

Doc 1

19 NOV 2020

**Growers details.**

Name Mr E Lucas

Address Pwlyddarren Farm
Welsh St Donats
Cowbridge
Vale of Glamorgan

Post code CF7 7SS

Telephone Number 01446 772300

Fax

Mobile

E-Mail

Operators Details

Name Siteserv Recycling Ltd

Address Triple Crown House
Llandow
Vale of Glamorgan

Post code CF71 7PB

Telephone Number 01446 795430

Fax

Mobile

E-Mail paul.roberts@siteservrecycling.com

Landowner R A England & Sons

Address (if different) Pwlyddarren Farm
Welsh St Donats
Cowbridge
Vale of Glamorgan

Post code CF7 7SS

Telephone Number

Mobile

Fax

E-Mail

Sampled By P Roberts

Date Sampled 11.09.19

Our Ref NW 001/20

EA Ref

Delivery Date Jan-21

Cheque No.

Cropping

Field number/name	Size(ha)	Spreadable Area	Proposed app/rate t/ha	Required DIPS	Current crop	Next crop	Incorpor method
3 ST 0223 7411	4.6	4.6	70	322	Grass Ley	W Wheat	Plough
4 ST 0238 7444	8.1	8	70	560	Maize	W Wheat	Plough
5 ST 0240 7409	4.7	4.7	70	329	Grass Ley	W Wheat	Plough
6 ST 0265 7438	7.3	7.2	70	504	Maize	W Wheat	Plough
Total	24.7	24.5		1715			



Farmer : Mr E Lucas Pwll-y-darren Farm Cowbridge #

Soil and DIPS Analysis

Soil Analysis Index

Ph	8	
Texture	CL	
P	23.6	2
K	106	1
Mg	43.3	1
OM	9.1	
Cu	27	
Zn	148.00	
Pb	67.7	
Cd	0.95	
Ni	27.7	
Cr	39.7	
Hg	0.2	

