EO Regulations Assessment Template: Licence Examination Report 2010

Examiners Name:	Michelle Purcell
Date of examination:	26/11/10
Waste/IPPC Licence Register No.:	W0017-04
Licensee:	Limerick County Council
Location (Site) Address:	Gortadroma, Ballyhahill, Co. Limerick
Class(es) of Activity EPA/WA licensed: [Note 1]	3rd schedule classes: 1, 5, 6, 7, 11 & 13 4th Schedule classes: 2, 3, 4, 9, 10, 11, 12 & 13
Date of Issue of licence:	21/12/09

[Note 1] This should identify the class of activity as referenced in the original First Schedule to EPA Act and Third and Fourth Schedules to WMA 1996.

Follow Schedule A Decision Trees to Surface Water and to Groundwater

I have carried out an examination of this licence and I recommend the following action.

	Yes	**No**
Licence **complies with** EO **GW** Regs requirements and a **declaration** can be issued to that effect.		✓
Licence **complies with** EO **SW** Regs requirements and a **declaration** can be issued to that effect.	✓ MJ 16/03/11	✓

Note 1:See attached Schedule A for standard conditions wording. Where the existing wording can be taken to meet the objectives of the wording in Schedule A it can be taken as compliant.

Licence **does not comply** with the requirements of the EO **GW** Regs, Licence can be brought into compliance with a **technical amendment** and insertion of conditions identified in Part 2 above.	✓	
Licence **does not comply** with the requirements of the EO **SW** Regs, Licence can be brought into compliance with a **technical amendment** and insertion of conditions identified in Part 2 above.		✓
Licence **does not comply** with the requirements of the EO **GW** Regs and having regard to the degree of non-compliance a **full-scale review** is considered appropriate.		✓
Licence **does not comply** with the requirements of the EO **SW** Regs and having regard to the degree of non-compliance a **full-scale review** is considered appropriate.	✓ Hoge 16/3/11	✓

