contents/made>



## 4 Air quality

**4.1** Air quality is important to public health and wellbeing and, more recently, has been linked to a range of health impacts. This has led to wide ranging research being undertaken in the health impacts of pollutants, resulting in both national and international guidance and advice being issued to protect public health.

**4.2** In 1997, the government adopted the first UK Air Quality Strategy (AQS), which set out how the government aimed to deal with local air quality and the impact of this on health and wellbeing. Further revision of the AQS brought about the process of Local Air Quality Management (LAQM), which is a process requiring all local authorities to regularly review and assess air quality within their area against the air quality objectives set out the Air Quality Standards Regulations 2010<sup>(15)</sup>. The pollutants of concern and relevant objectives are set out in Table 4.1 'Air quality objectives'.

### Local air quality management

**4.3** The purpose of reviewing air quality against the air quality objectives is to determine if any areas within the borough are either exceeding or likely to exceed any of the air quality objectives. If any such areas are identified, an Air Quality Management Area (AQMA) must be declared and an action plan drawn up, setting out how the local authority proposes to improve the air quality within that area.

**4.4** In Cheshire East, there are currently a number of small areas that have been declared as AQMAs<sup>(16)</sup>. The primary source of pollution in these areas is due to vehicle emissions, as a result of either standing/slow moving traffic or high volumes of traffic where there are sensitive receptors (such as houses) fronting directly on to the road. The council must make sure that development in and around any of the AQMAs will not have an adverse impact upon the air quality within those areas.

### Air quality objectives

**4.5** The Air Quality Standards Regulations 2010 set out the air quality objectives, which are based on protecting public health and wellbeing.

**4.6** The objectives of concern within Cheshire East are those that relate to nitrogen dioxide and particulate matter. All of the AQMAs declared to date relate to concentrations of nitrogen dioxide.

15 <https://www.legislation.gov.uk/ukxi/2010/1001/contents/made>

16 [https://www.cheshireeast.gov.uk/business/environmental\\_health/local\\_air\\_quality/aqma\\_area\\_maps.aspx](https://www.cheshireeast.gov.uk/business/environmental_health/local_air_quality/aqma_area_maps.aspx)



Table 4.1 Air quality objectives

Substance	Air quality objective levels
Nitrogen dioxide (NO <sub>2</sub> )	200µg.m <sup>-3</sup> hourly mean, not to be exceeded more than 18 times per year
Nitrogen dioxide (NO <sub>2</sub> )	40µg.m <sup>-3</sup> as an annual mean
Particulate matter (PM <sub>10</sub> )	50µg.m <sup>-3</sup> as a 24-hour mean, not to be exceeded more than 35 times per year
Particulate matter (PM <sub>10</sub> )	40µg.m <sup>-3</sup> as an annual mean
Particulate matter (PM <sub>2.5</sub> )	20µg.m <sup>-3</sup> as an annual mean
Benzene	16.25µg.m <sup>-3</sup> as a running annual mean
Benzene	5µg.m <sup>-3</sup> as an annual mean
1,3 - Butadiene	2.25µg.m <sup>-3</sup> as a running annual mean
Carbon monoxide (CO)	10µg.m <sup>-3</sup> as a running 8-hour mean
Lead	0.25µg.m <sup>-3</sup> as an annual mean
Sulphur dioxide (SO <sub>2</sub> )	266µg.m <sup>-3</sup> as a 15-minute mean, not to be exceeded more than 35 times per year
Sulphur dioxide (SO <sub>2</sub> )	350µg.m <sup>-3</sup> as an hourly mean, not to be exceeded more than 24 times per year
Sulphur dioxide (SO <sub>2</sub> )	125µg.m <sup>-3</sup> as a 24-hour mean, not to be exceeded more than 3 times per year

## Air quality assessments

**4.7** An air quality assessment should predict any potential impacts on local air quality from a proposed development. The assessment should consider any potential impacts on existing AQMAs and those areas that are close to the air quality objective in order to prevent the declaration of further AQMAs. The assessment must take into account all emission sources and compare the current air quality with future levels both with and without the proposed development.

### When is an air quality assessment required?

**4.8** An air quality assessment will be required where a proposed development has the potential to adversely impact air quality. This is particularly important when the development is either within or adjacent to an existing AQMA, or within an area where the impact on air quality may result in the declaration of a new AQMA. The criteria for determining if there will be an impact on air quality will be based on both the direct impact of the proposed development and the effect this will have on surrounding traffic flows and volumes. A list of the types of



development where an air quality assessment may be required is available on the council's website<sup>(17)</sup>. The planning applications validation checklist also contains information on this matter.

**4.9** Where relevant, a dust impact assessment should also be submitted as part of, or in addition to the air quality assessment. Emissions of dust to air can occur during the preparation of the land (e.g., demolition, land clearing, and earth moving), and during construction. The operational phases of minerals (and some waste) sites share some common features with construction activities; however, minerals sites can be of a significantly larger scale. A qualitative dust assessment for a minerals site would therefore normally be expected to be at least as rigorous as one carried out in accordance with the IAQM construction dust method, reflecting the potential for minerals sites to have a greater impact than construction sites. This should include an assessment of the impact of silica dust where relevant. In certain instances, the council may also ask for an assessment of bioaerosols where this is a relevant consideration.

## The assessment process

**4.10** This SPD does not set out a prescribed method or form for undertaking an assessment, which will be required if the proposed development is likely to adversely impact on local air quality. Therefore, it is important that the methodology and data sets are agreed in advance with the council's Air Quality Team. However, there is general guidance regarding estimating emissions and modelling in the Local Air Quality Management: Technical Guidance (TG22)<sup>(18)</sup>.

**4.11** The purpose of the assessment is to determine the likely changes to air quality as a result of the proposed development. The aim of the assessment will be to compare the existing situation without the proposed development, and the situation with the proposed development. This can be split in to 3 basic steps:

1. Assess the current air quality within the area (baseline).
2. Predict the future air quality without the proposed development (future baseline).
3. Predict the future air quality with the proposed development in place (future with development).

**4.12** The assessment should also take account of potential new sensitive receptors, including those with planning permission or allocated sites.

**4.13** Current air quality data within Cheshire East is available on the council's website<sup>(19)</sup> and the national background maps<sup>(20)</sup> will also be able to assist with this part of the process. However, it is important that prior to undertaking an assessment, an agreement is sought from the council's Air Quality Team<sup>(21)</sup> regarding the scope, data and methodology of the assessment to be undertaken.

---

17 [https://www.cheshireeast.gov.uk/business/environmental\\_health/local\\_air\\_quality/air\\_quality\\_and\\_planning/air\\_quality\\_and\\_planning.aspx](https://www.cheshireeast.gov.uk/business/environmental_health/local_air_quality/air_quality_and_planning/air_quality_and_planning.aspx)

18 <https://laqm.defra.gov.uk/wp-content/uploads/2022/08/LAQM-TG22-August-22-v1.0.pdf>

19 [https://www.cheshireeast.gov.uk/business/environmental\\_health/local\\_air\\_quality/what\\_is\\_pollution\\_like\\_near\\_me/air-pollution-monitoring.aspx](https://www.cheshireeast.gov.uk/business/environmental_health/local_air_quality/what_is_pollution_like_near_me/air-pollution-monitoring.aspx)

20 <https://uk-air.defra.gov.uk/data/laqm-background-home>

21 Email [airquality@cheshireeast.gov.uk](mailto:airquality@cheshireeast.gov.uk)



## Sensitive receptors

**4.14** All assessments should consider air quality concentrations. Paragraph 1.63 of TG22 states that exceedances of the objectives should be assessed in relation to “*the quality of the air at locations which are situated outside of buildings or other natural or man-made structures, above or below ground, and where members of public are regularly present*”. Further examples of where the air quality objectives should apply can be found in TG22.

### Assessing significance

**4.15** The primary requirement of the air quality assessment is to determine the significance in terms of change to the air quality, when the proposed development is completed. Environmental Protection UK provides guidance regarding assessing significance<sup>(22)</sup>, and the framework used for assessing significance has been adopted by the council. A copy of the framework is set out in Table 4.2 'Environment Protection UK impact descriptors for individual receptors'.

