Why we comment on this issue

Soil is a key part of our environment and soil degradation can have major implications for air and water quality as well as our climate, biodiversity and economy. Sustainable management and protection of soils is key to ensuring that soils can deliver essential functions vital for the sustainability of Scotland’s environment and economy.

The management and protection of carbon-rich soils is seen as a key element of Scotland’s climate change mitigation strategy because of the potential of soil to store carbon and exchange greenhouse gases (CO₂, CH₄ and N₂O) with the atmosphere. Scottish soils hold around 3 billion tonnes of carbon mostly in peatlands which is the majority of the UK’s land based carbon. Disruption of areas of carbon rich soil by development or cultivation can result in the loss of the stored carbon through release of greenhouse gases to the atmosphere. This is contrary to the target of reducing the emission of greenhouse gases set out in Part 1 of the Climate Change (Scotland) Act 2009 (CC Act) and efforts to mitigate climate change by reducing greenhouse gas emissions at source.

SEPA’s planning objectives for this topic

- To address climate change by protecting carbon stores and improving resilience to climate change through the protection and enhancement of soils
- To protect and enhance soils by reducing soil degradation caused by loss of organic matter, erosion, compaction, contamination and loss of biodiversity, which will protect soil functionality including ability of soils to:
  - Store carbon;
  - Filter and buffer pollutants; and,
  - Absorb water and therefore provide resilience to high intensity rainfall.

How we will address this issue through Strategic Environmental Assessment

We will address soil issues through SEA by:

- Requiring SEA to consider the effects of policies, proposals and allocations on soils.
• Recommending SEA objectives used for assessment include objectives aimed at maintaining and enhancing soils including: protecting carbon sinks and reducing loss of organic matter, reducing levels of contamination (existing and future), reducing soil sealing, compaction, loss of biodiversity and erosion.

Links with other development plan topic tables

Other related topic tables include sustainable resource management (zero waste and renewable energy).

The following table outlines our requirements and recommendations for Strategic and Local Development Plans relating to soils in more detail. If the following requirements are not met then we are likely to make formal representations to the emerging development plan.

Further details on the implementation of the requirements and recommendations and supporting information can be found in the Soils Background Paper.
# Soils: requirements and recommendations

## Strategic Development Plans

**Requirements:**
- Ensure that carbon rich soils are identified as a constraint when considering strategic development areas and areas of search for energy proposals;
- Ensure that policies require LDPs to:
  - Promote the protection of carbon rich soils as a carbon store.

**Recommendation:**
- Promote the protection of soils; and
- Source of relevant information are Categories of soil 5 and 6 on Scotland soils web carbon richness map can be taken to indicate presence of carbon rich soils.

## Local Development Plans

**Requirements:**
- Protect peat and carbon rich soils by avoiding the disturbance and excavation of carbon rich soil in the first instance. Where this is not possible development should be informed by:
  - an appropriate peat survey and management plan;
  - any disturbance or excavation be minimised; and,
  - suitable mitigation measures implemented to abate carbon emissions;
- Areas of carbon rich soil are identified as a constraint for site allocations and areas of search for energy proposals.

**Recommendations:**
- Promote the protection of soils
- Sources of relevant information are signposted in the policy and used in mapping to highlight where further site investigation may be required. For carbon rich soils Categories of soil 5 and 6 on Scotland soils web carbon richness map can be taken to indicate presence of carbon rich soils.
- Policy wording that requires that remediation proposals and objectives for potentially or statutorily identified contaminated land are consistent with the requirements of PAN 33, insofar as the development is suitable for use post remediation and that it is not causing unacceptable risk to human health and to the wider
environment, including all aspects of the water environment. Where site conditions are appropriate, consideration should be given to both radioactive and non-radioactive sources of contamination.

- Any allocations on Part IIA contaminated land sites should include relevant development requirements highlighting the need for appropriate site investigation remediation measures. These should be consistent with PAN 33 and agreed with the local authority in advance of redevelopment to ensure the site is suitable for proposed use.

- Inclusion of a policy or supplementary guidance that ensures the sustainable use of soils during the development and operation of sites and a commitment to minimise soil sealing. This could be supported by reference to the DEFRA good practice on construction sites document.