

Annual Return to the Environment Agency (a voluntary agreement with the water industry)

Sludge Quantity and Quality Report (previously MD109 Table 3ci)

Company	Yorkshire Water Services	Authorisation	
Calendar Year	2014	Designation	
Sewage Treatment Works (STW) number	622	Authorised signature	
Sludge Treatment Centres (STC) number	24	Date submitted to WQ process	

Outlet type	Outlet description (end use/disposal point only)	Untreated	Conventionally treated ⁽¹⁾	Enhanced treated ⁽¹⁾	Total ⁽²⁾
		<i>Tds</i>	<i>Tds</i>	<i>Tds</i>	<i>Tds</i>
Agricultural land	Agriculture	0	25,368	9,472	34,840
	(via composting) YW route is 'conditioning' - biologically similar to composting but temperatures not required. May or may not have been digested prior to conditioning.		23,214	774	23,988
Total to agricultural land		0	48,582	10,246	58,828
Non-agricultural land	Reclamation/restoration	264	1,687	0	1,951
	Forestry/coppice	0	0	0	0
	Curtilage	0	0	0	0
	(via composting) YW route is 'conditioning' - biologically similar to composting but temperatures not required. May or may not have been digested prior to conditioning.	0	17,340	0	17,340
Other (specify):		0	0	0	0
Total to non-agricultural land		264	19,027	0	19,292
Industry	Power generation/gasification	0	0	0	0
	Cement Manufacture	0	0	0	0
Other (specify):	Topsoil manufacture	0	0	16,332	16,332
Total to industry		0	0	16,332	16,332
Disposal	Incineration	25,884	0	0	25,884
	Landfill	0	0	0	0
	Dedicated sites	0	0	0	0
Other (specify):		0	0	0	0
Total to disposal		25,884	0	0	25,884
Discharged to surface waters ⁽³⁾	by Pipelines	0	0	0	0
	by Ships	0	0	0	0
	by Other	0	0	0	0
Total discharge to surface waters		0	0	0	0
Total		26,149	67,609	26,578	120,336

Average sludge quality to agricultural land	
Metal/nutrient	mg/kg dry solids
Cadmium (Cd)	1.1
Chromium (Cr)	212
Copper (Cu)	237
Lead (Pb)	124
Mercury (Hg)	0.7
Nickel (Ni)	32
Zinc (Zn)	704
% dry solids	
Nitrogen (N)	3.90
Phosphorus (P)	1.70
Phosphate ⁽⁴⁾	
Hectares (Ha)	
Agricultural land used	10,889

Table notes:

(1) As defined by the Safe Sludge Matrix (ADAS, 2001).

(2) Tonnes dry solids (Tds) for each outlet described should be reported as the amount going to that outlet (i.e. post treatment).

(3) Required for the purpose of Urban Waste Water Treatment Directive reporting to confirm nil discharges of processed sludge to sea or other surface waters.

(4) Phosphate = phosphorus x (a factor of) 2.2915.

Other notes

(6) Wastewater treatment grit and screenings should not be included in this table.

(7) Sludge sent for composting should be recorded separately (i.e. via composting) under the end use category (e.g. agriculture or land reclamation).

(8) Sludge should only be included as it reaches its end use or disposal point e.g. sludge in store (other than in field stores) should not be included.

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Sludge Quantity and Quality Report (previously MD109 Table 3ci)

Company	Yorkshire Water	Authorisation	
Calendar Year	2015	Designation	
Sewage Treatment Works (STW) number	638	Authorised signature	
Sludge Treatment Centres (STC) number	21	Date submitted to WQ process	

Outlet type	Outlet description (end use/disposal point only)	Untreated	Conventionally treated ⁽¹⁾	Enhanced treated ⁽¹⁾	Total ⁽²⁾
		<i>Tds</i>	<i>Tds</i>	<i>Tds</i>	<i>Tds</i>
Agricultural land	Agriculture	0	31,064	6,575	37,639
	(via composting) YW route is 'conditioning' - biologically similar to composting but temperatures not required. May or may not have been digested prior to conditioning.		49,354		49,354
Total to agricultural land		0	80,418	6,575	86,993
Non-agricultural land	Reclamation/restoration	12,114			12,114
	Forestry/coppice				0
	Curtilage				0
	(via composting) YW route is 'conditioning' - biologically similar to composting but temperatures not required. May or may not have been digested prior to conditioning. May have been conditioned with either woodwaste (to land rec only) or green waste (to land rec or agric).		4,419		4,419
Other (specify):					0
Total to non-agricultural land		12,114	4,419	0	16,533
Industry	Power generation/gasification				0
	Cement Manufacture				0
Other (specify):				1,259	1,259
Total to industry		0	0	1,259	1,259
Disposal	Incineration	22,516			22,516
	Landfill				0
	Dedicated sites				0
Other (specify):					0
Total to disposal		22,516	0	0	22,516
Discharged to surface waters ⁽³⁾	by Pipelines	0	0	0	0
	by Ships	0	0	0	0
	by Other	0	0	0	0
Total discharge to surface waters		0	0	0	0
Total		34,630	84,837	7,834	127,301

