

# WEIGHBRIDGE TICKET

Ticket No. DO649922  
CONVEYANCE NOTE

## WOODHORN GROUP Ltd

Tangmere Composting Facility  
City Fields Industrial Estate  
Tangmere  
West Sussex  
PO20 2FP  
EA Permit No: EPR/DB3703HG  
Company Reg No. 3629015  
VAT No. 816160744  
SIC Code: 38210

Waste Carrier Licence no: CBDU162145

|             |                                                               |
|-------------|---------------------------------------------------------------|
| Time In     | 12:49                                                         |
| Date In     | 26/6/2019                                                     |
| Time Out    | 12:58                                                         |
| Date Out    | 26/6/2019                                                     |
| Vehicle     | N77TJT                                                        |
| Carrier     | TJ Transport Ltd                                              |
| License No. |                                                               |
| Client      | Blaze Construction Ltd                                        |
| Address     | CRESSWELL PARK,<br>ROUNDSTONE LANE,<br>ANGMERING, , SIC Code: |
| Permit      |                                                               |
| Zone        |                                                               |
| Product     | Topsoil BS3882 (20MM)                                         |
| EWC Code    |                                                               |
| 1st Weight: | 12,420.00 Kg NONI                                             |
| 2nd Weight: | 29,980.00 Kg NONI                                             |
| Net Weight: | 17,560.00 Kg                                                  |

By Signing this document I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the waste (England and Wales) Regulations 2011

Signature waste depositor

Signature waste receiver

# THE WOODHORN GROUP

Date: 26/6/2019

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## Dispatch Note

(BLAZE)

### Bill/Sold To:

Blaze Construction Ltd  
93 Leigh Road  
Hampshire  
Eastleigh  
SO50 9DQ

### Job Site/Ship To:

Blaze Construction Ltd  
CALA HOMES SITE  
CRESSWELL PARK  
ROUNDSTONE LANE  
ANGMERING

| Quote No. | Job No. | Salesperson         | Manager | Ref       |
|-----------|---------|---------------------|---------|-----------|
| 31944     | 48668   | -No Sales Employee- |         | 609/15042 |

| DESCRIPTION | QTY / UNIT | UNIT PRICE | EXTENDED PRICE |
|-------------|------------|------------|----------------|
|-------------|------------|------------|----------------|

26/6/2019

### Container

8 Wheel Tipper

1.00 /

### Product

Topsoil BS3882 (20MM)

18.00 / Tonnes

84.67

Company Representative (signature)

Company Registration Number: 3629015

Company VAT Number: 816160744

Page 1 of 1

# WEIGHBRIDGE TICKET

Ticket No. DO649913

## WOODHORN GROUP Ltd

### Tangmere Composting Facility

City Fields Industrial Estate

Tangmere

West Sussex

PO20 2FP

EA Permit No:EPR/DB3703HG

Company Reg No.3629015

VAT No.816160744

SIC Code: 38210

Waste Carrier Licence no: CBDU162145

|             |                                                     |           |      |
|-------------|-----------------------------------------------------|-----------|------|
| Time In     | 11:47                                               |           |      |
| Date In     | 26/6/2019                                           |           |      |
| Time Out    | 11:56                                               |           |      |
| Date Out    | 26/6/2019                                           |           |      |
| Vehicle     | M44TJT                                              |           |      |
| Carrier     | TJ Transport Ltd                                    |           |      |
| License No. |                                                     |           |      |
| Client      | Blaze Construction Ltd                              |           |      |
| Address     | CRESSWELL PARK,<br>ROUNDSTONE LANE,<br>ANGMERING, , | SIC Code: |      |
| Permit      |                                                     |           |      |
| Zone        |                                                     |           |      |
| Product     | Topsoil BS3882 (20MM)                               |           |      |
| EWC Code    |                                                     |           |      |
| 1st Weight: | 13,120.00                                           | Kg        | NONE |
| 2nd Weight: | 31,440.00                                           | Kg        | NONE |
| Net Weight: | 18,320.00                                           | Kg        |      |

Signature waste depositer

Signature waste receiver

## Dispatch Note

## Bill/Sold To:

Blaze Construction Ltd  
93 Leigh Road  
Hampshire  
Eastleigh  
SO50 9DQ

## Job Site/Ship To:

Blaze Construction Ltd  
CALA HOMES SITE  
CRESSWELL PARK  
ROUNDSTONE LANE  
ANGMERING

## Quote No.

31943

## Job No.

48667

## Salesperson

-No Sales Employee-

## Manager

## Ref

609/15042

## DESCRIPTION

## QTY / UNIT

## UNIT PRICE

## EXTENDED PRICE

26/6/2019

## Container

8 Wheel Tipper

1.00 /

## Product

Topsoil BS3882 (20MM)

18.32 / Tonnes

85.81

\_\_\_\_\_  
Company Representative (signature)

Company Registration Number: 3629015

Company VAT Number: 816160744

Page 1 of 1

# WEIGHBRIDGE TICKET

Ticket No. DO649896  
CONVEYANCE NOTE

## WOODHORN GROUP Ltd

Tangmere Composting Facility

City Fields Industrial Estate

Tangmere

West Sussex

PO20 2FP

EA Permit No: EPR/DB3703HG

Company Reg No. 3629015

VAT No. 816160744

SIC Code: 38210

Waste Carrier Licence no: CBDU162145

|             |                                                               |
|-------------|---------------------------------------------------------------|
| Time In     | 10:18                                                         |
| Date In     | 26/6/2019                                                     |
| Time Out    | 10:28                                                         |
| Date Out    | 26/6/2019                                                     |
| Vehicle     | M44TJT                                                        |
| Carrier     | TJ Transport Ltd                                              |
| License No. |                                                               |
| Client      | Blaze Construction Ltd                                        |
| Address     | CRESSWELL PARK,<br>ROUNDSTONE LANE,<br>ANGMERING, , SIC Code: |
| Permit      |                                                               |
| Zone        |                                                               |
| Product     | Topsoil BS3882 (20MM)                                         |
| EW Code     |                                                               |
| 1st Weight: | 13,120.00 Kg NONE                                             |
| 2nd Weight: | 31,540.00 Kg NONE                                             |
| Net Weight: | 18,420.00 Kg                                                  |

By Signing this document I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the waste (England and Wales) Regulations 2011

Signature waste depositer

Signature waste receiver



## Dispatch Note

## Bill/Sold To:

Blaze Construction Ltd  
93 Leigh Road  
Hampshire  
Eastleigh  
SO50 9DQ

## Job Site/Ship To:

Blaze Construction Ltd  
CALA HOMES SITE  
CRESSWELL PARK  
ROUNDSTONE LANE  
ANGMERING

## Quote No.

31948

## Job No.

48672

## Salesperson

-No Sales Employee-

## Manager

## Ref

609/15042

## DESCRIPTION

## QTY / UNIT

## UNIT PRICE

## EXTENDED PRICE

26/6/2019

## Container

8 Wheel Tipper

1.00 /

## Product

Topsoil BS3882 (20MM)

18.42 / Tonnes

86.17

\_\_\_\_\_  
Company Representative (signature)

Company Registration Number: 3629015

Company VAT Number: 816160744

Page 1 of 1

# WEIGHBRIDGE TICKET

Ticket No. DO649900  
CONVEYANCE NOTE

## WOODHORN GROUP Ltd

### Tangmere Composting Facility

City Fields Industrial Estate

Tangmere

West Sussex

PO20 2FP

EA Permit No:EPR/DB3703HG

Company Reg No.3629015

VAT No.816160744

SIC Code: 38210

Waste Carrier Licence no: CBDU162145

|             |                                                               |
|-------------|---------------------------------------------------------------|
| Time In     | 10:26                                                         |
| Date In     | 26/6/2019                                                     |
| Time Out    | 10:34                                                         |
| Date Out    | 26/6/2019                                                     |
| Vehicle     | V16TJT                                                        |
| Carrier     | TJ Transport Ltd                                              |
| License No. |                                                               |
| Client      | Blaze Construction Ltd                                        |
| Address     | CRESSWELL PARK,<br>ROUNDSTONE LANE,<br>ANGMERING, , SIC Code: |
| Permit      |                                                               |
| Zone        |                                                               |
| Product     | Topsoil BS3882 (20MM)                                         |
| EWC Code    |                                                               |
| 1st Weight: | 12,620.00 Kg NONE                                             |
| 2nd Weight: | 30,080.00 Kg NONE                                             |
| Net Weight: | 17,460.00 Kg                                                  |

By Signing this document I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the waste (England and Wales) Regulations 2011

Signature waste depositer

Signature waste receiver

## Dispatch Note

## Bill/Sold To:

Blaze Construction Ltd  
93 Leigh Road  
Hampshire  
Eastleigh  
SO50 9DQ

## Job Site/Ship To:

Blaze Construction Ltd  
CALA HOMES SITE  
CRESSWELL PARK  
ROUNDSTONE LANE  
ANGMERING

## Quote No.

31949

## Job No.

48673

## Salesperson

-No Sales Employee-

## Manager

## Ref

609/15042

## DESCRIPTION

## QTY / UNIT

## UNIT PRICE

## EXTENDED PRICE

26/6/2019

## Container

8 Wheel Tipper

1.00 /

## Product

Topsoil BS3882 (20MM)

17.46 / Tonnes

82.75

\_\_\_\_\_  
Company Representative (signature)

Company Registration Number: 3629015

Company VAT Number: 819147744

# WEIGHBRIDGE TICKET

Ticket No. DO649960  
CONVEYANCE NOTE

## WOODHORN GROUP Ltd

### Tangmere Composting Facility

City Fields Industrial Estate

Tangmere

West Sussex

PO20 2FP

EA Permit No:EPR/DB3703HG

Company Reg No.3629015

VAT No.816160744

SIC Code: 38210

Waste Carrier Licence no: CBDU162145

|             |                                                               |
|-------------|---------------------------------------------------------------|
| Time In     | 15:55                                                         |
| Date In     | 26/6/2019                                                     |
| Time Out    | 16:06                                                         |
| Date Out    | 26/6/2019                                                     |
| Vehicle     | E10TJT                                                        |
| Carrier     | TJ Transport Ltd                                              |
| License No. |                                                               |
| Client      | Blaze Construction Ltd                                        |
| Address     | CRESSWELL PARK,<br>ROUNDSTONE LANE,<br>ANGMERING, , SIC Code: |
| Permit      |                                                               |
| Zone        |                                                               |
| Product     | Topsoil BS3882 (20MM)                                         |
| EWC Code    |                                                               |
| 1st Weight: | 12,740.00 Kg NONE                                             |
| 2nd Weight: | 31,220.00 Kg NONE                                             |
| Net Weight: | 18,480.00 Kg                                                  |

By Signing this document I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the waste (England and Wales) Regulations 2011

Signature waste depositer

Signature waste receiver

## Dispatch Note

## Bill/Sold To:

Blaze Construction Ltd  
93 Leigh Road  
Hampshire  
Eastleigh  
SO50 9DQ

## Job Site/Ship To:

Blaze Construction Ltd  
CALA HOMES SITE  
CRESSWELL PARK  
ROUNDSTONE LANE  
ANGMERING

## Quote No.

31959

## Job No.

48686

## Salesperson

-No Sales Employee-

## Manager

## Ref

609/15042

## DESCRIPTION

## QTY / UNIT

## UNIT PRICE

## EXTENDED PRICE

27/6/2019

## Container

8 Wheel Tipper

1.00 /

## Product

Topsoil BS3882 (20MM)

18.48 / Tonnes

86.38

\_\_\_\_\_  
Company Representative (signature)

Company Registration Number: 3629015

Company VAT Number: 816160744

Page 1 of 1

# WEIGHBRIDGE TICKET

Ticket No. DO649930  
CONVEYANCE NOTE

## WOODHORN GROUP Ltd

Tangmere Composting Facility  
City Fields Industrial Estate

Tangmere  
West Sussex

PO20 2FP

EA Permit No: EPR/D83703HG

Company Reg No: 3629015

VAT No: 816160744

SIC Code: 38210

Waste Carrier Licence no: CBDU162145

Time In 13:42

Date In 26/6/2019

Time Out 13:51

Date Out 26/6/2019

Vehicle V16TJT

Carrier TJ Transport Ltd

License No.

Client Blaze Construction Ltd

Address CRESSWELL PARK,  
ROUNDSTONE LANE,  
ANGMERING, . SIC Code:

Permit

Zone

Product Topsoil BS3882 (20MM)

EWC Code

1st Weight: 12,600.00 Kg NONI

2nd Weight: 30,140.00 Kg NONI

Net Weight: 17,540.00 Kg

By Signing this document I confirm that I have  
fulfilled my duty to apply the waste hierarchy as  
required by Regulation 12 of the waste (England  
and Wales) Regulations 2011.

Signature waste depositor

Signature waste receiver



# THE WOODHORN GROUP

Date: 26/6/2019

Page: 1

## Dispatch Note

**Bill/Sold To:**

Blaze Construction Ltd  
93 Leigh Road  
Hampshire  
Eastleigh  
SO50 9DQ

**Job Site/Ship To:**

Blaze Construction Ltd  
CALA HOMES SITE  
CRESSWELL PARK  
ROUNDSTONE LANE  
ANGMERING

| Quote No. | Job No. | Salesperson         | Manager | Ref       |
|-----------|---------|---------------------|---------|-----------|
| 31945     | 48669   | -No Sales Employee- |         | 609/15042 |

| DESCRIPTION | QTY / UNIT | UNIT PRICE | EXTENDED PRICE |
|-------------|------------|------------|----------------|
|-------------|------------|------------|----------------|

26/6/2019

**Container**

8 Wheel Tipper

1.00 /

**Product**

Topsoil BS3882 (20MM)

18.00 / Tonnes

\_\_\_\_\_  
Company Representative (signature)

Company Registration Number: 3629015

# WEIGHBRIDGE TICKET

Ticket No. DO649883  
CONVEYANCE NOTE

## WOODHORN GROUP Ltd

Tangmere Composting Facility  
City Fields Industrial Estate  
Tangmere

West Sussex

PO20 2FP

EA Permit No: EPR/DB370SHG

Company Reg No. 3629015

VAT No. 616160744

SIC Code: 38210

Waste Carrier Licence no: CBDU162145

Time In 08:58

Date In 26/6/2019

Time Out 09:03

Date Out 26/6/2019

Vehicle N77TJT

Carrier TJ Transport Ltd

License No.

Client Blaze Construction Ltd

Address CRESSWELL PARK,  
ROUNDSTONE LANE,  
ANGMERING, SIC Code:

Permit

Zone

Product

EWC Code

Topsoil BS3882 (20MM)

1st Weight: 12,460.00 Kg NONI

2nd Weight: 30,640.00 Kg NONI

Net Weight: 18,180.00 Kg

By Signing this document I confirm that I have  
fulfilled my duty to apply the waste hierarchy as  
required by Regulation 12 of the waste (England  
and Wales) Regulations 2011

Signature waste depositor

Signature waste

# Dispatch Note

**Bill/Sold To:**

Blaze Construction Ltd  
93 Leigh Road  
Hampshire  
Eastleigh  
SO50 9DQ

**Job Site/Ship To:**

Blaze Construction Ltd  
CALA HOMES SITE  
CRESSWELL PARK  
ROUNDSTONE LANE  
ANGMERING

| Quote No. | Job No. | Salesperson       | Manager | Ref       |
|-----------|---------|-------------------|---------|-----------|
| 31946     | 48670   | No Sales Employee |         | 609/15042 |

| DESCRIPTION           | QTY / UNIT     | UNIT PRICE | EXTENDED PRICE |
|-----------------------|----------------|------------|----------------|
| 26/6/2019             |                |            |                |
| Container             |                |            |                |
| 8 Wheel Tipper        | 1.00 /         |            |                |
| Product               |                |            |                |
| Topsoil BS3882 (20MM) | 18.00 / Tonnes |            |                |
|                       |                |            | 84.67          |

Company Representative (signature)

Company Registration Number: 3629015

Company VAT Number: 816160744

# WEIGHBRIDGE TICKET

Ticket No. DO649870  
CONVEYANCE NOTE

## WOODHORN GROUP Ltd

Tangmere Composting Facility

City Fields Industrial Estate

Tangmere

West Sussex

PO20 2FP

EA Permit No: EPRDB3703HG

Company Reg No 3629015

VAT No. 816160744

SIC Code 38210

Waste Carrier Licence no: CBDU162145

|             |                                                               |
|-------------|---------------------------------------------------------------|
| Time In     | 07:59                                                         |
| Date In     | 26/6/2019                                                     |
| Time Out    | 08:17                                                         |
| Date Out    | 26/6/2019                                                     |
| Vehicle     | E10TJT                                                        |
| Carrier     | TJ Transport Ltd                                              |
| License No. |                                                               |
| Client      | Blaze Construction Ltd                                        |
| Address     | CRESSWELL PARK,<br>ROUNDSTONE LANE,<br>ANGMERING. , SIC Code: |
| Permit      |                                                               |
| Zone        |                                                               |
| Product     | Topsoil BS3882 (20MM)                                         |
| EWC Code    |                                                               |
| 1st Weight: | 12,620.00 Kg NONE                                             |
| 2nd Weight: | 31,080.00 Kg NONE                                             |
| Net Weight: | 18,460.00 Kg                                                  |

By Signing this document I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the waste (England and Wales) Regulations 2011

