

Preliminary Phase of Offsite Soils Investigation (Factual Report)

Non-Technical Summary

This report, titled "Factual Report from Preliminary Phase of Offsite Soils Investigation", describes an investigation conducted by WSP UK Ltd for the Environment Agency (the Agency) to assess the potential presence of historical aerial emissions of PFOA (Perfluorooctanoic Acid) on shallow soils around the AGC Chemicals Europe site in Thornton-Cleveleys.

Introduction

Due to concerns in relation to historic emissions from the facility between the early 1950s and 2012 and possible PFOA deposition onto local land, Wyre Council, as the lead regulator under the Part 2A of the Environmental Protection Act 1990 (the Contaminated Land Regime), requested the Agency carry out an inspection of shallow soils.

PFOA was historically used by the facility in their production processes. PFOA is one chemical within a wider family of chemicals called 'per and poly fluoroalkyl substances' or PFAS.

The Agency-led inspection focussed on land parcels within a 5km radius of the facility, with the majority of samples taken within 500m. The inspection was undertaken between September and October 2024 and initially focussed on easily accessible public land. Land included parks, school playing fields and allotments.

The Inspection

The inspection was conducted in a methodical and phased manner, starting with a visit to the site and the local area, followed by a review of all available historical information and relevant information provided by the company. This enabled the Agency and their consultants to decide where to sample, what depth to sample and what chemicals to analyse for.

The actual inspection included the excavation of 79 hand-dug pits down to a maximum depth of 600mm (24 inches). As human health is the primary concern, and how people might be exposed to these shallow soils, a sampling depth down to 600mm was considered appropriate.

Whilst soil was the focus of this study, the water environment is also being considered as part of a wider study into potential contamination.

Fieldwork

The works themselves included hand digging small pits at each location, taking soil samples and analysing these in a laboratory. Rigorous quality control methods were employed to make sure the results were valid.

79 pits were excavated from 22 individual parcels of land, with soil taken at various depths between ground level down to 600mm. This resulted in a total of 199 soil samples sent to the laboratory for analysis of PFAS.

Findings

All 22 sampled land parcels reported detectable PFOA concentrations in soil with the maximum concentration reported as 35.1µg/kg. Analysis of the soil samples has indicated the presence of PFOA in 187 out of 199 samples, which represents approximately 94% of samples. Whilst other PFAS were detected, these were sporadic in nature and at much lower concentrations.

Summary

This preliminary inspection has confirmed the presence of PFOA in shallow soils around the facility. These initial findings indicate further work and risk assessment is necessary. These inspections are complex and need to be conducted in a phased and methodical way. And it can take time, and several phases, before clear and robust conclusions regarding risk can be delivered.