**Pollution Control**

Operation and maintenance of all plant and equipment required for the treatment processes will be carried out by suitably qualified engineers and operators. Checks of all plant and equipment will take place on a daily basis and recorded, a copy of which will be stored on site during days of operation.

All records regarding the installation, commissioning, operation and maintenance procedures will be recorded within the site logbook (diary).

All staff undertaking monitoring will comprise Provectus site engineers with experience in site monitoring, use of portable instrumentation and evaluation of data generated by routine monitoring when the site is operational.

**Dust – Control**

Remediation activities onsite will potentially generate dust from the excavation/extraction, sorting and grading of the material and vehicle traffic.

Possible receptors include site operatives, River Dee, the local working community, surface and the local properties. The potential risk is low the reasons below:

• Vehicle traffic will be kept to designated roadways and as far as practicable away from residential properties, however, should dust become a problem, a water bowser will be employed to dampen down exposed soils, flooring and roadways.

• Screener and crushing operations will be water misted as required.

• Monitoring of the concentration of airborne dust and particulates visually throughout the day.

• Dust suppression equipment will be utilised (i.e. water mist sprays)

- Works will be taking place during winter months where rainfall is higher on average creating natural dust suppression

• Appropriate PPE/RPE will be supplied to site operatives.

**Asbestos Dust/Fibre Emission Control Measures**

Dust generated during soil disturbance activities presents a potential impact to air quality. Soils contaminated with ACM's present a greater risk due to the potential for fibre release posing a threat to human health and the environment as a result the following will be observed during the works:

Dust and fibre emission controls are critical elements in the management of impacted soils, the type of emission controls are job specific and will be appropriate to the required level of control;

Potential dust/fibre emissions from soils will be mitigated by the application of water mist sprays.

Ensuring materials are suitably wetted prior to excavation or processing is critical for dust/fibre control;

Further mitigation measures which will be deployed as required include: stabilising agents or by covering/enclosing the soils with impermeable cover material.

**Odours**

Given the nature of the contamination at the site, the potential risk of liberating odours is negligible.

**Noise**

Our noise monitoring will be undertaken in line with the British Standard BS4142:2014 +A1:2019 in that background levels of noise will be collected before works commence onsite (using an appropriate DBA meter). Background levels will be collected prior to works commencing at designated locations and an average figure generated.

Once our treatment systems are in place the 'specific noise' level will be monitored. If the 'specific noise' is +5db above the background level then this is considered as the trigger level and further noise mitigation measures will be considered.

In order to keep noise at the site boundary to acceptable levels, hours of work on site will not exceed Monday to Friday (0800 – 1700), in line with the main sites current operating hours.

**Water Runoff**

Existing storm drainage can potentially act as a pathway for contaminants in soils to run from site into local water systems. However, any surface water run off will be contained within the permitted site and not enter site drainage.

**Emission Monitoring Plans**

**Indicator Parameters**

**Air Quality Monitoring – Gas and Vapour and VOC's**

Due to the nature of the material within the stockpiles and its original source on 'greenfield' land and site investigations finding no evidence of hydrocarbon contamination, no monitoring of gases, vapours and volatile organic compounds are deemed necessary throughout the site works.

**Dust monitoring**

Dust deposit levels will be measured using a dry foam "Frisbee" dust deposit gauges placed at four locations at the site boundary (BMP1, BMP2, BMP3 & BMP4). The mass of dust accumulating over a suitable period of time will be measured in a laboratory and verified. This will be undertaken for an assessment of airborne dust concentrations, which will allow comparison with any complaints registered to identify the source of the dust nuisance. Samples will be taken on a fortnightly basis. Based on the Environment Agency M17 guidance and confirm that (as per the guidance) a value of 200mg/m2/day is to be used as a trigger level. In the event that dust concentrations are assessed as being significant i.e. over 200 mg/m2/day, additional dust suppression methods will be adopted at the site. These methods may include deploying dust suppression water sprayers/canons/ tractor bowser and stopping works. Boundary dusts will be supported by daily visual assessments of dust generation,

which will be recorded in the site diary. A PM10 and PM 2.5 fixed monitoring location will be set up using a Purple Air monitor, the data will be compared to other Purple Air monitoring stations in the area and prestart monitoring data to set a baseline which will act as a trigger.

**Ambient Air Monitoring - Respirable Fibres including Asbestos**

Provectus will appoint an independent certified analyst (UKAS) to carry out ambient air monitoring and personal monitoring for the presence of airborne asbestos fibres. Asbestos air monitoring will be undertaken in accordance with HSG 248 Asbestos: The analysts' guide for sampling, analysis and clearance procedures. On site analysis of asbestos fibres will be undertaken to ensure information is available in a timely manner.

Air samples are to be collected inside each disturbance area when applicable. These will be made up of static asbestos monitoring stations placed in close proximity and be representative of the works atmosphere and personal air monitoring.

Perimeter static air monitoring will take place to give background readings, these will be placed around the works area including up and down wind, with targeted monitoring in any areas where human occupation is taking place, walkways/offices/offsite residents/adjacent to receptors etc. The location of the air monitoring points will be discussed with the analyst on site to ensure a representative sample is obtained.

Monitoring will be reviewed throughout the works and may be subject to change. It is initially proposed to undertake monitoring at the following intervals:

• Daily on three occasions across the first week, subject to test results this will decrease to then twice per week thereafter for the remainder of the works;

• Frequency will be increased to daily should we identify soils containing asbestos fibre concentration greater than 0.1% w/w.

**Noise**

Background levels will be collected prior to works commencing at designated locations and an average figure generated. Once our treatment systems are in place the ’specific noise’ level will be monitored.

If the ‘specific noise’ is +5db above the background level then this is considered as the trigger level and further noise mitigation measures will be considered.