**Table 4.2 Environment Protection UK impact descriptors for individual receptors**

Long term average concentration at receptor in assessment year	1% change in concentration relative to AQAL	2%-5% change in concentration relative to AQAL	6%-10% change in concentration relative to AQAL	>10% change in concentration relative to AQAL
75% or less of AQAL	Negligible	Negligible	Slight	Moderate
76-94% of AQAL	Negligible	Slight	Moderate	Moderate
95-102% of AQAL	Slight	Moderate	Moderate	Substantial
103-109% of AQAL	Moderate	Moderate	Substantial	Substantial
110% or more of AQAL	Moderate	Substantial	Substantial	Substantial

### Explanation

1. AQAL = Air Quality Assessment Level, which may be an air quality objective, EU limit or target value, or an Environment Agency 'Environment Assessment Level (EAL)'.
2. The Table is intended to be used by rounding the change in percentage pollutant concentration to whole numbers, which then makes it clearer which cell the impact falls within. The use is encouraged to treat the numbers with recognition of their likely accuracy and not assume a false level of precision. Changes of 0%, i.e., less than 0.5%, will be described as Negligible.
3. The Table is only designed to be used with annual mean concentrations.
4. Descriptors for individual receptors only; the overall significance is determined using professional judgement. For example, a 'moderate' adverse impact at one receptor may

22 [https://www.environmental-protection.org.uk/wp-content/uploads/2013/07/air-quality-planning-guidance\\_Jan17.pdf](https://www.environmental-protection.org.uk/wp-content/uploads/2013/07/air-quality-planning-guidance_Jan17.pdf)



not mean that the overall impact has a significant effect. Other factors need to be considered.

5. When defining the concentration as a percentage of the AQAL, use the 'without scheme' concentration where there is a decrease in pollutant concentration and the 'with scheme' concentration for an increase.
6. The total concentration categories reflect the degree of potential harm by reference to the AQAL value. At exposure less than 75% of this value, i.e., well below, the degree of harm is likely to be small. As the exposure approaches and exceeds the AQAL, the degree of harm increases. This change naturally becomes more important when the result is an exposure that is approximately equal to, or greater than the AQAL.
7. It is unwise to ascribe too much accuracy to incremental changes or background concentrations, and this is especially important when total concentrations are close to the AQAL. For a given year in the future, it is impossible to define the new total concentration without recognising the inherent uncertainty, which is why there is a category that has a range around the AQAL, rather than being exactly equal to it.

## Cumulative impacts

**4.16** The cumulative impact of a number of small developments in an area could lead to a gradual deterioration of air quality. This could comprise several impacts that are individually described as slight, but when added together could have a significant impact on air quality. Therefore, all assessments must take into account the cumulative impact of committed applications within the local area and propose suitable mitigation to offset the impact.

**4.17** An example would be if a number of small developments contribute to a significant increase in traffic levels, in an area that already has an air quality problem. Proposed mitigation could be that each development is required to provide a financial contribution to implement highway improvements or to assist with other actions within the council's Air Quality Action Plan. The study of the cumulative impact of additional development must be agreed as part of the scoping report.

## Planning conditions and mitigation

**4.18** Based on the results and conclusions of the air quality assessment, mitigation measures may be recommended to offset any predicted impacts of the proposed development. As far as possible, mitigation measures should be embedded into the design of the scheme and the air quality assessment should inform the scheme design, rather than being completed afterwards. Some mitigation measures (such as mechanical ventilation) can be large, noisy and visually imposing, so should be included in the scheme design from the outset so that all impacts can be assessed.

**4.19** There are a range of mitigation measures that can be used and whilst the list below provides a number of examples, this is not exhaustive.

- The design of the development can help to mitigate against exposure to existing air quality levels. This could include the location of mechanical ventilation, habitable rooms and openable windows to reduce exposure to vehicle emissions.
- The installation of electric vehicle charging points to encourage the uptake and use of ultra-low emissions vehicles instead of combustion engine models (the infrastructure



requirements for these are set out in Buildings Regulations Approved Document S - Infrastructure for the charging of electric vehicles).

- Developers to prepare a travel plan or travel information packs to highlight alternative means of transport, such as public transport, location of electric vehicle charging points and car sharing incentives.
- The provision of cycling and walking facilities.
- Traffic management or contributions to highway infrastructure, both new and amended. Green infrastructure: plants and trees may provide an aesthetically pleasing aspect to a scheme and may also be used to provide a barrier from a pollutant source such as a trafficked road.
- Ultra-low NOX (nitrogen oxides) emission boilers. On developments in built up areas, these boilers help to prevent new “hotspots” of high NOX emissions.
- Section 106 Agreements (Town and Country Planning Act 1990) to secure mitigation, where appropriate, to make the scheme environmentally acceptable.
- The application of damage costs as set out in Air quality appraisal: damage cost guidance<sup>(23)</sup>. Damage costs are the costs to society (mainly health) per tonne of pollutant emitted. They provide an easy reckoning of the monetised value of changes in pollution.
- Dust management plans and monitoring regimes.

## Air quality during the construction phase

**4.20** The impact of the construction phase of any development can have a significant impact on local air quality via dust, access roads, roads works and closures. Developers and contractors should follow the guidance set out by the Institute of Air Quality Management when drafting construction plans and mitigation measures to minimise air pollution. Therefore, as part of the management of all developments, best practicable means must be used at all times and for specific emissions this could include but not be limited to the following.

- During dry weather all access roads and stockpiles of material, which are likely to give rise to emissions of dust, shall be damped down and/or covered to prevent wind whipping. Any mobile crushing or screening plant used on site shall be subject to a Permit under the Environmental Permitting (England and Wales) Regulations 2016<sup>(24)</sup> and shall operate in accordance with all conditions imposed by the issuing authority. This may include the requirement for the use of water sprays to be in operation at all times during crushing and screening operations.
- The re-routing of traffic should be done so as not to impact on any AQMAs. All diesel or oil-fired plant must be located away from any sensitive receptors.
- Burning of material is not an appropriate method of disposal of waste material and any such material should be removed from the site along with other waste.
- Any additional actions required to mitigate dust emissions identified during ongoing development activities.
- For non-road mobile machinery, renewable, mains or battery powered plant items should be used where possible.

---

23 <https://www.gov.uk/government/publications/assess-the-impact-of-air-quality>

24 <https://www.legislation.gov.uk/ukxi/2016/1154/contents/made>



**4.21** All sites that are at medium or high risk of particulate emissions should carry out monitoring and guidance on the assessment of dust from sites is contained in the Institute of Air Quality Management's Guidance on the Assessment of Dust from Demolition and Construction<sup>(25)</sup>.

## Heating appliances

### Biomass boilers

**4.22** Biomass boilers are seen as a method to reduce emissions of greenhouse gas and are regarded as generally more environmentally friendly. However, biomass burning systems still emit a number of pollutants including nitrogen dioxide and particulate matter and whilst the level of emissions maybe less than coal or oil, they do produce more pollutants than gas fired systems. This was confirmed in the governments Clean Air Strategy 2019<sup>(26)</sup>, which states that:

*'This increase in burning solid fuels in our homes is having an impact on our air quality and now makes up the single largest contributor to our national PM emissions at 38%.'*

**4.23** Therefore, where a proposed development includes either any large biomass heating system or includes domestic wood burners or open fires, the council may, where appropriate, require an air quality assessment to determine the impact on air quality when compared to similar gas fired systems. In addition, the council may require that the only systems to be permitted will be those that are proved to be cleaner and have reduced emissions.

**4.24** Further information relating to biomass and air quality can be found on the Environmental Protection UK website<sup>(27)</sup>.

## Combined Heat and Power Systems

**4.25** Emissions from Combined Heat and Power (CHP) systems must be managed to ensure potential air quality impacts are controlled. Management of CHP systems will include system and fuel standards, abatement equipment, regulatory controls and planning controls to restrict where appliances can be installed and the effect they have on the local environment.

**4.26** As is the case with all combustion plant, the air quality assessment of planning applications containing CHP systems should follow a risk-based approach based upon factors such as:

- The location of a CHP system, i.e., is it in or close to an area of poor air quality
- The type of CHP system proposed and the fuel it will use
- The likely emission standard of the CHP system; and
- Whether the CHP system is substituting for a conventional boiler, and what the difference in emissions between the old boiler and new CHP system is likely to be.

---

25 <https://iaqm.co.uk/text/guidance/construction-dust-2014.pdf>

26 [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/770715/clean-air-strategy-2019.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/770715/clean-air-strategy-2019.pdf)

27 <https://www.environmental-protection.org.uk/wp-content/uploads/2016/03/Biomass-and-Air-Quality-Information-for-Developers-2017.pdf>



4.27 Further guidance is available for Institute of Air Quality Management's Combined Heat and Power Guidance for Local Authorities<sup>(28)</sup>.

