



Dice
Environmental

Glencoe Villa
Remediation Method Statement

October 2025

GLE-DEL-XX-XX-RP-GE-0002

Ref: 101556

Version 2.0

Site Glencoe Villa,
 Ickleford,
 Hitchin,
 SG5 3TR

Client Mr and Mrs Del Basso

Date 22/10/2025

Project Reference 101320

Document Reference GLE-DEL-XX-XX-RP-GE-0002

Prepared by:

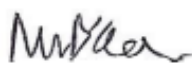


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Date

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1. Introduction

1.1. Background

Dice Environmental have been instructed by Mr and Mrs Del Basso to develop a Remediation Method Statement following the issue of Phase 1 & 2 Geo-environmental Report by Dice Environmental Ltd. In April 2024 (Ref: 101320), regarding the site known as 'Glencoe Villa, Ickleford, Hitchin, SG5 3TR'.

The Phase 1 Geo-Environmental Report identified several potential sources of contamination, including the historical on-site coal yard, proximal historic railway and proximal existing electricity substation. No significant potential source of ground gas was identified for the site.

A Phase 2 site investigation was undertaken on the 2nd April 2024, incorporating the advancement of 5No. window sample boreholes and 4No. hand dug pits to sample on-site stockpiles, made ground and underlying natural soils for laboratory testing.

4No. samples of Made Ground, identified to a maximum depth of 0.60mbgl, and 4No. samples of natural ground, identified to a maximum depth of 5mbgl, were sent for chemical testing. The analysis included Heavy Metals, Polyaromatic Hydrocarbons (PAHs), asbestos and Total Petroleum Hydrocarbons (TPHs). The results revealed elevated levels of Lead, Benzo(a)pyrene and Dibenzo(ah)anthracene in shallow soils in relation to a residential with produce end use.

4No. stockpiles were identified on site. 2No samples, 1No. from Stockpile A and 1No. from Stockpile B, were analysed for a standard 'CLEA' screening suite of Heavy Metals, Polyaromatic Hydrocarbons (PAHs) and asbestos. Stockpile A was identified to contain elevated levels of Benzo(b)fluoranthene, Benzo(a)pyrene and Dibenzo(ah)anthracene with respect to the proposed residential with produce end use.

This report will propose remedial measures to address the identified exceedances in contaminants of concern at the site.

1.2. Report Objectives

This Remediation Method Statement includes:

- Consideration of the findings of the Phase 1 and 2 Reports completed by Dice Environmental in April 2024 (Ref: 101320).
- Recommendations of the remedial measures to be taken to reduce the risk from the soils contaminated and stockpiles with Heavy Metals and PAHs.
- The detailing of a suitable verification plan to be undertaken following the implementation of the remedial measures.

1.3. Proposed Development Plan

The proposed development on site is to include the construction of a residential property with associated garden, driveway and parking facility.

The site location plan, layout and development proposal are included within Appendix A.

1.4. Limitations

The recommendations and opinions expressed in this report are based on information obtained as part of the desk study or provided by others. Information provided from other sources is taken in good faith and Dice Environmental cannot guarantee its accuracy. By the very nature of a ground investigation, information gained through intrusive investigation is from specific point locations. Ground conditions have the potential to vary significant across any site, and the ultimate decision with regards to foundation design or other technical specifications lies with the developer and/or structural engineer. Reliance upon the contents of this report is subject to receipt of payment for any outstanding balance owed to Dice Consulting Engineers Ltd. or Dice Environmental Ltd. dated prior to, and in associated with this report.

This report does not include specific investigation for the presence of either Potential Asbestos Containing Material (PACM) (unless identified within soils) or Japanese Knotweed at the subject site however, if obvious evidence of either is observed during the site walkover, details will be provided in this report. Specialist contractors should be commissioned to make detailed assessments and recommendations if these materials are suspected.

The information contained in this report is intended for the use of Mr and Mrs Del Basso and Dice Environmental can take no responsibility for the use of this information by any third party or for uses other than that described in this report or detailed within the terms of our engagement.

2. Remediation of On-site Contamination

2.1. Remedial Action – Soils

It is recommended that a minimum 600mm clean capping layer be added where the development is to consist of soft landscaping.

The capping depth may be established by either stripping existing soils to the specified zone-specific depth and replaced with 'clean' suitable for use materials, or by build-up from existing ground level with 'clean' suitable for use materials.

If the contaminated soils are stripped as part of the above procedure, they should be placed upon an impermeable membrane to avoid cross-contamination, stockpiled and assessed for waste classification prior to being moved off site.

'Clean', suitable for use (residential with produce end use) soil is to be imported from off-site. It is recommended that the chosen materials are screened prior to installation for their chemical suitability. Materials may be a combination of topsoil, subsoil, and/or graded aggregate, however a minimum 150mm of topsoil (meeting the requirements of BS3882:2015) should be added to gardens to provide a suitable growing medium (depth included within overall capping depth requirements).

Stockpiles were also identified on site. 2No. stockpiles were sampled, with Stockpile A containing elevated levels of Benzo(b)fluoranthene, Benzo(a)pyrene and Dibenz(ah)anthracene. These should be assessed for waste classification prior to being moved off site.

2.2. Discovery Strategy

Whilst the investigations undertaken on the site to date have been thorough, it remains possible that previously unexpected soil conditions may be encountered during the construction process. Examples may include oily pockets within the soil, potential for asbestos containing materials, black ashy materials, soils exhibiting strong odours, brightly coloured materials.

Should previously undiscovered contamination be encountered during the demolition/construction of the new buildings the following course of action should be adhered to:

1. The ground workers should report any suspected contamination immediately to the Client's site supervisor. The supervisor should contact the appointed verification engineer to request an engineer to visit the site to assess the extent of the 'contamination'.
2. Dice Environmental shall make records of their inspection, and pass details of these to the Local Authority.

3. Where the conditions revealed differ from those previously anticipated, the Verification Engineer shall take samples as deemed appropriate to be dispatched for appropriate chemical testing.
4. Depending on the results of the testing either: 1) no further work will be required; 2) a further detailed risk assessment will be required; and/or 3) localised specific remedial measures will be necessary. Appraisal criteria will vary depending on the nature of the assessment.
5. The results of any such testing will be sent to the Local Authority Pollution Control Section and if considered appropriate the Environment Agency. If additional remediation is required, the LA/EA will be informed of the date and time of the proposed works.
6. Remediation will be undertaken in accordance with a method statement submitted for approval. The works shall be supervised by an independent Verification Engineer who shall provide a Verification Report for the Local Authority and other regulators as required.
7. A copy of the discovery strategy should be lodged on site and provisions made to ensure that all workers are made aware of their responsibility to observe, report and act on any potentially suspicious or contaminated materials they may encounter.

3. Verification Plan

3.1. Verification of Capping Layer

Verification sampling frequency has been determined via consultation of local guidance issued by the Environment Agency in partnership with Hertfordshire, Bedfordshire & Neighbouring Authorities in June 2023 titled, 'Development on Potentially Contaminated Land and/or For A Sensitive End Use: Technical Guide for Planning Applicants and Developers', and YALPAG 2021 guidance 'Verification Requirements for Cover Systems'.

