OUTER HOUSE, COURT OF SESSION

[2020] CSOH 47

A116/13

OPINION OF LORD CLARK

In the cause

ANGELA MCMANUS and ROBERT MCMANUS

Pursuers

against

SCOTT WILSON SCOTLAND LIMITED

Defender

Pursuers: Sutherland; Allan McDougall, Solicitors
Defender: Duncan QC, Reid; CMS Cameron McKenna Nabarro Olswang LLP

19 May 2020

Introduction

[1] This is the lead action in a group of 44 cases raised by persons who claim to have suffered personal injury as a result of the inhalation of harmful substances alleged to be present in land upon which a housing development was constructed. The housing development, which is in Motherwell, is known as "the Watling Street development". The pursuers in the present case were tenants of two properties in the development. The defender is a limited company which provides civil engineering services. In the period from 1990 to 2001 the defender's predecessor was responsible for certain matters in connection with investigating, remediating and reporting upon contamination of the site, prior to the

construction of the development. The legal form of the defender's business, and its name, have changed over time and for ease of reference I will simply refer to the present company and its predecessors as the defender. The case called before me for a proof before answer, restricted to the issues of (i) whether the defender owed a duty of care to the pursuers, and (ii) if so, whether the defender had breached that duty of care. The remaining actions in the group are currently sisted.

Background

[2] The pleadings in the case are lengthy and complex, dealing with many allegations of negligence. The documentary productions, including several technical and detailed expert reports, are contained in over twenty lever-arch files. Evidence was led from six factual witnesses and three experts and the proof lasted for twelve days. However, in view of the more limited and focused nature of the pursuers' position as it was put in final submissions, I am able to restrict the narrative of the background, evidence and submissions only to the remaining salient points. I begin by explaining the history of the site before briefly summarising the relevant stages of involvement of the defender in works or services relating to the site.

History of the site

[3] The site occupies an area of some 10.6 hectares. It was first developed from farmland at the beginning of the twentieth century. It is understood that between 1912 and 1939 an iron and steel works was located on the site. Part of the site became occupied by the Ministry of Supply between 1945 and 1947 for the purpose of dealing with clothing and surplus equipment from demobilised soldiers. It is not known what processes were

engaged in by the Ministry of Supply during this period. It is possible, but was not confirmed in evidence, that dry-cleaning of clothing took place. If it did, solvents would probably have been used. Between 1947 and the late 1970s or early 1980s the site was occupied by companies in the AIE Group, in particular Metropolitan Vickers and Satchwell Sunvic, working from a light engineering factory manufacturing a range of products, and carrying out processes which are understood to have required solvents to be used.

[4] Discussions about the potential development of the site first took place between City Link Development Company Limited ("City Link") and the Scottish Development Agency ("the SDA") in 1986. In 1987, Thorburn Associates were commissioned by the SDA to prepare a geotechnical investigation to determine the soil conditions at the site, on the assumption that the site would be developed for housing. A geotechnical investigation looks at the physical properties of soil and rock, seeking to identify potential construction problems. It is not directly concerned with investigation of contamination and accordingly no chemical testing was undertaken by Thorburn Associates. A technical appraisal was produced by Thorburn Associates in June 1988. By that time, it was suspected that the former uses of the site meant that the ground had been contaminated by substances, with the result that the site required to be investigated and reported upon to determine its suitability as a location for the future development of residential housing.

[5] In 1984, and again in 1988, the SDA was granted outline planning consent, subject to certain conditions, in respect of proposed residential development of the site. One condition was that prior to an application for full planning permission being submitted to the local council, the applicant required to carry out an investigation of the soil conditions prevailing over the entire site. The planning brief stated that this investigation should establish the nature, concentration and distribution of any contaminants which may be located within the

soil. Thereafter the applicant would be required to take whatever action was recommended to remove or render harmless any areas of contamination.

The stages of the defender's involvement

1990 – 1991: Phase 1 Contamination Study

[6] For the purposes of development the site was divided into four parcels of land, designated as plots A, B1, B2 and C. The properties that the pursuers later came to reside in were constructed by 2001 and were each wholly within Plot A. In or about February 1990, City Link proposed to carry out residential development of the site, as the developer of plot A. City Link engaged a firm of consulting architects to prepare the draft housing layout. The firm contacted the defender with a view to the defender carrying out the design of the infrastructure works associated with the proposed residential development. At a meeting with City Link and the consulting architects on 28 February 1990 the defender advised that a study of old maps had established that the principal cause of concern in terms of contamination came from the site's former use as a location for iron and steel works. The defender also agreed "to have a look at this site and give an indicative report on the developability of the site given its condition in terms of obstructions and possible contaminations from previous uses". The defender wrote to City Link setting out the scope of the proposed infrastructure works associated with the residential development of the site. This included the need for a two-stage contamination study: a desktop study, followed by sampling and analysis work. The defender proposed that the work would be undertaken by a specialist contractor, who would have assistance from a chemist. The SDA confirmed that it would only fund works in relation to the investigation of contamination and not for more conventional ground investigations. On 22 June 1990, the defender wrote to Strathclyde

Regional Council's Department of the Regional Chemist ("the Regional Chemist") inviting it to provide a proposal for contamination studies relating to (i) the Watling Street site and (ii) a nearby site known as Java Street. The Java Street site is not of particular relevance for the purposes of the present case, but it is convenient to note that the defender enclosed with its letter a desktop study by Thorburn Associates from March 1990 in respect of the Java Street site. The letter also enclosed, in relation to the Watling Street site, copies of old Ordnance Survey maps collected by the defender "during our own desk studies", the technical appraisal by Thorburn Associates dated June 1988 and a plan of the site showing existing ground levels. The appraisal by Thorburn Associates from 1988 made reference to the site having been used for an engineering works and included a plan showing a layout of buildings. The letter advised the Regional Chemist that the defender was seeking to answer two questions: "is the site contaminated?" and "what would be the appropriate measures and cost of cleaning up the [site] to the satisfaction of the District Council Planners?"

[7] On 25 July 1990, Dr Peter Smith (a senior member of staff at the Regional Chemist) wrote to the defender, mentioning the Regional Chemist's previous involvement in a small area of the site and then setting out proposals with respect to a contamination study. In relation to the previous involvement, Dr Smith explained that in 1984 the Regional Chemist had examined an area of the site that had been used for the plating of metals. Tanks had been used to hold effluent from that process. The Regional Chemist had been asked at that time to investigate whether there was any pollution below the tanks. After that investigation, the Regional Chemist concluded that the tanks were still intact with no evidence of leakage. Turning to the defender's request for a contamination study, Dr Smith proposed in his letter that a grid of trial pits be dug out on the site. He listed potential contaminants of concern which, in his view, covered all the likely major contaminants at the

site. The defender then prepared a further proposal which was sent to City Link on 1 August 1990, and an amended version was sent to the SDA on 21 August 1990. This was described as a joint proposal, which superseded the previous proposal. The covering letter stated "In view of the involvement from the Department of the Regional Chemist, you will note that the input from [the defender] is significantly reduced." The details of the proposal, which were heavily based upon the terms of the letter from the Regional Chemist to the defender, set out the information upon which the proposal was based: the maps, plans and technical appraisal and the "little first-hand experience" of the Regional Chemist from the contamination survey it had carried out on one part of the site in 1984. The proposal stated that all of the processes carried out in the engineering works on the site were not known. It made the recommendation that a single stage contamination survey be carried out with pits excavated on a 50m grid (meaning the pits would be laterally and longitudinally spaced at 50m apart). It also stated, as an alternative option, that savings could be made by excavating pits at a wider spacing (100m) during a first phase with additional examination of areas shown to be contaminated at a second phase. The proposal was for services to be provided to the SDA by both the defender and the Regional Chemist with the defender project-managing the work and providing an assessment of the results and investigations. The Regional Chemist would undertake the fieldwork testing and prepare a factual report on that testing.

[8] In response, on 10 September 1990 the SDA appointed the defender and the Regional Chemist to undertake the work described in the joint proposal. The SDA confirmed that it preferred the two-phase option set out in the proposal and the defender was asked to proceed to instruct the Regional Chemist on that basis. The defender gave the SDA a preliminary programme for the proposed phase 1 work at the site. On 3 October 1990 the

defender wrote to the Regional Chemist to confirm that the defender would set out a grid at 100m intervals, as had been discussed and as the SDA had requested. The phase 1 investigation work began on 9 October 1990, undertaken by the Regional Chemist. On 8 February 1991, the defender wrote to the SDA enclosing two copies of the final report on the phase 1 investigation work. The report was also issued to City Link. The report included, at Appendix 3, a copy of a report prepared by the Regional Chemist from December 1990 entitled "Examination of Soil Contamination". This explained the number of trial pits excavated and the soil and water samples taken. No contamination had been identified by olfactory means (smell). Cyclohexane extractable matter was tested for, to assess the presence of organic material, including oils or greases, by identifying what is soluble in cyclohexane. This allows measurement of the gross or total of the organic material in the sample. It does not allow identification of specific solvents. The results described in the Regional Chemist's report did not identify any cyclohexane extractable matter which exceeded the threshold for action to be taken, as stated in the relevant guidance. The technical standard adopted was that issued by the Inter-Departmental Committee for the Redevelopment of Contaminated Land ("ICRCL"). The defender concluded in its report that the level of contamination was typically low. There was "ash and slag" present on the surface of the ground, probably as residues from the iron and steel works. The defender recommended that the layer of ash on the site should be removed to a licensed landfill and the deeper "made ground" should either be excavated and removed, or should be capped. The made ground was ground that had been placed on the natural ground in particular areas following upon earlier excavation or construction works. The defender's conclusion was qualified by noting that it would be prudent to have further

verification work, in order to confirm the cleanliness of the site and identify areas of deeper made ground which required treatment.