Signature waste depositer

Signature waste receiver

# THE WOODHORN GROUP

Date: 26/6/2019

Page: 1

## Dispatch Note

### Bill/Sold To:

Blaze Construction Ltd  
93 Leigh Road  
Hampshire  
Eastleigh  
SO50 9DQ

### Job Site/Ship To:

Blaze Construction Ltd  
CALA HOMES SITE  
CRESSWELL PARK  
ROUNDSTONE LANE  
ANGMERING

| Quote No. | Job No. | Salesperson         | Manager | Ref |
|-----------|---------|---------------------|---------|-----|
| 31942     | 48666   | -No Sales Employee- |         |     |

| DESCRIPTION | QTY / UNIT | UNIT PRICE | EXTENDED PRICE |
|-------------|------------|------------|----------------|
|-------------|------------|------------|----------------|

26/6/2019

### Container

8 Wheel Tipper

1.00 /

### Product

Topsoil BS3882 (20MM)

18.00 / Tonnes

84.67

Company Representative (signature)

Company Registration Number: 3629015

Company VAT Number: 411160744

# WEIGHBRIDGE TICKET

Ticket No. DO650011  
CONVEYANCE NOTE

## WOODHORN GROUP Ltd

Tangmere Composting Facility  
City Fields Industrial Estate  
Tangmere  
West Sussex  
PO20 2FP  
EA Permit No: EPR/DB3703HG  
Company Reg No: 3829015  
VAT No: 816160744  
SIC Code: 38210  
Waste Carrier Licence no: CSDU162146

|            |                                                              |
|------------|--------------------------------------------------------------|
| Time In    | 11:21                                                        |
| Date In    | 27/6/2019                                                    |
| Time Out   | 11:32                                                        |
| Date Out   | 27/6/2019                                                    |
| Vehicle    | E11TJT                                                       |
| Carrier    | TJ Transport Ltd                                             |
| License No |                                                              |
| Client     | Blaze Construction Ltd                                       |
| Address    | CRESSWELL PAPER,<br>ROUNDESTONE LANE,<br>ALDINGHAM, SIC 6061 |
| Permit     |                                                              |
| Zone       |                                                              |
| Product    | Topsoil 0000000000000000                                     |
| SWO Code   |                                                              |
| 1st Weight | 11.100000 kg                                                 |
| 2nd Weight | 31.400000 kg                                                 |
| Net Weight | 18.300000 kg                                                 |

By Signing this document I confirm that I have  
fulfilled my duty to apply the Waste Management  
required by Regulation 12 of the Waste England  
and Wales Regulations 2011

Signature waste depositor

Signature waste carrier

# Dispatch Note

**Bill/Sold To:**

Blaze Construction Ltd  
93 Leigh Road  
Hampshire  
Eastleigh  
SO50 9DQ

**Job Site/Ship To:**

Blaze Construction Ltd  
CALA HOMES SITE  
CRESSWELL PARK  
ROUNDSTONE LANE  
ANGMERING

| Quote No. | Job No. | Salesperson         | Manager | Ref |
|-----------|---------|---------------------|---------|-----|
| 31966     | 48694   | -No Sales Employee- |         |     |

| DESCRIPTION | QTY / UNIT | UNIT PRICE | EXTENDED PRICE |
|-------------|------------|------------|----------------|
|-------------|------------|------------|----------------|

27/6/2019

**Container**

8 Wheel Tipper

1.00 /

**Product**

Topsoil BS3882 (20MM)

19.00 / Tonnes

88.24

\_\_\_\_\_  
Company Representative (signature)

Company Registration Number: 3629015

Company VAT Number: 316160744

# WEIGHBRIDGE TICKET

Ticket No. DCK49989  
CONVEYANCE NOTE

## WOODHORN GROUP Ltd

Tongmere Composting Facility

City Fields Industrial Estate

Tongmere

West Sussex

PO20 2FP

E & P Permit No: EPR/050703HQ

Waste Reg No: 0620005

VAT No: 219760964

SWC Reg No: 30210

Waste Transfer Note No: CSDipr02145

Time In 08:58

Gate In 27/02/2016

Time Out 09:22

Date Out 27/02/2016

Vehicle V25TJT

Driver T.J. Transport

License No

Client Blaze Construction Ltd

Address ONECROSS RD, PAFIC,  
BURNHASTONE LANE  
ALLMERHAM, SIC Codes

Permit

Zone

Product Tarmac BS0382 (20MM)

EWC Code

1st Weight: 12,920.00 Kg NONE

2nd Weight: 3,110.00 Kg NONE

Net Weight: 18,520.00 Kg

By Signing this document I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the waste (England and Wales) Regulations 2011

Signature waste depositor

Signature waste receiver

## Dispatch Note

BLAZE

## Bill/Sold To:

Blaze Construction Ltd  
93 Leigh Road  
Hampshire  
Eastleigh  
SO50 9DQ

## Job Site/Ship To:

Blaze Construction Ltd  
CALA HOMES SITE  
CRESSWELL PARK  
ROUNDSTONE LANE  
ANGMERING

| Quote No. | Job No. | Salesperson         | Manager | Ref |
|-----------|---------|---------------------|---------|-----|
| 31961     | 48688   | -No Sales Employee- |         |     |

| DESCRIPTION | QTY / UNIT | UNIT PRICE | EXTENDED PRICE |
|-------------|------------|------------|----------------|
|-------------|------------|------------|----------------|

~~27/6/2019~~

## Container

8 Wheel Tipper

1.00 /

## Product

Topsoil BS3882 (20MM)

19.00 / Tonnes

88.24

\_\_\_\_\_  
Company Representative (signature)

Company Registration Number: 3629015

Company VAT Number: 816160744

# WEIGHBRIDGE TICKET

Ticket No. DO650004  
CONVEYANCE NOTE

## WOODHORN GROUP Ltd

Tangmere Composting Facility  
City Fields Industrial Estate  
Tangmere  
West Sussex  
PO20 2FP  
EA Permit No: EPR/DB3703HG  
Company Reg No: 3629015  
VAT No: 816160744  
SIC Code: 38210

Waste Carrier Licence no: CBDU162145

|             |                        |
|-------------|------------------------|
| Time In     | 10:48                  |
| Date In     | 27/6/2019              |
| Time Out    | 10:55                  |
| Date Out    | 27/6/2019              |
| Vehicle     | V25TJT                 |
| Carrier     | TJ Transport Ltd       |
| License No. |                        |
| Client      | Blaze Construction Ltd |

Address CRESSWELL PARK,  
ROUNDSTONE LANE,  
ANGMERING. , SIC Code:

Permit  
Zone

Product Topsoil BS3882 (20MM)  
EWC Code

|             |           |    |      |
|-------------|-----------|----|------|
| 1st Weight: | 12,820.00 | Kg | NONE |
| 2nd Weight: | 31,320.00 | Kg | NONE |
| Net Weight: | 18,500.00 | Kg |      |

By Signing this document I confirm that I have  
fulfilled my duty to apply the waste hierarchy as  
required by Regulation 12 of the waste (England  
and Wales) Regulations 2011

Signature waste depositer

Signature waste receiver

# Dispatch Note

**Bill/Sold To:**

Blaze Construction Ltd  
93 Leigh Road  
Hampshire  
Eastleigh  
SO50 9DQ

**Job Site/Ship To:**

Blaze Construction Ltd  
CALA HOMES SITE  
CRESSWELL PARK  
ROUNDSTONE LANE  
ANGMERING

| Quote No. | Job No. | Salesperson         | Manager | Ref |
|-----------|---------|---------------------|---------|-----|
| 31965     | 48692   | -No Sales Employee- |         |     |

| DESCRIPTION           | QTY / UNIT     | UNIT PRICE | EXTENDED PRICE |
|-----------------------|----------------|------------|----------------|
| 27/6/2019             |                |            |                |
| <b>Container</b>      |                |            |                |
| 8 Wheel Tipper        | 1.00 /         |            |                |
| <b>Product</b>        |                |            |                |
| Topsoil BS3882 (20MM) | 19.00 / Tonnes |            |                |

\_\_\_\_\_  
Company Representative (signature)

Company Registration Number: 3629015

# WEIGHBRIDGE TICKET

Ticket No. DO649972  
CONVEYANCE NOTE

## WOODHORN GROUP Ltd

Tangmere Composting Facility

City Fields Industrial Estate

Tangmere

West Sussex

PO20 2FP

EA Permit No. EPR/DB3703HG

Company Reg No 3628015

VAT No 816180744

SIC Code 36210

Waste Carrier Licence no. CB0U162145

Time in 03:08

Date in 27/6/2019

Time Out 08:18

Date Out 27/6/2019

Vehicle V26TJT

Carrier TJ Transport Ltd

License No.

Client Blaze Construction Ltd

Address CRESSWELL PARK  
ROUNDESTONE LANE  
ANGMERING, SIC Code

Permit

Zone

Product Topsoil Br. (incl. 1000kg)

EWU Code

1st Weight 12040.00 Kg NONI

2nd Weight 31380.00 Kg NONI

Net Weight 18740.00 Kg

By Signing this document I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the waste (England and Wales) Regulations 2011

Signature waste depos

Signature waste receiv

# Dispatch Note

**Bill/Sold To:**

Blaze Construction Ltd  
93 Leigh Road  
Hampshire  
Eastleigh  
SO50 9DQ

**Job Site/Ship To:**

Blaze Construction Ltd  
CALA HOMES SITE  
CRESSWELL PARK  
ROUNDSTONE LANE  
ANGMERING

| Quote No. | Job No. | Salesperson         | Manager | Ref |
|-----------|---------|---------------------|---------|-----|
| 31964     | 48691   | -No Sales Employee- |         |     |

| DESCRIPTION | QTY / UNIT | UNIT PRICE | EXTENDED PRICE |
|-------------|------------|------------|----------------|
|-------------|------------|------------|----------------|

27/6/2019

**Container**

8 Wheel Tipper

1.00 /

**Product**

Topsoil BS3882 (20MM)

19.00 / Tonnes

88.24

Company Representative (signature)

Company Registration Number: 3629015

Company VAT Number: 951 123 456

# WEIGHBRIDGE TICKET

Ticket No. DO650031  
CONVEYANCE NOTE

## WOODHORN GROUP Ltd

Tangmere Composting Facility  
City Fields Industrial Estate  
Tangmere  
West Sussex  
PO20 2FP  
EA Permit No: EPR/DB3700HG  
Company Reg No: 3829015  
VAT No: 816160744  
SIC Code: 38210  
Waste Carrier Licence no: OBDU162145

|             |                                                               |
|-------------|---------------------------------------------------------------|
| Time in     | 12:29                                                         |
| Date in     | 27/6/2019                                                     |
| Time Out    | 12:37                                                         |
| Date Out    | 27/6/2019                                                     |
| Vehicle     | V16TJT                                                        |
| Carrier     | TJ Transport Ltd                                              |
| License No. |                                                               |
| Client      | Blaze Construction Ltd                                        |
| Address     | CRESSWELL PARK,<br>ROUNDSTONE LANE,<br>ANGMERING, . SIC Code: |
| Permit      |                                                               |
| Zone        |                                                               |
| Product     | Topsoil BS3882 (20MM)                                         |
| EWC Code    |                                                               |
| 1st Weight: | 12,660.00 Kg NONE                                             |
| 2nd Weight: | 31,080.00 Kg NONE                                             |
| Net Weight: | 18,420.00 Kg                                                  |

By Signing this document I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the waste (England and Wales) Regulations 2011

Signature waste depositor

Signature waste receiver

# Dispatch Note

**Bill/Sold To:**

Blaze Construction Ltd  
93 Leigh Road  
Hampshire  
Eastleigh  
SO50 9DQ

**Job Site/Ship To:**

Blaze Construction Ltd  
CALA HOMES SITE  
CRESSWELL PARK  
ROUNDSTONE LANE  
ANGMERING

| Quote No. | Job No. | Salesperson         | Manager | Ref |
|-----------|---------|---------------------|---------|-----|
| 31963     | 48690   | -No Sales Employee- |         |     |

| DESCRIPTION | QTY / UNIT | UNIT PRICE | EXTENDED PRICE |
|-------------|------------|------------|----------------|
|-------------|------------|------------|----------------|

27/6/2019

**Container**

8 Wheel Tipper

1.00 /

**Product**

Topsoil BS3882 (20MM)

19.00 / Tonnes

88.24

Company Representative (signature)

Company Registration Number: 3629015

Company VAT Number: 818

# WEIGHBRIDGE TICKET

Ticket No. DO650050  
CONVEYANCE NOTE

## WOODHORN GROUP Ltd

Tangmere Composting Facility  
City Fields Industrial Estate  
Tangmere  
West Sussex  
PO20 2FP  
EA Permit No. EPR/D63703HG  
Company Reg No. 3629015  
VAT No. 816160744  
SIC Code 38210  
Waste Carrier Licence no. C8DU162145

|             |                                                               |
|-------------|---------------------------------------------------------------|
| Time In     | 13:58                                                         |
| Date In     | 27/6/2019                                                     |
| Time Out    | 14:10                                                         |
| Date Out    | 27/6/2019                                                     |
| Vehicle     | E11TJT                                                        |
| Carrier     | TJ Transport Ltd                                              |
| License No. |                                                               |
| Client      | Blaze Construction Ltd                                        |
| Address     | CRESSWELL PARK,<br>ROUNDSTONE LANE,<br>ANGMERING, . SIC Code: |
| Permit      |                                                               |
| Zone        |                                                               |
| Product     | Topsoil BS3882 (20MM)                                         |
| EWG Code    |                                                               |
| 1st Weight: | 13,100.00 Kg NONE                                             |
| 2nd Weight: | 30,060.00 Kg NONE                                             |
| Net Weight: | 16,960.00 Kg                                                  |

By Signing this document I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the waste (England and Wales) Regulations 2011

Signature waste depositor

Signature waste receiver

# Dispatch Note

**Bill/Sold To:**

Blaze Construction Ltd  
93 Leigh Road  
Hampshire  
Eastleigh  
SO50 9DQ

**Job Site/Ship To:**

Blaze Construction Ltd  
CALA HOMES SITE  
CRESSWELL PARK  
ROUNDSTONE LANE  
ANGMERING

| Quote No. | Job No. | Salesperson         | Manager | Ref |
|-----------|---------|---------------------|---------|-----|
| 31962     | 48689   | -No Sales Employee- |         |     |

| DESCRIPTION | QTY / UNIT | UNIT PRICE | EXTENDED PRICE |
|-------------|------------|------------|----------------|
|-------------|------------|------------|----------------|

27/6/2019

**Container**

8 Wheel Tipper

1.00 /

**Product**

Topsoil BS3882 (20MM)

19.00 / Tonnes

# WEIGHBRIDGE TICKET

Ticket No. DO649996  
CONVEYANCE NOTE

## WOODHORN GROUP Ltd

Tangmere Composting Facility  
City Fields Industrial Estate  
Tangmere  
West Sussex  
PO20 2FP  
EA Permit No: EPR/D3703HG  
Company Reg No 3629015  
VAT No. 816160744  
SIC Code: 38210  
Waste Carrier Licence no: CBDU162145

|             |                                                               |
|-------------|---------------------------------------------------------------|
| Time In     | 09:48                                                         |
| Date In     | 27/6/2019                                                     |
| Time Out    | 10:01                                                         |
| Date Out    | 27/6/2019                                                     |
| Vehicle     | V26TJT                                                        |
| Carrier     | TJ Transport Ltd                                              |
| License No. |                                                               |
| Client      | Blaze Construction Ltd                                        |
| Address     | CRESSWELL PARK,<br>ROUNDSTONE LANE,<br>ANGMERING. , SIC Code: |
| Permit      |                                                               |
| Zone        |                                                               |
| Product     | Topsoil BS3882 (20MM)                                         |
| EWC Code    |                                                               |
| 1st Weight: | 12,620.00 Kg NONE                                             |
| 2nd Weight: | 30,880.00 Kg NONE                                             |
| Net Weight: | 18,260.00 Kg                                                  |

By Signing this document I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the waste (England and Wales) Regulations 2011

Signature waste depositer

Signature waste receiver

## Dispatch Note

### Bill/Sold To:

Blaze Construction Ltd  
93 Leigh Road  
Hampshire  
Eastleigh  
SO50 9DQ

### Job Site/Ship To:

Blaze Construction Ltd  
CALA HOMES SITE  
CRESSWELL PARK  
ROUNDSTONE LANE  
ANGMERING

| Quote No. | Job No. | Salesperson         | Manager | Ref |
|-----------|---------|---------------------|---------|-----|
| 31960     | 48687   | -No Sales Employee- |         |     |

| DESCRIPTION | QTY / UNIT | UNIT PRICE | EXTENDED PRICE |
|-------------|------------|------------|----------------|
|-------------|------------|------------|----------------|

~~27/6/2019~~

Container  
8 Wheel Tipper

1.00 /

Product  
Topsoil BS3882 (20MM)

19.00 / Tonnes

88.24

\_\_\_\_\_  
Company Representative (signature)