A minimum of 3 verification pits should be advanced to 600mm below ground level to confirm the depth of the installed clean capping layer. The pits should be dug at random locations across the remediated portion of the site, in both rear and front residential gardens, where present.

1No. soil sample from each hole should be taken from a random point within the 600mm capping depth range and sent to a laboratory for analysis of Heavy Metals, Polyaromatic Hydrocarbons (PAHs), Total Petroleum Hydrocarbons (TPHs) and an asbestos screen.

Laboratory results should be screened against a residential with produce (gardens) end use to assess the suitability and relative success of remedial actions. The General Assessment Criteria (GACs) to be assessed against are presented within Appendix B.

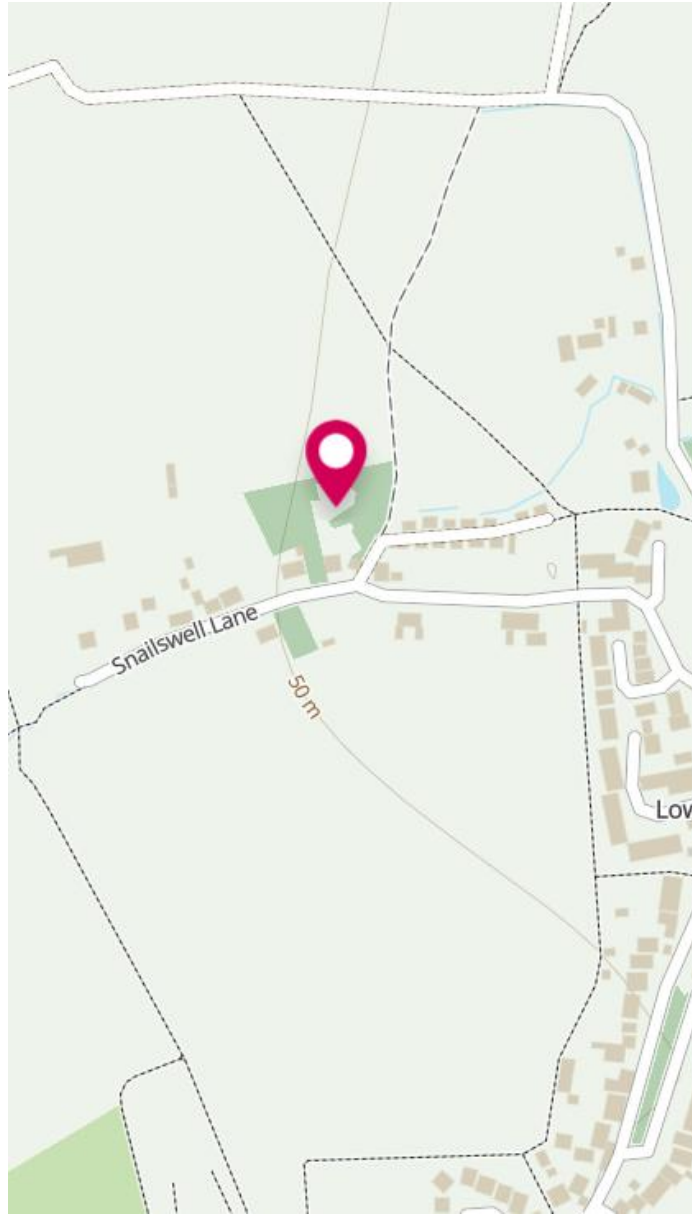
3.2. Reporting

The standalone verification report should be produced following completion of the proposed remedial action, for review and approval by the local planning authority.

This report should include:

- Site details.
- Planning Application details.
- Photos of inspection pits showing pit depths.
- Laboratory results of sampled soils from final garden interaction zones (capping layers where appropriate).
- Waste transfer tickets.
- An assessment of in-situ soils for suitability for use.
- Conclusions.

