Energy International

ESB Moneypoint

ANNUAL ENVIRONMENTAL REPORT 2010

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Introduction

IPPC Licence Number ***605-02***

1.2 Name and Location

Electricity Supply Board
Moneypoint Generating Station
Kilrush
Co Clare.

1.3 Description of Activities

The production of energy in combustion plant, rated thermal input of which is greater than 50 MW.

Moneypoint Station has three identical generating units, each of which generate 305MW giving a total electricity generating capacity of 915MWe. These units are conventional, independent steam generating units , each with boiler, turbine and auxiliary plant. The boilers can operate on either coal or heavy fuel oil. In practice, HFO is only used as an occasional supplement for coal (approximately 30,000 tonnes of HFO pa . Approximately 2,000,000 tonnes of coal are consumed each year.

Note: This report covers Environmental activities for the period of January 2010 to December 2010.

We had Three EPA audits in 2010 and three Non-Compliances resulted from these with a further non conformance resulting due to emissions exceedences to water;

- Failure to control dust emissions within the site boundary
- Excessive Black Smoke emissions during start ups
- Exceedence to water

All non conformances were closed out and the EPA notified

We had two SGS ISO 14001 surveillance audits in 2010. In total we had one Non-conformance; Failure to close out Environmental jobs in CMMS. This was addressed over the year.

We successfully retained our accreditation following these audits.

1.4 Moneypoint Environmental Policy and Key Objectives.

Moneypoint Generating Station is part of ESB Power Generation Business Unit. It exports approximately 855 Megawatts of electricity produced from steam generation plant burning coal and /or heavy fuel oil. The station location, on the Shannon Estuary, encompasses areas of significant environmental importance. Environmental monitoring stations are strategically placed at external locations. These demonstrate that the operation of Moneypoint does not have a significant impact on the environment.

In Moneypoint, we believe that:

- The protection of the environment is an integral part of good business practice.
- We have a duty to behave as a good corporate citizen and we must produce electricity with the minimum impact on our neighbours.
- We must be committed to the minimisation of waste production and to the safe and efficient recycling of the ash produced as a product of combustion.
- We must produce electricity as efficiently as possible and optimise plant operation to minimise losses.
- We must be open in all our dealings and be responsive to the public in relation to our operations.

To this end, we will:

- Establish and regularly review environmental performance for our business to ensure full compliance with ESB standards and E.U./ National legislation on the environment.
- Take account of environmental considerations in all planning and decision making.
- Review our environmental programme annually to ensure continual improvement in our environmental performance.
- Operate according to IPCL No: 605-02 (issued on 4/2/04)
- Develop and maintain an Environmental Management System to ISO 14001.
- Develop and regularly review management processes, operational procedures and audit capabilities to ensure that the systems put in place to prevent environmental damage function effectively.
- Put in place systems to reduce waste production and to monitor and ensure the safe disposal of waste produced.
- Put in place systems and resources to minimise the risk of environmental accidents.
- Draw up emergency response plans to deal with accidental pollution.
- Ensure that suppliers of goods and services are considerate of the environmental impact of their dealings with Moneypoint by advising them of our environmental policy and the environmental standards required of them.
- Seek to actively promote environmental awareness among our staff.
- Provide the necessary training and support for staff on environmental matters.
- Publicly report on an annual basis on our environmental performance.
- Record and respond swiftly to all complaints on environmental matters.
- This policy has corporate body endorsement.

Signed: Glenn Pope
Station Manager

1.5 Environmental Management Structure and Responsibility

Environmental Management is fully integrated into all aspects of management on site. The management structure is shown in figure 1.1. The Station Chemist is the Environmental Co-ordinator and is responsible for the co-ordination of all environmental activity at the station. The Environmental Co-ordinator along with the environmental specialist works with the management team and environmental management group to ensure that:

- The station complies with or betters the requirements of any environmental provisions specified under its IPC licence, other licences, planning permission and environmental legislation.
- The Station's EMS is operated and maintained to the required standard.
- By way of audit and review cycle, the EMS is effective, is adaptive to changing circumstances and is delivering continuous improvement.

1.6 Organisational Chart

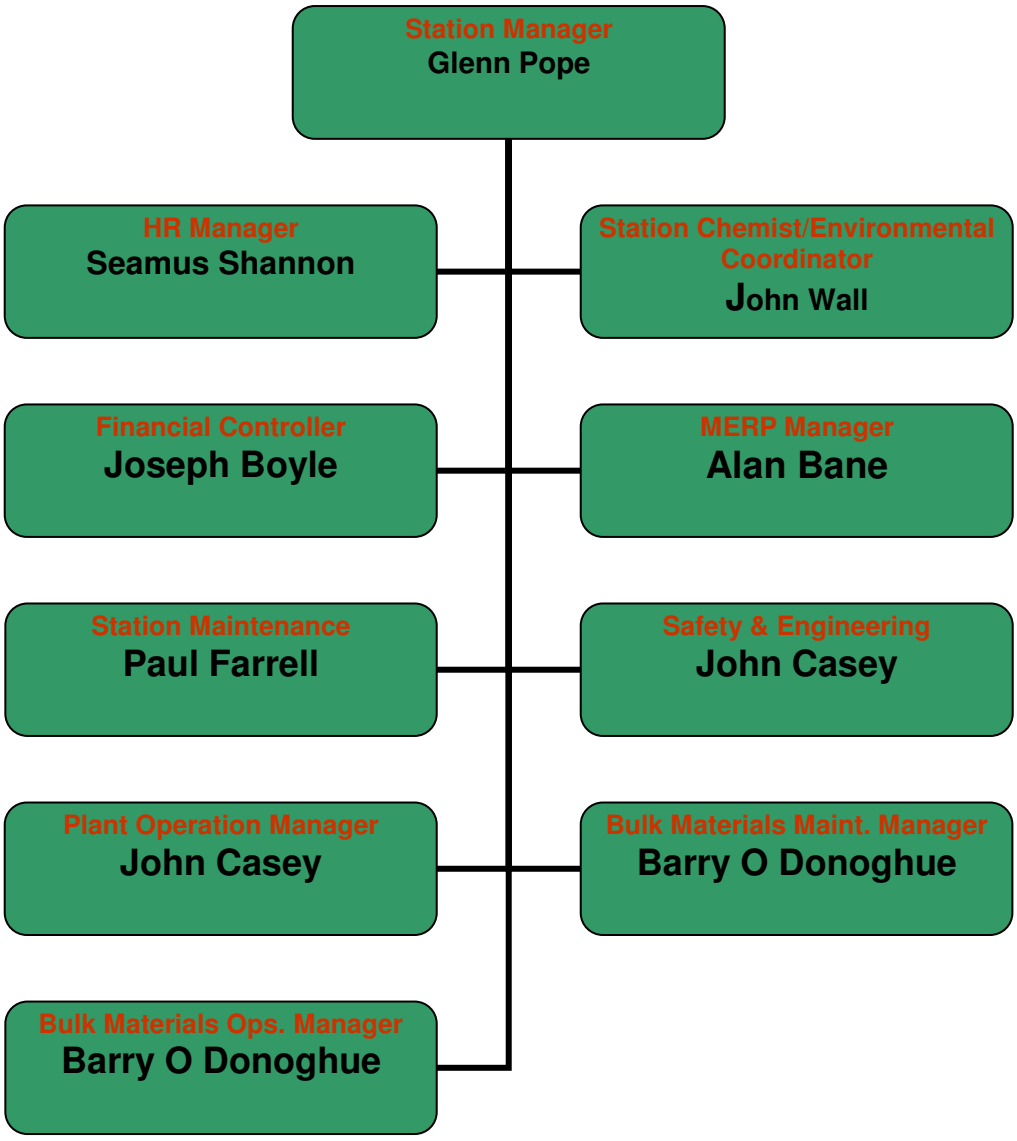


FIGURE 1.1

3 Emissions to Water

ESB Moneypoint has ten licensed emission points discharging to the Shannon Estuary.

