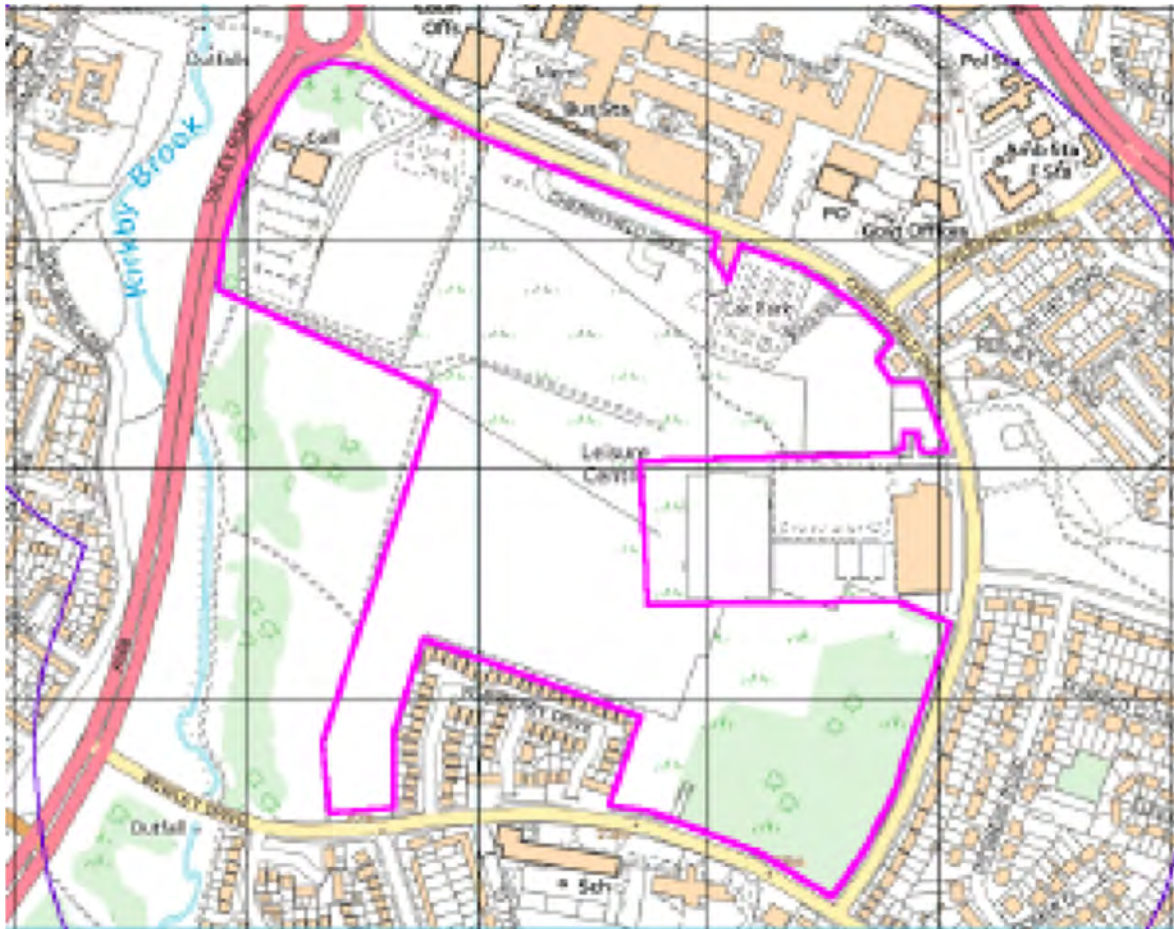


Asbestos Management Plan (Remediation Earthworks)



Land off Cherryfield Drive,
Kirkby,
Liverpool.
L32 8RX

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1.0 Introduction

This Asbestos Management Plan (AMP) outlines the methods to be employed by Urban Regen Ltd (UR) to systematically assess, reduce, and prevent exposure to asbestos during demolition, remediation, and earthwork operations. The AMP is a working document with the aim of ensuring that during remediation earthworks activities where ground is excavated:

- Site workers are aware of the prevalence and location of asbestos on the site.
- Fibre release is primarily controlled at source by considered operational practices which include physical and management control measures.
- All appropriate measures are taken to prevent, or, where not reasonably practicable, reduce, airborne fibre generation and exposure of site workers and neighbouring site users.
- Workers that are at higher risk are provided with the appropriate training, supervision, and equipment to prevent exposure
- Asbestos emissions are monitored to demonstrate compliance

This AMP details the potential risks of exposure and the control measures to be employed to mitigate the risk, supported through monitoring procedures and the review of documented complaints. It is to be read in conjunction with the following documents:

- Cherryfield Drive, Kirkby, Liverpool: Asbestos Risk Assessment. Smith Grant LLP, Ref: R3138L20250630, 01st July 2025
- The site specific '*Construction Phase Plan*' (CPP).
- The site specific '*Construction Environmental Management Plan*' (CEMP).

The methodologies detailed in this '*Dust Management Plan*' have been prepared in accordance with the following document:

- HSE Approved Code of Practice: Managing and Working with Asbestos ACoPL143
- CLAiRE CAR-SOIL Control of Asbestos Regulations 2012. Interpretation for Managing and Working with Asbestos in Soil and Construction Materials

The requirements of an Asbestos Management Plan are set out in ACoPPL143, and have been refined to reflect the specific incidence of ACM and asbestos incidence material on the site (entrained in a soil matrix rather than within the structure of buildings):

- Identifying the person(s) responsible for managing the asbestos risk, their required competence, and requirements for delegation of specific tasks;
- A copy of the asbestos risk assessment and Site Investigation Report;
- Instructions that any work on the site involving disturbance of the ground cannot start without the relevant parts of the Asbestos Risk Assessment and Site Investigation Report being checked.

The plan should also include details for how this will be achieved. In particular, the plan should identify the procedures and arrangements to make sure:

- The record/register is checked in good time before the work starts;
- Checks will be made that the information on the presence of asbestos has been understood and will be considered;
- Checks will be made that the correct controls will be used and that competent asbestos-trained contractors will carry out the work;
- Plans for any necessary work identified from the risk assessment, e.g. relocate impacted materials or remove ACMs for safe off-site disposal;
- The schedule for monitoring the condition of any ACM encountered and update the risk assessment if necessary;
- How to communicate the content of the management plan;
- Contingency arrangements if the main contact person for asbestos risk management is not available

2.0 Approval/distribution/quality, compliance, and review

2.1 Approval

Approved on behalf of:	Date	Name	Signature
UR			
Barratt Redrow PLC			
LPA (EHO approval and/or Planning Condition Discharge			

Table 2.1 Asbestos Management Plan approval

2.2 Distribution

Copy No.	Name	Position	Location
MASTER			
2			
3			
4			
5			

Table 2.2 Asbestos Management Plan distribution

2.3 Quality, compliance, and review

During the Remediation Earthworks, this site-specific AMP is to be managed in accordance with the Urban Regen Ltd quality and environmental management system accredited to ISO 9001 and 14001, respectively.

It will be the responsibility of the Site Manager to ensure that this site-specific AMP is always adhered to.

As a minimum, the management plan, including records and drawings, should be reviewed every 12 months. It should also be reviewed if there is reason to believe that circumstances have changed (there is a change to the Risk Assessment due to new information, work being undertaken, ACMs removed or relocated etc). The plan, including records and drawings, should then be updated accordingly

It will be the responsibility of Urban Regen Ltd senior management to carry out monitoring, auditing, and evaluation of site performance to ensure compliance with the ISO 9001 and 14001 standards with inspections supplemented by external audits to ensure adherence to these standards. Any external audits are to be copied to the client upon receipt.

