Facility Information Summary	
Licence Register Number	W0129-02
Name of site	MEHL (Murphy Environmental Hollywood Ltd.)
Site Location	Hollywood Great, Nag's Head, Naul, Co. Dublin
NACE Code	
Class of Activity	As W0129-02: Disposal Classes 1, 5, 13; Recovery Classes 3, 4, 13
RBME risk category	C2
National Grid Reference (6E, 6 N)	E315723 N258073

A brief description of the activities/process at the site for the reporting year. This should include information such as production increases or decreases on site, any infrastructural changes, environmental performance improvements which were measured during the reporting year;

The principal activity carried out on site is the deposition of inert waste into enginered landfill cells. Only inert waste is accepted, and is subject strict Waste Acceptance Procedures as follows:

i) Level 1 Basic Characterisation Testing - Extensive chemical analysis is carried out prior to the materials being delivered to MEHL to ensure that the waste meets our acceptance criteria.
We use an independent, accredited laboratory for all of our testing requirements.

ii) Level 2 "1 in 100" Compliance Testing - For 1 in 100 loads which have undergone Level 1 for a given site, or if we are in any doubt as to whether or not the waste is acceptable, it must be sent for laboratory analysis to prove that it meets the requirements of our Waste Acceptance Criteria.

iii) Level 3 On-Site Verification Testing - Each and every load arriving at Hollywood Landfill is subject to a visual and odour inspection, both at the weighbridge and upon tipping.

Declaration:

All the data and information presented in this report has been checked and certified as being accurate. The quality of the information is assured to meet licence requirements.

*Louise O'Donnell**	*10/04/2012*
Signature Group/Facility manager (or nominated, suitably qualified and experienced deputy)	Date

* Completed by Patel Tonra Ltd., Environmental Consultants to MEHL

AER summary template-AIR emissions

			Additional information
1	Does your site have licensed air emissions? If yes please complete table 1, 2 and 3 below for the current reporting year and answer further questions. If **you do not have** licenced emissions and **do not complete a solvent management plan** (table 5 and 6) you only need to complete table 1 fugitive emissions on site below	No	

Table 1 Fugitive emissions

Parameter /Substance	Annual fugitive emission (kg/annum)	Quantificaton method M/C/E
Dust	<ELV	M

Periodic/Non-Continuous Monitoring

2	Are there any results in breach of licence requirements? If yes please provide brief details in the comment section of Table 2 below			No — All results significantly below Emission Limit Value
3	Was all monitoring carried out in accordance with EPA guidance note AG2 and using the basic air monitoring checklist?	Basic air monitoring checklist	AGN2	Not applicable — No stack emissions. Standard method applied for dust monitoring, as specified in W0129-02

Table 2: Licensed Mass Emissions/Ambient data-periodic monitoring (non-continuous)

Emission reference no:	Parameter/ Substance	Date of Monitoring	ELV in licence or any revision therof	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence limit	Method of analysis	Annual mass load (kg)	% change in mass load from previous year +/-	Comments
D1	Dust	27/06/2011 to 27/07/2011	350	100 % of values < ELV	19	mg/m2/day	yes	VDI 2119	Not applicable	Not applicable	
D1	Dust	18/11/2011 to 16/12/2011	350	100 % of values < ELV	17	mg/m2/day	yes	VDI 2119	Not applicable	Not applicable	
D2	Dust	27/06/2011 to 27/07/2011	350	100 % of values < ELV	10	mg/m2/day	yes	VDI 2119	Not applicable	Not applicable	
D2	Dust	18/11/2011 to 16/12/2011	350	100 % of values < ELV	149	mg/m2/day	yes	VDI 2119	Not applicable	Not applicable	
D3A	Dust	27/06/2011 to 27/07/2011	350	100 % of values < ELV	17	mg/m2/day	yes	VDI 2119	Not applicable	Not applicable	
D3A	Dust	18/11/2011 to 16/12/2011	350	100 % of values < ELV	29	mg/m2/day	yes	VDI 2119	Not applicable	Not applicable	

AER summary template-AIR emissions

D5	Dust	27/06/2011 to 27/07/2011	350	100 % of values < ELV	25	mg/m2/day	yes	VDI 2119	Not applicable	Not applicable	
D5	Dust	18/11/2011 to 16/12/2011	350	100 % of values < ELV	8	mg/m2/day	yes	VDI 2119	Not applicable	Not applicable	

Note 1: Volumetric flow shall be included as a reportable parameter

AER summary template-AIR emissions

Continuous Monitoring

4	Does your site carry out continuous air emissions monitoring?	SELECT	NOT APPLICABLE
	If yes please review your continuous monitoring data and report the required fields below in Table 3 and compare it to its relevant Emission Limit Value (ELV)		
5	Did continuous monitoring equipment experience downtime? If yes please record downtime in table 3 below	SELECT	
6	Do you have a proactive service agreement for each piece of continuous monitoring equipment?	SELECT	
7	Did your site experience any abatement system bypasses? If yes please detail them in table 4 below	SELECT	

Table 3: Summary of average emissions -continuous monitoring

Emission reference no:	Parameter/ Substance	ELV in licence or any revision therof	Averaging Period	Compliance Criteria	Units of measurement	Annual Emission	Annual maximum	Monitoring Equipment downtime (hours)	% compliance current reporting year	Comments
NOT APPLICABLE	SELECT			SELECT	SELECT					

note 1: Volumetric flow shall be included as a reportable parameter.

Table 4: Abatement system bypass reporting table Bypass protocol

Date*	Duration** (hours)	Location	Reason for bypass	Corrective action
NOT APPLICABLE				

* this should include all dates that an abatement system bypass occurred

** an accurate record of time bypass beginning and end should be logged on site and maintained for future Agency inspections please refer to bypass protocol link

AER summary template-AIR emissions

8 Do you have a total Emission Limit Value of direct and fugitive emissions on site? if yes please fill out table 5

SELECT	NOT APPLICABLE

Table 5: Solvent Management Plan Summary Total VOC Emission limit value			Solvent regulations	Please refer to linked solvent regulations to complete table 5 and 6	
Reporting year	Total solvent input on site (kg)	Total VOC emissions to Air from entire site (direct and fugitive)	Total VOC emissions as %of solvent input	Total Emission Limit Value (ELV) in licence or any revision therof	Compliance
NOT APPLICABLE					SELECT
					SELECT

Table 6: Solvent Mass Balance summary

	(I) Inputs (kg)	(O) Outputs (kg)						
Solvent	(I) Inputs (kg)	Organic solvent emission in waste gases(kg)	Solvents lost in water (kg)	Collected waste solvent (kg)	Fugitive Organic Solvent (kg)	Solvent released in other ways e.g. by-passes (kg)	Solvents destroyed onsite through physical reaction e.g. incineration(kg)	Total emission of Solvent to air (kg)
NOT APPLICABLE								
							Total	

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER)

			Additional information
1	Does your site have licensed emissions direct to surface water or direct to sewer? If yes please complete table 3 and 4 below for the current reporting year and answer further questions. If **you do not have** licenced emissions you only need to complete table 1 and /table 2 below for ambient monitoring and visual inspections	Yes	
2	Was it a requirement of your licence to carry out visual inspections on any surface water discharges or watercourses on or near your site? If yes please complete table 2 below summarising only any evidence of contamination noted during visual inspections	Yes	

Table 1 Ambient monitoring

Location reference	Location relative to site activities	PRTR Parameter	Licenced Parameter	Monitoring date	ELV or trigger level in licence or any revision thereof*	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence	Comments
	upstream	SELECT	SELECT			All values < ELV		mg/L	SELECT	
SW-1	upstream		Ammoniacal Nitrogen	28/03/2011; 27/06/2011; 01/12/2011	Not applicable	Not applicable	0.09	mg/l NH_4-N	Not applicable	
SW-1	upstream		Calcium	28/03/2011; 27/06/2011; 01/12/2011	Not applicable	Not applicable	124.43	mg/l	Not applicable	
SW-1	upstream		Chemical Oxygen Demand	28/03/2011; 27/06/2011; 01/12/2011	Not applicable	Not applicable	12.33	mg/l	Not applicable	
SW-1	upstream		Chloride	28/03/2011; 27/06/2011; 01/12/2011	Not applicable	Not applicable	41.30	mg/l	Not applicable	
SW-1	upstream		Conductivity	28/03/2011; 27/06/2011; 01/12/2011	Not applicable	Not applicable	0.78	mS/cm	Not applicable	
SW-1	upstream		Dissolved Oxygen	28/03/2011; 27/06/2011; 01/12/2011	Not applicable	Not applicable	6.28	mg/l	Not applicable	
SW-1	upstream		Magnesium	28/03/2011; 27/06/2011; 01/12/2011	Not applicable	Not applicable	12.57	mg/l	Not applicable	
SW-1	upstream		Manganese	28/03/2011; 27/06/2011; 01/12/2011	Not applicable	Not applicable	0.16	mg/l	Not applicable	
SW-1	upstream		Orthophosphate	28/03/2011; 27/06/2011; 01/12/2011	Not applicable	Not applicable	0.06	mg/l	Not applicable	
SW-1	upstream		pH	28/03/2011; 27/06/2011; 01/12/2011	Not applicable	Not applicable	7.93	pH	Not applicable	
SW-1	upstream		Sodium	28/03/2011; 27/06/2011; 01/12/2011	Not applicable	Not applicable	26.87	mg/l	Not applicable	
SW-1	upstream		Sulphate	28/03/2011; 27/06/2011; 01/12/2011	Not applicable	Not applicable	160.38	mg/l	Not applicable	
SW-1	upstream		Temperature	28/03/2011; 27/06/2011; 01/12/2011	Not applicable	Not applicable	10.15	°C	Not applicable	
SW-1	upstream		Total Alkalinity	28/03/2011; 27/06/2011; 01/12/2011	Not applicable	Not applicable	181.00	mg/l	Not applicable	
SW-1	upstream		Total Suspended Solids	28/03/2011; 27/06/2011; 01/12/2011	Not applicable	Not applicable	10.00	mg/l	Not applicable	
SW-2	downstream		Ammoniacal Nitrogen	28/03/2011; 27/06/2011; 01/12/2011	Not applicable	Not applicable	0.04	mg/l NH_4-N	Not applicable	

SW-2	downstream		Calcium	28/03/2011; 27/06/2011; 01/12/2011	Not applicable	Not applicable	118.60	mg/l	Not applicable	
SW-2	downstream		Chemical Oxygen Demand	28/03/2011; 27/06/2011; 01/12/2011	Not applicable	Not applicable	10.67	mg/l	Not applicable	
SW-2	downstream		Chloride	28/03/2011; 27/06/2011; 01/12/2011	Not applicable	Not applicable	34.90	mg/l	Not applicable	
SW-2	downstream		Conductivity	28/03/2011; 27/06/2011; 01/12/2011	Not applicable	Not applicable	0.74	mS/cm	Not applicable	
SW-2	downstream		Dissolved Oxygen	28/03/2011; 27/06/2011; 01/12/2011	Not applicable	Not applicable	6.70	mg/l	Not applicable	
SW-2	downstream		Magnesium	28/03/2011; 27/06/2011; 01/12/2011	Not applicable	Not applicable	11.27	mg/l	Not applicable	
SW-2	downstream		Manganese	28/03/2011; 27/06/2011; 01/12/2011	Not applicable	Not applicable	0.35	mg/l	Not applicable	
SW-2	downstream		Orthophosphate	28/03/2011; 27/06/2011; 01/12/2011	Not applicable	Not applicable	0.16	mg/l	Not applicable	
SW-2	downstream		pH	28/03/2011; 27/06/2011; 01/12/2011	Not applicable	Not applicable	7.83	pH	Not applicable	
SW-2	downstream		Sodium	28/03/2011; 27/06/2011; 01/12/2011	Not applicable	Not applicable	20.20	mg/l	Not applicable	
SW-2	downstream		Sulphate	28/03/2011; 27/06/2011; 01/12/2011	Not applicable	Not applicable	142.60	mg/l	Not applicable	
SW-2	downstream		Temperature	28/03/2011; 27/06/2011; 01/12/2011	Not applicable	Not applicable	10.15	°C	Not applicable	
SW-2	downstream		Total Alkalinity	28/03/2011; 27/06/2011; 01/12/2011	Not applicable	Not applicable	162.00	mg/l	Not applicable	
SW-2	downstream		Total Suspended Solids	28/03/2011; 27/06/2011; 01/12/2011	Not applicable	Not applicable	10.00	mg/l	Not applicable	

*trigger values may be agreed by the Agency outside of licence conditions

Table 2 Visual inspections-Please only enter details where contamination was observed.