- SW1 Ash Disposal Area – Surface Drain
- SW2 Surface Drain No 2
- SW3 Foul Drain No 1
- SW4 Surface Drain No 3
- SW4A Band Screen Wash Water
- SW5 Surface Drain No 4
- SW6 Surface Drain No 5
- SW7 Surface Drain No 6
- SW8 Cooling Water Outfall
- SW9 Surface Drain No 9
- SW10 Foul Drain No 2
- SW11 Foul Drain No 11
- SW13 Surface Drain No 8
- SW14 Coal yard FGD lagoon

Drawing Ref: Station Drains MP325727 Appendix 4

Monitoring of these emission points is carried out in accordance with Schedule 2(iii) of Money points IPC license. A summary of the monitoring results for emissions to water at each of the above emission points is presented in the following tables.
The analytical data contained in the following tables has been generated by completing a routine discharge point sampling and analysis programme. The analysis is completed by a combination of ESB laboratory staff and contract laboratories. A database is maintained on-site from which the summary data has been extracted.

3.1 Surface discharges to water

SW1: This discharge point collects water from the ash Storage area located to the north of the main station.

	Q1	Q2	Q3	Q4	Limits
pH	6.3	6.5	7.4	6.9	6-10
SS mg/l	0	0	3.4	0	100
Conductivity	1008	1150	2120	7870	
Min oil	0	0	0	0	20ppm

SW2: This discharge point collects water from unit 3 sample rack, unit 3 blow down tank and the area north east of the waste storage compound. There is also surface water from north side of the boilers between the main plant and the FGD plant.

	Q1	Q2	Q3	Q4	Limits
pH	7.9	8.8	8.1	7.8	6-10
SS mg/l	50	9.2	55	51	100
Conductivity	331	363	1400	396	
Min oil	0.2	<0.2	<0.01	<0.25	20ppm

SW 3: This discharge point manages water from the temporary canteen septic tank**.**

	Q1	Q2	Q3	Q4	Limits
pH					6-10
SS mg/l	2.6	Nf	Nf	Nf	100
Conductivity					
Min oil					20ppm

SW 4: This discharge point collects water from the band screen wash water discharge and the area around the hydrogen plant located to the south

	Q1	Q2	Q3	Q4	Limits
SS mg/l	No flow	No flow	No flow	No flow	100

SW 5: This discharge point collects water from the area around unit 3 cascade building sump and surrounding surface drains. The cascade sump captures drains associated with the turbine hall and due to its position below sea level is a pumped drainage system

	Q1	Q2	Q3	Q4	Limits
pH	6.7	nf	nf	nf	6-10
SS mg/l	1.6				100
Conductivity	7				
Min oil	-				20ppm

SW 6: This discharge point collects water from the area around units 1 and 2 cascade buildings and associated surface drains. The cascade sump captures drains associated with the turbine hall and due to its position below sea level is a pumped drainage system

	Q1	Q2	Q3	Q4	Limits
pH	8.8	8.8	8.5	8.8	6-10
SS mg/l	29	9.4	14	29	100
Conductivity	4560	8060	25200	26300	
Min oil	1.7	1.57	-	-	20ppm

SW 7: This discharge point collects water from several areas including units 1 & 2 sample rack, units 1 & 2 ash tank overflow pipe, area around administration courtyard, around fire pump house and compressor house.

	Q1	Q2	Q3	Q4	Limits
pH	9.6	10.3	8.4	8.4	6-10
SS mg/l	89	136	36.8	9	100
Conductivity	3670	2830	380	536	
Min oil	0.2	<0.2	<0.01	<0.25	20ppm

SW 8: This discharge point manages water from condenser cooling water outfall.
Figure is average throughout the year.

	Q1	Q2	Q3	Q4	Limits
CHLORINE	0.137	0.137	0.137	0.137	0.5ppm
TEMP RISE (C)	9.5	9.5	9.5	9.5	15 deg

SW 9: This discharge point collects water from the area north east of the water treatment building also water drainage from the main coal stockpile

	Q1	Q2	Q3	Q4	Limits
pH	6.8	6.8	7.2	6.4	6-10
SS mg/l	147	54	34.8	48	100
Conductivity	2300	2300	1575	1673	
Min oil	2.1	2.1	-		20ppm

SW 10: This discharge point manages water from the station septic tank outlet.

	Q1	Q2	Q3	Q4	Limits
pH					6-10
SS mg/l	19	3	12.5	12.7	100
Conductivity	-				
Min oil	-	-	-	-	20ppm

SW 11: This discharge point collects water from the jetty septic tank outlet. This system is no longer in service

	Q1	Q2	Q3	Q4	Limits
SS mg/l	No flow	No flow	No flow	No flow	100

SW 13: This discharge point collects water from the area around the strategic coal stockpile. This is located at the eastern end of the main coal yard.

	Q1	Q2	Q3	Q4	Limits
pH	**7.22**	**7.6**	**7.4**	**7.19**	6-10
SS mg/l	**32**	**0.8**	**2**	**5**	100
Conductivity	**664**	**1048**	**783**	**978**	
Min oil	**-**	**-**	**-**	**-**	20ppm

3.2 Toxicity/ Leachate Analysis:

Annual Toxicity SW1 Results 2010

Parameter	Test Species	Limits	2010 Results
Toxicity	Tisbe Battagliai	n/a	<3.1 TU
Jan 2010	Vibrio Fischeri	n/a	<2.2 TU

3.3 Annual Metals

Ash Leachate Results 2010

Lead µg/l	**<0.02**
Dissolved Aluminium mg/l	**0.017**
Dissolved Arsenic µg/l	**2.89**
Dissolved Barium mg/	**0.020**
Dissolved Boron mg/l	**3.38**
Dissolved Cadmium µg/l	**0.938**
Dissolved Chromium µg/l	**24.3**
Dissolved Iron µg/l	**19**
Dissolved Mercury µg/l	**<0.01**
Dissolved Molybdenum µg/l	**701**
Dissolved Nickel µg/l	**2.61**
Dissolved Selenium µg/l	**39**
Dissolved Tin µg/l	**<0.36**
Dissolved Zinc µg/l	**1.75**
pH	**8.24**

3.3 Ash farm Metals 2010

Quarterly samples of PFA (pulverised Fuel Ash) and Bottom ash are taken and analysed in an accredited labs off site, all analysis reports are maintained at the station.