---

28 [http://www.iaqm.co.uk/text/guidance/epuk/chp\\_guidance.pdf](http://www.iaqm.co.uk/text/guidance/epuk/chp_guidance.pdf)



## 5 Contaminated land

**5.1** All land has the potential to be contaminated. Much of today's land contamination originates from polluting industrial processes from the 19th and 20th centuries. It can also arise from uncontrolled filling or raising of land, as well as more innocuous activities such as agricultural use, disposing of hearth ash in gardens or fuel/oil spillages. Contamination can also be caused by naturally occurring sources such as radon gas from underlying rock or ground gases from peat deposits. Contaminating substances are wide ranging and include (but are not limited to) metals, organic substances and ground gases.

**5.2** In the UK, contaminated land is identified and managed by two different regulatory frameworks, these being Part 2A of the Environmental Protection Act 1990<sup>(29)</sup> and the planning regime. It is widely acknowledged that remediation via the planning regime is the government's preferred option.

**5.3** Part 2A of the Environmental Protection Act 1990 was intended to identify land which is so contaminated that in its current condition it poses a significant possibility of significant harm to the health of persons living in or using the land or any other environmental receptors. In this situation the local authority has to ensure that the land condition is addressed to control any unacceptable risk. Cheshire East Council's approach to Part 2A is outlined in the Cheshire East Council Contaminated Land Strategy<sup>(30)</sup>.

**5.4** The second regulatory regime is the planning system. In this case the developer, as part of the planning and redevelopment process, must address any land condition matters through investigation, risk assessment and remediation where required. In practice, the vast majority of contaminated sites are cleaned up routinely via this route, with the local planning authority ensuring that developers produce safe new development. Cheshire East Council has a Developers' Guide<sup>(31)</sup> to provide advice on this process.

### What is contaminated land?

**5.5** The statutory definition of contaminated land<sup>(32)</sup> is as follows:

*'...any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land, that:*

- a. Significant harm is being caused or there is a significant possibility of such harm being caused; or*
- b. Significant pollution of controlled waters is being caused, or there is a significant possibility of such pollution being caused'*

29 <https://www.legislation.gov.uk/ukpga/1990/43/contents>

30 [https://www.cheshireeast.gov.uk/business/environmental\\_health/contaminated\\_land/contaminated\\_land.aspx](https://www.cheshireeast.gov.uk/business/environmental_health/contaminated_land/contaminated_land.aspx)

31 [https://www.cheshireeast.gov.uk/business/environmental\\_health/contaminated\\_land/development\\_and\\_contamination.aspx](https://www.cheshireeast.gov.uk/business/environmental_health/contaminated_land/development_and_contamination.aspx)

32 Environmental Protection Act 1990, Part 2A, Section 78(2)



**5.6** Where a local authority is satisfied that one or both of the circumstances detailed above is being met then it must act in accordance with guidance issued by the Secretary of State. How Cheshire East Council carries out its statutory contaminated land duties is set out in its Contaminated Land Strategy<sup>(33)</sup>.

**5.7** Part 2A of the Environmental Protection Act 1990 was introduced specifically to address the historical legacy of land contamination, whereas the planning system aims to control development and land use in the future. Therefore, assessing risks in relation to the future use of any land is primarily a task for the planning system. However, applicants/developers should always take into account Part 2A, because a change in use may cause the land to fall within the statutory definition of contaminated land by creating a contaminant linkage. In planning guidance, the definition covers cases where *“the actual or suspected presence of substances in, on or under the land may cause risks to people, human activities or the environment, regardless of whether or not the land meets the statutory definition in Part 2A”*. Land contamination (or the possibility of it) is a material consideration in planning decisions.

**5.8** Whether being considered under the planning regime or Part 2A of the Environmental Protection Act 1990, the principle of contaminated land risk assessment underpins all assessment. This is based upon the Contaminant (source) – Pathway – Receptor model. All three parts of the chain must be present to create what is known as a contaminant linkage. If a linkage is identified, it indicates that there is a potential for a contaminated land risk to be present at the site and this must be assessed.

**5.9** Each part of the chain is defined as follows:

- The contaminant (source) is a substance in, on or under the land.
- The pathway is the route by which the contaminant might affect the receptor.
- The receptor is the living organisms, ecological systems or properties that may be adversely affected.

Figure 5.1 Contaminant linkage



## Historical land use

**5.10** The history of a site or area is often the best guide to whether a site may be at risk of contamination. The borough of Cheshire East is a mix of urban settlements and rural areas, both with historical industrial heritage. Contamination can also arise from other sources (including natural sources, such as radon for example) and as such there is always the potential for contaminated land to be present. The council’s Contaminated Land Strategy provides an overview of the industrial history of Cheshire East.

33 [https://www.cheshireeast.gov.uk/business/environmental\\_health/contaminated\\_land/contaminated\\_land.aspx](https://www.cheshireeast.gov.uk/business/environmental_health/contaminated_land/contaminated_land.aspx)



## Roles and responsibilities

**5.11** Planning legislation and guidance places the responsibility on developers and/or landowners to secure a safe development with respect to contamination. The council's duty is to ensure that owners and developers carry out the necessary investigations and formulate proposals for dealing with any contamination in a responsible and effective manner. According to the NPPF the standard of remediation to be achieved, as a minimum, should be enough to ensure that the land is not capable of being determined as contaminated land under Part 2A of the Environmental Protection Act 1990. This is the removal of unacceptable risk, making the site suitable for its new use.

**5.12** Where a development is proposed, it is the responsibility of the developer to ensure that issues of land contamination are appropriately considered, that remediation takes place (where necessary) and that the land is safe and 'suitable for use' i.e., the site is cleaned up to a level which is appropriate for the proposed end use. Furthermore, it is the developer's responsibility to ensure that the investigation and remediation of land contamination is carried out by a competent person with a recognised relevant qualification and sufficient experience in contaminated land i.e., an environmental consultant.

**5.13** The local planning authority has a duty to take account of all material planning considerations, including potential contamination, when considering an application. Within the planning regime, contaminated land is often referred to as "land affected by contamination". When considering development on land affected by contamination, the local planning authority aims to ensure that any unacceptable risks to human health, property and/or the wider environment are identified so that appropriate action can be considered and then taken to address those risks. In accordance with NPPF paragraph 189(b), the land should not be capable of being determined as contaminated land under Part 2A of the Environmental Protection Act 1990 after remediation.

**5.14** The Environment Agency is a statutory consultee for many planning applications where development is proposed on land affected by contamination. The Environment Agency will consider the impacts on groundwater and surface waters, legally termed controlled waters, and the developer will need to ensure that any concerns of the Environment Agency are satisfied prior to development when these receptors are at risk. Other stakeholders will also be consulted where relevant (for example the Canal & River Trust in relation to protecting its watercourses).

**5.15** Other agencies are also able to offer advice to applicants, such as the relevant water undertaker where development is located in a groundwater source protection zone or on land used for public water supply.

## Contaminated land and planning

**5.16** It is the role of the local planning authority to plan for land uses that are appropriate in the light of all the relevant circumstances, including known or suspected contamination. When determining planning applications for development on land that may be affected by contamination, the local planning authority will consider whether any conditions are required to make the development acceptable. Such conditions may require that land is remediated in the course of development to an appropriate standard, taking account of its intended use, and that, if necessary, it is properly maintained thereafter.



**5.17** A precautionary approach should be taken when considering applications in relation to any land affected by contamination. This includes land subject to or in proximity to previous industrial uses and also where uses are being proposed that are particularly sensitive to contamination, including (but not limited to):

- All residential developments
- Allotments
- Schools
- Children's nurseries/day care centres
- Hospitals
- Playing areas and parks

**5.18** The council's guidance document on development and contaminated land<sup>(34)</sup> lists a number of high and very high-risk potential sources of contamination.

### Pre-application discussions

**5.19** Where practicable and applicable, proposers of development on land affected by contamination should arrange pre-application discussions with the local planning authority and other regulators, including the council's Environmental Protection and Building Control departments, any other relevant council specialists and the Environment Agency (where pollution of controlled waters and the waste management implications of land contamination are likely to be issues).

### Completing the "Existing Use" section of the planning application form

**5.20** In applying for planning permission applicants have to answer questions regarding contaminated land. Typically, there is a lack of understanding as to what type of development is vulnerable to contamination, if present. If the development proposed includes any of the sensitive uses listed in paragraph 5.17 then the answer to the question: "a proposed use that would be particularly vulnerable to the presence of contamination" is always Yes.

**Figure 5.2 Good example of the "existing use" section from a residential planning application**

**6. Existing Use**

Vacant factory building

Is the site currently vacant?  Yes  No

If Yes, please describe the last use of the site

Metal Fabrication

When did this use end (if known)? DD/MM/YYYY

Does the proposal involve any of the following? If Yes, you will need to submit an appropriate contamination assessment with your application.

