



**Pfizer Nutritionals Ireland Limited**  
**T/A Wyeth Nutritionals Ireland**  
Askeaton  
Co. Limerick  
Ireland  
Tel. +353 61 392168  
www.pfizer.ie

Ms. Ana Bolger  
Office of Climate, Licensing & Resource Use,  
Environmental Protection Agency,  
Headquarters,  
PO Box 3000,  
Johnstown Castle Estate,  
Co. Wexford

IPPC Licence Reg.: No. P0395-02

Date: November 2<sup>nd</sup> 2011

RE: IPPC Licence Review Application Form for the purposes of EC Environmental Objectives (Surface Waters) Regulations 2009.

Dear Ms, Bolger,

Please find enclosed one signed original, one hardcopy and two copies on CD-ROM of the above application as requested in your letter dated 28<sup>th</sup> July 2011. While initially specified that the submission should be made by 1<sup>st</sup> of October 2011, this was later deferred by the Agency's Ann Marie Donlon until 1<sup>st</sup> November 2011, after our IPPC licence was transferred.

Trusting that all of the information you require is contained in this application, however, should you require any additional information please don't hesitate to contact me by phone at 061.601.307 or by email at [brian.shiel@pfizer.com](mailto:brian.shiel@pfizer.com).

Yours sincerely,

Brian Shiel.

Encl./ One signed original, one hardcopy and two copies on CD-ROM of the IPPC Licence Review Application Form for Pfizer Nutritionals Ireland Limited, IPPC Licence Reg. No. P0395-02.

**Wyeth Nutritionals Ireland is a business name of Pfizer Nutritionals Ireland Limited**  
Registered in Ireland Company Number: 393631 – VAT Number IE6413631Q  
Registered Office: Operations Support Group, Ringaskiddy, Co. Cork  
Directors: Peter Duffy, Paul Duffy  
Secretary: Peter Duffy



## **Pfizer Nutritionals Ireland Limited**

### **IPPC Licence Review Application Form**

for the purposes of EC Environmental Objectives (Surface Waters) Regulations 2009

October 2011



# Integrated Pollution Prevention and Control (IPPC)/Waste Licensing

## Review Form and Guidance Note

For inspection purposes only.  
Consent of copyright owner required for any other use.

for the purposes of

EC Environmental Objectives (Surface Waters) Regulations  
2009

<b>EPA Reg. N°:</b> (Office use only)	<input type="text"/>
--	----------------------

**Environmental Protection Agency**  
P.O. Box 3000, Johnstown Castle Estate, Co. Wexford  
Lo Call: 1890 335599 Telephone: 053-9160600 Fax: 053-9160699  
Web: [www.epa.ie](http://www.epa.ie) Email: [info@epa.ie](mailto:info@epa.ie)

## INTRODUCTION

This Form is for the purposes of a review of an IPPC/Waste Licence in order to ensure that all authorisations under the *EPA Act 1992 to 2007* and the *Waste Management Acts 1996 to 2010* having discharges liable to cause water pollution are in compliance with the *EC Environmental Objectives (Surface Waters) Regulations 2009*.

While every effort has been made to ensure the accuracy of the material contained in the Review Form, the EPA assumes no responsibility and gives no guarantees, undertakings and warranties concerning the accuracy, completeness or up-to-date nature of the information provided herein and does not accept any liability whatsoever arising from any errors or omissions.

The Review Form and all supporting information shall be submitted to the Headquarters of the Agency in a format of a signed original, one hardcopy and two copies on CD-Rom. In cases where an Environmental Impact Statement (EIS) is required in support of the Review Form, a signed original, one hardcopy plus 16 copies (or 18 copies if the activity is within Energy sector) on CD-Rom shall be submitted.

All pages, including maps/drawings/plans, shall be no larger than A3 size. All files on CD-Rom shall be submitted in searchable PDF format and be no larger than 10MB each in size. All CD-Roms shall be labelled with the Licensee's name, Licence Register Number, address of the activity and name of the file (i.e. Review Form).

For inspection purposes only. Consent of copyright owner required for any other use.