A record of all inspections, reviews, audits etc. are to be always held on-site; reviews being recorded on the Asbestos Management Plan form - see Table 2.3 (to be maintained in the MASTER COPY only).

A copy of this Management Plan will be provided to Barratt Redrow PLC for distribution to all other parties involved in the excavation of soils on the site, for integration into their own Risk Assessments and Method Statements, however Urban Regen are not responsible for any updates, edits or changes necessitated by third party tasks or working methods. The Principal Contractor at each stage in the development and for each individual phase (different areas) and each specific stage (in the overall) programme duration will be responsible for reviewing this Management Plan and implementing those controls appropriate to the works under their control and the Site Manager employed by the Principal Contractor for the implementation of the appropriate monitoring and control measures.

Date	Details of inspection, audit, review	By whom	Actions taken	Name	Signed
15/07/2025	DRAFT	B Thomas	Issued to Barratt Redrow PLC for review		

Table 2.3 Record of ‘ Asbestos Management Plan ’ review

3.0 Site background information

The site, off Cherryfield Drive in Kirkby, was previously owned by Knowsley council and used for a variety of purposes, including a school, college, housing, and various commercial enterprises, is to be redeveloped in to circa 800 new homes by Barratt Redrow. The development will be split between the Barratt David Wilson Northwest and Barratt Manchester offices.

Located circa 13km to the northeast of Liverpool city centre, the site is irregularly shaped, covering approximately 22ha. The site is generally level and consists of open land, with the only remaining above ground structure relates to Kirkby College in the north west of the site. The site is bound by Cherryfield Drive to the north and east, residential properties off Bewley Drive to the South, Cherryfield Drive, Kirkby Leisure Centre (Health and Fitness Club) and public open space to the west. These neighbouring properties are considered sensitive adjacent land uses in consideration of risk and perceived risk of asbestos exposure

Historically, the land adjacent to the site to the east was a landfill operated in the 1960's and 1970's. Ground investigation on the landfill, as part of an earlier redevelopment scheme, detected a high incidence of asbestos in the deposited wastes. Although the landfill licence did not cover any part of the current development site, sensitivities to the potential for asbestos containing waste have influenced a Planning Condition requiring an Asbestos Risk Mitigation Plan (Excluding Demolition Works) to be submitted to, and approved by, the Local Planning Authority.

Recent site investigation works have confirmed the presence of widespread made ground over all parts of the site, to varying depths. The site investigation has involved the collection of 126 samples of made ground of which 12 (10%) contained asbestos fibres with Chrysotile, Amosite and Crocidolite all identified. Only one sample contained ACM (a fragment of bitumen) and a visual identification of suspected Cement Sheeting ACM was reported in one location.

The reported incidence, form and distribution of asbestos is typical of an Urban Made-Ground soil in a Brownfield setting and are generally considered to be of low risk to workers and the wider population. Such soils do require remediation to protect future site users as residents and particularly children can be exposed to garden soils, this is usually accomplished by a simple cove system to isolate the materials at a depth that would normally remain undisturbed due to domestic activities.

Based on the site characterisation, there is also the risk of localised higher impacted materials: caches of ACM or rogue loads deposited alongside uncontaminated soils can be encountered and the AMP contains contingencies to manage what increased risks can reasonably be anticipated during delivery of the site.

Release of asbestos fibres from soils has been the subject of detailed risk assessment by CLAIRE, SoBRA, CIRIA and others, it is widely recognised that adherence of fibres to the soil matrix is sufficient to prevent airborne release unless two conditions are met:

- 1) Drying out – natural soil moisture content in the UK varies but below the surface in vegetated or covered areas can be anticipated sufficient to wet the soil particles and any asbestos fibres present. On exposure however the surface of the soil can dry out.
- 2) Mechanical disturbance – by ambient conditions (wind), other erosion by trafficking surfaces and in the context of this project, excavation of soils, processing, haulage stockpiling and compaction.

To facilitate the residential development of the site, remediation/earthworks including the breakout of hard standings/relict foundations, turnover of all made ground, processing of all hard arisings for re-use, and earthworks to achieve the required landform. These activities infer a high level of mechanical disturbance and, once vegetation and surfaces are removed, the risk of wind erosion also rises. If these activities occur during a period where the site surface dries out there is a low but foreseeable risk that some fibres could be mobilised.

Based on the incidence and concentration of asbestos described in the site investigation, the concentration of airborne fibres would normally be very low and well below the Control limit for non-licensed work. However Urban Regen Ltd adhere to ALARP (As Low as Reasonably Practicable) principal in respect of Risk Management and Health and Safety. When managing risks related to hazardous substances like asbestos, employers must reduce exposure to a level that is considered "reasonably practicable," meaning the risk must be minimized after weighing the risk against the time, trouble, and cost involved in controlling it. This principle is enshrined in UK legislation, including the Health and Safety at Work etc. Act 1974, and extends to various hazardous substances, including those containing asbestos.

The level of risk will change throughout the programme; the highest chance of encountering ACM and the highest level of mechanical disturbance and largest areas of exposed soils will be during the Remediation Earthworks carried out by URL, however site investigation contractors before the main works, and civil engineers/groundworker's during the construction stage will also expose ground in excavations, albeit on a smaller scale and after the most significant contamination has been dealt with and verified as adequately completed. Following completion maintenance workers for utilities could expose ground, although the Remediation Strategy is designed to prevent exposure of future residents to residual soils.

4.0 Risk Assessment

4.1 Sources

Dust, and therefore asbestos fibres, may be generated during the following activities:

- Earthworks associated with the remediation and re-profiling of the site.
- Processing of demolition/earthworks arisings.
- On-site vehicle/plant movements.

4.2 Receptors

Once released, fibres will be transmitted via air transport (dispersion). The prevailing winds associated with the site are influenced by the local topography which generally dictate a north-easterly heading however this is not consistent enough to assess exposure over the project timescales. Immediate receptors are:

- Site Workers.
- General public in car parks, shopping area, neighbouring streets, public open space, and leisure centre.
- Occupied residential properties adjacent to the development site.

4.3 Impacts

Asbestos exposure at high levels can cause asbestosis (scarring of the lungs): this is not likely to occur in the context of the site and planned activities. However, mesothelioma and other cancers can occur following at lower exposure levels. It is generally considered that a linear exposure model is appropriate for assessing risks of cancer where the lower the concentration of fibres and exposure duration, the lower the risk of adverse effects.

Despite this there are no definitive limits set for Environmental Exposure in the UK context. It is widely recognised that the Control Limit of 0.01 f/cm³ over a 4-hour exposure is not suitable for environmental exposure.

Various attempts at defining the level of environmental exposure that would result in unacceptable risk have been made, one authoritative summary paper in relation to land contamination by the Society for

Brownfield Risk Assessment¹ reports concentrations resulting in a 1 in 100,000 risk of death from cancer ranging from 10's to 10,000's f/m³, depending on asbestos type and land-use. The lower limits not being measurable by commercially available techniques. Asbestos is also ubiquitous at low levels in the environment and in the UK is thought to be less than 100 f/m³.