Proposed Application Rate
70

Bridgend N&W Waste Analysis

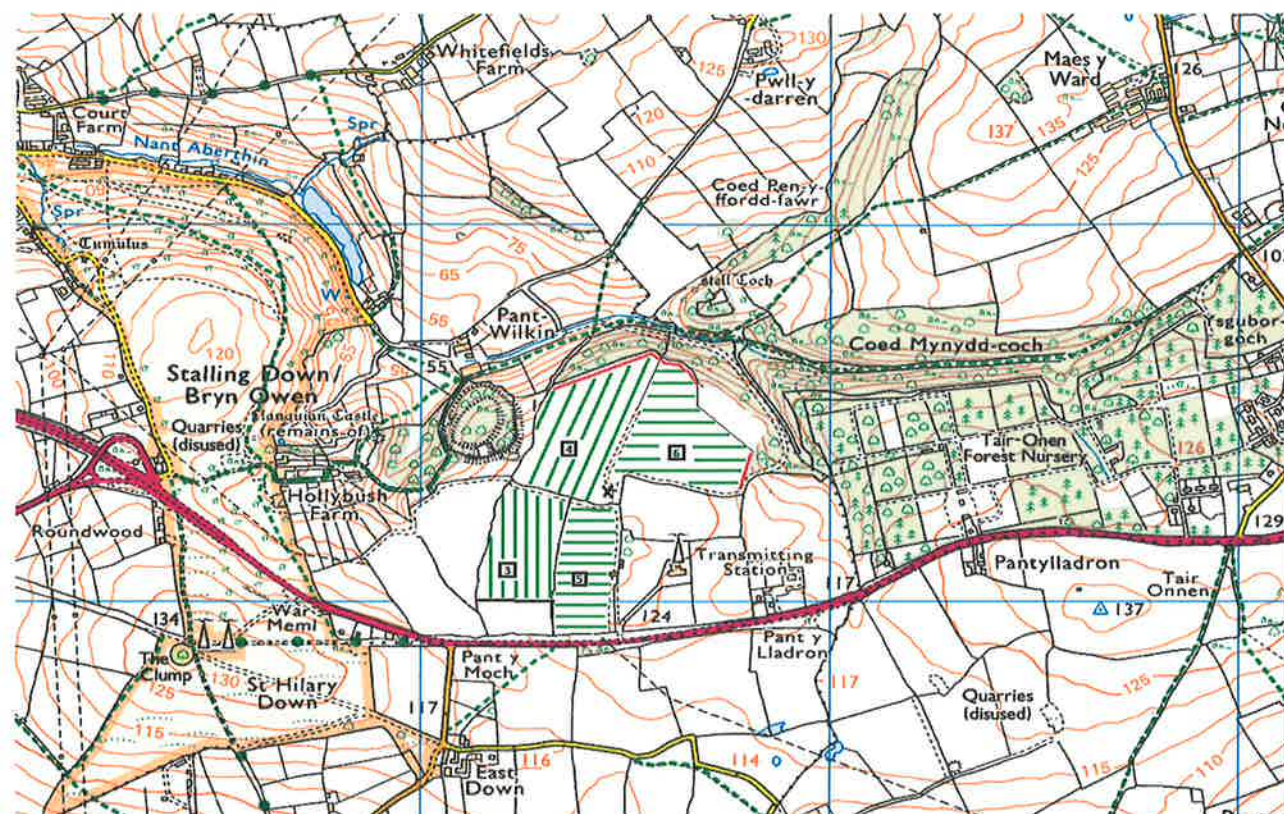
Site		
Ph	4.9	
NV	<1	%ww
EC	136	
DM	47.3	%
N	1.01	%ww
P	1142.00	mg/kg
K	103	mg/kg
Mg	344	mg/kg
S	1536	mg/kg
Na	351	mg/kg
Cu	28.4	Mg/Kg
Zn	78.4	Mg/Kg
Hg	0.13	Mg/Kg
Cr	31	Mg/Kg
Cd	0.1	Mg/Kg
Ni	6.8	Mg/Kg
Pb	3.78	Mg/Kg

Spread Area
4.6

DIPS Tonnage
322

Total Nutrients Oxides	Crop Requirement	Balance
SCA Sludge	Based on RB209 and soil indices	
	W Wheat 8 t/ha straw removed	
	SNS 1	
N	240.0 kg	220 kg/ha N -220.0
P	63.0 kg	60 kg/ha P ₂ O ₅ -60.0
K	36.0 kg	75 kg/ha K ₂ O -75.0
Mg	25.0 kg	0 kg/ha MgO 0.0
S	139.0 kg	50 kg/ha SO ₃ Depending -50

NOTE. Of the Total nitrogen supplied by this application of paper sludge, none is available to the following crop in year 1.



High Risk



Watercourses - 10 m margin - Borehole 50 m margin

Medium Risk



Woodland and Footpath 5m margin

Field Overview

Size (ha) 4.6

Field 3

Soil report No 69980-19



Farmer : Mr E Lucas Pwll-y-darren Farm Cowbridge #

Soil and DIPS Analysis

Soil Analysis			Index
Ph	7.9		
Texture	CL		
P	16.6	2	
K	114	1	
Mg	51.5	2	
OM	8.1		
Cu	28.7		
Zn	210.00		
Pb	102		
Cd	1.43		
Ni	30.2		
Cr	41.5		
Hg	0.2		

Bridgend N&W Waste Analysis		
Site	4.9	
Ph	<1	%ww
NV	136	
EC	47.3	%
N	1.01	%ww
P	1142.00	mg/kg
K	103	mg/kg
Mg	344	mg/kg
S	1536	mg/kg
Na	351	mg/kg
Cu	28.4	Mg/Kg
Zn	78.4	Mg/Kg
Hg	0.13	Mg/Kg
Cr	31	Mg/Kg
Cd	0.1	Mg/Kg
Ni	6.8	Mg/Kg
Pb	3.78	Mg/Kg