1991-1992: Phase 2 Contamination Study

[9] By around April 1991 City Link had submitted a planning application in respect of housing development at the site. In early 1992, the defender sent to the Lanarkshire Development Agency ("the LDA") which was now dealing with the site, a proposal for the phase 2 works and gave the estimated costs. The proposals included recommendations for trial pitting, with pits being formed on a 50m spacing (but fitting in with and not duplicating the positions previously sampled at phase 1). There would be a selective analysis of the samples, and the fieldwork would again be undertaken by the Regional Chemist. The LDA confirmed that the defender should proceed with the proposed phase 2 study. The defender sent to the LDA a programme of works for the phase 2 study, which anticipated a start date of 17 February 1992. The defender also contacted the Regional Chemist enclosing a plan of the site with the location of proposed inspection pits. The Regional Chemist replied, setting out the costs for the phase 2 study. The Regional Chemist was, for this phase, directly employed by the defender (rather than the LDA) to do the fieldwork because the Regional Chemist did not carry any professional indemnity insurance, which was not acceptable to the LDA. On 17 February 1992, the phase 2 works began on site. In April 1992 the Regional Chemist produced his factual phase 2 report. That report stated that the pits had been excavated, omitting areas covered by the first phase of the work. It said that the two reports together gave good cover of the site as a whole. A number of cyclohexane extracts were recorded, probably due to oil, and in general the higher results were associated only with the surface of the site. In May 1992, the defender issued its report "Summary of

Contamination Studies and Associated Development Costs" to the LDA based upon the phase 2 study. The defender proposed three possible remediation options, one of which involved removal of all made ground off-site and its replacement with clean fill.

1992- 1994: Remediation works

[10] For the purposes of remediation, the site was divided into four parcels of land designated as areas A1, A2, A3 and A4. One of the properties which was constructed several years later and then in due course occupied by the pursuers was in area A1 and the other property later occupied by them was on the boundary between areas A1 and A2. On 15 October 1992, City Link wrote to the LDA expressing a preference for the remediation solution of removal of all of the made ground as suggested in the defender's May 1992 report. The LDA asked the defender to prepare a proposal for the implementation of that option, but with a possible variation of removing only contaminated made ground, and a more limited import of clean material. The defender prepared tender documentation for the remediation works. In designing the testing suite to be followed by the contractor and its sub-contractor the defender chose to delete testing for cyclohexane extractable matter from the testing suite. The reason for doing so was that the defender had formed the view, from the previous investigations, that the major contaminants of concern were all associated with the ash and slag from the iron and steel works. That contamination could be identified visually. The defender relied on those present on site during the remediation works (and the subsequent verification testing) to report visual or olfactory signs of other contaminants. On 11 November 1992, the defender wrote to the LDA enclosing a draft "duty of care letter". The defender confirmed that its contract with the LDA was based on removing contaminated material and that the purpose of the works was to release the whole site for

residential development. The defender also gave an amended scope of the remediation scheme, as had been suggested by the LDA (removal of contaminated made ground) rather than what was suggested as option 1 in the defender's May 1992 report (the removal and replacement of all made ground) which would have been prohibitively expensive. The defender also stated to the LDA that it believed that the scheme adopted was appropriate for development of the site for residential purposes. On 15 December 1992 the defender provided a duty of care letter to Scottish Enterprise, the successor of the SDA. The letter stated that:

> " ... On completion of the remediation works all contamination within or affecting the affecting the site shall be removed so as to enable the entire site to be developed for residential purposes and to this end we have been instructed *inter alia* to carry out all the necessary investigation at the Site, to recommend the remediation works which are required, to prepare building contract documentation (including bills of quantities and specification) in respect of the remediation works recommended by us, to supervise the execution of the remediation works by the contractor and to issue a Certificate of Substantial Completion on the remediation works being satisfactorily completed."

With a view to effecting the development of the site, City Link entered into an agreement with Scottish Enterprise and the LDA in early 1993. A schedule to the agreement set out the tender documents for the remediation works. The defender then issued the invitation to tender for the remediation works. In due course I & H Brown was appointed as the contractor and it appointed Clyde Analytical as its sub-contractor to carry out the analytical work. The volume of material to be removed from the site turned out to be more than originally anticipated and there were difficulties in accommodating the removed material in landfill sites. The defender was asked by the LDA to assess the cost of capping the soil on area A4, rather than clearing it. The defender prepared a proposal to bury this remaining material on site. Various tests were carried out by Clyde Analytical and I & H Brown and the results were sent to the defender. In April 1993, the defender issued its report "Proposal

for the Burial of Ash on Site Below Future Residential Development" to the LDA. On 3 June 1993, there was a meeting to discuss a proposal to bury ash *in situ* in area A4. On 5 July 1994, the defender sent to Scottish Enterprise another duty of care undertaking in the same terms as noted above. In July 1994, the defender issued its "Report on Post Remediation Condition". The report included logs of all validation trial pits supervised by Clyde Analytical, results of the analytical testing, discussion of the verification procedure and remaining matters. The verification procedure was designed to determine the cleanliness of the remaining material. The report stated removal of most of the ash and the contaminated made ground had taken place. It concluded that the site was now "an area with an acceptably low level of contamination, and therefore considered to be suitable for residential development". The report also advised that it had not been possible to remove the ash completely from the development site and that once the final layout was known a suitable strategy should be implemented for those areas where it remained.

1994-1995: *Further remediation works and the discovery of TCE*

[11] During the remediation works, deep buried brick structures were found in parts of area A2. The LDA subsequently decided that the buried structures should be demolished and in about November 1994 the defenders were asked to manage and report upon the resulting further remediation works. Subsequent verification testing was undertaken. For this verification testing, the contractor was Central Building Contractors ("CBC") and analytical testing was carried out Altec Laboratory Services Limited ("Altec"). The defender provided Altec with the testing regime, which included tests additional to those that had been in the original testing schedule identified by the Regional Chemist. In April 1995, the defender issued its Addendum Report on Post-Remediation Condition, dealing with the

parts of area A2 that had been the subject of the verification testing by Altec. That report was addressed to the LDA. A copy was sent to Motherwell District Council and City Link. The purpose of the report was to certify that these further parts of the site referred to had been remediated to a point where any contamination had been reduced to a level that meant that the site was suitable for residential occupation. The report concluded that if the area was to be part of the residential development, then remaining contaminated material would require to be removed. Alternatively, if an area was to be used as open space, it could be capped with imported material.

[12] During this period, another issue arose. The development of plot C was to be undertaken by Wilcon Homes Northern Limited ("Wilcon Homes"). On 25 November 1994, Rennick Partnership wrote to the defender advising they had been instructed by Wilcon Homes to prepare a ground investigation report in relation to the site. They explained that a strong chemical smell in the area of their trial pit 15 had been encountered. This was in part of the site (for remediation purposes, area A4) covered by the defender's July 1994 report. It appears to be the case that this chemical presence was not picked up by the verification pitting carried out by I & H Brown and Clyde Analytical or the Regional Chemist's earlier investigation pits because their locations did not coincide with Rennick Partnership's trial pit 15. The site of the trial pit was visited by a representative of the defender. On 30 November 1994, the defender wrote to Rennick Partnership in response to their letter of 25 November 1994 noting that pits previously excavated in the vicinity of trial pit 15 had not revealed anything untoward. On 3 August 1995, City Link wrote to the defender enclosing a letter from a firm of solicitors who acted on behalf of Wilcon Homes, which referred to part of the site that still appeared to be affected by contamination and stated that the defender did not appear to be prepared to investigate matters further. On 4 August 1995, the

defender wrote to City Link responding to the content of the letter from the solicitors and explaining that the defender had, in November 1994, offered to comment further if Rennick Partnership provided more detailed information, which had never been received. The defender was willing to provide further assistance if this was considered necessary. On 4 September 1995, Rennick Partnership faxed Wilcon Homes enclosing correspondence from Kerr Mellor Associates ("Kerr Mellor") setting out the results of laboratory analysis. Investigation of the locality of the smell had found ground contaminated by trichloroethylene ("TCE"). The source was suspected to be either a spill or a leak from pipework. Either explanation would require the TCE to have passed through made ground removed from the site during excavation works. On 15 September 1995, there was a meeting to discuss a report from Kerr Mellor at which the defender, City Link and the LDA were represented. The view at the meeting was that the contaminated material should be taken off-site, with capping or *in situ* treatment considered to be inappropriate. In October 1995, the defender expressed to City Link the view that the removal of all solvent contaminated soil may be the only course of action which would satisfy the perceptions of prospective purchasers and their advisors, and also gave a statement of additional costs associated with the removal of the contaminated material. No evidence was led as to whether the contaminated material (approximately 1200m^3) was actually removed, although that was plainly the intended solution. Equally, there was no suggestion in any of the evidence that the material had been left in place.

1997: Reports

[13] On 5 September 1997, Scottish Homes wrote to the defender seeking a fee offer for the provision of general site condition reports in relation to plot B. The defender gave its fee

offer and set out proposals for further work. Scottish Homes accepted the defender's fee proposals and asked that the site reports be available by 30 September 1997. Thereafter the defender engaged Wimtec Environmental Ltd ("Wimtec") as the contractor to carry out some supplementary trial pit investigation and testing. Plot B was considered in two sections, "B1" and "B2". In October 1997, the defender issued its report "Watling Street, Motherwell Plot 'B1' – HAG competition Site Condition Report," addressed to Scottish Homes. In November 1997, the defender issued its report "Watling Street, Motherwell Plot 'B1' – GRO competition Site Condition Report", also addressed to Scottish Homes. The purpose of each of the reports was that they were to be included in the development brief of Scottish Homes to be issued to selected housing associations bidding to have housing on the plots. Each report stated that its comments were based on the conditions recorded during investigation and remediation works. The reports explained the ground investigations that had been carried out and also stated that there might be conditions existing which had not been revealed by the studies and which could not be taken into account. Each report provided inspection pit records and trial pit logs. No reference was made in the reports to the discovery of TCE contamination in area A4.

Post-1997 events

[14] The contractor dealing with the development of plot A was CBC. In 1999, the defender expressed concern about a landscape bund located within the site. The bund had been created by CBC and used for the disposal of made ground deemed not suitable for use in the residential area of plot A. CBC carried out further remediation works during the construction phase, based on analysis of soil samples prepared by their sub-contractor, Scientifics Ltd ("Scientifics"). The defender was asked to prepare a report in relation to the

removal of remaining ash and slag. In June 2001, the defender issued its draft report "Supplementary Post-Remediation Report Following Completion of Phase 3 at Development Site A", addressed to City Link. Based principally upon information supplied by CBC and Scientifics, the report stated that supplementary remediation works had been carried out by CBC and that the source of contamination presenting residual hazards to human health and plant health (the ash and slag) had been removed from the garden areas of certain houses and placed in the north-west corner of the site. The report concluded:

> "To the best of our knowledge the supplementary remediation works have been completed and the degree of risk of harm from chemical contamination has been reduced to an acceptably low level consistent with the residential use of the site".