Land which is known to be contaminated  Yes  No

Land where contamination is suspected for all or part of the site  Yes  No

A proposed use that would be particularly vulnerable to the presence of contamination  Yes  No

34 [https://www.cheshireeast.gov.uk/business/environmental\\_health/contaminated\\_land/development\\_and\\_contamination.aspx](https://www.cheshireeast.gov.uk/business/environmental_health/contaminated_land/development_and_contamination.aspx)



## Determining planning applications including pre-commencement

**5.21** If the information submitted with an application is such that the council cannot be satisfied that the necessary works are viable or practicable through a conditional planning permission, then the application may be refused. The amount of information we would expect to see submitted in support of any planning application is outlined in more detail within our Developers' Guide.

**5.22** With regards to the agreement of pre-commencement conditions, if there is no agreement to such conditions and insufficient information is provided to support the application, then the application may be refused.

### Planning conditions

**5.23** The local planning authority will generally use a series of staged conditions that aim to:

- Provide for preliminary risk assessment, including a conceptual model and, if required, investigation and characterisation of the site to confirm the nature and extent of contamination. The investigation would seek to validate the conceptual model to allow more refined risk assessment and appraisal of remedial options (see 'Site investigations and risk assessments') (pre-commencement condition).
- Propose and receive approval for a remediation scheme that ensures the removal of unacceptable risks to make the site suitable for use (pre-commencement condition).
- Submit and receive approval for a validation report that demonstrates the effectiveness of the remediation carried out (prior to occupation).

**5.24** If there are pre-commencement conditions then these must be satisfied before any commencement of work on site. If works have started on site without satisfying the contaminated land assessment aspect (i.e., pre-commencement) and agreeing any necessary remedial works then the development will be breaching planning conditions and it may be very difficult or impossible to investigate or remediate contamination as a result. In some cases, planning permission may also be lost as a result.

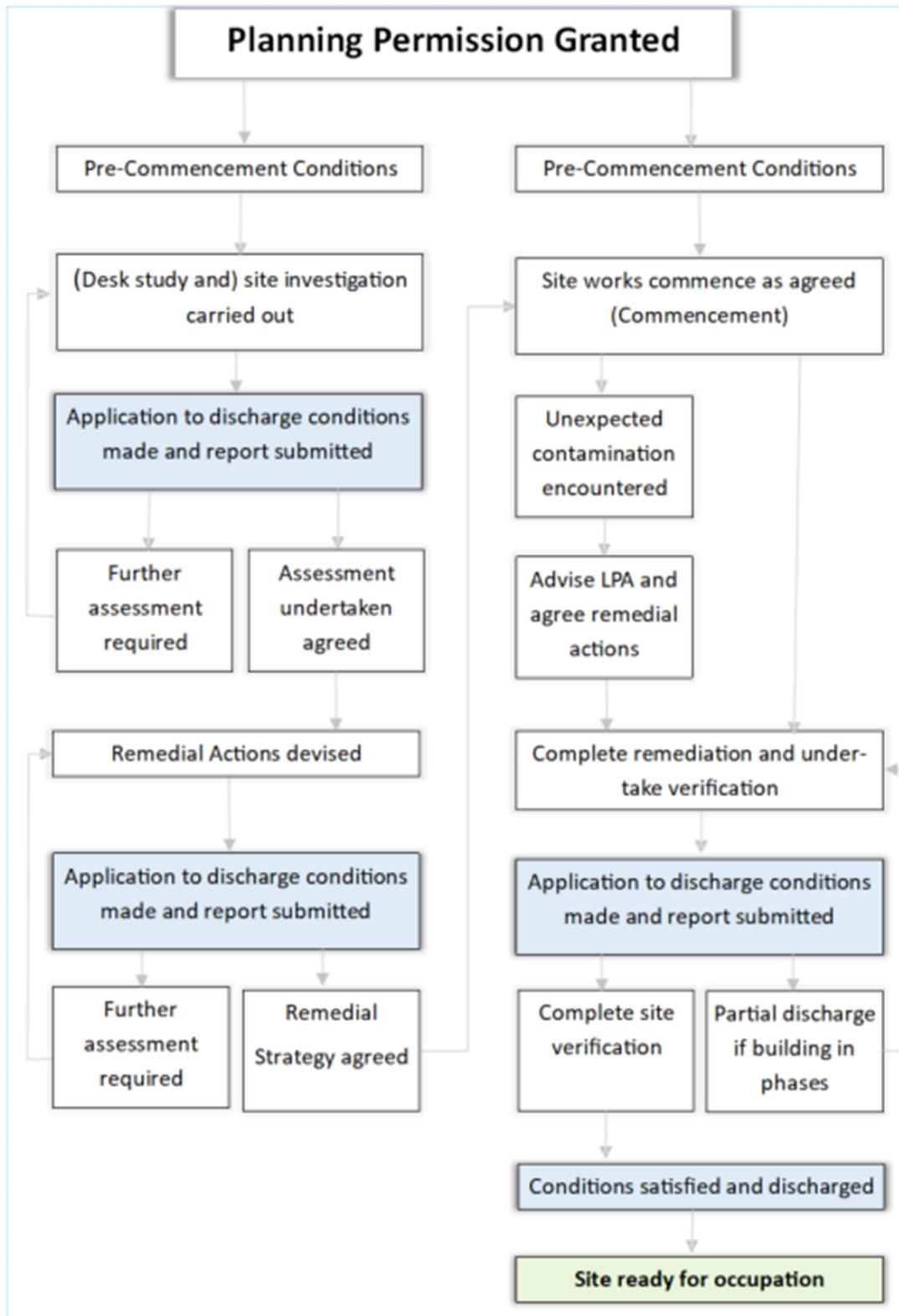
**5.25** It is important to emphasise that the lack of a condition requiring investigation into contamination does not imply that a site is not contaminated. The Contaminated Land Team will assess the likelihood of risk based upon the known history of a site. It remains the responsibility of a developer or landowner to satisfy themselves over whether a site may or may not have been contaminated in the past. Despite this, applicants are reminded that they have a duty in accordance Part 2A of the Environmental Protection Act 1990, to immediately inform the local planning authority if any unforeseen contamination is encountered at any point during the development.

### Discharge of conditions

**5.26** Having secured planning permission, the developer must adhere to the conditions on that permission and a guide to doing this is provided in Figure 5.3 'Process of complying with a contaminated land condition'.



Figure 5.3 Process of complying with a contaminated land condition



**5.27** If there are pre-commencement conditions, then these must be satisfied before any commencement of work on site. If works have started on site without satisfying the contaminated land assessment aspect (i.e., pre-commencement) and agreeing any necessary remedial works then the development will be breaching planning conditions and it may be very difficult or impossible to investigate or remediate contamination as a result.



**5.28** Furthermore, the prior to occupation aspect of the condition, usually the verification of any remedial methods, should be satisfied prior to occupation of the development. Again, this would be a breach of planning condition and as a result, the site may need to be considered under Part 2A. Besides the potential risks, including financial, to any purchasers this could be a reputational matter for the developer.

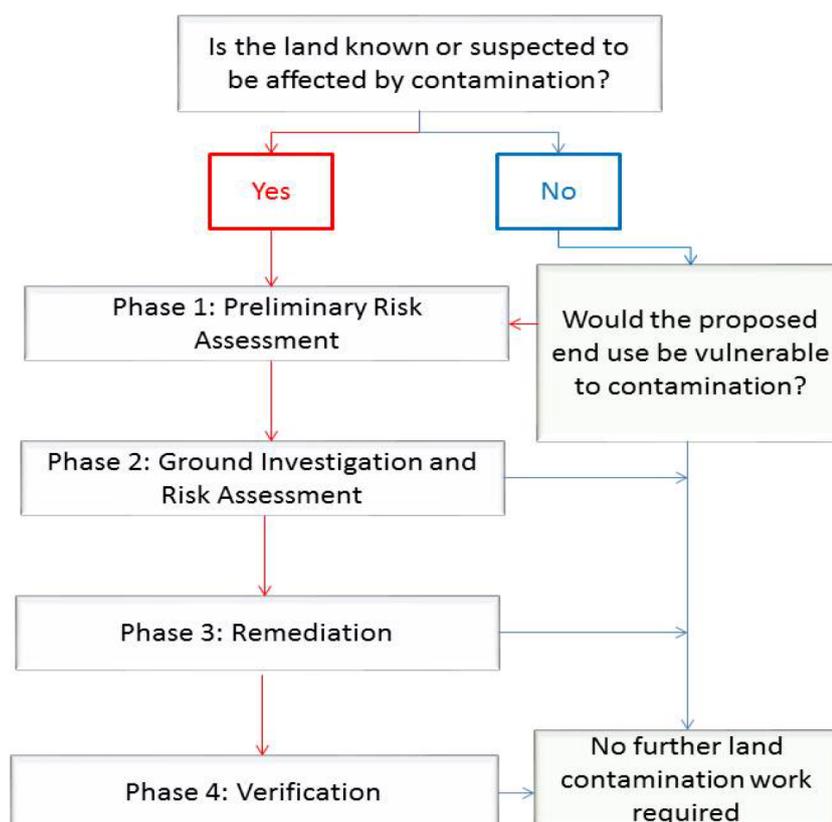
**5.29** Guidance on how to apply to discharge planning conditions can be viewed on the council's website<sup>(35)</sup>. As contaminated land planning conditions are typically divided into sections, there may be more than one discharge application required to achieve final planning discharge.