4.4 Risk Assessment

Smith Grant LLP have carried out a site-specific risk assessment using the techniques provided in CARSoil (attached Appendix A) which also takes into consideration the Remediation Objectives and Criteria for the site as set out in the agreed Remediation Strategy. Planning Consent 11042025 Condition 24c refers to "The approved Remediation Scheme" assumed to be E3P Remediation and Enabling Earthworks Strategy, Cherryfield Drive, Kirkby Ref: 15-280-R2-5, November 2024 which requires specific remediation measures at 4 locations referred to as Hotspot removal

The risk assessment considers the likely impact of work in 2 scenarios:

- 1) The asbestos hotspots identified to date (where quantifiable soil concentrations > 0.001% have been identified (and by extension other areas where similar conditions are encountered during the works
- 2) The rest of the site where a low incidence (10%) of soils could be expected to contain trace (unquantifiable but <0.001%) amounts of asbestos fibre.

Smith Grant LLP conclude that works are non-licensable and risks can be managed using adequate dust suppression.

Additional protection for workers engaged in specific tasks (envisage to be limited to excavations at the identified asbestos hotspots the hand-picking of ACM) may also need RPE, reassurance air monitoring and task specific PPE/RPE.

Anyone undertaking excavations in advance of the site remediation earthworks (ground investigations, archaeology, invasive species) should adopt a precautionary approach should adopt a precautionary approach, avoid working in the identified asbestos hotspots and maintain a watching brief for ACM by

¹ Discussion Paper on Guidelines for Airborne Concentrations of Asbestos Fibres in Ambient Air: Implications for Quantitative Risk Assessment Authors: Simon Cole¹, Simon Hay², Barry Mitcheson³
https://sobra.org.uk/?pmpro_getfile=1&file=2021/02/SoBRA-White-paper-on-tolerable-asbestos-concentrations-in-air_January2021-revision&ext=pdf

staff having the appropriate Asbestos Awareness Training, as well as avoiding working in dry conditions or generating dust.

Following implementation of the approved remediation strategy, which mandates no detectable asbestos in shallow soils and sequestration of any heavily impacted material at depth in surveyed locations that will not be disturbed in the future risks will be minimal and dedicated control measures are not required.

However, groundworkers, civil engineering contractors and utility companies will penetrate retained fill materials and must be made aware of the Asbestos Risk Assessment outcomes, and prescribed Control Measures and Monitoring requirements. As a minimum high standard of dust suppression, housekeeping and occupational hygiene are required must be adopted by all parties breaking ground. Specific to this site and the requirements of the Planning Conditions, there is a requirement for recognising where risks may be elevated to levels requiring other assessment, monitoring, or enhanced controls. All site workers involved in excavations, should therefore have undertaken Asbestos Awareness training.

5.0 Control measures

Management and physical control measures have been prepared to control any potential dust generation: by extension these measures will wet the soil and reduce mechanical disturbance, preventing the release of asbestos fibres which occur under the same mechanism as respirable dust.

5.1 Site Management responsibilities

The Principal Contractor Site Manager will have the responsibility for ensuring that dust generated on site is prevented/minimised. Regular progress meetings between the Site Manager, Senior Management Team, client, Sub Contractors, and independent consultants will be carried out to discuss current and proposed site operations. These discussions will include the impact of works with regards to the environmental impact of the works, including any potential dust generation.

These reviews will be carried out in parallel with assessment of the data obtained during the Verification Plan for the site during the remediation earthworks. This will provide a continuous supplement to the Site Investigation data with respect to the incidence and severity of asbestos impacted soil, as the recommended testing regime is implemented by independent consultants specialising in Land Contamination (including asbestos).

The Site Manager will ensure that all workers (including sub-contractors) are competent to implement this AMP. As a minimum all staff must have an in-date Asbestos Awareness qualification. Operatives

responsible for physically working with asbestos, and who therefore need to adhere to the recommended RPE/PPE and decontamination procedures will need the relevant Non-Licensed Work Training.

The Site Manager will also be responsible for briefing all workers (including sub-contractors) on the risks associated with and the potential of encountering ACM during the works, and implement a watching brief by all staff for ACM exposed during the works as the site is remediated. Further interim briefings will be carried out as part of the programme of Toolbox Talks covering health, safety, and environmental issues on a regular basis throughout the duration of site works.

If conditions encountered are worse than expected (for instance a buried cache of lagging, AIB, or insulating material is encountered), there may be a requirement for Licensed Work. Urban Regen Ltd is a Licensed Asbestos Removal Contractor (Ref: 242506084 <https://www.ukata.org.uk/library/hse-licensed-asbestos-removal-contractors-register>), so can provide suitably qualified resource carry out any licensed works.

Following completion of the Remediation Earthworks, these risks will reduce substantially as the asbestos hotspots will have been dealt with and the general fills undergone inspection for the presence of more severe asbestos impacts not identified during the site investigation. However, there should still be an assumption that low-level, trace incidences of asbestos will be present in the site fills and basic precautions adhered to.

5.2 Operational control measures

Dust generation on site is anticipated, however, works will be planned and carried out in a manner to minimise dust and prevent off-site emissions. Based on the CARSoil risk assessment; these will be sufficient to control risks to off-site receptors, given the sporadic and low-level asbestos impacted soil confirmed on the site.

- Consideration is to be given to weather conditions which may dry out surfaces promoting respirable dust and fibre release. The Site Manager is to check online weather reports daily, prior to works commencing in order to determine the likelihood that the predicted weather may lead to the generation of airborne dust. In this regard particular attention is to be given to wind direction and strength, as well as current site conditions/proposed works etc. For example; Is site dry? Are materials exposed which are susceptible to becoming airborne? Are particularly fine/dusty materials planned to be used e.g., dry soils?

-
- If working methods and mitigation techniques such as dust suppression cannot control dust generation due weather conditions (dry and windy), then works with the potential to cause dust are to be delayed until the weather is deemed suitable.
 - Works are to be planned and carried out to prevent/minimise dust passing beyond the fenced site boundary e.g. works near the boundary with sensitive receptors programmed to be completed during favourable conditions and low wind condition or wind blowing back into the controlled site.
 - On-site dust suppression is to be carried out using tractor/bowser, supplemented by sprays or Moto fog units, if necessary.
 - Road waggons removing potentially dusty materials from site are to be always sheeted.
 - Road waggons are to remain on hard standings at all times; being maintained/cleaned by a road sweeper, as necessary, to minimise dust/trafficking.
 - Hard surfaces are to be damped down by the tractor/bowser, as necessary, to minimise dust/trafficking.
 - A speed limit of 10mph is to be implemented across the whole of site.
 - Site plant haul routes are to be segregated from road going vehicles to ensure that the access routes to/from site remain clean.
 - The stockpiling of materials on site is to be minimised. Any stockpiles are to be located in relatively sheltered locations, the height of which are to remain >0.5m below the levels of any adjacent buildings/structures/landforms.

A warning that conditions are not being adequately controlled, would be the generation of dust passing beyond the site boundary which may be identified by one of the following;

- On-site reporting of dust by site personnel.
- Detection of dust at the site boundary as part of the monitoring procedure.
- By receipt of a dust complaint from a third party.

Any dust generation is to be mitigated as follows:

-
- The Site Manager will carry out an assessment of the works causing the dust, to ensure that it is being carried out as detailed in the relevant task specific Method Statement (derived in consideration of this Management Plan).
 - If works are found to be being carried out incorrectly all associated personnel are to be re-briefed on the associated task specific Method Statement (derived in consideration of this Management Plan) to ensure correct procedures are followed.
 - If the works are identified as being carried out in accordance with the relevant Method Statement (derived in consideration of this Management Plan) and dust is still being generated, works are to be modified to prevent/reduce the dust.
 - If works cannot be modified sufficiently to reduce elevated dust levels to an acceptable level i.e., not passing beyond the fenced boundary, works are to cease until additional dust suppression measures can be implemented.
 - Any outcome of the mitigation is to be documented and discussed at the following Progress Meeting.
 - Operational procedures will be reviewed by the relevant Director to confirm compliance.