# CONTENTS

<b>SECTION A: GENERAL.....</b>	<b>1</b>
<b>SECTION B: EMISSIONS .....</b>	<b>3</b>
<b>SECTION C: CONTROL &amp; MONITORING .....</b>	<b>4</b>
<b>SECTION D: EXISTING ENVIRONMENT &amp; IMPACT OF THE ACTIVITY .....</b>	<b>6</b>
<b>SECTION E: STATUTORY REQUIREMENTS .....</b>	<b>8</b>
<b>SECTION F: APPROVED ADJUSTMENTS &amp; CONDITIONS .....</b>	<b>9</b>
<b>SECTION G: DECLARATION .....</b>	<b>10</b>
<b>ANNEX 1: TABLES/ATTACHMENTS .....</b>	<b>11</b>

*For inspection purposes only.  
Consent of copyright owner required for any other use.*

## SECTION A: GENERAL

### A.1 Licensee

<b>Name*:</b>	Pfizer Nutritionals Ireland Ltd
<b>Address:</b>	Coolrahee
	Askeaton
	Co. Limerick
<b>Tel:</b>	061-392168
<b>Fax:</b>	061-601157
<b>e-mail:</b>	brian.shiel@pfizer.com

\* This should be the name of the Licensee which is current on the date this IPPC/Waste Licence Review Form is lodged with the Agency. It should be the name of the legal entity (which can be a limited company or a sole trader). A trading/business name is not acceptable.

### Name and Address for Correspondence

Only documentation submitted by the Licensee and by the nominated person will be deemed to have come from the Licensee.

<b>Name:</b>	Mr. Brian Shiel
<b>Address:</b>	Pfizer Nutritionals Ireland Ltd
	Askeaton
	Co. Limerick
<b>Tel:</b>	061-392168
<b>Fax:</b>	061-601157
<b>e-mail:</b>	brian.shiel@pfizer.com

### Address of registered or principal office of Body Corporate (if applicable)

<b>Address:</b>	Operations Support Group
	Ringaskiddy
	Co. Cork
<b>Company Register No.</b>	393631
<b>Tel:</b>	021-5008000
<b>Fax:</b>	-
<b>e-mail:</b>	peter.duffy@pfizer.com

## A.2 Location of Activity

<b>Name:</b>	Pfizer Nutritionals Ireland Ltd
<b>Address*:</b>	Coolrahee
	Askeaton
	Co. Limerick
<b>Tel:</b>	061-392168
<b>Fax:</b>	061-601157
<b>Contact Name:</b>	Mr. Brian Shiel
<b>Position:</b>	EHS Lead
<b>e-mail:</b>	brian.shiel@pfizer.com

\* Include any townland.

<b>National Grid Reference (12 digit 6E,6N)</b>	133524E, 151326N
---	------------------

Location maps (no larger than A3), appropriately scaled, with legible grid references should be enclosed in **Attachment N<sup>o</sup> A.2**. The site boundary must be outlined on the map in red colour.

Geo-referenced digital drawing files (e.g. AutoCAD files) in Irish Grid projection of the site boundary and overall site plan, including labelled emission points to surface water and their monitoring and sampling locations, are also required.

For inspection purposes only  
Consent of copyright owner required for any other use

**SECTION B: EMISSIONS**

**B.1 Emissions to Surface Waters**

Describe the nature of emissions from the activity to receiving surface waters. Specify which of these emissions are process discharges and storm/surface water discharges.

Tables B.1(i) and B.1(ii) should be completed.

Please note that monitoring of the discharge(s) for the purposes of Table B.1(ii) shall be undertaken for the list of compulsory parameters listed in Table D.1(i). Where other relevant substances have been identified, during the Assessment of Impact on Receiving Surface Water requested under Section D.1 of this Review Form, monitoring of the discharge upstream and downstream for the relevant parameters shall also be included.

A summary list of the emission points, together with maps/drawings (no larger than A3) and supporting documentation should be included as **Attachment N<sup>o</sup> B.1**.

**B.2 Tabular Data on Emission Points to surface water**

Licensees should submit the following information for each emission point to surface water:

<b>Point Code</b>	<b>Easting</b>	<b>Northing</b>	<b>Verified</b>	<b>Emission</b>
SW1	133614	151496	Y (based on site drawing with grid superimposed)	pH, BOD, Suspended Solids, Total N, Ammonia, Total P, Oil, Fats & Grease, Toxicity
SW2 (stormwater) - There are 7 emission points in total. Monitoring only required for SW2	133552	151540	Y (based on site drawing with grid superimposed)	pH, BOD, Total N, Ammonia,

\* SW = Surface Water

An individual record (i.e. row) is required for each emission point. Acceptable file formats include Excel, Access or other upon agreement with the Agency.



For inspection purposes only.  
Consent of copyright owner required for any other use.