## Site investigations and risk assessments

**5.30** The council's Developers' Guide provides more detail on the requirements of contaminated land information and what to submit to support a planning application. Reference to appropriate technical guidance is also included within the guide.

**5.31** Figure 5.4 'Phased approach to assess contaminated land' summarises the phased approach required to assess contaminated land in the planning regime. The following sections provide more detail on each phase.

**Figure 5.4 Phased approach to assess contaminated land**



35 [https://www.cheshireeast.gov.uk/planning/view\\_a\\_planning\\_application/making\\_a\\_planning\\_application/conditions\\_of\\_planning\\_consent.aspx](https://www.cheshireeast.gov.uk/planning/view_a_planning_application/making_a_planning_application/conditions_of_planning_consent.aspx)



## Phase 1: Preliminary risk assessment

**5.32** The Phase 1 preliminary risk assessment (also known as a desk study) is the collection of information, including site history, to support the development of the conceptual model. A conceptual model is a simple representation of the site and considers all potential contaminant sources, pathways and receptors and any potential contaminant linkages. It should also include a walkover survey which means assessing the site and identifying any visual evidence of sources of contamination (such as ash/made ground or fuel tanks).

**5.33** The conclusions of the report should contain recommendations as to whether the site is, or can be made suitable for its proposed use, and if further works and thus progression to Phase 2 are required.

**5.34** Please note that reports written for conveyancing purposes are not accepted as they do not fulfil the requirements of a Phase 1 assessment. For lower risk developments, such as a change of use, the council may accept a questionnaire<sup>(36)</sup>, depending on the former use of the site. This may negate the requirement for a Phase 1 Preliminary Risk Assessment to be undertaken.

## Phase 2: Site investigation and risk assessment

**5.35** A Phase 2 site investigation is an intrusive on-site survey of the actual ground conditions at the site. The aim of this is to prove (or disprove) the presence of possible contaminant linkages identified in the Phase 1 report. This is achieved through the sampling of soil and groundwater and ground gas monitoring where necessary, depending on the conceptual site model.

**5.36** The results of these investigations should determine whether any contamination is present and if so, whether it poses a potential risk to health, controlled waters or the environment. The investigation should be designed so that it considers the former, current and proposed land uses.

**5.37** On sites which may be particularly contaminated or have significant risks or management issues it may be prudent to discuss your site investigation proposals with the Contaminated Land team.

**5.38** The results of the sampling and monitoring should be considered within a risk assessment. As part of this, contaminants will be assessed against recognised generic assessment criteria for human health, controlled waters and vapours as appropriate. If the site has contaminants present, which do not have generic assessment criteria, then it may be necessary to derive site specific assessment criteria. Furthermore, if the end use is not applicable to current generic assessment criteria, then again derivation of site-specific assessment criteria may be required. Further information on risk assessment can be found in the council's Developers' Guide.

---

36 [https://www.cheshireeast.gov.uk/business/environmental\\_health/contaminated\\_land/development\\_and\\_contamination.aspx](https://www.cheshireeast.gov.uk/business/environmental_health/contaminated_land/development_and_contamination.aspx)



**5.39** After completing the site investigation works, including all required rounds of gas monitoring (as appropriate), the preliminary conceptual site model developed in Phase 1 should be reviewed and updated based on the findings of the investigation. This updated conceptual model will then identify if further works are required or whether the assessment is complete.

### Phase 3: Remediation

**5.40** Remedial works, if required should be compiled into a Remediation Strategy. For some lower risk sites, it may be sufficient to include this as a section in the Phase 2 report. The remediation strategy must be agreed with the local planning authority and Environment Agency, if applicable, and the relevant conditions discharged ahead of any remedial works commencing.

**5.41** For larger development sites, there is an opportunity to consider a sustainable approach to land contamination risk management. Where appropriate, a sustainability assessment should be carried out as part of the Remediation Options Appraisal in line with industry standards. SuRF-UK sets out a framework<sup>(37)</sup> for undertaking such an assessment. A Remediation Options Appraisal precedes the Remediation Strategy, considering the possible remedial actions for the site.

### Phase 4: Verification

**5.42** How verification (also referred to as validation) of remedial works is to be undertaken would have been set out within the agreed remediation strategy. It is important that this process is carefully and appropriately documented to demonstrate that the development is suitable for use.

**5.43** Verification information must be provided to the local planning authority as part of a discharge of conditions submission for the Contaminated Land Team to assess in good time ahead of the development, or phase of development, being occupied. Without this, the site would be considered to be breaching its planning conditions and may be considered under Part 2A of the Environmental Protection Act 1990. Final discharge would be achieved at the end of the development.

### Using consultants and laboratories

**5.44** Depending on the type, level or extent of contamination, it is likely that a specialist consultant or service (e.g., analytical laboratory) will be required during the process of investigating, assessing and remediating land contamination. Care should be taken in appointing an environmental consultant, opting for a well experienced, sufficiently competent and qualified person or company that carries appropriate levels of professional indemnity insurance. It is critical that the consultant undertaking the works has experience of undertaking contaminated land assessments.

**5.45** All reports should be prepared by appropriately qualified professionals and comply with current good practice and guidance. Accredited drillers and laboratories should be employed for all investigation and analysis. Copies of the full laboratory results, as received

37 <https://www.claire.co.uk/projects-and-initiatives/surf-uk>



from the laboratory with no subsequent amendments should be appended. Sampling methodologies, chain of custody information, all borehole logs and risk assessment calculations should also be included.

## Importing and re-use of soils

**5.46** During the site investigation the suitability of soils for reuse on site will be assessed. If they are not suitable or there is insufficient volume, soils may need to be imported to the development. The import and reuse of soils should be done so in accordance with the relevant Waste Management Regulations. Advice on Environmental Permits<sup>(38)</sup> and Waste Exemptions<sup>(39)</sup> can be sought from the Environment Agency. The importing and reuse of soils on site can also be managed by the Definition of Waste: Development Industry Code of Practice (DoW CoP) if applicable.

**5.47** As well as soils being suitable for use and not contaminated, soils must be healthy and present in sufficient quantity for a sustainable landscape. Soils must meet the requirements of the British Standard for topsoil (BS 3882:2015) and subsoil (BS 8601:2013) (including the need to be free of sharps such as glass fragments) and both need to be present in garden and landscaped areas. A cover system maybe agreed as part of the remedial strategy and as for all gardens, this should take into account rooting depths for any proposed planting. Section A.3 of BS 3882:2015 for topsoil gives an indication of rooting depths (450mm for grass, 600mm for shrubs and 900mm for trees).

**5.48** Well structured, healthy soils are essential to the realisation of all nature-based solutions to climate change and guidance can be found in Defra's Construction Code of Practice for the Sustainable Use of Soils on Construction Sites<sup>(40)</sup>.

---

38 <https://www.gov.uk/guidance/waste-environmental-permits>

39 <https://www.gov.uk/government/collections/waste-exemptions-using-waste>

40 [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/716510/pb13298-code-of-practice-090910.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/716510/pb13298-code-of-practice-090910.pdf)



## 6 Noise

**6.1** Noise pollution is defined as unwanted sound, which usually occurs as an intrusive or offensive sound. The difference between the two is:

- Intrusive sound may be louder than or significantly different to background noise and is considered likely to disturb or interfere with an individual's daily life.
- Offensive sound is often dependant on the time of day i.e., night time, characteristics or the duration of the noise.

**6.2** Proposed developments involving residential dwellings are often the most noise sensitive and will require protection from noise in the surrounding area, for example noise from transport, commercial, industrial or leisure sources.