Date	Jan 2010	Jan 2010	May 2010	May 2010	Jul 2010	Jul 2010	Oct 2010	Oct 2010
Ash type	Bottom	Fly	Bottom	Fly	Bottom	Fly	Bottom	Fly
Metals								
Aluminium mg/kg	**6730**	**21700**	**2718**	**29000**	**23300**	**5540**	**4570**	**18800**
Arsenic Low Level mg/kg	**2.96**	**26.2**	**<0.5**	**<0.5**	**20.2**	**2.65**	**2.34**	**25.5**
Barium mg/kg	**342**	**515**	**120**	**560**	**647**	**150**	**154**	**456**
Cadmium l mg/kg	**<0.2**	**0.409**	**<0.5**	**<0.5**	**0.699**	**0.189**	**0.322**	**1.4**
Chromium mg/kg	**15.6**	**52.8**	**9**	**54**	**56.6**	**15.3**	**21.8**	**49.7**
Copper mg/kg	**7.37**	**29.4**	**10**	**32**	**30.4**	**7.7**	**5.95**	**32.2**
Iron mg/kg	**14800**	**23600**	**14010**	**>32000**	**23700**	**14300**	**13600**	**27800**
Lead mg/kg	**12.7**	**10.3**	**1**	**18**	**14.2**	**1.12**	**2.68**	**9.78**
Mercury Low Level mg/kg	**0.14**	**0.241**	**<0.3**	**<0.3**	**0.14**	**0.14**	**<0.14**	**<0.14**
Molybdenum mg/kg	**0.67**	**14.8**	**1**	**4**	**6.96**	**0.534**	**2.98**	**15.5**
Nickel mg/kg	**12.1**	**29.2**	**<1**	**47**	**32.4**	**11.1**	**12**	**34.9**
Selenium mg/k	**<1**	**22.2**	**<0.5**	**<0.5**	**14.1**	**<1**	**<1**	**26.4**
Tin mg/kg	**0.24**	**1.91**	**<10**	**14**	**0.371**	**0.24**	**<0.24**	**1.78**
Zinc mg/kg	**15**	**60.8**	**31**	**179**	**56.96**	**14.4**	**12.7**	**74.8**
PH	**9.24**	**10.4**	**8.65**	**8.91**	**9.39**	**9.12**	**9.3**	**12.3**

3.4 Emissions to Water Non-Compliance Summary

The table below highlights the exceedences in relation to suspended solids, Ammonia and pH for 2010, it can be seen that a notable reduction in suspended solids resulted upon implementation of control measures as proposed to the EPA in 2009/2010

Discharge Point	SW1	SW2	SW3	SW4	SW4a	SW5	SW6	SW7	SW8	SW9	SW10	SW11	SW13	TOTAL
JAN														
FEB								**1**		**1**				
MAR										**1**				
APR								**2**						
MAY														
JUNE														
JULY														
AUG														
SEPT								**1**						
OCT														
NOV														
DEC							**1**							
TOTAL /YEAR														**7**

Note: Reports for all above have been forwarded to the EPA and closed out.

3.5 Comparison between EPA and ESB surface water monitoring results

During the year the EPA paid the site a number of visits to collect samples from the surface water discharge points, parallel samples were taken each time and the comparison of the results are listed below.

(Table from one of 4 visits) Results from other visits available on request.

EPA vs MONEYPOINT SURFACE WATER SAMPLES 02/11/2010

		EPA SAMPLES			ESB SAMPLES		
DETERMINATION	**SAMPLE POINT**	**RESULT**	**UNIT**	**LIMIT**	**RESULT**	**UNITS**	**LIMITS**
			ph	6 to 9		ph	6 to 9
PH	SW1	**no flow**			**no flow**		
	SW2	**7.8**			**7.4**		
	SW4a	**7.97**			**8**		
	SW6	**Nr**			**8.4**		
	SW7	**8.19**			**8.4**		
	SW8	**7.94**			**8**		
	SW13	**7.19**			**7.1**		
	SW9	**5.9**			**6.1**		
SUSPENDED SOLIDS							
	SW2	**61.6**	mg/l		**51**		
	SW7	**5.2**			**5**		
	SW9	**48**			**44**		
AMMONIA			mg/lN				
	SW2	**0.275**			**0.28**		
	SW4a	**0.522**			**Not Required**		
	SW7	**0.297**			**0.46**		
	SW9	**0.31**			**0.18**		
	SW13	**0.049**			**Not Required**		
MINERAL OILS			mg/l				
	SW2	**0.05**			**Not visible**		
	SW7	**<0.01**			**Not visible**		
	SW9	**<0.01**			**Not visible**		
	SW13	**<0.01**			**Not visible**		

(Table from first of 4 visits) Results from other visits available on request

EPA vs MONEYPOINT SURFACE WATER SAMPLES 22/09/2010

		EPA SAMPLES			ESB SAMPLES		
DETERMINATION	**SAMPLE POINT**	**RESULT**	**UNIT**	**LIMITS**	**RESULT**	**UNITS**	**LIMITS**
PH	SW13	**7.35**	ph	6 to 9	**7.4**	ph	6 to 9
	SW7	**8.07**			**8.4**		
	SW4a	**7.84**			**8**		
	SW2	**7.41**			**7.5**		
	SW8	**7.77**			**-**		
	SW6	**7.94**			**8.2**		
	SW1	**6.99**			**7.4**		
	SW13	**7.35**			**7.4**		
SUSPENDED SOLIDS							
	SW7	**2.8**	mg/l		**0.42**	Mg/l	
	SW2	**2**			**8.4**		
TDS			mg/l				
AMMONIA	SW4a	**0.415**	mg/l N		**Not Required**	Mg/l N	
	SW6	**0.213**			**0.15**		
	SW7	**0.764**			**0.42**		

4 Emissions to Atmosphere

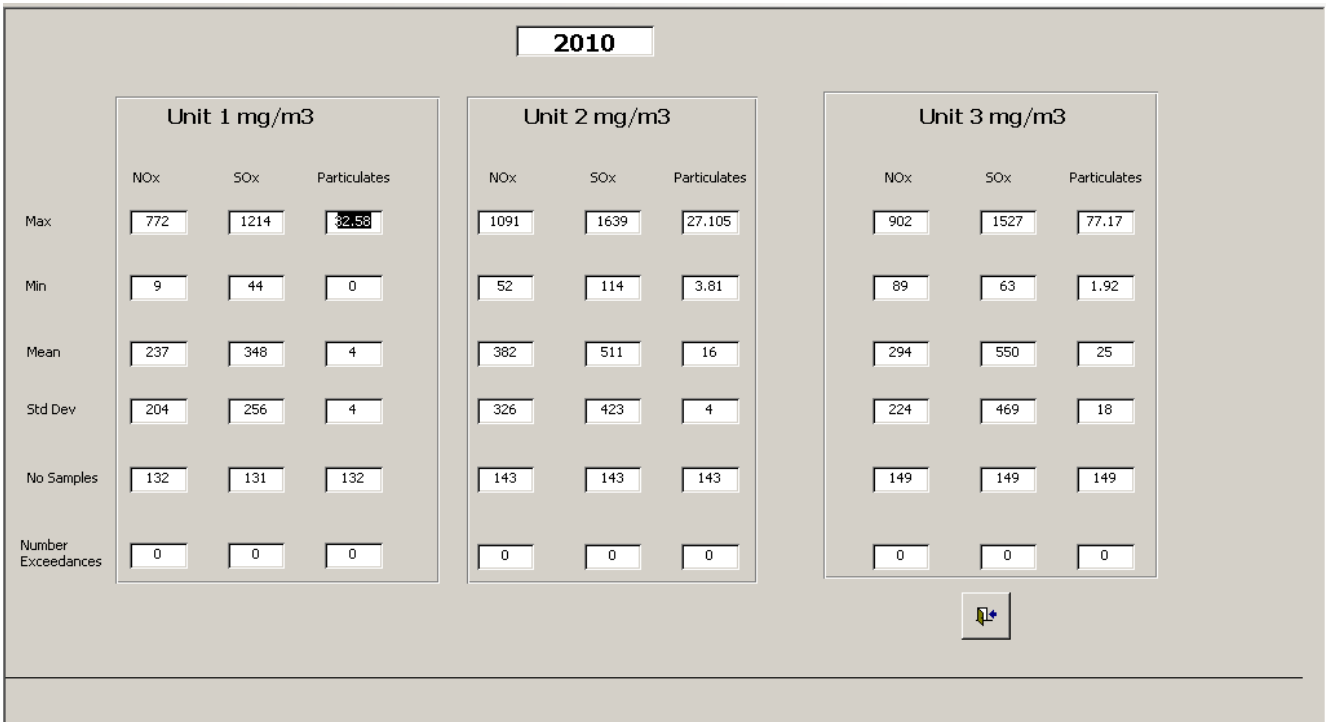
4.1 Iso-kinetic Dust sample results 2010

A number of iso-kinetic dust monitors are located around the site at dust sensitive locations the results of this monitoring are listed below, Additional dust monitoring stations were installed in 2010.