Proposed

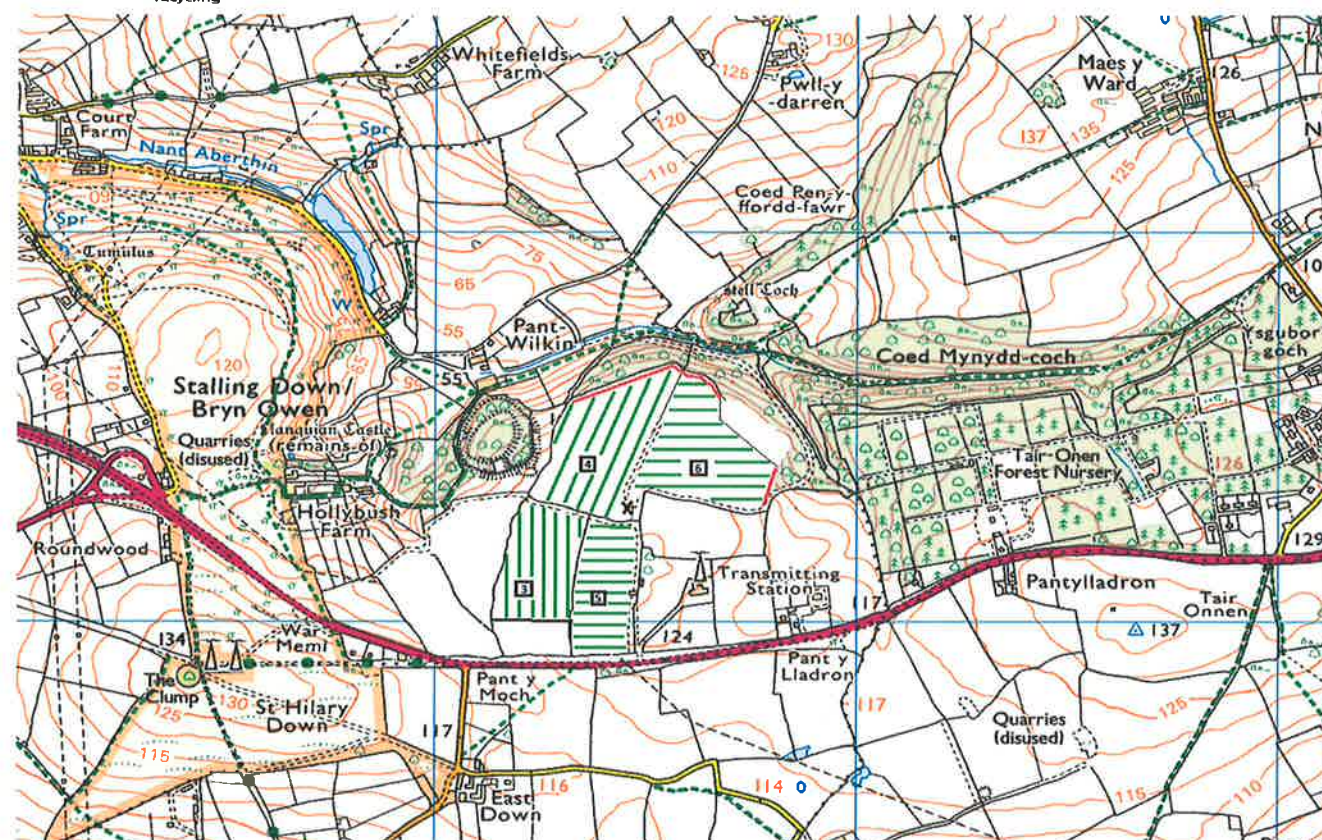
Application
Rate
70

Spread
Area
8

DIPS
Tonnage
560

Total Nutrients Oxides		Crop Requirement		Balance
SCA Sludge		Based on RB209 and soil indices		
		W Wheat		8 t/ha straw removed
		SNS 1		
N	240.0 kg	220 kg/ha N		20.0
P	63.0 kg	60 kg/ha P ₂ O ₅		3.0
K	36.0 kg	75 kg/ha K ₂ O		-39.0
Mg	25.0 kg	0 kg/ha MgO		25.0
S	139.0 kg	50 kg/ha SO ₃	Depending	89