Company Registration Number: 3629015

Company VAT Number: 815160744

Page 1 of 1

# WEIGHBRIDGE TICKET

Ticket No. DO650144  
CONVEYANCE NOTE

## WOODHORN GROUP Ltd

Tangmere Composting Facility  
City Fields Industrial Estate  
Tangmere  
West Sussex  
PO20 2FP  
EA Permit No: EPR/D3703HG  
Company Reg No 3629015  
VAT No. 816160744  
SIC Code 38210  
Waste Carrier Licence no: CBDU162145

|             |                                                               |
|-------------|---------------------------------------------------------------|
| Time In     | 10:46                                                         |
| Date In     | 28/6/2019                                                     |
| Time Out    | 10:56                                                         |
| Date Out    | 28/6/2019                                                     |
| Vehicle     | V16TJT                                                        |
| Carrier     | TJ Transport Ltd                                              |
| License No. |                                                               |
| Client      | Bleaze Construction Ltd                                       |
| Address     | CRESSWELL PARK,<br>ROUNDSTONE LANE,<br>ANGMERING, . SIC Code: |
| Permit      |                                                               |
| Zone        |                                                               |
| Product     | Topsoil BS3882 (20MM)                                         |
| EWC Code    |                                                               |
| 1st Weight: | 12,660.00 Kg NON                                              |
| 2nd Weight: | 31,060.00 Kg NON                                              |
| Net Weight: | 18,400.00 Kg                                                  |

By Signing this document I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the waste (England and Wales) Regulations 2011

Signature waste depositer

Signature waste receiver

# Dispatch Note

**Bill/Sold To:**

Blaze Construction Ltd  
93 Leigh Road  
Hampshire  
Eastleigh  
SO50 9DQ

**Job Site/Ship To:**

Blaze Construction Ltd  
CALA HOMES SITE  
CRESSWELL PARK  
ROUNDSTONE LANE  
ANGMERING

| Quote No. | Job No. | Salesperson         | Manager | Ref |
|-----------|---------|---------------------|---------|-----|
| 32007     | 48734   | -No Sales Employee- |         |     |

| DESCRIPTION | QTY / UNIT | UNIT PRICE | EXTENDED PRICE |
|-------------|------------|------------|----------------|
|-------------|------------|------------|----------------|

28/6/2019

**Container**

8 Wheel Tipper 1.00 /

**Product**

Topsoil BS3882 (20MM) 19.00 / Tonnes

88.24

Company VAT Number: 816160744

# WEIGHBRIDGE TICKET

Ticket No. DO650104  
CONVEYANCE NOTE

## WOODHORN GROUP Ltd

Tangmere Composting Facility  
City Fields Industrial Estate  
Tangmere  
West Sussex  
PO20 2FP  
EA Permit No: EPR/DB3703HG  
Company Reg No. 3629015  
VAT No. 816160744  
SIC Code: 38210  
Waste Carrier Licence no: CBDU162145

|             |                                                               |
|-------------|---------------------------------------------------------------|
| Time In     | 08:58                                                         |
| Date In     | 28/6/2019                                                     |
| Time Out    | 09:08                                                         |
| Date Out    | 28/6/2019                                                     |
| Vehicle     | V16TJT                                                        |
| Carrier     | TJ Transport Ltd                                              |
| License No  |                                                               |
| Client      | Blaze Construction Ltd                                        |
| Address     | CRESSWELL PARK,<br>ROUNDSTONE LANE,<br>ANGMERING, , SIC Code: |
| Permit      |                                                               |
| Zone        |                                                               |
| Product     | Topsoil BS3882 (20MM)                                         |
| EWC Code    |                                                               |
| 1st Weight: | 12,660.00 Kg NONE                                             |
| 2nd Weight: | 31,040.00 Kg NONE                                             |
| Net Weight: | 18,380.00 Kg                                                  |

By Signing this document I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the waste (England and Wales) Regulations 2011

Signature waste depositer

Signature waste receiver

# Dispatch Note

**Bill/Sold To:**

Blaze Construction Ltd  
93 Leigh Road  
Hampshire  
Eastleigh  
SO50 9DQ

**Job Site/Ship To:**

Blaze Construction Ltd  
CALA HOMES SITE  
CRESSWELL PARK  
ROUNDSTONE LANE  
ANGMERING

| Quote No. | Job No. | Salesperson         | Manager | Ref |
|-----------|---------|---------------------|---------|-----|
| 32014     | 48742   | -No Sales Employee- |         |     |

| DESCRIPTION | QTY / UNIT | UNIT PRICE | EXTENDED PRICE |
|-------------|------------|------------|----------------|
|-------------|------------|------------|----------------|

28/6/2019

**Container**

8 Wheel Tipper

1.00 /

**Product**

Topsoil BS3882 (20MM)

19.00 / Tonnes

88.24

VAT Number: 816160744

# WEIGHBRIDGE TICKET

Ticket No. DO650161  
CONVEYANCE NOTE

## WOODHORN GROUP Ltd

Tangmere Composting Facility  
City Fields Industrial Estate

Tangmere  
West Sussex  
PO20 2FP

EA Permit No: EPR/D83703HG

Company Reg No: 3629015

VAT No: 816160744

SIC Code: 38210

Waste Carrier Licence no: CBDU162145

Time In 11:44

Date In 28/6/2019

Time Out 11:54

Date Out 28/6/2019

Vehicle E11TJT

Carrier TJ Transport Ltd

License No.

Client Blaze Construction Ltd

Address CRESSWELL PARK,  
ROUNDSTONE LANE,  
ANGMERING, . SIC Code:

Permit

Zone

Product Topsoil BS3882 (20MM)

EWC Code

1st Weight: 13,040.00 Kg NONI

2nd Weight: 31,200.00 Kg NONI

Net Weight: 18,160.00 Kg

By Signing this document I confirm that I have  
fulfilled my duty to apply the waste hierarchy as  
required by Regulation 12 of the waste (England  
and Wales) Regulations 2011

Signature waste depositer

Signature waste receiver

# Dispatch Note

**Bill/Sold To:**

Blaze Construction Ltd  
93 Leigh Road  
Hampshire  
Eastleigh  
SO50 9DQ

**Job Site/Ship To:**

Blaze Construction Ltd  
CALA HOMES SITE  
CRESSWELL PARK  
ROUNDSTONE LANE  
ANGMERING

| Quote No. | Job No. | Salesperson         | Manager | Ref |
|-----------|---------|---------------------|---------|-----|
| 32009     | 48736   | -No Sales Employee- |         |     |

| DESCRIPTION | QTY / UNIT | UNIT PRICE | EXTENDED PRICE |
|-------------|------------|------------|----------------|
|-------------|------------|------------|----------------|

28/6/2019

**Container**

8 Wheel Tipper

1.00 /

**Product**

Topsoil BS3882 (20MM)

19.00 / Tonnes

88.24

Com

Com

60744

Page 1 of 1

# WEIGHBRIDGE TICKET

Ticket No. DO650206  
CONVEYANCE NOTE

## WOODHORN GROUP Ltd

Tangmere Composting Facility  
City Fields Industrial Estate  
Tangmere  
West Sussex  
PO20 2FP  
EA Permit No: EPR/DB3703HG  
Company Reg No: 3629015  
VAT No: 816160744  
SIC Code: 38210  
Waste Carrier Licence no: CBDU162145

|             |                                                           |
|-------------|-----------------------------------------------------------|
| Time In     | 13:45                                                     |
| Date In     | 28/6/2019                                                 |
| Time Out    | 13:55                                                     |
| Date Out    | 28/6/2019                                                 |
| Vehicle     | E10TJT                                                    |
| Carrier     | TJ Transport Ltd                                          |
| License No. |                                                           |
| Client      | Blaze Construction Ltd                                    |
| Address     | CRESSWELL PARK<br>ROUNDSTONE LANE<br>ANGMERING. SIC Code: |
| Permit      |                                                           |
| Zone        |                                                           |
| Product     | Topsoil BS3882 (20MM)                                     |
| EWC Code    |                                                           |
| 1st Weight: | 12,700.00                                                 |
| 2nd Weight: | 30,780.00 Kg NONE                                         |
| Net Weight: | 18,060.00 Kg                                              |

By Signing this document I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the waste (England and Wales) Regulations 2011

Signature waste depositor

Signature waste receiver

# THE WOODHORN GROUP

Date: 27/6/2019

Page: 1

## Dispatch Note

### Bill/Sold To:

Blaze Construction Ltd  
93 Leigh Road  
Hampshire  
Eastleigh  
SO50 9DQ

### Job Site/Ship To:

Blaze Construction Ltd  
CALA HOMES SITE  
CRESSWELL PARK  
ROUNDSTONE LANE  
ANGMERING

| Quote No. | Job No. | Salesperson         | Manager | Ref |
|-----------|---------|---------------------|---------|-----|
| 32010     | 48737   | -No Sales Employee- |         |     |

| DESCRIPTION | QTY / UNIT | UNIT PRICE | EXTENDED PRICE |
|-------------|------------|------------|----------------|
|-------------|------------|------------|----------------|

28/6/2019

### Container

8 Wheel Tipper

1.00 /

### Product

Topsoil BS3882 (20MM)

19.00 / Tonnes

88.24

Company Representative (signature)

Company Registration Number: 3629015

Company VAT Number: 816160744

Page 1 of 1

# WEIGHBRIDGE TICKET

Ticket No. DO650121  
CONVEYANCE NOTE

## WOODHORN GROUP Ltd

Tangmere Composting Facility  
City Fields Industrial Estate

Tangmere  
West Sussex  
PO20 2FP

EA Permit No. EPR/DB3703HG

Company Reg No. 3629015

VAT No. 816160744

SIC Code 38210

Waste Carrier Licence no. CBDU162145

Time In 09:52

Date In 28/6/2019

Time Out 10:07

Date Out 28/6/2019

Vehicle E11TJT

Carrier TJ Transport Ltd

License No.

Client Blaze Construction Ltd

Address CRESSWELL PARK,  
ROUNDSTONE LANE,  
ANGMERING, SIC Code:

Permit

Zone

Product

EWC Code Topsoil BS3882 (20MM)

1st Weight: 13,080.00 Kg NONE

2nd Weight: 31,300.00 Kg NONE

Net Weight: 18,220.00 Kg

By Signing this document I confirm that I have  
fulfilled my duty to apply the waste hierarchy as  
required by Regulation 12 of the waste (England  
and Wales) Regulations 2011

Signature waste depositor

Signature waste receiver

## Dispatch Note

## Bill/Sold To:

Blaze Construction Ltd  
93 Leigh Road  
Hampshire  
Eastleigh  
SO50 9DQ

## Job Site/Ship To:

Blaze Construction Ltd  
CALA HOMES SITE  
CRESSWELL PARK  
ROUNDSTONE LANE  
ANGMERING

| Quote No. | Job No. | Salesperson         | Manager | Ref |
|-----------|---------|---------------------|---------|-----|
| 32011     | 48738   | -No Sales Employee- |         |     |

| DESCRIPTION | QTY / UNIT | UNIT PRICE | EXTENDED PRICE |
|-------------|------------|------------|----------------|
|-------------|------------|------------|----------------|

28/6/2019

## Container

8 Wheel Tipper

1.00 /

## Product

Topsoil BS3882 (20MM)

19.00 / Tonnes

88.24

---

Company Representative (signature)

Company Registration Number: 3629015

Company VAT Number: 816180744

Page 1 of 1

## WEIGHBRIDGE TICKET

Ticket No. DO650155

## CONVEYANCE NOTE

### WOODHORN GROUP Ltd

Tangmere Composting Facility

City Fields Industrial Estate

Tangmere

West Sussex

PO20 2FP

EA Permit No: EPR/DB3703HG

Company Reg No: 3629015

VAT No: 816160744

SIC Code: 38210

Waste Carrier Licence no: CBDU162145

|             |                                                               |
|-------------|---------------------------------------------------------------|
| Time In     | 11:16                                                         |
| Date In     | 28/6/2019                                                     |
| Time Out    | 11:23                                                         |
| Date Out    | 28/6/2019                                                     |
| Vehicle     | N77TJT                                                        |
| Carrier     | TJ Transport Ltd                                              |
| License No. |                                                               |
| Client      | Blaze Construction Ltd                                        |
| Address     | CRESSWELL PARK,<br>ROUNDSTONE LANE,<br>ANGMERING, , SIC Code: |
| Permit      |                                                               |
| Zone        |                                                               |
| Product     | Topsoil BS3882 (20MM)                                         |
| EWC Code    |                                                               |
| 1st Weight: | 12,280.00 Kg NONE                                             |
| 2nd Weight: | 29,740.00 Kg NONE                                             |
| Net Weight: | 17,460.00 Kg                                                  |

By Signing this document I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the waste (England and Wales) Regulations 2011

Signature waste depositer

Signature waste receiver

# Dispatch Note

**Bill/Sold To:**

Blaze Construction Ltd  
93 Leigh Road  
Hampshire  
Eastleigh  
SO50 9DQ

**Job Site/Ship To:**

Blaze Construction Ltd  
CALA HOMES SITE  
CRESSWELL PARK  
ROUNDSTONE LANE  
ANGMERING

| Quote No. | Job No. | Salesperson         | Manager | Ref |
|-----------|---------|---------------------|---------|-----|
| 32008     | 48735   | -No Sales Employee- |         |     |

| DESCRIPTION | QTY / UNIT | UNIT PRICE | EXTENDED PRICE |
|-------------|------------|------------|----------------|
|-------------|------------|------------|----------------|

28/6/2019

**Container**

8 Wheel Tipper

1.00 /

**Product**

Topsoil BS3882 (20MM)

19.00 / Tonnes

88.24

Company VAT Number: 816180744

# WEIGHBRIDGE TICKET

Ticket No. DO650108  
CONVEYANCE NOTE

WOODHORN GROUP Ltd

Tangmere Composting Facility  
City Fields Industrial Estate

Tangmere

West Sussex

PO20 2FP

EA Permit No: EPR/DB3703HG

Company Reg No: 3629015

VAT No: 316160744

STU Code: 38210

Waste Carrier Licence no: CBDU162146

|             |                                                               |
|-------------|---------------------------------------------------------------|
| Time In     | 09:14                                                         |
| Date In     | 28/6/2019                                                     |
| Time Out    | 09:24                                                         |
| Date Out    | 28/6/2019                                                     |
| Vehicle     | E10TJT                                                        |
| Carrier     | TJ Transport Ltd                                              |
| License No. |                                                               |
| Client      | Blaze Construction Ltd                                        |
| Address     | CRESSWELL PARK,<br>ROUNDSTONE LANE,<br>ANGMERING, . SIC Code: |
| Permit      |                                                               |
| Zone        |                                                               |
| Product     | Topsail BS3882 (20MM)                                         |
| EWC Code    |                                                               |
| 1st Weight: | 12,640.00 Kg NONE                                             |
| 2nd Weight: | 30,720.00 Kg NONE                                             |
| Net Weight: | 18,080.00 Kg                                                  |

By Signing this document I confirm that I have  
fulfilled my duty to apply the waste hierarchy, as  
required by Regulation 12 of the waste (England  
and Wales) Regulations 2011

Signature waste deposit

Signature waste receive

## Dispatch Note

**Bill/Sold To:**

Blaze Construction Ltd  
93 Leigh Road  
Hampshire  
Eastleigh  
SO50 9DQ

**Job Site/Ship To:**

Blaze Construction Ltd  
CALA HOMES SITE  
CRESSWELL PARK  
ROUNDSTONE LANE  
ANGMERING

**Quote No.**

32013

**Job No.**

48740

**Salesperson**

-No Sales Employee-

**Manager**

**Ref**

**DESCRIPTION**

**QTY / UNIT**

**UNIT PRICE**

**EXTENDED PRICE**

28/6/2019

Container  
8 Wheel Tipper

1.00 /

**Product**

Topsoli BS3882 (20MM)

19.00 / Tonnes

88.24

Company Representative (signature)

Company Registration Number: 3629015

Company VAT Number: 816160744

# WEIGHBRIDGE TICKET

Ticket No. DO650227  
CONVEYANCE NOTE

## WOODHORN GROUP Ltd

Tangmere Composting Facility  
City Fields Industrial Estate  
Tangmere

West Sussex

PO20 2FP

EA Permit No: EPRD83703HG

Company Reg No. 3629015

VAT No. 816160744

SIC Code: 38210

Waste Carrier Licence no: CBDU162145

Time In 15:24

Date In 28/6/2019

Time Out 15:36

Date Out 28/6/2019

Vehicle E10TJT

Carrier TJ Transport

License No.