For the works being carried out that specifically relate to asbestos (exposing or disturbing ACM, or in hotspots where ACM has been identified), additional targeted methods to suppress fibre release will be carried out, specifically:

- Minimising access to the work area to essential personnel and plant.
- Using only competent operatives, including non-licensed work qualified employees for hand picking work
- Damping down the surface before commencing any excavations or hand-picking.
- Regular applications of water to the working area if soils appear to be drying out or any visible dust generated.
- Minimising movement of materials and mechanical handling, drop heights etc.
- Proper storage and quarantine for contaminated materials: bagging or covered skips for ACM, sealed stockpiles, sheeted or kept damp for impacted soils.

6.0 Monitoring

Prior to any works commencing the Site Manager is to check and document the weather conditions on the Daily Site Diary. This enables potential dust issues to be predicted, with proactive mitigation measures implemented prior to any issues arising. The assessing of the weather conditions should be an ongoing process with the information recorded at regular intervals.

The Site Manager will carry out dust monitoring at least daily, along the fenced site boundary, with all information recorded on the Daily Dust Inspection Form (See Appendix B) or a similar document that meets the requirements of the operations under their control. If planned works are being carried out which may generate dust, these inspections are to be increased, as necessary.

6.1 Sampling and Analysis

The Remediation Strategy requires verification sampling of the identified areas (and any subsequently identified) through the collection of soil samples by an independent specialist consultant. In addition, regular sampling of materials while the earthworks progress is mandated. These measures will allow continuous review of the risk assessment and confirmation that the mitigation measures remain appropriate of site conditions during the Remediation earthworks. Following completion of the Remediation earthworks, and their independent verification, inspection of excavations and arisings by operatives having undergone Asbestos Awareness training will be sufficient, with specialist testing only required if suspect materials are encountered.

If observations and results indicate conditions differ from the assumptions Risk assessment (appendix A), this will be revised, and the Management Plan updated.

6.2 Dust Monitoring

Dust monitoring is to be carried out in the following manner:

- An initial visual assessment to determine the likely locations where dust may have the potential to migrate beyond the fenced site boundary.
- After the initial assessment has been carried out any suspect locations are to be visited to determine if dust is migrating beyond the fenced boundary.
- Using a portable dust monitor and visual assessment, determine if dust is passing beyond the fenced site boundary.

- If dust is migrating beyond the fenced boundary, the source of the dust is to be identified and any corrective/remedial actions carried out to prevent/minimise any potential receptor impact.

Daily dust monitoring is to be supplemented with dust monitoring points (sticky pads) established along the site boundaries with sensitive receptors if the presence of nuisance dust is detected to provide a formal quantification on a fortnightly basis.

All staff responsible for assessing dust will receive appropriate training from the Site Manager. Each person carrying out dust inspections will initially be accompanied by the Site Manager to ensure that the dust is being perceived similarly.

All on site personnel are responsible for reporting any dust issues to the Site Manager immediately. This will be instructed during the site-specific Site Induction. Any dust issues reported to the Site Manager are to be investigated immediately with the information recorded on the Dust Investigation Form (See Appendix B) or appropriate alternative register.

6.3 Asbestos Monitoring

Based on the Risk Assessment, monitoring of Airbourne asbestos is not required for most of the remediation earthworks activities, the exceptions being;

- During works to remediate the specific hotspots identified by the site investigation requiring remedial action;
- Any works involving the segregation of ACM for disposal;
- If the ongoing Sampling and analysis confirms the presence of higher risk ACM present within the site fills;

The best means of assessing whether risks are higher than anticipated during these activities is Activity Based sampling; that is the deployment of monitoring equipment and collection of air samples locally to the operations.

As a priority, ambient concentrations more than the Control Limit 0.1 f/ml will trigger the Contingency response and Emergency plan.

However given the sensitivity of the local receptors and to avoid the perception of risk, a lower limit of detection will be employed by harvesting higher sample volumes and the use of Scanning Electron Microscope (SEM) analysis of samples to achieve a lower limit of detection. A sample of 960l combined

with SEM can achieve a limit of detection 2 orders lower than the control Limit of 0.001 f/ml which is considered low enough to provide reassurance at boundary conditions.

Following completion of the Remediation earthworks, and their independent verification, asbestos monitoring will not be required, with specialist testing only required if suspect materials are encountered and confirmed to be ACM.

7.0 Contingencies & Emergency plan

If site conditions do not reflect the Site Investigation findings, specifically if greater incidences of asbestos are observed, or if caches or discrete deposits of ACM are identified, the attached Risk Assessment (Appendix A) is to be reviewed and revised as necessary.

The controls, monitoring and mitigation measures set out in this AMP are not expected to change substantially, however, there may be a requirement for higher intensity dust suppression and additional reassurance monitoring, so this will also be reviewed.

If site conditions indicate that any work with ACM needs to be licenced then UR will still carry this out, but specialist operatives will be utilised.

Any dust complaints are to be reported to the UR Head Office immediately. Any dust complaints are to be entered onto the Dust Complaints form (part of the Construction Phase Plan) by the Site Manager. The Site Manager is to ensure that:

- The complaint is investigated to identify the cause of the dust.
- Any abnormal on-site activity is to be assessed and, if necessary, action taken to prevent a reoccurrence of the same problem. Any actions are to be documented.
- The investigation is to be forwarded to the relevant Director for review/comment.
- The complainant is to be contacted and updated on the investigation and the actions taken.
- The complaint is to be discussed at the following Progress Meeting, identifying the cause and measures taken to prevent any reoccurrence.
- Any changes to site procedures to prevent reoccurrence are to be documented and conveyed to site personnel in a Tool Box Talk.

-
- If the investigation indicates that the complaint has not been justified this will also be recorded on the Dust Complaints form.

An emergency incident may result in the loss of control of dust being generated and could have an unacceptable short-term impact on the local environment, exceedance of the asbestos control limit in the working area, or the lower SEM limit of detection at the site boundary.

Should an emergency incident occur all works are to be stopped, the Site Manager is to be informed immediately and the Emergency Plan is to be implemented.

The Emergency Plan is to be prepared as part of the Construction Phase Plan and should provide information/detail the procedures to be followed, in the event of physical injuries, mechanical damage or environmental impact etc.

As a minimum the Emergency Plan should identify the following:

- Emergency contacts (e.g., Emergency services/Environment Agency/Waste Management and Spill Management contractors/water companies etc.)
- Site contact details
- Site specific restrictions (e.g., working hours/noise restrictions/protected and restricted areas etc.)
- Site layout plan detailing the main site features, foul and surface water drainage, waste locations (skips/stockpiles), sensitive receptors, protected or restricted areas, spill response equipment, firefighting equipment, first aid equipment etc.
- Record of fuels/oils/chemicals on site detailing location, quantity/volume, hazard and means of use.
- A flow diagram detailing the procedure to follow in the event of an incident.

All site personnel are to be briefed on the Emergency Plan during the site induction.

The emergency procedure/plan is to be always displayed on the site notice board, being updated as and when necessary.

A record of any incidents and associated correspondences, are to be retained on site; being held within the relevant register of the Construction Phase Plan.