The pleadings

[15] The pursuers averred that the defender was acting as an environmental consultant, to provide the following services: to investigate the extent of contamination of the ground at the Watling Street site as a result of its previous uses; to advise on the remediation works which would be required to make the site, or any part of it, suitable for residential development; to prepare a scheme for the remediation works; and to administer and supervise the remediation works contract. In those circumstances, it was the duty of the defender: (i) to investigate the nature, concentration and distribution of contaminants within the site; and (ii) to prepare a scheme of remediation that would remediate the site to meet the requirements for the future residential use of the site. As the known former uses of the site included engineering works carried on for some 40 years, the defender knew or ought to have known that various solvents and other organic compounds would have been used in the course of the manufacturing and other processes engaged in. The defender

knew or ought to have known that there was a high degree of probability that ground at the site would be contaminated by these various solvents and other organic compounds.

[16] The contaminated waste said to present on the site and the elements contained within the waste are identified in the pursuers' pleadings. Reference is made to volatile organic compounds ("VOCs") including TCE and tetrachloroethylene ("PCE") and also to semi-volatile organic compounds ("SVOCs"). The pursuers aver that their rented homes were built on ground containing a variety of contaminants, including VOCs and SVOCs. TCE was said to have been detected. The pursuers are said to have suffered neuropsychiatric symptoms as a result of exposure to vapours contaminated by solvents. The pursuers averred that any reasonably competent environmental consultant: (i) in 1990 and also in 1992, would have advised that it was necessary to investigate the site to ascertain the nature, extent and distribution of contamination by a variety of solvents within the site; (ii) would have made sure that the same range of testing on soil samples that was carried out in 1990 and 1992 was also carried out on the soil samples taken in 1993, 1994 and also in the further suite of tests carried out in 1995; (iii) in 1995, would have tested for a wider range of organic contaminants than polyaromatic hydrocarbons and phenols; (iv) in 1995, 1997 and 2001 would have investigated the site for contamination by a variety of solvents likely to have been used within the site whilst it was an engineering works; and (v) in 2001 would have known that the validation testing that had been carried out in 1994, 1995 and 2000 had not taken into consideration the risk of continuing contamination of the site by that variety of solvents. The defender had failed to investigate and advise on the nature, concentration and distribution of contamination of the site by solvents in the manner and to the extent that a reasonably competent environmental consultant, exercising ordinary skill

and ordinary care, would have done. As a result of its failures the defender was in breach of its duties towards the pursuers.

[17] Put very briefly, the defender's pleaded position was that it was not appointed to act as an environmental consultant, but had a series of distinct appointments under the ACE Terms of Engagement in which it was appointed as a consulting engineer. The defender had relied upon the advice and guidance of chemists employed to investigate the site and on each occasion it was sought, advice was obtained from a properly qualified and experienced specialist. It was reasonable and appropriate that such advice was sought and relied upon. The defender referred to the various contractual documents produced during the course of the work at the Watling Street development as indicating the scope of its responsibilities. The defender denied that any duty of care was owed to the pursuers and denied the various breaches of duty alleged.

Evidence

Factual witnesses

[18] The pursuers led factual evidence from six witnesses. My summary of the background is based upon that evidence, as well as the productions, and I now simply give a brief overview of the points they discussed. Dr Peter Smith had no specific recollection of his involvement in matters relating to the site when he had worked at the Regional Chemist but, having considered the papers, was able to make certain comments. Investigation of land was a relatively small part of the work of the Regional Chemist, but Dr Smith had been involved in investigating about twelve sites over a seven or eight year period. He referred to the material that had been sent to him by the defender in June 1990. The Regional Chemist's proposals were based upon the available material and Dr Smith saw no need to

ask for anything further. He explained his previous involvement in the site and the work done after he had become involved. Investigation by means of a grid of pits, which was the method he had proposed, cannot possibly find everything and there was a very good chance that materials would not be found but would be identified by others later doing work on the site. If the investigation was targeted, things would be missed. However, if a particular target had been identified where there was evidence that solvents might be present it would be looked at. Sight and smell were relevant means of identifying material. He commented on various documents, including the reports made by the defender.

[19] Scott McKinnon joined City Link in about 2000 and became involved in the project then, but had been aware of it beforehand, because he worked for another entity within the same corporate group. He explained his understanding of the overall position, which was that City Link "would draw down the site from the SDA (or its successor) once it was deemed clean and fit for residential development". He referred to the various reports from the defender, including those from 1994 and 1995.

[20] Ronald McLetchie was the former managing director of City Link. He explained that the agreement between City Link and the SDA was that City Link would purchase the site in parcels provided it was certified as clean and suitable for residential development. The SDA undertook to carry out the decontamination work. The defender's reports, including from 1994 and 1995, had been relied upon for that purpose.

[21] Hugh Blackwood had been the chief executive of the defender from 2005, having been a partner when the business was a firm and then a director when it became a company. He was the defender's project director for the purposes of the Watling Street project although, as he put it, his involvement "faded out" following substantial completion of various matters by 1995. He explained the involvement of others in the defender's team,

including Kenny O'Hara as the nominated project manager, and Roger Doubal and Mike Hendy (from whom Stewart Proud took over) who dealt with the geotechnical aspects of the project. He explained that, at the time, environmental issues in relation to infrastructure development were still in their infancy and he was not aware of specialist environmental consultant firms at that time. That was part of the reason why the Regional Chemist was approached. The Regional Chemist took charge of the investigation and the interpretation of results, under the management of the defender. The Regional Chemist had experience of undertaking work of this kind for the SDA around former industrial sites in the west of Scotland. It was the Regional Chemist's advice to do a grid rather than a targeted investigation. The defender adopted the ICRCL standard, following advice from the Regional Chemist and the SDA. This standard defined the potential contaminants on industrial sites, described the testing regime, and nominated thresholds and action levels for successful remediation. He explained in detail the various stages of the defender's work in relation to the site during his involvement. He commented on the Post-Remediation Condition report from July 1994, observing that the report set out that remediation objectives had been substantially achieved, except for several localised areas across the site which for practical reasons were not dealt with during the remediation works. The report highlighted that these remaining areas might require further removal of ash and slag once the site layout had been determined. He also commented on the addendum to that report, dated April 1995. He discussed the involvement of Altec in the later verification process. He also commented on the site condition reports from October 1997 and November 1997. In relation to plot B, the brief from Scottish Homes stated that the data to be provided was for information only and bidding associations must satisfy themselves as to the acceptability of site conditions for the specific proposal. He explained that CBC advised that the ash and

slag around the power cable had been removed and used as fill for the large landscaping bund. This was against what the defender had indicated in its December 1994 report which was that the ash and slag from the power cable should be removed and disposed of off-site. Subsequently, ash and slag was removed from where the garden areas of houses might be located.

[22] Samuel Proud (known as Stewart Proud) became involved in the project in late 1994 as an assistant civil engineer with a specialism in geotechnics, employed by the defender. The report on post-remediation condition dated July 1994 provided him with helpful background to the project. It explained that the remediation objectives had been substantially achieved except for several localised areas that for practical reasons were not dealt with during the remediation works. It mentioned the problems encountered in the area A2 in relation to buried structures. The addendum to the report on post-remediation condition, dated April 1995 compiled the results of the verification pitting and testing undertaken in parts of area A2. He also discussed the site condition reports dated October 1997 and November 1997. These reports, as had the July 1994 and April 1995 reports on remediation, noted that localised areas of ash and slag may have to be removed when they conflicted with the final development layout, particularly garden areas. The material could remain *in situ* provided it was protected against erosion and not left exposed if the area was to be open space for landscaping. He mentioned the caveats in the site condition reports and that no warranty was given or offered to users of them. He commented on the ash and slag surrounding the power cable and that its use by CBC as fill in the large landscaping bund in the north-west corner of the site was without the knowledge or involvement of the defender. The draft supplementary post-remediation report dated July 2001 was prepared on the basis that all the remaining areas of ash and slag had been removed from any areas

where housing was to be built, or where gardens were designated, as highlighted in previous reports.

[23] Roger Doubal is a chartered civil engineer who worked for the defender and whose involvement in the project commenced following the departure of Mike Hendy to Hong Kong in 1994. By that time the contract to remediate the site by the contractor I & H Brown had concluded and the site had been handed over to the LDA in about August 1994. Some outstanding works remained, including the removal of the ash and slag around the power cable area. Following the remediation works the site was divided into plots for development purposes. He spoke about Rennick Partnership having reported a chemical smell, discovered following trial pitting works and Kerr Mellor corresponding with the defender about it. Mr Doubal had responded to the letter from Rennick Partnership about the smell in the area of trial pit 15 on 30 November 1995 stating that the remediation works undertaken at Watling Street were verified by post-treatment investigation involving the excavation of pits and subsequent testing and reporting. The three pits excavated in the vicinity of the area referred to had not revealed anything untoward. The defender offered to comment further if it was provided with more detailed information. The Kerr Mellor report, with which the defender agreed, dealt with the treatment for the localised contaminated area. He explained that the defender concurred that the removal to a licensed tip as recommended was the preferred option. He also commented on further reports, including the draft reports dated April 2000 and July 2001

[24] Kenneth O'Hara joined the defender's business in 1982 and first became involved in the project around 1990. The initial appointment of the defender included the design of roads and infrastructure works for City Link. As the project progressed, he remembered undertaking research into the site's past history, including at the Mitchell Library in

Glasgow. He recollected that the site had been a manufacturing site during the Second World War and he identified old maps showing it was the site of a former ironworks. His involvement was primarily on the roads and infrastructure aspects of the project. He explained the defender's job files for the project and gave an overview of his involvement in the drainage and roadworks aspects. Among other things, he spoke about the ash and slag on the site and how that came to be dealt with.

