

Site Characterisation and Environmental Risk Assessment of Land Contamination: A List of the Types of Raw Data to be Included in Submissions to SEPA

- 1.1 This checklist lists the types of basic raw data which must be included in submissions to SEPA relating to the site characterisation of land contamination in support of the interpretation of risks to the Water Environment. This covers submissions made in respect of both the Planning and Development Control and Part IIA regimes ^[1].
- 1.2 This checklist is for owners, developers or consultants to use to help ensure that adequate information is included in any submission. It is also for SEPA Operations staff to use as an initial screening tool prior to passing on any submission to SEPA Specialist staff. The aim is to streamline the review process and reduce unnecessary delays resulting from requests for essential basic data missing from report submissions.
- 1.3 The owner/developer should undertake site characterisation and risk assessment in line with appropriate guidance (e.g. Local Authority and SEPA guidance on 'Land contamination and development management', SEPA Guidance on 'Assessing Water Pollution Arising from Land Containing Chemical Contaminants', CLR11 and BS10175). Some of these documents are available on the [SEPA website](#). In addition, the owner/developer should ensure that all the types of raw data listed in the checklist below are included in any submission. This data is required by the owner/developer to undertake adequate site characterisation and risk assessments and is needed by SEPA to see if these assessments are satisfactory.
- 1.4 Without the information included in the checklist below SEPA cannot initiate any review of the submission and will suggest re-submission in a form that will satisfy our checklist requirements. In light of this we would recommend that the checklist is completed, in full, prior to its submission and, where appropriate, information deficiencies resulting only from ongoing 'phased' investigations are suitably highlighted for our attention ^[2].
- 1.5 Once, the checklist information has been provided and a full review is undertaken by SEPA staff it may become apparent that additional information is required (for example, modelling of the impact that the contamination is having on groundwater or further boreholes in more appropriate locations). In this case this further information will be requested by SEPA.

General Details	
Site Name	
NGR of centre of site	
Developer/owner	
Local Authority	

Raw Data Required	Included? Add section/page ref
Previous Work	
1. References of previous reports.	Yes/No
Source of contamination	
2. Accurate site investigation plans showing the location and depth of any sources of any contamination including, the location of spills, leaks, discharges, working/storage areas and tanks and pipes. Details of the type of contamination should be marked against each area.	Yes/No
3. Accurate site investigation plans with locations of exploratory holes from current and historical investigations e.g. boreholes, trial pits, window samples. These should be clearly labelled on a map/plan.	Yes/No
Receptors	
4. Location of potential receptors. This should include groundwater, surface waters, wetlands (including if they are groundwater fed) and abstractions (including the location of authorised abstractions (via SEPA) and private water supplies (via Local Authorities)).	Yes/No
Hydrogeology	
5. Methods used for forming exploratory holes, for example boreholes, trial pits, window samples.	Yes/No
6. Trial pit logs; elevation must be surveyed with reference to ordnance datum (mAOD).	Yes/No
7. Borehole logs, including construction details such as casing depth, screened/open intervals, method of sealing borehole annulus, position of water strikes or seepage, and details of the strata thickness and nature of geological units. Details of any cores/sample taken for testing. Borehole elevation should be surveyed with reference to ordnance datum (mAOD).	Yes/No
8. Groundwater levels for individual boreholes in metres below ground level (mbgl) AND metres above ordnance datum (mAOD) with reference location, response zone and date/time.	Yes/No
9. Water levels for surface water features included in the site conceptual model (in metres above ordnance datum (mAOD)).	Yes/No

Raw Data Required	Included? Add section/page ref
10. Results of any in situ or laboratory testing such as hydraulic conductivity testing. This should include the method statements, raw data and interpreted results. The date, location and depth of any testing or sampling should be provided.	Yes/No
11. Identification of preferential flow pathways; natural geological conditions and man-made structures such as drainage, utility ducts and mine-workings.	Yes/No
Soil and Groundwater Quality Monitoring	
12. Environmental quality monitoring (soil, ground gas and vapour, leachability tests & water environment); sampling details including sample reference information, date, depth & strata and results. Sufficiently low limits of detection must be employed within the laboratory analyses to enable comparison of data against appropriate assessment criteria. All relevant original data should be included e.g. sample records and laboratory certificates.	Yes/No
13. Field observations (thickness, visual and olfactory) of non aqueous phase liquids (NAPL) (including location e.g. BH1 and date).	Yes/No

Notes:

Investigation design, logging and sampling techniques should be carried out in accordance with current codes of practice, such as BS 10175:2011 Investigation of potentially contaminated sites - Code of practice.

[¹] For PPC, refer to TG02:

http://www.sepa.org.uk/air/process_industry_regulation/pollution_prevention_control/sepa_guidance.aspx

For Mobile Plant Licence - Site Specific Working Plan, refer to our waste guidance: http://www.sepa.org.uk/waste/waste_regulation/guidance_position_statements.aspx and seek advice from local Ops Team in first instance.

[²] SEPA recognises that the regulatory regime, stage or iteration of risk assessment will determine report content as consultation progresses. Where ongoing phased investigations result in multiple reports this should be clearly demarcated – i.e. “this report follows reports X and Y previously sent to [SEPA individual / Team / office] under cover of letter dated dd/mm/yy”.