Site	Undissolved Solids Avg mg/m2/day	Based on X Month's
Ash Farm	***53.73***	***10***
Ash Farm 1	***12.63***	***10***
Gate A	***42.34***	***10***
Coal-yard1	***220.34***	***10***
Coal-yard 2	***61.7***	***10***
Coal-yard 3	***44.26***	***5***
Coal-yard 4	***47.56***	***5***

4.2 Snapshot of CEMS

Below is a screen shot of the current CEMS system in operation for 2010, The CEMS analyser is an OPSIS instrument relying on in stack measurement techniques it is currently in the process of being superseded by a new extractive CEMS system compliant with the EU CEMS standard EN 14181. There were no exceedences of our SOx, NOx and dust for 2010.



4.3 Emissions to Atmosphere Non-compliance Summary

Year	Non-compliance	Cause	Corrective Action
2008	7 particulates exceedences /station	Precipitator problem	Unit overhauls scheduled 2009
2009	6 particulates exceedences /station	Precipitator problems	Unit overhauls scheduled 2010
2010	Failure to control dust in ash storage area.	Ash dust blown off surface of ash storage area	Revised ash storage area management.

Mass emissions for 2010			
	SOx	NOx	Dust
Unit 1	1521	1085	17
Unit 2	2356	1831	72
Unit 3	2705	1458	112

The station mass emissions were within the limits as set out in our licence and also within the NERP limits as set out in 2008 NERP national agreement, no ELV exceedences were recorded for any of the 48 hourly periods for SOx , NOx or dust.

5 Waste Management Report

ESB Moneypoint produced 199,380 tonnes of waste in 2010, of which 82 tons were classified as hazardous Outside of the bulk solids generated through combustion and emissions abatement the station achieved a 90% recycling rate on the non-hazardous waste generated for 2010, this was a major achievement for the station and represented a significant improvement on previous years.

Management of waste on site is in compliance with condition 7 of our licence.

The tables below summarise the volumes and categories of waste generated in 2010

Summary of Waste Information for 2010	**2010**
Item	*Tonnes*
Total quantity of waste produced in 2010	*199,380*
total quantity of waste disposed of on-site	*139,953*
total quantity of waste disposed of off-site	*190.112*
total quantity of waste recovered on-site	*0*
total quantity of waste recovered off-site	*59,248*
Quantity of non-hazardous waste produced in 2010	*199,298*
quantity of non-hazardous waste disposed of on-site	*139,953*
quantity of non-hazardous waste disposed of off-site	*142.05*
quantity of non-hazardous waste recovered on-site	*0*
quantity of non-hazardous waste recovered off-site	*59,210.2645*
Quantity of hazardous waste produced in 2010	*82.682*
quantity of hazardous waste disposed of on-site	*0*
quantity of hazardous waste disposed of off-site	*48.062*
quantity of hazardous waste recovered on-site	*0*
quantity of hazardous waste recovered off-site	*34.62*

Information on Hazardous waste for 2010

European Waste Catalogue Code	Hazardous (Yes/No)	Description*	Quantity (tonnes)	Disposal / Reuse / Recycling	Carrier / Transporter	Ultimate Disposal / Recovery	
					Name & Permit Details	Location	Name & Permit Details
13 08 99	*Yes*	*waste oils/oily water*	*33.4*	*recycled*	*Enva WCP/LK/052/ 02b*	*Clonminam Ind Estate, Portlaoise, Co. Laoise*	*Enva 184-1*
16 05 04	*Yes*	*Refrigerant*	*0.1*	*recycled*	*Indaver WCP-DC-08-1121-01*	*Tolka Quay, Dublin Port*	
16 06 01	*Yes*	*Batteries*	*0.9*	*recycled*	*Enva WCP/LK/052/ 02b*	*Clonminam Ind Estate, Portlaoise, Co. Laoise*	*Enva 184-1*
16 05 04	*Yes*	*Aerosols*	*0.175*	*disposal*	*Rilta WCP/LK/056/ 02b*	*402 Greenogue Business pk, Rathcoole, Co Dublin*	*Rilta 192-1*
13 07 01	*Yes*	*Solid oily sludge*	*26.115*	*disposal*	*Enva WCP/LK/052/ 02b*	*Clonminam Ind Estate, Portlaoise, Co. Laoise*	*Enva 184-1*
15 02 02	*Yes*	*Solid waste / oily rags*	*18.22*	*disposal*	*Enva WCP/LK/052/ 02b*	*Clonminam Ind Estate, Portlaoise, Co. Laoise*	*Enva 184-1*
16 07 08	*Yes*	*Paint related material*	*0.22*	*recycled*	*Enva WCP/LK/052/ 02b*	*Clonminam Ind Estate, Portlaoise, Co. Laoise*	*Enva 184-1*
15 01 10	*yes*	*Empty chemical containers*	*3.49*	*disposal*	*Enva WCP/LK/052/ 02b*	*Clonminam Ind Estate, Portlaoise, Co. Laoise*	*Enva 184-1*
20 01 21	*Yes*	*Fluorescent Tubes*	*0.062*	*disposal*	*Rilta WCP/LK/056/ 02b*	*403 Greenogue Business pk, Rathcoole, Co Dublin*	*Rilta 192-1*
			82.682				