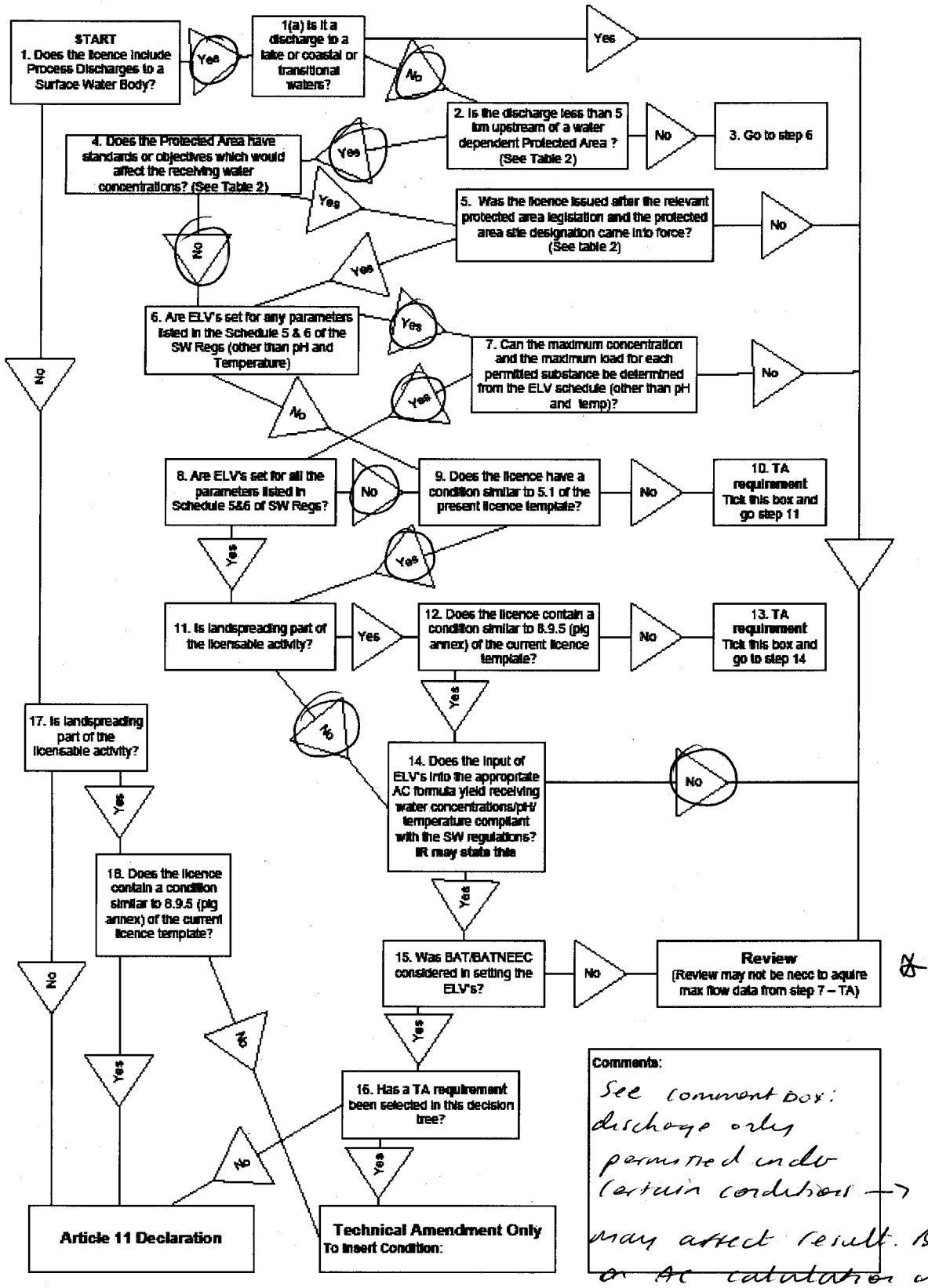
VS 16/3/11

Comments:

Licence requires contaminated SW to be diverted to a Stormwater settling pond / holding ponds. Trigger level for Ammonia ~~or~~ for water entering the Stormwater settling pond. No SW shall be discharged when any trigger level is exceeded. Discharge is to the White River. Licence also states that treated leachate is permitted to be discharged to the White River but only when the discharge meets ELVs, the flow in the river is > 50 litres per second and there are > 40 dilutions in the recieving water. The White River runs through the Stacks to Mullaghareirk Mountains West SPA (code: 004161).

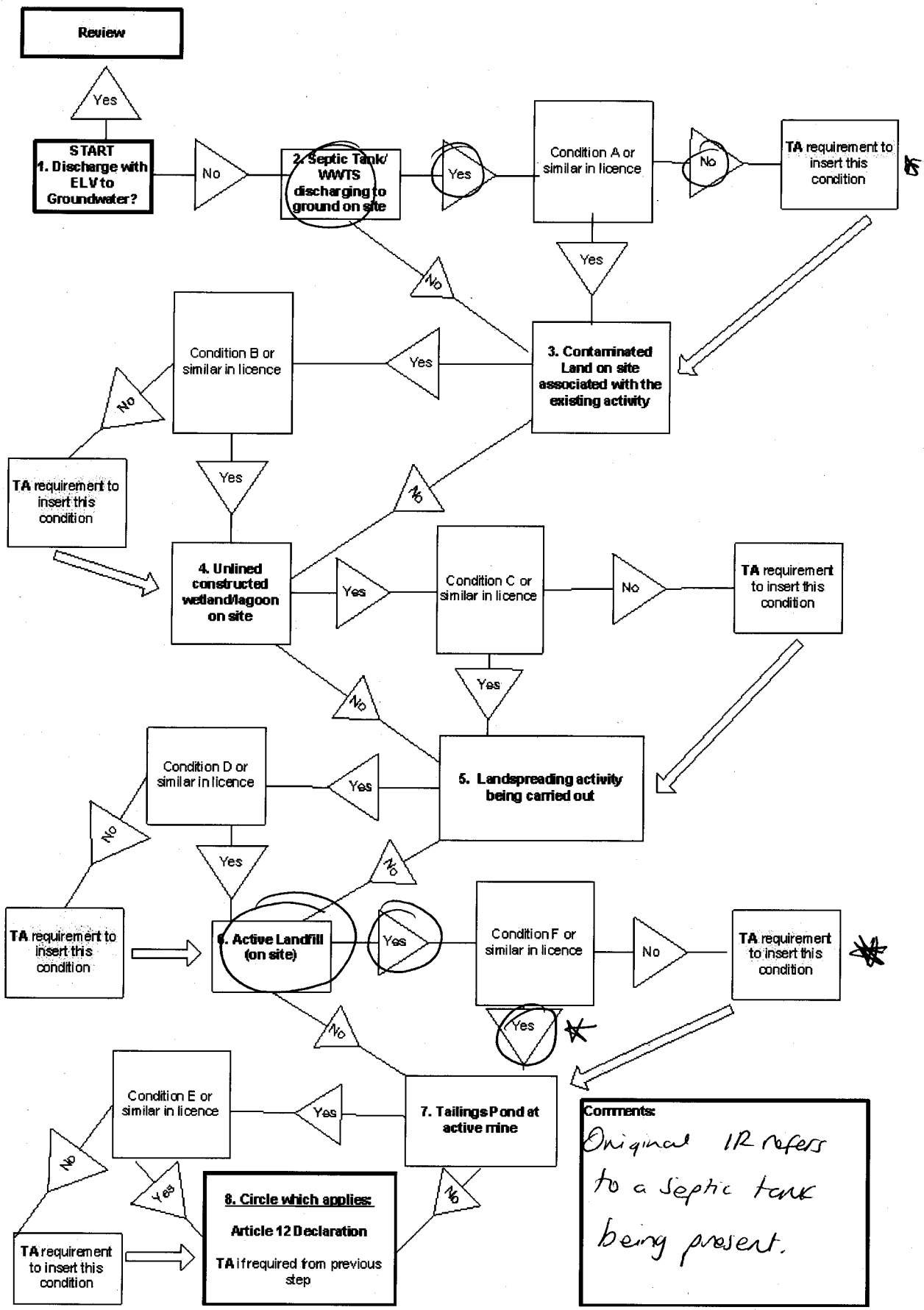
AC - no data for only uls monitoring station. Also no uls hydrometric station. See results attached.