**6.3** Industrial or commercial developments are generally the least sensitive to noise, but they can become the source of noise disturbance and as such the noise assessment must include the impact the proposed development will have on surrounding noise sensitive receptors. These noise sensitive receptors may include (but are not limited to) uses such as residential (including permanent residential moorings and pitches), quiet outdoor recreation areas, conference facilities, theatres, schools, hospitals and places of worship.

**6.4** Paragraph 191 of the NPPF refers to noise, and the explanatory note to the NPSE sets out the concepts that are applied to noise impacts, including NOEL, LOAEL and SOAEL (see paragraphs 2.10 and 2.11 in the 'National policy' section)

**6.5** The agent of change principle was included in the NPPF in 2018 and now places a duty on any potentially noise sensitive development proposed near to existing businesses or community facilities to incorporate suitable mitigation to prevent the noise, from such premises, causing disamenity to future occupants. Therefore, as part of any planning application submitted this must be taken into account and where necessary, a noise impact assessment must have been undertaken and all proposed mitigation measures incorporated into the proposed development. The noise impact assessment should also take account of new developments under construction or with planning permission.

### Acceptable noise levels

**6.6** The NPSE does not set any numerical values to any of the noise impact levels described, but it does state that the SOAEL is likely to vary depending on factors such as the noise source, time of day and the type/sensitivity of the receptor. However, the NPPG sets out specific maximum noise levels for normal mineral extraction, and short-term noise generative operations and temporary activities at quarries.

**6.7** The National Planning Practice Guidance also advises how potential noise impacts can be managed through the planning process and provides further advice and guidance on the following matters:

- When noise is relevant to planning.
- Whether noise can override other planning concerns How to determine noise impacts.
- The observed effect levels.



- How to establish whether noise is likely to be a concern The factors that influence whether noise could be a concern Guidance on noise standards in planning policies.
- Relevant factors in identifying areas of tranquillity.
- Addressing risk of conflict between new development and existing businesses or facilities.
- Addressing the adverse effects of noise sources, including where the 'agent of change' needs to put mitigation in place.
- Further considerations on mitigating noise impacts on residential developments.
- Addressing the potential impact of aviation activities on new development.

**6.8** A summary of the effects of noise exposure and the effects on health and quality of life is set out in the National Planning Practice Guidance and replicated in Table 6.1 'Noise exposure hierarchy'.

**Table 6.1 Noise exposure hierarchy**

Level	Response	Examples of outcomes	Increasing effect level	Action
No Observed Effect Level (NOEL)	Not present	No effect	No observed effect	No specific measures required
No Observed Adverse Effect Level (NOAEL)	Present and not intrusive	Noise can be heard, but does not cause any change in behaviour, attitude or other physiological response. Can slightly affect the acoustic character of the area but not such that there is a change in the quality of life	No observed adverse effect	No specific measures required
Lowest Observed Adverse Effect Level (LOAEL)	Present and intrusive	Noise can be heard and causes small changes in behaviour, attitude or other physiological response, e.g., turning up volume of television; speaking more loudly; where there is no alternative ventilation, having to close windows for some of the time because of the noise.  Potential for some reported sleep disturbance. Affects the acoustic character of the area such that there is a small actual or perceived change in the quality of life.	Observed adverse effect	Mitigate and reduce to a minimum



Level	Response	Examples of outcomes	Increasing effect level	Action
Significant Observed Adverse Effect Level (SOAEL)	Present and disruptive	The noise causes a material change in behaviour, attitude or other physiological response, e.g., avoiding certain activities during periods of intrusion; where there is no alternative ventilation, having to keep windows closed most of the time because of the noise. Potential for sleep disturbance resulting in difficulty in getting to sleep, premature awakening and difficulty in getting back to sleep. Quality of life diminished due to change in acoustic character of the area.	Significant observed adverse effect	Avoid
Significant Observed Adverse Effect Level (SOAEL)	Present and very disruptive	Extensive and regular changes in behaviour, attitude or other physiological response and/or an inability to mitigate effect of noise leading to psychological stress, e.g., regular sleep deprivation/awakening; loss of appetite, significant, medically definable harm, e.g., auditory and non-auditory	Unacceptable adverse effect	Prevent

**6.9** BS 8233:2014 provides guideline internal ambient noise levels for rooms within specific types of buildings. For dwelling houses, flats and rooms in residential use it recommends that the internal noise levels do not exceed the following guideline levels set out in Table 6.2 'Indoor ambient noise levels for dwellings'.

**Table 6.2 Indoor ambient noise levels for dwellings**

Activity	Location	07:00 to 23:00	23:00 to 07:00
Resting	Living room	35 dB $L_{Aeq,16hour}$	-
Dining	Dining room/area	40 dB $L_{Aeq,16hour}$	-
Sleeping (daytime resting)	Bedroom	35 dB $L_{Aeq,16hour}$	30 dB $L_{Aeq,8hour}$



## Noise sensitive developments

**6.10** The government has issued planning practice guidance for noise. The document indicates that noise is an important consideration in planning terms. It gives an indication of when noise is an issue and guidance on planning responses for noise levels between the Lowest Observed Adverse Effect Level (LOAEL) and the Significant Observed Adverse Effect Level (SOAEL). The guidance states that local plans can include specific standards to apply to various forms of proposed development and locations in their area.

**6.11** In the context of government policy, Cheshire East Council requires that developments aim for:

1. A noise level between the **No Observed Effect Level** (this is the level of noise exposure below which no effect at all on health or quality of life can be detected) and the **Lowest Observed Adverse Effect Level** (this is the level of noise exposure above which adverse effects on health and quality of life can be detected). Conditions may be attached to achieve this level.

**If point 1 cannot be achieved, then:**

2. If the assessment results in a level between the **Lowest Observed Adverse Effect Level** and the **Significant Observed Adverse Effect Level** (this is the level of noise exposure above which significant adverse effects on health and quality of life occur), mitigation will be necessary to reduce the level and thus conditions will be attached to achieve this reduced level.

**If points 1 & 2 cannot be achieved, then:**

3. If the assessment results in a **Significant Observed Adverse Effect Level** after mitigation, the application will be recommended for refusal.

**6.12** Cheshire East Council has adopted the following internal noise limits for residential properties, which are established in standards and guidance such as BS8233 and noise guidelines issued by the World Health Organisation.

- Bedrooms (night time; 23:00 - 07:00) 30 dB  $L_{Aeq,8hour}$  (individual noise events should not normally exceed 45 dB  $L_{Amax,F}$  more than 15 times<sup>(41)</sup>)
- Living Rooms (daytime; 07:00 - 23:00) 35 dB  $L_{Aeq,16hour}$
- Gardens and terraces (daytime, 07:00-23:00) 55 dB  $L_{Aeq,16hour}$  (across a reasonable proportion of the space)

### Aircraft

**6.13** SADPD Policy ENV 13 'Aircraft noise' provides detailed policy advice regarding noise sensitive developments within areas affected by aircraft noise.

---

41 In respect of aircraft noise, SADPD Policy ENV 13 limits individual noise events exceeding 45 dB  $L_{Amax,F}$  in bedrooms to not normally occur more than 10 times in a night.



## Noise generative developments

**6.14** Potentially noisy development may cover a large range of different activities and planning use classes. Typically, the following use classes would be considered to have the potential for greater impact on noise sensitive land uses at or around the proposed development:

- B2/B8 General industrial and storage/distribution.
- E(b) Sale of food and drink for consumption (mostly) on the premises (e.g., restaurants and cafés).
- E(d) Indoor sport, recreation or fitness.
- E(e) Provision of medical or health services.
- E(f) Creche, day nursery or day centre.
- F1 Learning and non-residential institutions
- F2(c) Areas or places for outdoor sport or recreation
- F2(d) Indoor or outdoor swimming pools or skating rinks
- Sui Generis uses are by their nature often more varied and specific consideration of any proposal within this category is required to ensure that potential noise impacts are minimised. This includes (but is not limited to) developments such as theatres, amusement arcades/funfairs, taxi businesses, hostels, waste disposal installations, nightclubs, casinos, drinking establishments, hot food takeaways, live music venues, cinemas, concert halls, bingo halls and dance halls.

**6.15** Prior to submitting a planning application, the applicant must review all of the noise sensitive areas that can potentially be affected by the noise from the proposed development. This will form the basis of the required Noise Impact Assessment (NIA) and the 'Noise impact assessments' section below provides more details regarding the assessment. If the applicant is unsure whether a NIA is required, they should contact the council's Environmental Protection Team<sup>(42)</sup> who will be able to offer more advice.