Average sludge quality to agricultural land	
Metal/nutrient	mg/kg dry solids
Cadmium (Cd)	1.6
Chromium (Cr)	118
Copper (Cu)	244
Lead (Pb)	134
Mercury (Hg)	0.8
Nickel (Ni)	51
Zinc (Zn)	631
% dry solids	
Nitrogen (N)	4.10
Phosphorus (P)	1.66
Phosphate ⁽⁴⁾	3.80
Hectares (Ha)	
Agricultural land used	14,772

Table notes:

(1) As defined by the Safe Sludge Matrix (ADAS, 2001).

(2) Tonnes dry solids (Tds) for each outlet described should be reported as the amount going to that outlet (i.e. post treatment).

(3) Required for the purpose of Urban Waste Water Treatment Directive reporting to confirm nil discharges of processed sludge to sea or other surface waters.

(4) Phosphate = phosphorus x (a factor of) 2.2915.

Other notes

(6) Wastewater treatment grit and screenings should not be included in this table.

(7) Sludge sent for composting should be recorded separately (i.e. via composting) under the end use category (e.g. agriculture or land reclamation).

(8) Sludge should only be included as it reaches its end use or disposal point e.g. sludge in store (other than in field stores) should not be included.

Annual Return to the Environment Agency (a voluntary agreement with the water industry)

Sludge Quantity and Quality Report (3ci)

Including Satisfactory Sludge Use/Disposal declarations

Company	Yorkshire Water Services	Average sludge quality to agricultural land			
Calendar Year	2016	Metal	mg/kg dry solids	Nutrient	% dry solids
Sewage Treatment Works (STW) number	638	Cadmium (Cd)	1.3	Nitrogen (N)	3.43
Sludge Treatment Centres (STC) number	21	Chromium (Cr)	107	Phosphorus (P)	1.52
Authorisation		Copper (Cu)	228	Phosphate (4)	3.48
Designation		Lead (Pb)	103		
Authorised signature		Mercury (Hg)	0.7		
Date submitted to WQ process		Nickel (Ni)	34		Hectares (Ha)
		Zinc (Zn)	811	Agricultural land used	19,440

Sludge Quantity (3ci) table notes:

- (1) As defined by the Safe Sludge Matrix (ADAS, 2001)
- (2) Tonnes dry solids (Tds) for each outlet described should be reported as the amount going to that outlet (i.e. post treatment, including lime additions)
- (3) Required for the purpose of Urban Waste Water Treatment Directive reporting to confirm nil discharges of processed sludge to sea or other surface waters
- (4) Phosphate = phosphorus x (a factor of) 2.2915
- (5) Wastewater or sludge treatment grit and screening amounts removed should not be included in any part of this table
- (6) Sludge sent for composting should be recorded separately (i.e. via composting) under the end use category (e.g. agriculture or land reclamation)
- (7) Sludge should only be included as it reaches its end use or disposal point e.g. sludge in store (other than in temporary field stores) should not be included

General note: Sludge quantities (3ci) include amounts in field storage

Satisfactory Sludge Use/Disposal table notes (see also definitions sheet for full explanations):

- (8) Exclude grit and screenings, water treatment sludges and any solids added during the sludge treatment process e.g. lime
- (9) Amounts should be calculated at the point of use/disposal; NB record the input amount for pyrolysis processes
- (10) Include compliance (satisfactory) or non-compliance (unsatisfactory) with SUIAR, EPR (relating to the recycling and/or disposal of sewage sludge) and SSM (at the time of application to the land)
- (11) % Satisfactory sludge use/disposal includes a threshold indicator; Green = 100%; Amber = greater than 98% but less than 100%, Red = Less than 98% satisfactory

General note: Satisfactory sludge use/disposal amounts to land refer to amounts actually applied to the land (and not just amounts in field storage)

Sludge Quantity (3ci)

Outlet type	Outlet description (end use/disposal point only)	Untreated	Conventionally treated (1)	Enhanced treated (1)	Total (2)
		<i>Tds</i>	<i>Tds</i>	<i>Tds</i>	<i>Tds</i>
Agricultural land	Agriculture	0	63,392	4,623	68,015
	(via composting)	0	34,164	0	34,164
Total to agricultural land		0	97,556	4,623	102,179
Non-agricultural land	Reclamation/restoration	24,404	0	0	24,404
	Forestry/coppice	0	0	0	0
	Curtilage	0	0	0	0
	(via composting)	0	5,672	0	5,672
Other (specify):		0	0	0	0
Total to non-agricultural land		24,404	5,672	0	30,076
Industry	Power generation/gasification	0	0	0	0
	Cement Manufacture	0	0	0	0
Other (specify):		0	0	0	0
Total to industry		0	0	0	0
Disposal	Incineration	0	0	0	0
	Landfill	0	0	0	0
	Dedicated sites	0	0	0	0
Other (specify):		54	0	0	54
Total to disposal		54	0	0	54
Discharged to surface waters (3)	by Pipelines	0	0	0	0
	by Ships	0	0	0	0
	by Other	0	0	0	0
Total discharge to surface waters		0	0	0	0
Total		24,458	103,228	4,623	132,309