## SECTION C: CONTROL & MONITORING

**Describe the proposed technology and other techniques for preventing or, where this is not possible, reducing emissions from the installation/facility.**

### **C.1 Treatment, Abatement and Control Systems**

An overview/summary of treatment/abatement systems for effluent emissions should be included together with schematics as appropriate.

For each Surface Water Emission Point identified complete Table C.1(i).

Supporting information should form **Attachment N<sup>o</sup> C.1.**

Normal operation and variations for start-up and shutdown should be described. Anticipated malfunctions and known problems associated with the treatment should be highlighted.

Proposed monitoring to be undertaken for influent(s) to treatment plant, and in-treatment monitoring required for the management of the treatment plant should be detailed.

**Please find description of the operation of our Wastewater Treatment Plant in Attachment C**

### **C.2 Monitoring and Sampling Points**

Identify monitoring and sampling points and outline proposals for monitoring emissions to surface water bodies.

Table C.2(i) should be completed (where relevant) for emissions to surface water.

Where ambient environment monitoring is carried out or proposed, Table C.2(ii) should be completed as relevant for each environmental medium and at least 12 samples should be taken at regular intervals.

Include details of monitoring/sampling locations and methods.

Supporting information should form **Attachment N<sup>o</sup> C.2.**

### C.3 Tabular Data on Monitoring and Sampling Points

Licensees should submit the following information for each monitoring and sampling point:

Point Code	Point Type	Easting	Northing	Verified	Pollutant
Provide label ID's	M=Monitoring S=Sampling	6E-digit GPS Irish National Grid Reference	6N-digit GPS Irish National Grid Reference	Y = GPS used N = GPS not used	e.g. Ammonia (as N), Biochemical oxygen demand

An individual record (i.e. row) is required for each monitoring and sampling point. Acceptable file formats include Excel, Access or other upon agreement with the Agency.

Point source monitoring/sampling refers to monitoring from specific emission points (e.g. from a wastewater treatment plant). Ambient monitoring includes monitoring of river quality upstream/downstream of an effluent discharge.

For inspection purposes only.  
Consent of copyright owner required for any other use.

## SECTION D: EXISTING ENVIRONMENT & IMPACT OF THE ACTIVITY

### D.1 Assessment of Impact on Receiving Surface Water

Describe the existing environment in terms of water quality with particular reference to environmental quality standards as specified within the *EC Environmental Objectives (Surface Waters) Regulations 2009 S.I. No. 272 of 2009*. Table D.1(i) should be completed as directed.

Indicate whether or not the activity complies with the requirements of the *EC Environmental Objectives (Surface Waters) Regulations 2009 S.I. No. 272 of 2009*.

The Licensee should conduct an assessment of impact of discharge(s) from the installation/facility on receiving surface water. In undertaking this assessment the Licensee shall have particular regard to substances used in the manufacturing processes likely to result in discharges of those substances listed in the *EC Environmental Objectives (Surface Waters) Regulations 2009 S.I. No. 272 of 2009*. When completing any assimilative capacity calculations have regard to the Water Services Training Group 'Guidance to Applicant - Discharge to Surface Waters' available at <http://www.wsntg.ie/publications/index.asp> and other standard guidance.

If the process discharges are to coastal, transitional waters or lakes, the assessment may require a modelling study. The modelling study shall include estimates on what the resultant concentrations of the permitted substances in the receiving water body will be upon discharge at the current licence limits.

Regardless of the receiving water body type, determine the maximum allowable discharge concentrations to achieve compliance with the 95%ile good status limits. N.B. If the discharge is to a water body that is already achieving high status, or if the discharge is to waters draining to the surface water bodies identified under the First Schedule of the *EC Environmental Objectives (Freshwater Pearl Mussel) Regulations 2009*, compliance must be with 95%ile **high** status limits.

State distance from the process discharges to a nearest downstream water dependent Protected Area. Include the name and code of this Protected Area.

Full details of the assessment, including a copy of an Environmental Impact Statement if it was required for the purposes of obtaining planning permission(s), should be submitted as **Attachment N° D.1.1**.

Where necessary, the Licensee should supply detailed information on the proposals to comply with the requirements of the *EC Environmental Objectives (Surface Waters) Regulations 2009 S.I. No. 272 of 2009* including a detailed timeframe for any proposed works in **Attachment N° D.1.2**.

**Please find in Attachment D the Impact Assessment Report.**

## D.2 Environmental Considerations and Best Available Techniques (BAT)

Describe, in outline, the main alternatives, if any, to the proposals contained in the Review Form.