Information on Non Hazardous waste for 2010

European Waste Catalogue Code	Hazardous (Yes/No)	Description*	Quantity (tonnes)	Disposal / Reuse / Recycling	Carrier / Transporter	Ultimate Disposal / Recovery / Permit Number	
10 01 02	No	Coal fly ash	52,966	reused	Irish Cement	Limerick	
10 01 02	No	Coal fly ash	4,878	reused	Cemex		
10 01 02	No	Coal fly ash	37,421	disposal	Moneypoint landfill	Kilrush, Co. Clare	Moneypoint Landfill, IPPC Licence 605-02
10 01 02	No	Coal fly ash	19179	disposal	Moneypoint landfill	Kilrush, Co. Clare	Moneypoint FGD y-Product Landfill, IPPC Licence 605-02
10 01 01	No	Ash (bottom, slag)	12,716	disposal	Moneypoint landfill	Kilrush, Co. Clare	Moneypoint Landfill, IPPC Licence 605-02
10 01 05	No	FGD By-product	59422	Disposal	Moneypoint landfill	Kilrush, Co. Clare	Moneypoint FGD y-Product Landfill, IPPC Licence 605-02
10 13 01	No	Cement	2105	Disposal	Moneypoint landfill	Kilrush, Co. Clare	Moneypoint FGD y-Product Landfill, IPPC Licence 605-02
20 03 99	No	Compost	9100	Disposal	Moneypoint landfill	Kilrush, Co. Clare	Moneypoint Landfill, IPPC Licence 605-02
15 01 01/ 02	No	Dry recyclable	28.9045	recycled	Clean Irl. WCP/LK/003/02b	Cree Kilrush, Co. Clare	Clean Irl. WCP/LK/003/02B
17 05 04	No	Inert Fill	304.32	reused	Clean Irl. WCP/LK/003/02b	Cree Kilrush, Co. Clare	Moneypoint Landfill, IPPC Licence 605-02
15 01 02	No	Plastic	8.87	recycled	Clean Irl. WCP/LK/003/02b	Cree Kilrush, Co. Clare	Clean Irl. WCP/LK/003/02B
17 06 04	No	Insulation	30.18	recycled	Clean Irl. WCP/LK/003/02b	Cree Kilrush, Co. Clare	Clean Irl. WCP/LK/003/02B
15 01 03	No	Timber	28.801	reused	Clean Irl. WCP/LK/003/02b	Cree Kilrush, Co. Clare	Clean Irl. WCP/LK/003/02B
17 04 07	No	Scrap Metal	70.140	Recycled	Munster metal	Clondrinagh, Ennis Road / WP/LK/01/ A	
17 04 07	No	Scrap Metal	352.369	Recycled	Clean Irl. WCP/LK/003/02b	Cree Kilrush, Co. Clare	Clean Irl. WCP/LK/003/02B
17 09 04	No	Rubble	543.7	reused	Clean Irl. WCP/LK/003/02b	Cree Kilrush, Co. Clare	Clean Irl. WCP/LK/003/02B
20 01 25	No	cooking oil	0.56	reused	Frylite	Kilcolgan, Galway	WCP-MO-09-0624-01
20 01 36	No	Electrical waste	1.42	recycled	Clean Irl. WCP/LK/003/02b	Cree Kilrush, Co. Clare	Clean Irl. WCP/LK/003/02B
20 03 01	No	Mixed municipal waste	142.05	disposal	Clean Irl. WCP/LK/003/02b	Cree Kilrush, Co. Clare	Clean Irl. WCP/LK/003/02B
			199,298.31				

INFORMATION OF MERP SITE WASTE 2010

MERP SITE		***WASTE***	***REGISTER Tonnage***				
20 03 01	No	Mixed waste	1.794	disposal	Clean Irl. / WCP/LK/003/02b	Cree Kilrush, Co. Clare	Clean Irl. WCP/LK/003/02B
15 01 03	No	Timber / Pallets	7.5	recycled	Clean Irl. / WCP/LK/003/02b	Cree Kilrush, Co. Clare	Clean Irl. WCP/LK/003/02B
17 04 07	No	Skip Waste	34.76	recycled	Clean Irl. / WCP/LK/003/02b	Cree Kilrush, Co. Clare	Clean Irl. WCP/LK/003/02B
15 01 01/02	No	Recyclables	1.024	recycled	Clean Irl. / WCP/LK/003/02b	Cree Kilrush, Co. Clare	Clean Irl. WCP/LK/003/02B

European Waste Catalogue Code	**Hazardous (Yes/No)**	**Description***	**Quantity (tonnes)**	**Disposal / Reuse / Recycling**	**Carrier / Transporter**	**Ultimate Disposal / Recovery / Permit Number**

6 Energy and Water Consumption

Energy and water consumption figures for 2010 are shown in following Tables below.

6.1 Energy Consumption MW

Year	Coal	Distillate Oil	HFO	House Load
2008	4,153,373	5040	9441	453,336
2009	3,571,022	66	2922	374,320
2010	3,756,872	3441	63,086	400,620

6.2 Energy Generated MW

Year	MW hrs Generated
2008	4,658,220
2009	3,738,840
2010	3,823,400

6.3 Water Consumption m^3

Year	Domestic Water Usage	Other	WTP	Total
2008	72,785	919,722	262,593	1,255,100
2009	62,129	796,184	419,671	1,277,984
2010	71,450	956,716	568,818	1,596,984

7. Environmental Incidents and Complaints

7.1 Complaints Summary

Summary of complaints by category during 2010								
Category	**Dust**	**Air**	**Odour**	**Noise**	**Water**	**Procedural**	**Misc**	**Total**
January								
February								
March	2							
April								
May	1							
June	4					1		
July	4						1	
August	1							
September								
October	1							
November								
December								
TOTAL/YEAR								**15**

Note: Reports for all above have been forwarded to the EPA and closed out.

7.2 Incidents Summary

There were no incidents of significant environmental impact on site in 2010, there were a number of environmental exceedences as per the ELV's set out in the licence and a report of each of these was sent to the EPA throughout the 2010 year.

7.3 Queries received Summary

A number of queries were made to the station in relation to the operation and performance of the emissions abatement equipment installed on site; these queries were answered with information forwarded on. Site tours were given to a number of schools and colleges. A number of 3rd level institutions conducted projects involving the use of coal ash in construction projects and the station facilitated these students by providing ash samples and analysis data collected on site.

8.0 Management of the Activity

8.1 Environmental Management Programme 2010

ENVIRONMENTAL MANAGEMENT PROGRAMME 2010

Description		***Completion***
Energy Management		
Implement Sustainability projects		80%
Lighting control - motion/light sensors	Work still in progress	20%
Heat Recovery from Blow down Tank	Engineering component completed	30%
Wind Turbine	10 kw turbine installed and running successfully.	100%
Waste Management		
Continue paper recycling bins in all offices	Continues to be successful	100%
Improve waste segregation to < 30 % Mixed waste	Mixed waste for 2010 < 10%	100%
Implement sump cleaning program	Completed	100%
Complete installation of compactors	Completed	100%
Investigate market for FGD product	Ongoing	20%
Water Management		
CCTV survey of drains and pipelines	Repairs completed	100%
Replace fire fighting system with more modern system	Completed	100%
Recycle water at interceptor for SW 7	Final pipe work modification required	90%
Number System for bunds	In progress, will run parallel to the next bund inspection	10%
Integrity Test of WTP sump	Complete and found to be in satisfactory condition	100%
Upgrade of second HFO tank and pipe work	Complete	100%
Air Emissions Management		
New CEMS on all 3 units to comply with EN 14181	New CEMS is still in the commissioning phase, repeated delays have pushed the hand over in to 2011	90%
MERP optimisation	Station continues to improve the performance of the abatement plant	100%
Convert site vehicles to biodiesel	All vehicles identified as capable of running on the fuel mix have been switched over. New mix due early 2011	100%
Purchase electric vehicles	Vehicle due on site early 2011	20%
Dismantle old environmental stations	Some outstanding work remains to be completed	70%
		100%
Investigate alternative fuels	No Fuel trials carried out this year, investigations now focused on supply and engineering requirements	80%

ENVIRONMENTAL MANAGEMENT PROGRAMME 2011

ENERGY MANAGEMENT

Implement Sustainability projects
Lighting control - motion/light sensors
Heating- AC and/or other technologies
Influence Energy use behaviour
Increase Biodiesel Usage
Energy Audit

WASTE MANAGEMENT

Investigate market for clean bailed cardboard
Improve waste segregation to < 10 % Mixed waste
Implement sump cleaning program
Investigate market for FGD product
Packaging reduction

Water Management

Water usage audit
Number System for bunds
Recycle water at interceptor for SW 9
Recycle water at interceptor for SW 2

Air Emissions Management

New CEMS on all 3 units to comply with EN 14181
Proactive dust monitoring system for Ash storage area
Convert site vehicles to biodiesel
Purchase electric vehicles
Dismantle old environmental stations