Client Blaze Construction Ltd

Address CRESSWELL PARK,  
ROUNDSTONE LANE,  
ANGMERING, . SIC Code:

Permit

Zone

Product Topsoil BS3882 (20MM)

EWC Code

1st Weight: 12,700.00 Kg NONI

2nd Weight: 30,620.00 Kg NONI

Net Weight: 17,920.00 Kg

By Signing this document I confirm that I have  
fulfilled my duty to apply the waste hierarchy as  
required by Regulation 12 of the waste (England  
and Wales) Regulations 2011

Signature waste depositor

Signature waste receiver

# THE WOODHORN GROUP

Date: 27/6/2019

Page: 1

## Dispatch Note

### Bill/Sold To:

Blaze Construction Ltd  
93 Leigh Road  
Hampshire  
Eastleigh  
SO50 9DQ

### Job Site/Ship To:

Blaze Construction Ltd  
CALA HOMES SITE  
CRESSWELL PARK  
ROUNDSTONE LANE  
ANGMERING

| Quote No. | Job No. | Salesperson         | Manager | Ref |
|-----------|---------|---------------------|---------|-----|
| 32006     | 48724   | -No Sales Employee- |         |     |

| DESCRIPTION | QTY / UNIT | UNIT PRICE | EXTENDED PRICE |
|-------------|------------|------------|----------------|
|-------------|------------|------------|----------------|

1/7/2019

### Container

8 Wheel Tipper

1.00 /

### Product

Topsoil BS3882 (20MM)

19.00 / Tonnes

88.24

Company Representative (signature)

Company Registration Number: 3629015

Company VAT Number: 816160744

Page 1 of 1

# WEIGHBRIDGE TICKET

Ticket No. DO650113  
CONVEYANCE NOTE

## WOODHORN GROUP Ltd

Tangmere Composting Facility

City Fields Industrial Estate

Tangmere

West Sussex

PO20 2FP

EA Permit No.EPR/DB3703HG

Company Reg No.3529015

VAT No.816160744

SIC Code: 38210

Waste Carrier Licence no: CBDU162145

|             |                                                               |
|-------------|---------------------------------------------------------------|
| Time In     | 08:42                                                         |
| Date In     | 28/6/2019                                                     |
| Time Out    | 09:50                                                         |
| Date Out    | 28/6/2019                                                     |
| Vehicle     | N77TJT                                                        |
| Carrier     | TJ Transport Ltd                                              |
| License No. |                                                               |
| Client      | Blaze Construction Ltd                                        |
| Address     | CRESSWELL PARK,<br>ROUNDSTONE LANE,<br>ANGMERING, . SIC Code: |
| Permit      |                                                               |
| Zone        |                                                               |
| Product     | Topsoil BS3882 (20MM)                                         |
| EWC Code    |                                                               |
| 1st Weight: | 12,320.00 Kg NON                                              |
| 2nd Weight: | 30,220.00 Kg NON                                              |
| Net Weight: | 17,900.00 Kg                                                  |

By Signing this document I confirm that I have fulfilled my duty to apply the waste hierarchy required by Regulation 12 of the waste (England and Wales) Regulations 2011

Signature waste depositor

Signature waste receiver

# Dispatch Note

**Bill/Sold To:**

Blaze Construction Ltd  
93 Leigh Road  
Hampshire  
Eastleigh  
SO50 9DQ

**Job Site/Ship To:**

Blaze Construction Ltd  
CALA HOMES SITE  
CRESSWELL PARK  
ROUNDSTONE LANE  
ANGMERING

| Quote No. | Job No. | Salesperson         | Manager | Ref |
|-----------|---------|---------------------|---------|-----|
| 32012     | 48739   | -No Sales Employee- |         |     |

| DESCRIPTION                   | QTY / UNIT     | UNIT PRICE | EXTENDED PRICE |
|-------------------------------|----------------|------------|----------------|
| 28/6/2019                     |                |            |                |
| <b>Container</b>              |                |            |                |
| 8 Wheel Tipper                | 1.00 /         |            |                |
| <b>Product</b>                |                |            |                |
| Topsoil BS3882 (20MM)         | 19.00 / Tonnes |            |                |
|                               |                |            | 88.24          |
| Com                           |                |            |                |
| Com                           |                |            |                |
| Company VAT Number: 818160744 |                |            | Page 1 of 1    |



## **APPENDIX E**

# **LABORATORY CERTIFICATES**

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## FINAL ANALYTICAL TEST REPORT

**Envirolab Job Number:** 19/08452  
**Issue Number:** 1

**Date:** 13 September, 2019

**Client:** RSK Environment Ltd Southampton  
Unit 26  
Basepoint Abbey Enterprise Centre  
Premier Way  
Romsey,  
Hampshire  
UK  
SO51 9AQ

**Project Manager:** Josh Laite; All RSK Southampton  
**Project Name:** Angmering  
**Project Ref:** 305021  
**Order No:** N/A  
**Date Samples Received:** 09/09/19  
**Date Instructions Received:** 09/09/19  
**Date Analysis Completed:** 13/09/19

**Prepared by:**

**Approved by:**



Melanie Marshall  
Laboratory Coordinator

Holly Neary-King  
Client Manager

Envirolab Job Number: 19/08452

Client Project Name: Angmering

Client Project Ref: 305021

| Lab Sample ID                                       | 19/08452/1  | 19/08452/2  | 19/08452/3  | 19/08452/4  |  |  |  | Units | Limit of Detection | Method ref |
|-----------------------------------------------------|-------------|-------------|-------------|-------------|--|--|--|-------|--------------------|------------|
| Client Sample No                                    |             |             |             |             |  |  |  |       |                    |            |
| Client Sample ID                                    | Plot 277 RG | Plot 278 RG | Plot 279 RG | Plot 280 RG |  |  |  |       |                    |            |
| Depth to Top                                        | 0.10        | 0.30        | 0.10        | 0.40        |  |  |  |       |                    |            |
| Depth To Bottom                                     |             |             |             |             |  |  |  |       |                    |            |
| Date Sampled                                        | 04-Sep-19   | 04-Sep-19   | 04-Sep-19   | 04-Sep-19   |  |  |  |       |                    |            |
| Sample Type                                         | Soil - ES   | Soil - ES   | Soil - ES   | Soil - ES   |  |  |  |       |                    |            |
| Sample Matrix Code                                  | 4AE         | 5AE         | 4AE         | 6AE         |  |  |  |       |                    |            |
| % Stones >10mm <sub>A</sub>                         | 1.7         | 9.8         | 4.3         | 8.7         |  |  |  | % w/w | 0.1                | A-T-044    |
| pH <sub>D</sub> <sup>M#</sup>                       | 7.82        | 8.32        | 7.61        | 8.36        |  |  |  | pH    | 0.01               | A-T-031s   |
| Sulphate (water sol 2:1) <sub>D</sub> <sup>M#</sup> | 0.09        | 0.08        | 0.07        | 0.05        |  |  |  | g/l   | 0.01               | A-T-026s   |
| Sulphate (acid soluble) <sub>D</sub> <sup>M#</sup>  | 450         | 290         | 380         | 230         |  |  |  | mg/kg | 200                | A-T-028s   |
| Arsenic <sub>D</sub> <sup>M#</sup>                  | 5           | 5           | 5           | 5           |  |  |  | mg/kg | 1                  | A-T-024s   |
| Cadmium <sub>D</sub> <sup>M#</sup>                  | <0.5        | 1.0         | <0.5        | 0.8         |  |  |  | mg/kg | 0.5                | A-T-024s   |
| Copper <sub>D</sub> <sup>M#</sup>                   | 12          | 9           | 13          | 10          |  |  |  | mg/kg | 1                  | A-T-024s   |
| Chromium <sub>D</sub> <sup>M#</sup>                 | 23          | 22          | 18          | 25          |  |  |  | mg/kg | 1                  | A-T-024s   |
| Chromium (hexavalent) <sub>D</sub>                  | <1          | <1          | <1          | <1          |  |  |  | mg/kg | 1                  | A-T-040s   |
| Lead <sub>D</sub> <sup>M#</sup>                     | 14          | 13          | 17          | 12          |  |  |  | mg/kg | 1                  | A-T-024s   |
| Mercury <sub>D</sub>                                | <0.17       | <0.17       | <0.17       | <0.17       |  |  |  | mg/kg | 0.17               | A-T-024s   |
| Nickel <sub>D</sub> <sup>M#</sup>                   | 22          | 21          | 20          | 22          |  |  |  | mg/kg | 1                  | A-T-024s   |
| Selenium <sub>D</sub> <sup>M#</sup>                 | <1          | <1          | <1          | <1          |  |  |  | mg/kg | 1                  | A-T-024s   |
| Zinc <sub>D</sub> <sup>M#</sup>                     | 41          | 53          | 50          | 57          |  |  |  | mg/kg | 5                  | A-T-024s   |

Envirolab Job Number: 19/08452

Client Project Name: Angmering

Client Project Ref: 305021

|                                                                 |             |             |             |             |  |  |  |       |                    |            |
|-----------------------------------------------------------------|-------------|-------------|-------------|-------------|--|--|--|-------|--------------------|------------|
| Lab Sample ID                                                   | 19/08452/1  | 19/08452/2  | 19/08452/3  | 19/08452/4  |  |  |  | Units | Limit of Detection | Method ref |
| Client Sample No                                                |             |             |             |             |  |  |  |       |                    |            |
| Client Sample ID                                                | Plot 277 RG | Plot 278 RG | Plot 279 RG | Plot 280 RG |  |  |  |       |                    |            |
| Depth to Top                                                    | 0.10        | 0.30        | 0.10        | 0.40        |  |  |  |       |                    |            |
| Depth To Bottom                                                 |             |             |             |             |  |  |  |       |                    |            |
| Date Sampled                                                    | 04-Sep-19   | 04-Sep-19   | 04-Sep-19   | 04-Sep-19   |  |  |  |       |                    |            |
| Sample Type                                                     | Soil - ES   | Soil - ES   | Soil - ES   | Soil - ES   |  |  |  |       |                    |            |
| Sample Matrix Code                                              | 4AE         | 5AE         | 4AE         | 6AE         |  |  |  |       |                    |            |
| Asbestos in Soil (inc. matrix)                                  |             |             |             |             |  |  |  |       |                    |            |
| Asbestos in soil <sup>#</sup>                                   | NAD         | NAD         | NAD         | NAD         |  |  |  |       |                    | A-T-045    |
| Asbestos ACM - Suitable for Water Absorption Test? <sub>D</sub> | N/A         | N/A         | N/A         | N/A         |  |  |  |       |                    | A-T-045    |

Envirolab Job Number: 19/08452

Client Project Name: Angmering

Client Project Ref: 305021

| Lab Sample ID                                    | 19/08452/1  | 19/08452/2  | 19/08452/3  | 19/08452/4  |  |  |  | Units | Limit of Detection | Method ref |
|--------------------------------------------------|-------------|-------------|-------------|-------------|--|--|--|-------|--------------------|------------|
| Client Sample No                                 |             |             |             |             |  |  |  |       |                    |            |
| Client Sample ID                                 | Plot 277 RG | Plot 278 RG | Plot 279 RG | Plot 280 RG |  |  |  |       |                    |            |
| Depth to Top                                     | 0.10        | 0.30        | 0.10        | 0.40        |  |  |  |       |                    |            |
| Depth To Bottom                                  |             |             |             |             |  |  |  |       |                    |            |
| Date Sampled                                     | 04-Sep-19   | 04-Sep-19   | 04-Sep-19   | 04-Sep-19   |  |  |  |       |                    |            |
| Sample Type                                      | Soil - ES   | Soil - ES   | Soil - ES   | Soil - ES   |  |  |  |       |                    |            |
| Sample Matrix Code                               | 4AE         | 5AE         | 4AE         | 6AE         |  |  |  |       |                    |            |
| PAH-16MS                                         |             |             |             |             |  |  |  |       |                    |            |
| Acenaphthene <sub>A</sub> <sup>M#</sup>          | <0.01       | <0.01       | <0.01       | <0.01       |  |  |  | mg/kg | 0.01               | A-T-019s   |
| Acenaphthylene <sub>A</sub> <sup>M#</sup>        | <0.01       | <0.01       | <0.01       | <0.01       |  |  |  | mg/kg | 0.01               | A-T-019s   |
| Anthracene <sub>A</sub> <sup>M#</sup>            | <0.02       | <0.02       | <0.02       | <0.02       |  |  |  | mg/kg | 0.02               | A-T-019s   |
| Benzo(a)anthracene <sub>A</sub> <sup>M#</sup>    | 0.05        | <0.04       | <0.04       | <0.04       |  |  |  | mg/kg | 0.04               | A-T-019s   |
| Benzo(a)pyrene <sub>A</sub> <sup>M#</sup>        | 0.05        | <0.04       | <0.04       | <0.04       |  |  |  | mg/kg | 0.04               | A-T-019s   |
| Benzo(b)fluoranthene <sub>A</sub> <sup>M#</sup>  | 0.08        | <0.05       | 0.07        | <0.05       |  |  |  | mg/kg | 0.05               | A-T-019s   |
| Benzo(ghi)perylene <sub>A</sub> <sup>M#</sup>    | <0.05       | <0.05       | <0.05       | <0.05       |  |  |  | mg/kg | 0.05               | A-T-019s   |
| Benzo(k)fluoranthene <sub>A</sub> <sup>M#</sup>  | <0.07       | <0.07       | <0.07       | <0.07       |  |  |  | mg/kg | 0.07               | A-T-019s   |
| Chrysene <sub>A</sub> <sup>M#</sup>              | <0.06       | <0.06       | <0.06       | <0.06       |  |  |  | mg/kg | 0.06               | A-T-019s   |
| Dibenzo(ah)anthracene <sub>A</sub> <sup>M#</sup> | <0.04       | <0.04       | <0.04       | <0.04       |  |  |  | mg/kg | 0.04               | A-T-019s   |
| Fluoranthene <sub>A</sub> <sup>M#</sup>          | <0.08       | <0.08       | <0.08       | <0.08       |  |  |  | mg/kg | 0.08               | A-T-019s   |
| Fluorene <sub>A</sub> <sup>M#</sup>              | <0.01       | <0.01       | <0.01       | <0.01       |  |  |  | mg/kg | 0.01               | A-T-019s   |
| Indeno(123-cd)pyrene <sub>A</sub> <sup>M#</sup>  | 0.04        | <0.03       | <0.03       | <0.03       |  |  |  | mg/kg | 0.03               | A-T-019s   |
| Naphthalene <sub>A</sub> <sup>M#</sup>           | <0.03       | <0.03       | <0.03       | <0.03       |  |  |  | mg/kg | 0.03               | A-T-019s   |
| Phenanthrene <sub>A</sub> <sup>M#</sup>          | <0.03       | <0.03       | <0.03       | <0.03       |  |  |  | mg/kg | 0.03               | A-T-019s   |
| Pyrene <sub>A</sub> <sup>M#</sup>                | <0.07       | <0.07       | <0.07       | <0.07       |  |  |  | mg/kg | 0.07               | A-T-019s   |
| Total PAH-16MS <sub>A</sub> <sup>M#</sup>        | 0.22        | <0.08       | <0.08       | <0.08       |  |  |  | mg/kg | 0.01               | A-T-019s   |

Envirolab Job Number: 19/08452

Client Project Name: Angmering

Client Project Ref: 305021

| Lab Sample ID                                  | 19/08452/1  | 19/08452/2  | 19/08452/3  | 19/08452/4  |  |  |  | Units | Limit of Detection | Method ref |
|------------------------------------------------|-------------|-------------|-------------|-------------|--|--|--|-------|--------------------|------------|
| Client Sample No                               |             |             |             |             |  |  |  |       |                    |            |
| Client Sample ID                               | Plot 277 RG | Plot 278 RG | Plot 279 RG | Plot 280 RG |  |  |  |       |                    |            |
| Depth to Top                                   | 0.10        | 0.30        | 0.10        | 0.40        |  |  |  |       |                    |            |
| Depth To Bottom                                |             |             |             |             |  |  |  |       |                    |            |
| Date Sampled                                   | 04-Sep-19   | 04-Sep-19   | 04-Sep-19   | 04-Sep-19   |  |  |  |       |                    |            |
| Sample Type                                    | Soil - ES   | Soil - ES   | Soil - ES   | Soil - ES   |  |  |  |       |                    |            |
| Sample Matrix Code                             | 4AE         | 5AE         | 4AE         | 6AE         |  |  |  |       |                    |            |
| TPH CWG                                        |             |             |             |             |  |  |  |       |                    |            |
| Ali >C5-C6 <sub>A</sub> <sup>#</sup>           | <0.01       | <0.01       | <0.01       | <0.01       |  |  |  | mg/kg | 0.01               | A-T-022s   |
| Ali >C6-C8 <sub>A</sub> <sup>#</sup>           | <0.01       | <0.01       | 0.01        | <0.01       |  |  |  | mg/kg | 0.01               | A-T-022s   |
| Ali >C8-C10 <sub>A</sub>                       | <1          | <1          | <1          | <1          |  |  |  | mg/kg | 1                  | A-T-055s   |
| Ali >C10-C12 <sub>A</sub> <sup>M#</sup>        | <1          | <1          | <1          | <1          |  |  |  | mg/kg | 1                  | A-T-055s   |
| Ali >C12-C16 <sub>A</sub> <sup>M#</sup>        | <1          | <1          | <1          | <1          |  |  |  | mg/kg | 1                  | A-T-055s   |
| Ali >C16-C21 <sub>A</sub> <sup>M#</sup>        | 2           | <1          | 2           | <1          |  |  |  | mg/kg | 1                  | A-T-055s   |
| Ali >C21-C35 <sub>A</sub>                      | 20          | 1           | 25          | 3           |  |  |  | mg/kg | 1                  | A-T-055s   |
| Total Aliphatics <sub>A</sub>                  | 22          | 1           | 28          | 3           |  |  |  | mg/kg | 1                  | A-T-055s   |
| Aro >C5-C7 <sub>A</sub> <sup>#</sup>           | <0.01       | <0.01       | <0.01       | <0.01       |  |  |  | mg/kg | 0.01               | A-T-022s   |
| Aro >C7-C8 <sub>A</sub> <sup>#</sup>           | <0.01       | <0.01       | <0.01       | <0.01       |  |  |  | mg/kg | 0.01               | A-T-022s   |
| Aro >C8-C10 <sub>A</sub>                       | 2           | <1          | 2           | 1           |  |  |  | mg/kg | 1                  | A-T-055s   |
| Aro >C10-C12 <sub>A</sub> <sup>M#</sup>        | <1          | <1          | <1          | <1          |  |  |  | mg/kg | 1                  | A-T-055s   |
| Aro >C12-C16 <sub>A</sub>                      | 1           | <1          | 2           | <1          |  |  |  | mg/kg | 1                  | A-T-055s   |
| Aro >C16-C21 <sub>A</sub> <sup>M#</sup>        | 6           | <1          | 6           | <1          |  |  |  | mg/kg | 1                  | A-T-055s   |
| Aro >C21-C35 <sub>A</sub> <sup>M#</sup>        | 89          | 3           | 124         | 10          |  |  |  | mg/kg | 1                  | A-T-055s   |
| Total Aromatics <sub>A</sub>                   | 98          | 3           | 134         | 11          |  |  |  | mg/kg | 1                  | A-T-055s   |
| TPH (Ali & Aro >C5-C35) <sub>A</sub>           | 121         | 5           | 162         | 15          |  |  |  | mg/kg | 1                  | A-T-055s   |
| BTEX - Benzene <sub>A</sub> <sup>#</sup>       | <0.01       | <0.01       | <0.01       | <0.01       |  |  |  | mg/kg | 0.01               | A-T-022s   |
| BTEX - Toluene <sub>A</sub> <sup>#</sup>       | <0.01       | <0.01       | <0.01       | <0.01       |  |  |  | mg/kg | 0.01               | A-T-022s   |
| BTEX - Ethyl Benzene <sub>A</sub> <sup>#</sup> | <0.01       | <0.01       | <0.01       | <0.01       |  |  |  | mg/kg | 0.01               | A-T-022s   |
| BTEX - m & p Xylene <sub>A</sub> <sup>#</sup>  | <0.01       | <0.01       | <0.01       | <0.01       |  |  |  | mg/kg | 0.01               | A-T-022s   |
| BTEX - o Xylene <sub>A</sub> <sup>#</sup>      | <0.01       | <0.01       | <0.01       | <0.01       |  |  |  | mg/kg | 0.01               | A-T-022s   |
| MTBE <sub>A</sub> <sup>#</sup>                 | <0.01       | <0.01       | <0.01       | <0.01       |  |  |  | mg/kg | 0.01               | A-T-022s   |

## **REPORT NOTES**

### **General**

This report shall not be reproduced, except in full, without written approval from Envirolab.