Expert evidence

The pursuers' expert witnesses

[25] Ms Elizabeth Copland gave expert testimony on behalf of the pursuers. She became instructed as an expert in 2018, as a result of the unavailability of others who had earlier provided expert reports for the pursuers. She is a director of IKM Consulting Ltd and is a chartered geologist. Her area of specialism is contaminated geology. She had worked with IKM as an environmental geoscientist, including doing work on contaminated land desktop studies and progressing to being a project scientist. She had also been involved in risk assessment, supervision of remediation, and post-remediation work in relation to contaminated land. She provided a report, described as a "peer review" dated February 2019, in which she set out the history and various phases of the defender's involvement and she then commented on the conclusions reached by previous experts. In very brief summary, her position was that a competent desktop study was not prepared by the defender in advance of the phase 1 investigation and as a result there was a lack of understanding of the possible processes that could reasonably have taken place at the site given its history. The phase 1 proposal did not consider the layout of the former buildings or the processes used within them. The subsequent phase 2 investigation did not fill in the

gaps in the 100m grid to create a 25m grid and did not explore all the potential sources of contamination on the site. No targeted investigation of potential sources was undertaken. This resulted in data gaps, which were never addressed. In her opinion, the site was not properly characterised, given its past usage. There was no thorough desktop study or a targeted approach during the phase 2 investigation, and a comprehensive suite of VOC testing was not undertaken, resulting in the characterisation of the site being incomplete. The defender did not have a sufficient amount of information to be able to confirm definitively to City Link that the site was suitable for residential end-use, given the level of testing and remediation that had been completed. As such, the works fell below the standard acceptable at the time. Ms Copland also agreed that the process of risk assessment in respect of contaminated land was developing at this time in the statutory guidance and that formal risk tools provided by UK agencies were not fully developed until after 2002. Had further categorisation of the site taken place, on the balance of probabilities contamination hotspots would have been detected. An insufficient desktop study and a non-targeted investigation did not allow for the identification of VOC contamination and buried obstructions. In turn, the remediation design did not take cognisance of potential sources and pathways relating to VOC contamination.

[26] In relation to breaches of the duty of care, a reasonably competent environmental consultant acting in 1990 would have carried out a full and thorough desktop study prior to commencing the site investigation. This would have included, given the previous use of the site, advice that it was necessary to investigate the site to identify the nature and extent and distribution of contamination by a variety of solvents on the site. In designing the investigating strategy, the defender should have advised that targeted investigation around the identified electroplating area, and other ancillary sources and pathways, was necessary.

When the site was revisited in 1992, any reasonably competent environmental consultant would have carried out a full and thorough desktop study of the kind described above prior to commencing the site investigation. Prior to concluding that the degree of risk of harmful chemical contamination had been reduced to an acceptably low level consistent with the residential use of the site, an environmental consultant of ordinary competence in exercising ordinary care would have assessed whether the degree of remediation undertaken at the site in 1994, 1995 and 2001 was appropriate given the site's former history. Such a consultant is likely to have recommended additional sampling to verify the appropriateness of the remediation across the plot and this would have included VOC testing. In her view, the defender also had, from 1997 to 2001, a duty to ensure that the information provided within the site condition reports and supplementary post-remediation reports was in line with best practice and commensurate with the guidance available at the time. That guidance included the Department of the Environment's Industry Profile on Engineering Works (Electrical and Electronic Equipment Manufacturing Works), published in 1995 and another profile published in 1996 ("the DoE profiles"). Chlorinated solvents should have been identified as potential contaminants of concern at the site due to its history. The defender had failed to fully characterise the extent of the contamination both in terms of the range of contaminants and their distribution on the post-remediated site and thereby assess whether the site was acceptable for residential use. Post-remediation there was no evidence to suggest that the defender had reviewed the current guidance or considered whether further chemical testing was now required. This fell below the standard of an environmental consultant of ordinary competence exercising ordinary care at the time. This negligence resulted in a failure by the defender to fully characterise the extent of the contamination.

[27] Dr Raymond Cox is a consulting engineer. He gave expert evidence on behalf of the pursuers about the industrial processes undertaken at the site prior to its remediation, the likely waste products of these processes and what should have been known about the risk of finding these waste products on site in advance of remediation work. He also discussed the actual practice on the site and what impact this would have had on the potential risk of contaminants and whether there had been a lack of accurate assessment of them. He noted that, as he understood it, after the houses were occupied environmental sampling of indoor areas, of vapour percolating through soil, and solid soil samples had revealed the presence of a range of solvent-type compounds including in particular TCE. Such a substance has carcinogenic and non-carcinogenic health effects. He explained what in his view was likely to have occurred during the industrial processes on site and he identified the chemicals likely to have been involved. The defender had recommended a cyclohexane extraction process which would extract chlorinated hydrocarbons such as TCE, PCE and the polychlorinated bi-phenols but these distinctly different chemicals would not be separately analysed. As these substances are more toxic than ordinary oils, that was a significant omission. The defender, in the specification of laboratory analytical work on samples to be collected from the site, should have included separate analysis for chlorinated hydrocarbons.

The defender's expert witness

[28] The expert witness led for the defender was Philip Crowcroft, who is a partner in the firm Environmental Resource Management Ltd. He is a member of the Institute of Civil Engineers, a chartered engineer, a specialist in land condition ("SiLC") and a "suitably qualified person" under the National Quality Mark scheme. In about 2002, a register of

specialists in land condition, known as the SiLC register was set up. In order to be on the register, a person has to demonstrate a sufficient period of relevant experience and needs to attend an interview with experienced SiLC members and then do an open-book examination. Mr Crowcroft had become a SiLC member shortly after the register was set up. He was involved in the professional technical panel of SiLC, which managed its operation. Recently, he had been chairman of SiLC Register Ltd and was previously chairman of the Land Forum, a body set up by the industry to promote the sustainable use of land. The Land Forum is an organisation comprising professionals who have an interest in brownfield sites. In order to improve reporting on contaminated land, the Land Forum asked SiLC to deal with the qualification process and persons who qualify are known as SQPs. In looking for the badge of being an environmental consultant, Mr Crowcroft explained that being a SiLC or SQP was the appropriate indication. He had given expert evidence in relation to about thirty projects. He is the joint author of good practice guidance documents on the risk assessment and management of land contamination including the Model Procedures for Management of Land Contamination published jointly in 2004 by the Environmental Agency and DEFRA, and the second edition of the Manual on Management of Land Contamination published by the Welsh Development Agency. He has over 30 years' experience in dealing with the redevelopment of brownfield land, gained through working for specialist contractors, environmental consultants and the Environment Agency. His experience in the reclamation of brownfield sites goes back to the 1980s. He has been involved in work similar to that of the defender in the present case. He had been the national land policy manager for the Environment Agency for some 10 years from 1991 and dealt with contaminated land issues. He had been the director of the contaminated land unit of an environmental consultancy business.

[29] Put shortly, Mr Crowcroft's position, under reference to the test in *Hunter* v *Hanley*, was that the defender had not breached any duty of care and, on the contrary, had acted in accordance with the normal and usual practice at the time. Mr Crowcroft explained that he spoke from first-hand experience of how suites of analysis for determining contaminants were used during the relevant period of 1990 to 2001. It was rare that any testing programmes went beyond the ICRCL guidance in the early 1990s. In determining contaminants in the 1990s the choice would generally be to look at the ICRCL listings of substances which had trigger values. The practice at the time was to speak to someone who had knowledge of industrial processes, in this case the Regional Chemist. The scope of analysis carried out, based on the advice of the Regional Chemist, reflected the list of contaminants on which there were trigger values available, as listed in the ICRCL guidance. By including cyclohexane extractable matter, the Regional Chemist had covered the potential for organic substances without going to the substantial cost of undertaking detailed analysis of individual organic compounds. The Regional Chemist had proposed the suite of testing and it was reasonable for the defender to rely upon that advice. The Regional Chemist was the expert in relation to detecting contamination. In relation to the design, tendering, undertaking and supervision of the remediation works, the defender had again complied with the usual practice at the time. Overall, the defender' reports on the remediation works gave a thorough exposition of what had been done. The reports also made clear that problems might still exist between the boreholes and might need action. The reports accorded with the usual practice. The verification process was managed by a person who had experience of dealing with contaminated land. It was very unlikely that smells would be missed. The idea of using one's nose to find smells that would trigger confirmatory testing was the usual practice at the time.

[30] In relation to the discovery of TCE at trial pit 15 on plot C in November 1994, he explained that such things will arise when site investigation is carried out using a grid for the spacing of exploratory holes or pits. He added that it is common practice to locate pits at a spacing where, if as a result a localised contamination hotspot is missed, the extent will be limited in size and the problem will be identified during foundation construction and dealt with at the time. This particular incident showed the value of using visual and olfactory methods to identify localised hotspots. It was open to the defender to say that the findings of Kerr Mellor did not require the defender to revisit their own work; the defender had made clear that in between boreholes one might find matter that wasn't expected to be found. A person such as a contractor finding a localised problem and dealing with it is just part of the process. Even though the presence of TCE had not been detected by smell when the made ground was removed from that area, developers dig lots of trenches and that gives them a chance of finding things missed by the earlier investigation process. Going back to the Regional Chemist for further advice after the TCE was found would not have been the appropriate thing to do; there was no contact with the Regional Chemist at that stage. In conjunction with the fact that the contaminated made ground was being removed, the reasonable approach was to seek to detect odours. The excavation of soil related to this localised hotspot was apparently undertaken and the issue was resolved. Mr Crowcroft would have expected that if any other such localised hotspots had existed on site they would have been found during the intensive excavation of foundation trenches and drainage runs, which occur during the construction process, and would have been dealt with. The fact that there had been no other reports of coming across such contamination demonstrated the effectiveness of the remediation approach in which the defender had been involved. In relation to the site condition reports in 1997, these were factual documents reporting the

known data in accordance with the practice at the time. It was also reasonable for the defender, in their June 2001 report, to have relied upon the work done by Scientifics, upon which CBC had also relied. It was important to bear in mind the caveats put into the defender's reports.