Describe any environmental considerations which were made with respect to the use of cleaner technologies, waste minimisation and raw material substitution.

Describe the measures proposed or in place to ensure that:

- (a) the best available techniques are or will be used to prevent or eliminate or, where that is not practicable, generally reduce an emission from the activity;
- (b) no significant pollution is caused;
- (c) waste production is avoided in accordance with *Council Directive 75/442/EEC of 15 July 1975 on waste*; where waste is produced, it is recovered or, where that is technically and economically impossible, it is disposed of while avoiding or reducing any impact on the environment;
- (d) energy and other resources are used efficiently;
- (e) the necessary measures are taken to prevent accidents and limit their consequences; and,
- (f) the necessary measures are taken upon definitive cessation of activities to avoid any pollution risk and return the site of operation to a satisfactory state.

This section should present a statement on energy efficiency at the site to include, where appropriate, an energy audit with reference to the *EPA Guidance document on Energy Audits*. Licensees should have regard to Section 5 of the *EPA Acts 1992 and 2003* in selecting BAT and in particular the following:

- The use of low-waste technology;
- The use of less hazardous substances;
- The furthering of recovery and recycling of substances generated and used in the process and of waste where appropriate;
- Comparable processes, facilities or methods of operation, which have been tried with success on an industrial scale;
- Technological advances and changes in scientific knowledge and understanding;
- The nature, effects and volume of the emissions concerned;
- The commissioning dates for new or existing facilities;
- The length of time needed to introduce the BAT;
- The consumption and nature of raw materials, including water, used in the process and their energy efficiency;
- The need to prevent or reduce to a minimum the overall impact of the emissions on the environment and the risks to it;
- The need to prevent accidents and to minimize the consequences for the Environment; and,
- The information published by the Agency in the form of sectoral BAT Guidance documents and the relevant BREF documents published by the EC (available for download at <http://eippcb.jrc.es/> and at [www.epa.ie](http://www.epa.ie)).

**Please find in Attachment E the BAT Report.**

## SECTION E: STATUTORY REQUIREMENTS

### E.1 Best Environmental Practices – Compliance with Legislation

Demonstrate if the best environmental practices are in place for control of diffuse emissions from the installation/facility as set out in the following legislation:

- (a) a specification prepared by the Agency in accordance with Section 5 of the *Environmental Protection Agency Act 1992* as amended by Section 7 of the *Protection of the Environment Act 2003*;
- (b) the *Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001)* as amended by the *Urban Waste Water Treatment (Amendment) Regulations 2004 (S.I. No. 440 of 2004)* or any future amendment thereof;
- (c) the *European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2009 (S.I. No. 101 of 2009)* or any future amendment thereof;
- (d) the *Local Government (Water Pollution) Act, 1977 (Control of Cadmium Discharges) Regulations 1985 (S.I. No. 294 of 1985)*;
- (e) the *Local Government (Water Pollution) Act, 1977 (Control of Hexachlorocyclohexane and Mercury Discharges) Regulations 1986 (S.I. No. 55 of 1986)*;
- (f) the *Local Government (Water Pollution) Acts, 1977 and 1990 (Control of Carbon Tetrachloride, DDT and Pentachlorophenol Discharges) Regulations 1994 (S.I. No. 43 of 1994)*; and,
- (g) measures or controls identified in a pollution reduction plan for the river basin district prepared in accordance with Part V of the *EC Environmental Objectives (Surface Waters) Regulations 2009 S.I. No. 272 of 2009* for the reduction of pollution by priority substances or the ceasing or phasing out of emissions, discharges and losses of priority hazardous substances.

**Pfizer confirms that it is in compliance with the above legislation.**

## SECTION F: APPROVED ADJUSTMENTS & CONDITIONS

Where the Office of Environmental Enforcement (OEE) of the Agency has agreed any variations or adjustments to the conditions of the existing licence, the licensee must supply a schedule detailing these agreed variations and adjustments to the existing licence conditions. An updated, scaled drawing of the site layout (no larger than A3) providing visual information on such adjustments or variations where appropriate should be included.

In the case of once-off assessments/ reports required under conditions of the existing licence the licensee must supply a schedule detailing those assessments/ reports that have been completed and agreed with the Office of Environmental Enforcement (OEE) or as otherwise agreed.

**Attachment N<sup>o</sup> F1** shall include the schedule of variations and/or adjustments together with the updated drawing.