Location Reference	Date of inspection	Description of contamination	Source of contamination	Corrective action	Comments
		No contamination observed	SELECT		
			SELECT		

Licensed Emissions to water and /or wastewater(sewer)-periodic monitoring (non-continuous)

3	Was there any result in breach of licence requirements? If yes please provide brief details in the comment section of Table 3 below			No	Additional information
4	Was all monitoring carried out in accordance with EPA guidance and checklists for Quality of Aqueous Monitoring Data Reported to the EPA? If no please detail what areas require improvement in additional information box	External /Internal Lab Quality checklist	Assessment of results checklist	Yes	

Table 3: Licensed Emissions to water and /or wastewater (sewer)-periodic monitoring (non-continuous)

Emission reference no:	Emission released to	Parameter/ SubstanceNote 1	Type of sample	Date of Monitoring	Averaging period	ELV or trigger values in licence or any revision thereofNote 2	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence	Method of analysis	Procedural reference source	Procedural reference standard number	Annual mass load (kg)	% change in mass load from previous year +/-	Comments

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER)

SWD-1	Water	Suspended Solids	discrete	27/6/11; 1/12/11	Not applicable	35	All values < ELV	Dry	mg/L	yes	Gravimetric analysis	SELECT		Not applicable	Not applicable	
SWD-2	Water	Suspended Solids	discrete	27/6/11; 1/12/12	Not applicable	35	All values < ELV	Dry	mg/L	yes	Gravimetric analysis			Not applicable	Not applicable	
SWD-3	Water	Suspended Solids	discrete	27/6/11; 1/12/13	Not applicable	35	All values < ELV	Dry	mg/L	yes	Gravimetric analysis			Not applicable	Not applicable	
SWD-4	Water	Suspended Solids	discrete	27/6/11; 1/12/14	Not applicable	35	All values < ELV	Dry	mg/L	yes	Gravimetric analysis			Not applicable	Not applicable	
SWD-5	Water	Suspended Solids	discrete	27/6/11; 1/12/15	Not applicable	35	All values < ELV	Dry	mg/L	yes	Gravimetric analysis			Not applicable	Not applicable	
SWD-6	Water	Suspended Solids	discrete	27/6/11; 1/12/16	Not applicable	35	All values < ELV	<10	mg/L	yes	Gravimetric analysis			Not applicable	Not applicable	
SWD-7	Water	Suspended Solids	discrete	27/6/11; 1/12/17	Not applicable	35	All values < ELV	Dry	mg/L	yes	Gravimetric analysis			Not applicable	Not applicable	

Note 1: Volumetric flow shall be included as a reportable parameter

Note 2: Where Emission Limit Values (ELV) do not apply to your licence please compare results against EQS for Surface water or relevant receptor quality standards

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER)

Continuous monitoring

			Additional Information
5	Does your site carry out continuous emissions to water/sewer monitoring?	No	

If yes please summarise your continuous monitoring data below in Table 4 and compare it to its relevant Emission Limit Value (ELV)

6	Did continuous monitoring equipment experience downtime? **If yes please record downtime in table 4 below**	SELECT	Not applicable
7	Do you have a proactive service contract for each piece of continuous monitoring equipment on site?	SELECT	Not applicable
8	Did abatement system bypass occur during the reporting year? **If yes please complete table 5 below**	SELECT	Not applicable

Table 4: Summary of average emissions -continuous monitoring

Emission reference no:	Emission released to	Parameter/ Substance	ELV or trigger values in licence or any revision thereof	Averaging Period	Compliance Criteria	Units of measurement	Annual Emission for current reporting year (kg)	% change +/- from previous reporting year	Monitoring Equipment downtime (hours)	% compliance current reporting year	Comments
Not applicable	SELECT	SELECT		SELECT	SELECT	SELECT					
	SELECT	SELECT		SELECT	SELECT	SELECT					

note 1: Volumetric flow shall be included as a reportable parameter.

Table 5: Abatement system bypass reporting table

Date	Duration (hours)	Location	Resultant emissions	Reason for bypass	Corrective action*	Was a report submitted to the EPA?	When was this report submitted?
Not applicable						SELECT	

*Measures taken or proposed to reduce or limit bypass frequency

Bund/pipe testing report summary ALL IPPC/WASTE licensed facilities | **Intensive agriculture facilities please use alternative template**

Bund testing | dropdown menu click to see options

			Additional information
	Are you required by your licence to undertake integrity testing on bunds and containment structures ? if yes please fill out table 1 below listing all bunds and containment structures on site	Not applicable	Bund testing is stipulated in W0129-02; however fuel is no longer stored in the diesel tanks in the bunded area on site (the plant items which required diesel are no longer on site). Bund testing has, therefore, not been required (diesel tanks are empty). The only diesel currently stored on site is in the self-contained mobile fuel bowser which is stored in the garage building.
1			
2	Please provide integrity testing frequency period	Not applicable	
3	Does the site maintain a register of bunds, underground pipelines (including stormwater and foul), Tanks, sumps and containers? (containers refers to "Chemstore" type units and mobile bunds)	Yes	

Table 1: Summary details of bund integrity test

Bund/Containment structure ID	Type	Specify Other type	Product containment	Actual capacity	Capacity required*	Type of integrity test	Other test type	Test date	Integrity reports maintained on site?	Results of test	Integrity test failure explanation <50 words	Corrective action taken	Scheduled date for retest	Results of retest(if in current reporting year)

* Capacity required should comply with 25% or 110% containment rule as detailed in your licence

			Commentary
4	Has integrity testing been carried out in accordance with licence requirements and are all structures tested in line with BS8007/EPA Guidance?	bunding and storage guidelines	Not applicable
5	Are channels/transfer systems to remote containment systems tested?		Not applicable
6	Are channels/transfer systems compliant in both integrity and available volume?		Not applicable
7	Do all sumps and chambers have high level liquid alarms?		Not applicable
8	If yes to Q7 are these failsafe systems included in a maintenance and testing programme?		Not applicable

Pipeline/underground structure testing

	Are you required by your licence to undertake integrity testing on underground structures e.g. pipelines or sumps etc ? if yes please fill out table 2 below listing all	Not applicable	The only underground pipes are for surface water runoff.
1	underground structures and pipelines on site		
2	Please provide integrity testing frequency period	Not applicable	

Table 2: Summary details of underground structures/pipeline integrity test

Structure ID	Type system	Material of construction:	Does this structure have Secondary containment?	Type of secondary containment	Type integrity testing	Integrity reports maintained on site?	Results of test	Integrity test failure explanation <50 words	Corrective action taken	Scheduled date for retest	Results of retest(if in current reporting year)
	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT				SELECT

Please use commentary for additional details not answered by tables/ questions above

Tank and Pipeline assessment reporting-Intensive Agriculture sector only

			Additional information if required
1	Is it a requirement of your licence to carry out a tank and pipeline assessment for effluent storage on site?	SELECT	NOT APPLICABLE
2	is it a requirement of your licence to submit a programme for agreement to the Agency prior to carrying out a tank and pipeline assessment?	SELECT	
3	If yes has a programme been submitted to the Agency for agreement on the testing and inspection of under and over-ground effluent storage tanks and pipelines? Please enter date of submission in additional information	SELECT	
4	What method has been proposed for the testing of under and over ground effluent storage tanks and pipelines?	SELECT	
5	Has the testing and inspection of under and over ground effluent storage tanks and pipelines been completed during the current reporting year? If no please enter date last tank and pipeline assessment was completed in additional information.	SELECT	
6	If Visual inspection was the method used were any cracks or defects detected? If yes please detail in additional information	SELECT	
7	If yes to Q6 have the cracks or defects been repaired successfully? If no please explain in additional information	SELECT	
8	If hydrogeological or geophysics investigation methods were used was there any evidence of contamination detected? If yes please detail in additional information	SELECT	
9	If yes to Q8 please detail proposed or completed remediation work in additional information		
10	Are there any leak detection systems on site? Please see Department of Agricultures S126 and EPA guidance on Storage and Bunding of materials for required systems S126.pdf bunding and storage guidelines	SELECT	
11	From the visual inspections carried out has any discharge been visible in the leak detection inspection chamber? If yes please enter details in table 1	SELECT	
12	Was it a requirement of your licence to analyse samples for the current reporting year. If yes please enter details of any samples taken in table 2 below	SELECT	
13	When is the next tank and pipeline assessment due?		
14	Does the licensee consider they are compliant with licence conditions?	SELECT	
15	Include details of any other findings of report		

Table 1: Visual inspection of leak detection chamber

Date	Evidence of discharge	Samples taken (reference in table 2)

Table 2: Samples collected from leak detection chamber

Date	Sample frequency	Sample id	Colour/Odour	Parameter	ELV (If applicable)	Measured value
	SELECT					
	SELECT					

Table 3 Storage capacity for Organic Fertiliser

Total organic fertiliser storage capacity (m3)	Quantity of organic fertiliser generated by the animals housed on site in previous reporting year	Total quantity of organic fertiliser moved off site and recorded in the organic fertiliser register and "record 3" as submitted to DAFM* in previous reporting year	Quantity of organic fertiliser on site at the start of reporting year	Quantity of organic fertiliser at close of current reporting year	Have records of movement of organic fertiliser (record 3) for the previous calendar year been submitted to DAFM?
					SELECT

*DAFM -Department of Agriculture Food and Marine

Complaints

Have you received any environmental complaints in the current reporting year? If yes please complete summary details of complaints received on site in table 1 below	No	Additional information

Table 1 Complaints summary

Date	Category	Other type (please specify)	Brief description of complaint (Free txt <20 words)	Corrective action< 20 words	Resolution status	Resolution date	Further information
Not Applicable	SELECT				SELECT		
	SELECT				SELECT		
	SELECT				SELECT		
	SELECT				SELECT		
	SELECT				SELECT		

Total complaints open at start of reporting year	
Total new complaints received during reporting year	
Total complaints closed during reporting year	
Balance of complaints end of reporting year	

Incidents

Have any incidents occurred on site in the current reporting year? Please list all incidents for current reporting year in Table 2 below	Yes	Additional information

*For information on how to report and what constitutes an incident	What is an incident

Table 2 Incidents summary

Date of occurrence	Incident nature	Location of occurrence	Incident category*please refer to guidance	Receptor	Cause of incident	Other cause(please specify)	Activity in progress at time of incident	Communication	Occurrence	Corrective action<20 words	Preventative action <20 words	Resolution status	Resolution date	Liklihood of reoccurence
29/06/2011	Breach of ELV	Monitoring Locations BH-5, BH-8 and BH-10A	1. Minor	No Uncontrolled release	Not related to site activities		Normal activities	EPA	Recurring	Not required	Not applicable	Complete	05/07/2011	Medium
13/09/2011	Breach of ELV	Monitoring locations BH-6, BH-8, BH-10A, SW-1 and SWD-6	1. Minor	No Uncontrolled release	Not related to site activities		Normal activities	EPA	Recurring	Not required	Not applicable	Complete	13/09/2011	Medium
14/11/2011	Breach of ELV	Monitoring Location BH-8	1. Minor	No Uncontrolled release	Not related to site activities		Normal activities	EPA	Recurring	Not required	Not applicable	Complete	17/11/2011	Medium
22/12/2011	Breach of ELV	Monitoring Locations in BH-8, BH-10A, BH-12, SWD-6	1. Minor	No Uncontrolled release	Not related to site activities		Normal activities	EPA	Recurring	Not required	Not applicable	Complete	22/12/2011	Medium
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT

Total number of incidents current year	4
Total number of incidents previous year	4
% reduction/ increase	0

Groundwater /Contaminated land summary report

			Comments
1	Are you required to carry out groundwater monitoring as part of your licence requirements?	yes	
2	Are you required to carry out soil monitoring as part of your licence requirements?	no	
3	Do you extract groundwater for use on site? If yes please specify use in comment section	no	
4	Is there contaminated land and /or groundwater on site? If yes please answer q's 5-12	no	
5	Is the contamination related to operations at the facility (either current and/or historic)	SELECT	Not applicable
6	Have actions been taken to address contamination issues?If yes please summarise remediation strategies proposed/undertaken for the site	SELECT	Not applicable
7	Please specify the proposed time frame for the remediation strategy	SELECT	Not applicable
8	Is there a licence condition to carry out/update ELRA for the site?	SELECT	Not applicable
9	Has any type of risk assesment been carried out for the site?	SELECT	Not applicable
10	Has a Conceptual Site Model been developed for the site?	SELECT	Not applicable
11	Have potential receptors been identified on and off site?	SELECT	Not applicable
12	Is there evidence that contamination is migrating offsite?	SELECT	Not applicable

Table 1: Upgradient Groundwater monitoring results

Date of sampling	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration++	Average Concentration+	unit	GTV's*	DWS	% change in average concentration previous year +/-	Upward trend in pollutant concentration over last 5 years of monitoring data
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-5	Ammoniacal Nitrogen	Lab analysis	Quarterly	0.11	0.057	mg/l NH_4-N	N/A	DWS	-59%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-5	Arsenic	Lab analysis	Quarterly	0.008	0.006	mg/l	N/A	DWS	-167%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-5	Barium	Lab analysis	Quarterly	0.03	0.020	mg/l	N/A	DWS	-100%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-5	Calcium	Lab analysis	Quarterly	88.1	80.8	mg/l	N/A	DWS	-18%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-5	Chloride	Lab analysis	Quarterly	22.9	20.8	mg/l	75	DWS	-2%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-5	Colour	Field analysis	Quarterly	Clear	Clear	N/A	N/A	DWS	0%	No

Groundwater /Contaminated land summary report											
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-5	Conductivity	Field analysis	Quarterly	0.66	0.62	mS/cm	1	DWS	-2%	No
22/02/2011	BH-5	Cyanide	Lab analysis	Annually	0.01	0.01	mg/l	N/A	DWS	-300%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-5	Dissolved Oxygen	Field analysis	Quarterly	3.3	2.0	mg/l	N/A	DWS	-191%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-5	Iron	Lab analysis	Quarterly	0.02	0.02	mg/l	N/A	DWS	16%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-5	Level, Water	Field analysis	Quarterly	102.75	101.85	mOD	N/A	DWS	0%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-5	Manganese	Lab analysis	Quarterly	0.17	0.15	mg/l	N/A	DWS	3%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-5	Odour	Field analysis	Quarterly	None	None	N/A	N/A	DWS	0%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-5	pH	Field analysis	Quarterly	7.4	7.1	pH	6<pH<9	DWS	0%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-5	Phenols, Total	Lab analysis	Quarterly	0.15	0.08	mg/l	0.1	DWS	-56%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-5	Potassium	Lab analysis	Quarterly	1.5	1.4	mg/l	N/A	DWS	19%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-5	Sodium	Lab analysis	Quarterly	52.1	42.0	mg/l	80	DWS	30%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-5	Sulphate	Lab analysis	Quarterly	84.3	69.9	mg/l	150	DWS	14%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-5	Temperature	Field analysis	Quarterly	12.1	9.4	°C	N/A	DWS	8%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-5	Total Organic Carbon	Lab analysis	Quarterly	5.0	4.3	mg/l	50	DWS	-53%	No

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22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-5	Total Oxidized Nitrogen	Lab analysis	Quarterly	0.2	0.2	mg/l	N/A	DWS	-115%	No
22/02/2011	BH-5	Boron	Lab analysis	Annually	0.054	0.054	mg/l	N/A	DWS	78%	No
22/02/2011	BH-5	Cadmium	Lab analysis	Annually	0.0005	0.001	mg/l	0.004	DWS	-120%	No
22/02/2011	BH-5	Chromium, Total	Lab analysis	Annually	0.0015	0.002	mg/l	N/A	DWS	-353%	No
22/02/2011	BH-5	Coliforms, Faecal	Lab analysis	Annually	4	4	cfus/100ml	N/A	DWS	100%	No
22/02/2011	BH-5	Coliforms, Total	Lab analysis	Annually	4	4	cfus/100ml	N/A	DWS	-400%	No
22/02/2011	BH-5	Copper	Lab analysis	Annually	0.007	0.007	mg/l	0.5	DWS	46%	No
22/02/2011	BH-5	Fluoride	Lab analysis	Annually	0.300	0.300	mg/l	N/A	DWS	0%	No
22/02/2011	BH-5	Lead	Lab analysis	Annually	0.005	0.005	mg/l	N/A	DWS	-43%	No
22/02/2011	BH-5	List I and II Substances	Lab analysis	Annually	0.010	0.010	mg/l	N/A	DWS	0%	No
22/02/2011	BH-5	Magnesium	Lab analysis	Annually	6.5	6.5	mg/l	N/A	DWS	-39%	No
22/02/2011	BH-5	Mercury	Lab analysis	Annually	0.001	0.001	mg/l	N/A	DWS	25%	No
22/02/2011	BH-5	Orthophosphates	Lab analysis	Annually	0.06	0.06	mg/l	N/A	DWS	-483%	No
27/06/2011	BH-5	PAHs (Total 17)	Lab analysis	Annually	-	-	mg/l	N/A	DWS	-	No
22/02/2011	BH-5	Phosphorus, Total	Lab analysis	Annually	0.625	0.625	mg/l	N/A	DWS	-396%	No
22/02/2011	BH-5	Total Solids	Lab analysis	Annually	347	347	mg/l	N/A	DWS	-17%	No
22/02/2011	BH-5	Zinc	Lab analysis	Annually	0.033	0.033	mg/l	N/A	DWS	59%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-6	Ammoniacal Nitrogen	Lab analysis	Quarterly	0.52	0.33	mg/l NH_4-N	N/A	DWS	12%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-6	Arsenic	Lab analysis	Quarterly	0.0025	0.0025	mg/l	N/A	DWS	43%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-6	Barium	Lab analysis	Quarterly	0.239	0.101	mg/l	N/A	DWS	37%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-6	Calcium	Lab analysis	Quarterly	101.9	91.1	mg/l	N/A	DWS	-2%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-6	Chloride	Lab analysis	Quarterly	22.8	21.1	mg/l	75	DWS	-5%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-6	Colour	Field analysis	Quarterly	Clear	Clear	N/A	N/A	DWS	0%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-6	Conductivity	Field analysis	Quarterly	0.70	0.63	mS/cm	1	DWS	-2%	No
22/02/2011	BH-6	Cyanide	Lab analysis	Annually	0.01	0.01	mg/l	N/A	DWS	-233%	No

22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-6	Dissolved Oxygen	Field analysis	Quarterly	2.54	1.09	mg/l	N/A	DWS	-452%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-6	Iron	Lab analysis	Quarterly	0.02	0.02	mg/l	N/A	DWS	-1115%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-6	Level, Water	Field analysis	Quarterly	117.31	117.31	mOD	N/A	DWS	0%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-6	Manganese	Lab analysis	Quarterly	0.218	0.188	mg/l	N/A	DWS	-9%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-6	Odour	Field analysis	Quarterly	None	None	N/A	N/A	DWS	0%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-6	pH	Field analysis	Quarterly	7.6	7.3	pH	6<pH<9	DWS	-1%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-6	Phenols, Total	Lab analysis	Quarterly	0.15	0.11	mg/l	0.1	DWS	-27%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-6	Potassium	Lab analysis	Quarterly	6.80	5.62	mg/l	N/A	DWS	11%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-6	Sodium	Lab analysis	Quarterly	27.30	19.53	mg/l	80	DWS	-18%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-6	Sulphate	Lab analysis	Quarterly	59.50	30.20	mg/l	150	DWS	3%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-6	Temperature	Field analysis	Quarterly	12.60	8.83	°C	N/A	DWS	-13%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-6	Total Organic Carbon	Lab analysis	Quarterly	9	5	mg/l	50	DWS	-129%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-6	Total Oxidized Nitrogen	Lab analysis	Quarterly	0.4	0.2	mg/l	N/A	DWS	-24%	No
22/02/2011	BH-6	Boron	Lab analysis	Annually	0.105	0.105	mg/l	N/A	DWS	44%	No

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22/02/2011	BH-6	Cadmium	Lab analysis	Annually	0.0005	0.0005	mg/l	0.004	DWS	66%	No
22/02/2011	BH-6	Chromium, Total	Lab analysis	Annually	0.0015	0.0015	mg/l	N/A	DWS	-72%	No
22/02/2011	BH-6	Coliforms, Faecal	Lab analysis	Annually	0	0	cfus/100ml	N/A	DWS	0%	No
22/02/2011	BH-6	Coliforms, Total	Lab analysis	Annually	0	0	cfus/100ml	N/A	DWS	-1100%	No
22/02/2011	BH-6	Copper	Lab analysis	Annually	0.007	0.007	mg/l	0.5	DWS	38%	No
22/02/2011	BH-6	Fluoride	Lab analysis	Annually	0.4	0.3	mg/l	N/A	DWS	21%	No
22/02/2011	BH-6	Lead	Lab analysis	Annually	0.005	0.005	mg/l	N/A	DWS	38%	No
22/02/2011	BH-6	List I and II Substances	Lab analysis	Annually	0.01	0.01	mg/l	N/A	DWS	0%	No
22/02/2011	BH-6	Magnesium	Lab analysis	Annually	18.4	18.0	mg/l	N/A	DWS	-1%	No
22/02/2011	BH-6	Mercury	Lab analysis	Annually	0.001	0.001	mg/l	N/A	DWS	36%	No
22/02/2011	BH-6	Orthophosphates	Lab analysis	Annually	0.06	0.06	mg/l	N/A	DWS	24%	No
27/06/2011	BH-6	PAHs (Total 17)	Lab analysis	Annually	0.0003	0.0003	mg/l	N/A	DWS	-1583%	No
22/02/2011	BH-6	Phosphorus, Total	Lab analysis	Annually	0.02	0.02	mg/l	N/A	DWS	-73%	No
22/02/2011	BH-6	Total Solids	Lab analysis	Annually	358	358	mg/l	N/A	DWS	26%	No
22/02/2011	BH-6	Zinc	Lab analysis	Annually	0.015	0.015	mg/l	N/A	DWS	68%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-8	Ammoniacal Nitrogen	Lab analysis	Quarterly	0.98	0.74	mg/l NH_4-N	N/A	DWS	-416%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-8	Arsenic	Lab analysis	Quarterly	0.0025	0.0025	mg/l	N/A	DWS	40%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-8	Barium	Lab analysis	Quarterly	0.077	0.063	mg/l	N/A	DWS	-12%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-8	Calcium	Lab analysis	Quarterly	117.6	99.3	mg/l	N/A	DWS	1%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-8	Chloride	Lab analysis	Quarterly	74.5	55.8	mg/l	75	DWS	1%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-8	Colour	Field analysis	Quarterly	Brown - high sediment	Brown - high sediment	N/A	N/A	DWS	0%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-8	Conductivity	Field analysis	Quarterly	0.77	0.7125	mS/cm	1	DWS	-9%	No
22/02/2011	BH-8	Cyanide	Lab analysis	Annually	0.01	0.01	mg/l	N/A	DWS	-300%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-8	Dissolved Oxygen	Field analysis	Quarterly	4	1.8975	mg/l	N/A	DWS	-147%	No