The results reported herein relate only to the material supplied to the laboratory.

The residue of any samples contained within this report, and any received with the same delivery, will be disposed of six weeks after initial scheduling. For samples tested for Asbestos we will retain a portion of the dried sample for a minimum of six months after the initial Asbestos testing is completed.

Analytical results reflect the quality of the sample at the time of analysis only.

Opinions and interpretations expressed are outside the scope of our accreditation.

If results are in italic font they are associated with an AQC failure, these are not accredited and are unreliable.

A deviating samples report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.

The Client Sample No, Client Sample ID, Depth to Top, Depth to Bottom and Date Sampled were all provided by the client.

### **Soil chemical analysis:**

All results are reported as dry weight (<40°C).

For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as '% stones >10mm'.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any "A" subscripts

All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any "D" subscripts.

### **TPH analysis of water by method A-T-007:**

Free and visible oils are excluded from the sample used for analysis so that the reported result represents the dissolved phase only.

### **Electrical Conductivity of water by Method A-T-037:**

Results greater than 12900µS/cm @ 25°C / 11550µS/cm @ 20°C fall outside the calibration range and as such are unaccredited.

### **Asbestos:**

Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.

Stones etc. are not removed from the sample prior to analysis.

Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing and fibre counting by sedimentation/phase contrast optical microscopy if required. If asbestos is identified as being present but is not in a form that is suitable for analysis by hand picking and weighing (normally if the asbestos is present as free fibres) quantification by sedimentation is performed.

Where ACMs are found a percentage asbestos is assigned to each with reference to 'HSG264, Asbestos: The survey guide' and the calculated asbestos content is expressed as a percentage of the dried soil sample aliquot used.

### **Predominant Matrix Codes:**

1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample.

Samples with Matrix Code 7 & 8 are not predominantly a SAND/LOAM/CLAY mix and are not covered by our BSEN 17025 or MCERTS accreditations, with the exception of bulk asbestos which are BSEN 17025 accredited.

### **Secondary Matrix Codes:**

A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal,

E = contains roots/twigs.

### **Key:**

IS indicates Insufficient Sample for analysis.

US indicates Unsuitable Sample for analysis.

NDP indicates No Determination Possible.

NAD indicates No Asbestos Detected.

N/A indicates Not Applicable.

Superscript # indicates method accredited to ISO 17025.

Superscript "M" indicates method accredited to MCERTS.

Subscript "A" indicates analysis performed on the sample as received.

Subscript "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve

Please contact us if you need any further information.

## Envirolab Deviating Samples Report

Units 7&8 Sandpits Business Park, Mottram Road, Hyde, SK14 3AR

T [REDACTED]

**Client:** RSK Environment Ltd Southampton, Unit 26 , Basepoint Abbey Enterprise  
Centre, Premier Way, Romsey,, Hampshire, UK, SO51 9AQ

**Project No:** 19/08452

**Date Received:** 09/09/2019 (am)

**Project:** Angmering

**Cool Box Temperatures (°C):** 16.1

**Clients Project No:** 305021

### NO DEVIATIONS IDENTIFIED

If, at any point before reaching the laboratory, the temperature of the samples has breached those set in published standards, e.g. BS-EN 5667-3, ISO 18400-102:2017, then the concentration of any affected analytes may differ from that at the time of sampling.

## **APPENDIX F**

# **GENERIC ASSESSMENT CRITERIA**

---

## **Generic assessment criteria for human health: residential scenario with home-grown produce**

### **Background**

RSK's generic assessment criteria (GAC) were initially prepared following the publication by the Environment Agency (EA) of soil guideline value (SGV) and toxicological (TOX) reports, and associated publications in 2009<sup>(1)</sup>. RSK GAC were updated following the publication of GAC by LQM/CIEH in 2009<sup>(2)</sup>. RSK GAC are periodically revised when updated information on toxicological, land use or receptor parameters is published.

### **Updates to the RSK GAC**

In 2014, the publication of Category 4 Screening Levels (C4SL)<sup>(3,4)</sup>, as part of the Defra-funded research project SP1010, included modifications to certain exposure assumptions documented within EA Science Report SC050221/SR3 (herein after referred to as SR3)<sup>(5)</sup> used in the generation of SGVs.

C4SL were published for six substances (cadmium, arsenic, benzene, benzo(a)pyrene, chromium VI and lead) for a sandy loam soil type with 6% soil organic matter, based on a low level of toxicological concern (LLTC; see Section 2.3 of research project report SP1010<sup>(3)</sup>). Where a C4SL has been published, the RSK GAC duplicates the C4SL published values using all input parameters within the SP1010 final project report<sup>(3)</sup> and associated appendices<sup>(6)</sup>, and adopts them as GAC for these six substances.

For all other substances the C4SL exposure modifications, with the exception of the "top two" produce type approach taken in the C4SL, have been applied to the current RSK GAC. These include alterations to daily inhalation rates for residential and commercial scenarios, reducing soil adherence factors in children (age classes 1 to 12 only) for residential land use, reducing exposure frequency for dermal contact outdoors for residential land use, and updated produce type consumption rates (90<sup>th</sup> percentile) based on recent data from the National Diet and Nutrition Survey.

The RSK GAC have also been revised with updated toxicology published by LQM/CIEH in 2015<sup>(7)</sup> or by the USEPA<sup>(14)</sup>, where a C4SL has not been published.

### **RSK GAC derivation for metals and organic compounds**

#### *Model selection*

Soil assessment criteria (SAC) were calculated using the Contaminated Land Exposure Assessment (CLEA) tool v1.071, supporting EA guidance<sup>(5,8,9)</sup> and revised exposure scenarios published for the C4SL<sup>(3)</sup>. Groundwater assessment criteria (GrAC) protective of human health via the inhalation pathway were derived using the RBCA 2.51 model with the Johnson and Ettinger model for soil and groundwater volatilisation. RSK has updated the inputs within RBCA to reflect EA guidance<sup>(1,5,8,9)</sup>. The SAC and GrAC collectively are termed GAC.

#### *Conceptual model*

In accordance with SR3<sup>(5)</sup>, the residential with home-grown produce scenario considers risks to a female child between the ages of 0 and 6 years old as the highest risk scenario. In accordance

with Box 3.1 of SR3<sup>(5)</sup>, the pathways considered for production of the SAC in the residential with home-grown produce scenario are

- direct soil and dust ingestion
- consumption of home-grown produce
- consumption of soil attached to home-grown produce
- dermal contact with soil and indoor dust
- inhalation of indoor and outdoor dust and vapours.

Figure 1 is a conceptual model illustrating these linkages.

In line with guidance in the EA SGV report for cadmium<sup>(1)</sup>, the RSK GAC for cadmium has been derived based on estimates representative of lifetime exposure. Although young children are generally more likely to have higher exposures to soil contaminants, the renal toxicity of cadmium, and the derivation of the  $TDI_{oral}$  and  $TDI_{inh}$ , are based on considerations of the kidney burden accumulated over 50 years or so. It is therefore reasonable to consider exposure not just in childhood but averaged over a longer period.

The pathway considered in production of the GrAC is the volatilisation of compounds from groundwater and subsequent vapour inhalation by residents while indoors. Figure 2 illustrates this linkage. Although the outdoor air inhalation pathway is also valid, this contributes little to the overall risks owing to the dilution in outdoor air. Within RBCA, the solubility limit of the chemical restricts the extent of volatilisation, which in turn drives the indoor air inhalation pathway. While the same restriction is not built into the CLEA model, the CLEA model output cells are flagged red where the soil saturation limit has been exceeded.

With respect to volatilisation, the CLEA model assumes a simple linear partitioning of a chemical in the soil between the sorbed, dissolved and vapour phase<sup>(9)</sup>. The upper boundaries of this partitioning are represented by the maximum aqueous solubility and pure saturated vapour concentration of the chemical. The CLEA model estimates saturated soil concentrations where these limits are reached<sup>(9)</sup>. The CLEA software uses a traffic light system to identify when individual and/or combined assessment criteria exceed the lower of either the aqueous- or vapour-based soil saturation limits. Model output cells are flagged red where the saturated soil concentration has been exceeded and the contribution of the indoor and outdoor vapour pathway to total exposure is greater than 10%. In this case, further consideration of the following is required<sup>(9)</sup>:

- Free phase contamination may be present.
- Exposure from the vapour pathways will be over-predicted by the model, as in reality the vapour phase concentration will not increase at concentrations above saturation limits
- Where the vapour pathway contribution is greater than 90%, it is unlikely the relevant health criteria value (HCV) will be exceeded at soil concentrations at least a factor of ten higher than the relevant HCV.

Where the vapour pathway is the predominant pathway (contributes greater than 90% of exposure) or the only exposure route considered and the cell is highlighted red (SAC exceeds saturation limit), the risk based on the assumed conceptual model is likely to be negligible as the vapour risk is assumed to be tolerable at maximum possible soil concentrations. In such circumstances, the vapour pathway exposure should be considered based on the presence of free phase or non-aqueous phase liquid sources and the measured concentrations of volatile organic compounds (VOC) in the vapour phase. Screening could be considered based on setting

the SAC as the modelled soil saturation limits. However, as stated within the CLEA handbook<sup>(9)</sup>, this is likely to not be practical in many cases because of the very low saturation limits and, in any case, is highly conservative.

It should also be noted that for mixtures of compounds, free phase may be present where soil (or groundwater) concentrations are well below saturation limits for individual compounds.

Where the vapour pathway is only one of the exposure pathways considered, an additional approach can then be utilised as detailed within Section 4.12 of the CLEA model handbook<sup>(9)</sup>, which explains how to calculate an effective assessment criterion manually.

SR3<sup>(5)</sup> states that, as a general rule of thumb, it is recognised that estimating vapour phase concentrations from dissolved and sorbed phase contamination by petroleum hydrocarbons are at least a factor of ten higher than those likely to be measured on-site. RSK has therefore applied an empirical subsurface to indoor air correction factor of 10 into the CLEA model chemical database and to outputs from the RBCA model for all petroleum hydrocarbon fractions (including BTEX, trimethylbenzenes and the polycyclic aromatic hydrocarbons (PAH) naphthalene, acenaphthene and acenaphthylene) to reduce this conservatism.

#### *Input selection*

The most up-to-date published chemical and toxicological data was obtained from EA Report SC050021/SR7<sup>(10)</sup>, the EA TOX<sup>(11)</sup> reports, the C4SL SP1010 project report and associated appendices<sup>(3,6)</sup>, the 2015 LQM/CIEH report<sup>(7)</sup> or the USEPA IRIS database<sup>(14)</sup>. Where a C4SL has been published, the RSK GAC have duplicated the C4SL published values using all input parameters within the SP1010 final project report<sup>(3)</sup> and associated appendices<sup>(6)</sup>, and has adopted them as GAC for these six substances. Toxicological and specific chemical parameters for aromatic hydrocarbon C<sub>8</sub>–C<sub>9</sub> (styrene), 1,2,4-trimethylbenzene and methyl tertiary-butyl ether (MTBE) were obtained from the CL:AIRE Soil Generic Assessment Criteria report<sup>(11)</sup>.

For TPH, aromatic hydrocarbons C<sub>5</sub>–C<sub>8</sub> were not modelled, as this range comprises benzene and toluene, which are modelled separately. The aromatic C<sub>8</sub>–C<sub>9</sub> hydrocarbon fraction comprises ethylbenzene, xylene and styrene. As ethylbenzene and xylene are being modelled separately, the physical, chemical and toxicological data for aromatic C<sub>8</sub>–C<sub>9</sub> have been taken from styrene.

For the GrAC, the HCV used in the modelling were derived using the toxicological data for the SAC amended as follows:

- A child weighing 13.3kg (average of 0-6 year old female in accordance with Table 4.6 of SR3<sup>(5)</sup>) and breathing 8.77m<sup>3</sup> (average daily inhalation rate for a 0-6yr old female in accordance with SP1010 final project report for the C4SL (Table 3.2<sup>(3)</sup>) and USEPA data<sup>(14)</sup>)
- Background inhalation (mean daily intake (MDI)) for a child (Age Classes 1-6)
- Residential amendments to the MDI for younger age groups following Table 3.4 and Section 3.4.1 of SR2<sup>(8)</sup>; amended to reflect average daily inhalation rates in accordance with SP1010 final project report for the C4SL (Table 3.2<sup>(3)</sup>) and USEPA data<sup>(12)</sup>.

#### *Physical parameters*

For the residential with home-grown produce scenario, the CLEA default building is a small, two-storey terrace house with a concrete ground-bearing slab. The house is assumed to have a 100m<sup>2</sup> private garden consisting of lawn and flowerbeds, incorporating a 20m<sup>2</sup> plot for growing fruit and vegetables consumed by the residents. SR3<sup>(5)</sup> notes this residential building type to be

the most conservative in terms of potential for vapour intrusion. The building parameters used in the production of the RSK GACs are the default CLEA v1.06 inputs presented in Table 3.3 of SR3<sup>(3)</sup>, with a dust loading factor detailed in Section 9.3 of SR3<sup>(5)</sup>. The parameters for a sandy loam soil type were used in line with Table 4.4 of SR3<sup>(5)</sup>. This includes a value of 6% for the percentage of soil organic matter (SOM) within the soil. In RSK's experience, this is rather high for many sites. To avoid undertaking site-specific risk assessments for SOM, RSK has produced an additional set of GAC for SOM of 1% and 2.5% for all substances using the CLEA tool.

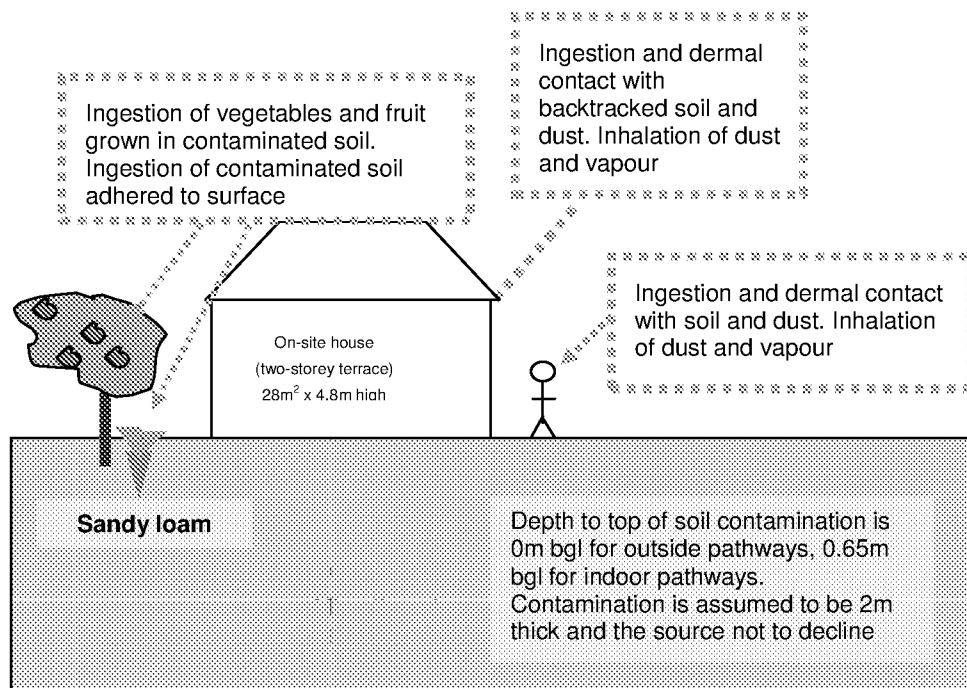
For the GrAC, the depth to groundwater was taken as 2.5m based on RSK's experience of assessing the volatilisation pathway from groundwater. The GrAC were produced using the input parameters in Table 4.