Condition No.	Existing Condition	Proposed Wording (where appropriate)	OEE Agreement Reference	Description

Please see Attachment F Schedule of Agreements for further details

For inspection purposes only.  
Consent of copyright owner required for any other use.

---

**SECTION G: DECLARATION**

---

**Declaration**

I certify that the information given in this Review Form is truthful, accurate and complete.

I give consent to the EPA to copy this Review Form for its own use and to make it available for inspection and copying by the public, both in the form of paper files available for inspection at EPA and via the EPA's website. This consent relates to this Review Form itself and to any further information, submission, objection, or submission to an objection whether provided by me as Licensee, any person acting on the Licensee's behalf, or any other person.

**Signed by:** Brian Shiel **Date:** 02/11/11  
(on behalf of the organisation)

**Print signature name:** Brian Shiel

**Position in organisation:** EHS Lead

For inspection purposes only.  
Consent of copyright owner required for any other use.

Company stamp or seal:



## **ANNEX 1: TABLES/ATTACHMENTS**

For inspection purposes only.  
Consent of copyright owner required for any other use.

**TABLE B.1(i): EMISSIONS TO SURFACE WATERS**

(One page for each emission)

**Emission Point:**

Emission Point Ref. No.:	SW1		
Source of Emission:	Wastewater Treatment Plant		
Location :	Askeaton, Co. Limerick		
Grid Ref. (12 digit, 6E,6N):	133614E, 151496N		
Name of receiving waters:	Deel Estuary		
Flow rate in receiving waters:		N/A	m <sup>3</sup> .sec <sup>-1</sup> Dry Weather Flow
		N/A	m <sup>3</sup> .sec <sup>-1</sup> 95%ile flow

**Emission Details:**

(i) Volume to be emitted			
Normal/day	2800 m <sup>3</sup>	Maximum/day	2800 m <sup>3</sup>
Maximum rate/hour	126 m <sup>3</sup>		

(ii) Period or periods during which emissions are made, or are to be made, including daily or seasonal variations (*start-up /shutdown to be included*):

Periods of Emission (avg)		60	min/hr	24	hr/day	350	day/yr
---------------------------	--	----	--------	----	--------	-----	--------

**TABLE B.1(i): EMISSIONS TO SURFACE WATERS**

(One page for each emission)

**Emission Point:**

Emission Point Ref. No.:	SW2		
Source of Emission:	Stormwater Discharge		
Location :	Askeaton, Co. Limerick		
Grid Ref. (12 digit, 6E,6N):	133552E, 151540N		
Name of receiving waters:	Deel Estuary		
Flow rate in receiving waters:		<u>N/A</u>	$\text{m}^3 \cdot \text{sec}^{-1}$ Dry Weather Flow
		<u>N/A</u>	$\text{m}^3 \cdot \text{sec}^{-1}$ 95%ile flow

**Emission Details:**

(i) Volume to be emitted			
Normal/day	N/A	Maximum/day	N/A
Maximum rate/hour	N/A		

(ii) Period or periods during which emissions are made, or are to be made, including daily or seasonal variations (*start-up /shutdown to be included*):

Periods of Emission (avg)	<u>60</u> min/hr <u>24</u> hr/day <u>365</u> day/yr
---------------------------	---

**TABLE B.1(ii): EMISSIONS TO SURFACE WATERS - Characteristics of the emission** (One table per emission point)

**Emission Point Reference Number:** SW1

Parameter	Prior to treatment				As discharged				% Efficiency
	Max. hourly average (mg/l)	Max. daily average (mg/l)	kg/day	kg/year	Max. hourly average (mg/l)	Max. daily average (mg/l)	kg/day	kg/year	
BOD	5,600	5,600	1,970	689,500	40	40	100	35,000	99%
Suspended Solids	1,960	1,960	970	339,500	50	50	140	49,000	97.5%
Total Nitrogen	-	-	-	-	15	15	42	14,700	-
Total P (As P)	6.9	6.9	12.5	4,375	2	2	5.6	1,960	31%
MRP (As P)	3.45	3.45	6.25	2,188	1	1	2.8	980	31%
Oils, Fats & Greases	-	-	-	-	15	15	42	14,700	-
Ammonia	2.2	2.2	4.0	1,400	10	10	28	9,800	-

Consent of copyright owner required for any other use.  
For inspection purposes only.