[31] In relation to Ms Copland's report, Mr Crowcroft explained that he had been working actively in the brownfield industry throughout the period of 1990 to 2001 and was well aware of the common practice of consulting engineers at that time. On the question of not undertaking a sufficiently rigorous desktop study, the defender was presented with material prepared by Thorburn Associates and other data. Searching for newspaper articles on microfiche would not have been done. While there was no final desktop study report, or at least no report had been found, the defender knew the broad industrial history of the site and relied on the Regional Chemist to interpret the significance of that history. The role of the Regional Chemist included how an industrial facility might affect people. The Regional Chemist had experience of the site. The defender had worked in accordance with the wishes of its client, the SDA. On Ms Copland's point about the defender not having sought sufficient investigation to fully characterise a contamination on the site, the scope of contamination investigation was defined by the Regional Chemist in the role of environmental consultant. Spacings of trial pits between 25m and 100m were considered, but on the evidence the client pushed back on costs resulting in a phased investigation which began with a 100m grid in 1990-1991 and was infilled at the second phase to form a grid of 50m in 1992. Targeting for specific areas might be done if one knew, for example, where degreasing had taken place. It was appropriate to use trial pitting rather than targeting for this site. In any event, those involved would be watching out for smells. The final stage of achieving a 25m grid was undertaken at the verification stage after completion

of the main remediation. Ms Copland had missed an important issue: the purpose of undertaking investigations is to try and narrow down where contamination lies and only remediate soil which is affected by contamination. Visual and olfactory senses are crucial for the identification of contamination, particularly organics. When deployed by an experienced environmental chemist or consultant they massively increase the chances of detecting contamination, both in exploratory pits and on the ground between pits. Logs made at the time showed instances of visual identification which had assisted the finding of contamination. With a public sector client using public money a consultant must ensure that they do what is required to make the site developable, but not spend unnecessarily. The defender realised that the made ground on site, which included a mix of ash, cinders and some rubble, was ubiquitously affected by metals and there was no point in trying to find areas needing removal and other areas that might be left in place. This being the case, there was absolutely no point in undertaking a 25m grid of pits ahead of remediation, but there was great value in doing so after all the near-surface made ground contamination was removed. The contract for the main remediation works set out this approach for the contractor I & H Brown and its subcontractor Clyde Analytical to follow. This was the most cost-effective approach. The defender reached the view that houses should only be built on areas where the contaminated made ground had been removed. Removing all the made ground down to natural glacial till would allow the contractor and the client to identify any deeper localised areas of made ground and develop a localised strategy. On Ms Copland's point about not testing for a sufficiently broad suite of contaminants and specifically not testing for solvents, the testing suite adopted was typical for the time and was devised by the Regional Chemist. It followed the view from the ICRCL guidance that the suite of testing should match those substances with trigger values set out in ICRCL documents. It

was rare to go beyond the testing stated in the ICRCL guidance. The defender's work was carried out to a high standard in the context of good practice in the 1990s.

[32] In relation to Dr Cox's report, it was reasonable to assume that a varying range of substances would be present on the ground and that understanding clearly underpinned the eventual choice of remediation approach that was adopted (removal of all contaminated made ground on natural soils from the site). The absence of a published desktop study report on the defender's archive did not mean that the site history was not considered but rather just meant there was no formalised study report or that copies of the report had been lost. There were several errors in the instructions given to Dr Cox, as recorded in his report. Some of Dr Cox's observations were based on speculation. Since 1947 the ground below the site has been extensively disturbed which was very likely to have exposed any leaked TCE or PCE to air, allowing these substances to volatilise and disperse. In relation to Dr Cox's point about solvent contaminated sludges which would have been buried on site, that was highly unlikely given the practice at the time of those involved in industry-reputable companies. It was not clear what period of time Dr Cox was dealing with when commenting on the actual practice on site. Resources (including public resources) played a key part in what was in fact done. As to Dr Cox's view that failing to test specifically for TCE and PCE was a significant omission, it could equally be argued that testing for numerous other organic compounds should have been undertaken. This was not the advice of the Regional Chemist, nor was it common practice at the time.

Submissions

Submissions for the pursuers

[33] The submissions of counsel for the pursuers can be summarised as follows. The terms "engineer" and "environmental consultant" were simply descriptive of the broad areas of work undertaken. The fact that environmental consultancy had become more professionalised since 1990 did not change things. The defender owed a duty of care to the pursuers in respect of the work undertaken by them on behalf of City Link and the SDA, LDA and Scottish Enterprise in respect of the investigation of the site, the design of a remediation strategy to make the site suitable for the residential housing, between 1990 and 2001. The duty to take reasonable care to avoid acts or omissions which you can reasonably foresee would be likely to injure your neighbour was established in *Donoghue* v *Stevenson* 1932 SC (HL) 31. Once a defender becomes involved in the activity which gives rise to the risk, he comes under the duty to act reasonably in all respects relevant to that risk: *Perrett* v *Collins* [1999] PNLR 77 (at 88 and 98). The test in *Hunter* v *Hanley* 1955 SC 200 was to be applied.

[34] By 1990 there was a clear and established practice for the investigation of potentially contaminated land sites. That practice was based on the advice in guidance documents known to the defender. It was a key part of the methodology set out for the practice that there was as complete as possible an investigation into the former uses of the site, the activities which took place there, and the processes that were involved in these uses and activities. It was necessary that this was done in order to understand what potential contaminants of concern might be present on the site, and the nature of any hazard arising from those contaminants. This process of investigation was a contamination desktop study. There was no evidence that the defender did a contamination desktop study in the manner

set out in the guidance documents of the time. The outcome from such a desktop study should, at the very least, have been a document which drew upon the information studied and gave its conclusions. No desktop study was referred to in any report produced by defender, where one would expect to see it referenced. The only desktop study work to investigate the site which appeared from the evidence to have been undertaken was the work done by Kenneth O'Hara. It was not clear exactly what the extent of his investigation was, although he and other witnesses referred to historic Ordnance Survey maps having been researched in the Mitchell Library in Glasgow by him. On his own evidence, the purpose of Kenneth O'Hara's investigation of the site was not for investigating the uses of the site in terms of what activities and processes had taken place; rather, it was for investigation of the historic layout of the site in terms of buildings and locations of pipes from the perspective of his own concern about infrastructure for the proposed development. It was not an investigation of the site to determine potential contamination beyond what was known about the pre-war iron and steel works. The defender agreed with both City Link and the SDA that it was the defender's responsibility to carry out a desktop study. The defender accordingly failed to undertake an exercise which it had agreed to do, and which was fundamental to the investigation of the site for contamination and for deciding whether or not the site might be developed for residential housing. Had the defender carried out a proper desktop study it would have realised that there had been several occupiers of the site, and that there had been a number of different processes undertaken on site which would have involved known contaminants. In relation to the contaminants to be tested for, there was no evidence that the defender's staff had applied their minds to what the Regional Chemist had recommended. The information from a proper desktop study would have been a material consideration in determining how phase 1 and phase 2 of the site

investigations would take place, and also when considering the verification testing of the site. If a desktop study of the type discussed in the guidance documents was ever undertaken it was not included in the information provided by the defender to the Regional Chemist at any stage.

[35] The evidence showed that in early 1990 the defender had started some investigation of the site, and felt competent to identify potential hazards from former uses, and was able to identify what testing would be appropriate. By the time that the defender sought advice from the Regional Chemist, the defender had already made a proposal on 29 May 1990 for the investigation of the site for potential contamination. In that proposal the fieldwork, laboratory testing and factual reporting services to be provided by the contractor would have been services which fell within the scope of "Additional Services" in Section 7 of ACE Terms and Conditions. The involvement of the Regional Chemist was at the suggestion of the SDA. Based on Dr Smith's evidence, the work of the Regional Chemist was mainly testing of such things as food, water and toys for local authorities. Dr Smith had some experience of contaminated land sites, although his experience involved a maximum of a dozen sites, over a period of seven or 8 years, before he retired in April 1997. The defender prepared the further proposal. Any reader of it would believe and understand that its content had been authored by the defender. That document did not disclose that the defender had contracted with the Regional Chemist for advice, nor did it state that the defender had relied upon the Regional Chemist to devise the proposals for the ground investigations. The document described it as a joint proposal with the Regional Chemist, in which the role of the Regional Chemist was to undertake the fieldwork testing and prepare a factual report on that testing. This also appears to have been the understanding of the SDA. Thus, the defender was bearing to provide its own advice as to the appropriate method for

investigation of the site and what testing should be done for contamination, with the role of the Regional Chemist being a subordinate role as sub-contractor to carry out the actual fieldwork and testing. The only contract that the Regional Chemist had was for that fieldwork and testing.

[36] In light of the factual position as to the role which the defender had identified for itself in relation to City Link and subsequently the SDA, the defender assumed the responsibility for determining the appropriate methodology for investigating the site and advising on its remediation. This was consistent with the duty of care undertakings subsequently given to Scottish Enterprise to (amongst other matters) " … carry out all the necessary investigation at the Site, to recommend the remediation works which are required… ". In those circumstances where the defender had solicited advice from the Regional Chemist and presented that advice as its own, the defender ought to have specified to City Link and the SDA that this was advice which had been made the responsibility of the Regional Chemist if the defender did not wish to be responsible for the content of the advice presented: *Try Build Ltd* v *Invicta Leisure Tennis Ltd* (2000) 71 Con LR 141. Having failed to do so, the defender assumed responsibility for the recommendations of the Regional Chemist, and had a duty to check that the recommendations of the Regional Chemist were appropriate and based on a proper understanding of the site history and the potential contaminants of concern that ought to be considered: *South Lakeland DC* v *Curtins Consulting Engineers Plc*, unreported 23 May 2000. In relation to the remediation works, there were reasons to believe that they were not carried out entirely in compliance with agreed methodology, according to entries in the site diaries.

[37] Although there is no general duty of care on the part of a construction professional to review earlier work, there may be circumstances where that becomes appropriate:

New Islington & Hackney Housing Association Ltd v *Pollard, Thomas & Edwards*, 2001 PNLR 515 at [17]-[26]; *Shepherd Construction Ltd* v *Pinsent Masons LLP*, [2012] PNLR 31 at [31]. The defender was made aware by September 1995 that there had been a discovery of contamination by TCE and also made aware of the potential health risks associated with TCE, which were expressly set out in the report by Kerr Mellor. At that point there had been no development of the site. The defender knew that there had been no previous investigation for solvents. The defender did not have any knowledge which explained why TCE was found. It ought to have realised that the TCE that was found must have passed through made ground above the trial pit that it was found in. The defender did not consider why this finding of TCE had not been made during the course of clearing the made ground above that area or that there might be other areas where TCE or other solvents might remain in the ground. The defender did not consider whether this finding meant that it ought to look back at the previous site investigation and the remediation strategy recommended, and review whether these had been appropriate for the intended end-use of residential development or whether reconsideration or investigation work might be necessary. This finding therefore triggered a duty of care on the part of the defender to review the earlier work it had undertaken, and to provide advice to City Link and to Scottish Enterprise on the need for reconsideration or further investigation of the site for potential solvent contamination. The defender was aware that it had not particularly considered contamination by liquids, and the main contaminants of concern were known to be static unless actively disturbed and moved.