NOTE. Of the Total nitrogen supplied by this application of paper sludge, none is available to the following crop in year 1.



High
Risk



Watercourses - 10 m margin - Borehole 50 m margin

Medium
Risk



Woodland and Footpath 5m margin

Field Overview

Size (ha) 8.1

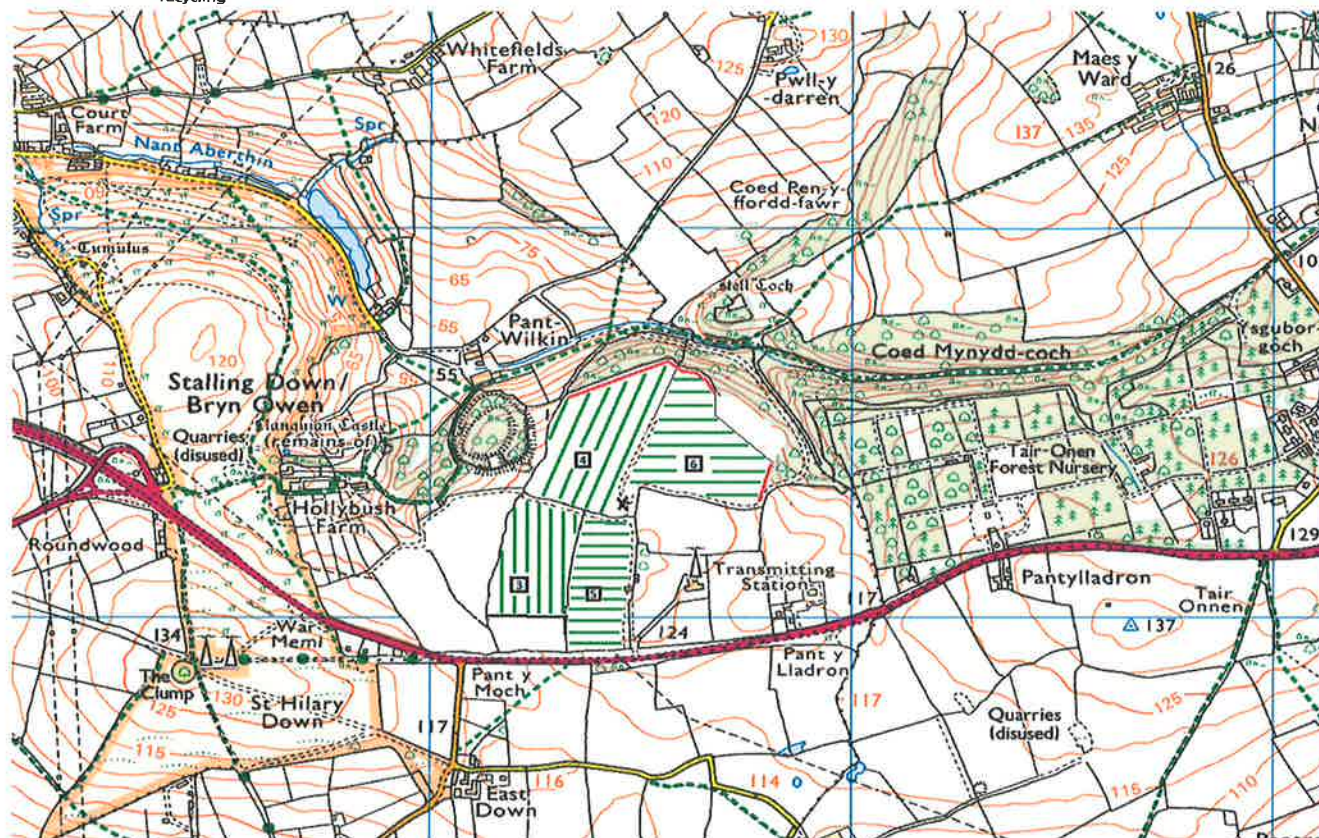
Field 4

Soil report No 69980-19



Farmer : Mr E Lucas Pwll-y-darren Farm Cowbridge #

Soil and DIPS Analysis



High Risk



Watercourses - 10 m margin - Borehole 50 m margin

Medium Risk



Woodland and Footpath 5m margin

Field Overview

Size (ha) 4.7

Field 5

Soil report No 69980-19

Soil Analysis		Index
Ph	8.1	
Texture	CL	
P	59.8	4
K	156	2-
Mg	47.7	1
OM	7	
Cu	20.8	
Zn	139.00	
Pb	63.9	
Cd	0.94	
Ni	27.1	
Cr	36.7	
Hg	0.2	

Proposed

Application Rate

70

Bridgend N&W Waste Analysis		
Site		
Ph	4.9	
NV	<1	%ww
EC	136	
DM	47.3	%
N	1.01	%ww
P	1142.00	mg/kg
K	103	mg/kg
Mg	344	mg/kg
S	1536	mg/kg
Na	351	mg/kg
Cu	28.4	Mg/Kg
Zn	78.4	Mg/Kg
Hg	0.13	Mg/Kg
Cr	31	Mg/Kg
Cd	0.1	Mg/Kg
Ni	6.8	Mg/Kg
Pb	3.78	Mg/Kg