Appendix A Asbestos Risk Assessment

Our ref: R3138-L20250630
Planning ref: 24/00068/FUL

01st July 2025

Ben Thomas
Urban Regen Ltd
Langley Road
Pendlebury
Salford
M6 6FG

by e-mail: ben.thomas@urbanregen.co.uk

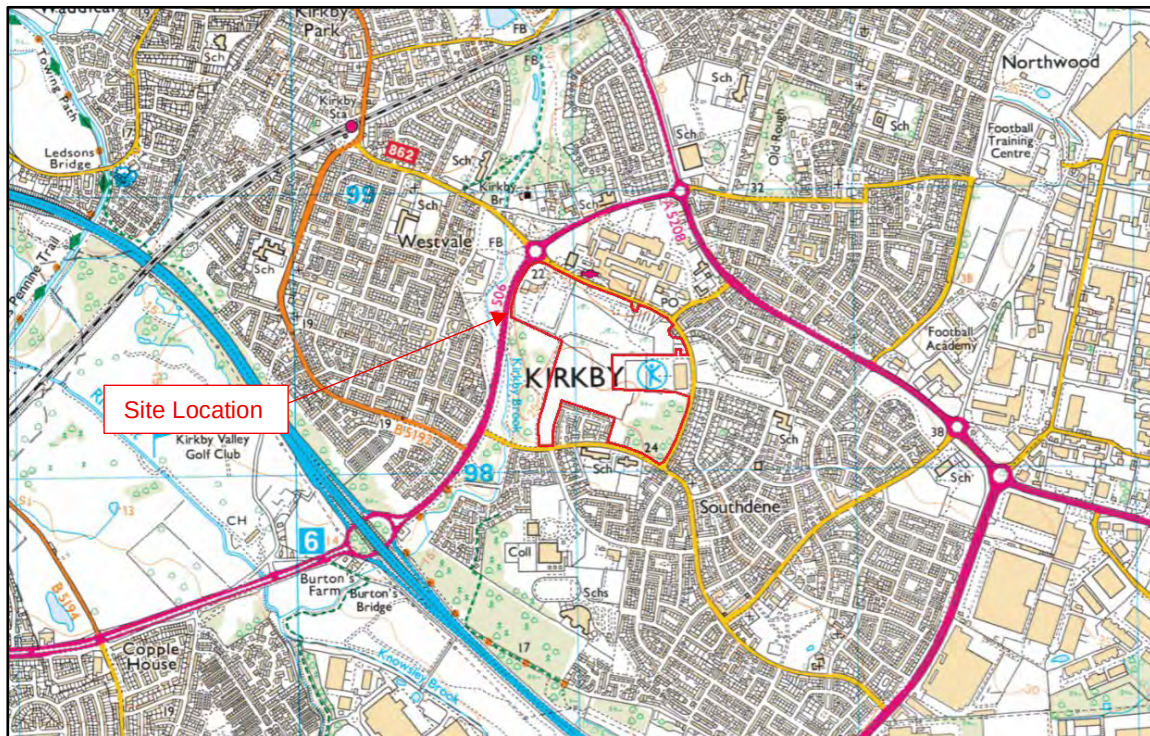
Dear Ben

Cherryfield Drive, Kirkby, Liverpool Asbestos Risk Assessment

Background

It is understood that Barratt & David Wilson Homes (BDWH) has been granted planning permission (ref. 24/00068/FUL) by Knowsley Council (KC) for the residential development of a parcel of land located to the south of Cherryfield Drive, Kirkby, Knowsley (herein referred to as the "Site"). Current development proposals are for the demolition of the existing buildings on Site and construction of 800 dwellings with associated landscaping and infrastructure. The approximate Site boundary is shown on Figure 1 below.

Figure 1: Site Boundary



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As part of the Planning Permission for the Site, a specific Condition requiring production of an Asbestos Risk Management Plan has been applied, the wording of which is reproduced below:

- **25. A. Asbestos Risk Mitigation Plan:** *No development (excluding demolition works) shall take place until an Asbestos Risk Mitigation Plan has been submitted to and approved in writing by the Local Planning Authority.*

It is understood that there are local sensitivities regarding the asbestos risk on Site due to the presence of a local landfill area where frequent incidences of chrysotile and amosite were identified in the soil, as reported in the Buro Happold 'Kirkby Redevelopment: Geoenvironmental and Geotechnical Interpretative Report: Phase 1 Ground Investigation (GDO 205 Landfill)' (ref: 021706, November 2007). It is noted, however, that this relates to an area of land located directly adjacent to the western boundary and that the landfill does not extend onto the subject Site.

To determine the potential risks from the incidences of asbestos identified on Site to date and the corresponding mitigation measures that would likely be required, remediation contractor Urban Regen Ltd. (URL) has duly instructed Smith Grant LLP (SGP) to undertake an Asbestos Risk Assessment for the Site. This has been carried out in accordance with CAR-Soil (2016)¹ guidance with specific reference to Regulation 6 (Assessment of work which exposes employees to asbestos). Its intention is to ultimately inform the Asbestos Risk Management Plan for the Site.

SGP has been provided with several intrusive investigation reports that have been undertaken on the Site in order to inform this assessment, as follows:

- E3P 'Phase I & II Geoenvironmental Site Assessment': Cherryfield Drive (ref: 15-280-R1-6, November 2024);
- ESG 'Factual Report on Ground Investigation: Former All Saints School, Kirkby' (ref: F5013-15, February 2016);
- Clancy Consulting 'Geo-Environmental Appraisal Report for Knowsley Community College, Liverpool' (ref: 10/1533/001 Rev. 01, December 2020);
- Clancy Consulting 'Preliminary GeoEnvironmental Appraisal Report for Phase 2 Site, Cherryfield Drive, Knowsley' (ref: 10/1519/001 Rev. 01, May 2020);

The E3P 'Remediation and Enabling Works Strategy' (ref: 15-280-R2-5, dated November 2024) has also been provided. It is understood that both of the E3P reports have been submitted to, and approved by KC.

¹ CL:AIRE, 2016. Control of Asbestos Regulations 2012 - Interpretation for Managing and working with Asbestos in Soil and Construction and Demolition Materials: Industry guidance

Summary of Asbestos Incidences

As summarised from the above reporting, a total of 126 soil samples have been collected from across the Site, of which 12 have reported positive incidences of asbestos. A summary of the relevant reports, investigation locations, quantities and types of asbestos, and the ground conditions within which the asbestos was identified is presented in Table 1.