[38] A surprising aspect of the 2001 remediation report was that the defender was prepared to produce such a document purely in reliance on the work that it had been told was carried out by CBC and Scientifics. It was not suggested on behalf of the pursuers that

the information given by CBC and Scientifics was not reported honestly and accurately, but this part of the site had not been tested before. It was one of the residual areas which had not been trial pitted or subject to any validation works down to the natural ground. The testing that was done was all in made ground. It had not been validated at all by the defender.

[39] The defender was therefore in breach of its duty of care for the following reasons. It formed a theory at the very outset, and thereafter, contrary to the ordinary and accepted practice of a reasonably competent consultant exercising ordinary skill and care in the investigation of a suspected contaminated land site and did not undertake an acceptable desktop study or analysis of the site, its former uses and the processes and substances associated with these former uses. Therefore, the defender had no understanding of the potential for contamination by anything other than from the iron and steel works. The desktop study investigation which formed the basis for future investigation of the site was not carried out by a person with the relevant knowledge and skill of desktop study work for contaminated land. The desktop study was not carried out to the appropriate standard or in accordance with the guidance of the time. This failure affected every subsequent stage of remediation of the site. The initial investigation of the site and the remediation strategy only focussed on potential contamination from iron and steel works and not from other sources. No consideration was given to known process areas in relation to the engineering works, or to the contaminants known to be associated with those premises beyond anything specifically drawn to their attention (the cyanide from the plating effluent tanks). No consideration was given to VOCs due to the defective investigation done at the outset. Elevated levels of organics indicated by cyclohexane extractable material testing in phase 1 and phase 2 ought to have been further investigated. The defender excluded further

cyclohexane extractable material testing at the validation stage because it relied upon visual inspection of the site to remove the ash and slag as the contaminant of concern. The remediation suite recommended by the Regional Chemist was based on the flawed desktop study exercise. Although the defender relied on the Regional Chemist for advice about the remediation suite, it remained the defender's responsibility. Subsequent site condition reports were not in line with best practice at the time, which would have included use of information in the DoE profiles, as Ms Copland had stated. The reported finding in 1995 of a substantial amount of ground contaminated by TCE, which was a substance the defender was told had significant health risks associated with it, ought to have led the defender to review the site investigation and remediation strategy.

Submissions for the defender

[40] The submissions made by senior counsel for the defender can be summarised as follows. In relation to duty of care, the defender was content to test the issue on the hypothesis that it was, as the pursuers asserted, an environmental consultant throughout its involvement with the site, or at least that there was no material difference arising from whether it was an environmental consultant or provided engineering services. It was, however, necessary that the parties were in a sufficiently proximate relationship: *Donoghue* v *Stevenson* (at 44); *South Pacific Manufacturing Co Ltd* v *New Zealand Security Consultants and Investigations Ltd* [1992] 2 NZLR 282 (at 306), cited by Clerk and Lindsell, *Torts* (22nd ed, para 8-17). It was also necessary to ask whether the pursuers were so clearly and directly affected by the defender's actions that they ought reasonably to have been in the defender's contemplation. The answer on every occasion should be in the negative, and so no duty of care was owed to the pursuers. The proper question in the present case was whether, if the

defender did not do what was expected, it was reasonably foreseeable that subsequent occupiers may suffer physical injury. That was not accepted by the defender. When imposing a duty of care, it is necessary to consider the content of that duty, which will be informed by the context in which it is said to arise: *South Australia Asset Management Corporation* v *York Montague Ltd* [1997] AC 191 (at 211); *Hughes-Holland* v *BPE Solicitors* [2017] UKSC 21; [2018] AC 599 (para 38). This approach was equally applicable to a case such as the present, as explained in Tromans, *Contaminated Land* (3rd ed, para.16-14). In the present case, before a duty of care could be recognised at any particular stage, it would be necessary to place the activities of the defender in their proper context, including having regard to the roles performed by others involved in the development of the site. By way of example, the post-remediation report of July 1994 did not produce a sufficiently proximate relationship with future occupiers.

[41] Prior to the proof, it was agreed that the pursuers' expert evidence would be led under reservation as to its admissibility. The defender's objections to its admissibility were insisted upon. Separately, the defender insisted upon the objections taken to certain lines of questioning put on behalf of the pursuers to both Ms Copland and Mr Crowcroft for want of any proper basis in the evidence. Reference was made to *Kennedy* v *Cordia (Services)* [2016] UKSC 6; 2016 SC (UKSC) 59; *Davie* v *Magistrates of Edinburgh* 1953 SC 34 (at 40); *Dingley* v *Chief Constable, Strathclyde Police* 1998 SC 548 (at 604); and *McTear* v *Imperial Tobacco Limited* 2005 2 SC 1 (at para 5.17). No evidence was presented from which it could be held that Ms Copland had acquired by study or experience sufficient knowledge of the subject to render her opinion of value in resolving the issues before the court. Ms Copland had no qualifications to allow her to give evidence on the subject of responsibility of environmental consultants. The entirety of her evidence should be excluded as inadmissible. In relation to

Dr Cox, there was no basis for concluding that he was qualified to explain investigation of brownfield sites at the stage of planning a contamination study. All of his evidence should also be excluded as inadmissible.

[42] The pursuer in a professional negligence action is expected to call the relevant factual witnesses, including the defender. The issue was addressed by Lord Reed in *McConnell* v *Ayrshire and Arran Health Board* 2001 Rep LR 85 (at [25]-[28]), citing with approval comments made by Lord MacLean in *Loughran* v *Lanarkshire Acute Hospitals NHS Trust*, 6 April 2000. As was explained in *Kennedy* (at [57]), it was the pursuers' obligation to furnish Ms Copland with the relevant factual material that should contribute to her opinion. Specifically, she did not have the position of those who had worked for the defender on why they did not do what was being suggested by the pursuers in relation to revision of the original desktop study. Having not provided her with the relevant factual material there was no proper basis on which she could be invited to comment: *McD* v *HMA* 2002 SCCR 896 (at [13], *per* Lord Justice Clerk (Gill)). Without a basis in fact, any views offered by an expert are valueless: Walker and Walker, *The Law of Evidence in Scotland* (4th ed, para.16.3.8). Accordingly, the objection should be sustained. Since Ms Copland had not given evidence that supported an allegation of professional negligence, the pursuers could not properly insist upon such an allegation: *Tods Murray* v *Arakin Ltd* 2011 SCLR 37 (at [92]); *D* v *Lothian Health Board* 2018 SCLR 1 (at [73]).

[43] The evidence of Dr Cox and Ms Copland should not be accepted as supporting an allegation of negligence against the defender. In any event, where it conflicted with the evidence of Mr Crowcroft, Mr Crowcroft's evidence should be preferred. Mr Crowcroft could, unlike Ms Copland, speak to practice at the time and, again unlike Ms Copland, is a member of SiLC (and, until recently, its president) and a "suitably qualified person" or SQP.

Mr Crowcroft was clearly qualified to provide opinion evidence and had considerable experience of practice throughout the relevant period. Dealing with the factual witnesses, the evidence of those who had worked for the defender was credible and reliable, as was the evidence of Dr Smith. Mr McKinnon had no true memory of events, as he acknowledged. In his oral evidence Mr McLetchie was also quite clear that City Link had proceeded at all times upon the basis of the written information in the defender' reports.

[44] In relation to stage 1 of the defender's involvement, the defender had ensured that proper cognisance was taken by seeking advice from the acknowledged expert in this field, Dr Smith. It was clear that the criticism made by the pursuers is directed at the wrong person. The defender performed its role properly. That limited role did not give rise to a duty of care. On stage 2, notwithstanding the position in her supplementary report, Ms Copland said she took no issue with Mr Blackwood's evidence on this and she accepted that there was factual evidence of looking for and testing for organic contamination. She had provided no oral evidence to the effect that such testing required to be more extensive or that it required a different focus. The defender proceeded on the footing that the pursuers were unable to advance any case in relation to the remediation works. The evidence supported the defender's position. No duty of care arose, and in any event there was no breach. Turning to the Kerr Mellor report and the discovery of TCE at plot C, the problem was localised and was properly dealt with. Again, there was no proximate relationship between the defender and the pursuers (and other subsequent residents of the site) at this stage. In any event, Mr Crowcroft explained the consequences of the discovery of the localised contamination and that there was no requirement on the defender to revisit its earlier work. Even if a duty of care was owed at this point, it was fulfilled.

[45] It was unclear to what extent the pursuers insisted upon any allegation in relation to the 1997 reports. At best, the criticism may be that the defender had a duty when preparing the 1997 reports to ensure that these were consistent with guidance available at the time and, in particular, to have reviewed the DoE profiles. The role of the defender was limited and the suggestion that the defender was acting as an environmental consultant at this stage was especially strained. However, even if that was the defender's role it could not sensibly be said that the pursuers were so clearly and directly affected by the defender's 1997 reports that they ought reasonably to have been in the defender' contemplation. Accordingly, no duty of care was owed to the pursuers (and other subsequent residents of the site) in relation to the preparation of those reports. However, even if there was duty, it was fulfilled for the reasons given by Mr Crowcroft in his report. If the 2001 report was being relied upon as allegedly negligent, it was necessary to recognise that it was only ever a draft, and CBC were in receipt of advice from both Scientifics and Paisley University. It could not properly be said that there was a sufficiently proximate relationship between the defender and the pursuers (and other subsequent residents of the site) in relation to the draft report. Once again, if a duty of care was found to have been owed, it had been fulfilled for all of the reasons given by Mr Crowcroft in his report.