**6.16** If the applicant is proposing any pre-application discussions with the council's Development Management Team, then further advice may be available through this process. However, the aim will be for all such development to ensure that the noise levels for sensitive receptors do not exceed those set out in the 'Acceptable noise levels' section above.

## Noise impact assessments

**6.17** Noise control by its very nature is complex, therefore it may be necessary to engage a suitably qualified and experienced acoustic consultant to undertake a NIA and, if required, recommend appropriate noise mitigation measures. Advice regarding the methodology for undertaking a NIA can be obtained from the council's Environmental Protection Team.

**6.18** There are various different standards and guidance available covering a range of situations to help determine the type of noise assessment required. The main standards used are:

- BS4142:2014+A1:2019 - Methods for rating and assessing industrial and commercial sound.

---

42 Email [environmentalprotection2@cheshireeast.gov.uk](mailto:environmentalprotection2@cheshireeast.gov.uk)



- BS8233:2014 - Guidance on sound insulation and noise reduction for buildings.
- Department of Transport technical memorandum: Calculation of Road Traffic Noise (1998) - Describes the procedures for calculating noise from road traffic. These procedures are necessary to assess entitlement under the Noise Insulation Regulations, but they also provide guidance appropriate to the calculation of traffic noise for more general applications.
- Department of Transport technical memorandum: Calculation of Railway Noise (1995) - Primarily concerned with the procedures for calculating noise from moving railway vehicles as defined in the Noise Insulation (Railways and Other Guided Transport Systems) Regulations 1995.

**6.19** With regards to NIAs for noise sensitive sites, the assessment must include the following:

- The reason for and scope of the report.
- The sources of noise in the area.
- Location plan of proposed development and likely receptors.
- Methodology used, including location of noise monitoring, equipment used, weather conditions.
- Reasons for deviations from standard methods (if appropriate).
- Full table of results.
- Comparison of survey results with noise standards.
- Recommendations for noise control measures.
- Full calculations of the noise reduction expected to support any suggested noise control measures.

**6.20** In addition, to the list above all noise generative sites must also include an assessment of potential noise sources including ancillary equipment and noise from deliveries to and from the site.

## Mitigation measures

**6.21** Based on the results and conclusion of a noise impact assessment, mitigation measures may be recommended to either protect sensitive premises or to reduce noise arising from noise generative premises. There are a range of noise mitigation measures which can be used. The examples given below are not an exhaustive list.

- **Building orientation and layout:** The design of buildings should be that noise sensitive rooms such as bedrooms, be orientated away from noise sources such as local roads and commercial developments. In addition, potentially noise generative sites should ensure that plant and equipment and other noisy activities (such as delivery routes) are located as far as possible from noise sensitive properties.
- **Screening:** There is a range of specialist acoustic screening, which can be used to reduce noise from a range of noise sources, but this can also include non-specialist equipment such as suitable close-boarded fencing to protect gardens and habitable rooms.
- **Windows and doors:** The selection of the correct windows and doors can have a significant effect on reducing noise levels within rooms. Therefore, suitable acoustic or double glazing should be included as part of any mitigation.



- **Acoustic ventilation:** There are situations where noise sensitive premises are in noisy environments such as town centres. In these situations, there can be dramatic change in the noise experienced when a window is opened for ventilation purposes. Therefore, suitable acoustic ventilation should be considered to help residents maintain a reasonable level of noise.
- **Permanent plant and equipment:** The location and suitable screening of plant or equipment is critical to reducing noise levels and should be addressed during the design phase to ensure that the noise levels are minimised.

**6.22** Wherever possible, mitigation measures should be embedded into the scheme design and included in the submitted proposals rather than being secured later as a condition of permission. Acoustic mitigation measures may well be large, noisy or visually intrusive and would need to be properly assessed as part of the proposal.

## Noise during the construction phase

**6.23** Noise from construction or demolition work can be intrusive and disruptive to local business and noise sensitive land uses. For this reason, construction/demolition activity should be restricted to daytime periods and have clearly defined start and finish times. It is usually recommended that all noisy works (audible beyond the site boundary) are restricted to the following:

- **08.00 to 18.00 Monday - Friday**
- **09.00 to 14.00 on Saturday**
- **No work to be undertaken on Sunday or Bank Holidays**

**6.24** By using set working hours for noise generating activity on site, as well as deliveries, respite is provided for local residents, businesses and workers close to the development. The council is aware that noise and disruption to local residents is inevitable due to the very nature of the work and hence communication with local residents is critical to overcoming any issues and will allow the development to progress.

**6.25** For larger developments or those likely to be taking place over a longer period of time, it may be worth considering joining the national Considerate Contractors Scheme<sup>(43)</sup>. These types of schemes suggest guidelines, which minimise disruption to local residents/businesses and provide a code of conduct for employees on site so that their work does not unduly upset local residents/businesses. These types of schemes include noise and usually other elements that may cause disruption such as dust, deliveries, working hours, behaviour on site, delivery routes and non-construction noise such as radios.

---

43 <https://www.ccscheme.org.uk/>



## 7 Light

**7.1** Artificial light provides valuable benefits to society, including through extending opportunities for sport and recreation and can be essential to new development. However, artificial light is not always required and has the potential to become what is termed 'light pollution' or 'obtrusive light', especially when it is not in a suitable location and affects surrounding residents and causes annoyance to people. For maximum benefit, the best use of artificial light is about getting the right light, in the right place and providing light at the right time.

### What is light pollution?

**7.2** Light pollution is described as unwanted light from any artificial source and can occur as:

- Sky Glow: the orange glow visible around urban areas resulting from the scattering of artificial light by dust particles and water droplets in the sky.
- Glare: the uncomfortable brightness of a light source when viewed against a dark sky.
- Light trespass: light spillage beyond the boundary of the property on which a light is located.

### Light and planning

**7.3** Artificial light alone is not classed as development, but the structures and installation may be classed as such and require planning permission. Planning permission is normally required for the following types of installations:

- Lights mounted on poles or other similar structures.
- External lighting proposed as part of an industrial or commercial scheme.
- New lighting structures or works, which are integral to other development requiring planning permission.
- Illuminated advertisements, although there are some exceptions such as those indicating medical services and some commercial advertisements on the frontage of business premises.
- Large scale installations such as that required for sports facilities.

**7.4** Developers are responsible for ascertaining whether planning permission is required for a lighting scheme. Further advice may be available through the council's Permitted Development Enquiries Service<sup>(44)</sup>. Developers are required to submit, as part of a planning application, details of lighting schemes, which should include light scatter/contour diagrams. The aim will be to minimise light pollution encroaching on to neighbouring properties caused by light spillage.

### Sources of light pollution

**7.5** Light pollution can arise from many different sources:

---

44 [https://www.cheshireeast.gov.uk/planning/view\\_a\\_planning\\_application/do\\_i\\_need\\_planning\\_permission/permitted\\_development\\_enquiry/permitted\\_development\\_enquiry.aspx](https://www.cheshireeast.gov.uk/planning/view_a_planning_application/do_i_need_planning_permission/permitted_development_enquiry/permitted_development_enquiry.aspx)



- All night (and sometimes daytime) floodlighting of buildings; illuminated shop windows and advertising signs which remain switched on overnight.
- Domestic security lighting which is inappropriately positioned and intrudes on neighbouring properties.
- Temporary lighting associated with construction and engineering projects.
- Flood lighting of sports facilities, such as golf driving ranges, football pitches etc.

## Lighting assessments

**7.6** A lighting assessment will be required if there is the potential for any proposed lighting to have an impact on the surrounding area. The assessment must provide full details of the lighting scheme, together with the appropriate light scatter/contour diagrams to demonstrate that the scheme will not adversely affect the amenity of the surrounding area.

**7.7** Any proposal for artificial lighting should be accompanied by that information normally required for any other planning proposal and additionally the information set out below:

- A statement setting out why a lighting scheme is required, the proposed users and the frequency and length of use in terms of hours of illumination.
- A site survey showing the area to be lit relative to the surrounding area, the existing landscape features together with proposed landscaping features to mitigate the impacts of the proposed lighting.
- A technical report prepared by a suitably experienced and qualified Lighting Engineer setting out the type of lights, performance, height and spacing of lighting columns. The light levels to be achieved over the intended area, the site boundaries and the range/intensity of lighting beyond the site boundary.