Spread Area
4.7

DIPS Tonnage
329

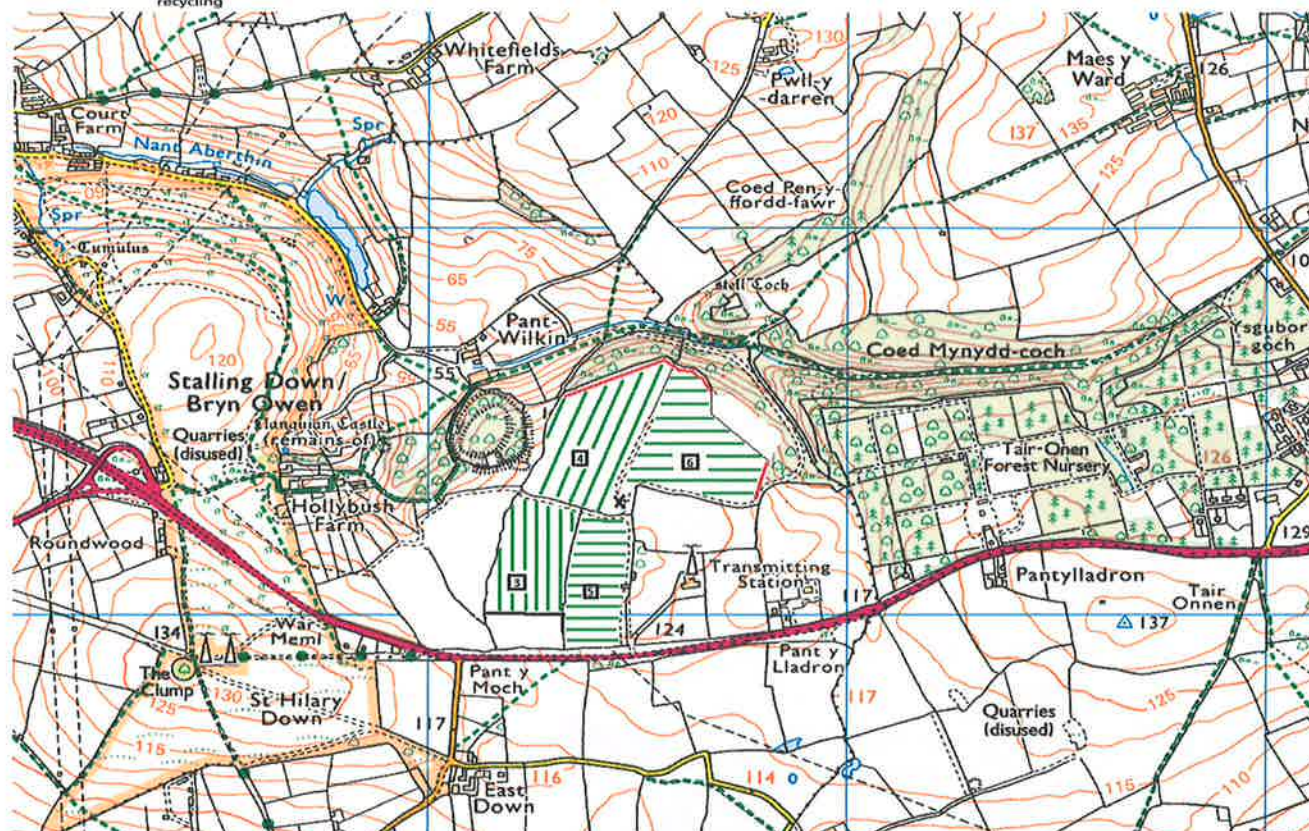
Total Nutrients	Crop Requirement		Balance
Oxides	Based on RB209 and soil indices		
SCA Sludge	W Wheat	8 t/ha straw removed	
	SNS 1		
N	240.0 kg	220 kg/ha N	-220.0
P	63.0 kg	0 kg/ha P ² O ⁵	0.0
K	36.0 kg	45 kg/ha K ² O	-45.0
Mg	25.0 kg	0 kg/ha MgO	0.0
S	139.0 kg	50 kg/ha SO ₃	Depending -50

NOTE. Of the Total nitrogen supplied by this application of paper sludge, none is available to the following crop in year 1.



Farmer : Mr E Lucas Pwll-y-darren Farm Cowbridge #

Soil and DIPS Analysis



High
Risk



Watercourses - 10 m margin - Borehole 50 m margin

Medium
Risk



Woodland and Footpath 5m margin

Field Overview

Size (ha) 7.3

Field 6

Soil report No 69980-19

Soil Analysis

		Index
Ph	8	
Texture	CL	