Annual Return to the Environment Agency (a voluntary agreement with the water industry)
Sludge Quantity and Quality Report (3ci) including Satisfactory Sludge Use/Disposal declarations
Please complete all colour shaded boxes with zeros where appropriate

Company	2017	Average sludge quality to agricultural land			
Calendar Year	638	Metal	mg/kg dry solids	Nutrient	% dry solids
Sewage Treatment Works (STW) number	21	Cadmium (Cd)	1.3	Nitrogen (N)	5.30
Sludge Treatment Centres (STC) number		Chromium (Cr)	156	Phosphorus (P)	2.18
Authorisation		Copper (Cu)	287	Phosphate (4)	5.00
Designation		Lead (Pb)	90		
Authorised signature		Mercury (Hg)	1.0		
Date submitted to WQ process		Nickel (Ni)	37		Hectares (Ha)
		Zinc (Zn)	811	Agricultural land used	14,303

Sludge Quantity (3ci) table notes:

- (1) As defined by the Safe Sludge Matrix (ADAS, 2001)
- (2) Tonnes dry solids (Tds) for each outlet described should be reported as the amount going to that outlet (i.e. post treatment, including lime additions)
- (3) Required for the purpose of Urban Waste Water Treatment Directive reporting to confirm nil discharges of processed sludge to sea or other surface waters
- (4) Phosphate = phosphorus x (a factor of) 2.2915
- (5) Wastewater or sludge treatment grit and screening amounts removed should not be included in any part of this table
- (6) Sludge sent for composting should be recorded separately (i.e. via composting) under the end use category (e.g. agriculture or land reclamation)
- (7) Sludge should only be included as it reaches its end use or disposal point e.g. sludge in store (other than in temporary field stores) should not be included
- General note: Sludge quantities (3ci) may include amounts still in field storage - care should be taken to avoid double counting from year to year

Satisfactory Sludge Use/Disposal table notes (see also definitions sheet for full explanations):

- (8) Exclude grit and screenings, water treatment sludges and any solids added during the sludge treatment process e.g. lime
- (9) Amounts should be calculated at the point of use/disposal; NB record the input amount for pyrolysis processes
- (10) Include compliance (satisfactory) or non-compliance (unsatisfactory) with SUIAR, EPR (relating to the recycling and/or disposal of sewage sludge) and SSM (at the time of application to the land)
- General note: unless agreed with the Environment Agency, sludge used or disposed under a Local Enforcement Position should be recorded as Unsatisfactory Sludge.
- (11) % Satisfactory sludge use/disposal includes a threshold indicator; Green = 100%; Amber = greater than 98%, but less than 100%, Red = less than 98% satisfactory

General note: Satisfactory sludge use/disposal amounts to land refer to amounts actually spread/applied to land (specifically excluding amounts still in field storage)

Sludge Quantity (3ci)

Outlet type	Outlet description (end use/disposal point only)	Untreated	Conventionally treated (1)	Enhanced treated (1)	Total (2)
		Tds	Tds	Tds	Tds
Agricultural land	Agriculture	0	50,776	11,895	62,671
	(via composting)	0	10,446	0	10,446
Total to agricultural land		0	61,222	11,895	73,117
Non-agricultural land	Reclamation/restoration	28,018			28,018
	Forestry/coppice				0
	Curtilage				0
	(via composting)				0
Other (specify):					0

Total to non-agricultural land		28,018	0	0	28,018
Industry	Power generation/ gasification				0
	Cement Manufacture				0
Other (specify):					0
Total to industry		0	0	0	0
Disposal	Incineration	2,785			2,785
	Landfill				0
	Dedicated sites				0
Other (specify):					0
Total to disposal		2,785	0	0	2,785
Discharged to surface waters (3)	by Pipelines	0	0	0	0
	by Ships	0	0	0	0
	by Other	0	0	0	0
Total discharge to surface waters		0	0	0	0
Total		30,803	61,222	11,895	103,920

Annual Return to the Environment Agency (a voluntary agreement with the water industry)
 Sludge Quantity and Quality Report (3ci) including Satisfactory Sludge Use/Disposal declarations
 Please complete all colour shaded boxes with zeros where appropriate

Company	Yorkshire Water Services Ltd	Average sludge quality to agricultural land			
Calendar Year	2018	Metal	mg/kg dry solids	Nutrient	% dry solids
Sewage Treatment Works (STW) number	626	Cadmium (Cd)	1.2	Nitrogen (N)	4.10
Sludge Treatment Centres (STC) number	30	Chromium (Cr)	195	Phosphorus (P)	1.74
Authorisation		Copper (Cu)	223	Phosphate (4)	4.00
Designation		Lead (Pb)	86		
Authorised signature		Mercury (Hg)	0.7		
Date submitted to WQ process		Nickel (Ni)	35		Hectares (Ha)
		Zinc (Zn)	687	Agricultural land used	14,427