Table 1: Summary of Soil Asbestos Incidences Reported During Site Investigations

Report ref.	Entry (Depth)	Asbestos Quantity (%)	Asbestos Type	Strata detected
E3P (15-280-R1-6)	TP118 (0.50m)	0.002%	Amosite (loose fibres)	Made ground: Black clayey sandy gravel (ashy)
	TP132 (0.20m)	<0.001%	Chrysotile & crocidolite (loose fibres)	Made ground: Brown sandy clay with rootlets and rare roots (topsoil)
	TP140 (0.10m)	0.005%	Chrysotile (loose fibrous debris)	Made ground: Dark grey slightly gravelly clayey coarse sand with frequent rootlets (topsoil)
	TP202 (1.00m)	0.009%	Chrysotile (bitumen)	Made ground: Black very sandy gravel with frequent cobbles and occasional boulders.
	WS206 (0.90m)	<0.001%	Chrysotile (loose fibres)	Natural: Firm black mottled light brown gravelly very sandy clay.
ESG (F5013-15)	TP624 (0.5m)	ANQ*	Tremolite (free fibres)	Made ground: Black brown very gravelly silty sand with high cobble and boulder content.
	TP631 (0.3m)	ANQ*	Amosite & chrysotile (free fibres)	Made ground: Dark brown sandy gravelly clay with occasional angular, fine to coarse gravel of brick.
	TP633 (0.8m)	ANQ*	Amosite (free fibres)	Made ground: Dark brown slightly gravelly silty fine to coarse sand interbedded with grey sandy angular fine to coarse gravel.
	TP643 (0.35m)	ANQ*	Amosite (free fibres)	Made ground: Brown slightly gravelly sandy clay with occasional brick and clay pipe fragments.
	TP644 (0.2m)	ANQ*	Amosite (free fibres)	Made ground: Dark brown sandy gravelly clay with low cobble content.
	TP651 (0.8m)	ANQ*	Chrysotile (free fibres)	Made ground: Dark brown slightly gravelly sandy CLAY with medium cobble content.
	WS602 (0.8m)	ANQ*	Chrysotile (clumps of fibres)	Made ground: Orangish brown slightly gravelly slightly silty slightly clayey sand.

*ANQ: Asbestos Not Quantified

In addition to the positive incidences of asbestos described above, E3P has also reported the suspected presence of asbestos cement sheeting within entry WS141 (0.00-0.20m); however, this was not confirmed with testing. It is also reported in the E3P 'Phase I & II Geoenvironmental Site Assessment' that "asbestos fibres were encountered within 5 samples" during a previous site investigation carried out by Ian Farmer Associates ('Factual Report on Ground Investigation'; Ref: 41989, March 2017), however

this report has not been provided to SGP. It is understood that quantification analysis was not undertaken on these samples.

Risk Assessment

As asbestos has been identified within the Site soils and to assist URL to comply with their responsibilities under CAR-Soil (2016) Regulation 6 to ***“prevent the exposure of their employees to asbestos, so far as is reasonably practicable”***, SGP has undertaken an asbestos risk assessment to determine the risks to Site workers during any ground disturbance works. In addition to considering Site workers, a risk assessment has also been carried out for nearby residents during the works as well as future Site residents, taking into account the remedial measures that are required to be implemented as detailed in the E3P ‘Remediation and Enabling Works Strategy’ for the Site (i.e. provision of 600mm soil cover systems in gardens, reduced to 300mm in public open space / landscaped areas).

To assist with this assessment, the CL:AIRE Joint Industry Working Group (JIWG) Decision Support Tool (DST) for the Qualitative Risk Ranking of Work Activities and Receptors Involved in or Exposed to Asbestos in Soil and Construction & Demolition Materials: v2.1 (March 2017) has been utilised to determine the risks to the three types of receptors described above. To allow for a conservative assessment, the worst-case conditions reported within the Site investigation information have been used as input parameters (i.e. the most hazardous asbestos type encountered, the highest quantity reported etc.). The worksheets which include the input parameters are provided in Appendix A and a summary of the DST scenario rankings are provided in Table 2 below.

Table 2: Summary of DST Scenario Rankings for Three Receptor Types Considered

Receptor	Hazard Ranking	Exposure Ranking	Receptor Ranking	Hazard, Exposure & Receptor Ranking	Pathway Ranking	Overall Ranking
Site Workers	Medium	Medium	Medium	Medium	Low	Low
Nearby Residents	Medium	Medium	High	Medium	Low	Low
Future Site Residents	Medium	Low	Low	Low	Very Low	Negligible

Mitigation Measures

To determine the likely mitigation measures required during the remediation earthworks, the CL:AIRE JIWG DST for the Categorisation of Work Activities involving Asbestos in Soil and Construction & Demolition Material in accordance with the Control of Asbestos Regulations 2012: v2.1 (March 2017) has also been utilised. This has been completed for two scenarios:

1. Remediation of asbestos hotspot areas (as defined by E3P) where soil-asbestos concentrations were reported >0.001%
2. General earthworks – trace asbestos (<0.001%) assumed to be present in made ground fills across the Site

The probable licensing status and the recommended health and safety measures for the Site works as per the model outputs are reproduced in Table 3 below. The corresponding worksheets are provided in Appendix B.

Table 3: Summary of DST for the Categorisation of Work Activities Outputs

Scenario	Probable licencing status	RPE	Dust Suppression	Hygiene / Decontamination
Asbestos Hotspot Remediation	Non-Licensed Work	EN140 with P3 filter half mask	Localised mechanical dust suppression	Localised and enhanced personal decontamination facilities
General Earthworks	CAR do not apply	EN149 type FFP3 disposable	Manual / localised dust suppression	Localised and basic personal decontamination facilities

Whilst it is recommended that masks are used for the two scenarios described above, it is considered that dust suppression to reduce dust generation and potential fibre remobilisation is the critical mitigation measure to be employed across the Site. Whilst masks provide a secondary level of protection, it should be considered within the Asbestos Risk Mitigation Plan that the requirement to wear masks is only for specific asbestos hotspot removal works and works where there is dust generation. Additionally, this would only be necessary for workers on the ground in close proximity to ground disturbance works. Vehicles would provide sufficient protection to their operators and any workers on the ground at distance (as well as nearby residents) would be sufficiently protected by the dust suppression to be deployed. Similarly for the decontamination recommendations, this would also only apply to those working on the ground in close proximity to ground disturbance works.

It is also noted that there are specific recommendations within the E3P Remedial Strategy concerning the protection of nearby residents / site workers from the asbestos identified on Site during the remediation earthworks, many of which are in line with those described above. These are summarised as follows:

- An Asbestos Risk Mitigation Plan should be compiled by the contractor for their works on site.
- Where visible pieces of asbestos-containing material are identified during the site remediation and enabling work, this material must be dealt with in strict accordance with the Control of Asbestos Regulations (CAR) 2012, UK Waste Management Legislation and the Environmental Protection Act 1994.
- Reassurance air testing in accordance with the requirements of HSG248 should be completed during the operation to move the soils [the asbestos hotspot remediation works] to demonstrate the deployment of the required control procedure and safe working methods.
- During excavation, as outlined within the detailed working methodologies, soils will be regularly damped down using water to control the generation of dust (this may also comprise precipitation).

- In accordance with the HSE *Guidance Note em6: Asbestos Essentials, Personal protective equipment (including RPE)*, E3P recommend that all site operatives present within the work area where potential asbestos-impacted soils are being excavated are supplied with the following personal protective equipment:
 - o Disposable overalls.
 - Type 5 (BS EN ISO 13982-1) are suitable.
 - Cotton overalls hold dust and need specialist laundering.
 - o Waterproof overalls for outdoor work.
 - o Use oversized overalls - this will help to prevent ripping at the seams.
 - o If the cuffs are loose, seal them with tape.
 - o Avoid wearing a long-sleeved shirt as these are difficult to cover properly.
 - o Wear the overall legs over footwear as tucking them in lets dust into footwear.
 - o Wear the hood over the RPE straps.