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22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-8	Iron	Lab analysis	Quarterly	0.179	0.095	mg/l	N/A	DWS	-342%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-8	Level, Water	Field analysis	Quarterly	133.62	133.42	mOD	N/A	DWS	0%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-8	Manganese	Lab analysis	Quarterly	1.73	1.25	mg/l	N/A	DWS	-88%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-8	Odour	Field analysis	Quarterly	None	None	N/A	N/A	DWS	0%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-8	pH	Field analysis	Quarterly	7.3	6.9	pH	6<pH<9	DWS	4%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-8	Phenols, Total	Lab analysis	Quarterly	0.15	0.10	mg/l	0.1	DWS	-29%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-8	Potassium	Lab analysis	Quarterly	4.8	3.8	mg/l	N/A	DWS	-71%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-8	Sodium	Lab analysis	Quarterly	34.2	31.3	mg/l	80	DWS	5%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-8	Sulphate	Lab analysis	Quarterly	186.9	141.7	mg/l	150	DWS	10%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-8	Temperature	Field analysis	Quarterly	14.1	11.2	°C	N/A	DWS	2%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-8	Total Organic Carbon	Lab analysis	Quarterly	21	19	mg/l	50	DWS	-32%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-8	Total Oxidized Nitrogen	Lab analysis	Quarterly	1.2	0.63	mg/l	N/A	DWS	12%	No
22/02/2011	BH-8	Boron	Lab analysis	Annually	0.047	0.047	mg/l	N/A	DWS	74%	No
22/02/2011	BH-8	Cadmium	Lab analysis	Annually	0.0006	0.0006	mg/l	0.004	DWS	-383%	No
22/02/2011	BH-8	Chromium, Total	Lab analysis	Annually	0.0015	0.0015	mg/l	N/A	DWS	-10927%	No
22/02/2011	BH-8	Coliforms, Faecal	Lab analysis	Annually	0	0	cfus/100ml	N/A	DWS	-59900%	No
22/02/2011	BH-8	Coliforms, Total	Lab analysis	Annually	0	0	cfus/100ml	N/A	DWS	-125900%	No

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22/02/2011	BH-8	Copper	Lab analysis	Annually	0.008	0.008	mg/l	0.5	DWS	-63%	No
22/02/2011	BH-8	Fluoride	Lab analysis	Annually	0.3	0.3	mg/l	N/A	DWS	0%	No
22/02/2011	BH-8	Lead	Lab analysis	Annually	0.005	0.005	mg/l	N/A	DWS	40%	No
22/02/2011	BH-8	List I and II Substances	Lab analysis	Annually	0.01	0.01	mg/l	N/A	DWS	0%	No
22/02/2011	BH-8	Magnesium	Lab analysis	Annually	11.4	11.4	mg/l	N/A	DWS	13%	No
22/02/2011	BH-8	Mercury	Lab analysis	Annually	0.001	0.001	mg/l	N/A	DWS	25%	No
22/02/2011	BH-8	Orthophosphates	Lab analysis	Annually	0.06	0.06	mg/l	N/A	DWS	0%	No
27/06/2011	BH-8	PAHs (Total 17)	Lab analysis	Annually	0.0003	0.0003	mg/l	N/A	DWS	-1583%	No
22/02/2011	BH-8	Phosphorus, Total	Lab analysis	Annually	1.96	1.96	mg/l	N/A	DWS	-706%	No
22/02/2011	BH-8	Total Solids	Lab analysis	Annually	864	864	mg/l	N/A	DWS	-473%	No
22/02/2011	BH-8	Zinc	Lab analysis	Annually	0.01	0.01	mg/l	N/A	DWS	55%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-9	Ammoniacal Nitrogen	Lab analysis	Quarterly	0.11	0.09	mg/l NH_4-N	N/A	DWS	-53%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-9	Arsenic	Lab analysis	Quarterly	0.0053	0.0033	mg/l	N/A	DWS	-133%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-9	Barium	Lab analysis	Quarterly	0.017	0.0068	mg/l	N/A	DWS	-893%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-9	Calcium	Lab analysis	Quarterly	92.9	88.7	mg/l	N/A	DWS	4%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-9	Chloride	Lab analysis	Quarterly	25.4	24.1	mg/l	75	DWS	4%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-9	Colour	Field analysis	Quarterly	Brown (sediment)	Brown (sediment)	N/A	N/A	DWS	0%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-9	Conductivity	Field analysis	Quarterly	0.52	0.5125	mS/cm	1	DWS	-2%	No
22/02/2011	BH-9	Cyanide	Lab analysis	Annually	0.01	0.01	mg/l	N/A	DWS	-300%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-9	Dissolved Oxygen	Field analysis	Quarterly	6.0	2.4	mg/l	N/A	DWS	-34%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-9	Iron	Lab analysis	Quarterly	0.031	0.023	mg/l	N/A	DWS	21%	No

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22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-9	Level, Water	Field analysis	Quarterly	107.47	105.42	mOD	N/A	DWS	0%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-9	Manganese	Lab analysis	Quarterly	0.101	0.065	mg/l	N/A	DWS	-58%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-9	Odour	Field analysis	Quarterly	None	None	N/A	N/A	DWS	0%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-9	pH	Field analysis	Quarterly	6.9	6.9	pH	6<pH<9	DWS	-2%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-9	Phenols, Total	Lab analysis	Quarterly	0.15	0.10	mg/l	0.1	DWS	-12%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-9	Potassium	Lab analysis	Quarterly	0.70	0.63	mg/l	N/A	DWS	0%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-9	Sodium	Lab analysis	Quarterly	15.5	14.6	mg/l	80	DWS	3%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-9	Sulphate	Lab analysis	Quarterly	40.72	36.96	mg/l	150	DWS	-1%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-9	Temperature	Field analysis	Quarterly	12.4	11.0	°C	N/A	DWS	3%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-9	Total Organic Carbon	Lab analysis	Quarterly	11	8	mg/l	50	DWS	-38%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-9	Total Oxidized Nitrogen	Lab analysis	Quarterly	0.2	0.2	mg/l	N/A	DWS	-5%	No
22/02/2011	BH-9	Boron	Lab analysis	Annually	0.038	0.038	mg/l	N/A	DWS	68%	No
22/02/2011	BH-9	Cadmium	Lab analysis	Annually	0.0005	0.0005	mg/l	0.004	DWS	-410%	No
22/02/2011	BH-9	Chromium, Total	Lab analysis	Annually	0.0015	0.0015	mg/l	N/A	DWS	-40%	No
22/02/2011	BH-9	Coliforms, Faecal	Lab analysis	Annually	0	0	cfus/100ml	N/A	DWS	0%	No
22/02/2011	BH-9	Coliforms, Total	Lab analysis	Annually	0	0	cfus/100ml	N/A	DWS	-2300%	No
22/02/2011	BH-9	Copper	Lab analysis	Annually	0.007	0.007	mg/l	0.5	DWS	21%	No
22/02/2011	BH-9	Fluoride	Lab analysis	Annually	0.3	0.3	mg/l	N/A	DWS	0%	No
22/02/2011	BH-9	Lead	Lab analysis	Annually	0.005	0.005	mg/l	N/A	DWS	20%	No

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22/02/2011	BH-9	List I and II Substances	Lab analysis	Annually	0	0	mg/l	N/A	DWS	0%	No
22/02/2011	BH-9	Magnesium	Lab analysis	Annually	4.3	4.3	mg/l	N/A	DWS	-26%	No
22/02/2011	BH-9	Mercury	Lab analysis	Annually	0.001	0.001	mg/l	N/A	DWS	25%	No
22/02/2011	BH-9	Orthophosphates	Lab analysis	Annually	0.06	0.06	mg/l	N/A	DWS	0%	No
27/06/2011	BH-9	PAHs (Total 17)	Lab analysis	Annually	0.0003	0.0003	mg/l	N/A	DWS	-1583%	No
22/02/2011	BH-9	Phosphorus, Total	Lab analysis	Annually	0.387	0.387	mg/l	N/A	DWS	60%	No
22/02/2011	BH-9	Total Solids	Lab analysis	Annually	348	348	mg/l	N/A	DWS	4%	No
22/02/2011	BH-9	Zinc	Lab analysis	Annually	0.011	0.011	mg/l	N/A	DWS	27%	No
											No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-11A	Ammoniacal Nitrogen	Lab analysis	Quarterly	0.29	0.23	mg/l NH_4-N	N/A	DWS	4%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-11A	Arsenic	Lab analysis	Quarterly	0.027	0.019	mg/l	N/A	DWS	-39%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-11A	Barium	Lab analysis	Quarterly	0.035	0.025	mg/l	N/A	DWS	-16%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-11A	Calcium	Lab analysis	Quarterly	101.5	90.3	mg/l	N/A	DWS	1%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-11A	Chloride	Lab analysis	Quarterly	25.0	23.4	mg/l	75	DWS	0%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-11A	Colour	Field analysis	Quarterly	Cloudy	Clear	N/A	N/A	DWS	0%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-11A	Conductivity	Field analysis	Quarterly	0.62	0.48	mS/cm	1	DWS	-22%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-11A	Dissolved Oxygen	Field analysis	Quarterly	4.0	1.9	mg/l	N/A	DWS	-89%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-11A	Iron	Lab analysis	Quarterly	0.02	0.02	mg/l	N/A	DWS	-1340%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-11A	Level, Water	Field analysis	Quarterly	98.47	98.41	mOD	N/A	DWS	0%	No

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22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-11A	Manganese	Lab analysis	Quarterly	0.372	0.3556	mg/l	N/A	DWS	11%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-11A	Odour	Field analysis	Quarterly	None	None	N/A	N/A	DWS	0%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-11A	pH	Field analysis	Quarterly	7.9	7.3	pH	6<pH<9	DWS	0%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-11A	Phenols, Total	Lab analysis	Quarterly	0.15	0.11	mg/l	0.1	DWS	-27%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-11A	Potassium	Lab analysis	Quarterly	2.4	2.0	mg/l	N/A	DWS	5%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-11A	Sodium	Lab analysis	Quarterly	16.5	16.3	mg/l	80	DWS	3%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-11A	Sulphate	Lab analysis	Quarterly	11.67	9.52	mg/l	150	DWS	-18%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-11A	Temperature	Field analysis	Quarterly	13.6	11.1	°C	N/A	DWS	12%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-11A	Total Organic Carbon	Lab analysis	Quarterly	9	4.4	mg/l	50	DWS	-150%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-11A	Total Oxidized Nitrogen	Lab analysis	Quarterly	0.2	0.2	mg/l	N/A	DWS	4%	No
22/02/2011	BH-11A	Boron	Lab analysis	Annually	0.053	0.053	mg/l	N/A	DWS	65%	No
22/02/2011	BH-11A	Cadmium	Lab analysis	Annually	0.005	0.005	mg/l	0.004	DWS	67%	No
22/02/2011	BH-11A	Chromium, Total	Lab analysis	Annually	0.0015	0.0015	mg/l	N/A	DWS	-73%	No
22/02/2011	BH-11A	Coliforms, Faecal	Lab analysis	Annually	0	0	cfus/100ml	N/A	DWS	0%	No
22/02/2011	BH-11A	Coliforms, Total	Lab analysis	Annually	0	0	cfus/100ml	N/A	DWS	-500%	No
22/02/2011	BH-11A	Copper	Lab analysis	Annually	0.007	0.007	mg/l	0.5	DWS	38%	No
22/02/2011	BH-11A	Cyanide	Lab analysis	Annually	0.01	0.01	mg/l	N/A	DWS	-233%	No
22/02/2011	BH-11A	Fluoride	Lab analysis	Annually	0.6	0.48	mg/l	N/A	DWS	15%	No
22/02/2011	BH-11A	Lead	Lab analysis	Annually	0.005	0.005	mg/l	N/A	DWS	47%	No
22/02/2011	BH-11A	List I and II Substances	Lab analysis	Annually	0.01	0.01	mg/l	N/A	DWS	0%	No
22/02/2011	BH-11A	Magnesium	Lab analysis	Annually	12.2	12.05	mg/l	N/A	DWS	2%	No
22/02/2011	BH-11A	Mercury	Lab analysis	Annually	0.001	0.001	mg/l	N/A	DWS	36%	No