APPENDIX A



Title
Site Location

Reference
101320

Date
11/09/2025

Site Address

Glencoe Villa,
Ickleford,
Hitchin
SG5 3TR

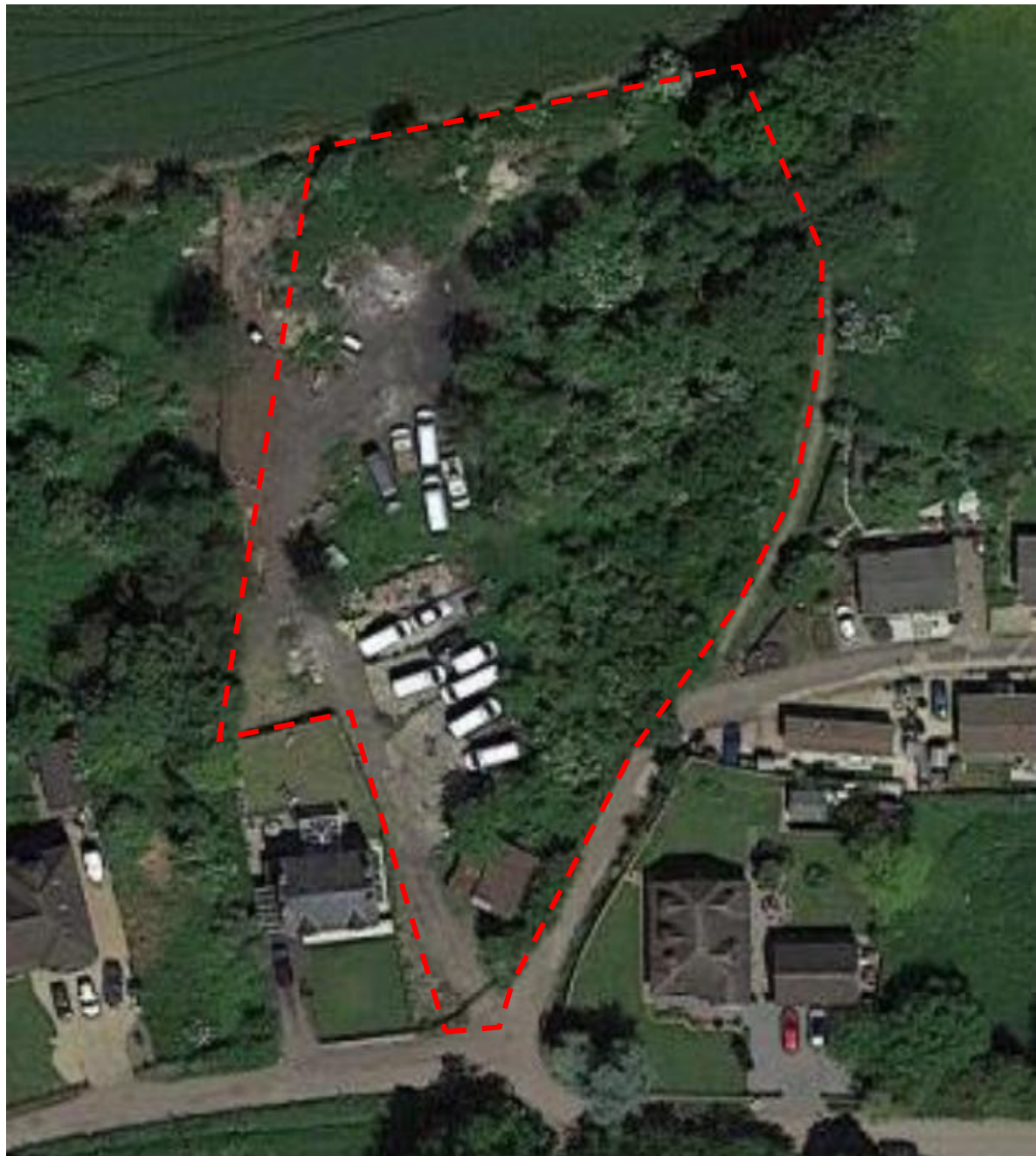
Legend

 Approximate Site Centre

Scale
NTS

Drawn
AMD

Figure Number
Fig.1



Title

Site Layout

Reference

101320

Date

11/09/2025

Site Address

Glencoe Villa,
Ickleford,
Hitchin
SG5 3TR

Legend

Scale

NTS

Drawn

AMD

Figure Number

Fig.2



Title

Development Proposal

Reference

101320

Date

11/09/2025

Site Address

**Glencoe Villa,
Ickleford,
Hitchin
SG5 3TR**

Legend

Scale

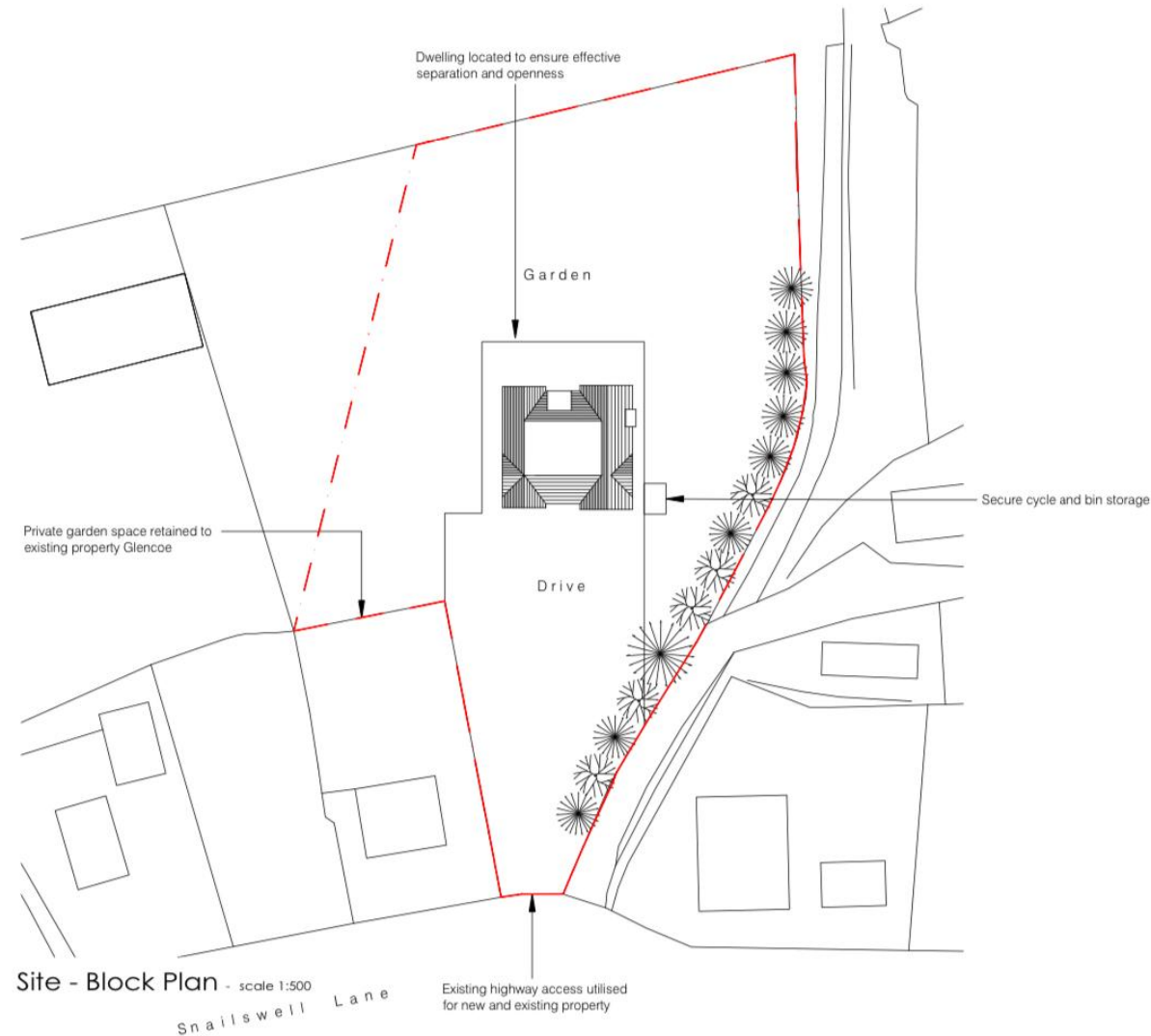
NTS

Drawn

AMD

Figure Number

Fig.3



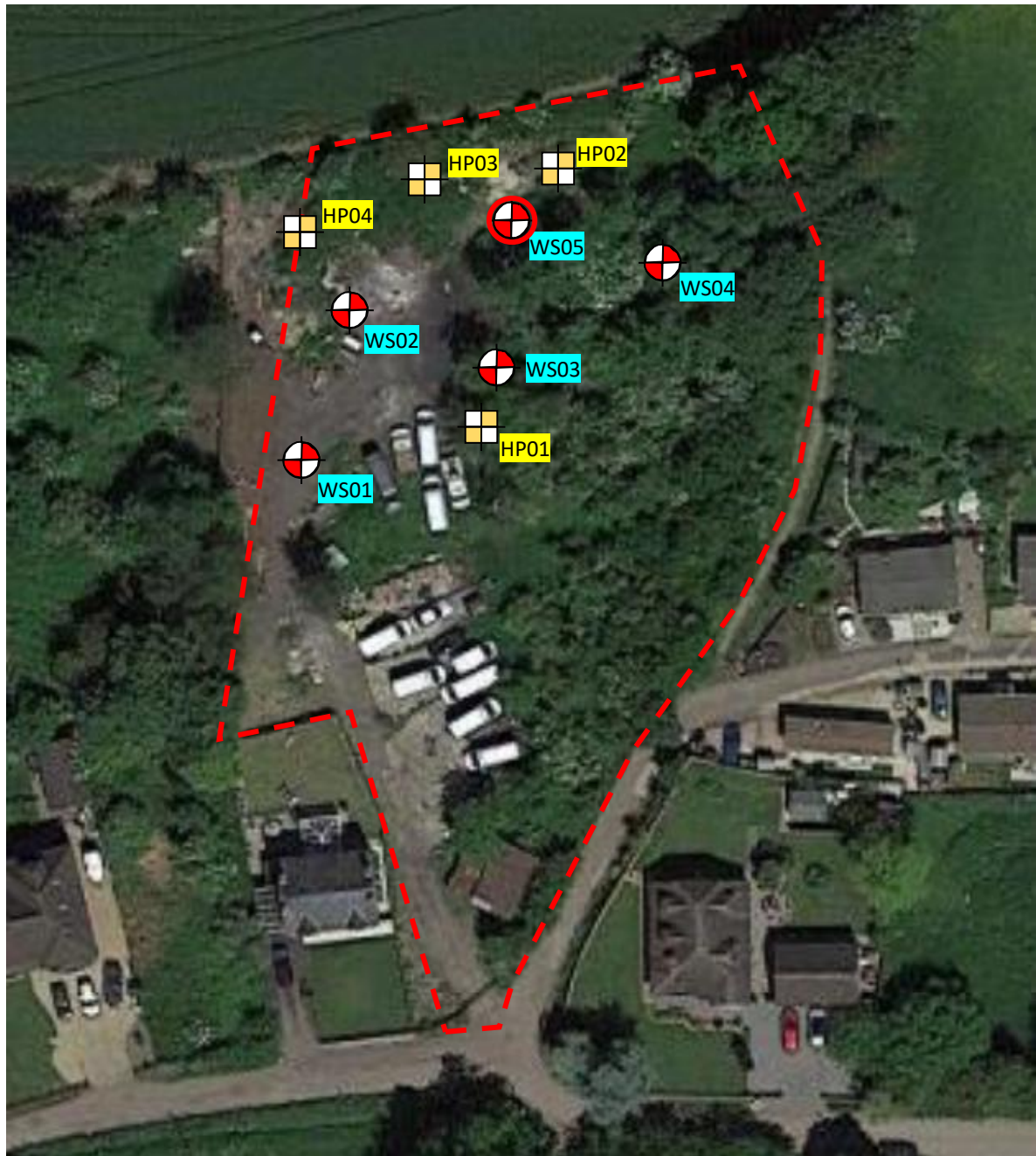
Notes

This drawing is PRELIMINARY only &
Subject to detailed design & all
relevant Statutory Approvals



Schedule of Areas

Site Area Approx 3520sqm



Title
SI Plan

Reference
101320

Date
11/09/2025

Site Address

Glencoe Villa,
Ickleford,
Hitchin
SG5 3TR

Legend

 Borehole Location

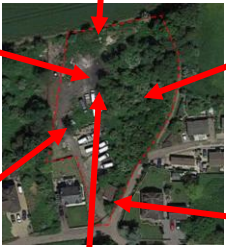
 Hand Dug Pit into
