

OUTLINE PROPOSED REMEDIATION STRATEGY

1. This document is a non-technical description of the outline remediation methodologies proposed to be undertaken to deal with soil contamination at Attwood Lane, Hereford as part of the residential development scheme being put forward by Lioncourt Homes Limited. It has been prepared to provide information to the local Parish Council.
2. The ground conditions (with respect to soil contamination) at the site have been investigated on three separate occasions between 2002 and 2007. The findings of all three investigations have been reviewed by Applied Geology and updated in respect of the current regulatory guidance/legislation and to take account of the currently proposed development layout.
3. The updated assessment has indicated the following with respect to soil contamination:
 - a. There are widespread elevated concentrations of nickel and widespread slightly elevated concentrations of benzo(a)pyrene (a hydrocarbon commonly found in ash, coal, tarmac) across the site;
 - b. There is a single high concentration of chromium in one location at the site;
 - c. There is an area of hydrocarbon-contaminated soil associated with the former fuel tank in the old depot area towards the centre of the site;
 - d. There are two other, probably small, areas of hydrocarbon-contamination soils (possibly related to fuel spills) in other parts of the site.
4. To deal with items a and b above, a cover layer system is proposed consisting of a 100mm thick 'no-dig' layer overlain by a 600mm depth of clean imported subsoil and topsoil. The exact thickness and make-up of the cover layer will be agreed with Hereford Council Environmental Health Officer as part of standard contaminated land conditions. The cover layer will be placed over the existing ground levels and the proposed finished levels raised by approx 700mm. This 'cover layer' will prevent the subsequent householders and nearby residents from coming into contact with the contaminated soil or soil dust. In areas of buildings, roads, car parking the construction materials will effectively provide the same role and prevent exposure to contaminated soils below.
5. To deal with items c and d above, the affected soils will be excavated and removed from site and the resultant void replaced with clean soils, crushed concrete, or similar.
6. At the request of the council's EHO Lioncourt Homes will undertake asbestos testing following demolition of the existing buildings on site.
7. There is no evidence from the desk study undertaken that the more toxic form of chromium (Chromium 6) would have been used on site, therefore, it has been assumed that the total chromium concentrations measured during the investigations are representative of the less toxic form of chromium (Chromium 3). However, if Chromium 6 were present on site it would not affect the proposed remediation outlined above. Notwithstanding this, Lioncourt Homes Ltd will undertake additional identification testing on samples to confirm which form of Chromium is present at the same time that general asbestos testing is undertaken ie. after demolition.
8. A detailed Remediation Strategy and Verification Plan will be generated by Applied Geology and submitted to the Local Authority Environmental Health team for approval as part of the planning regime. This will set out how the remediation will be undertaken and also how it will be independently verified.
9. On completion of the remedial works an independent Validation Report will be produced demonstrating that the remediation has been carried out in accordance with the agreed methodologies. This report will include all necessary test results, photographs, proof of soil disposal etc and will also be submitted to the Local Authority as part of the planning process.