22/02/2011	BH-11A	Orthophosphates	Lab analysis	Annually	0.06	0.055	mg/l	N/A	DWS	14%	No
27/06/2011	BH-11A	PAHs (Total 17)	Lab analysis	Annually	0.0003	0.0003	mg/l	N/A	DWS	-1583%	No
22/02/2011	BH-11A	Phosphorus, Total	Lab analysis	Annually	0.02	0.02	mg/l	N/A	DWS	-1570%	No
22/02/2011	BH-11A	Total Solids	Lab analysis	Annually	348	348	mg/l	N/A	DWS	-121%	No
22/02/2011	BH-11A	Zinc	Lab analysis	Annually	0.018	0.018	mg/l	N/A	DWS	40%	No
							SELECT				SELECT

.+ where average indicates arithmetic mean

.++ maximum concentration indicates the maximum measured concentration from all monitoring results produced during the reporting year

Table 2: Downgradient Groundwater monitoring results

Date of sampling	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration	Average Concentration	unit	GTV's*	SELECT**	% change in average concentration previous year +/-	Upward trend in yearly average pollutant concentration over last 5 years of monitoring data
							SELECT				SELECT
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-4A	Ammoniacal Nitrogen	Lab analysis	Quarterly	0.03	0.03	mg/l NH_4-N	N/A	DWS	-83%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-4A	Arsenic	Lab analysis	Quarterly	0.0065	0.0035	mg/l	N/A	DWS	74%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-4A	Barium	Lab analysis	Quarterly	0.046	0.027	mg/l	N/A	DWS	26%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-4A	Calcium	Lab analysis	Quarterly	103.1	88.5	mg/l	N/A	DWS	-21%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-4A	Chloride	Lab analysis	Quarterly	21.6	17.2	mg/l	75	DWS	-42%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-4A	Colour	Field analysis	Quarterly	Clear	Clear	N/A	N/A	DWS	0%	No

Groundwater /Contaminated land summary report											
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-4A	Conductivity	Field analysis	Quarterly	0.62	0.565	mS/cm	1	DWS	-17%	No
22/02/2011	BH-4A	Cyanide	Lab analysis	Annually	0.01	0.01	mg/l	N/A	DWS	-300%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-4A	Dissolved Oxygen	Field analysis	Quarterly	4.0	1.6	mg/l	N/A	DWS	-119%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-4A	Iron	Lab analysis	Quarterly	0.02	0.02	mg/l	N/A	DWS	13%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-4A	Level, Water	Field analysis	Quarterly	91.96	91.96	mOD	N/A	DWS	0%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-4A	Manganese	Lab analysis	Quarterly	0.37	0.26	mg/l	N/A	DWS	34%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-4A	Odour	Field analysis	Quarterly	None	None	N/A	N/A	DWS	None	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-4A	pH	Field analysis	Quarterly	7.7	7.4	pH	6<pH<9	DWS	1%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-4A	Phenols, Total	Lab analysis	Quarterly	0.15	0.10	mg/l	0.1	DWS	-30%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-4A	Potassium	Lab analysis	Quarterly	1.5	1.3	mg/l	N/A	DWS	5%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-4A	Sodium	Lab analysis	Quarterly	15.2	11.6	mg/l	80	DWS	10%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-4A	Sulphate	Lab analysis	Quarterly	31.61	24.45	mg/l	150	DWS	-101%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-4A	Temperature	Field analysis	Quarterly	16.1	12.0	°C	N/A	DWS	18%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-4A	Total Organic Carbon	Lab analysis	Quarterly	8.0	5.3	mg/l	50	DWS	-26%	No

Groundwater /Contaminated land summary report											
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-4A	Total Oxidized Nitrogen	Lab analysis	Quarterly	0.2	0.2	mg/l	N/A	DWS	-394%	No
22/02/2011	BH-4A	Boron	Lab analysis	Annually	0.049	0.049	mg/l	N/A	DWS	76%	No
22/02/2011	BH-4A	Cadmium	Lab analysis	Annually	0.0005	0.0005	mg/l	0.004	DWS	10%	No
22/02/2011	BH-4A	Chromium, Total	Lab analysis	Annually	0.0015	0.0015	mg/l	N/A	DWS	47%	No
22/02/2011	BH-4A	Coliforms, Faecal	Lab analysis	Annually	0	0	cfus/100ml	N/A	DWS	0%	No
22/02/2011	BH-4A	Coliforms, Total	Lab analysis	Annually	0	0	cfus/100ml	N/A	DWS	-100%	No
22/02/2011	BH-4A	Copper	Lab analysis	Annually	0.007	0.007	mg/l	0.5	DWS	29%	No
22/02/2011	BH-4A	Fluoride	Lab analysis	Annually	0.3	0.3	mg/l	N/A	DWS	0%	No
22/02/2011	BH-4A	Lead	Lab analysis	Annually	0.005	0.005	mg/l	N/A	DWS	30%	No
22/02/2011	BH-4A	List I and II Substances	Lab analysis	Annually	0.01	0.01	mg/l	N/A	DWS	0%	No
22/02/2011	BH-4A	Magnesium	Lab analysis	Annually	9.2	9.2	mg/l	N/A	DWS	-5%	No
22/02/2011	BH-4A	Mercury	Lab analysis	Annually	0.001	0.001	mg/l	N/A	DWS	25%	No
22/02/2011	BH-4A	Orthophosphates	Lab analysis	Annually	0.93	0.93	mg/l	N/A	DWS	89%	No
27/06/2011	BH-4A	PAHs (Total 17)	Lab analysis	Annually	0.0003	0.0003	mg/l	N/A	DWS	-1583%	No
22/02/2011	BH-4A	Phosphorus, Total	Lab analysis	Annually	0.069	0.069	mg/l	N/A	DWS	19%	No
22/02/2011	BH-4A	Total Solids	Lab analysis	Annually	347	347	mg/l	N/A	DWS	-12%	No
22/02/2011	BH-4A	Zinc	Lab analysis	Annually	0.004	0.004	mg/l	N/A	DWS	0%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-10A	Ammoniacal Nitrogen	Lab analysis	Quarterly	0.03	0.03	mg/l NH_4-N	N/A	DWS	-8%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-10A	Arsenic	Lab analysis	Quarterly	0.0025	0.0025	mg/l	N/A	DWS	21%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-10A	Barium	Lab analysis	Quarterly	0.015	0.014	mg/l	N/A	DWS	-32%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-10A	Calcium	Lab analysis	Quarterly	213.8	179.2	mg/l	N/A	DWS	-5%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-10A	Chloride	Lab analysis	Quarterly	38.8	35.1	mg/l	75	DWS	13%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-10A	Colour	Field analysis	Quarterly	Cloudy	Clear	N/A	N/A	DWS	0%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-10A	Conductivity	Field analysis	Quarterly	1.15	0.93	mS/cm	1	DWS	-7%	No
22/02/2011	BH-10A	Cyanide	Lab analysis	Annually	0.01	0.01	mg/l	N/A	DWS	-200%	No

	Groundwater /Contaminated land summary report										
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-10A	Dissolved Oxygen	Field analysis	Quarterly	11.0	7.9	mg/l	N/A	DWS	12%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-10A	Iron	Lab analysis	Quarterly	0.02	0.02	mg/l	N/A	DWS	23%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-10A	Level, Water	Field analysis	Quarterly	100.54	99.97	mOD	N/A	DWS	0%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-10A	Manganese	Lab analysis	Quarterly	0.002	0.002	mg/l	N/A	DWS	-645%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-10A	Odour	Field analysis	Quarterly	None	None	N/A	N/A	DWS	0%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-10A	pH	Field analysis	Quarterly	7.8	7.6	pH	6<pH<9	DWS	-1%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-10A	Phenols, Total	Lab analysis	Quarterly	0.15	0.10	mg/l	0.1	DWS	-72%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-10A	Potassium	Lab analysis	Quarterly	3.1	2.8	mg/l	N/A	DWS	10%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-10A	Sodium	Lab analysis	Quarterly	29.3	20.3	mg/l	80	DWS	26%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-10A	Sulphate	Lab analysis	Quarterly	401.65	319.92	mg/l	150	DWS	-14%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-10A	Temperature	Field analysis	Quarterly	13.1	11.5	°C	N/A	DWS	10%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-10A	Total Organic Carbon	Lab analysis	Quarterly	10.0	7.8	mg/l	50	DWS	-13%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-10A	Total Oxidized Nitrogen	Lab analysis	Quarterly	0.9	0.7	mg/l	N/A	DWS	-62%	No
22/02/2011	BH-10A	Boron	Lab analysis	Annually	0.054	0.054	mg/l	N/A	DWS	69%	No

	Groundwater /Contaminated land summary report										
22/02/2011	BH-10A	Cadmium	Lab analysis	Annually	0.0005	0.0005	mg/l	0.004	DWS	40%	No
22/02/2011	BH-10A	Chromium, Total	Lab analysis	Annually	0.0015	0.0015	mg/l	N/A	DWS	31%	No
22/02/2011	BH-10A	Coliforms, Faecal	Lab analysis	Annually	0	0	cfus/100ml	N/A	DWS	0%	No
22/02/2011	BH-10A	Coliforms, Total	Lab analysis	Annually	0	0	cfus/100ml	N/A	DWS	-5500%	No
22/02/2011	BH-10A	Copper	Lab analysis	Annually	0.007	0.007	mg/l	0.5	DWS	50%	No
22/02/2011	BH-10A	Fluoride	Lab analysis	Annually	0.3	0.19	mg/l	N/A	DWS	-5%	No
22/02/2011	BH-10A	Lead	Lab analysis	Annually	0.005	0.005	mg/l	N/A	DWS	57%	No
22/02/2011	BH-10A	List I and II Substances	Lab analysis	Annually			mg/l	N/A	DWS		No
22/02/2011	BH-10A	Magnesium	Lab analysis	Annually	15.6	14.65	mg/l	N/A	DWS	25%	No
22/02/2011	BH-10A	Mercury	Lab analysis	Annually	0.001	0.001	mg/l	N/A	DWS	48%	No
22/02/2011	BH-10A	Orthophosphates	Lab analysis	Annually	0.06	0.0325	mg/l	N/A	DWS	-43%	No
27/06/2011	BH-10A	PAHs (Total 17)	Lab analysis	Annually	0.0003	0.0003	mg/l	N/A	DWS	67%	No
22/02/2011	BH-10A	Phosphorus, Total	Lab analysis	Annually	0.136	0.136	mg/l	N/A	DWS	-144%	No
22/02/2011	BH-10A	Total Solids	Lab analysis	Annually	1024	1024	mg/l	N/A	DWS	59%	No
22/02/2011	BH-10A	Zinc	Lab analysis	Annually	0.009	0.009	mg/l	N/A	DWS	47%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-12	Ammoniacal Nitrogen	Lab analysis	Quarterly	0.9	0.28	mg/l NH_4-N	N/A	DWS	89%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-12	Arsenic	Lab analysis	Quarterly	0.0055	0.00325	mg/l	N/A	DWS	-214%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-12	Barium	Lab analysis	Quarterly	0.036	0.025	mg/l	N/A	DWS	84%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-12	Calcium	Lab analysis	Quarterly	40.3	22.9	mg/l	N/A	DWS	-86%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-12	Chloride	Lab analysis	Quarterly	9.6	6.3	mg/l	75	DWS	-248%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-12	Colour	Field analysis	Quarterly	Light brown	Light brown	N/A	N/A	DWS	0%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-12	Conductivity	Field analysis	Quarterly	0.2	0.1	mS/cm	1	DWS	-119%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-12	Dissolved Oxygen	Field analysis	Quarterly	8.0	3.5	mg/l	N/A	DWS	-133%	No