Stockpile

 Indicates installed boreholes
for ground water monitoring

Scale
NTS

Drawn
AMD

Figure Number
Fig.4



Title	
Site Photos	
Reference	Date
101320	11/09/2025

Site Address
Glencoe Villa, Ickleford, Hitchin SG5 3TR

Legend

Scale	Drawn	Figure Number
NTS	AMD	Fig.5



Title
Site Photos

Reference
101320

Date
11/09/2025

Site Address

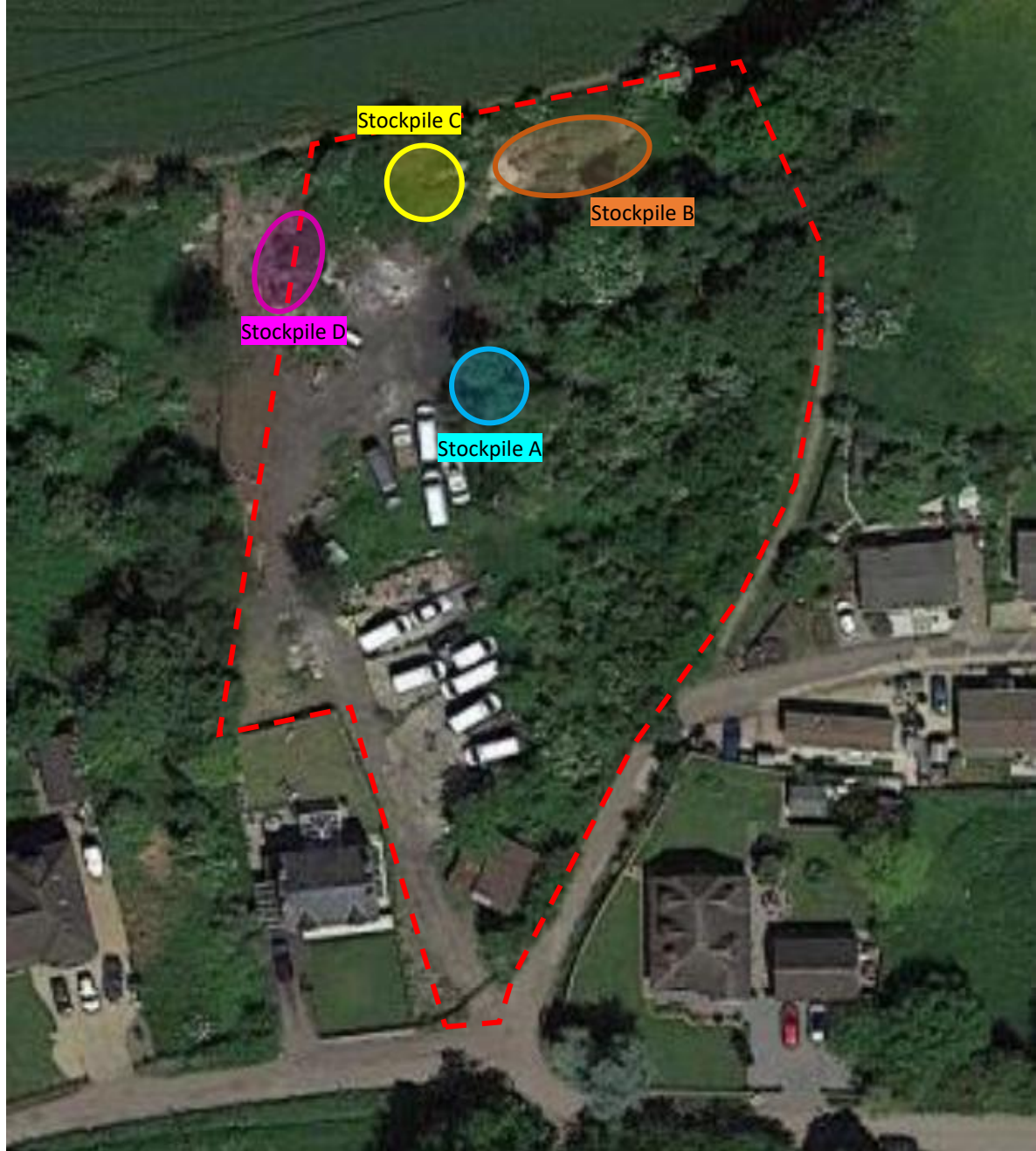
Glencoe Villa,
Ickleford,
Hitchin
SG5 3TR

Legend

Scale
NTS

Drawn
AMD

Figure Number
Fig.6



Title
Approximate Stockpile Locations

Reference
101320

Date
11/09/2025

Site Address

Glencoe Villa,
Ickleford,
Hitchin
SG5 3TR

Legend

Scale
NTS

Drawn
AMD

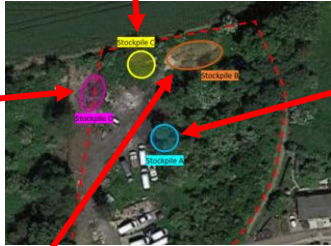
Figure Number
Fig.7



Stockpile C



Stockpile D



Stockpile A



Stockpile B



Title
Photos – Stockpiles

Reference
101320

Date
11/09/2025

Site Address

Glencoe Villa,
Ickleford,
Hitchin
SG5 3TR

Legend

Scale
NTS

Drawn
AMD

Figure Number
Fig.8

APPENDIX B

Rational and full list of General Assessment Criteria used by Dice Environmental.