Misc

IPCL Compliance
ISO 14001 compliance
Continue community project With local schools
Take part in 'Dolphin Watch' Project
Maintain Local Forum

9.0 PER Report for 2010

Facility Identification	
Name	ESB Moneypoint
IPC Register Number	605-02
Reporting Period	1st January - 31st December 2010
National Grid Reference	**E** 103555 **N** 151533
Employee No.	260

Pollutant Summary

Pollutant Name	Output to Air (tonnes) NERP Data			
	A1-1	**A1-2**	**A1-3**	**Total**
Sulphur Dioxide (SO_2)	1521	2356	2705	6583
Nitrogen Oxides (as NO_2)	1085	1831	1458	4375
Carbon Dioxide	See total	See total	See total	3455891.1
Particulate	17	72	112	202

NCV of fuels used Moneypoint

Year	Coal NCV MJ/kg	HFO NCV MJ/kg	LFO NCV MJ/kg
2010	24.73	40.48	43.31
2009	24.82	40.67	43.31
2008	25.144	40.51	40.40

Estimated Heavy Metals Emission for Moneypoint in 2010 based on;

- fuel burn and KEMA test results in 2003
- E'on Testing carried out in conjunction with the acceptance tests for the NOx and SOx abatement equipment
- Further station testing carried out during the operation of the plant throughout 2010

Heavy metals emissions are conservatively based on results of a 2003 study carried out by KEMA, this calculation methodology is utilised at periods where no emissions abatement is being carried out. For all other periods in the plants operation additional data will be used in the calculation methodology used for emissions reporting. Because of the new emissions abatement equipment the heavy metals emissions have been reduced partially due to the increased efficiency of the bag filtration system employed in the SOx abatement plant but also due to the chemical reactions involved in both the NOx SCR process and the SOx FGD process .

Trace Element	Emission kg/yr
As	24
B	16771
Cd	1
Cr	27
Cu	14
Hg	11
Mo	10
Ni	25
Pb	11
Se	605
V	88
Zn	99

10.0 Licence Specific Reports

10.1 Noise Monitoring Reports

All results of these tests show that the station is clearly compliant with the requirements of its noise IPCL set at (Leq30) 55db Day and 45db Night.
Summary of report at end of AER

10.2 Report on List I and List II Substance Reductions

Hydrazine is only used in very small amounts now due to cycle chemistry employed in the station. The stock we keep is only 4.5% concentration and used for protection of the closed cooling water system.
The current remaining stock of hydrazine is to be replaced with an alternative carbohydrazide based product in 2011 thereby removing the list II substance from site.

10.3 Review of Environmental Liabilities Insurance Cover

Environmental Risk Assessment Report;
Report submitted Feb 2004.
Full indemnity carried by ESB to cover all risks identified.
A revised EIR and ELRA are currently being produced and when complete will be forwarded to the EPA

10.4 Bund Testing

Moneypoint completed year three of the three yearly cycles of bund tests in 2009 and all repairs identified have been completed, 2010 see the start of the new bund testing cycle and this will continue again in 2011.

10.5 Tank and Pipeline Test & Inspection Report

Drains survey completed in 2009, a number of drain sections were identified as requiring repair work and this repair work was completed in 2010.

10.6 Groundwater Monitoring

See attached data sheets APPENDIX 1

10.7 Annual Landfill Status Report

Landfill Name	**Ash Storage Area**
Licence Number	**605-02**
Landfill Location	**Moneypoint, Kilrush, Co Clare**
Owner and Operator	**ESB**
Area occupied by waste	**387,000 m^2**
Volume and composition of waste deposited in the preceding year	Pulverised Fuel Ash ~ 37,500 tons Furnace Bottom Ash ~ 12,750 tons
Methods of Depositing	Fill, Compact and Cover
Time and duration of depositing	Varies: minimum 8AM to 5PM 5 days a week maximum 8AM to 8PM 7 days a week
Total Accumulated quantities of waste deposited	2.7 m tonnes (estimated)
Stability Checks Undertaken	None required
Results of Monitoring Programme:	
a) Surface Water Monitoring	Refer to Section 3.1
b) Groundwater Monitoring	Refer to Section 10.6
c) Leachate Monitoring	Refer to Section 3.2
d) Waste Stability ,levels, Void Monitoring	None
e) Meteorological Monitoring	2009 Rainfall 845 mm
f) Dust Monitoring – in ASA	33.18 mg/m2/day (yearly ave)
Summary of Monitoring Non Compliance & Corrective Actions	Refer to Section 2.3 and 7.1
Revisions to Landfill Operational Plan	None in 2010
Summary of any developmental / remedial works carried out in the preceding year	Significant Top-soiling was carried out on all areas of the Ash Storage Area with the working faces of the sits reduced in size
Calculated Remaining Capacity	340,000m^3
Calculated final capacity of site	3 m tonnes (estimated)
Year in which final capacity of site is expected to be reached	It is not expected that final capacity of site will ever be reached. Reclamation of deposited ash began in 2010
Progress on restoration of completed cells	No area of the ASA has reached completion yet.

10.8 FGD By-Product Landfill Status Report

Landfill Name	FGD By-Product Landfill
Licence Number	**605-02**
Landfill Location	**Moneypoint, Kilrush, Co Clare**
Owner and Operator	**ESB**
Area occupied by waste	**160,000 m^2**
Volume and composition of waste deposited in the preceding year	Pulverised Fuel Ash ~ 19,200 tons FGD By-Product ~ 59,500 tons Cement ~ 2100 tons
Methods of Depositing	Fill, Compact and Cover
Time and duration of depositing	8AM to 5PM 5 days a week
Total Accumulated quantities of waste deposited	139,000 tonnes (estimated)
Stability Checks Undertaken	Report submitted for first sub-cell
Results of Monitoring Programme:	Bund containment layer sufficient
b) Groundwater Monitoring	Refer to Section 10.6
e) Meteorological Monitoring	2009 Rainfall 845 mm
f) Dust Monitoring – in ASA	141 mg/m2/day (yearly avg)
Summary of Monitoring Non Compliance & Corrective Actions	Refer to section 2.3 and 7.1
Revisions to Landfill Operational Plan	None in 2010
Summary of any developmental / remedial works carried out in the preceding year	Cell 1Aand B have reached full capacity and have been capped and top-soiled
Calculated Remaining Capacity	860,000 m^3 (for area A) and 3,000,000 m^3 (for area B)
Year in which final capacity of site is expected to be reached	2025

4.9 Review of Residuals Management Plan

The current RMP and ELRA are in the process of being revised given the significant changes undergone on the site since to completion of the MERP project, when completed they will be submitted to the EPA.