Schèdule A Decision Tree – Discharge to Surface Water



SW Decision Tree Version 8 23/11/10 GC

Decision Tree – Discharge to Groundwater



Ra – Trigger level condition is present but the hydrogeological condition is not → TA.

List of Conditions

A	**On-site Wastewater Treatment Systems**	The licensee shall provide and maintain a Wastewater Treatment plant at the facility/installation for the treatment of sanitary effluent arising on-site. Any waste water treatment system and any percolation area shall satisfy the criteria set out in the *Wastewater Treatment Manual, Treatment Systems for Single Houses*, published by the Environmental Protection Agency. Note this condition may alternatively refer to Wastewater Treatment Manuals – Treatment Systems for Small Communities, Business, Leisure Centres and Hotels.
B	**Contaminated Land associated with existing activity**	In licence, condition may read similar to : The licensee shall, within twelve months of date of grant of this licence, arrange for the carrying out, by an appropriately qualified consultant/professional, of a comprehensive hydrogeological investigation of the site. The scope, detail and programme, including report structure and reporting schedule, for this investigation must be agreed by the Agency prior to implementation. Any recommendations arising from a report or reports on this investigation must be implemented within such a period to be agreed by the Agency.
C	**Unlined Constructed Wetlands**	Ambient monitoring will require groundwater monitoring in the vicinity of the unlined constructed wetland/lagoons. Including parameters Phosphorus and Nitrogen.
D	**Landspreading** **(Similar to Condition 8.9.5 (pig annex) of current licence template)**	In licence the condition may read similar to the following: Landspreading shall, as a minimum, be carried out in accordance with S.I. No. 101 of 2009 European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2009. All landspreading activities shall be carried out in such a manner as to avoid contamination of surface waters and groundwaters, and so as to minimise odour nuisance. Note this condition may alternatively refer to earlier GAP Regulations
E	**Landfill**	In licence Schedule C.6 Ambient monitoring will require groundwater monitoring and include relevant hazardous parameters. Licence conditions may read similar to the following: Within three months of the date of grant of this licence, the licensee shall submit to the Agency for its agreement, groundwater monitoring trigger levels in accordance with the requirements of Directive 1999/31/EC, **Directive 2000/60/EC, Directive 2006/118/EC and the European Communities Environmental Objectives (Groundwater) Regulations 2010**
F	**Tailings Pond at Active Mine**	In licence Schedule C.6 Ambient monitoring will require groundwater monitoring and include relevant hazardous parameters or the licence may require specific groundwater monitoring of the tailings management facility.

		Licence conditions may read similar to the following: Groundwater adjacent to the TMF shall be monitored as set out in *Schedule 3(iii) Monitoring of Tailings Management Facility* of this licence.
N/A	**Condition 5.1 of current licence template**	No specified emission from the installation/facility shall exceed the emission limit values set out in *Schedule B: Emission Limits,* of this licence. There shall be no other emissions of environmental significance.