P	27.8	3
K	80.6	1
Mg	37.9	1
OM	7.7	
Cu	24.3	
Zn	145.00	
Pb	56.8	
Cd	0.91	
Ni	24.9	
Cr	36.2	
Hg	0.2	

Proposed

Application
Rate
70

Bridgend N&W Waste Analysis

Site		
Ph	4.9	
NV	<1	%ww
EC	136	
DM	47.3	%
N	1.01	%ww
P	1142.00	mg/kg
K	103	mg/kg
Mg	344	mg/kg
S	1536	mg/kg
Na	351	mg/kg
Cu	28.4	Mg/Kg
Zn	78.4	Mg/Kg
Hg	0.13	Mg/Kg
Cr	31	Mg/Kg
Cd	0.1	Mg/Kg
Ni	6.8	Mg/Kg
Pb	3.78	Mg/Kg

Spread
Area
7.2

DIPS
Tonnage
504

Total Nutrients	Crop Requirement	Balance
Oxides	Based on RB209 and soil indices	
Intertissue Sludge	W Wheat 8 t/ha straw removed	
	SNS 1	
N	220 kg/ha N	-220.0
P	0 kg/ha P ₂ O ₅	0.0
K	75 kg/ha K ₂ O	-75.0
Mg	0 kg/ha MgO	0.0
S	50 kg/ha SO ₃ Depending	-50

NOTE. Of the Total nitrogen supplied by this application of paper sludge, none is available to the following crop in year 1.