Appendix 1 2010 Groundwater Monitoring Results

	Sample ID	BH16	BH17	BH21	BH8	BH3	BH2
Determinant	**Lab ID**	**90663**	**90664**	**90665**	**90666**	**90667**	**90668**
Aluminium (ug/l)	n/a	16	31	211	150	142	125
Arsenic (ug/l)	++	<1	2	<1	<1	<1	<1
Barium (ug/l)	++	43	43	31	15	20	16
Boron(ug/l)	++	150	<100	380	280	6600	410
Chloride	**	40	45	64	58	33	47
Chromium #	**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
COD	n/a	16	158	1220	55	15	7
Conductivity (uS/cm @ 20'C)	**	489	688	1176	2590	877	383
Copper #	**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Iron #	**	0.08	0.14	1.2	0.29	0.12	0.05
Mercury (ug/l)	++	<0.05	<0.05	<0.05	<0.05	0.06	<0.05
Molybdenum (ug/l)	++	<10	<10	<10	<10	260	<10
Nickel #	**	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrate	**	0.6	0.7	3	0.5	0.8	18
Orthophosphate	**	<1	<1	<1	<1	<1	<1
Oils, Fats & Greases	n/a	3	3	<2	3	6	<2
pH	**	7.2	7.7	7.1	7.4	6.9	6.7
Selenium (ug/l)	++	<3	<3	<3	<3	<3	<3
Tin (ug/l)	++	<10	<10	<10	<10	<10	<10
Total Ammonia as NH4	n/a	<0.1	0.10	5.4	0.11	0.66	<0.1
Total Nitrogen	n/a	<1	2	7	1	2	5
TOC	n/a	2.3	2.7	4.9	1.7	4.8	2.0
TPH ##(ug/l)	++	400	57	43	58	17	33
DRO(ug/l) ##	++	64	15	18	23	<10	<10
PRO(ug/l)	++	<1	<1	<1	<1	<1	<1
Mineral Oil ##(ug/l)	++	340	42	25	35	13	25
Zinc #	**	<0.01	0.03	<0.01	<0.01	<0.01	<0.01
Benzene (ug/l)	++	<1	<1	<1	<1	<1	<1
EthylBenzene (ug/l)	++	<1	<1	<1	<1	<1	<1
Xylene (ug/l)	++	<1	<1	<1	<1	<1	<1
Toluene (ug/l)	++	<1	<1	<1	<1	<1	<1
PAH (ug/l)	++	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20

BOREHOLE ANALYSIS 2010

	Sample ID	BH19	BH30	BH4	BH5	BH6
Determinant	**Lab ID**	**90669**	**90670**	**90671**	**90672**	**90673**
Aluminium (ug/l)	n/a	143	514	30	89	12
Arsenic (ug/l)	++	1	<1	2	<1	<1
Barium (ug/l)	++	110	38	120	25	7
Boron(ug/l)	++	<100	<100	6000	4800	230
Chloride	**	59	91	4043	159	47
Chromium #	**	<0.05	<0.05	<0.05	<0.05	<0.05
COD	n/a	64	80	230	<4	<4
Conductivity (uS/cm @ 20'C)	**	505	597	11540	1437	388
Copper #	**	<0.05	<0.05	<0.05	<0.05	<0.05
Iron #	**	0.09	4.46	0.12	<0.05	0.15
Mercury (ug/l)	++	<0.05	<0.05	<0.05	<0.05	<0.05
Molybdenum (ug/l)	++	<10	<10	5000	95	<10
Nickel #	**	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrate	**	0.7	0.9	57	39	1
Orthophosphate	**	<1	<1	<5	<1	<1
Oils, Fats & Greases	n/a	4	6	5	3	6
pH	**	8.0	7.2	8.3	6.8	7.2
Selenium (ug/l)	++	<3	<3	<3	<3	<3
Tin (ug/l)	++	<10	<10	<10	<10	<10
Total Ammonia as NH4	n/a	0.10	1.0	341	0.64	<0.1
Total Nitrogen	n/a	1	5	313	10	<1
TOC	n/a	2.2	1.3	36	2.0	1.2
TPH ##(ug/l)	++	<10	<10	<10	<10	<10
DRO(ug/l) ##	++	<10	<10	<10	<10	<10
PRO(ug/l)	++	<1	<1	<1	<1	<1
Mineral Oil ##(ug/l)	++	<10	<10	<10	<10	<10
Zinc #	**	<0.01	0.02	0.45	<0.01	<0.01
Benzene (ug/l)	++	<1	<1	<1	<1	<1
EthylBenzene (ug/l)	++	<1	<1	<1	<1	<1
Xylene (ug/l)	++	<1	<1	<1	<1	<1
Toluene (ug/l)	++	<1	<1	<1	<1	<1
PAH (ug/l)	++	<0.20	<0.20	<0.20	<0.20	<0.20

BOREHOLE ANALYSIS 2010

	Sample ID	BH 7	BH10	BH22	BH23	BH25
Determinant	**Lab ID**	**91399**	**90741**	**90743**	**90744**	**90745**
Aluminium (ug/l)	n/a	48	373	14	20	16
Arsenic (ug/l)	++	<1	<1	<1	1	<1
Barium (ug/l)	++	22	17	12	9	12
Boron (ug/l)	++	<100	2800	3400	3900	4100
Chloride	**	16	15222(n/a)	18485(n/a)	18816(n/a)	17807(n/a)
Chromium #	**	<0.05	<0.05	<0.05	<0.05	<0.05
COD	n/a	55	170	290	280	250
Conductivity (uS/cm @ 20'C)	**	557	36700(n/a)	44500(n/a)	45300(n/a)	43900(n/a)
Copper #	**	<0.05	<0.05	<0.05	<0.05	<0.05
Iron #	**	0.06	0.89	<0.05	<0.05	<0.05
Mercury (ug/l)	++	<0.05	<0.05	<0.05	<0.05	<0.05
Molybdenum (ug/l)	++	<10	<10	<10	<10	<10
Nickel #	**	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrate	**	1	9	<5	<5	<5
Orthophosphate	**	0.8	<5	<5	<5	<5
Oils, Fats & Greases	n/a	6	3	6	5	2
pH	**	7.6	8.2	8.3	8.4	8.3
Selenium (ug/l)	++	<3	<3	<3	<3	<3
Tin	++	13	<10	<10	<10	<10
Total Ammonia as NH4	n/a	<0.1	<0.1	<0.1	<0.1	<0.1
Total Nitrogen	n/a	2	5	1	<4	<3
TOC	n/a	7.5	0.47	0.38	0.44	0.27
TPH ## (ug/l)	++	23	<10	<10	<10	<10
DRO (ug/l)	++	<10	<10	<10	<10	<10
PRO (ug/l)	++	<1	<1	<1	<1	<1
Mineral Oil ## (ug/l)	++	18	<10	<10	<10	<10
Zinc #	**	<0.01	<0.01	<0.01	<0.01	<0.01
Benzene (ug/l)	++	<1	<1	<1	<1	<1
EthylBenzene (ug/l)	++	<1	<1	<1	<1	<1
Xylene (ug/l)	++	<1	<1	<1	<1	<1
Toluene (ug/l)	++	<1	<1	<1	<1	<1
PAH's (ug/l)	++	<0.20	<0.20	<0.20	<0.20	<0.20

