



Northumberland

County Council

Contaminated Land Planning Procedure (Full & Outline Applications only)

Contents			
Section	Sub Section		Page
1		Planning consultation process	2
2		Stages of Contaminated Land Assessment Process	2
	2.1	Review of Planning Documentation	2
	2.2	Review of Planning Application Form	2
	2.3	Review of GIS Data	3
	2.4	Review of Local knowledge and Public Representations	3
	2.5	Review of Development sensitivity	3
	2.6	Review of Desktop Report	4
3		Determination of Contaminated land Risk	4
	3.1	Sensitivity of end use	4
	3.2	Current and historical evidence of contamination	5
	3.3	Phase 1 - Preliminary Risk Assessment	5
	3.4	Phase 2 – Intrusive investigation	5
	3.5	Remediation Statement	5
	3.6	Proposed Mitigation	6
4		Recommendation to Development Management	6
	Appendix 1	Mine Gas Assessment	7

Contaminated Land Planning Procedure – Full & Outline Applications only

Under the Revised National Planning Policy Framework 2018 (NPPF paragraphs 170(e) - 178), the presence of contaminated land is a material planning consideration.

1. Planning Consultations Process

Within Northumberland County Council, the Public Health Protection Unit's (PHPU) Environmental Protection(EP) Team hold the required competency with regard to the assessment of Contaminated Land under the Environmental Protection Act, 1990, Part 2A. The team are not 'Statutory Consultees' but provide internal expert advice to Development Management colleagues and externally to Northumberland National Park Authority.

A consultation process exists between the PHPU and Development Management, whereby EP officers will respond to planning consultations within 21 days (full) or 14 days (re consultations). Whilst no formal procedure is in place with National Park planning colleagues, officers seek to respond within the same periods.

Upon receipt of a planning consultation involving contaminated land, Environmental Protection officers will follow the steps within this procedure.

2. Stages of Contaminated Land Assessment Process

2.1 Review of Planning Documentation

On receipt of any consultation, the published planning information should be reviewed to ensure that only current up to date information is assessed. All documentation relating to a Northumberland County Council planning application can be found on the Northumberland Public Access System. Available at: <http://publicaccess.northumberland.gov.uk/online-applications/>

All documentation relating to a National Park planning application can be found on the planning application register available <http://nnpa.planning-register.co.uk/PlaPlanningAppResults.aspx?mode=outstanding>.

2.2 Review of Planning Application Forms

Section 14 of the planning application form contains the following 3 questions which relate to contaminated land:

- Is the land known to be contaminated ?
- Is contamination suspected for all or part of the site ?
- Is the proposed use particularly vulnerable to the presence of contamination?

The applicant / agent will have answered these and this information will allow officers to make an initial assessment of the risk posed to the development from land contamination.

Additionally, subject to pre application discussions, **all** new development with a sensitive end use (including dwellings, allotments, schools, nurseries, playgrounds . .etc) require a minimum Phase 1 Land Contamination Assessment to be submitted. Section 14 of the planning application form has either not been completed or the Phase 1 report is not included, the application **should not** be validated by Development Management's registry team and further consultation should cease.

If necessary, EP officers will recommend refusal of the application due to lack of information if the application has been validated and these pre requisites have not been completed / submitted.

Northumberland County Council is a member of the [Yorkshire and Lincolnshire Pollution Advisory Group \(YALPAG\)](#) . Applicant's and developers should be made aware that reports submitted with planning applications should contain the required information in accordance with that scheme¹.

If the application is accompanied by a Phase 1 report, officers should review it.

2.3 Review of GIS Data

The Environmental Protection team maintain a GIS system which contains details of potentially contaminated sites within Northumberland County. It is based upon current and historic information. The details are accessed and viewed either through ArcGIS or Arc Reader. They also keep records of areas of unrecorded mine workings for the former Castle Morpeth area. The absence of records in any case however, does not mean the absence of historical mining or contamination.

Each application site must be assessed against this contaminated land data set.

Where the data layers show that historical contamination may be present, a Phase 1 assessment (as a minimum) will be required.

Environmental Protection officers will recommend refusal of the application due to lack of information, if the application has either been validated without a Phase 1 assessment or such an assessment is not received within consultation response timetable, where contamination may be present.

2.4 Review of Local Knowledge and Public Representations

Local knowledge held by council employees, neighbours and elected members is a valuable resource and can often identify additional areas of concern locally. Where possible, a site visit should be undertaken and any local knowledge considered. Representations & objections made by members of the public, local & parish Councils and pressure groups may alert officers to areas of concern e.g. historic animal burial sites have been identified in this way.