Signed Michelle Purcell Date 10/01/11

Assimilative Capacity

Reg. No.	W0017-04
Licensee Name:	Limerick County Council

Instruction: Fill in yellow boxes only

C downstream=(F river 95* C back) + (F effluent * C effluent)/ (F river 95 + F effluent)

C downstream -Downstream concentration in receiving water (mg/l)

F river 95 - upstream receiving fiver flow, 95 percentile flow (m3/s)

C back - background/upstream concentration in receiving water (mg/l)

F effluent - effluent flow discharging to receiving waters, use average (m3/s)

C effluent - permissible effluent concentration

EQS (mg/l)	**High status**	**Good Status**
BOD mg O_2/l	2.2	2.6
Total Ammonia mg N/l	0.09	0.14
MRP (Orthophosphate) mg P/l	0.045	0.075

If no background conc available:	**Adjusted background conc, mg/l**	
	For High Status	**For Good Status**
BOD mg O_2/l	2	2.4
Total Ammonia mg N/l	0.065	0.115
MRP (Orthophosphate) mg P/l	0.03	0.06

If background conc exceeds EQS	**Adjusted background conc, mg/l**	
	For High Status	**For Good Status**
BOD mg O_2/l	N/A	2.4
Total Ammonia mg N/l	N/A	0.115
MRP (Orthophosphate) mg P/l	N/A	0.06

If background conc does not exceed EQS, then use as it is

Status of Receiving Water	No Status data available - Q4 on GIS	e.g. high or good
EQS Parameter	BOD	e.g. BOD/Ammonia/MRP
EQS applicable	2.6000	e.g. 2.6
C Background	2.4000	
F River 95, m^3/s	0.0060	
C Background (adjusted if required), mg/l	2.4000	95%ile
F discharge (max/day),	120.0000	
F discharge (average), m^3/s	0.0014	
C discharge, mg/l	25.0000	

Contribution from discharge	4.6992
C downstream (by adding background and contribution from ELV)	7.0992
Adjustion correction (eg. (60sec *60min*24hours)/1000)	86.4000
AC (kg/day)	0.1037
Discharged in kg/day	3.0000
% AC consumed	**2893.52**
Available Headroom	0.2000
% Headroom consumed	**2349.62**
>25% Headroom consumed?	Yes

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C downstream -Downstream concentration in receiving water (mg/l)

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C back - background/upstream concentration in receiving water (mg/l)

F effluent - effluent flow discharging to receiving waters, use average (m3/s)

C effluent - permissible effluent concentration

EQS (mg/l)	**High status**	**Good Status**
BOD mg O_2/l	2.2	2.6
Total Ammonia mg N/l	0.09	0.14
MRP (Orthophosphate) mg P/l	0.045	0.075

If no background conc available:	**Adjusted background conc, mg/l**	
	For High Status	**For Good Status**
BOD mg O_2/l	2	2.4
Total Ammonia mg N/l	0.065	0.115
MRP (Orthophosphate) mg P/l	0.03	0.06

If background conc exceeds EQS	**Adjusted background conc, mg/l**	
	For High Status	**For Good Status**
BOD mg O_2/l	N/A	2.4
Total Ammonia mg N/l	N/A	0.115
MRP (Orthophosphate) mg P/l	N/A	0.06

If background conc does not exceed EQS, then use as it is

Status of Receiving Water	No Status data available - Q4 on GIS	e.g. high or good
EQS Parameter	Ammonia	e.g. BOD/Ammonia/MRP
EQS applicable	0.1400	e.g. 2.6
C Background	0.1150	
F River 95, m^3/s	0.0060	
C Background (adjusted if required), mg/l	0.1150	95%ile
F discharge (max/day),	120.0000	
F discharge (average), m^3/s	0.0014	
C discharge, mg/l	3.0000	
Contribution from discharge	0.5639	
C downstream (by adding background and contribution from ELV)	**0.6789**	
Adjustion correction (eg. (60sec *60min*24hours)/1000)	86.4000	
AC (kg/day)	0.0130	
Discharged in kg/day	0.3600	
% AC consumed	2777.78	
Available Headroom	0.0250	
% Headroom consumed	**2255.64**	
>25% Headroom consumed?	Yes	