Decision and reasons

Objections taken by the defender

[46] As noted, senior counsel for the defender submitted that the evidence of Ms Copland and Dr Cox should be entirely excluded from consideration because of their lack of relevant knowledge and experience. While it is correct that Ms Copland is not a member of SiLC and is not a "suitably qualified person", she did explain her experience of dealing with matters

of land contamination (see para [25] above). That experience covers a number of aspects of dealing with such matters. Her opinion evidence was based largely on the standards and guidance documents that were available at the time. Her evidence on the ICRCL guidance broadly coincided with that of Mr Crowcroft, although she also referred to other documents such as the DoE profiles. I note that she is not a civil engineer and she was not in practice in her field of work at the time of the key events which arose in the present case. However, the defender did not insist upon its pleaded position that it could not be regarded as having acted as an environmental consultant. In the 1990s, civil engineers were engaged in matters of land contamination in the same sort of manner as environmental consultants later came to be involved. At the material times, the concept of environmental consultancy was in its relative infancy and the particular disciplines which then existed and dealt with such matters were not rigidly defined. Thus, Ms Copland's lack of experience in the discipline of civil engineering is not sufficient to cause her evidence to be excluded. I accept, of course, that guidance is not the same thing as actual practice, but on the evidence of Mr Crowcroft it is clear that at least some of the guidance in existence (particularly from the ICRCL) was of real significance. I conclude that it was demonstrated that Ms Copland has sufficient qualifications and relevant knowledge and experience to allow her to give her opinion on the defender's conduct at the material times. I therefore reject the defender' submission that her evidence should be excluded from consideration. Properly understood, however, her evidence in relation to actual practice at the material times was confined to what was stated in the guidance to which she referred. When assessing the weight to be given to her evidence, I take that into account along with the various other factors referred to above.

[47] In relation to Dr Cox, he is a consulting engineer with substantial experience in relation to hazardous substances. His report and his evidence concerned the historical

industrial operations at the site and the potential waste materials arising from them. In my opinion, he has relevant knowledge and experience to allow him to speak to those issues. His evidence was given in a careful and measured fashion and he was entirely candid about the matters upon which he was not able to assist the court. I therefore reject the defender's contention that his evidence should be excluded as inadmissible. I accept that he has no particular qualifications or experience in relation to investigation of brownfield sites at the stage of planning a contamination study and I take this into account in dealing with the weight of his evidence.

[48] The next ground of objection raised by the defender was that there was no basis in fact for the criticism made by Ms Copland in re-examination, that there should have been revisal of the original desktop study following upon the discovery of TCE at trial pit 15, as none of the factual witnesses employed by the defender at the time had been asked why they did not do so. However, on my notes, Ms Copland had already been asked in examination-in-chief about whether the DoE profiles were relevant in relation to revisal of the desktop study once the TCE contamination had been discovered. In any event, I was shown no authority for the proposition that such evidence is inadmissible. The cases of *McConnell* v *Ayrshire and Arran Health Board* and *Loughran* v *Lanarkshire Acute Hospitals NHS Trust* deal with the need to ask the factual witness what he or she actually did. This will of course also make clear what the witness did not do. That provides the factual basis for the expert's evidence. The expert witness should, in a professional negligence case, be commenting upon whether the course the defender adopted was one which no ordinarily skilled professional would have taken had he or she been acting with ordinary care. The evidence objected to was about whether there should have been revisal of the original desktop study. We know that was not done. Ms Copland could therefore comment on

whether no ordinarily skilled professional would have failed to take that approach had he been acting with ordinary care. If the defender wished to adduce evidence as to why that course was not taken it was entirely open to the defender to do so. I therefore repel that objection.

[49] Senior counsel for the defender also objected to certain questions put to Mr Crowcroft in cross-examination. The evidence was allowed to be led subject to competency and relevancy. The basis for these objections was that Ms Copland had not given evidence on the allegation put in each question and hence no basis existed for the line of questioning. In respect of two of those objections, I accept that position to be correct and I sustain the objections to the following lines of questioning: (i) whether it would have been reasonable for the defender to have gone back to Scottish Enterprise or the LDA or "whatever body it was" to advise them about the finding in trial pit 15 and what potential consequences that may have had for the rest of the site; and (ii) what the LDA might have taken from the points the defender is recorded as having said in the minute of the meeting with them on 15 September 1995. I would add, however, that Mr Crowcroft's answers to these questions did not assist the pursuers' case.

Assessment of the expert evidence

[50] As I have noted above, Ms Copland had no actual experience of the practice of professionals dealing with contaminated land at any of the material times when the alleged failures are said to have occurred. At the time of the proof, she was aged 36, and had graduated in 2004. This is of significance, as the case concerned work that commenced twenty-nine years before the proof and in a discipline or field (civil engineering or environmental consultancy dealing with contaminated land) that was developing at that

time and continued to develop thereafter. When her qualifications and experience are compared to those of Mr Crowcroft, I am left in no doubt that he was very substantially better equipped to address the issues in this case and to assist the court. When giving her oral evidence, on various occasions Ms Copland stopped short of criticising the defender to the same extent as in her reports. Other parts of her evidence were given in a somewhat guarded manner. To the extent that she founded upon guidance other than from the ICRCL (eg the DoE profiles) that was not supported by the evidence of other witnesses (such as Dr Smith and Mr Crowcroft). Moreover, guidance does not necessarily set the standard of care (*Baker* v *Quantum Clothing Group*, at [101]) and the test in *Hunter* v *Hanley* includes consideration of whether there was a normal and usual practice which the defender did not adopt. Apart from reference to guidance, Ms Copland was simply not in a position to speak to the normal and usual practice at the material times. She was nonetheless plainly seeking to assist the court and she gave her honest opinions on all of the points raised with her.

[51] In contrast, Mr Crowcroft had very considerable experience of practice throughout the relevant period. I have noted earlier his qualifications and experience, which resulted in him achieving positions of significant responsibility in the private and public sectors in the subject area of contaminated land and making materially important contributions to it. That experience, along with the manner in which he dealt with the issues in the case and the reasoning that he gave, resulted in his evidence being convincing. He took a very well-informed, realistic and practical approach to the issues in the case. Put broadly, Mr Crowcroft set out the normal and usual practice regarding the redevelopment of brownfield sites and he identified the key guidance documents and the normal contractual framework. His opinion was that the defender accorded with the normal and usual practice and indeed that it had taken a cautious or conservative approach in respect of the guidance.

The defender had worked within the framework of the industry-standard documents. I was left in no doubt that his evidence should be preferred to that of Ms Copland. In addition, while Mr Crowcroft properly addressed the test in *Hunter* v *Hanley*, Ms Copland's approach involved discussion of what she described as failures to follow best practice and certain other alleged failures which did not fully address the *Hunter* v *Hanley* test. At times in her evidence aspects of the test were explored, but not in a precise and structured manner. However, even assuming that in expressing her conclusions she was applying the proper test, given the marked differences in qualifications and experience between her and Mr Crowcroft, and the practical, logical and well-reasoned basis for Mr Crowcroft's conclusions, I give substantially greater weight to the evidence of Mr Crowcroft. The pursuers submitted that while Mr Crowcroft had a distinguished career and impressive credentials, his evidence should not be relied upon by the court. The central plank of that submission was that Mr Crowcroft was said to have made a number of assumptions that were not supported by the evidence. I did not view the key parts of the evidence of Mr Crowcroft as in any way based upon mere assumptions; rather, his evidence was founded upon his considerable and impressive experience, logic and common sense, and the normal and usual practice at the relevant times. Accordingly, where there are any material differences of opinion between these two experts, I prefer the evidence of Mr Crowcroft to that of Ms Copland. This applies to each of the points of criticism of the defender raised in Ms Copland's reports and in her evidence. In light of her lack of experience and her inability to speak to the normal and usual practice at the relevant times, I also place no weight on her evidence given in answer to the question to which objection was taken.

[52] Dr Cox gave his evidence in a careful and fairly impressive manner. However, in relation to the information which he had discovered about the history of the site, the

pursuers did not properly identify how, when and why the defender should have come across such material. Morever, the pursuers never properly addressed the question of whether no reasonably competent environmental consultant or civil engineer carrying out the contractual duties undertaken by the defender would at the material time have failed to identify specific items recently found by Dr Cox, or indeed what they would have taken from them. I therefore regard the evidence of Dr Cox, while genuine and of some help in relation to the background, as not being of any substantial weight. On the matters which Dr Cox discussed, I again prefer and accept the evidence of Mr Crowcroft.

Issue 1: duty of care

[53] I accept the broad point made on a number of occasions in the authorities (including in *Perrett* v *Collins* (at 88)) that where a person is involved in an activity which, if he does not exercise reasonable care, will create a foreseeable risk of personal injury to others, the person owes a duty of care to those others to act reasonably having regard to the existence of that risk. In my opinion, where a firm of civil engineers has been engaged to carry out specified work relating to contaminated land, on a site which is intended to be developed for housing, and where the contaminants may foreseeably be such as to cause injury to those who will reside in housing on the site, the firm owes a duty of care to those who later become residents. It is true that there are factors which might be argued to point towards a lack of proximity, including that the defender was engaged by various entities, asked to carry out work only of a specific nature, gave reports which were largely factual and contained caveats, and that at least some of the work was carried out long before any development of housing. Nevertheless, given the nature of the potential contaminants and the seriousness of the injuries they could cause and the fact that a significant number of individuals could be

exposed to potential harm on a site where housing development was intended, there is a sound basis for concluding that there was sufficient proximity and that a duty of care was owed by the defender to the pursuers. This applies even in relation to the preparation of reports, given their relevance in relation to the proposed development of the site. I therefore reject the defender's position on the lack of proximity and the absence of a duty of care.

[54] However, that leaves open the issue of the scope or extent of the duty of care. It was argued for the pursuers that:

> "It was the duty of the [defender]: (a) to investigate the nature, concentration and distribution of contaminants within the site; (b) to prepare a scheme of remediation that would remediate the site to meet the requirements for the future residential use of the site."

To some extent at least, the pursuers relied upon alleged assumptions of responsibility, which I discuss further below. The defender did not insist upon its averments that the case based against it as being an environmental consultant was wholly unfounded. But the specific context in which the defender acted is obviously very important: *South Australia Asset Management Corporation* v *York Montague Ltd* (at 211); *Hughes-Holland* v *BPE Solicitors* (at [38]). Much therefore turns on the nature and terms of the defender's involvement at each stage of the work the defender was engaged to perform. The documentary productions provide information on those points. In that regard, subjective views expressed by witnesses about their understanding of the nature of the defender's role, given well over twenty years later, carry little weight. I would also add that several of the witnesses plainly had no clear recollection of the detail of what had occurred at the material times (indeed some said that their evidence was based largely upon what they had read in the documents they had been shown). There were also documents referred to in evidence, such as the site diaries, where the author or those present or involved were not identified or called as

witnesses, making it difficult to reach clear conclusions about the meaning or relevance of these documents.