Sludge Quantity (3ci) table notes:

- (1) As defined by the Safe Sludge Matrix (ADAS, 2001)
- (2) Tonnes dry solids (Tds) for each outlet described should be reported as the amount going to that outlet (i.e. post treatment, including lime additions)
- (3) Required for the purpose of Urban Waste Water Treatment Directive reporting to confirm nil discharges of processed sludge to sea or other surface waters
- (4) Phosphate = phosphorus x (a factor of) 2.2915
- (5) Wastewater or sludge treatment grit and screening amounts removed should not be included in any part of this table
- (6) Sludge sent for composting should be recorded separately (i.e. via composting) under the end use category (e.g. agriculture or land reclamation)
- (7) Sludge should only be included as it reaches its end use or disposal point e.g. sludge in store (other than in temporary field stores) should not be included
- General note: Sludge quantities (3ci) may include amounts still in field storage - care should be taken to avoid double counting from year to year

Satisfactory Sludge Use/Disposal table notes (see also definitions sheet for full explanations):

- (8) Exclude grit and screenings, water treatment sludges and any solids added during the sludge treatment process e.g. lime
- (9) Amounts should be calculated at the point of use/disposal; NB record the input amount for pyrolysis processes
- (10) Include compliance (satisfactory) or non-compliance (unsatisfactory) with SUIAR, EPR (relating to the recycling and/or disposal of sewage sludge) and SSM (at the time of application to the land)
- General note: unless agreed with the Environment Agency, sludge used or disposed under a Local Enforcement Position should be recorded as Unsatisfactory Sludge.
- (11) % Satisfactory sludge use/disposal includes a threshold indicator; Green = 100%; Amber = greater than 98%, but less than 100%, Red = less than 98% satisfactory
- General note: Satisfactory sludge use/disposal amounts to land refer to amounts actually spread/applied to land (specifically excluding amounts still in field storage)

Sludge Quantity (3ci)

Outlet type	Outlet description (end use/disposal point only)	Untreated	Conventionally treated (1)	Enhanced treated (1)	Total (2)
		Tds	Tds	Tds	Tds
Agricultural land	Agriculture	0	36,456	29,176	65,632
	(via composting)	0	13,312	0	13,312
Total to agricultural land		0	49,768	29,176	78,945
Non-agricultural land	Reclamation/restoration	17,735			17,735
	Forestry/coppice				0
	Curtilage				0
	(via composting)	0	5,861		5,861
Other (specify):		0	0	0	0
Total to non-agricultural land		17,735	5,861	0	23,595

Industry	Power generation/ gasification	0	0	0	0
	Cement Manufacture	0	0	0	0
Other (specify):		0	0	0	0
Total to industry		0	0	0	0
Disposal	Incineration	4,397	0	0	4,397
	Landfill	0	0	0	0
	Dedicated sites	0	0	0	0
Other (specify):		0	0	0	0
Total to disposal		4,397	0	0	4,397
Discharged to surface waters (3)	by Pipelines	0	0	0	0
	by Ships	0	0	0	0
	by Other	0	0	0	0
Total discharge to surface waters		0	0	0	0
Total		22,132	55,629	29,176	106,937

Annual Return to the Environment Agency (a voluntary agreement with the water industry)

Sludge Quantity and Quality Data Report

Please complete all colour shaded boxes with zeros where appropriate

Company	Yorkshire Water Services Ltd	Average sludge quality to agricultural land			
Calendar Year	2019	Metal	mg/kg dry solids	Nutrient	% dry solids
Sewage Treatment Works (STW) number	626	Cadmium (Cd)	1.6	Nitrogen (N)	5.40
Sludge Treatment Centres (STC) number	31	Chromium (Cr)	213	Phosphorus (P)	2.29
Authorisation		Copper (Cu)	288	Phosphate (4)	5.25
Designation		Lead (Pb)	92		
Authorised signature		Mercury (Hg)	1.2		
Date submitted to WQ process		Nickel (Ni)	41		Hectares (Ha)
		Zinc (Zn)	874	Agricultural land used	17,370

Sludge Quantity

Outlet type	Outlet description (end use/disposal point only)	Untreated	Conventionally treated (1)	Enhanced treated (1)	Total (2)
		Tds	Tds	Tds	Tds
Agricultural land	Agriculture	0	58,698	14,875	73,573
	(via composting)	0			0
Total to agricultural land		0	58,698	14,875	73,573
Non-agricultural land	Reclamation/restoration	3,998			3,998
	Forestry/coppice				0
	Curtilage				0
	(via composting)				0
Other (specify):					0
Total to non-agricultural land		3,998	0	0	3,998
Industry	Power generation/gasification				0
	Cement Manufacture				0
Other (specify):					0
Total to industry		0	0	0	0
Disposal	Incineration				0
	Landfill				0
	Dedicated sites				0
Other (specify):					0
Total to disposal		0	0	0	0
Discharged to surface waters (3)	by Pipelines	0	0	0	0
	by Ships	0	0	0	0
	by Other	0	0	0	0
Total discharge to surface waters		0	0	0	0
Total		3,998	58,698	14,875	77,571