*Summary of modifications to the default CLEA SR3<sup>(5)</sup> input parameters for residential with home-grown produce land-use scenario*

In summary, the RSK GAC were produced using the default input parameters for soil properties, the air dispersion model, building properties and the vapour model detailed in SR3<sup>(5)</sup>. Modifications to the default SR3<sup>(5)</sup> exposure scenarios based on the C4SL exposure scenarios<sup>(3)</sup> are presented in Tables 2 and 3 below.

The final selected GAC are presented by pathway in Table 5 and the combined GAC in Table 6.

**Figure 1: Conceptual model for residential scenario with home-grown produce**



**Table 1: Exposure assessment parameters for residential scenario with home-grown produce – inputs for CLEA model**

| Parameter            | Value                              | Justification                                                                                                                                                                                                                   |
|----------------------|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Land use             | Residential with homegrown produce | Chosen land use                                                                                                                                                                                                                 |
| Receptor             | Female child age 1 to 6            | Key generic assumption given in Box 3.1, SR3 <sup>(5)</sup>                                                                                                                                                                     |
| Building             | Small terraced house               | Key generic assumption given in Box 3.1, SR3. Small, two-storey terraced house chosen, as it is the most conservative residential building type in terms of protection from vapor intrusion (Section 3.4.6, SR3) <sup>(5)</sup> |
| Soil type            | Sandy Loam                         | Most common UK soil type (Section 4.3.1, from Table 3.1, SR3) <sup>(5)</sup>                                                                                                                                                    |
| Start AC (age class) | 1                                  | Range of age classes corresponding to key generic assumption that the critical receptor is a young female child aged 0–6. From Box 3.1, SR3 <sup>(5)</sup>                                                                      |
| End AC (age class)   | 6                                  |                                                                                                                                                                                                                                 |
| SOM (%)              | 6                                  | Representative of sandy loamy soil according to EA guidance note dated January 2009 entitled 'Changes We Have Made to the CLEA Framework Documents' <sup>(13)</sup>                                                             |
|                      | 1                                  | To provide SAC for sites where SOM <6% as often observed by RSK                                                                                                                                                                 |
|                      | 2.5                                |                                                                                                                                                                                                                                 |
| pH                   | 7                                  | Model default                                                                                                                                                                                                                   |

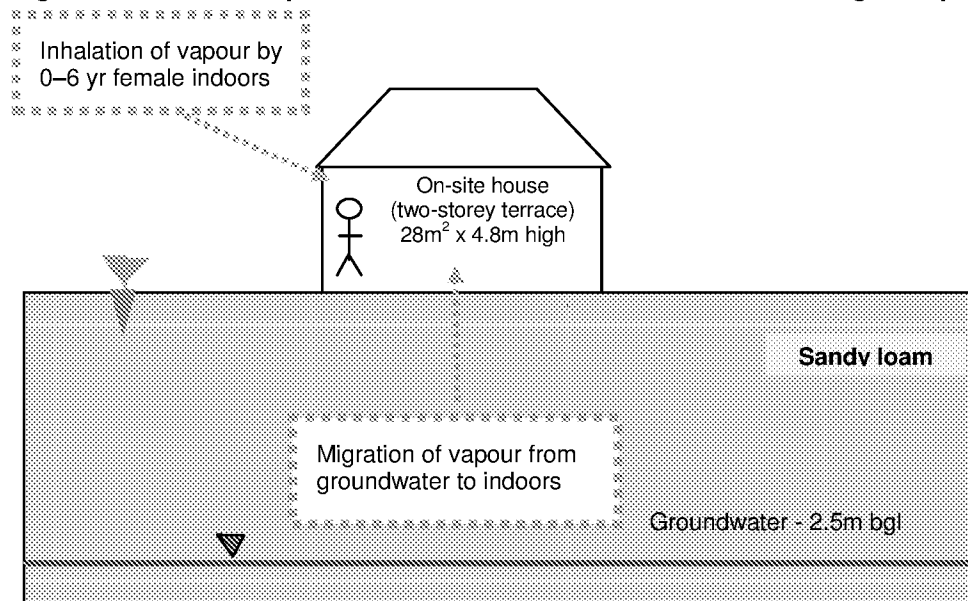
**Table 2: Residential with home-grown produce – modified home-grown produce data**

| Name             | Consumption rate 90 <sup>th</sup> percentile (g FW kg <sup>-1</sup> BW day <sup>-1</sup> ) by age class |      |      |      |      |      | Dry weight conversion factor (g DW g <sup>-1</sup> FW) | Home-grown fraction (average)  | Home-grown fraction (high end) | Soil loading factor (g g <sup>-1</sup> DW) | Preparation correction factor |
|------------------|---------------------------------------------------------------------------------------------------------|------|------|------|------|------|--------------------------------------------------------|--------------------------------|--------------------------------|--------------------------------------------|-------------------------------|
|                  | 1                                                                                                       | 2    | 3    | 4    | 5    | 6    |                                                        |                                |                                |                                            |                               |
| Green vegetables | 7.12                                                                                                    | 5.87 | 5.87 | 5.87 | 4.53 | 4.53 | 0.096                                                  | 0.05                           | 0.33                           | 1.00E-03                                   | 2.00E-01                      |
| Root vegetables  | 10.7                                                                                                    | 2.83 | 2.83 | 2.83 | 2.14 | 2.14 | 0.103                                                  | 0.06                           | 0.4                            | 1.00E-03                                   | 1.00E+00                      |
| Tuber vegetables | 16                                                                                                      | 6.6  | 6.6  | 6.6  | 4.95 | 4.95 | 0.21                                                   | 0.02                           | 0.13                           | 1.00E-03                                   | 1.00E+00                      |
| Herbaceous fruit | 1.83                                                                                                    | 3.39 | 3.39 | 3.39 | 2.24 | 2.24 | 0.058                                                  | 0.06                           | 0.4                            | 1.00E-03                                   | 6.00E-01                      |
| Shrub fruit      | 2.23                                                                                                    | 0.46 | 0.46 | 0.46 | 0.19 | 0.19 | 0.166                                                  | 0.09                           | 0.6                            | 1.00E-03                                   | 6.00E-01                      |
| Tree fruit       | 3.82                                                                                                    | 10.3 | 10.3 | 10.3 | 5.16 | 5.16 | 0.157                                                  | 0.04                           | 0.27                           | 1.00E-03                                   | 6.00E-01                      |
| Justification    | Table 3.4, SP1010 <sup>(3)</sup>                                                                        |      |      |      |      |      | Table 6.3, SR3 <sup>(5)</sup>                          | Table 4.19, SR3 <sup>(5)</sup> |                                | Table 6.3, SR3 <sup>(5)</sup>              |                               |

**Table 3: Residential with home-grown produce – modified and use and receptor data**

| Parameter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Unit                                  | Age class                                                                 |     |       |      |      |      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|---------------------------------------------------------------------------|-----|-------|------|------|------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                       | 1                                                                         | 2   | 3     | 4    | 5    | 6    |
| EF (soil and dust ingestion)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | day yr <sup>-1</sup>                  | 180                                                                       | 365 | 365   | 365  | 365  | 365  |
| EF (consumption of home-grown produce)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | day yr <sup>-1</sup>                  | 180                                                                       | 365 | 365   | 365  | 365  | 365  |
| EF (skin contact, indoor)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | day yr <sup>-1</sup>                  | 180                                                                       | 365 | 365   | 365  | 365  | 365  |
| EF (skin contact, outdoor)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | day yr <sup>-1</sup>                  | 170                                                                       | 170 | 170   | 170  | 170  | 170  |
| EF (inhalation of dust and vapour, indoor)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | day yr <sup>-1</sup>                  | 365                                                                       | 365 | 365   | 365  | 365  | 365  |
| EF (inhalation of dust and vapour, outdoor)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | day yr <sup>-1</sup>                  | 365                                                                       | 365 | 365   | 365  | 365  | 365  |
| Justification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                       | Table 3.5, SP1010 <sup>(3)</sup> ; Table 3.1, SR3 <sup>(5)</sup>          |     |       |      |      |      |
| Soil to skin adherence factor (outdoor)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | mg cm <sup>-2</sup> day <sup>-1</sup> | 0.1                                                                       | 0.1 | 0.1   | 0.1  | 0.1  | 0.1  |
| Justification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                       | Table 3.5, SP1010 <sup>(3)</sup>                                          |     |       |      |      |      |
| Inhalation rate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | m <sup>3</sup> day <sup>-1</sup>      | 5.4                                                                       | 8.0 | 8.9/f | 10.1 | 10.1 | 10.1 |
| Justification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                       | Mean value USEPA, 2011 <sup>(12)</sup> ; Table 3.2, SP1010 <sup>(3)</sup> |     |       |      |      |      |
| Notes: For <b>cadmium</b> , the exposure assessment for a residential land use is based on estimates representative of lifetime exposure AC1-18. This is because the TDI <sub>oral</sub> and TDI <sub>inh</sub> are based on considerations of the kidney burden accumulated over 50 years. It is therefore reasonable to consider exposure not just in childhood but averaged over a longer period. See the Environment Agency Science Report SC05002/ TOX 3 <sup>(1)</sup> , Science Report SC050021/Cadmium SGV <sup>(1)</sup> and the project report SP1010 <sup>(3)</sup> for more information. |                                       |                                                                           |     |       |      |      |      |

**Figure 2: GrAC conceptual model for RBCA residential with home-grown produce scenario**



**Table 4: Residential with home-grown produce – RBCA inputs**

| Parameter                            | Unit                             | Value    | Justification                                                                                                                                                   |
|--------------------------------------|----------------------------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Receptor</b>                      |                                  |          |                                                                                                                                                                 |
| Averaging time                       | Years                            | 6        | From Box 3.1, SR3 <sup>(5)</sup>                                                                                                                                |
| Receptor weight                      | kg                               | 13.3     | Average of CLEA 0–6 year old female data, Table 4.6, SR3 <sup>(5)</sup>                                                                                         |
| Exposure duration                    | Years                            | 6        | From Box 3.1, report, SR3 <sup>(5)</sup>                                                                                                                        |
| Exposure frequency                   | Days/yr                          | 350      | Weighted using occupancy period of 23 hours per day for 365 days of the year                                                                                    |
| <b>Soil type – sandy loam</b>        |                                  |          |                                                                                                                                                                 |
| Total porosity                       | -                                | 0.53     | CLEA value for sandy loam. Parameters for sandy loam from Table 4.4, SR3 <sup>(5)</sup>                                                                         |
| Volumetric water content             | -                                | 0.33     |                                                                                                                                                                 |
| Volumetric air content               | -                                | 0.20     |                                                                                                                                                                 |
| Dry bulk density                     | g cm <sup>-3</sup><br>or<br>kg/L | 1.21     |                                                                                                                                                                 |
| Vertical hydraulic conductivity      | cm s <sup>-1</sup>               | 3.56E-3  | CLEA value for saturated conductivity of sandy loam, Table 4.4, SR3 <sup>(5)</sup> equivalent to 307 cm/day                                                     |
| Vapour permeability                  | m <sup>2</sup>                   | 3.05E-12 | Calculated for sandy loam using equations in Appendix 1, SR3 <sup>(5)</sup>                                                                                     |
| Capillary zone thickness             | m                                | 0.1      | Professional judgement                                                                                                                                          |
| Fraction organic carbon              | %                                | 0.0348   | Representative of sandy loam according to EA guidance note dated January 2009 entitled 'Changes We Have Made to the CLEA Framework Documents' <sup>(13)</sup>   |
| <b>Building</b>                      |                                  |          |                                                                                                                                                                 |
| Building volume/area ratio           | m                                | 4.8      | Table 3.3, SR3 <sup>(5)</sup>                                                                                                                                   |
| Foundation area                      | m <sup>2</sup>                   | 28       |                                                                                                                                                                 |
| Foundation perimeter                 | m                                | 22       | Calculated assuming building measures 7m x 4m to give 28m <sup>2</sup> foundation area                                                                          |
| Building air exchange rate           | d <sup>-1</sup>                  | 12       | Table 3.3, SR3 <sup>(5)</sup> Building air exchange rate equivalent to 1.4E-04 s <sup>-1</sup>                                                                  |
| Depth to bottom of foundation slab   | m                                | 0.15     |                                                                                                                                                                 |
| Foundation thickness                 | m                                | 0.15     |                                                                                                                                                                 |
| Foundation crack fraction            | -                                | 0.0151   | Calculated from floor crack area of 423 cm <sup>2</sup> and building footprint of 28m <sup>2</sup> in Table 4.21, SR3 <sup>(5)</sup>                            |
| Volumetric water content of cracks   | -                                | 0.33     | Assumed equal to underlying soil type in assumption that cracks become filled with soil over time. Parameters for sandy loam from Table 4.4, SR3 <sup>(5)</sup> |
| Volumetric air content of cracks     | -                                | 0.2      |                                                                                                                                                                 |
| Indoor/outdoor differential pressure | Pa                               | 3.1      | From Table 3.3, SR3 <sup>(5)</sup> Equivalent to 31 g/cm/s <sup>2</sup>                                                                                         |

## References

1. Environment Agency (2009), 'Science Reports SC050021 - SGV and TOX reports for: benzene, toluene, ethylbenzene, xylene, mercury, selenium, nickel, arsenic, cadmium, phenol, dioxins, furans and dioxin-like PCBs'; 'Supplementary information for the derivation of SGV for: benzene, toluene, ethylbenzene, xylene, mercury, selenium, nickel, arsenic, cadmium, phenol, dioxins, furans and dioxin-like PCBs', and 'Contaminants in soil: updated collation of toxicological data and intake values for humans: benzene, toluene, ethylbenzene, xylene, mercury, selenium, nickel, arsenic, cadmium, phenol, dioxins, furans and dioxin-like PCBs'. Available at: <https://www.gov.uk/government/publications/contaminants-in-soil-updated-collation-of-toxicological-data-and-intake-values-for-humans> and <https://www.gov.uk/government/publications/land-contamination-soil-guideline-values-sgvs> (accessed 4 February 2015)
2. Nathanial, C. P., McCaffrey, C., Ashmore, M., Cheng, Y., Gillet, A. G., Ogden, R. C. and Scott, D. (2009), *LQM/CIEH Generic Assessment Criteria for Human Health Risk Assessment*, second edition (Nottingham: Land Quality Press).
3. Contaminated Land: Applications in Real Environment (CL:AIRE) (2014). 'Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination', Revision 2, DEFRA research project SP1010.
4. Department for Environment, Food and Rural Affairs (Defra) (2014), 'SP1010: Development of Category 4 Screening Levels for assessment of land affected by contamination – Policy Companion Document', Revision 2.
5. Environment Agency (2009), *Science Report – SC050021/SR3. Updated technical background to the CLEA model* (Bristol: Environment Agency).
6. Contaminated Land: Applications in Real Environment (CL:AIRE) (2014). 'Appendices C to H). DEFRA research project SP1010'.
7. Nathanial, C. P., McCaffrey, C., Gillet, A. G., Ogden, R. C. and Nathanial, J. F. (2015), *The LQM/CIEH S4ULs for Human Health Risk Assessment* (Nottingham: Land Quality Press).
8. Environment Agency (2009), *Human health toxicological assessment of contaminants in soil. Science Report – Final SC050021/SR2* (Bristol: Environment Agency).
9. Environment Agency (2009), *Science Report – SC050021/SR4 CLEA Software (version 1.05) Handbook* (Bristol: Environment Agency).
10. Environment Agency (2008), *Science Report SC050021/SR7. Compilation of Data for Priority Organic Pollutants for Derivation of Soil Guideline Values* (Bristol: Environment Agency).
11. CL:AIRE (2009), *Soil Generic Assessment Criteria for Human Health Risk Assessment* (London: CL:AIRE).
12. USEPA (2011), *Exposure factors handbook*, EPA/600/R-090/052F (Washington, DC: Office of Research and Development).
13. Environment Agency (2009), 'Changes made to the CLEA framework documents after the three-month evaluation period in 2008', released January 2009.
14. USEPA (2010). Hydrogen cyanide and cyanide salts. Integrated Risk Information Systems (IRIS) Chemical Assessment Summary. September 2010. <https://www.epa.gov/iris> (accessed 9 December 2015)