It is noted that with respect to the above recommendation ***“At this current time, with the levels of ACM identified within the soils, the above-listed PPE is not considered to be required for all site personnel during the entire management of these soils”.***

Yours sincerely

for: Smith Grant LLP



S D Miller BSc MCIWEM
Senior Environmental Consultant

Appendix A: CL:AIRE JIWG DST Worksheets for the Qualitative Risk Ranking of Work Activities and Receptors

Decision Support Tool for Receptor Risk Ranking

Stage 1		Score
Hazard Identification		
Select ACM type (run model for each type to generate 'Worst Case' output)	Loose fibrous asbestos debris	3
Extent of degradation of ACMs	Disaggregated (dominated by loose fibrous material; extreme degradation in ACM and/or free asbestos fibres/fibre bundles)	4
Friability and degree of bonding by matrix (ACM matrix, not ground materials)	Friable ACM or ACM with fibres not linked in any matrix (free dispersed fibres/fibre bundles)	4
Distribution of Visible Asbestos Across Affected Area	No visible ACMs/fibre bundles	0
Asbestos fibre type	Mainly amphibole and chrysotile mixtures, including trace crocidolite	2
Sub-total		13
Hazard ranking		Medium

No warranty, expressed or implied, or reliance, is provided in relation to the use of this tool.
It is contingent on users to satisfy themselves that the output from the tool is relevant and appropriate to the assessment being made.

Stage 2

Emission Factors

Score

Amount of asbestos fibre in selected ACM/fibre type as % of host material

Very Low quantities - 0.001 to 0.01 %wt/wt

1

Respirable fibre index for ACM - RIVM report 711701034 (2003)

High

4

Activity type and effect on deterioration of ACMs

No disturbance activity

0

Best description of primary host material matrix

Coarse to Fine Gravel

3

Sub-total

8

Exposure ranking

Low

Stage 3		Score	
Pathway and Receptor Sensitivity			
Receptor category	Residential	No score required	
Age of Receptor	Infant (under 5)	4	
Duration of exposure/site occupancy	<1 hour in any week (e.g. short duration work or equivalent infrequent exposure event when exposure aggregated over 1 yr)	0	
Receptor ranking		4	Low
Combined hazard, exposure and receptor ranking			Low
Pathway: Distance of Receptor from Source	In or within 10m of area of disturbance	4	
Pathway: Depth to impacted material	Material buried at depth, unlikely to be disturbed except for deeper construction related excavation	B	
Pathway ranking		4B	Very Low
Overall ranking			Negligible

Project Reference	R3138
Site Name	Cherryfield Drive, Kirkby, Liverpool
Client	Urban Regen Ltd.
Run by	Scott Miller (Senior Consultant), Smith Grant LLP
Date	27.06.25
Reviewed by	Dan Wayland (Partner), Smith Grant LLP
Characterisation of scenario being evaluated	Residential use of the Site following remediation and construction works; asbestos impacted soils to be retained beneath permanent hardstanding or soil cover systems (600m in gardens / 300m in areas of public open space / landscaping as per the requirements of the Remediation Strategy - potential exposure to future site residents.
Interpretation of scenario ranking by DST	Hazard Ranking - Medium / Exposure Ranking - Low / Receptor Ranking - Low / Combined Hazard, Exposure and Receptor Ranking - Low / Pathway Ranking - Very Low / Overall Ranking - Negligible

Decision Support Tool for Receptor Risk Ranking

Stage 1		Score
Hazard Identification		
Select ACM type (run model for each type to generate 'Worst Case' output)	Loose fibrous asbestos debris	3
Extent of degradation of ACMs	Disaggregated (dominated by loose fibrous material; extreme degradation in ACM and/or free asbestos fibres/fibre bundles)	4
Friability and degree of bonding by matrix (ACM matrix, not ground materials)	Friable ACM or ACM with fibres not linked in any matrix (free dispersed fibres/fibre bundles)	4
Distribution of Visible Asbestos Across Affected Area	Occasional/random occurrences of visible contamination by ACMs	1
Asbestos fibre type	Mainly amphibole and chrysotile mixtures, including trace crocidolite	2
Sub-total		14
Hazard ranking		Medium

No warranty, expressed or implied, or reliance, is provided in relation to the use of this tool.
It is contingent on users to satisfy themselves that the output from the tool is relevant and appropriate to the assessment being made.

Stage 2		Score
Emission Factors		
Amount of asbestos fibre in selected ACM/fibre type as % of host material	Very Low quantities - 0.001 to 0.01 %wt/wt	1
Respirable fibre index for ACM - RIVM report 711701034 (2003)	High	4
Activity type and effect on deterioration of ACMs	High disturbance, significant deterioration expected	4
Best description of primary host material matrix	Coarse to Fine Gravel	3
Sub-total		12
Exposure ranking		Medium

Stage 3		Score	
Pathway and Receptor Sensitivity			
Receptor category	Residential	No score required	
Age of Receptor	Infant (under 5)	4	
Duration of exposure/site occupancy	> 1hr <10 hr daily exposure (e.g. part-time to full time occupational exposure or extended daily recreational exposure)	3	
Receptor ranking		7	High
Combined hazard, exposure and receptor ranking			Medium
Pathway: Distance of Receptor from Source	In or within 10m of area of disturbance	4	
Pathway: Depth to impacted material	Material buried at shallow depth, potential to be disturbed by excavation	C	
Pathway ranking		4C	Low
Overall ranking			Low

Project Reference	R3138
Site Name	Cherryfield Drive, Kirkby, Liverpool
Client	Urban Regen Ltd.
Run by	Scott Miller (Senior Consultant), Smith Grant LLP
Date	27.06.25
Reviewed by	Dan Wayland (Partner), Smith Grant LLP
Characterisation of scenario being evaluated	Remediation earthworks to prepare site for residential development - potential exposure to adjacent residents of the site
Interpretation of scenario ranking by DST	Hazard Ranking - Medium / Exposure Ranking - Medium / Receptor Ranking - High/ Combine Hazard, Exposure and Receptor Ranking - Medium / Pathway Ranking - low / Overall ranking - low

Decision Support Tool for Receptor Risk Ranking

Stage 1		Score
Hazard Identification		
Select ACM type (run model for each type to generate 'Worst Case' output)	Loose fibrous asbestos debris	3
Extent of degradation of ACMs	Disaggregated (dominated by loose fibrous material; extreme degradation in ACM and/or free asbestos fibres/fibre bundles)	4
Friability and degree of bonding by matrix (ACM matrix, not ground materials)	Friable ACM or ACM with fibres not linked in any matrix (free dispersed fibres/fibre bundles)	4
Distribution of Visible Asbestos Across Affected Area	Occasional/random occurrences of visible contamination by ACMs	1
Asbestos fibre type	Mainly amphibole and chrysotile mixtures, including trace crocidolite	2
Sub-total		14
Hazard ranking		Medium

No warranty, expressed or implied, or reliance, is provided in relation to the use of this tool.
It is contingent on users to satisfy themselves that the output from the tool is relevant and appropriate to the assessment being made.