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Sludge Quantity and Quality Data Report

Please complete all colour shaded boxes with zeros where appropriate

Company	Yorkshire Water Services Ltd	Average sludge quality to agricultural land			
Calendar Year	2020	Metal	mg/kg dry solids	Nutrient	% dry solids
Sewage Treatment Works (STW) number	626	Cadmium (Cd)	1.7	Nitrogen (N)	5.09
Sludge Treatment Centres (STC) number	31	Chromium (Cr)	119	Phosphorus (P)	2.42
Authorisation		Copper (Cu)	279	Phosphate (4)	5.55
Designation		Lead (Pb)	105		
Authorised signature		Mercury (Hg)	0.8		
Date submitted to WQ process		Nickel (Ni)	45		Hectares (Ha)
		Zinc (Zn)	863	Agricultural land used	18,214

Sludge Quantity

Outlet type	Outlet description (end use/disposal point only)	Untreated	Conventionally treated (1)	Enhanced treated (1)	Total (2)
		Tds	Tds	Tds	Tds
Agricultural land	Agriculture	0	65,808	7,986	73,794
	(via composting)	0	0	0	0
	Total to agricultural land	0	65,808	7,986	73,794
Non-agricultural land	Reclamation/restoration	2,733	449	0	3,182
	Forestry/coppice	0	0	0	0
	Curtilage	0	0	0	0
	(via composting)	0	0	0	0
	Other (specify):	0	0	0	0
	Total to non-agricultural land	2,733	449	0	3,182
Industry	Power generation/gasification	0	0	0	0
	Cement Manufacture	0	0	0	0
	Other (specify):	0	0	0	0
	Total to industry	0	0	0	0
Disposal	Incineration	0	0	0	0
	Landfill	0	0	0	0
	Dedicated sites	0	0	0	0
	Other (specify):	0	0	0	0
	Total to disposal	0	0	0	0
Discharged to surface waters (3)	by Pipelines	0	0	0	0
	by Ships	0	0	0	0
	by Other	0	0	0	0
	Total discharge to surface waters	0	0	0	0
Total		2,733	66,257	7,986	76,976

Sludge Quantity table notes:

(1) As defined by the Safe Sludge Matrix (ADAS, 2001)

(2) Tonnes dry solids (Tds) for each outlet described should be reported as the amount going to that outlet (i.e. post treatment, including lime additions)

(3) Required for the purpose of Urban Waste Water Treatment Directive reporting to confirm nil discharges of processed sludge to sea or other surface waters

(4) Phosphate = phosphorus x (a factor of) 2.2915

(5) Wastewater or sludge treatment grit and screening amounts removed should not be included in any part of this table

(6) Sludge sent for composting should be recorded separately (i.e. via composting) under the end use category (e.g. agriculture or land reclamation)

(7) Sludge should only be included as it reaches its end use or disposal point e.g. sludge in store (other than in temporary field stores) should not be included

General note: Sludge quantities may include amounts still in field storage - care should be taken to avoid double counting from year to year

Annual Return to the Environment Agency (a voluntary agreement with the water industry)

Sludge Quantity and Quality Data Report

Please complete all colour shaded boxes with zeros where appropriate

Company	Yorkshire Water Services Ltd	Average sludge quality to agricultural land			
Calendar Year	2021	Metal	mg/kg dry solids	Nutrient	% dry solids
Sewage Treatment Works (STW) number	607	Cadmium (Cd)	1.6	Nitrogen (N)	5.18
Sludge Treatment Centres (STC) number		Chromium (Cr)	74	Phosphorus (P)	2.42
Authorisation		Copper (Cu)	264	Phosphate (4)	5.55
Designation		Lead (Pb)	98		
Authorised signature		Mercury (Hg)	0.7		
Date submitted to WQ process		Nickel (Ni)	48		Hectares (Ha)
		Zinc (Zn)	827	Agricultural land used	15,240

Sludge Quantity

Outlet type	Outlet description (end use/disposal point only)	Untreated	Conventionally treated (1)	Enhanced treated (1)	Total (2)
		Tds	Tds	Tds	Tds
Agricultural land	Agriculture	0	74,549	0	74,549
	(via composting)	0	0	0	0
Total to agricultural land		0	74,549	0	74,549
Non-agricultural land	Reclamation/restoration	2,410	524	0	2,934
	Forestry/coppice	0	0	0	0
	Curtilage	0	0	0	0
	(via composting)	0	23,775	0	23,775
Other (specify):		0	0	0	0
Total to non-agricultural land		2,410	24,299	0	26,709
Industry	Power generation/ gasification	0	0	0	0
	Cement Manufacture	0	0	0	0
Other (specify):	Other WASC	163	0	0	163
Total to industry		163	0	0	163
Disposal	Incineration	0	0	0	0
	Landfill	0	0	0	0
	Dedicated sites	0	0	0	0
Other (specify):		0	0	0	0
Total to disposal		0	0	0	0
Discharged to surface waters (3)	by Pipelines	0	0	0	0
	by Ships	0	0	0	0
	by Other	0	0	0	0
Total discharge to surface waters		0	0	0	0
Total		2,573	98,848	0	101,421