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Determinand	Allotment	R _{WH} HP	R _{WO} HP	Commercial/ Industrial	POSresi	POSpark
Metals						
Arsenic (Inorganic) ^{a, b, c}	43	37	40	640	79	170
Beryllium ^{a, b, d, e}	35	1.7	1.7	12	2.2	63
Boron ^{a, b, d}	45	290	11000	240000	21000	46000
Cadmium (pH6-8) ^{a, b, d, f}	1.9	11	85	190	120	560
Chromium (trivalent) ^{a, b, d, g}	18000	910	910	8600	1500	33000
Chromium (hexavalent) ^{a, b, c}	1.8 ^h	6 ⁱ	6 ⁱ	33 ^j	7.7 ^j	220 ^j
Copper ^{a, b, c}	520	2400	7100	68000	12000	44000
Mercury (elemental) ^{a, b, c, j}	21	1.2	1.2	58 ^{vap} (25.8)	16	30 ^{vap} (25.8)
Mercury (inorganic) ^{a, b, c}	19	40	56	1100	120	240
Methylmercury ^{a, b, c}	6	11	15	320	40	68
Nickel ^{a, b, c}	230 ^k	180 ^e	180 ^e	980 ^e	230 ^e	3400 ^k
Selenium ^{a, b, c}	88	250	430	12000	1100	1800
Vanadium ^{a, b, c, i, j}	91	410	1200	9000	2000	5000
Zinc ^{a, b, c}	620	3700	40000	730000	81000	170000
BTEX Compounds (SOM 1%/ 2.5%/ 6%)						
Benzene ^{a, b, l, m}	0.017/0.034/ 0.075	0.087/0.17/ 0.37	0.38/0.7/1.4	27 / 47 / 90	72 / 72 / 73	90 / 100 / 110
Toluene ^{a, b, l, m}	22 / 51 / 120	130 / 290 / 660	800 ^{vap} (869) /1900/3900	56000 ^{vap} (869) / 110000 ^{vap} (1920) / 180000 ^{vap} (4360)	56000 / 56000 / 56000	87000 ^{vap} (869) / 95000 ^{vap} (1920) / 100000 ^{vap} (4360)
Ethylbenzene ^{a, b, l, m}	16 / 39 / 91	47 / 110 / 260	83 / 190 / 440	5700 ^{vap} (518) / 13000 ^{vap} (1220) / 27000 ^{vap} (2840)	24000 / 24000 / 25000	17000 ^{vap} (518) / 22000 ^{vap} (1220) / 27000 ^{vap} (2840)
O – Xylene ^{a, b, l, m, n}	28 / 67 / 160	60 / 140 / 330	88 / 210 / 480	6600 ^{sol} (478) / 15000 ^{sol} (1120) / 33000 ^{sol} (2620)	41000 / 42000 / 43000	17000 ^{sol} (478) / 24000 ^{sol} (1120) / 33000 ^{sol} (2620)
M – Xylene ^{a, b, l, m, n}	31 / 74 / 170	59 / 140 / 320	82 / 190 / 450	6200 ^{vap} (625) / 14000 ^{vap} (1470) / 31000 ^{vap} (3460)	41000 / 42000 / 43000	17000 ^{vap} (625) / 24000 ^{vap} (1470) / 32000 ^{vap} (3460)
P – Xylene ^{a, b, l, m, n}	29 / 69 / 160	56 / 130 / 310	79 / 180 / 430	5900 ^{sol} (576) / 14000 ^{sol} (1350) / 30000 ^{sol} (3170)	41000 / 42000 / 43000	17000 ^{sol} (576) / 23000 ^{sol} (1350) / 31000 ^{sol} (3170)
Polycyclic Aromatic Hydrocarbons (SOM 1%/ 2.5%/ 6%)^{a, b, l, p}						
Acenaphthene	34 / 85 / 200	210 / 510 / 1100	3000 ^{sol} (57.0) / 4700 ^{sol} (141) / 6000 ^{sol} (336)	84000 ^{sol} (57.0) / 97000 ^{sol} (141) / 100000	15000 / 15000 / 15000	29000 / 30000 / 30000
Acenaphthylene	28 / 69 / 160	170 / 420 / 920	2900 ^{sol} (86.1) / 4600 ^{sol} (212) / 6000 ^{sol} (506)	83000 ^{sol} (86.1) / 97000 ^{sol} (212) / 100000	15000 / 15000 / 15000	29000 / 30000 / 30000
Anthracene	380 / 950 / 2200	2400 / 5400 / 11000	31000 ^{sol} (1.17 /35000/ 37000	520000 / 540000 / 540000	74000 / 74000 / 74000	150000 / 150000 / 150000
Benz(a)anthracene	2.9 / 6.5 / 13	7.2 / 11 / 13	11 / 14 / 15	170 / 170 / 180	29 / 29 / 29	49 / 56 / 62
Benzo(a)pyrene (Bap)	0.97 / 2.0 / 3.5	2.2 / 2.7 / 3.0	3.2 / 3.2 / 3.2	35 / 35 / 36	5.7 / 5.7 / 5.7	11 / 12 / 13
Benzo(b)fluoranthene	0.99 / 2.1 / 3.9	2.6 / 3.3 / 3.7	3.9 / 4.0 / 4.0	44 / 44 / 45	7.1 / 7.2 / 7.2	13 / 15 / 16
Benzo(g,h,i)perylene	290 / 470 / 640	320 / 340 / 350	360/360 / 360	3900/4000/ 4000	640/640/640	1400/1500/ 1600
Benzo(k)fluoranthene	37 / 75 / 130	77 / 93 / 100	110 / 110 / 110	1200/ 1200/1200	190/190/190	370 / 410 / 440
Chrysene	4.1 / 9.4 / 19	15 / 22 / 27	30 / 31 / 32	350 / 350 / 350	57 / 57 / 57	93 / 110 / 120
Dibenzo(ah)anthracene	0.14 / 0.27 / 0.43	0.24 / 0.28 / 0.3	0.31/0.32/ 0.32	3.5 / 3.6 / 3.6	0.57/0.57/0.58	1.1 / 1.3 / 1.4
Fluoranthene	52 / 130 / 290	280 / 560 / 890	1500/1600/ 1600	23000/23000/ 23000	3100/3100/ 3100	6300 / 6300 / 6400
Fluorene	27 / 67 / 160	170 / 400 / 860	2800 ^{sol} (30.9) /3800 ^{sol} (76.5) /4500 ^{sol} (183)	63000 ^{sol} (30.9) / 68000 / 71000	9900 / 9900 / 9900	20000 / 20000 / 20000
Indeno(1,2,3-cd)pyrene	9.5 / 21 / 39	27 / 36 / 41	45 / 46 / 46	500 / 510 / 510	82 / 82 / 82	150 / 170 / 180
Naphthalene ^q	4.1 / 10 / 24	2.3 / 5.6 / 13	2.3 / 5.6 / 13	190 ^{sol} (76.4) / 460 ^{sol} (183) / 1100 ^{sol} (432)	4900/ 4900/ 4900	1200 ^{sol} (76.4) / 1900 ^{sol} (183) / 3000
Phenanthrene	15 / 38 / 90	95 / 220 / 440	1300 ^{sol} (36.0) / 1500/1500	22000 / 22000 / 23000	3100 / 3100 / 3100	6200 / 6200 / 6300
Pyrene	110 / 270 / 620	620 / 1200 / 2000	3700 / 3800 / 3800	54000 / 54000 / 54000	7400 / 7400 / 7400	15000 / 15000 / 15000
Coal Tar (Bap as surrogate marker)	0.32 / 0.67 / 1.2	0.79 / 0.98 / 1.1	1.2 / 1.2 / 1.2	15 / 15 / 15	2.2 / 2.2 / 2.2	4.4 / 4.7 / 4.8
Explosives^{a, b, l, p}						
2, 4, 6 Trinitrotoluene	0.24 / 0.58 / 1.40	1.6 / 3.7 / 8.0	65 / 66 / 66	1000/1000/1000	130/130 / 130	260 / 270 / 270
RDX (Royal Demolition Explosive C ₃ H ₆ N ₆ O ₆)	17 / 38 / 85	120 / 250 / 540	13000 / 13000 / 13000	210000 / 210000 / 210000	26000/26000/ 27000	49000 ^{sol} (18.7) / 51000 / 53000
HMX (High Melting Explosive C ₄ H ₈ N ₈ O ₈)	0.86 / 1.9 / 3.9	5.7 / 13 / 26	6700 / 6700 / 6700	110000 / 110000 / 110000	13000 / 13000 / 13000	23000 ^{vap} (0.35) /23000 ^{vap} (0.39) /24000 ^{vap} (0.48)