2.5 Review of Development Sensitivity

If the application is for a sensitive end use i.e. dwellings with gardens, allotments, schools, nurseries, playgrounds . .etc), then a desktop assessment will be necessary without the prerequisite contaminated land evidence.

However, this will have to be determined on a 'case by case' basis by the Competent officer, taking into account the nature, scale and location of the development and published guidance.

¹ [Development on Land Affected by Contamination: Technical Guidance for Developers, Landowners and Consultants \(Version 9.2, March 2018\)](#)

- [Screening Assessment Form \(Version 9.2, March 2018\)](#)
- [Verification Requirements for Cover Systems: Technical Guidance for Developers, Landowners and Consultants \(Version 3.4, November 2017\)](#)
- [Verification Requirements for Gas Protection Systems: Technical Guidance for Developers, Landowners and Consultants \(Version 1.1, December 2016\)](#)

2.6 Review of Desktop Report

Where the site has been identified as being located in an area where historical contamination may be present and /or the development has a sensitive end use, a Phase 1 Assessment must accompany the planning consultation.

For *single properties only*, this assessment can take the form of the YALPAG screening assessment.

Where more than one property is proposed, the Phase 1 Assessment must comply with the requirements of BS10175:2010+A1:2013 - Investigation of Potentially Contaminated Sites Code of Practice.

The NPPF requires that any formal Phase 1 Assessment must be undertaken by an appropriate qualified and experienced contaminated land consultant.

EP officers may recommend refusal of the application due to lack of information, when a contaminated land consultant has either not satisfactorily verified their appropriate qualifications and competency *or* when required, either a Phase 1 Assessment or a YALPAG screening assessment has not been submitted.

3. Determination of Contaminated Land Risk

In 2010, in the case of [Technoprint Plc & Anor, R \(on the application of\) v Leeds City Council & Anor](#) , the High Court determined that it was unreasonable to grant planning permission where issues relating to potential land contamination were unresolved. This judgement set legal precedent requiring thereafter, that any Local Authority must consider all significant aspects of contaminated land prior to determining a planning application.

It is therefore necessary in every case, to determine the level of risk a development poses, in order to assess the amount of information required to accompany any planning application.

The determination of risk must take into account the following factors :

3.1 Sensitivity of proposed end use

For most developments, there are 3 categories of end use to consider :- Residential with garden – potential growing of foodstuffs, Residential with no gardens (apartments) & Commercial/ industrial.

Using available evidence, EP officers will determine if there is past contaminative use *on or near* the proposed development site. The significance of the proximity of the past contaminative use will depend on the nature of the activities previously undertaken, underlying geology and mobility of contaminant. Consideration should also be given to other factors and relevant information such as any Phase 1 Report, presence of gardens (actual or proposed) and historical coal mining(see Appendix 1).

Residential

For residential developments, where no past actual or potential contaminative use either *on or near* to the site has been identified the initial risk rating for the site will be *low*. For low risk sites, it is appropriate to control developments through the use of conditions.

Commercial / Industrial

For commercial / industrial developments where no past contaminative use either *on or near* to the site has been identified the initial risk rating for the site will be *low*. For low risk sites, it is appropriate to control developments through the use of conditions.

3.2 Current and historical evidence of contamination

For residential developments, where a past contaminative use of concern is identified on or near the site, the initial risk rating will be *high*. For high risk sites, conditions cannot automatically be used to control the development. For residential (with no garden) the only significant risk will be from ground gas, due the 24 hour occupation. If this is not present, the initial risk rating will be *medium*.

For commercial / industrial, where a significant past contaminative use is identified on or near the site, the initial risk rating will be *medium*.

For *medium* risk sites, it **is** appropriate to control developments through the use of conditions.

3.3 Phase 1 Preliminary Risk Assessment

Where the risk rating within the Phase 1 Assessment differs from the initial risk rating and EP officers are in agreement with it, this may allow for the risk rating to change and a conditional recommendation made.

Where officers are either not in agreement with the conclusion of the report, information is missing, information is of poor quality, or the report has not been compiled in line with NPPF requirements, then the initial risk rating must be maintained or increased.

Where officers have determined that the risk to the proposed development is *high*, the principles of [Technoprint Plc & Anor. R \(on the application of\) v Leeds City Council & Anor](#) must be followed and a Phase 2 intrusive investigation provided.

In these circumstances, if a Phase 2 investigation has not been submitted then the Environmental Protection officers will recommend refusal of the application.