Sludge Quantity table notes:

(1) As defined by the Safe Sludge Matrix (ADAS, 2001)

(2) Tonnes dry solids (Tds) for each outlet described should be reported as the amount going to that outlet (i.e. post treatment, including lime additions)

(3) Required for the purpose of Urban Waste Water Treatment Directive reporting to confirm nil discharges of processed sludge to sea or other surface waters

(4) Phosphate = phosphorus x (a factor of) 2.2915

(5) Wastewater or sludge treatment grit and screening amounts removed should not be included in any part of this table

(6) Sludge sent for composting should be recorded separately (i.e. via composting) under the end use category (e.g. agriculture or land reclamation)

(7) Sludge should only be included as it reaches its end use or disposal point e.g. sludge in store (other than in temporary field stores) should not be included

General note: Sludge quantities may include amounts still in field storage - care should be taken to avoid double counting from year to year

Annual Return to the Environment Agency (a voluntary agreement with the water industry)

Sludge Quantity and Quality Data Report

Please complete all colour shaded boxes with zeros where appropriate

Company	Yorkshire Water Services Ltd	Average sludge quality to agricultural land			
Calendar Year	2022	Metal	mg/kg dry solids	Nutrient	% dry solids
Sewage Treatment Works (STW) number	606	Cadmium (Cd)	1.5	Nitrogen (N)	5.10
Sludge Treatment Centres (STC) number	32	Chromium (Cr)	107	Phosphorus (P)	2.46
Authorisation		Copper (Cu)	259	Phosphate (4)	5.64
Designation		Lead (Pb)	100		
Authorised signature		Mercury (Hg)	0.7		
Date submitted to WQ process		Nickel (Ni)	47		Hectares (Ha)
		Zinc (Zn)	818	Agricultural land used	15,092

Sludge Quantity

Outlet type	Outlet description (end use/disposal point only)	Untreated	Conventionally treated (1)	Enhanced treated (1)	Total (2)
		Tds	Tds	Tds	Tds
Agricultural land	Agriculture	0	76,597	113	76,709
	(via composting)	0	0	0	0
Total to agricultural land		0	76,597	113	76,709
Non-agricultural land	Reclamation/restoration	312	616	0	929
	Forestry/coppice	0	0	0	0
	Curtilage	0	0	0	0
	(via composting)	0	2,440	0	2,440
Other (specify):		0	0	0	0
Total to non-agricultural land		312	3,056	0	3,368
Industry	Power generation/gasification	0	0	0	0
	Cement Manufacture	0	0	0	0
Other (WaSC):		0	0	0	0
Other (specify):		0	0	0	0
Total to industry		0	0	0	0
Disposal	Incineration	0	0	0	0
	Landfill	58	0	0	58
	Dedicated sites	0	0	0	0
Other (specify):	(via composting)	702	0	0	702
Total to disposal		760	0	0	760
Discharged to surface waters (3)	by Pipelines	0	0	0	0
	by Ships	0	0	0	0
	by Other	0	0	0	0
Total discharge to surface waters		0	0	0	0
Total		1,073	79,652	113	80,838

Sludge Quantity table notes:

(1) As defined by the Safe Sludge Matrix (ADAS, 2001)

(2) Tonnes dry solids (Tds) for each outlet described should be reported as the amount going to that outlet (i.e. post treatment, including lime additions)

(3) Required for the purpose of Urban Waste Water Treatment Directive reporting to confirm nil discharges of processed sludge to sea or other surface waters

(4) Phosphate = phosphorus x (a factor of) 2.2915

(5) Grit & screenings & water treatment sludge will be excluded

(6) Sludge sent for composting should be recorded separately (i.e. via composting) under the end use category (e.g. agriculture or land reclamation)

(7) Sludge should only be included as it reaches its end use or disposal point e.g. sludge in store (other than in temporary field stores) should not be included

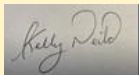
General note: Sludge quantities may include amounts still in field storage - care should be taken to avoid double counting from year to year

Annual return sludge quantity and quality data report

A voluntary agreement between the Environment Agency with the water industry.

