CASE STUDY

Soil Management / Offsite Disposal

Seconique, Wolverhampton

Client

Seconique Furniture

Environmental Consultant / Remediation Contractor

envirotreat®

Site Background & History

Seconique is a furniture manufacturer that had relocated to the site in 2018 following GE Aviation's move to the local i54 site. Prior to this move, Envirotreat carried out soil and groundwater remediation work to address legacy soil and groundwater contamination on site.

Following the acquisition of the site by Seconique, various elements of groundwork and development were undertaken which resulted in the accumulation of waste stockpiles on site. These stockpiles comprised:

- Crushed concrete – circa 1,200 Tonnes
- Tarmac – circa 100 Tonnes
- Soil – circa 4,000 Tonnes

Seconique engaged Envirotreat to carry out soil sampling, analysis and a waste assessment (in accordance with the requirements of WM3) to establish the classification of the materials and also the most cost-effective disposal routes.

The respective stockpiles are shown in Figures 1 - 3 below.

Figure 1 – Soil Stockpile

Figure 2 – Crushed Concrete Stockpile

Figure 3 – Southern Section of the Stockpile

The sampling, analysis and subsequent waste assessment carried out by Envirotreat revealed that the tarmac waste stockpile was not coal tar as originally thought – the tarmac waste was, nevertheless, still classified as hazardous due to elevated hydrocarbon concentrations.

The crushed concrete stockpile contained visible fragments of asbestos containing materials [ACM] and was therefore classified as hazardous. The main soil stockpile was confirmed to be non-hazardous, with a small section at the rear of the main stockpile potentially hazardous due to elevated hydrocarbon concentrations.

Using a network of waste brokers, hauliers and receiver sites, Envirotreat formulated a disposal option that ensured all waste materials would be treated and recycled following transport from site.

Prior to the commencement of the main works, Envirotreat re-attended the site to separate out the hazardous section of the main stockpile. Confirmatory soil sampling and analysis was also carried out

The separated hazardous material was stockpiled separately to await disposal.

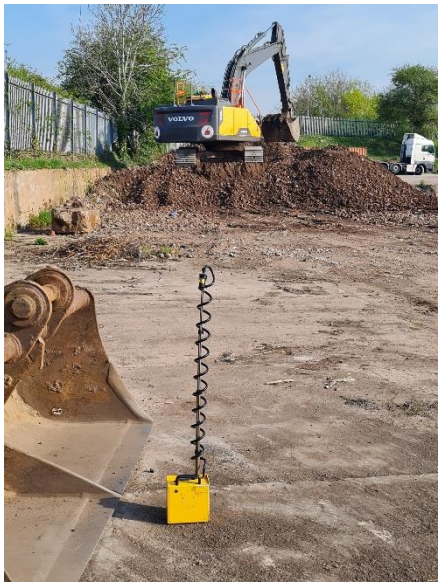
Crushed Concrete Stockpile

The crushed concrete stockpile was firstly removed to improve access to the remaining waste stockpiles. Eight wheeled wagons were used to transport the material to a local receiver site for treatment and subsequent reuse. The confirmed presence of ACM within this stockpile meant that this element of the works required reassurance air monitoring for the duration of the loading and transport.

In total, 85 loads of crushed concrete were removed from site.

The loading of the crushed concrete and the reassurance air monitoring is shown in Figure 4 below.

Figure 4 – Crushed Concrete Loading / Reassurance Air Monitoring



Tarmac and Hazardous Soil Stockpile

A total of 25 loads of tarmac and hazardous soil were removed from site to a local recycling facility for treatment and subsequent reuse. The stockpile is shown in Figure 5 below.

Figure 5 – Hazardous Soil and Tarmac Stockpile

Main Soil Stockpile

A total of 169 loads of soil were removed from site to a local soil recycling and treatment facility (on 8 wheeled wagons). The loading of the lorries is shown in Figure 6 below.

Figure 6 – Loading of Soils – Main Stockpile

During this element of the works, a volume of mixed waste comprising wood, plastic, metals and plastic sheeting was uncovered at the base of the stockpile. This was separated out and stockpiled separately for appropriate disposal – the mixed waste is shown in Figure 7 below.

Figure 7 – Uncovered Mixed Waste

Two loads of mixed waste were ultimately removed from site.

Following removal of all the materials from site, the area was graded and tidied to allow the storage of wagons by one of the tenants on the site.

The post completion area is shown in the Figures 8 - 10 below

Figure 8 – Post Completion (Crushed Concrete Area)

Figure 9 – Post Completion

Figure 10 – Post Completion

Environmental Monitoring

Envirotreat undertook environmental monitoring throughout the soil management and disposal works – this comprised of predominantly dust monitoring (using a Dust Trak) and reassurance air monitoring during the crushed concrete loading operation. Dust did not exceed background thresholds during the work and dust suppression was not required. Reassurance air monitoring showed all fibre concentrations to be below threshold values.

Conclusions

All hazardous waste consignment notes and transfer tickets were provided to Seconique on completion, along with a summary report.

The successful completion of these works enabled the client to provide quantitative evidence of the duty of care required for off site disposal.

The disposal works were completed in accordance with the agreed strategy and in full compliance with The Waste (England and Wales) Regulations 2011.