3.4 Intrusive investigation - Phase 2

If a Phase 2 investigation has been submitted, it shall be reviewed to determine if it has been undertaken in accordance with the NPPF which states that 'All investigations of land potentially affected by contamination should be carried out in accordance with established procedures (such as BS10175). If the Phase 2 investigation **is not** sufficient to fully identify the risks to the site, then the application should be refused due to a lack of information.

If the Phase 2 investigation **is** sufficient to identify the risks from contaminated land and confirms the risk rating, then a review of the Remediation statement should be carried out.

3.5 Remediation Statement

For sites where a Remediation Statement is required this must accompany the consultation. Where EP officers are not in agreement with the conclusion of the statement, or information is missing or of poor quality, then a recommendation to refuse the application due to a lack of information should be made.

If the Remediation Statement is sufficient the proposed mitigation should be considered.

3.6 Proposed Mitigation

The proposed mitigation must be compliant with current guidance (including YALPAG). Where officers are not in agreement with proposed mitigation or the information is missing or of poor quality, then a recommendation to refuse the application due to a lack of information should be made.

If the information contained within the Remediation Statement (including mitigation) is appropriate then the rest of the process can be conditioned.

4. Recommendation to Development Management

After the assessment process detailed within this procedure has been followed, one of the following recommendations shall be made in writing to Development Management.

Unconditional Approval – Where EP officers are entirely in agreement with the consultation, Planning memo PL01 will be sent to planning.

Conditional Approval- Where the risk rating allows the recommendation of conditions, these will be sent to Development Management using Planning memo PL02. Appropriate conditions will be either be selected from PHPU Standard Planning Conditions document or a bespoke condition written. In order to ensure that they comply with NPPF requirements, ALL conditional recommendations made by PHPU will contain the following caveat : ***All recommended conditions should be subject to confirmation by Development Services Legal Team, to ensure they are enforceable.***

Refusal- Where the risk rating justifies a recommendation to refuse the application, Planning memo PL03 will be used.

All planning responses provided by EP officers will be checked and countersigned.

Appendix 1

Mine Gas Procedure

If the proposed development site is located in a former coal mining area then mine gas is a material planning consideration.

Environmental Protection would consider that the impact of mine gas falls under the contaminated land assessment for a site. This is specified in section 178 of the NPPF and was confirmed locally in the planning inspectorate decision ref: APP/P2935/W/15/3131744 (Arriva Garage, Ashington). As such, the potential impacts from mine gas must be assessed through this process.

Background

As a result of the extensive historical coal extraction which took place throughout Northumberland, there are a large number of mine shafts, drift's and adits, which have never been formally identified or located and which have the potential to generate mine gases. An additional feature which increases the environmental risk is the presence of workable seams located at very shallow depths, having very little rock cover between the old workings and ground level. Rising groundwater levels within the Northumberland Coalfield area, are also known to be associated with the increased risk of mine gas migration.

The most common form of Mine gas in Northumberland is Blackdamp or Stythe (local name). Blackdamp is the name given to the gas where the Oxygen contained naturally in the atmosphere has been adsorbed by the workings, leaving the air deficient of Oxygen. There have been a number of mine gas incidents locally over the years, including one in 1995 in south east Northumberland, which resulted in a fatality.

In 2016, within neighbouring North Tyneside Council, 35 new build properties were subject to significant subsidence issues. It was found that there had been inadequate site investigation into coal mining legacy issues, which failed to identify unrecorded mining activities beneath the site. 18 of these properties required demolition².

In Gorebridge, Midlothian (2013), 22 residents were affected by inhalation of Carbon Dioxide (CO₂) released from historical underlying coal mining³. The properties had been built without any protection from mine gas and had been classified as Low Risk. In this case, residents were evacuated and the properties eventually demolished.

The final report of the Gorebridge Incident Management Team(IMT)(Nov 2017), concluded that the current procedure for mine gas risk assessment, which gives primary responsibility for assessing the risk (and determining mitigation), to the site developers, is *unsatisfactory, unsafe and not consistent with a precautionary approach* designed to protect public health.

The IMT recommended that mine gas mitigation measures should be made mandatory in ***all*** new residential and similar developments, designated by the Coal Authority as former mining areas, *irrespective* of their current designation as either Low or High risk.

² <https://www.chroniclelive.co.uk/news/north-east-news/west-allotment-subsidence-site-18-14765026>

³ <https://www.nhslothian.scot.nhs.uk/MediaCentre/PressReleases/2017/Documents/Gorebridge%20Report.pdf>

Mining Risk Area

In order to determine whether the site lies within a Mining risk area, EP officers will consult the EP GIS map layer, the Maps of Coal Mining Development High Risk Areas:

<https://www.gov.uk/government/collections/coalfield-plans-for-local-planning-authority-areas>

and / or contact the Coal Authority directly.