Determinand	Allotment	R _{HP}	R _{WP}	Commercial/ Industrial	POSresi	POSpark
Petroleum Hydrocarbons (SOM 1%/ 2.5%/ 6%)^{a, b, l, m}						
Aliphatic EC 5-6	730 / 1700 / 3900	42 / 78 / 160	42 / 78 / 160	3200 ^{sol} (304) / 5900 ^{sol} (558) / 12000 ^{sol} (1150)	570000 ^{sol} (304) / 590000 / 600000	95000 ^{sol} (304) / 130000 ^{sol} (558) / 180000 ^{sol} (1150)
Aliphatic EC >6-8	2300 / 5600 / 13000	100 / 230 / 530	100 / 230 / 530	7800 ^{sol} (144) / 17000 ^{sol} (322) / 40000 ^{sol} (736)	600000 / 610000 / 620000	150000 ^{sol} (144) / 220000 ^{sol} (322) / 320000 ^{sol} (736)
Aliphatic EC >8-10	320 / 770 / 1700	27 / 65 / 150	27 / 65 / 150	2000 ^{sol} (78) / 4800 ^{vap} (190) / 11000 ^{vap} (451)	13000 / 13000 / 13000	14000 ^{sol} (78) / 18000 ^{vap} (190) / 21000 ^{vap} (451)
Aliphatic EC >10-12	2200 / 4400 / 7300	130v ^{ap} (48) / 330 ^{vap} (118) / 760 ^{vap} (283)	130v ^{ap} (48) / 330 ^{vap} (118) / 770 ^{vap} (283)	9700 ^{sol} (48) / 23000 ^{vap} (118) / 47000 ^{vap} (283)	13000 / 13000 / 13000	21000 ^{sol} (48) / 23000 ^{vap} (118) / 24000 ^{vap} (283)
Aliphatic EC >12-16	11000 / 13000 / 13000	1100 ^{sol} (24) / 2400 ^{sol} (59) / 4300 ^{sol} (142)	1100 ^{sol} (24) / 2400 ^{sol} (59) / 4400 ^{sol} (142)	59000 ^{sol} (24) / 82000 ^{sol} (59) / 90000 ^{sol} (142)	13000 / 13000 / 13000	25000 ^{sol} (24) / 25000 ^{sol} (59) / 26000 ^{sol} (142)
Aliphatic EC >16-35 °	260000 / 270000 / 270000	65000 ^{sol} (8.48) / 92000 ^{sol} (21) / 110000	65000 ^{sol} (8.48) / 92000 ^{sol} (21) / 110000	1600000 / 1700000 / 1800000	250000 / 250000 / 250000	450000 / 480000 / 490000
Aliphatic EC >35-44 °	260000 / 270000 / 270000	65000 ^{sol} (8.48) / 92000 ^{sol} (21) / 110000	65000 ^{sol} (8.48) / 92000 ^{sol} (21) / 110000	1600000 / 1700000 / 1800000	250000 / 250000 / 250000	450000 / 480000 / 490000
Aromatic EC 5-7 (benzene)	13 / 27 / 57	70 / 140 / 300	370 / 690 / 1400	260000 ^{sol} (1220) / 46000 ^{sol} (2260) / 86000 ^{sol} (4710)	56000 / 56000 / 56000	76000 ^{sol} (1220) / 84000 ^{sol} (2260) / 92000 ^{sol} (4710)
Aromatic EC >7-8 (toluene)	22 / 51 / 120	130 / 290 / 660	860 / 1800 / 3900	56000 ^{vap} (869) / 110000 ^{sol} (1920) / 180000 ^{vap} (4360)	56000 / 56000 / 56000	87000 ^{vap} (869) / 95000 ^{sol} (1920) / 100000 ^{vap} (4360)
Aromatic EC >8-10	8.6 / 21 / 51	34 / 83 / 190	47 / 110 / 270	3500 ^{vap} (613) / 8100 ^{vap} (1500) / 17000 ^{vap} (3580)	5000 / 5000 / 5000	7200 ^{vap} (613) / 8500 ^{vap} (1500) / 9300 ^{vap} (3580)
Aromatic EC >10-12	13 / 31 / 74	74 / 180 / 380	250 / 590 / 1200	16000 ^{sol} (364) / 28000 ^{sol} (899) / 34000 ^{sol} (2150)	5000 / 5000 / 5000	9200 ^{sol} (364) / 97000 ^{sol} (899) / 10000
Aromatic EC >12-16	23 / 57 / 130	140 / 330 / 660	1800 / 2300 ^{sol} (419) / 2500	36000 ^{sol} (169) / 37000 / 38000	5100 / 5100 / 5000	10000 / 10000 / 10000
Aromatic EC >16-21 °	46 / 110 / 260	260 / 540 / 930	1900 / 1900 / 1900	28000 / 28000 / 28000	3800 / 3800 / 3800	7600 / 7700 / 7800
Aromatic EC >21-35 °	370 / 820 / 1600	1100 / 1500 / 1700	1900 / 1900 / 1900	28000 / 28000 / 28000	3800 / 3800 / 3800	7800 / 7800 / 7900
Aromatic EC >35-44 °	370 / 820 / 1600	1100 / 1500 / 1700	1900 / 1900 / 1900	28000 / 28000 / 28000	3800 / 3800 / 3800	7800 / 7800 / 7900
Aliphatic+Aromatic EC >44-70 °	1200 / 2100 / 3000	1600 / 1800 / 1900	1900 / 1900 / 1900	28000 / 28000 / 28000	3800 / 3800 / 3800	7800 / 7800 / 7900
Chloroalkanes & Chloroalkenes (SOM 1%/ 2.5%/ 6%)^{a, b, l, p}						
1,2-Dichloroethane	0.0046 / 0.0083 / 0.016	0.0071 / 0.011 / 0.019	0.092 / 0.013 / 0.023	0.67 / 0.97 / 1.7	29 / 29 / 29	21 / 24 / 28
1,1,1 Trichloroethane (TCA)	48 / 110 / 240	8.8 / 18 / 39	9.0 / 18 / 40	660 / 1300 / 3000	140000 / 140000 / 140000	57000 ^{vap} (1425) / 76000 ^{vap} (2915) / 100000 ^{vap} (6392)
1,1,1,2 Tetrachloroethane	0.79 / 1.9 / 4.4	1.2 / 2.8 / 6.4	1.5 / 3.5 / 8.2	110 / 250 / 560	1400 / 1400 / 1400	1500 / 1800 / 2100
1,1,2,2 Tetrachloroethane	0.41 / 0.89 / 2.0	1.6 / 3.4 / 7.5	3.9 / 8.0 / 17	270 / 550 / 1100	1400 / 1400 / 1400	1800 / 2100 / 2300
Tetrachloroethene (PCE)	0.65 / 1.5 / 3.6	0.18 / 0.39 / 0.90	0.18 / 0.4 / 0.92	19 / 42 / 95	1400 / 1400 / 1400	810 ^{sol} (424) / 1100 ^{sol} (951) / 1500
Tetrachloromethane (Carbon Tetrachloride)	0.45 / 1.0 / 2.4	0.026 / 0.056 / 0.13	0.026 / 0.056 / 0.13	2.9 / 6.3 / 14	890 / 920 / 950	190 / 270 / 400
Trichloroethene (TCE)	0.041 / 0.091 / 0.21	0.016 / 0.034 / 0.075	0.017 / 0.036 / 0.080	1.2 / 2.6 / 5.7	120 / 120 / 120	70 / 91 / 120
Trichloromethane (Chloroform)	0.42 / 0.83 / 1.7	0.91 / 1.7 / 3.4	1.2 / 2.1 / 4.2	99 / 170 / 350	2500 / 2500 / 2500	2600 / 2800 / 3100
Chloroethene (Vinyl Chloride)	0.00055 / 0.001 / 0.0018	0.00064 / 0.00087 / 0.0014	0.00077 / 0.001 / 0.0015	0.059 / 0.077 / 0.12	3.5 / 3.5 / 3.5	4.8 / 5.0 / 5.4
Phenol & Chlorophenols^{a, b, l, p}						
Phenol	23 / 42 / 83	120 / 200 / 380	440 / 690 / 1200	440 ^{dr} (26000) / 690 ^{dr} (30000) / 1300 ^{dr} (34000)	440 ^{dr} (10000) / 690 ^{dr} (10000) / 1300 ^{dr} (10000)	440 ^{dr} (7600) / 690 ^{dr} (8300) / 1300 ^{dr} (93000)
Chlorophenols (excluding PCP) [†]	0.13 ^s / 0.3 / 0.7	0.87 ^s / 2.0 / 4.5	94 / 150 / 210	3500 / 4000 / 4300	620 / 620 / 620	1100 / 1100 / 1100
Pentachlorophenol (PCP)	0.03 / 0.08 / 0.19	0.22 / 0.52 / 1.2	27 ^{vap} (16.4) / 29 / 31	400 / 400 / 400	60 / 60 / 60	110 / 120 / 120
Other^{a, b, l, p}						
Carbon Disulphide	4.8 / 10 / 23	0.14 / 0.29 / 0.62	0.14 / 0.29 / 0.62	11 / 22 / 47	11000 / 11000 / 12000	1300 / 1900 / 2700
Hexachlorobutadiene (HCBD)	0.25 / 0.61 / 1.4	0.29 / 0.7 / 1.6	0.32 / 0.78 / 1.8	31 / 66 / 120	25 / 25 / 25	48 / 50 / 51