## Mitigation measures

**7.8** Effective lighting should be well directed and almost invisible from a distance. The lighting scheme should not exceed the minimum required for the use, according to the following standards and guidance:

- BS EN 12464-2:2014 Light and lighting. Lighting of workplaces - Outdoor work places
- BS 5489-1:2020 Design of road lighting - Lighting of roads and public amenity areas
- BS EN 13201-1-5:2014/2015 Road lighting
- SSL Lighting Guides

**7.9** The design of any scheme should include the following:

**7.10 Proper design and planning:** Lighting shall only be used where and when necessary; using appropriate strength of light; and by adjusting light fittings to direct the light to where it is required. Luminance should be appropriate to the surroundings and character of the area as a whole. 'Over lighting' should be avoided and shields, reflectors or baffles used to prevent overspill of light to sensitive areas.

**7.11 Direction of light:** Light should be directed downwards wherever possible to illuminate its target and not upwards. Consideration should be given to providing lighting that does not glare on approach and which places light onto the ground and not into the sky where it is wasted.



**7.12 Sensor switches:** All security lighting schemes should use one of the following options:

- The use of Passive Infrared (PIR) sensors; or
- All-night lighting at a level of low brightness.

**7.13** If correctly aligned and installed, a PIR sensor that switches on lighting when an intruder is detected, often acts as a greater deterrent than permanently floodlit areas, which allow the potential intruder to look for weaknesses in security.

**7.14** Where appropriate, lighting schemes could include 'dimming' to lower the level of lighting (e.g., during periods of reduced use of an area, when higher lighting levels are not needed). The incorporation of dimming can still offer the proven benefits of an external lighting installation i.e., maintaining a feeling of safety and acting as a deterrent against criminal behaviour, while limiting adverse impacts.

### Planning conditions

**7.15** Where an assessment has been reviewed and approved, conditions may be attached to any planning permission to control the lighting scheme. These may include the following, which is not an exhaustive list:

- Limiting the time the lighting is used, or the use of dimming at certain times.
- Specifying lamps, luminaires and columns.
- The design, height, position and angle of the lighting.
- The use of planting and bunding to contain lighting effects.

**7.16** These conditions will be applied as necessary by the council to help reduce obtrusive light from glare and spillage to protect residential amenity.

### Light during the construction phase

**7.17** Light from construction or demolition work can be extremely intrusive to neighbouring properties. As part of the Construction Management Plan details of the lighting scheme for the site should be submitted, in order to demonstrate that the proposed scheme is appropriate in terms of its purpose and setting.



## 8 Odour

**8.1** The planning system should ensure that all new developments are appropriate for the location and whilst ideally odour generating and odour sensitive uses should be separated, this is not always possible. In the situations when it is not possible to separate the different types of premises it may be necessary to employ odour abatement and mitigation measures.

**8.2** New proposals for odour generating developments will require an odour impact risk assessment to be submitted with the planning application, either as a stand-alone assessment or as part of an Environmental Impact Assessment for the development.

**8.3** Typical examples of potentially odorous activities are:

- hot food premises
- food production and manufacturing sector
- landfill, waste disposal and recycling sites
- intensive livestock and animal rearing / farming
- sewage / wastewater and sludge treatment works
- processing / rendering of animals / animal by-products
- solid waste management, handling and treatment plants (for example compost windrows turning)
- biofuels and anaerobic digestion facilities
- pet food processing
- foundry emissions

**8.4** The agent of change principle was included in the NPPF in 2018 and now places a duty on any potentially odour sensitive development proposed near to existing businesses or community facilities to incorporate suitable mitigation to prevent the odour, from such premises, causing disamenity to future occupants. Therefore, as part of any relevant planning application submitted this must be taken into account and where necessary, an odour impact assessment must have been undertaken, which demonstrates that the development can be made acceptable through mitigation measures, and all proposed mitigation measures are incorporated into the proposed development. The odour impact assessment should also take account of new developments under construction or with planning permission.

### Requirements for hot food premises

**8.5** A scheme detailing the kitchen extraction system must be submitted with the planning application. This must also detail the type and location of any relevant filters, location of external duct work including the discharge point/termination height and any cowl etc. together with any mitigation required. Mitigation measures may include, but not restricted to, filtration, odour abatement and regular maintenance of the system to control the discharge of odours and fumes arising from food handling, preparation and cooking. The odour impact assessment for hot food premises should also consider arrangements for waste disposal.

### Odour impact assessments

**8.6** An assessment of the impact of an odour source, process, activity or use on surrounding users of the land should usually seek to identify and contain the following key elements:



- A description of existing baseline odour conditions (including complaints history) where relevant.
- A description of the location of receptors (either existing or proposed) and their relative sensitivities to odour effects.
- Details of potential odour sources
- A description of control/mitigation and design measures
- Where odour modelling has been used the report should contain full details of the input data and modelling options used to allow a third party to reproduce the results.

**8.7** The odour impact assessment should also take account of planned investment at facilities, such as investment at a wastewater treatment works, which is required in connection with a wastewater undertaker's business plan approved by its regulators. The scope and approach to the odour impact assessment should be agreed with the council and in liaison with the relevant operator of the facility in question. Detailed advice on odour impact assessments is available in the Assessment of Odour for Planning (2018, Institute of Air Quality Management)<sup>(45)</sup>.

---

45 <http://iaqm.co.uk/text/guidance/odour-guidance-2014.pdf>



## 9 Glossary

Air Quality Assessment Level (AQAL)	When carrying out an air quality assessment, an AQAL may be an air quality objective (set out in the Air Quality Standards (England) Regulations 2007), EU limit or target value, or an Environment Agency 'Environment Assessment Level'.
Air Quality Management Area (AQMA)	If any areas are either exceeding or likely to exceed any of the air quality objectives (set out in the Air Quality Standards (England) Regulations 2007), an AQMA must be declared, and an action plan drawn up, setting out how the local authority proposes to improve the air quality within that area.
Air Quality Strategy (AQS)	The UK AQS sets out how the government aims to deal with local air quality and the impact of this on health and wellbeing.
Combined Heat and Power (CHP)	Combined Heat and Power (CHP) is the co-production of electricity and heat for a building (or an industrial process). CHP is generally a more energy efficient technology than the on-site boilers and electricity from the National Grid that is used to heat and power most buildings. This is due to the low efficiency of large-scale electricity generation and supply.
Environmental Impact Assessment (EIA)	An EIA is a procedure which serves to provide information about the likely effects of a proposed project on the environment, so as to inform the decision-making process as to whether the development should be allowed to proceed, and if so, on what terms. It is required under the Town and Country Planning (Environmental Impact Assessment) Regulations for certain planning applications.
Local Air Quality Management (LAQM)	LAQM is a process requiring all local authorities to regularly review and assess air quality within their area against the air quality objectives set out the Air Quality Standards (England) Regulations 2007.
Local Air Quality Management: Technical Guidance (TG22)	TG22 is designed to support local authorities in carrying out their duties in relation to Local Air Quality Management (LAQM)
Local Plan Strategy (LPS)	The LPS is part of the development plan and sets out the vision and overall planning strategy for the borough over the period to 2030. It includes strategic planning policies and allocates strategic sites for development.
Lowest Observed Adverse Effect Level (LOAEL)	The level of noise exposure above which adverse effects on health and quality of life can be detected.



National Planning Policy Framework (NPPF)	The NPPF for sets out the government's planning policies for England and how these should be applied.
Noise Impact Assessment (NIA)	An assessment of noise issues using measurements of existing noise and prediction, calculation and modelling of proposed noise sources; and consideration of the impact on noise-sensitive sites.
No Observed Adverse Effect Level (NOAEL)	The level of noise exposure at which noise can be heard but does not cause any change on behaviour, attitude or other physiological response.
No Observed Effect Level (NOEL)	The level of noise exposure at which noise can be heard but does not cause any change on behaviour, attitude or other physiological response.
Passive Infrared (PIR) sensor	A PIR sensor switches lighting on when a person is detected.
Significant Observed Adverse Effect Level (SOAEL)	The level of noise exposure above which significant adverse effects on health and quality of life occur.
Site Allocations and Development Policies Document (SADPD)	The SADPD is part of the development plan. It supports the policies and proposals of the LPS by providing additional policy detail through non-strategic and detailed planning policies and site allocations.
Strategic Environmental Assessment (SEA)	SEA is a requirement of European Directive 2001/42/EC for plans and programmes that have significant environmental effects. The objective is to provide for a high level of protection of the environment with a view to promoting the achievement of sustainable development.
Supplementary Planning Document (SPD)	SPDs add further detail to the policies in the development plan and are used to provide guidance for development on specific sites, or on particular issues. SPDs may be a material planning consideration in planning decisions but are not part of the development plan.