Assessment of Mine Gas

The assessment of mine gas is a separate consideration from other ground gases such as landfill gas, although some of the guidance is still applicable.

No Risk - If the proposed development site is not located in one of the risk areas, further assessments will not be required.

Low Risk - For those developments in the low risk areas, PHPU officers will recommend a condition requiring gas protection measures are incorporated into developments. Consultants wishing to challenge this condition must provide robust justification, which may include gas monitoring on the site. If there are no justified gas concerns then PHPU officers will review the imposition of the condition.

Moderate /High Risk/ - For those developments in these risk areas , either mine gas monitoring should be undertaken to identify if a significant gas regime is present or gas protection measures should be fitted to every property or building within the development. Additional dialogue shall take place with the Statutory Consultee (Coal Authority) prior to any agreement for the development or any agreement of conditions.

Very High Risk - No development shall be recommended within these areas unless pre agree stand off distances around shafts, drifts ,adits and known shallow workings are included together with other treatments which have been validated by the Coal Authority.

Monitoring

It is important that any gas monitoring which has been undertaken is appropriate for the site. In assessing this EP officers should consider: the statistical minimum level of gas monitoring; the times of the year when monitoring has been undertaken and pressure drops during monitoring periods. Officers must be satisfied that all three of these have been considered for the conclusions to be accepted.

- The minimum number of gas monitoring samples and minimum number of visits should be those specified in the CIRIA C665 guidance (see Table 1 below). Where either the number of samples or the number of visits are less than those specified in the guidance, the applicant must provide detailed justification.
- The optimum time of year to monitor for mine gas production is during the late autumn, winter and early spring period. If monitoring *has not* been undertaken within this period then the result are not based on worst case scenario and they must be assessed accordingly.
- Atmospheric pressure is an important factor in mine gas generation. Any assessment should be undertaken during periods of rapid and profound pressure drops. A rapid or profound pressure drop is a minimum reduction in atmospheric pressure of 4 mbar over 3 hours. Where gas monitoring has not captured these it will not be accepted..

Where gas monitoring results are provided which have been taken in compliance with the points above, an assessment of the oxygen levels must also be assessed.

If gas monitoring has not been undertaken and the risk assessment indicates that it is necessary or the gas monitoring has not considered the above points, then a gas membrane condition and other mitigations as necessary, can be applied as an alternative.

If agreed with the applicant / developer this may be the most efficient option in terms of cost/benefit both in terms of time and expense.

Table 1 – Number of visits required⁴

		Generation Potential of Source				
		Very Low	Low	Moderate	High	Very High
	Low (Commercial)	4 visits over 1 month	6 visits over 2 months	6 visits over 3 months	12 visits over 6 months	12 visits over 12 months
	Moderate (Flats)	6 visits over 2 months	6 visits over 3 months	9 visits over 6 months	12 visits over 12 months	24 visits over 24 months
	High (Residential with Gardens)	6 visits over 2 months	9 visits over 6 months	9 visits over 12 months	24 visits over 12 months	24 visits over 24 months

Depleted Oxygen Levels

There is currently no published guidance by which to assess the depleted oxygen risk which is characteristic of mine gas production. The CIRIA C665 guidance is a landfill gas standard and is therefore not wholly appropriate or applicable to Mine Gas assessment.




In the absence of a specific ‘safe oxygen level’, EP officers will apply the occupational health value of 19%, which is specified in the Mines Regulations 2014. If gas monitoring results demonstrate that oxygen levels are below 19%, then gas protection condition must be applied.

If gas values are above 19% then no further assessment is required and mine gas risk will be deemed acceptable, in accordance with the NPPF.

⁴ Source CIRIA C665 Guidance
Page 9 of 10

It is possible that depleted Oxygen levels may be present from activities other than historic mining, where consultants believe that this is the case they must provide detailed justification explaining the reasons. If detailed justification is not provided then gas protection conditions must be applied.

EP officers may wish to use a planning informative to advise the prudent developer to consider the incorporation of a fully verified proprietary gas membrane within the development to ensure a high level of protection for future occupants and as a protection from any future changes in the mine gas regime. Specific consideration will be given to extensions to existing properties so as not to increase the risk to occupiers by displacement of the gas to previously unaffected parts of the building.

	Name	Signature	Date
Prepared by	David Lathan		19/10/18
	Wendy Stephenson		19/10/18
Checked by	Peter Simpson		22/10/18