Stage 2		Score
Emission Factors		
Amount of asbestos fibre in selected ACM/fibre type as % of host material	Very Low quantities - 0.001 to 0.01 %wt/wt	1
Respirable fibre index for ACM - RIVM report 711701034 (2003)	High	4
Activity type and effect on deterioration of ACMs	High disturbance, significant deterioration expected	4
Best description of primary host material matrix	Coarse to Fine Gravel	3
Sub-total		12
Exposure ranking		Medium

Stage 3		Score	
Pathway and Receptor Sensitivity			
Receptor category	Construction	No score required	
Age of Receptor	Young adult (>16 and <24)	2	
Duration of exposure/site occupancy	> 1hr <10 hr daily exposure (e.g. part-time to full time occupational exposure or extended daily recreational exposure)	3	
Receptor ranking		5	Medium
Combined hazard, exposure and receptor ranking			Medium
Pathway: Distance of Receptor from Source	In or within 10m of area of disturbance	4	
Pathway: Depth to impacted material	Material buried at shallow depth, potential to be disturbed by excavation	C	
Pathway ranking		4C	Low
Overall ranking			Low

Project Reference	R3138
Site Name	Cherryfield Drive, Kirkby, Liverpool
Client	Urban Regen Ltd.
Run by	Scott Miller (Senior Consultant), Smith Grant LLP
Date	27.06.25
Reviewed by	Dan Wayland (Partner), Smith Grant LLP
Characterisation of scenario being evaluated	Remediation earthworks to prepare site for residential development - potential exposure to site workers
Interpretation of scenario ranking by DST	Hazard Ranking - Medium / Exposure Ranking - Medium / Receptor Ranking - Medium / Combined Hazard, Exposure and Receptor Ranking - Medium / Pathway Ranking - Low / Overall Ranking - Low

Appendix B: CL:AIRE JIWG DST Worksheets for the Categorisation of Work Activities



Joint Industry Working Group

Asbestos in Soil and Construction & Demolition Materials

Project Reference	R3138
Site Name	Cherryfield Drive, Kirkby, Liverpool
Client	Urban Regen Ltd.
Run by	Scott Miller (Senior Consultant), Smith Grant LLP
Date	27.06.25
Scenario details	Asbestos hotspot remediation works

Decision Support Tool for CAR2012 Work Categories

Stage 1

Hazard Factors

Select ACM type (run model for each type to generate 'Worst Case' output)
Extent of degradation of ACMs at outset of work
Friability and degree of bonding by matrix (ACM matrix, not ground materials)
Distribution of Visible Asbestos Across Affected Area
Amount of asbestos fibre in selected ACM/fibre type as % of host material

Loose fibrous asbestos debris	3
Disaggregated (dominated by loose fibrous material; extreme degradation in ACM and/or free asbestos fibres/fibre bundles)	4
Friable ACM or ACM with fibres not linked in any matrix (free dispersed fibres/fibre bundles)	4
Occasional/random occurrences of visible contamination by ACMs	1
Very Low quantities - <0.001 to 0.01 %wt/wt	1

Sub-total

13

Note: the asbestos licensing regime is unaffected by the type of asbestos fibre present in ACMs

Hazard ranking

Medium

No warranty, expressed or implied, or reliance, is provided in relation to the use of this tool.

It is contingent on users to satisfy themselves that the output from the tool is relevant and appropriate to the assessment being made.

Stage 2

Exposure Factors

Score

Anticipated airborne fibre concentration - Control Limit or SALI?
 Anticipated duration of exposure to asbestos
 Activity type and effect on deterioration of ACMs during work
 Best description of primary host material matrix (soil/made ground)
 Respirable fibre index for ACM - RIVM report 711701034 (2003)

<0.1 fibres/ml (4 Hr TWA) or <0.6 fibres/ml (10 minute STEL)	2
> 2 hours in a 7 day period and Up to 10 hours in a day (e.g. full time occupational exposure)	4
Sampling, manual or mechanical (significant deterioration expected)	2
Coarse to Fine Gravel	3
High	4

Sub-total

15

Exposure ranking

Medium

Combined hazard and exposure ranking

28

Medium

Stage 3

Risk Assessment Outputs

Probable Licensing Status	Non-Licensed Work
RPE*	EN140 with P3 filter half mask
Dust Suppression**	Localised mechanical dust suppression
Hygiene/Decontamination***	Localised and enhanced personal decontamination facilities

*Where RPE has to be worn continuously for long periods (e.g. more than 1-hour), then powered RPE may be necessary.

**Reduction in control measures possible if natural mitigation factors are present (e.g. raining, wet ground)

***Guide only; suitability of selected personal hygiene measures may be reviewed on a site/contamination-specific basis



Joint Industry Working Group

Asbestos in Soil and Construction & Demolition Materials

Project Reference	R3138
Site Name	Cherryfield Drive, Kirkby, Liverpool
Client	Urban Regen Ltd.
Run by	Scott Miller (Senior Consultant), Smith Grant LLP
Date	27.06.25
Scenario details	General remediation earthworks to prepare site for residential development

Decision Support Tool for CAR2012 Work Categories

Stage 1

Hazard Factors

Select ACM type (run model for each type to generate 'Worst Case' output)
Extent of degradation of ACMs at outset of work
Friability and degree of bonding by matrix (ACM matrix, not ground materials)
Distribution of Visible Asbestos Across Affected Area
Amount of asbestos fibre in selected ACM/fibre type as % of host material

Free dispersed fibres/fibre bundles	2
Disaggregated (dominated by loose fibrous material; extreme degradation in ACM and/or free asbestos fibres/fibre bundles)	4
Friable ACM or ACM with fibres not linked in any matrix (free dispersed fibres/fibre bundles)	4
No visible ACMs/fibre bundles	0
Trace quantities - <0.0001 to 0.001 %wt/wt	0

Sub-total

Score

0

Note: the asbestos licensing regime is unaffected by the type of asbestos fibre present in ACMs

Hazard ranking

Negligible

No warranty, expressed or implied, or reliance, is provided in relation to the use of this tool.

It is contingent on users to satisfy themselves that the output from the tool is relevant and appropriate to the assessment being made.

Stage 2

Exposure Factors

Score

Anticipated airborne fibre concentration - Control Limit or SALI?
 Anticipated duration of exposure to asbestos
 Activity type and effect on deterioration of ACMs during work
 Best description of primary host material matrix (soil/made ground)
 Respirable fibre index for ACM - RIVM report 711701034 (2003)

<0.1 fibres/ml (4 Hr TWA) or <0.6 fibres/ml (10 minute STEL)	2
> 2 hours in a 7 day period and Up to 10 hours in a day (e.g. full time occupational exposure)	4
Sampling, manual or mechanical (significant deterioration expected)	2
Coarse to Fine Gravel	3
High	4

Sub-total

15

Exposure ranking

Medium

Combined hazard and exposure ranking

15

Low

Stage 3

Risk Assessment Outputs

Probable Licensing Status	CAR do not apply
RPE*	EN149 type FFP3 disposable
Dust Suppression**	Manual/localised dust suppression
Hygiene/Decontamination***	Localised and basic personal decontamination facilities

*Where RPE has to be worn continuously for long periods (e.g. more than 1-hour), then powered RPE may be necessary.

**Reduction in control measures possible if natural mitigation factors are present (e.g. raining, wet ground)

***Guide only; suitability of selected personal hygiene measures may be reviewed on a site/contamination-specific basis

Appendix B Daily Dust Inspection Form

Daily Dust Inspection Form					Date
Time of inspection					
Location e.g. street name etc.					
Weather conditions (dry/rain/fog/snow etc.)					
Temperature (warm/cold etc. or degrees if known)					
Wind strength (none/light/steady/strong/gusty etc.)					
Wind direction (N/NE/E/SE/S/SW/W/NW)					
Dust intensity (see table below)					
Dust concentration -PM10 (mg/m3)					
Dust duration (during the test)					
Type of dust (What is the dust likely to be?)					
Nearest receptor sensitivity (see table below)					
Source (Where is the dust coming from)					
Comments/observations					
Inspection locations – see monitoring plan Drawing for Key					
Intensity: 0 – No dust 1 – Very low 2 – Low 3 – Medium 4 – High 5 – Very high 6 – Extremely high Receptor sensitivity: Low (e.g. Footpath, road etc.) Medium (e.g. industrial or commercial workplaces etc.) High (e.g. SSSI woodland and habitats, housing, pub/hotel etc.)					