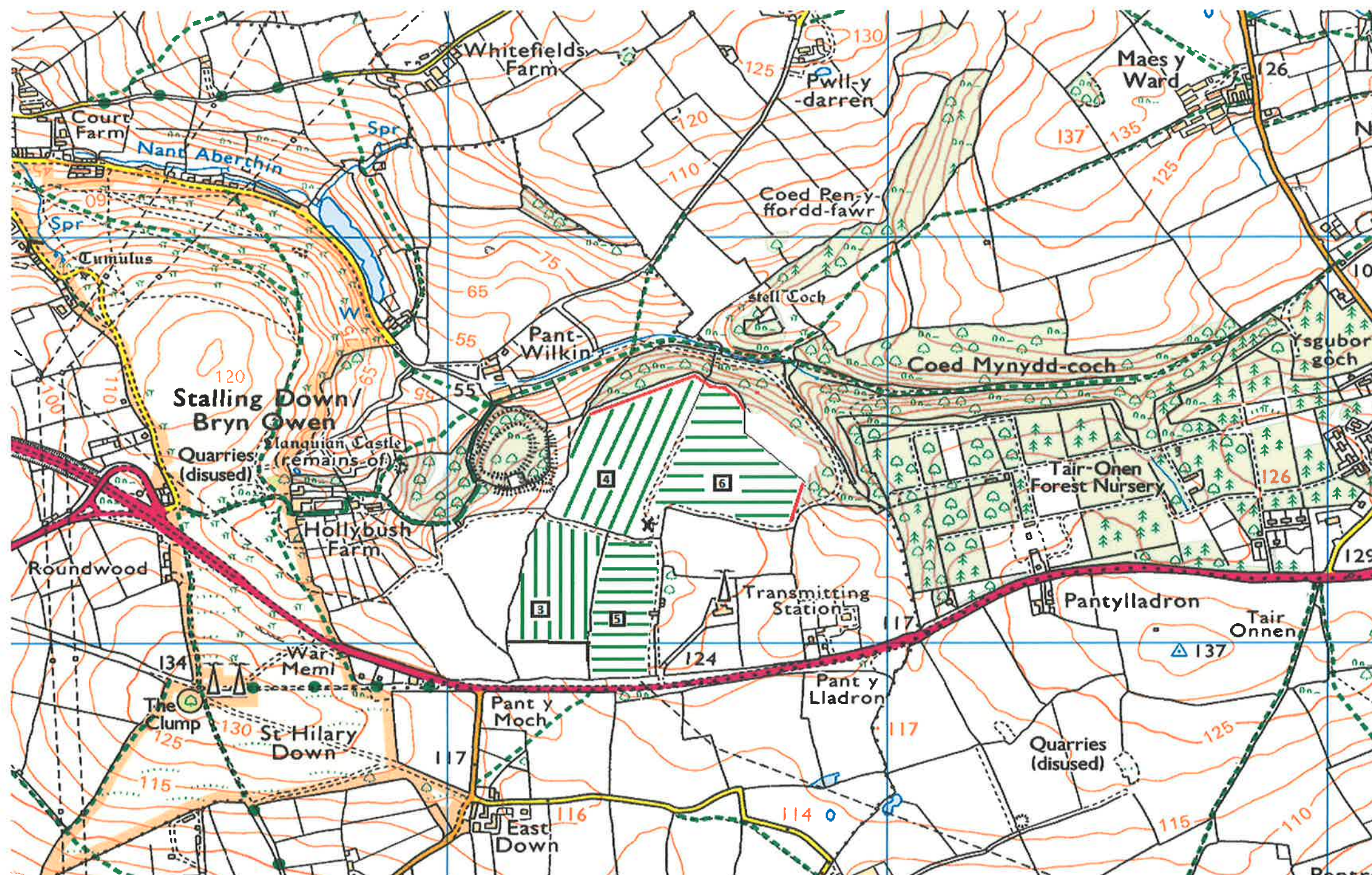
Farmer :