## GENERIC ASSESSMENT CRITERIA FOR HUMAN HEALTH - RESIDENTIAL WITH HOME-GROWN PRODUCE



Table 5

Human Health Generic Assessment Criteria by Pathway for Residential With Home-Grown Produce Scenario

| Compound                              | Notes | GrAC<br>(µg/l) | SAC Appropriate to Pathway SOM 1% (mg/kg) |            |          | Soil Saturation<br>Limit (mg/kg) | SAC Appropriate to Pathway SOM 2.5% (mg/kg) |            |          | Soil Saturation<br>Limit (mg/kg) | SAC Appropriate to Pathway SOM 6% (mg/kg) |            |          | Soil Saturation<br>Limit (mg/kg) |
|---------------------------------------|-------|----------------|-------------------------------------------|------------|----------|----------------------------------|---------------------------------------------|------------|----------|----------------------------------|-------------------------------------------|------------|----------|----------------------------------|
|                                       |       |                | Oral                                      | Inhalation | Combined |                                  | Oral                                        | Inhalation | Combined |                                  | Oral                                      | Inhalation | Combined |                                  |
| Metals                                |       |                |                                           |            |          |                                  |                                             |            |          |                                  |                                           |            |          |                                  |
| Arsenic                               | (a,b) | -              | 3.71E-01                                  | 5.26E-02   | NR       | NR                               | 3.71E-01                                    | 5.26E-02   | NR       | NR                               | 3.71E-01                                  | 5.26E-02   | NR       | NR                               |
| Cadmium                               | (a)   | -              | 2.30E-01                                  | 4.89E-02   | 2.21E-01 | NR                               | 2.30E-01                                    | 4.89E-02   | 2.21E-01 | NR                               | 2.30E-01                                  | 4.89E-02   | 2.21E-01 | NR                               |
| Chromium (III) - trivalent            | (c)   | -              | 1.84E-04                                  | 9.07E-02   | NR       | NR                               | 1.84E-04                                    | 9.07E-02   | NR       | NR                               | 1.84E-04                                  | 9.07E-02   | NR       | NR                               |
| Chromium (VI) - hexavalent            | (a,d) | -              | 5.85E-01                                  | 2.09E-01   | NR       | NR                               | 5.85E-01                                    | 2.09E-01   | NR       | NR                               | 5.85E-01                                  | 2.09E-01   | NR       | NR                               |
| Copper                                | -     | -              | 2.72E-03                                  | 1.41E-04   | 2.47E-03 | NR                               | 2.72E-03                                    | 1.41E-04   | 2.47E-03 | NR                               | 2.72E-03                                  | 1.41E-04   | 2.47E-03 | NR                               |
| Lead                                  | (a)   | -              | 2.01E-02                                  | NR         | NR       | NR                               | 2.01E-02                                    | NR         | NR       | NR                               | 2.01E-02                                  | NR         | NR       | NR                               |
| Elemental Mercury (Hg <sup>0</sup> )  | (d)   | 1.29E+01       | NR                                        | 3.86E-01   | NR       | 4.31E+00                         | NR                                          | 5.60E-01   | NR       | 1.07E+01                         | NR                                        | 1.29E+00   | NR       | 2.58E+01                         |
| Inorganic Mercury (Hg <sup>2+</sup> ) | -     | -              | 3.99E-01                                  | 5.53E-03   | 3.91E-01 | NR                               | 3.99E-01                                    | 5.53E-03   | 3.91E-01 | NR                               | 3.99E-01                                  | 5.53E-03   | 3.91E-01 | NR                               |
| Methyl Mercury (Hg <sup>+</sup> )     | -     | 2.22E-04       | 1.26E-01                                  | 1.87E-01   | 7.92E-00 | 7.33E+01                         | 1.26E-01                                    | 5.62E-01   | 9.34E-00 | 1.42E+02                         | 1.26E-01                                  | 7.86E-01   | 1.06E-01 | 3.04E+02                         |
| Nickel                                | (d)   | -              | 1.27E-02                                  | 1.81E-02   | NR       | NR                               | 1.27E-02                                    | 1.81E-02   | NR       | NR                               | 1.27E-02                                  | 1.81E-02   | NR       | NR                               |
| Selenium                              | (b)   | -              | 2.96E-02                                  | NR         | NR       | NR                               | 2.96E-02                                    | NR         | NR       | NR                               | 2.96E-02                                  | NR         | NR       | NR                               |
| Zinc                                  | (b)   | -              | 3.86E-03                                  | 5.63E-07   | NR       | NR                               | 3.86E-03                                    | 5.63E-07   | NR       | NR                               | 3.86E-03                                  | 5.63E-07   | NR       | NR                               |
| Cyanide (free)                        | -     | -              | 1.37E-00                                  | 1.87E-04   | 1.37E-00 | NR                               | 1.37E-00                                    | 1.87E-04   | 1.37E-00 | NR                               | 1.37E-00                                  | 1.87E-04   | 1.37E-00 | NR                               |
| Volatile Organic Compounds            |       |                |                                           |            |          |                                  |                                             |            |          |                                  |                                           |            |          |                                  |
| Benzene                               | (a)   | 2.50E+04       | 2.62E-01                                  | 9.04E-01   | 2.89E-01 | 1.22E+03                         | 3.28E-01                                    | 1.68E+00   | 4.98E-01 | 2.26E+03                         | 1.16E+00                                  | 3.49E+00   | 2.73E-01 | 4.71E+03                         |
| Toluene                               | -     | 5.90E+05       | 1.33E-02                                  | 9.06E-02   | 1.31E-02 | 8.89E-02                         | 5.43E-03                                    | 2.00E-03   | 2.87E-02 | 1.92E+03                         | 7.36E-02                                  | 4.55E-03   | 6.77E-02 | 4.36E+03                         |
| Ethylbenzene                          | -     | 1.25E+05       | 1.10E-02                                  | 8.54E-01   | 4.74E-01 | 5.18E-02                         | 2.61E-02                                    | 1.96E-02   | 1.18E-02 | 1.22E+03                         | 6.00E-02                                  | 4.59E-02   | 2.80E-02 | 2.84E+03                         |
| Xylene - m                            | -     | 1.16E+05       | 2.10E-02                                  | 6.25E-01   | 5.82E-01 | 6.25E+02                         | 5.01E-02                                    | 1.95E+02   | 1.40E+02 | 1.47E+03                         | 1.19E+03                                  | 4.59E+02   | 3.27E+02 | 3.46E+03                         |
| Xylene - o                            | -     | 1.41E+05       | 1.32E-02                                  | 8.87E-01   | 6.07E-01 | 4.78E-02                         | 4.95E-02                                    | 2.96E-02   | 1.43E-02 | 1.12E+03                         | 1.05E-03                                  | 4.86E-02   | 2.58E-02 | 2.62E+03                         |
| Xylene - p                            | -     | 1.21E+05       | 1.56E-02                                  | 7.83E-01   | 5.86E-01 | 5.76E-02                         | 4.70E-02                                    | 1.89E-02   | 1.33E-02 | 1.35E+03                         | 1.08E-03                                  | 4.39E-02   | 2.10E-02 | 3.17E+03                         |
| Total xylene                          | -     | 1.16E+05       | 1.88E-02                                  | 7.83E-01   | 5.86E-01 | 6.25E+02                         | 4.58E-02                                    | 1.69E+02   | 1.43E+02 | 1.47E+03                         | 1.05E+03                                  | 4.39E+02   | 2.10E+02 | 3.46E+03                         |
| Methyl tertiary Butyl ether (MTBE)    | -     | 9.32E+08       | 1.54E-02                                  | 1.04E-03   | 1.24E-02 | 2.04E+04                         | 2.87E-02                                    | 1.89E-03   | 2.38E-02 | 3.31E+04                         | 6.03E-02                                  | 3.21E-03   | 5.09E-02 | 6.27E+04                         |
| Trichloroethene                       | -     | 6.44E+01       | 2.83E-01                                  | 1.72E-02   | 1.82E-02 | 1.54E+03                         | 6.29E-01                                    | 3.53E-02   | 3.40E-02 | 3.22E+03                         | 1.41E+00                                  | 7.89E-02   | 7.53E-02 | 7.14E+03                         |
| Tetrachloroethene                     | -     | 4.08E-02       | 4.49E-00                                  | 1.79E-01   | 1.75E-01 | 4.24E+02                         | 1.04E-01                                    | 4.03E-01   | 3.34E-01 | 9.51E+02                         | 2.26E-01                                  | 3.21E-01   | 3.94E-01 | 2.18E+03                         |
| 1,1,1-Trichloroethene                 | -     | 3.59E+04       | 3.29E-03                                  | 9.03E-00   | 8.77E-00 | 1.43E+03                         | 7.28E-02                                    | 1.84E-01   | 1.80E-01 | 2.92E+03                         | 1.39E-03                                  | 4.04E-01   | 3.34E-01 | 6.39E+03                         |
| 1,1,1,2-Tetrachloroethane             | -     | 2.84E+03       | 3.89E-00                                  | 1.54E-00   | 1.20E-00 | 2.60E+03                         | 1.27E-01                                    | 2.59E-00   | 2.75E-00 | 6.02E+03                         | 3.32E-01                                  | 5.29E-00   | 6.40E-00 | 1.40E+04                         |
| 1,1,2,2-Tetrachloroethane             | -     | 1.85E+04       | 2.81E-00                                  | 3.82E-00   | 1.94E-00 | 2.87E+03                         | 5.10E-00                                    | 2.94E-00   | 3.47E-00 | 5.46E+03                         | 1.36E-01                                  | 1.76E-01   | 1.57E-00 | 1.20E+04                         |
| Carbon Tetrachloride                  | -     | 6.10E+01       | 3.19E-00                                  | 2.59E-00   | 2.57E-02 | 1.52E+03                         | 7.11E-00                                    | 5.69E-02   | 5.82E-02 | 3.32E+03                         | 1.62E-01                                  | 1.22E-01   | 1.27E-01 | 7.54E+03                         |
| 1,2-Dichloroethane                    | -     | 9.70E+01       | 3.17E-02                                  | 6.20E-03   | 7.13E-03 | 3.41E+03                         | 5.73E-02                                    | 1.83E-02   | 1.06E-02 | 4.91E+03                         | 1.08E-01                                  | 2.29E-02   | 1.68E-02 | 8.43E+03                         |
| Vinyl Chloride                        | -     | 6.20E+00       | 3.82E-05                                  | 7.73E-04   | 6.48E-04 | 1.36E+03                         | 3.82E-03                                    | 1.80E-03   | 5.79E-04 | 1.76E+03                         | 1.25E-02                                  | 1.35E-03   | 1.36E-03 | 2.69E+03                         |
| 1,2,4-Trimethylbenzene                | -     | 5.10E+03       | NR                                        | 1.78E+00   | NR       | 4.74E+02                         | NR                                          | 4.28E+00   | NR       | 1.16E+03                         | NR                                        | 3.72E+00   | NR       | 2.76E+03                         |
| 1,3,5-Trimethylbenzene                | (e)   | -              | NR                                        | NR         | NR       | 2.30E+02                         | NR                                          | NR         | NR       | 5.52E+02                         | NR                                        | NR         | NR       | 1.30E+03                         |
| Semi-Volatile Organic Compounds       |       |                |                                           |            |          |                                  |                                             |            |          |                                  |                                           |            |          |                                  |
| Acenaphthene                          | -     | 4.11E+03       | 2.27E-02                                  | 4.86E-04   | 2.86E-02 | 5.70E+01                         | 5.41E-02                                    | 1.18E-05   | 5.38E-02 | 1.41E+02                         | 1.18E-03                                  | 2.86E-05   | 1.17E-03 | 3.36E+02                         |
| Acenaphthylene                        | -     | 7.95E+03       | 1.95E-02                                  | 4.59E-04   | 1.84E-02 | 8.61E+01                         | 4.48E-02                                    | 1.11E-05   | 4.40E-02 | 2.12E+02                         | 9.78E-02                                  | 2.53E-05   | 9.74E-02 | 5.06E+02                         |
| Anthracene                            | -     | -              | 2.43E-03                                  | 1.59E-05   | 2.39E-03 | 1.17E+00                         | 5.59E-03                                    | 3.77E-05   | 5.45E-03 | 2.91E+00                         | 1.10E-04                                  | 8.78E-05   | 1.09E-04 | 6.96E+00                         |
| Benzo(a)anthracene                    | -     | -              | 1.01E-01                                  | 2.47E-01   | 7.18E+00 | 1.71E+00                         | 1.42E-01                                    | 4.27E+01   | 1.07E-01 | 4.28E+00                         | 1.69E-01                                  | 5.26E-01   | 1.33E-01 | 1.03E+01                         |
| Benzo(b)fluoranthene                  | -     | -              | 2.96E+00                                  | 1.93E-01   | 2.56E+00 | 1.22E+00                         | 5.89E+00                                    | 2.13E-01   | 3.29E+00 | 3.04E+00                         | 4.43E+00                                  | 2.22E+01   | 3.89E+00 | 7.29E+00                         |
| Benzo(g,h,i)perylene                  | -     | -              | 3.77E-02                                  | 1.87E-02   | 3.14E-02 | 1.54E-02                         | 4.09E-02                                    | 1.94E-03   | 3.86E-02 | 3.85E-02                         | 4.23E-02                                  | 1.97E-03   | 3.48E-02 | 9.23E-02                         |
| Benzo(k)fluoranthene                  | -     | -              | 8.92E-01                                  | 5.41E-02   | 7.86E-01 | 6.87E-01                         | 1.10E-02                                    | 5.79E+02   | 9.22E-01 | 1.72E+00                         | 1.21E+02                                  | 5.91E-02   | 1.00E+02 | 4.12E+00                         |
| Chrysene                              | -     | -              | 1.86E-01                                  | 1.19E-02   | 1.46E-01 | 4.40E-01                         | 2.54E-01                                    | 1.49E-02   | 2.17E-01 | 1.10E+00                         | 3.12E-01                                  | 1.66E-02   | 2.67E-01 | 2.64E+00                         |
| Dibenz(a,h)anthracene                 | -     | -              | 2.90E-01                                  | 1.45E-00   | 2.41E-01 | 3.93E-03                         | 3.42E-01                                    | 1.64E+00   | 2.64E-01 | 9.82E-03                         | 3.89E-01                                  | 1.74E+00   | 3.04E-01 | 2.36E-02                         |
| Fluoranthene                          | -     | -              | 2.67E-02                                  | 3.83E-04   | 2.85E+02 | 1.89E+01                         | 5.83E-02                                    | 8.87E+04   | 5.80E-02 | 4.73E+01                         | 9.00E-02                                  | 1.83E+05   | 8.96E-02 | 1.13E+02                         |
| Fluorene                              | -     | -              | 1.77E-02                                  | 6.20E-03   | 1.72E-02 | 3.09E+01                         | 4.18E-02                                    | 1.53E-04   | 4.07E-02 | 7.65E+01                         | 6.88E-02                                  | 3.82E-04   | 8.77E-02 | 1.83E+02                         |
| Indeno(1,2,3-cd)pyrene                | -     | -              | 3.09E-01                                  | 2.12E-02   | 2.70E-01 | 6.13E-02                         | 4.22E-01                                    | 2.38E-02   | 3.59E-01 | 1.53E+01                         | 4.93E-01                                  | 2.50E-02   | 4.11E-01 | 3.68E-01                         |
| Phenanthrene                          | -     | -              | 9.85E-01                                  | 7.17E-03   | 9.72E-01 | 3.60E+01                         | 2.24E-02                                    | 1.76E-04   | 2.22E-02 | 8.96E+01                         | 4.48E+02                                  | 4.07E-04   | 4.43E+02 | 2.14E+02                         |
| Pyrene                                | -     | -              | 6.25E+02                                  | 6.79E-04   | 6.80E-02 | 2.20E+00                         | 1.25E-03                                    | 2.04E-05   | 1.24E-03 | 5.49E+00                         | 2.05E-03                                  | 4.23E-05   | 2.04E+03 | 1.32E+01                         |
| Benzo(a)pyrene                        | (a)   | -              | 4.96E-00                                  | 3.91E-01   | NR       | 9.11E-01                         | 4.96E-00                                    | 3.77E-01   | NR       | 2.28E+00                         | 4.96E-00                                  | 3.89E-01   | NR       | 5.46E+00                         |
| Naphthalene                           | -     | 1.90E+04       | 3.79E-01                                  | 2.39E-01   | 1.27E-01 | 7.64E+01                         | 5.68E-01                                    | 5.68E-01   | 3.04E-01 | 1.83E+02                         | 1.53E-02                                  | 1.31E-02   | 7.06E-02 | 4.32E+02                         |
| Phenol                                | -     | -              | 1.86E-02                                  | 4.58E-02   | 1.29E-02 | 2.42E+04                         | 2.89E-02                                    | 6.96E-02   | 2.89E-02 | 3.81E+04                         | 5.89E-02                                  | 1.19E-02   | 5.32E-02 | 7.03E+04                         |

