

## Describe the Candidate Options

### Identify all reasonably applicable options of techniques

You should include:

- a brief description of individual control measures or configurations of control measures selected for each option, and the activities with which they are associated (the existing base-case may conveniently be the first option).
- justification why any techniques generally applicable to the regulated facility have not been selected for assessment. (see relevant H1 annex) (This should be based on regulated facility-specific technical, not economic reasons).
- for new projects, whether any initial environmental assessment that was done at the project evaluation stage, or any screening of technology or process routes prior to this assessment, particularly where this has a bearing on environmental performance. (see H1)

**In the case of b) or c) please enter your Comments here:**

Liquid Waste centre is utilising biological treatment capacity of the WwTW. A liquid waste centre has previously operated on the site - The new site will utilise the existing asset of the storage tank and connection to the trunk sewer to re-instate liquid waste acceptance.

Option Number	Title	Description
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1	Base-Case	
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Once a series of options have been generated for the proposed project, it is recommended that the Operator discuss these with the local Regulator to check both parties agree that the options are satisfactory. This may save the Operator from spending resources on assessment of options which are unlikely to meet the required environmental performance.

List the main activity or activities to which the release control options are applicable and any other activities that will be affected by the candidate control option on the main activity:



Air Release Points

Please define your Release Points for Releases to Air

Are there any Air emissions?

No

Number	Description	Location or Grid Reference	Activity or Activities	Effective Height metres	Efflux Velocity m/s	Total Flow m3/hr
e.g.1		North stack		150	25	5,000

Release Points:

Add

Delete

Copy

Comments:

No point source emissions to air - possible fugitive odour emissions - monitored and controlled through an odour procedure part of the sites IMS



## Receiving Water Body(s)

Please define the Final Discharge Locations for Releases to Water

Are there any discharges to surface waters?

Yes

Use the 'Add' button below to list all final discharge points.

For discharges to sewer, this should be the point where the sewage works discharges to a surface water

**N.B. For Riverine discharges (River, Upper Estuary) you only need enter the River description and flow once. Further details of individual releases can be entered on the next page. For discharges to TRaC waters, separate Discharge Locations must be added for each release point that has a different mixing zone**

Number	Description	Final Discharge Category	Freshwater Q95 flow rate
1	Julians Pill/Usk Estuary	T	Not Applicable



## Water Discharge/Release Details and Flow Data

Please define your Release Points for Releases to Water

Number	Description	Location or Grid Reference	Activity or Activities	Final Discharge Point	Discharge via Sewer?	Mean Effluent Flow Rate*	Max Effluent Flow Rate*
1	S1	Newport Liquid Waste Centre	Discharge of liquid waste to sewer	1 Julians Pill/Lusk Estuary	Yes	m <sup>3</sup> /s 0.0100	m <sup>3</sup> /s 0.0200

## Comments

Maximum daily discharge as per the trade effluent agreement is 20 l/s = 0.02 m<sup>3</sup>/s  
Mean rate is estimated at 50% of the maximum 10 l/s = 0.01 m<sup>3</sup>/s

\* When operating





## Release Concentrations of Substances Present in Discharges to Water

Please list all Substances released to Water for each Release Point identified in the previous page.

Which type of assessment method are you using?  Continue with the method below.  
(See help box & H1 Annex D for information)

Method:  Chemical Specific

Reference:

Number	Substance	Meas'ment Method	Operating Mode (% of)	Average Concentration in the Effluent (AA)		Maximum Concentration in the Effluent (Max)		Annual Rate kg/yr	Sewage Treatment Factor	Significant Load (PHS Only) kg/year
				Conc. µg/l	Meas'ment Basis	Conc. µg/l	Meas'ment Basis			
1	Ammonia ( $\leq$ 50mg/l CaCO <sub>3</sub> (90 %ile))	Spot	100.0%	500000	Annual Avg	200000		157680	0.08	
2	Chloride	Spot	100.0%	1000000	Annual Avg	5000000		315360	1	
3	Chromium III (95%ile) (dissolved)		100.0%	333	Annual Avg	2000		105.01488	0.52	
4	Cobalt		100.0%	333	Annual Avg	2000		105.01488	1	
5	Copper		100.0%	333	Annual Avg	2000		105.01488	0.21	
6	Lead and it's compounds		100.0%	333	Annual Avg	2000		105.01488	0.17	
7	Nickel and its compounds		100.0%	333	Annual Avg	2000		105.01488	0.17	
8	Tin (inorganic)		100.0%	333	Annual Avg	2000		105.01488	1	
9	Zinc		100.0%	333	Annual Avg	2000		105.01488	0.33	