	Groundwater /Contaminated land summary report										
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-12	Iron	Lab analysis	Quarterly	0.02	0.02	mg/l	N/A	DWS	16%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-12	Level, Water	Field analysis	Quarterly	101.5	100.7	mOD	N/A	DWS	0%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-12	Manganese	Lab analysis	Quarterly	0.002	0.002	mg/l	N/A	DWS	6%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-12	Odour	Field analysis	Quarterly	None	None	N/A	N/A	DWS	0%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-12	pH	Field analysis	Quarterly	8.1	7.8	pH	6<pH<9	DWS	4%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-12	Phenols, Total	Lab analysis	Quarterly	0.15	0.10	mg/l	0.1	DWS	-13%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-12	Potassium	Lab analysis	Quarterly	4.1	3.0	mg/l	N/A	DWS	10%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-12	Sodium	Lab analysis	Quarterly	11.9	7.0	mg/l	80	DWS	-63%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-12	Sulphate	Lab analysis	Quarterly	9.81	4.18	mg/l	150	DWS	-177%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-12	Temperature	Field analysis	Quarterly	12.0	10.7	°C	N/A	DWS	6%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-12	Total Organic Carbon	Lab analysis	Quarterly	12.0	8.5	mg/l	50	DWS	24%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-12	Total Oxidized Nitrogen	Lab analysis	Quarterly	0.5	0.5	mg/l	N/A	DWS	-962%	No
22/02/2011	BH-12	Boron	Lab analysis	Annually	0.056	0.056	mg/l	N/A	DWS	79%	No
22/02/2011	BH-12	Cadmium	Lab analysis	Annually	0.0005	0.0005	mg/l	0.004	DWS	47%	No
22/02/2011	BH-12	Chromium, Total	Lab analysis	Annually	0.0015	0.0015	mg/l	N/A	DWS	-310%	No
22/02/2011	BH-12	Coliforms, Faecal	Lab analysis	Annually	0	0	cfus/100ml	N/A	DWS	0%	No
22/02/2011	BH-12	Coliforms, Total	Lab analysis	Annually	0	0	cfus/100ml	N/A	DWS	-100%	No

	Groundwater /Contaminated land summary report										
22/02/2011	BH-12	Copper	Lab analysis	Annually	0.007	0.007	mg/l	0.5	DWS	29%	No
22/02/2011	BH-12	Cyanide	Lab analysis	Annually	0.01	0.01	mg/l	N/A	DWS	-300%	No
22/02/2011	BH-12	Fluoride	Lab analysis	Annually	0.3	0.3	mg/l	N/A	DWS	0%	No
22/02/2011	BH-12	Lead	Lab analysis	Annually	0.005	0.005	mg/l	N/A	DWS	40%	No
22/02/2011	BH-12	List I and II Substances	Lab analysis	Annually	0.01	0.01	mg/l	N/A	DWS	0%	No
22/02/2011	BH-12	Magnesium	Lab analysis	Annually	0.7	0.7	mg/l	N/A	DWS	-386%	No
22/02/2011	BH-12	Mercury	Lab analysis	Annually	0.001	0.001	mg/l	N/A	DWS	25%	No
22/02/2011	BH-12	Orthophosphates	Lab analysis	Annually	0.06	0.06	mg/l	N/A	DWS	-517%	No
27/06/2011	BH-12	PAHs (Total 17)	Lab analysis	Annually	0.0003	0.0003	mg/l	N/A	DWS	-1733%	No
22/02/2011	BH-12	Phosphorus, Total	Lab analysis	Annually	0.511	0.511	mg/l	N/A	DWS	-272%	No
22/02/2011	BH-12	Total Solids	Lab analysis	Annually	358	358	mg/l	N/A	DWS	-183%	No
22/02/2011	BH-12	Zinc	Lab analysis	Annually	0.006	0.006	mg/l	N/A	DWS	50%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-13	Ammoniacal Nitrogen	Lab analysis	Quarterly	0.05	0.04	mg/l NH_4-N	N/A	DWS	6%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-13	Arsenic	Lab analysis	Quarterly	0.008	0.004	mg/l	N/A	DWS	35%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-13	Barium	Lab analysis	Quarterly	0.016	0.010	mg/l	N/A	DWS	16%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-13	Calcium	Lab analysis	Quarterly	60.8	51.0	mg/l	N/A	DWS	8%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-13	Chloride	Lab analysis	Quarterly	39.8	36.33	mg/l	75	DWS	-5%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-13	Colour	Field analysis	Quarterly	Brown (sediment)	Brown (sediment)	N/A	N/A	DWS	0%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-13	Conductivity	Field analysis	Quarterly	0.44	0.39	mS/cm	1	DWS	-3%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-13	Dissolved Oxygen	Field analysis	Quarterly	11.0	4.7	mg/l	N/A	DWS	-120%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-13	Iron	Lab analysis	Quarterly	0.02	0.02	mg/l	N/A	DWS	-5%	No

Groundwater /Contaminated land summary report											
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-13	Level, Water	Field analysis	Quarterly	112.86	112.21	mOD	N/A	DWS	2%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-13	Manganese	Lab analysis	Quarterly	0.002	0.002	mg/l	N/A	DWS	-69%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-13	Odour	Field analysis	Quarterly	None	None	N/A	N/A	DWS	0%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-13	pH	Field analysis	Quarterly	8.0	7.6	pH	6<pH<9	DWS	2%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-13	Phenols, Total	Lab analysis	Quarterly	0.15	0.10	mg/l	0.1	DWS	-29%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-13	Potassium	Lab analysis	Quarterly	2.1	1.9	mg/l	N/A	DWS	-7%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-13	Sodium	Lab analysis	Quarterly	18.5	17.4	mg/l	80	DWS	4%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-13	Sulphate	Lab analysis	Quarterly	17.44	11.80	mg/l	150	DWS	1%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-13	Temperature	Field analysis	Quarterly	11.4	10.5	°C	N/A	DWS	9%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-13	Total Organic Carbon	Lab analysis	Quarterly	10.0	6.3	mg/l	50	DWS	16%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-13	Total Oxidized Nitrogen	Lab analysis	Quarterly	10.8	9.2	mg/l	N/A	DWS	-17%	No
22/02/2011	BH-13	Boron	Lab analysis	Annually	0.012	0.012	mg/l	N/A	DWS	0%	No
22/02/2011	BH-13	Cadmium	Lab analysis	Annually	0.0005	0.0005	mg/l	0.004	DWS	40%	No
22/02/2011	BH-13	Chromium, Total	Lab analysis	Annually	0.0015	0.0015	mg/l	N/A	DWS	-747%	No
22/02/2011	BH-13	Coliforms, Faecal	Lab analysis	Annually	0	0	cfus/100ml	N/A	DWS	0%	No
22/02/2011	BH-13	Coliforms, Total	Lab analysis	Annually	0	0	cfus/100ml	N/A	DWS	-100%	No
22/02/2011	BH-13	Copper	Lab analysis	Annually	0.007	0.007	mg/l	0.5	DWS	29%	No
22/02/2011	BH-13	Cyanide	Lab analysis	Annually	0.01	0.01	mg/l	N/A	DWS	-300%	No
22/02/2011	BH-13	Fluoride	Lab analysis	Annually	0.3	0.3	mg/l	N/A	DWS	0%	No
22/02/2011	BH-13	Lead	Lab analysis	Annually	0.005	0.005	mg/l	N/A	DWS	30%	No

Groundwater /Contaminated land summary report											
22/02/2011	BH-13	List I and II Substances	Lab analysis	Annually	0.01	0.01	mg/l	N/A	DWS	0%	No
22/02/2011	BH-13	Magnesium	Lab analysis	Annually	3.9	3.9	mg/l	N/A	DWS	-1%	No
22/02/2011	BH-13	Mercury	Lab analysis	Annually	0.001	0.001	mg/l	N/A	DWS	25%	No
22/02/2011	BH-13	Orthophosphates	Lab analysis	Annually	0.81	0.81	mg/l	N/A	DWS	16%	No
27/06/2011	BH-13	PAHs (Total 17)	Lab analysis	Annually	0.0003	0.0003	mg/l	N/A	DWS	-1583%	No
22/02/2011	BH-13	Phosphorus, Total	Lab analysis	Annually	6.415	6.415	mg/l	N/A	DWS	88%	No
22/02/2011	BH-13	Total Solids	Lab analysis	Annually	4669	4669	mg/l	N/A	DWS	95%	No
22/02/2011	BH-13	Zinc	Lab analysis	Annually	0.003	0.003	mg/l	N/A	DWS	-100%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-14	Ammoniacal Nitrogen	Lab analysis	Quarterly	0.07	0.04	mg/l NH_4-N	N/A	DWS	24%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-14	Arsenic	Lab analysis	Quarterly	0.0026	0.0025	mg/l	N/A	DWS	64%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-14	Barium	Lab analysis	Quarterly	0.033	0.023	mg/l	N/A	DWS	52%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-14	Calcium	Lab analysis	Quarterly	32.2	26.5	mg/l	N/A	DWS	-17%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-14	Chloride	Lab analysis	Quarterly	30.5	21.4	mg/l	75	DWS	18%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-14	Colour	Field analysis	Quarterly	Light brown	Clear	N/A	N/A	DWS	0%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-14	Conductivity	Field analysis	Quarterly	0.28	0.24	mS/cm	1	DWS	-14%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-14	Dissolved Oxygen	Field analysis	Quarterly	8.00	3.54	mg/l	N/A	DWS	-126%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-14	Iron	Lab analysis	Quarterly	0.02	0.02	mg/l	N/A	DWS	15%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-14	Level, Water	Field analysis	Quarterly	99.65	99.00	mOD	N/A	DWS	0%	No

	Groundwater /Contaminated land summary report										
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-14	Manganese	Lab analysis	Quarterly	0.02	0.01	mg/l	N/A	DWS	-20%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-14	Odour	Field analysis	Quarterly	None	None	N/A	N/A	DWS	0%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-14	pH	Field analysis	Quarterly	7.8	7.0	pH	6<pH<9	DWS	5%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-14	Phenols, Total	Lab analysis	Quarterly	0.15	0.10	mg/l	0.1	DWS	-29%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-14	Potassium	Lab analysis	Quarterly	3.2	2.6	mg/l	N/A	DWS	-17%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-14	Sodium	Lab analysis	Quarterly	13.9	10.5	mg/l	80	DWS	9%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-14	Sulphate	Lab analysis	Quarterly	39.04	28.7	mg/l	150	DWS	-62%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-14	Temperature	Field analysis	Quarterly	12.6	10.7	°C	N/A	DWS	4%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-14	Total Organic Carbon	Lab analysis	Quarterly	11.0	8.5	mg/l	50	DWS	21%	No
22/02/2011; 27/06/2011; 14/09/2011; 01/12/2011	BH-14	Total Oxidized Nitrogen	Lab analysis	Quarterly	9.8	6.5	mg/l	N/A	DWS	21%	No
22/02/2011	BH-14	Boron	Lab analysis	Annually	0.069	0.069	mg/l	N/A	DWS	48%	No
22/02/2011	BH-14	Cadmium	Lab analysis	Annually	0.0006	0.0006	mg/l	0.004	DWS	-325%	No
22/02/2011	BH-14	Chromium, Total	Lab analysis	Annually	0.0018	0.0018	mg/l	N/A	DWS	-28%	No
22/02/2011	BH-14	Coliforms, Faecal	Lab analysis	Annually	1	1	cfus/100ml	N/A	DWS	0%	No
22/02/2011	BH-14	Coliforms, Total	Lab analysis	Annually	24	24	cfus/100ml	N/A	DWS	-108%	No
22/02/2011	BH-14	Copper	Lab analysis	Annually	0.011	0.011	mg/l	0.5	DWS	27%	No
22/02/2011	BH-14	Cyanide	Lab analysis	Annually	0.01	0.01	mg/l	N/A	DWS	-300%	No
22/02/2011	BH-14	Fluoride	Lab analysis	Annually	0.3	0.3	mg/l	N/A	DWS	0%	No
22/02/2011	BH-14	Lead	Lab analysis	Annually	0.005	0.005	mg/l	N/A	DWS	30%	No
22/02/2011	BH-14	List I and II Substances	Lab analysis	Annually	0.01	0.01	mg/l	N/A	DWS	0%	No
22/02/2011	BH-14	Magnesium	Lab analysis	Annually	1.8	1.8	mg/l	N/A	DWS	-111%	No
22/02/2011	BH-14	Mercury	Lab analysis	Annually	0.001	0.001	mg/l	N/A	DWS	25%	No

Groundwater /Contaminated land summary report											
22/02/2011	BH-14	Orthophosphates	Lab analysis	Annually	0.37	0.37	mg/l	N/A	DWS	84%	No
27/06/2011	BH-14	PAHs (Total 17)	Lab analysis	Annually	0.0003	0.0003	mg/l	N/A	DWS	-1583%	No
22/02/2011	BH-14	Phosphorus, Total	Lab analysis	Annually	0.124	0.124	mg/l	N/A	DWS	28%	No
22/02/2011	BH-14	Total Solids	Lab analysis	Annually	315	315	mg/l	N/A	DWS	30%	No
22/02/2011	BH-14	Zinc	Lab analysis	Annually	0.027	0.027	mg/l	N/A	DWS	0.259259259	No
							SELECT				SELECT

* please note exceedance of a relevant Groundwater threshold value (GTV) at a representative monitoring point does not indicate non compliance, an exceedance triggers further investigation to confirm whether the criteria for poor groundwater chemical status are being met.