GENERIC ASSESSMENT CRITERIA FOR HUMAN HEALTH - RESIDENTIAL WITH HOME-GROWN PRODUCE



Table 5  
Human Health Generic Assessment Criteria by Pathway for Residential With Home-Grown Produce Scenario

| Compound                                                          | Notes | GrAC<br>(µg/l) | SAC Appropriate to Pathway SOM 1% (mg/kg) |            |          | Soil Saturation<br>Limit (mg/kg) | SAC Appropriate to Pathway SOM 2.5% (mg/kg) |            |          | Soil Saturation<br>Limit (mg/kg) | SAC Appropriate to Pathway SOM 6% (mg/kg) |            |          | Soil Saturation<br>Limit (mg/kg) |
|-------------------------------------------------------------------|-------|----------------|-------------------------------------------|------------|----------|----------------------------------|---------------------------------------------|------------|----------|----------------------------------|-------------------------------------------|------------|----------|----------------------------------|
|                                                                   |       |                | Oral                                      | Inhalation | Combined |                                  | Oral                                        | Inhalation | Combined |                                  | Oral                                      | Inhalation | Combined |                                  |
| Total Petroleum Hydrocarbons                                      |       |                |                                           |            |          |                                  |                                             |            |          |                                  |                                           |            |          |                                  |
| Aliphatic hydrocarbons >EC <sub>9</sub> -EC <sub>8</sub>          |       | 2.05E+04       | 4.99E+03                                  | 4.24E+01   | 4.28E+01 | 3.04E+02                         | 1.13E+04                                    | 7.79E+01   | 7.78E+01 | 5.58E+02                         | 2.50E+04                                  | 1.81E+02   | 1.80E+02 | 1.15E+03                         |
| Aliphatic hydrocarbons >EC <sub>9</sub> -EC <sub>8</sub>          |       | 5.37E+03       | 1.49E+04                                  | 1.04E+02   | 1.03E+02 | 1.44E+02                         | 3.43E+04                                    | 2.31E+02   | 2.31E+02 | 3.22E+02                         | 7.11E+04                                  | 5.29E+02   | 5.29E+02 | 7.36E+02                         |
| Aliphatic hydrocarbons >EC <sub>9</sub> -EC <sub>10</sub>         |       | 4.27E+02       | 1.61E+03                                  | 2.68E+01   | 2.67E+01 | 7.77E+01                         | 2.91E+03                                    | 6.59E+01   | 6.51E+01 | 1.90E+02                         | 4.26E+03                                  | 1.59E+02   | 1.54E+02 | 4.51E+02                         |
| Aliphatic hydrocarbons >EC <sub>10</sub> -EC <sub>11</sub>        |       | 3.39E+01       | 4.57E+03                                  | 1.33E+02   | 1.32E+02 | 4.75E+01                         | 5.51E+03                                    | 3.31E+02   | 3.26E+02 | 1.18E+02                         | 5.98E+03                                  | 7.93E+02   | 7.65E+02 | 2.83E+02                         |
| Aliphatic hydrocarbons >EC <sub>11</sub> -EC <sub>16</sub>        |       | 7.59E+01       | 6.27E+03                                  | 1.11E+03   | 1.06E+03 | 2.37E+01                         | 6.34E+03                                    | 2.78E+03   | 2.41E+03 | 5.91E+01                         | 6.36E+03                                  | 6.67E+03   | 4.34E+03 | 1.42E+02                         |
| Aliphatic hydrocarbons >EC <sub>18</sub> -EC <sub>35</sub>        | (b)   | -              | 6.46E+04                                  | NR         | NR       | 8.48E+00                         | 9.17E+04                                    | NR         | NR       | 2.12E+01                         | 1.10E+05                                  | NR         | NR       | 5.09E+01                         |
| Aliphatic hydrocarbons >EC <sub>35</sub> -EC <sub>44</sub>        | (b)   | -              | 6.46E+04                                  | NR         | NR       | 8.48E+00                         | 9.17E+04                                    | NR         | NR       | 2.12E+01                         | 1.10E+05                                  | NR         | NR       | 5.09E+01                         |
| Aromatic hydrocarbons >EC <sub>9</sub> -EC <sub>3</sub> (styrene) |       | 2.90E+05       | 1.09E+01                                  | 5.22E+02   | 1.76E+01 | 6.26E+02                         | 2.93E+01                                    | 1.35E+03   | 2.49E+01 | 1.44E+03                         | 5.61E+01                                  | 2.79E+03   | 5.69E+01 | 3.35E+03                         |
| Aromatic hydrocarbons >EC <sub>9</sub> -EC <sub>10</sub>          |       | 2.60E+04       | 5.76E+01                                  | 4.74E+01   | 5.45E+01 | 6.13E+02                         | 1.39E+02                                    | 1.18E+02   | 8.36E+01 | 1.50E+03                         | 3.07E+02                                  | 2.77E+02   | 1.94E+02 | 3.58E+02                         |
| Aromatic hydrocarbons >EC <sub>10</sub> -EC <sub>12</sub>         |       | 2.45E+04       | 8.89E+01                                  | 2.58E+05   | 7.52E+01 | 3.64E+02                         | 1.98E+05                                    | 6.39E+02   | 1.79E+02 | 8.99E+02                         | 4.25E+02                                  | 1.58E+03   | 3.81E+02 | 2.15E+03                         |
| Aromatic hydrocarbons >EC <sub>12</sub> -EC <sub>13</sub>         |       | 5.75E+03       | 1.47E+02                                  | 2.85E+03   | 1.45E+02 | 1.69E+02                         | 3.96E+02                                    | 7.07E+03   | 3.96E+02 | 4.19E+02                         | 6.81E+02                                  | 1.66E+04   | 6.74E+02 | 1.00E+03                         |
| Aromatic hydrocarbons >EC <sub>13</sub> -EC <sub>21</sub>         | (b)   | -              | 2.69E+02                                  | NR         | NR       | 5.37E+01                         | 5.45E+02                                    | NR         | NR       | 1.34E+02                         | 6.34E+02                                  | NR         | NR       | 3.21E+02                         |
| Aromatic hydrocarbons >EC <sub>21</sub> -EC <sub>22</sub>         | (b)   | -              | 1.09E+03                                  | NR         | NR       | 4.83E+00                         | 1.47E+02                                    | NR         | NR       | 1.21E+01                         | 1.70E+03                                  | NR         | NR       | 2.90E+01                         |
| Aromatic hydrocarbons >EC <sub>22</sub> -EC <sub>44</sub>         | (b)   | -              | 1.09E+03                                  | NR         | NR       | 4.83E+00                         | 1.47E+02                                    | NR         | NR       | 1.21E+01                         | 1.70E+03                                  | NR         | NR       | 2.90E+01                         |

Notes:

EC - equivalent carbon. GrAC - groundwater assessment criteria. SAC - soil assessment criteria.  
The CLEA model output is colour coded depending upon whether the soil saturation limit has been exceeded.

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Calculated SAC exceeds soil saturation limit and may significantly effect the interpretation of any exceedances since the contribution of the indoor and outdoor vapour pathway to total exposure is >10%. This shading has also been used for the RSCA output where the theoretical solubility limit has been exceeded.  
Calculated SAC exceeds soil saturation limit but will not effect the SSV significantly since the contribution of the indoor and outdoor vapour pathway to total exposure is <10%.  
Calculated SAC does not exceed the soil saturation limit.

For consistency where the theoretical solubility limit within RSCA has been exceeded in production of the GrAC, these cells have also been hatched red.

The SAC for organic compounds are dependent upon soil organic matter (SOM) (%) content. To obtain SOM from total organic carbon (TOC) (%) divide by 0.58. 1% SOM is 0.58% TOC. DL Rowell Soil Science: Methods and Applications, Longmans, 1994.  
SAC for TPH fractions, PAHs naphthalene, acenaphthene and acenaphthylene, MTBE, BTEX and trimethylbenzene compounds were produced using an attenuation factor for the indoor air inhalation pathway of 10 to reduce conservatism associated with the vapour inhalation pathway (Section 10.1.1, SR3)  
(a) SAC for arsenic, benzerie, benzo(a)pyrene, cadmium, chromium VI and lead are derived using the C4SL toxicology data.  
(b) SAC for selenium should not include the inhalation pathway as no expert group HCV has been derived; aliphatic and aromatic hydrocarbons >EC16 should not include inhalation pathway due to their non-volatile nature and inhalation exposure being minimal (oral, dermal and inhalation exposure is compared to the oral HCV); arsenic should only be based on oral contribution (rather than combined) owing to the relative small contribution from inhalation in accordance with the SGV report. The Oral SAC should be adopted for zinc and benzo(a)pyrene.  
(c) SAC for CrIII should be based on the lower of the oral and inhalation SAC (see LQM/CIEH 2015 Section 6.8)  
(d) SAC for elemental mercury, chromium VI and nickel should be based on the inhalation pathway only.  
(e) SAC for 1,3,5-trimethylbenzene is not recorded owing to the lack of toxicological data, SAC for 1,2,4-trimethylbenzene may be used.

GENERIC ASSESSMENT CRITERIA FOR HUMAN HEALTH - RESIDENTIAL WITH HOME-GROWN PRODUCE



**Table 6**  
Human Health Generic Assessment Criteria for Residential with home-grown produce

| Compound                                                          | GrAC for Groundwater (µg/l) | SAC for Soil SOM 1% (mg/kg)                                     | SAC for Soil SOM 2.5% (mg/kg) | SAC for Soil SOM 6% (mg/kg) |
|-------------------------------------------------------------------|-----------------------------|-----------------------------------------------------------------|-------------------------------|-----------------------------|
| <b>Metals</b>                                                     |                             |                                                                 |                               |                             |
| Arsenic                                                           | -                           | 37                                                              | 37                            | 37                          |
| Cadmium                                                           | -                           | 22                                                              | 22                            | 22                          |
| Chromium (III) - trivalent                                        | -                           | 910                                                             | 910                           | 910                         |
| Chromium (VI) - hexavalent                                        | -                           | 21                                                              | 21                            | 21                          |
| Copper                                                            | -                           | 2,500                                                           | 2,500                         | 2,500                       |
| Lead                                                              | -                           | 200                                                             | 200                           | 200                         |
| Elemental Mercury (Hg <sup>0</sup> )                              | 12.90                       | 0.2                                                             | 0.6                           | 1.2                         |
| Inorganic Mercury (Hg <sup>2+</sup> )                             | -                           | 39                                                              | 39                            | 39                          |
| Methyl Mercury (Hg <sup>4+</sup> )                                | 22180                       | 10                                                              | 10                            | 10                          |
| Nickel                                                            | -                           | 130                                                             | 130                           | 130                         |
| Selenium                                                          | -                           | 258                                                             | 258                           | 258                         |
| Zinc                                                              | -                           | 3,900                                                           | 3,900                         | 3,900                       |
| Cyanide (free)                                                    | -                           | 1.4                                                             | 1.4                           | 1.4                         |
| <b>Volatile Organic Compounds</b>                                 |                             |                                                                 |                               |                             |
| Benzene                                                           | 23000                       | 0.20                                                            | 0.41                          | 0.87                        |
| Toluene                                                           | 590000                      | 130                                                             | 300                           | 680                         |
| Ethylbenzene                                                      | 124600                      | 50                                                              | 110                           | 260                         |
| Xylene - m                                                        | 115900                      | 59                                                              | 140                           | 327                         |
| Xylene - o                                                        | 141400                      | 61                                                              | 143                           | 332                         |
| Xylene - p                                                        | 121100                      | 57                                                              | 133                           | 310                         |
| Total xylene                                                      | 115900                      | 57                                                              | 133                           | 310                         |
| Methyl tertiary-Butyl ether (MTBE)                                | 9320000                     | 130                                                             | 250                           | 510                         |
| Trichloroethene                                                   | 64                          | 0.02                                                            | 0.03                          | 0.08                        |
| Tetrachloroethene                                                 | 408                         | 0.2                                                             | 0.4                           | 0.9                         |
| 1,1,1-Trichloroethane                                             | 35900                       | 9                                                               | 18                            | 39                          |
| 1,1,1,2-Tetrachloroethane                                         | 2800                        | 1.2                                                             | 2.8                           | 6.5                         |
| 1,1,2,2-Tetrachloroethane                                         | 18500                       | 1.6                                                             | 3.5                           | 7.7                         |
| Carbon Tetrachloride                                              | 61                          | 0.026                                                           | 0.056                         | 0.127                       |
| 1,2-Dichloroethane                                                | 97                          | 0.007                                                           | 0.011                         | 0.019                       |
| Vinyl Chloride                                                    | 6                           | 0.0006                                                          | 0.0009                        | 0.0014                      |
| 1,2,4-Trimethylbenzene                                            | 5095                        | 1.8                                                             | 4.3                           | 9.7                         |
| 1,3,5-Trimethylbenzene                                            | -                           | NR                                                              | NR                            | NR                          |
| <b>Semi-Volatile Organic Compounds</b>                            |                             |                                                                 |                               |                             |
| Acenaphthene                                                      | 4110                        | 230                                                             | 540                           | 1,170                       |
| Acenaphthylene                                                    | 7950                        | 180                                                             | 440                           | 970                         |
| Anthracene                                                        | -                           | 2,400                                                           | 5,500                         | 10,900                      |
| Benzo(a)anthracene                                                | -                           | 7                                                               | 11                            | 13                          |
| Benzo(b)fluoranthene                                              | -                           | 2.6                                                             | 3.3                           | 3.7                         |
| Benzo(g,h,i)perylene                                              | -                           | 310                                                             | 340                           | 350                         |
| Benzo(k)fluoranthene                                              | -                           | 77                                                              | 92                            | 100                         |
| Chrysene                                                          | -                           | 15                                                              | 22                            | 27                          |
| Dibenzo(a,h)anthracene                                            | -                           | 0.24                                                            | 0.28                          | 0.30                        |
| Fluoranthene                                                      | -                           | 290                                                             | 560                           | 900                         |
| Fluorene                                                          | -                           | 170                                                             | 410                           | 880                         |
| Indeno(1,2,3-cd)pyrene                                            | -                           | 27                                                              | 36                            | 41                          |
| Phenanthrene                                                      | -                           | 100                                                             | 220                           | 440                         |
| Pyrene                                                            | -                           | 620                                                             | 1,240                         | 2,040                       |
| Benzo(a)pyrene                                                    | -                           | 5                                                               | 5                             | 5                           |
| Naphthalene                                                       | 19000                       | 13                                                              | 30                            | 71                          |
| Phenol                                                            | -                           | 120                                                             | 210                           | 390                         |
| <b>Total Petroleum Hydrocarbons</b>                               |                             |                                                                 |                               |                             |
| Aliphatic hydrocarbons EC <sub>5</sub> -EC <sub>8</sub>           | 20000                       | 42                                                              | 78                            | 160                         |
| Aliphatic hydrocarbons >EC <sub>8</sub> -EC <sub>8</sub>          | 5370                        | 100                                                             | 230                           | 530                         |
| Aliphatic hydrocarbons >EC <sub>8</sub> -EC <sub>10</sub>         | 427                         | 27                                                              | 65                            | 154                         |
| Aliphatic hydrocarbons >EC <sub>10</sub> -EC <sub>12</sub>        | 33.9                        | 130 (48)                                                        | 330 (118)                     | 760 (283)                   |
| Aliphatic hydrocarbons >EC <sub>12</sub> -EC <sub>16</sub>        | 0.759                       | 1,100 (24)                                                      | 2,400 (59)                    | 4,300 (142)                 |
| Aliphatic hydrocarbons >EC <sub>16</sub> -EC <sub>35</sub>        | -                           | 65,000 (8)                                                      | 92,000 (21)                   | 110,000                     |
| Aliphatic hydrocarbons >EC <sub>35</sub> -EC <sub>44</sub>        | -                           | 65,000 (8)                                                      | 92,000 (21)                   | 110,000                     |
| Aromatic hydrocarbons >EC <sub>8</sub> -EC <sub>9</sub> (styrene) | 290000                      | 11                                                              | 25                            | 57                          |
| Aromatic hydrocarbons >EC <sub>9</sub> -EC <sub>10</sub>          | 20000                       | 30                                                              | 80                            | 190                         |
| Aromatic hydrocarbons >EC <sub>10</sub> -EC <sub>12</sub>         | 24500                       | 80                                                              | 180                           | 390                         |
| Aromatic hydrocarbons >EC <sub>12</sub> -EC <sub>16</sub>         | 5750                        | 140                                                             | 330                           | 670                         |
| Aromatic hydrocarbons >EC <sub>16</sub> -EC <sub>21</sub>         | -                           | 260                                                             | 540                           | 930                         |
| Aromatic hydrocarbons >EC <sub>21</sub> -EC <sub>35</sub>         | -                           | 1,100                                                           | 1,500                         | 1,700                       |
| Aromatic hydrocarbons >EC <sub>35</sub> -EC <sub>44</sub>         | -                           | 1,100                                                           | 1,500                         | 1,700                       |
| <b>Minerals</b>                                                   |                             |                                                                 |                               |                             |
| Asbestos                                                          | -                           | No asbestos detected with ID or <0.001% dry weight <sup>1</sup> |                               |                             |

**Notes:**

<sup>1</sup> Generic assessment criteria not calculated owing to low volatility of substance and therefore no pathway, or an absence of toxicological data.

NR - SAC for 1,3,5-trimethylbenzene is not recorded owing to the lack of toxicological data, SAC for 1,2,4-trimethylbenzene may be used

EC - equivalent carbon, GrAC - groundwater assessment criteria, SAC - soil assessment criteria.

<sup>1</sup> LOD for weight of asbestos per unit weight of soil calculated on a dry weight basis using PLM, handpicking and gravimetry.

The SAC for organic compounds are dependent on Soil Organic Matter (SOM) (%) content. To obtain SOM from total organic carbon (TOC) (%) divide by 0.58.

1% SOM is 0.58% TOC. DL Rowell Soil Science: Methods and Applications, Longmans, 1994.

SAC and GrAC for TPH fractions, PAHs naphthalene, acenaphthene and acenaphthylene, MTBE, BTEX and trimethylbenzene compounds were produced using an attenuation factor for the indoor air inhalation pathway of 10 to reduce conservatism associated with the vapour inhalation pathway, section 10.1.1, SR3.

(VALUE IN BRACKETS)

The SAC has been set as the model calculated SAC with the saturation limit shown in brackets.

RSK has adopted an approach for petroleum hydrocarbons in accordance with LQM/CIEH whereby the concentration modelled for each petroleum hydrocarbon fraction has been tabulated as the SAC with the corresponding solubility or vapour saturation limits given in brackets.

For consistency where the GrAC exceeds the solubility limit, GrAC has been set at the solubility limit. The GrAC is conservative since concentrations of the chemical are very unlikely to be at sufficient concentration to result in an exceedance of the health criteria value at the point of exposure (i.e. indoor air) provided free-phase product is absent.