Sludge quantity and quality data report

Please complete all colour shaded boxes with zeros where appropriate

Company	Yorkshire Water	Average sludge quality to agricultural land			
Calendar Year	2023	Metal	mg/kg dry solids	Nutrient	% dry solids
Sewage Treatment Works (STW) number	605	Cadmium (Cd)	1.6	Nitrogen (N)	5.53
Sludge Treatment Centres (STC) number	32	Chromium (Cr)	88	Phosphorus (P)	2.44
Authorisation	Kelly Neild	Copper (Cu)	266	Phosphate (4)	5.60
Designation	Recycling Manager	Lead (Pb)	112		
Authorised signature		Mercury (Hg)	0.7		
Date submitted to WQ process		Nickel (Ni)	44		Hectares (Ha)
		Zinc (Zn)	831	Agricultural land used	13,451

Sludge Quantity

Outlet type	Outlet description (end use/disposal point only)	Untreated	Conventionally treated (1)	Enhanced treated (1)	Total (2)
		Tds	Tds	Tds	Tds
Agricultural land	Agriculture	0.00	73,512.34	0.00	73,512.34
	(via composting)	0.00	0.00	0.00	0.00
Total to agricultural land		0.00	73,512.34	0.00	73,512.34
Non-agricultural land	Reclamation/restoration	704.28	101.09	0.00	805.37
	Forestry/coppice	0.00	0.00	0.00	0.00
	Curtilage	0.00	0.00	0.00	0.00
	(via composting)	0.00	0.00	0.00	0.00
Other (specify):		0.00	0.00	0.00	0.00
Total to non-agricultural land		704.28	101.09	0.00	805.37
Industry	Power generation/gasification	0.00	0.00	0.00	0.00
	Cement Manufacture	0.00	0.00	0.00	0.00
Other (WaSC):		79.06	0.00	0.00	79.06
Other (specify):		0.00	0.00	0.00	0.00
Total to industry		79.06	0.00	0.00	79.06
Disposal	Incineration	0.00	0.00	0.00	0.00
	Landfill	325.11	0.00	0.00	325.11
	Dedicated sites	0.00	0.00	0.00	0.00
Other (specify):		0.00	0.00	0.00	0.00
Total to disposal		325.11	0.00	0.00	325.11
Discharged to surface waters (3)	by Pipelines	0.00	0.00	0.00	0.00
	by Ships	0.00	0.00	0.00	0.00
	by Other	0.00	0.00	0.00	0.00
Total discharge to surface waters		0.00	0.00	0.00	0.00
Total		1,108.44	73,613.42	0.00	74,721.87

Sludge Quantity table notes:

(1) As defined by the Safe Sludge Matrix (ADAS, 2001)

(2) Tonnes dry solids (tds) for each outlet described should be reported as the amount going to that outlet (such as, post treatment, including lime additions)

(3) Required for the purpose of Urban Waste Water Treatment Directive reporting to confirm nil discharges of processed sludge to sea or other surface waters

(4) Phosphate = phosphorus x (a factor of) 2.2915

(5) Grit and screenings and water treatment sludge will be excluded

(6) Sludge sent for composting should be recorded separately (such as composting) under the end use category (for example, agriculture or land reclamation)

(7) Sludge should only be included as it reaches its end use or disposal point for example, sludge in store (other than in temporary field stores) should not be included

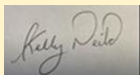
General note: Sludge quantities may include amounts still in field storage - care should be taken to avoid double counting from year to year

Annual return sludge quantity and quality data report

A voluntary agreement between the Environment Agency with the water industry.

Sludge quantity and quality data report

Please complete all colour shaded boxes with zeros where appropriate

Company	Yorkshire Water	Average sludge quality to agricultural land			
Calendar Year	2024	Metal	mg/kg dry solids	Nutrient	% dry solids
Sewage Treatment Works (STW) number	605	Cadmium (Cd)	1.6	Nitrogen (N)	5.62
Sludge Treatment Centres (STC) number	32	Chromium (Cr)	118	Phosphorus (P)	2.47
Authorisation	Kelly Neild	Copper (Cu)	259	Phosphate (4)	5.66
Designation	Recycling Manager	Lead (Pb)	126		
Authorised signature		Mercury (Hg)	0.8		
Date submitted to WQ process	20-Feb-25	Nickel (Ni)	38		Hectares (Ha)
		Zinc (Zn)	842	Agricultural land used	16,017