**TABLE B.1(ii): EMISSIONS TO SURFACE WATERS - Characteristics of the emission** (One table per emission point)

**Emission Point Reference Number:** SW2(stormwater)

Parameter	Prior to treatment				As discharged				% Efficiency	
	Max. hourly average (mg/l)	Max. daily average (mg/l)	kg/day	kg/year	Max. hourly average (mg/l)	Max. daily average (mg/l)	kg/day	kg/year		
pH						6.5-9 units	pH			N/A
BOD						15				N/A
Total N (as N)						15				N/A
Ammonia (as N)						2				N/A

For inspection purposes only. Consent of copyright owner required for any other use.

**TABLE C.1(i): ABATEMENT/TREATMENT CONTROL**

**Emission Point Reference Number:** SW1

Control <sup>1</sup> parameter	Equipment <sup>2</sup>	Equipment maintenance	Equipment calibration	Equipment back-up	Monitoring to be carried out <sup>3</sup>	Monitoring equipment	Monitoring equipment calibration
OFG Removal	Motor/Belt	Annual	-	Spares accessible			
pH (neutralisation)	Acid/Caustic Dosing Pumps	Annual	-	Spares accessible			
Effluent Transfer	Transfer Pumps	Annual	-	Spares accessible			
Dissolved Oxygen (SBR)	Blowers	Annual	-	Spares accessible	Dissolved Oxygen	DO Meter	-
MLSS	Sludge Transfer Pumps	Annual	-	Spares accessible	MLSS	MLSS Meter	-
-	Belt Filter	Annual	-	Spares accessible	-	-	-
Plant Loading					COD (Raw Effluent)	Hach	
Plant Loading					P (Raw Effluent)	Standard Methods	-
Sludge Health	-	-	-		Sludge Floc Microscopy	Microscope	-

<sup>1</sup> List the operating parameters of the treatment/abatement system which control its function.

<sup>2</sup> List the equipment necessary for the proper function of the abatement/treatment system.

<sup>3</sup> List the monitoring of the control parameter to be carried out.

**TABLE C.2(i): EMISSIONS MONITORING AND SAMPLING POINTS**

(One table per monitoring point)

**Emission Point Reference Number:** SW1

Parameter	Monitoring frequency	Accessibility of Sampling Points	Sampling method	Analysis method/ technique
Flow	Continuous	Good	On-line Meter	On-line Meter
pH	Continuous	Good	On-line Meter	pH electrode
COD	Daily	Good	Flow Proportional	Standard Methods
BOD	Weekly	Good	Flow Proportional	Standard Methods
Suspended Solids	Daily	Good	Flow Proportional	Standard Methods
Nitrates (as N)	Daily	Good	Flow Proportional	Standard Methods
Ammonia (as N)	Daily	Good	Flow Proportional	Standard Methods
Total Phosphorus (as P)	Weekly	Good	Flow Proportional	Standard Methods
MRP (as P)	Daily	Good	Flow Proportional	Standard Methods
Total Nitrogen (as N)	Weekly	Good	Flow Proportional	Standard Methods
Oils, Fats & Greases	Weekly	Good	Flow Proportional	Standard Methods
Toxicity	Annually	Good	Flow Proportional	Standard Methods


For inspection purposes only.  
Consent of copyright owner required for any other use.



**TABLE C.2(ii): AMBIENT ENVIRONMENT MONITORING AND SAMPLING POINTS** (One table per monitoring point)

**Monitoring Point Reference Number:** \_\_\_\_\_ N/A \_\_\_\_\_

Parameter	Monitoring frequency	Accessibility of Sampling point	Sampling method	Analysis method/ technique
		For inspection purposes only. Consent of copyright owner required for any other use.		

**Table D.1(i) RECEIVING WATER SURFACE WATER QUALITY**

**Monitoring Point/Grid Reference:** \_\_\_\_\_ N/A \_\_\_\_\_

Parameter	Results <sup>1</sup> (mg/l)												Sampling method (grab, drift etc.)	Normal Analytical Range	Analysis method/ technique	
	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date				
pH																
Temperature																
Electrical conductivity EC																
Ammonia (as N)																
Chemical oxygen demand																
Biochemical oxygen demand																
Dissolved oxygen DO																
Total Nitrogen (as N)																
Nitrite (as N)																
Nitrate (as N)																
Total Phosphorous (as P)																
OrthoPhosphate (as P)																

For inspection purposes only. Consent of copyright owner required for any other use.

<sup>1</sup> At least 12 samples should be taken at regular intervals.

**Provide summary of the monitoring results**