Comments



Raw Materials

Please list all Raw Materials Consumed:

Number

Material

Annual Consumption

Units

e.g.

1

Non-potable Water

50,000

0 tonnes/year

2

Potable water

0 tonnes/year

Raw Materials:

Add

Delete

Copy

Comments:

Only water usage will be domestic for the site office. Washdown water for small spillages will be final effluent from the WwTW



## Waste Inventory

Please list all Waste Streams emitted:

Are there any Waste emissions?

Yes

Number	Waste Stream	Mass tonne/yr	Category of Waste	Disposal/Recovery Option
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1 Settled solids/sludge

50

biodegradable non-hazardous was

Biological and Physico-chemical treatme

Comments

Minimal waste will be generated at site - low volumes of settled solids/sludge expected to build up in the liquid waste storage tank which will be removed when required (estimated twice per year) this will be removed from site and disposed of to a permitted site for treatment and disposal.



## Identify Relevant Impacts

Identify any environmental impacts that are not relevant to this assessment by deselecting from the list below:

Releases in Part 2?		Justification for omission
No	<input type="checkbox"/> Air	No point source air emissions - minimal odour generated - odour plan in place
No	<input type="checkbox"/> Deposition from Air to Land	No point source air emissions to land
Yes	<input checked="" type="checkbox"/> Water	
Yes	<input checked="" type="checkbox"/> Waste	
No	<input type="checkbox"/> Visual	No new structures or significant changes to the infrastructure of the site
No	<input type="checkbox"/> Ozone Creation	N/A
No	<input type="checkbox"/> Global Warming	N/A

If you have deselected an environmental impact as not relevant to this assessment, no further assessment of this impact will be carried out





## Local Environmental Quality

### Describe the Quality of the Environment:

Provide a brief description of the main local factors that may influence the importance of the impact of emissions in the surrounding environment

#### Air Quality

Are there any Environmental Quality Standards relating to substances released from the activities, which may be at risk due to additional contribution from the activity ?  
(Environmental Quality Standards for air and water are described in EPR Technical Guidance Notes)

No point source air emissions from the site, possible odour emissions but likely to be insignificant. Odour plan is in place and a complaints procedure.

Are there any Local Air Quality Management Plans applicable to releases from the activity?

No

#### Water Quality & Resources

Are there any Environmental Quality Standards relating to substances released from the activities, which may be at risk due to additional contribution from the activity?

EQS for the Usk Estuary will not be at risk from the activity - site has a trade effluent agreement in place with limits - WwTW discharges under a water quality permit - both the liquid waste site and the WwTW are regulated and monitored.

Are proposals to abstract water satisfactory in order to obtain an abstraction licence?

N/A

Is the activity located in a groundwater vulnerable zone (for activities with direct releases to land only)?

No

#### Proximity to Sensitive Receptors

Is public annoyance likely to be an issue for noise, odour or plume visibility ?

Assessed as insignificant - odour plan in place and complaints procedure in place. Any issues will be investigated and addressed.

Are there any wildlife habitats, eg Special Areas of Conservation, or Special Protection Areas, likely to be affected by releases from the activity? (Description of requirements of Habitats Directive is provided in EPR Technical Guidance Notes)

The WwTW discharges to the Usk estuary - SSSI/SAC/SPA - the WwTW is a permitted site and regulated by NRW. DCWW have set trade effluent limits to regulate and monitor the discharge from the liquid waste site.



