



NON-TECHNICAL SUMMARY

SOIL ASSESSMENT - DQRA

TRAVELLER SITE (FERNHILL CARAVAN PARK), BURY

RSK Environment Limited (RSK) was commissioned by Six Town Housing to carry out an assessment of a series of raised screening mounds, made of soil, placed around the perimeter of Fernhill Caravan Park located on Every Street in Bury, and of landscaped areas adjacent to internal roadways. In addition, at the request of residents, soil samples were taken from soft landscaped areas within three residential plots.

The perimeter soil screening mounds are located within the north-west, north-east and south-eastern parts of the site. It is understood that in the late 1980s made ground from an adjoining piece of land were placed on Fernhill Caravan Park as a series of mounds to screen the surrounding industrial setting from site residents. The screening mounds are generally covered with grass. Little is known about the material that was used to construct these mounds although exposed faces have been created by the site residents and it is possible to see the nature of the soil within the mounds at these locations; soil samples were collected from these areas.

In June 2018 RSK collected shallow soil samples from the perimeter soil mounds and various landscaped areas; users of the site are most likely to come into direct contact with soils close to the surface through recreational activities and therefore such samples are the most appropriate when considering potential risks to site residents. People can be exposed to contaminants in soil via the ingestion of soil, or dust arising directly from the soil, (e.g. through playing on the soil and through hand to mouth contact), via the inhalation of dust made up of soil or through touching the soil. Soil samples were tested for a variety of contaminants, including asbestos.

The initial risk assessment undertaken, termed a generic quantitative risk assessment, compared the results of soil testing to generic soil assessment criteria for a residential land use where home-grown produce is not grown. This type of assessment takes a very precautionary approach to understanding if concentrations of contaminants are elevated, and makes a number of broad assumptions about how residents behave at the site. The assessment criteria used to evaluate if concentrations of contaminants in soil are elevated are designed to be conservative and to identify soils that do not require any further investigation or risk assessment.

The initial risk assessment identified elevated concentrations of several different contaminants, including asbestos, in the soils tested. Only the perimeter mounds were sampled and assessed at that time. This led to the conclusion that further risk assessment was required for four chemicals. Asbestos was only encountered, at very low concentrations, in two shallow soil samples in the perimeter mounds, indicating asbestos is not widely present in the perimeter soil mounds and is unlikely to be present in soils that residents may come into contact with.

The second risk assessment undertaken, termed a detailed quantitative risk assessment, is more specific to the site and is designed to be more realistic in terms of how residents live and behave at a site. Such an assessment can consider the actual ages of children likely to be in contact with the soils (children are typically more sensitive to contamination than adults) and can allow a more realistic assessment of risk by removing the precautionary assumptions used in the initial risk assessment.

For the second risk assessment a series of adjustments were made to the assessment criteria used within the initial risk assessment, to make the assessment criteria more realistic to how residents may behave at the site. Concentrations of chemicals in the perimeter mounds and landscaped areas were then compared to the more realistic assessment criteria. The risk assessment concluded that concentrations of chemicals in the perimeter mounds do not pose a significant risk to the health of site residents. This conclusion is based on the current use of the site, likely activities at the site confirmed by Six Town Housing and observations made by RSK regarding use of the perimeter mounds.