Mr E Lucas

Pwll-y-darren Farm

Welsh St Donats

Cowbridge



Overview of fields

Stockpile - location ST 0246 7427

Risk Assessment

Field No.	Features	Waste Properties	Harm	Pathway	Level Of Risk	Risk management	Overall Risk	Justification
N/A	Watercourses	Nutrient enrichment. High BOD.	Eutrophication in the water course can be a threat to plant and animal life through a decrease in oxygen and an increase in algal growth. Decrease in available Oxygen due to high BOD.	Spreading	Medium	10 m exclusion zone	Low	
N/A	Pond	Nutrient enrichment. High BOD.	Eutrophication in the water course can be a threat to plant and animal life through a decrease in oxygen and an increase in algal growth. Decrease in available Oxygen due to high BOD.	Spreading	Medium	10 m exclusion zone	Low	
N/A	Houses	Slight smell. blue colour	Nuisance to the public caused by slight smell and colouration.	Spreading	High	10 m margin around dwellings	Low	
N/A	Boreholes /Wells/Spring	Nutrient enrichment. High BOD.	Pollution of drinking water supplies.	Seepage through soil profile	Medium	50 m exclusion zone	Low	
None	Mineshafts							No mineshafts
N/A	Footpaths	Slight smell when wet. Blue colour.	Visible nuisance. Slight smell when wet.	Spreading	Medium	Avoid all footpaths	Low	
4.6	Woodland	Slight smell when wet. Blue colour.	Potential nutrient enrichment	Spreading	Medium	Avoid all woodland	Low	risk low if 10 m no spread margin
N/A	SSSI	Nutrient enrichment. High BOD.	Nutrient enrichment of SSSI and effect on biodiversity	Spreading	Medium	SSSI around 500m from spreading area	V Low	

Risk Assessment Stockpiles

Field No.	Features	Waste Properties	Harm	Pathway	Level Of Risk	Risk management	Overall Risk	Justification
N/A	Watercourses	Nutrient enrichment. High BOD.	Eutrophication in the water course can be a threat to plant and animal life through a decrease in oxygen and an increase in algal growth. Decrease in available Oxygen due to high BOD.	Seepage / direct contamination from stockpile	Medium	Min 10 m exclusion zone. No slope on field.	Low	
N/A	Pond	Nutrient enrichment. High BOD.	Eutrophication in the water course can be a threat to plant and animal life through a decrease in oxygen and an increase in algal growth. Decrease in available Oxygen due to high BOD.	Seepage / direct contamination from stockpile	Medium	10 m exclusion zone	Low	
N/A	Houses	Slight smell.	Nuisance to the public caused by slight smell.	Close proximity to houses with aerosol effect	High	At least 50 m margin from dwellings	Low	
N/A	Boreholes /Wells/Spring	Nutrient enrichment. High BOD.	Pollution of drinking water supplies.	Seepage through soil profile	Medium	50 m exclusion zone	Low	
4	Slope	Potential slump	Pollution potential although no immediate receptors	Direct transfer	Medium dependant on weather conditions	High DM waste with no slump risk. Stockpiles profiled to shed water.	Low	Both potential stockpile areas with little slope and no receptors in vicinity
N/A	Footpaths	Slight smell.	Visible nuisance. Slight smell.		Medium	Avoid all footpaths	Low	
N/A	Woodland	Slight smell.	Potential nutrient enrichment		Medium	Allow 10 m margin to all woodland	Low	
N/A	SSSI	Nutrient enrichment. High BOD.	Nutrient enrichment of SSSI and effect on biodiversity		Medium	SSSI around 500m from spreading area	V Low	