[55] The pursuers' articulation of the scope of the duty of care is very much contradicted by the evidence of Mr Crowcroft, summarised above, which I accept. I also reject the pursuers' argument in relation to assumption of responsibility. The factual and legal grounds for assumption of responsibility were not made out and the contention is again strongly refuted by the evidence of Mr Crowcroft, including that the defender did not assume responsibility for the advice and methodology put forward by the Regional Chemist. I conclude therefore that the extent of the defender's duty of care to the pursuers was to exercise reasonable care when performing its agreed role under the various contracts.

Issue 2: Breach of duty

[56] The first of the key contentions made by the pursuers is that the defender did not undertake an acceptable desktop study or analysis of the site, its former uses and the processes and substances associated with these former uses. In oral submissions for the pursuers it was suggested that there was in fact no evidence that the desktop study had been carried out. Contrary to that position, the evidence does indeed demonstrate that the defender undertook a desktop study. I accept that there was no specific report lodged as a production, but I was given no real basis to conclude on the evidence that no actual report was ever prepared, far less that no desktop study had been done. There plainly was a compilation or file of material which had been located and collated by the defender at the time. That material was sent to the Regional Chemist. The defender's letter dated 22 June 1990 expressly referred to Ordnance Survey sheets "collected during our own desk studies". I have no reason to regard that reference in a contemporaneous document as an untruth.

Mr Crowcroft explained that the various items referred to in evidence as having been collected at the time would have contributed towards a detailed desktop study. I am left in no doubt that the defender conducted a desktop study.

[57] As to whether the defender exercised reasonable care when doing so, I accept the evidence of Mr Crowcroft which bears upon that issue. The report by Thorburn Associates for the SDA in June 1988 (which formed part of the material identified at the time and in the possession of the defender) stated that an iron and steel works had been located in the northern parts of the site and that the site was later occupied by an engineering works which was demolished in the late 1970s. The report also refers to the site as the "former Satchwell Sunvic site". As Mr Crowcroft explained, there were similarities between the various documents collected or held by the defender and the more extensive references quoted by Dr Cox. Mr Crowcroft's opinion was that the defender had carried out a much more comprehensive desktop study than that done by Thorburn Associates in relation to the Java Street site. As matters evolved, the defender made contact with an appropriate expert, the Regional Chemist, who had some experience of testing for contamination on the site, albeit in a limited area. The defender's final proposal to the SDA made clear that the defender's input was now (when compared to the previous proposal) significantly reduced, given the involvement of the Regional Chemist. The defender plainly relied upon the Regional Chemist to interpret the significance of the industrial history and followed the approach recommended by the Regional Chemist. When more information came to light from the Regional Chemist, the need for sampling and analysis became more evident. The various uses of areas of the site and the fact that all of the processes carried out were not known actually underpinned the methodology and the eventual choice of remediation approach: the removal of all contaminated made ground from the site. I therefore accept that the

defender delivered the scope of the services agreed and did not fail to exercise reasonable care.

[58] The pursuers argued that the desktop study was not carried out by a person with the relevant knowledge and skill of desktop study work for contaminated land. The identity of the person employed by the defender who collated much or all of the material is not of any significance. For the reasons given by Mr Crowcroft and noted above, the defender complied with the normal and usual practice. Further, in relation to the nature and extent of the material found by the defender at the time, the pursuers failed to establish that any particular piece of information, including any further material discovered by Dr Cox, should have been identified by the defender or indeed by any reasonably competent environmental consultant or civil engineer exercising ordinary skill and ordinary care. In addition, the pursuers failed to establish what should properly have been taken from that information by such a person. By way of example, Dr Cox had, as Mr Crowcroft put it, speculated that the Ministry of Supply clothing operation in 1945 to 1947 had used TCE and/or PCE for dry cleaning of clothes, when use of such substances was only a possibility. Further, the ground below the site had been substantially disturbed since 1947, with new buildings constructed and old buildings demolished and then with the upper metre or so of soil removed. Mr Crowcroft's view, which I accept, was that this substantial disturbance would very likely have exposed any leaked TCE and PCE (if indeed present on the site) to air allowing it to volatilise and disperse. Dr Cox had also speculated that solvent contaminated sludges would have been buried on site, rather than sent off for incineration. I therefore conclude that the pursuers have failed to establish any breach of duty in respect of the desktop study.

[59] As regards the investigation and the identified remediation solution, it was clear from the evidence that the defender relied upon the Regional Chemist. This was a

reasonable approach, the Regional Chemist being a specialist public body with knowledge of industrial land. The approach taken by the Regional Chemist was in accordance with the guidance and practice. The proposed scope of the analysis (put forward by the Regional Chemist) reflected the list of contaminants for which there were trigger values available, as published in the ICRCL guidance. It was made clear to the SDA that this was "not a comprehensive analysis but would cover all of the likely major contaminants on site." The inclusion of cyclohexane extractable matter meant that the Regional Chemist had covered the potential for organic substances being present, without going to the substantial cost of undertaking detailed analysis of individual organic compounds. The pursuers contended that although the defender relied on the Regional Chemist for advice about the remediation suite, it remained the defender's responsibility. I do not accept that view; the Regional Chemist was separately appointed by the SDA. While the proposal was a joint one, the extent of the input from the defender was clearly described. Contrary to the submission for the pursuers, the defender did not present the Regional Chemist's advice as its own. The cases relied upon by the pursuers (*Try Build Ltd* v *Invicta Leisure Tennis Ltd* and *South Lakeland DC* v *Curtins Consulting Engineers Plc*) involved quite different factual circumstances. It was for the client (the SDA) to decide what grid of sampling it was prepared to pay for. Moreover, Dr Cox and Ms Copland were not able to say where localised or targeted testing of solvents ought to have taken place. In her oral evidence Ms Copland accepted that there was factual evidence of looking and testing for organic contamination. She did not appear to assert that testing required to be more extensive or that it required a different focus. In any event, visual and olfactory means of identifying contaminants are also of importance. In view of the fact that not much was known about the specific uses of particular buildings formerly on the site, the approach to investigation was the use of the

regular grid, covering all areas. This approach was recognised as normal good practice. The phasing of testing was also entirely in accordance with good practice at the time. The Regional Chemist's evaluation of the test results referred to the levels set out in the ICRCL guidance. The threshold level (rather than the higher level requiring action) was relied upon by the defender as a means of deciding whether removal of material was necessary, which Mr Crowcroft described as a "very conservative" approach. I accept his evidence that the defender performed its role properly and in accordance with usual and normal practice. Applying the test in *Hunter* v *Hanley*, this involved no breach of duty.

[60] The pursuers contended that subsequent site condition reports were not in line with best practice at the time, which would have included use of information in the DoE profiles. Under reference to those profiles, Ms Copland said that chlorinated solvents, including TCE, were listed as being used in such works as had previously taken place on the site. However, the DoE profiles were advice and information sources rather than a set of rules to follow. Mr Crowcroft explained that an analytical suite based on the relevant industry profile would run to nearly six pages of substances, which was not a tenable way to proceed at the time. The ICRCL guidance did not recommend testing for every possible contaminant and that guidance was followed, in accordance with the usual practice at the material times. The defender had inserted a clear caveat into its reports that there could be other areas of contamination which had not yet been located. In particular, the 1997 site condition reports on plots B1 and B2 stated that the comments made in the report were based on the condition recorded during investigations and remediation works and said:

> "There may be, however, conditions existing which have not been revealed by the studies and which could not be taken into account. Therefore, bidding organisations and their advisors must satisfy themselves regarding the site conditions and no warranty is given or offered to users of this report."

I accept the evidence of Mr Crowcroft that the defender accorded with the usual and normal practice and the relevant guidance, including in relation to the site condition reports.

[61] The pursuers also contended that the finding of a substantial amount of ground identified in 1995 as contaminated by TCE, which was a substance the defender was told had significant health risks associated with it, ought to have led the defender to review the site investigation and remediation strategy. It was clear from the evidence of Dr Smith and Mr Crowcroft that a localised contamination problem could be missed by the standard grid approach. Visual and olfactory methods to identify localised hotspots are important and a remaining contaminant might well be identified during excavation or construction works (including for foundations or drains) and dealt with at the time. Substantial construction works took place on the site, and no other localised hotspots were found. In addition, the defender had been told that the particular problem would be resolved by removing the material and the defender recommended that approach. It is correct that the evidence was not absolutely clear as to whether the contaminated soil found at this stage was altogether removed, but on the other hand the pursuers failed to prove, or even suggest, that it was not removed. Moreover, all of the material indications are that this was fully intended to be done; there is nothing to indicate that it was not carried out. For those reasons alone, I therefore conclude that the pursuers have failed to establish any breach of duty in this regard. In addition, the pursuers did not identify in evidence what actual measures or steps the defender ought to have taken in any review of the site investigation or remediation strategy. It was not clear from the evidence precisely what targeted investigation the pursuers were suggesting ought to have been either recommended or carried out. As Mr Crowcroft put it, targeted investigation involves knowing the target. The factual basis

for this alleged breach of duty was not established in evidence, nor was the test in *Hunter* v *Hanley* properly addressed by the pursuers' expert witnesses.

[62] The defender's Supplementary Post-Remediation Report dated 2001 is described as a draft, but there was no suggestion that a later finalised version was produced or that the draft was not relied upon and so I view it as the actual report. The pursuers argued that for the purposes of this report the defender relied on work that the defender had been told had been carried out by CBC and Scientifics, with the involvement of Paisley University. I accept the evidence of Mr Crowcroft that in the circumstances it was reasonable for the defender to rely upon what the defender was told had been done. Counsel for the pursuers expressly acknowledged that it was not being suggested by him that CBC and Scientifics had not reported their work honestly or accurately. On the evidence, the defender had no reason to consider that these firms had not performed their work responsibly. Again, no breach of duty is established.

Disposal

[63] For the above reasons, I repel the pleas-in-law for the pursuers, sustain the fourth plea-in-law for the defender and grant decree of absolvitor.