Determinand	Allotment	R _W HP	R _{WO} HP	Commercial/ Industrial	POSresi	POSpark
Pesticides (SOM 1%/ 2.5%/ 6%)^{a, b, c, p}						
Aldrin	3.2 / 6.1 / 9.6	5.7 / 6.6 / 7.1	7.3 / 7.4 / 7.5	170 / 170 / 170	18 / 18 / 18	30 / 31 / 31
Atrazine	0.5 / 1.2 / 2.7	3.3 / 7.6 / 17.4	610 / 620 / 620	9300 / 9400 / 9400	1200 / 1200 / 1200	2300 / 2400 / 2400
Dichlorvos	0.0049 / 0.010 / 0.022	0.032 / 0.066 / 0.14	6.4 / 6.5 / 6.6	140 / 140 / 140	16 / 16 / 16	26 / 26 / 27
Dieldrin	0.17 / 0.41 / 0.96	0.97 / 2 / 3.5	7.0 / 7.3 / 7.4	170 / 170 / 170	18 / 18 / 18	30 / 30 / 31
Alpha - Endosulfan	1.2 / 2.9 / 6.8	7.4 / 18 / 41	160 ^{vap} (0.003) / 280 ^{vap} (0.007) / 410 ^{vap} (0.016)	5600 ^{vap} (0.003) / 7400 ^{vap} (0.007) / 8400 ^{vap} (0.016)	1200 / 1200 / 1200	2400 / 2400 / 2500
Beta - Endosulfan	1.1 / 2.7 / 6.4	7.0 / 17 / 39	190 ^{vap} (0.00007) / 320 ^{vap} (0.0002) / 440 ^{vap} (0.0004)	6300 ^{vap} (0.00007) / 7800 ^{vap} (0.0002) / 8700	1200 / 1200 / 1200	2400 / 2400 / 2500
Alpha-Hexachlorocyclohexane	0.035 / 0.087 / 0.21	0.23 / 0.55 / 1.2	6.9 / 9.2 / 11	170 / 180 / 180	24 / 24 / 24	47 / 48 / 48
Beta - Hexachlorocyclohexane	0.013 / 0.032 / 0.077	0.085 / 0.2 / 0.46	3.7 / 3.8 / 3.8	65 / 65 / 65	8.1 / 8.1 / 8.1	15 / 15 / 16
Gamma – Hexachlorocyclohexane	0.0092 / 0.023 / 0.054	0.06 / 0.14 / 0.33	2.9 / 3.3 / 3.5	67 / 69 / 70	8.2 / 8.2 / 8.2	14 / 15 / 15
Chlorobenzenes^{a, b, c, p}						
Chlorobenzene	5.9 / 14 / 32	0.46 / 1.0 / 2.4	0.46 / 1.0 / 2.4	56 / 130 / 290	11000 / 13000 / 14000	1300 ^{sol} (675) / 2000 ^{sol} (1520) / 2900
1,2-dichlorobenzene (1,2-DCB)	94 / 230 / 540	23 / 55 / 130	24 / 57 / 130	2000 ^{sol} (571) / 4800 ^{sol} (1370) / 11000 ^{sol} (3240)	90000 / 95000 / 98000	24000 ^{sol} (571) / 36000 ^{sol} (1370) / 51000 ^{sol} (3240)
1,3-dichlorobenzene (1,3-DCB)	0.25 / 0.6 / 1.5	0.4 / 1.0 / 2.3	0.44 / 1.1 / 2.5	30 / 73 / 170	300 / 300 / 300	390 / 440 / 470
1,4-dichlorobenzene (1,4-DCB)	15 ⁱ / 37 ⁱ / 88 ⁱ	61 ^q / 150 ^q / 350 ^q	61 ^q / 150 ^q / 350 ^q	4400 ^{vap, q} (224) / 10000 ^{vap, q} (540) / 25000 ^{vap, q} (1280)	17000 ⁱ / 17000 ⁱ / 17000 ⁱ	36000 ^{vap, i} (224) / 36000 ^{vap, i} (540) / 36000 ^{vap, i} (1280)
1,2,3-Trichlorobenzene	4.7 / 12 / 28	1.5 / 3.6 / 8.6	1.5 / 3.7 / 8.8	102 / 250 / 590	1800 / 1800 / 1800	770 ^{vap} (134) / 1100 ^{vap} (330) / 1600 ^{vap} (789)
1,2,4- Trichlorobenzene	55 / 140 / 320	2.6 / 6.4 / 15	2.6 / 6.4 / 15	220 / 530 / 1300	15000 / 17000 / 19000	1700 ^{vap} (318) / 2600 ^{vap} (786) / 4000 ^{vap} (1880)
1,3,5- Trichlorobenzene	4.7 / 12 / 28	0.33 / 0.81 / 1.9	0.33 / 0.81 / 1.9	23 / 55 / 130	1700 / 1700 / 1800	380 ^{vap} (36.7) / 580 ^{vap} (90.8) / 860 ^{vap} (217)
1,2,3,4-Tetrachlorobenzene	4.4 / 11 / 26	15 / 36 / 78	24 / 56 / 120	1700 ^{vap} (122) / 3080 ^{vap} (304) / 4400 ^{vap} (728)	830 / 830 / 830	1500 ^{vap} (122) / 1600 / 1600
1,2,3,5- Tetrachlorobenzene	0.38 / 0.90 / 2.2	0.66 / 1.6 / 3.7	0.75 / 1.9 / 4.3	49 ^{vap} (39.4) / 120 ^{vap} (98.1) / 240 ^{vap} (235)	78 / 79 / 79	110 ^{vap} (39) / 120 / 130
1,2,4,5- Tetrachlorobenzene	0.06 / 0.16 / 0.37	0.33 / 0.77 / 1.6	0.73 / 1.7 / 3.5	42 ^{sol} (19.7) / 72 ^{sol} (49.1) / 96	13 / 13 / 13	25 / 26 / 26
Pentachlorobenzene (P ₅ CB)	1.2 / 3.1 / 7.0	5.8 / 12 / 22	19 / 30 / 38	640 ^{sol} (43.0) / 770 ^{sol} (107) / 830	100 / 100 / 100	190 / 190 / 190
Hexachlorobenzene (HCB)	0.47 / 1.1 / 2.5	1.8 ^{vap} (0.20) / 3.3 ^{vap} (0.5) / 4.9	4.1 ^{vap} (0.20) / 5.7 ^{vap} (0.5) / 6.7 ^{vap} (1.2)	110 ^{vap} (0.20) / 120 / 120	16 / 16 / 16	30 / 30 / 30