**Depending on location of the site and proximity to other sensitive receptors alternative Receptor based Water Quality standards should be used in addition to the GTV e.g. if the site is close to surface water compare to Surface Water Environmental Quality Standards (SWEQS), If the site is close to a drinking water supply compare results to the Drinking Water Standards (DWS)

Surface water EQS | Groundwater regulations GTV's | Drinking water (private supply) standards | Drinking water (public supply) standards | Interim Guideline Values (IGV)

Table 3: Soil results

Groundwater /Contaminated land summary report							
Date of sampling	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration	Average Concentration	unit
Not applicable							SELECT
							SELECT

NB - The analysis of monitoring results ignores 'less than' (<) values, e.g. if the result for a given parameter was less than the limit of detection, say <0.05, the model herein assumes a result of 0.05. Results shown above are, therefore, in many cases reported as being higher than the actual result obtained.

Groundwater monitoring results also include results of EPA sampling on 28/3/11 at BH-6, BH-10A and BH-11A, plus MEHL duplicates.

Environmental Liability Risk Assessment

			Commentary
1	Is it a requirement of your licence to complete an ELRA?	Yes	
2	Has an initial ELRA been submitted to and approved by the Agency?	Yes	Submitted to EPA on 24/5/10 but no formal approval/response by the agency
3	Please enter the date of submission of the initial ELRA	24/05/2010	
4	Date of most recent substantial ELRA update	May-10	
5	What financial instrument/s do you have in place to cover unknown liabilities?	Insurance	
6	Has this financial instrument/s been verified by the Agency?	No	
7	What is the date of expiry of this financial instrument?	Renewed annually	
8	Date of next required review of the ELRA?	May-15	
9	Please list the top 10 risks assessed on your site in table 1 below		

Table 1 ELRA summary information

Click here to access EPA guidance on ELRA	Operational Risk Assessment Category	SELECT							
				Mitigation measures to reduce risk			ELRA		
Risk ID	Potential hazards	Environmental effect	Previous risk score	Action	Date of implementation of mitigation measures	Comment	Revised Risk score for current reporting year	ELRA costing	Does the current financial provision (FP) cover the risk score?
e.g									
SELECT			SELECT	SELECT			SELECT		SELECT
SELECT	The ELRA submitted to the Agency follows EPA guidance, the format of which does not correspond with the table outlined herein. Further information available on request.		SELECT	SELECT			SELECT		SELECT
SELECT			SELECT	SELECT			SELECT		SELECT
SELECT			SELECT	SELECT			SELECT		SELECT
SELECT			SELECT	SELECT			SELECT		SELECT
SELECT			SELECT	SELECT			SELECT		SELECT
SELECT			SELECT	SELECT			SELECT		SELECT
SELECT			SELECT	SELECT			SELECT		SELECT
SELECT			SELECT	SELECT			SELECT		SELECT
SELECT			SELECT	SELECT			SELECT		SELECT
SELECT			SELECT	SELECT			SELECT		SELECT
Total			SELECT	SELECT			SELECT		SELECT

Closure Restoration Aftercare Management Plan/ Restoration plan (CRAMP/RP)

1	Was a closure or restoration plan a requirement of the licence?	Yes	
2	Has a closure plan submission been approved by the Agency?	No	Submitted 24/5/10 but no formal approval by the Agency
3	What is the timescale for submission?		
4	What financial instrument do you have in place to cover known liabilities?	Cash in bank	
5	What is the date of expiry of this financial instrument?		
6	What is the status of implementation of the plan?		

Table 2 CRAMP summary information (NON Landfill)

Date of submission of plan	Risk category	Closure plan in place	Clean closure	Restoration Aftercare Management Plan	Change in Risk category since previous year	Increase in risk category	Does the current financial provision cover the risk score?	Value of current financial provision for site
Not Applicable	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	

Environmental Management Programme (EMP)/Continuous Improvement Programme

	Highlighted cells contain dropdown menu click to view		Additional Information
1	Do you maintain an Environmental Mangement System for the site. If yes, please detail in additional information	Yes	Independently certified to ISO 14001:2004
2	Does the EMS reference the most significant environmental aspects and associated impacts on-site	Yes	
3	Does the EMS maintain an Environmental Management Programme (EMP) as required in accordance with the licence requirements	Yes	
4	Do you maintain an environmental documentation/communication system to inform the public on environmental performance of the facility, as required by the licence	Yes	

Environmental Management Programme (EMP) report

Objective Category	Target	Status (% completed)	How target was progressed	Responsibility	Intermediate outcomes
Groundwater protection	Ongoing monitoring and measurement - water	100	Monitoring completed	Individual	Improved Environmental Management Practices
Noise reduction	Ongoing monitoring and measurement - noise	100	Monitoring completed	Individual	Improved Environmental Management Practices
Reduction of emissions to Air	Ongoing monitoring and measurement - dust	100	Monitoring completed	Individual	Improved Environmental Management Practices

Noise Monitoring Report Summary

1	Was noise monitoring a licence requirement for the AER period? If yes please fill in table 1 noise summary below	Yes
2	Was noise monitoring carried out using the EPA Guidance note including completion of the "Checklist for noise measurement report" included in the guidance note as table 6? Draft Noise Guidance	Not applicable (Guidance Note post-dates monitoring)
3	Does your site have a noise reduction plan	No
4	When was the noise reduction plan last updated?	
5	Have there been changes relevant to site noise emissions (e.g. plant or operational changes) since the last noise survey?	No

Table 1: Noise monitoring summary

Date of monitoring	Time period	Noise location (on site)	Noise sensitive location -NSL (if applicable)	LA_{eq}	LA_{90}	LA_{10}	LA_{max}	Tonal or Impulsive noise* (Y/N)	If tonal /impulsive noise was identified was 5dB penalty applied?	Comments (ex. main noise sources on site, & extraneous noise ex. road traffic)	Is site compliant with noise limits (day/evening/night)?
23/06/2011	09:00 - 13:00		N4	51	42	52		No	Not applicable		Yes
23/06/2011	09:00 - 13:00		N5	57	35	54		No		Road traffic on local road network + intermittent aircraft noise	Yes
23/06/2011	09:00 - 13:00		N6	56	36	52		No		Road traffic on local road network + intermittent aircraft noise	Yes
23/06/2011	09:00 - 13:00		N7	63	38	56		No		Road traffic on local road network + intermittent aircraft noise + motorway noise	Yes
23/06/2011	09:00 - 13:00		N8	64	34	56		No		Road traffic on local road network + intermittent aircraft noise + motorway noise	Yes

*Please ensure that a tonal analysis has been carried out as per guidance note NG4. These records must be maintained onsite for future inspection

If noise limits exceeded as a result of noise attributed to site activities, please choose the corrective action from the following options? SELECT

** please explain the reason for not taking action/resolution of noise issues?

Any additional comments? (less than 200 words)

Resource usage/ Energy Efficiency

			Additional information
1	When did the site carry out the most recent energy efficiency audit? Please list the recommendations in table 3 below	No formal audit completed; ongoing monitoring and management of energy use by licensee.	Cells D13 and E13 based on SEAI: 10.169kWh/litre of diesel
2	Is the site a member of any accredited programmes for reducing energy usage/water conservation such as the SEAI programme linked to the right? If yes please list them in additional information	SEAI - Large Industry Energy Network (LIEN)	
3	Where Fuel Oil is used in boilers on site is the sulphur content compliant with licence conditions? Please state percentage in additional information	Not applicable	

Table 1 Energy usage on site

Energy Use	Previous year kWh	Current year kWh	Production +/- % compared to previous reporting year**	Energy Consumption +/- % vs overall site production*
Total	215,083.37	195,330.82		-10.11%
Electricity	46,400.00	33,420.00		-38.84%
Fossil Fuels:				
Heavy Fuel Oil	168,683.37	161,910.82		-4.18%
Light Fuel Oil				
Natural gas				
Coal/Solid fuel				
Renewable energy generated on site				

* where consumption of energy can be compared to overall site production please enter this information as percentage increase or decrease compared to the previous reporting year.
** where site production information is available please enter percentage increase or decrease compared to previous year

Table 2 Water usage on site

Water use	Previous year m3/yr.	Current year m3/yr.	Production +/- % compared to previous reporting year**	Energy Consumption +/- % vs overall site production*
Groundwater				
Surface water				
Public supply	2,287.00	1,338.00		-70.93%
Total	2,287.00	1,338.00		-70.93%

* where consumption of water can be compared to overall site production please enter this information as percentage increase or decrease compared to the previous reporting year.
** where site production information is available please enter percentage increase or decrease compared to previous year

Table 3: Energy Audit finding recommendations

Date of audit	Recommendations	Description of Measures proposed	Origin of measures	Predicted energy savings %	Implementation date	Responsibility	Completion date	Status and comments
Not applicable			SELECT					
			SELECT					
			SELECT					

SECTION A-PRTR WASTE TRANSFERS TAB- TO BE COMPLETED BY ALL IPPC AND WASTE FACILITIES | PRTR facility logon. | dropdown list click to see options

SECTION B- WASTE ACCEPTED ONTO SITE-TO BE COMPLETED BY ALL IPPC AND WASTE FACILITIES

			Additional Information
1	Were any wastes accepted onto your site for recovery or disposal or treatment prior to recovery or disposal within the boundaries of your facility ?; (waste generated within your boundaries is to be captured through PRTR reporting) If yes please enter details in table 1 below	Yes	
2	Did your site have any rejected consignments of waste in the current reporting year? If yes please give a brief explanation in the additional information	No	
3	Was waste accepted onto your site that was generated outside the Republic of Ireland? If yes please state the quantity in tonnes in additional information	No	

Table 1 Details of waste accepted onto your site for recovery, disposal or treatment (do not include wastes generated at your site, as these will have been reported in your PRTR workbook)

