

Remediation Report on Polymer Laboratories Limited, Essex Road site.

Background.

Polymer Laboratories Limited(PLL) have occupied the current Essex Road site for some 25 years. The site was developed by COSIRA for industrial start up units and Polymer Laboratories eventually purchased the whole of the site. Prior to this the site was owned by British Railways and was used as a goods yard and engineering works going back to the start of the railway system. In 1998 Polymer Laboratories decided to enlarge the capacity of their production and research facility by the addition of a new building on the Northern end of the site. This area consisted of an old stone building (previously owned by British Rail), and an area of wasteland, which was undeveloped. Baart Harries Newall (BHN) were employed by PLL as architects on the new facility and plans were submitted for planning approval in 1999, In accordance with the wishes of the council an environmental impact statement was submitted with the planning application and approved by all relevant authorities. . These plans were then passed by South Shropshire District Council later that year. Trial pits were dug as part of the initial design under the instruction of the civil engineers: Carroll and Williams Ltd. No problems were encountered at this stage. At this time the legislation regarding the redevelopment of contaminated land had not been implemented as part of the planning procedure and therefore construction of the facility was undertaken starting in August 1999.

During a routine inspection of the site by the building control dept of SSDC. A layer in the subsoil was noted to be black and could be a problem. As it had no odour the building control officer advised the Builders (Frank Galliers Limited (FGL)) to proceed with caution and investigate if the layer changed in odour.

Later that week the site was inspected by Ms C Rose of the Environment and Development Department of SSDC. Ms Rose was concerned that under new regulations (brought in after our initial planning application) the site should be tested for contamination, and in particular the black layer. It was pointed out by SSDC that if this layer fell above the threshold levels for contamination then it might have to be removed from the site retrospectively. As the floor slab was about to be laid the following week. A decision was made that given the risk of being asked to remove the black layer after the floor slab had been poured, PLL had no option but to instruct that the layer was removed and the area backfilled with fresh stone.

A sample of the layer was retained for testing by Enviros Technos Ltd, of Walford Nr Shrewsbury. The results of this test were passed onto SSDC and the material removed was sent by FGL for disposal in a registered site. Section 62-transport documentation was retained by FGL and PLL to show that the correct procedure had been followed. Copies of these documents are given in the appendix. Tests on the sample showed level of hydrocarbons in the soil entrained in this layer to be just above the threshold levels for

industrial use. Visual examination of the layer and investigation into the previous use of the site concluded that the black layer consisted of granite from the track, which may be contaminated with biodegraded oils and greases. Mixed with coal dust originating from the sites previous use as an off-loading yard for a gas works. A copy of this analysis is given in the appendix.

After the layer had been removed and the backfilling started a further visit was made to the site by SSDC on 24 November 1999. A discussion as to the removal of the layer took place and PLL were asked to sample the soil below the black layer to ensure that this was not contaminated. Again PLL employed the services of Enviros Technos to sample the layer below the black layer.

The result of these tests showed that the soil under the black layer had no or very little contamination by hydrocarbons. It was felt therefore that the black layer was although shown to be contaminated with hydrocarbons was stable and that no leaching had taken place. A copy of this report and a location map showing the location of the test points is given in the appendix.

Remediation Statement.

Based on these results it was decided by PLL that we should remove the black layer from under all foundations of buildings* being constructed on the site, and in the immediate locality of all pipes and trenches running through the site.

However, due to the fact that the layer has shown no signs of leaching over at least 25 years. It was concluded by PLL that it would be environmentally most effective to leave the black layer in place under all other areas on the site. These consist of the roadway and car parking spaces. We felt that to remove the layer from these areas would not be of benefit to the local environment and may indeed be more harmful environmentally by removing it to another site where it may become exposed.

* During construction of the foundations for the electric sub-station and generator. It was found that the layer did not continue to the Western side of the site but seemed to stop at the edge of the old roadway. It was therefore decided not to remove the soil from this part of the site, as there was no sign of contamination.

As the construction project has two main phases, the first being the construction of the new building, which is nearly complete. The second phase being, the refurbishment of the existing building, and the construction of a link between the two buildings. The same criteria will be applied by PLL for construction of the link. That is to say the soil including the black layer will be removed from site and disposed of as special waste. The area will then be back filled with fresh stone.

PLL therefore feel that we have complied with the requests of SSDC in a constructive and environmentally sound manner. Due to the late request for

the contaminated layer to be tested, we have acted in such a way that the risk of this contaminant causing environmental harm has been effectively dealt with. As a company PLL has always acted in a responsible manner and will continue to do so in the future, we feel that our record to date bears this out. We will continue to liaise with all relevant authorities and hope that the new facility will improve our environmental performance. We have designed the facility in such a way as to be in keeping with the locality and to minimise the environmental effects of our processes.