- R_WHP Residential with homegrown produce
 R_{WO}HP Residential without homegrown produce
 POSresi public open spaces near residential housing
 POSpark public open space for recreational use but not dedicated sports pitches
 SOM Soil Organic Matter – **the S4UL for all organic compounds will vary according to SOM**
- a Based on a sandy loam soil as defined in SR3 (Environment Agency, 2009b) and 6% soil organic matter (SOM)
 b Figures rounded to two significant figures
 c Based only on a comparison of oral and dermal soil exposure with oral Index Dose
 d The background ADE is limited to being no larger than the contribution from the relevant soil ADE
 e Based on comparison of inhalation exposure with inhalation TDI only
 f Based on a lifetime exposure via the oral, dermal and inhalation pathways
 g Based on localised effects comparing inhalation exposure with inhalation ID only
 h Based on comparison of inhalation exposure with inhalation ID
 i Based on comparison of oral and dermal exposure with oral TDI
 j Based on comparison of oral, dermal and inhalation exposure with inhalation TDI
 k Based on comparison of all exposure pathways with oral TDI
 l S4ULs assume that free phase contamination is not present
 m S4ULs based on a sub-surface soil to indoor air correction factor of 10
 n The HCV applied is based on the intake of total Xylene and therefore exposure should not consider an isomer in isolation
 o Oral, dermal and inhalation exposure compared with oral HCV
 p S4ULs based on a sub-surface soil to indoor air correction factor of 1
 q Based on a comparison of inhalation exposure with the inhalation TDI for localised effects
 r Based on 2,4-dichlorophenol unless otherwise stated
 s Based on 2,3,4,6-tetrachlorophenol
 vap S4UL presented exceeded the vapour saturation limit, which is presented in brackets
 sol S4UL presented exceeds the solubility saturation limit, which is presented in brackets
 dir S4ULs based on a threshold protective of direct skin contact, guideline in brackets based on the health effects following long term exposure provided for illustration only

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Category 4 Screening Levels (C4SL) – Table taken from SP1010: Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination – Policy Companion Document (Department for Environmental, Food and Rural Affairs December 2014).

	Residential (with home-grown produce)	Residential (without home-grown produce)	Allotments	Commercial	Public Open Space 1	Public Open Space 2
Arsenic	37	40	49	640	79	170
Benzene	0.87	3.3	0.18	98	140	230
Benzo(a)pyrene	5.0	5.3	5.7	77	10	21
Cadmium	22	150	3.9	410	220	880
Chromium VI	21	21	170	49	21	250
Lead	200	310	80	2300	630	1300

All in mg/kg

Public Open Space 1 – for grassed area adjacent to residential housing

Public Open Space 2 - Park Type Public Open Space Scenario