Assimilative Capacity

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C downstream=(F river 95* C back) + (F effluent * C effluent)/ (F river 95 + F effluent)

C downstream -Downstream concentration in receiving water (mg/l)

F river 95 - upstream receiving fiver flow, 95 percentile flow (m3/s)

C back - background/upstream concentration in receiving water (mg/l)

F effluent - effluent flow discharging to receiving waters, use average (m3/s)

C effluent - permissible effluent concentration

EQS (mg/l)	High status	Good Status
BOD mg O_2/l	2.2	2.6
Total Ammonia mg N/l	0.09	0.14
MRP (Orthophosphate) mg P/l	0.045	0.075

If no background conc available:	Adjusted background conc, mg/l For High Status	For Good Status
BOD mg O_2/l	2	2.4
Total Ammonia mg N/l	0.065	0.115
MRP (Orthophosphate) mg P/l	0.03	0.06

If background conc exceeds EQS	Adjusted background conc, mg/l For High Status	For Good Status
BOD mg O_2/l	N/A	2.4
Total Ammonia mg N/l	N/A	0.115
MRP (Orthophosphate) mg P/l	N/A	0.06

If background conc does not exceed EQS, then use as it is

Status of Receiving Water	GOOD	e.g. high or good
EQS Parameter	BOD	e.g. BOD/Ammonia/MRP
EQS applicable	2.6000	e.g. 2.6
C Background	2.4000	
F River 95, m^3/s	0.0556	=40 x
C Background (adjusted if required), mg/l	2.4000	95%ile
F discharge (max/day),	120.0000	
F discharge (average), m^3/s	0.0014	
C discharge, mg/l	25.0000	

using 40 hours discharge flow.

Contribution from discharge	0.6098
C downstream (by adding background and contribution from ELV)	3.0098
Adjustion correction (eg. (60sec *60min*24hours)/1000)	86.4000
AC (kg/day)	0.9600
Discharged in kg/day	3.0000
% AC consumed	312.50
Available Headroom	0.2000
% Headroom consumed	304.88
>25% Headroom consumed?	Yes

exceeds EQS

Thea 7/3/11

Assimilative Capacity

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C downstream=(F river 95* C back) + (F effluent * C effluent)/ (F river 95 + F effluent)

C downstream -Downstream concentration in receiving water (mg/l)

F river 95 - upstream receiving fiver flow, 95 percentile flow (m3/s)

C back - background/upstream concentration in receiving water (mg/l)

F effluent - effluent flow discharging to receiving waters, use average (m3/s)

C effluent - permissible effluent concentration

EQS (mg/l)	High status	Good Status
BOD mg O_2/l	2.2	2.6
Total Ammonia mg N/l	0.09	0.14
MRP (Orthophosphate) mg P/l	0.045	0.075

If no background conc available:	Adjusted background conc, mg/l For High Status	For Good Status
BOD mg O_2/l	2	2.4
Total Ammonia mg N/l	0.065	0.115
MRP (Orthophosphate) mg P/l	0.03	0.06

If background conc exceeds EQS	Adjusted background conc, mg/l For High Status	For Good Status
BOD mg O_2/l	N/A	2.4
Total Ammonia mg N/l	N/A	0.115
MRP (Orthophosphate) mg P/l	N/A	0.06

If background conc does not exceed EQS, then use as it is

Status of Receiving Water	GOOD	e.g. high or good
EQS Parameter	Ammonia	e.g. BOD/Ammonia/MRP
EQS applicable	0.1400	e.g. 2.6
C Background	0.1150	
F River 95, m^3/s	0.0556	
C Background (adjusted if required), mg/l	0.1150	95%ile
F discharge (max/day),	120.0000	
F discharge (average), m^3/s	0.0014	
C discharge, mg/l	3.0000	

Contribution from discharge	0.0732
C downstream (by adding background and contribution from ELV)	0.1882
Adjustion correction (eg. (60sec *60min*24hours)/1000)	86.4000
AC (kg/day)	0.1200
Discharged in kg/day	0.3600
% AC consumed	300.00
Available Headroom	0.0250
% Headroom consumed	292.68
>25% Headroom consumed?	Yes

exceeds EQS

HMG 7/3/11

Assimilative Capacity

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C downstream=(F river 95* C back) + (F effluent * C effluent)/ (F river 95 + F effluent)

C downstream -Downstream concentration in receiving water (mg/l)

F river 95 - upstream receiving fiver flow, 95 percentile flow (m3/s)