Sludge Quantity

Outlet type	Outlet description (end use/disposal point only)	Untreated	Conventionally treated (1)	Enhanced treated (1)	Total (2)
		Tds	Tds	Tds	Tds
Agricultural land	Agriculture	0.00	79,319.86	0.00	79,319.86
	(via composting)	0.00	0.00	0.00	0.00
Total to agricultural land		0.00	79,319.86	0.00	79,319.86
Non-agricultural land	Reclamation/restoration	227.39	1,153.55	0.00	1,380.94
	Forestry/coppice	0.00	0.00	0.00	0.00
	Curtilage	0.00	0.00	0.00	0.00
	(via composting)	147.84	0.00	0.00	147.84
Other (specify):		0.00	0.00	0.00	0.00
Total to non-agricultural land		375.23	1,153.55	0.00	1,528.78
Industry	Power generation/gasification	0.00	0.00	0.00	0.00
	Cement Manufacture	0.00	0.00	0.00	0.00
Other (WaSC):		119.33	0.00	0.00	119.33
Other (specify):		0.00	0.00	0.00	0.00
Total to industry		119.33	0.00	0.00	119.33
Disposal	Incineration	0.00	0.00	0.00	0.00
	Landfill	0.00	386.34	0.00	386.34
	Dedicated sites	0.00	0.00	0.00	0.00
Other (specify):		0.00	0.00	0.00	0.00
Total to disposal		0.00	386.34	0.00	386.34
Discharged to surface waters (3)	by Pipelines	0.00	0.00	0.00	0.00
	by Ships	0.00	0.00	0.00	0.00
	by Other	0.00	0.00	0.00	0.00
Total discharge to surface waters		0.00	0.00	0.00	0.00
Total		494.56	80,859.75	0.00	81,354.32

Sludge Quantity table notes:

(1) As defined by the Safe Sludge Matrix (ADAS, 2001)

(2) Tonnes dry solids (tds) for each outlet described should be reported as the amount going to that outlet (such as, post treatment, including lime additions)

(3) Required for the purpose of Urban Waste Water Treatment Directive reporting to confirm nil discharges of processed sludge to sea or other surface waters

(4) Phosphate = phosphorus x (a factor of) 2.2915

(5) Grit and screenings and water treatment sludge will be excluded

(6) Sludge sent for composting should be recorded separately (such as composting) under the end use category (for example, agriculture or land reclamation)

(7) Sludge should only be included as it reaches its end use or disposal point for example, sludge in store (other than in temporary field stores) should not be included

General note: Sludge quantities may include amounts still in field storage - care should be taken to avoid double counting from year to year

Annual return sludge quantity and quality data report

A voluntary agreement between the Environment Agency with the water industry.

Sludge quantity and quality data report

Please complete all colour shaded boxes with zeros where appropriate

Company	Yorkshire Water	Average sludge quality to agricultural land			
Calendar Year	2025	Metal	mg/kg dry solids	Nutrient	% dry solids
Sewage Treatment Works (STW) number	603	Cadmium (Cd)	1.3	Nitrogen (N)	5.13
Sludge Treatment Centres (STC) number	32	Chromium (Cr)	101	Phosphorus (P)	3.15
Authorisation	Laura Ward	Copper (Cu)	227	Phosphate (4)	7.22
Designation	Recycling Manager	Lead (Pb)	96		
Authorised signature		Mercury (Hg)	0.8		
Date submitted to WQ process	12/02/2026	Nickel (Ni)	33		Hectares (Ha)
		Zinc (Zn)	762	Agricultural land used	16,480

Sludge Quantity

Outlet type	Outlet description (end use/disposal point only)	Untreated	Conventionally treated (1)	Enhanced treated (1)	Total (2)
		Tds	Tds	Tds	Tds
Agricultural land	Agriculture	0.00	78,277.19	0.00	78,277.19
	(via composting)	0.00	0.00	0.00	0.00
Total to agricultural land		0.00	78,277.19	0.00	78,277.19
Non-agricultural land	Reclamation/restoration	5,038.84	2,022.13	0.00	7,060.97
	Forestry/coppice	0.00	0.00	0.00	0.00
	Curtilage	0.00	0.00	0.00	0.00
	(via composting)	0.00	0.00	0.00	0.00
	Other (specify):	0.00	0.00	0.00	0.00
Total to non-agricultural land		5,038.84	2,022.13	0.00	7,060.97
Industry	Power generation/gasification	0.00	0.00	0.00	0.00
	Cement Manufacture	0.00	0.00	0.00	0.00
	Other (WaSC):	87.30	0.00	0.00	87.30
	Other (specify): 3rd party BAS compliant Lin	1,992.22	0.00	0.00	1,992.22
	Total to industry	2,079.52	0.00	0.00	2,079.52
Disposal	Incineration	0.00	0.00	0.00	0.00
	Landfill	0.00	0.00	0.00	0.00
	Dedicated sites	0.00	0.00	0.00	0.00
	Other (specify):	0.00	0.00	0.00	0.00
	Total to disposal	0.00	0.00	0.00	0.00
Discharged to surface waters (3)	by Pipelines	0.00	0.00	0.00	0.00
	by Ships	0.00	0.00	0.00	0.00
	by Other	0.00	0.00	0.00	0.00
Total discharge to surface waters		0.00	0.00	0.00	0.00
Total		7,118.36	80,299.32	0.00	87,417.68

Sludge Quantity table notes:

(1) As defined by the Safe Sludge Matrix (ADAS, 2001)

(2) Tonnes dry solids (tds) for each outlet described should be reported as the amount going to that outlet (such as, post treatment, including lime additions)

(3) Required for the purpose of Urban Waste Water Treatment Directive reporting to confirm nil discharges of processed sludge to sea or other surface waters

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