## Water Impacts - TRaC Water Releases

### Apply Test 1 (See Guidance) and Calculate Process Contributions of Emissions to Water

This table applies Test 1 and also estimates the Process Contribution for releases in to saline waters, this is calculated after dilution into the relevant surface water type for each emission to water listed in the inventory, according to the release point parameters input earlier. If you have more accurate data obtained through dilution modelling, this may be entered as indicated and will be used instead of the estimated PC. Any releases which 'Pass' Test 1 are screened out at this point.

Substance	Annual Avg EQS			MAC EQS		
	Release µg/l	EQS	Release conc < 100% EQS Test 1	Release µg/l	EQS	Release conc < 100% EQS Test 1
[S1] Ammonia (≤ 50mg/l CaCO <sub>3</sub> (90 %ile)) (Julians Pill/Usk Estuary)	500000		N/A	2000000		N/A
[S1] Chloride (Julians Pill/Usk Estuary)	1000000		N/A	5000000		N/A
[S1] Chromium III (95%ile) (dissolved) (Julians Pill/Usk Estuary)	333		N/A	2000		N/A
[S1] Cobalt (Julians Pill/Usk Estuary)	333	3	Fail	2000	100	Fail
[S1] Copper (Julians Pill/Usk Estuary)	333	3.6	Fail	2000		N/A
[S1] Lead and it's compounds (Julians Pill/Usk Estuary)	333	1.3	Fail	2000	14	Fail
[S1] Nickel and its compounds (Julians Pill/Usk Estuary)	333	8.6	Fail	2000	34	Fail
[S1] Tin (inorganic) (Julians Pill/Usk Estuary)	333	10	Fail	2000		N/A
[S1] Zinc (Julians Pill/Usk Estuary)	333	6.8	Fail	2000		N/A

Note that the Process Contribution shown for each substance is the sum of the individual process contributions of each point from which the substance is emitted. Process Contributions obtained from modelling data should incorporate all relevant release points and flow conditions.

\* If you have valid dispersion modelling data available - please enter it here

Comments



## Water Impact Screening - TRaC Releases

### TRaC Tests 3 - 5

This page applies Tests 3 to 5 of the methodology for assessing TRaC Waters

Description	Is the discharge to a location with restricted dilution /dispersion characteristics		Is the discharge to a location less than 50m offshore or to a location where the sea bed is less than 1m below		Is the discharge negatively buoyant	
	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes

S1

Comments



## Water Impact Modelling Assessment

See guidelines in H1 Annex D and respond to the following

Describe here the justification for whether detailed modelling is, or is not required for any of the releases. Refer to the guidelines in H1 Annex D.

Describe source of background information:

Describe location of detailed modelling work:

Detailed modelling has not been carried out as the discharge is into the WWTW which has a WQ permit and regulated by NRW. DCWW have issued a trade effluent agreement with maximum limits for determinants such as metals,





### Waste Impact Score Calculation

Number	Waste Stream	Mass	Final treatment or disposal method	(Score)	Waste Type	(Score)	Impact Score
1	Settled solids/sludge	50	Biological and Physico-chemical treatment	12	biodegradable non-hazard	4	2400

Comments



## Summary of Environmental Assessment

You have now completed all of the steps in this software for the environmental assessment. This will provide you with:

- an inventory of all emissions sources and substances emitted from your activities
- an information trail of how the impacts of these emissions have been assessed
- a summary of the impacts

You now need to use this information to confirm whether the emissions are acceptable, i.e. that they do not cause significant pollution to occur, by responding below:

Do any of the emissions exceed any of the following

Statutory Emission limit values:	No	If yes, identify the substances concerned and improvements that are needed to at least meet the statutory requirement
Environmental Quality Standards (air and water):	No	If yes, identify the substances concerned, the contribution from the activities and investigate whether further detailed fate and effect modelling and/or pollution controls are needed. Ensure that the relevant EQS reference conditions are applied.
Environmental Assessment Levels:	No	If yes, identify the substances concerned, the contribution from the activities and investigate whether further detailed fate and effect modelling and/or pollution controls are needed.

Use the box below to provide further information on any of the above to which you have responded 'Yes':

Finally, print all of the information and submit with your application. Remember to include any supplementary information and reports that you have had made reference to during the assessment procedure.