C back - background/upstream concentration in receiving water (mg/l)

F effluent - effluent flow discharging to receiving waters, use average (m3/s)

C effluent - permissible effluent concentration

EQS (mg/l)	95%ile	
	High status	Good Status
BOD mg O_2/l	2.2	2.6
Total Ammonia mg N/l	0.09	0.14
MRP (Orthophosphate) mg P/l	0.045	0.075

EQS (mg/l)	Mean	
	High status	Good Status
BOD mg O_2/l	1.3	1.5
Total Ammonia mg N/l	0.04	0.065
MRP (Orthophosphate) mg P/l	0.025	0.035

If no background conc available:	Adjusted background conc (mean) mg/l	
	For High Status	For Good Status
BOD mg O_2/l	1.2	1.4
Total Ammonia mg N/l	0.03	0.053
MRP (Orthophosphate) mg P/l	0.02	0.03

If background conc exceeds EQS	Adjusted background conc (mean) mg/l	
	For High Status	For Good Status
BOD mg O_2/l	N/A	1.4
Total Ammonia mg N/l	N/A	0.053
MRP (Orthophosphate) mg P/l	N/A	0.03

If background conc does not exceed EQS, then use as it is	

Status of Receiving Water	GOOD	e.g. high or good
EQS Parameter	BOD	e.g. BOD/Ammonia/OrthoP
EQS applicable	2.6000	use 95%ile
C Background	no data	

F River 95, m^3/s	0.0600
C Background (adjusted if required), mg/l	1.4000
F discharge (max/day),	120.0000
F discharge (average), m^3/s	0.0014
C discharge, mg/l	25.0000

Contribution from discharge	0.5656
C downstream (by adding background and contribution from ELV)	1.9656
Adjustion correction (eg. (60sec *60min*24hours)/1000)	86.4000
AC (kg/day)	6.2208
Discharged in kg/day	3.0000
% AC consumed	48.23
Available Headroom	1.2000
% Headroom consumed	47.13
>25% Headroom consumed?	Yes

Assimilative Capacity

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Instruction: Fill in yellow boxes only

C downstream=(F river 95* C back) + (F effluent * C effluent)/ (F river 95 + F effluent)

C downstream -Downstream concentration in receiving water (mg/l)

F river 95 - upstream receiving fiver flow, 95 percentile flow (m3/s)

C back - background/upstream concentration in receiving water (mg/l)

F effluent - effluent flow discharging to receiving waters, use average (m3/s)

C effluent - permissible effluent concentration

EQS (mg/l)	**95%ile**	
	High status	**Good Status**
BOD mg O_2/l	2.2	2.6
Total Ammonia mg N/l	0.09	0.14
MRP (Orthophosphate) mg P/l	0.045	0.075

EQS (mg/l)	**Mean**	
	High status	**Good Status**
BOD mg O_2/l	1.3	1.5
Total Ammonia mg N/l	0.04	0.065
MRP (Orthophosphate) mg P/l	0.025	0.035

If no background conc available:	**Adjusted background conc (mean) mg/l**	
	For High Status	**For Good Status**
BOD mg O_2/l	1.2	1.4
Total Ammonia mg N/l	0.03	0.053
MRP (Orthophosphate) mg P/l	0.02	0.03

If background conc exceeds EQS	**Adjusted background conc (mean) mg/l**	
	For High Status	**For Good Status**
BOD mg O_2/l	N/A	1.4
Total Ammonia mg N/l	N/A	0.053
MRP (Orthophosphate) mg P/l	N/A	0.03

If background conc does not exceed EQS, then use as it is

Status of Receiving Water	GOOD	e.g. high or good
EQS Parameter	Ammonia	e.g. BOD/Ammonia/OrthoP
EQS applicable	0.1400	use 95%ile
C Background	no data	

F River 95, m^3/s	0.0600
C Background (adjusted if required), mg/l	0.0530
F discharge (max/day),	120.0000
F discharge (average), m^3/s	0.0014
C discharge, mg/l	3.0000

Contribution from discharge	0.0679
C downstream (by adding background and contribution from ELV)	0.1209
Adjustion correction (eg. (60sec *60min*24hours)/1000)	86.4000
AC (kg/day)	0.4510
Discharged in kg/day	0.3600
% AC consumed	79.82
Available Headroom	0.0870
% Headroom consumed	78.02
>25% Headroom consumed?	Yes