	Licenced annual tonnage limit for your site (total tonnes/annum)	EWC code European Waste Catalogue EWC codes	Source of waste accepted	Description of waste accepted **Please enter an accurate and detailed description - which** European Waste Catalogue EWC codes	Quantity of waste accepted in current reporting year (tonnes)	Quantity of waste accepted in previous reporting year (tonnes)	Reduction/Increase over previous year +/ - %	Reason for reduction/increase from previous reporting year	Packaging Content (%)- only applies if the waste has a packaging component	Disposal/Recovery or treatment operation carried out at your site and the description of this operation	Quantity of waste remaining on site at the end of reporting year (tonnes)	Comments -
E.g.		120117	*12-WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS*	Waste blasting material other than those mentioned in 12 01 16	738.14	*0*	#DIV/0!		*0%*	*D5- Specially engineered landfill*		
		170101	*17- CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)*	Concrete	72.48	*79*			*0%*	*D5- Specially engineered landfill*		
		170107	*17- CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)*	Mixture of concrete, bricks, tiles and ceramics	16.70	*0*			*0%*	*D5- Specially engineered landfill*		
		170202	*17- CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)*	Glass	26.94	*67*			*0%*	*D5- Specially engineered landfill*		
		170302	*17- CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)*	Bituminous mixtures	572.50	*0*	#DIV/0!		*0%*	*D5- Specially engineered landfill*		
E.g.												
		170504	*17- CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)*	Soil & stones	20,692.48	*27991*			*0%*	*D5- Specially engineered landfill*		
		170504	*17- CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)*	Soil & stones	3,803.66	-			*0%*	*R5-Recycling/reclamation or other inorganic materials which includes soil celaning resuling in recovery of the soil and recycling of inorganic construction materials*	*1892*	*1,892 tonnes in storage.*
		170604	*17- CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)*	Insulation materials	13.70	*20*			*0%*	*D5- Specially engineered landfill*		
		190902	*19- WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE*	Sludges from water clarifi	1,029.66	*129*	698%		*0%*	*D5- Specially engineered landfill*		
		191205	*19- WASTES FROM WASTE MANAGEMENT FACILITIES,*	Glass	412.10	*329*	25%		*0%*	*D5- Specially engineered landfill*		
		100101	*10- WASTES FROM THERMAL PROCESSES*	Bottom/Boiler Ash	-	*309*			*0%*	*D5- Specially engineered landfill*		
		150107	*15- WASTE PACKAGING; ABSORBENTS, WIPING*	Glass packaging	-	*22*			*0%*	*D5- Specially engineered landfill*		

louiseod:
3803.66 recovered

	170506	*17- CONSTRUCTION AND DEMOLITION WASTES*	Dredging spoil	-	*1578*			*0%*	*D5- Specially engineered landfill*		
	170904	*17- CONSTRUCTION AND DEMOLITION WASTES*	Mixed C&D wastes	-	*103*			*0%*	*D5- Specially engineered landfill*		

SECTION C-TO BE COMPLETED BY ALL WASTE FACILITIES (waste transfer stations, Composters, Material recovery facilities etc) EXCEPT LANDFILL SITES

4	Is all waste processing infrastructure as required by your licence and approved by the Agency in place? If no please list waste processing infrastructure required onsite	Yes	NOT APPLICABLE
		SELECT	
5	Is all waste storage infrastructure as required by your licence and approved by the Agency in place? If no please list waste storage infrastructure required on site	N/A	
6	Does your facility have relevant nuisance controls in place?	N/A	
7	Do you have an odour management system in place for your facility? If no why?	N/A	
8	Do you maintain a sludge register on site?	N/A	

SECTION D-TO BE COMPLETED BY LANDFILL SITES ONLY

Table 2 Waste type and tonnage-landfill only

	Waste types permitted for disposal	Authorised/licenced annual intake for disposal (tpa)	Actual intake for disposal in reporting year (tpa)	Remaining licensed capacity at end of reporting year (m3)	Comments
e.g.	Inert waste	500,000	27,378		
e.g.				4,040,649	

Table 3 General information-Landfill only

Area ID	Date landfilling commenced	Date landfilling ceased	Currently landfilling	Private or Public Operated	Inert or non-hazardous	Predicted date to cease landfilling	Licence permits asbestos	Is there a separate cell for asbestos?	Accepted asbestos in reporting year	Total disposal area occupied by waste	Lined disposal area occupied by waste	Unlined area	Comments on liner type
										SELECT UNIT	SELECT UNIT	SELECT UNIT	
W0129-02	2003	Ongoing	Yes	Private	Inert	Dependent on input + planning requirements	No	No	No	30,650m^2	30,650m^2	0 (further areas of quarry to be developed as lined cells in line with phased restoration of the site).	Inert landfill liner in accordance with Landfill Directive 1999

Table 4 Environmental monitoring-landfill onl Landfill Manual-Monitoring Standards

Was meterological monitoring in compliance with Landfill Directive (LD) standard in reporting year +	Was leachate monitored in compliance with LD standard in reporting year	Was Landfill Gas monitored in compliance with LD standard in reporting year	Was SW monitored in compliance with LD standard in reporting year	Have GW trigger levels been established	Were emission limit values agreed with the Agency (ELVs)	Was topography of the site surveyed in reporting year	Has the statement under S53(A)(5) of WMA been submitted in reporting year	Comments
Yes	Yes	N/A	Yes	Yes	Yes	Yes	No	N/A

.+ please refer to Landfill Manual linked above for relevant Landfill Directive monitoring standards

Table 5 Capping-Landfill only

Area uncapped*	Area with temporary cap	Area with final cap to LD Standard m2 ha, a	Area capped other	Area with waste that should be permanently capped to date under licence	What materials are used in the cap	Comments
SELECT UNIT	SELECT UNIT					
	0	3600m2	Not applicable	Not applicable	Subsoil and topsoil	

*please note this includes daily cover area

Table 6 Leachate-Landfill only

9	Is leachate from your site treated in a Waste Water Treatment Plant?	No
10	Is leachate released to surface water? If yes please complete leachate mass load information below	No

Volume of leachate in reporting year(m3)	Leachate (BOD) mass load (kg/annum)	Leachate (COD) mass load (kg/annum)	Leachate (NH4) mass load (kg/annum)	Leachate (Chloride) mass load kg/annum	Leachate treatment on-site	Specify type of leachate treatment	Comments

Please ensure that all information reported in the landfill gas section is consistent with the Landfill Gas Survey submitted in conjunction with PRTR returns

Table 7 Landfill Gas-Landfill only

Gas Captured&Treated by LFG System m3	Power generated (MW / KWh)	Used on-site or to national grid	Was surface emissions monitoring performed during the reporting year?	Comments
Not applicable			SELECT	

Environmental Protection Agency

Guidance to completing the PRTR workbook

AER Returns Workbook

Version 1.1.13

REFERENCE YEAR	2011

1. FACILITY IDENTIFICATION

Parent Company Name	Murphy Environmental Hollywood Limited
Facility Name	Murphy Environmental Hollywood Limited
PRTR Identification Number	W0129
Licence Number	W0129-02

Waste or IPPC Classes of Activity

No.	class_name
3.5	Specially engineered landfill, including placement into lined discrete cells which are capped and isolated from one another and the environment.
3.1	Deposit on, in or under land (including landfill).
3.13	Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.
4.3	Recycling or reclamation of metals and metal compounds.
4.4	Recycling or reclamation of other inorganic materials.
Address 1	Hollywood Great
Address 2	Nags Head
Address 3	The Naul
Address 4	County Dublin
	Dublin
Country	Ireland
Coordinates of Location	-9.09708 52.6126
River Basin District	IEEA
NACE Code	3900
Main Economic Activity	Remediation activities and other waste management services
AER Returns Contact Name	Ken Rooney
AER Returns Contact Email Address	ken_rooney@murphyenvironmental.ie
AER Returns Contact Position	Facility Manager
AER Returns Contact Telephone Number	01-8433744
AER Returns Contact Mobile Phone Number	087-9824322
AER Returns Contact Fax Number	01-8433747
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	0
User Feedback/Comments	
Web Address	

2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
5(d)	Landfills
5(d) 50.1	Landfills General

3. SOLVENTS REGULATIONS (S.I. No. 543 of 2002)

Is it applicable?	No
Have you been granted an exemption ?	No
If applicable which activity class applies (as per Schedule 2 of the regulations) ?	
Is the reduction scheme compliance route being used ?	

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

RELEASES TO AIR					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD				QUANTITY		
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION B : REMAINING PRTR POLLUTANTS

RELEASES TO AIR					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD				QUANTITY		
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION C : REMAINING POLLUTANT EMISSIONS (As required in your Licence)

RELEASES TO AIR					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD				QUANTITY		
			Method Used					
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

Additional Data Requested from Landfill operators

For the purposes of the National Inventory on Greenhouse Gases, landfill operators are requested to provide summary data on landfill gas (Methane) flared or utilised on their facilities to accompany the figures for total methane generated. Operators should only report their Net methane (CH4) emission to the environment under T(total) KG/yr for Section A: Sector specific PRTR pollutants above. Please complete the table below:

Landfill: Murphy Environmental Hollywood Limited

Please enter summary data on the quantities of methane flared and / or utilised	**T (Total) kg/Year**	**M/C/E**	**Method Used**		**Facility Total Capacity m3 per hour**	
			Method Code	**Designation or Description**		
Total estimated methane generation (as per site model)	0.0				N/A	
Methane flared	0.0				0.0	(Total Flaring Capacity)
Methane utilised in engine/s	0.0				0.0	(Total Utilising Capacity)
Net methane emission (as reported in Section A above)	0.0				N/A	

4.2 RELEASES TO WATERS

Link to previous years emissions data

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

Data on ambient monitoring of storm/surface water or groundwater, conducted as part of your licence requirements, should NOT be submitted under AER / PRTR Reporting as this onl

RELEASES TO WATERS					Please enter all quantities in this section in KGs			
POLLUTANT					QUANTITY			
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION B : REMAINING PRTR POLLUTANTS

RELEASES TO WATERS					Please enter all quantities in this section in KGs			
POLLUTANT					QUANTITY			
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION C : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

RELEASES TO WATERS					Please enter all quantities in this section in KGs			
POLLUTANT					QUANTITY			
			Method Used					
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

4.3 RELEASES TO WASTEWATER OR SEWER

Link to previous years emissions data

SECTION A : PRTR POLLUTANTS

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD			QUANTITY			
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION B : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD			QUANTITY			
			Method Used					
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

4.4 RELEASES TO LAND

Link to previous years emissions data

SECTION A : PRTR POLLUTANTS

RELEASES TO LAND					Please enter all quantities in this section in KGs		
POLLUTANT		METHOD			QUANTITY		
			Method Used				
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year
					0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION B : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

RELEASES TO LAND					Please enter all quantities in this section in KGs		
POLLUTANT		METHOD			QUANTITY		
			Method Used				
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year
					0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

Please enter all quantities on this sheet in Tonnes

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility Non Haz Waste: Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used					
Within the Country	12 01 17	No	738.0	waste blasting material other than those mentioned in 12 01 16	D5	M	Weighed	Offsite in Ireland	MEHL,W0129-02	Hollywood Great,Nag's Head,Naul,Co. Dublin,Ireland		
Within the Country	17 01 01	No	72.0	concrete	D5	M	Weighed	Offsite in Ireland	MEHL,W0129-02	Hollywood Great,Nag's Head,Naul,Co. Dublin,Ireland		
Within the Country	17 01 07	No	16.7	mixture of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	D5	M	Weighed	Offsite in Ireland	MEHL,W0129-02	Hollywood Great,Nag's Head,Naul,Co. Dublin,Ireland		
Within the Country	17 02 02	No	26.94	glass	D5	M	Weighed	Offsite in Ireland	MEHL,W0129-02	Hollywood Great,Nag's Head,Naul,Co. Dublin,Ireland		
Within the Country	**17 03 02**	**No**	572.5	bituminous mixtures containing other than those mentioned in 17 03 01	D5	M	Weighed	Offsite in Ireland	MEHL,W0129-02	Hollywood Great,Nag's Head,Naul,Co. Dublin,Ireland		
Within the Country	17 05 04	No	20692.48	soil and stones other than those mentioned in 17 05 03	D5	M	Weighed	Offsite in Ireland	MEHL,W0129-02	Hollywood Great,Nag's Head,Naul,Co. Dublin,Ireland		
Within the Country	17 06 04	No	13.92	insulation materials other than those mentioned in 17 06 01 and 17 06 03	D5	M	Weighed	Offsite in Ireland	MEHL,W0129-02	Hollywood Great,Nag's Head,Naul,Co. Dublin,Ireland		
Within the Country	19 09 02	No	1029.66	sludges from water clarification	D5	M	Weighed	Offsite in Ireland	MEHL,W0129-02	Hollywood Great,Nag's Head,Naul,Co. Dublin,Ireland		
Within the Country	19 12 05	No	412.46	glass	D5	M	Weighed	Offsite in Ireland	MEHL,W0129-02	Hollywood Great,Nag's Head,Naul,Co. Dublin,Ireland		
Within the Country	17 05 04	No	3803.66	soil and stones other than those mentioned in 17 05 03	R5	M	Weighed	Offsite in Ireland	MEHL,W0129-02	Hollywood Great,Nag's Head,Naul,Co. Dublin,Ireland		

* Select a row by double-clicking the Description of Waste then click the delete button

Link to previous years waste data
Link to previous years waste summary data & percentage change