BOREHOLE ANALYSIS 2010

	Sample ID	BH27A	BH26	BH12	BH14	BH15	BH9
Determinant	**Lab ID**	**90735**	**90736**	**90737**	**90738**	**90739**	**90740**
Aluminium (ug/l)	n/a	159	99	67	380	33	16
Arsenic (ug/l)	++	<1	<1	<1	<1	<1	<1
Barium (ug/l)	++	39	12	26	16	11	10
Boron (ug/l)	++	140	3400	390	3400	3800	800
Chloride	**	75	19465(n/a)	46	20357(n/a)	20869(n/a)	96
Chromium #	**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
COD	n/a	98	300	8	310	240	193
Conductivity (uS/cm @ 20'C)	**	628	41500(n/a)	541	40500(n/a)	43900(n/a)	1026
Copper #	**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Iron #	**	0.08	0.52	0.07	0.45	<0.05	<0.05
Mercury (ug/l)	++	<0.05	0.1	<0.05	<0.05	<0.05	<0.05
Molybdenum (ug/l)	++	<10	<10	<10	<10	41	<10
Nickel #	**	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrate	**	1	<5	4	12	<5	0.7
Orthophosphate	**	<1	<5	<1	<5	<5	<1
Oils, Fats & Greases	n/a	<2	<2	2	4	<2	2
pH	**	6.5	8.3	7.6	8.3	8.4	7.6
Selenium (ug/l)	++	<3	<3	<3	<3	<3	<3
Tin	++	<10	<10	<10	12	<10	<10
Total Ammonia as NH4	n/a	<0.1	<0.1	<0.1	0.15	<0.1	<0.1
Total Nitrogen	n/a	<1	<4	<1	<6	<4	<1
TOC	n/a	4.6	0.42	1.4	0.39	0.86	1.3
TPH ## (ug/l)	++	<10	<10	25	<10	<10	<10
DRO (ug/l)	++	<10	<10	<10	<10	<10	<10
PRO (ug/l)	++	<1	<1	<1	<1	<1	<1
Mineral Oil ## (ug/l)	++	<10	<10	25	<10	<10	<10
Zinc #	**	0.02	<0.01	<0.01	0.02	<0.01	<0.01
Benzene (ug/l)	++	<1	<1	<1	<1	<1	<1
EthylBenzene (ug/l)	++	<1	<1	<1	<1	<1	<1
Xylene (ug/l)	++	<1	<1	<1	<1	<1	<1
Toluene (ug/l)	++	<1	<1	<1	<1	<1	<1
PAH's (ug/l)	++	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20

Appendix 2 Noise Report 2010

ESB ENERGY INTERNATIONAL

MONEYPOINT POWER STATION

IPCL
NOISE REPORT

Turbine Section Sept 2010

Liam Broderick (ESB) 10-09-2010

Introduction

This work was carried out to ascertain the Db sound levels at the NSL's as an annual requirement for the ESB Aghada Station IPCL.

2. Test Personnel

This work was carried out by Liam Broderick of ESB Energy International

3. Equipment

The noise measurements were made using the following:
Bruel & Kjaer noise meter type 2260 (S N 2001649)
Microphone type 4189 (serial No. 2021133)
Calibrator type 4231 (serial No. 2084922)
Wind shield (type UA0237)
The NAMAS certificates dated 08/10/09 for the meter and calibrator are included in this report in Appendix 3. Pre and Post meter calibrations were completed for each test period.
Meter set to A weighting, 1/3 octave analysis and Fast response. The microphone was positioned 1.3 m above the ground and mounted on a tripod for all samples.

4. Tests

A total of four Leq 30 measurements were made, one for Night and one for Day at NSL1 and 2
The measurements are being submitted for the 2010 report dated 31st Aug and 1st Sept 2010. All measurements were made in accordance the latest guidelines laid down in the EPA guidance document 2nd edition dated 2006. Full details of each NSL result are given in Appendix 2

5. Conditions

The weather was sunny with dry conditions and wind speeds of 1 to 2 m/s for the duration of all measurements.
The overall plant was on partial load for the duration of these noise measurements.
Unit 1 – Off load for duration of test as it was on planned outage.
Unit 2 – 90% load on day tests , 40% Load on night tests.
Unit 3 – 70% load on day tests , 40% Load on night tests.
The station was clearly audible in these tests as per comments.
Comments regarding specific local conditions are contained in Appendix 1
Moneypoint NSL Site Map is shown in Appendix 4

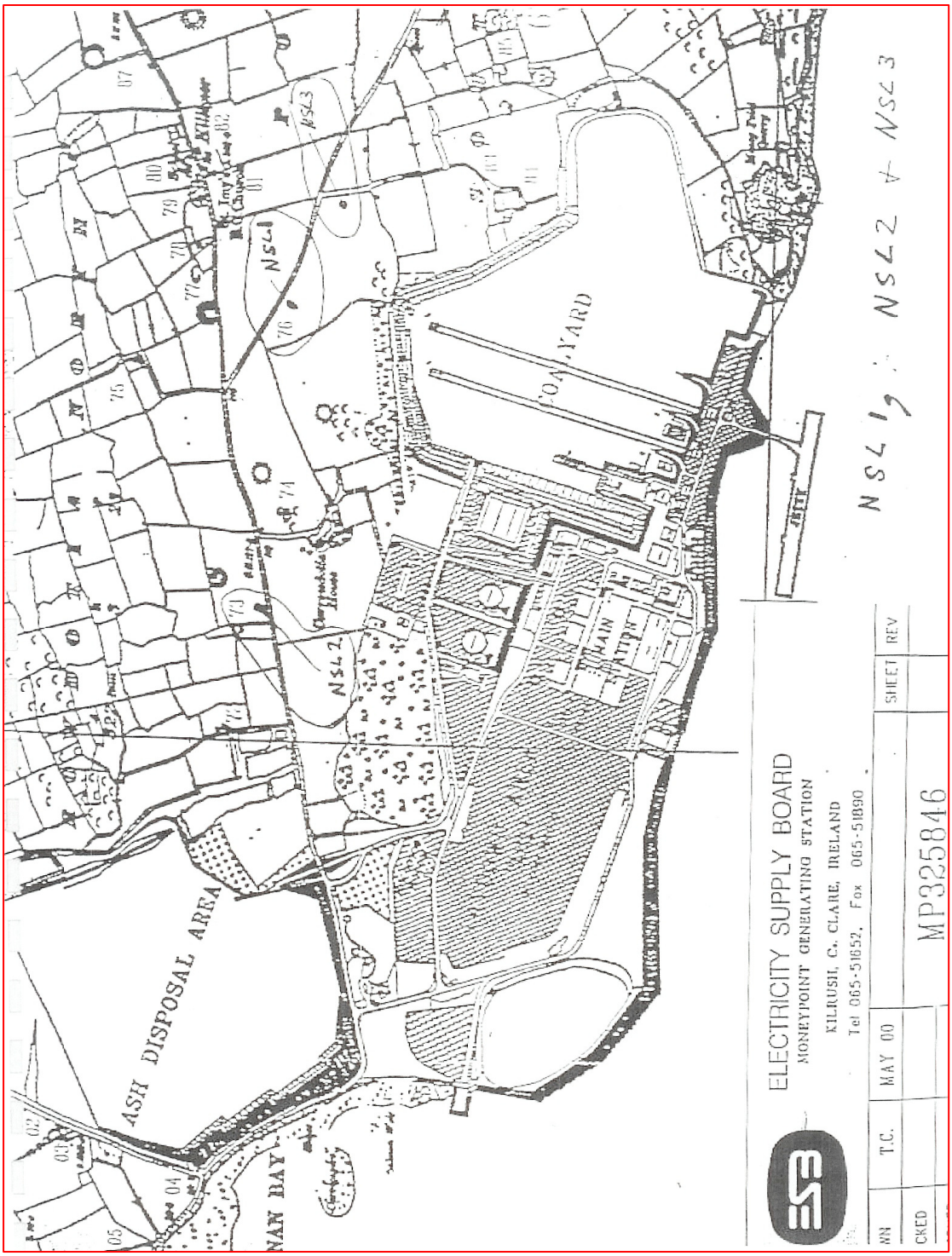
6. Results

Location	LeqA 30	LA 90	LA 10	LA Max	LA Min
NSL1 Day	43.5	39.0	46.1	65.4	35.2
NSL1 Night	< 33	< 33	33.1	52.0	< 33
NSL2 Day	46.2	40.1	49.2	65.4	36.8
NSL2 Night	40.6	36.8	41.1	74.2	34.4
NSL3 Day	44.7	39.6	47.1	63.4	34.2
NSL3 Night	32.5	< 33	34.9	51.0	< 33

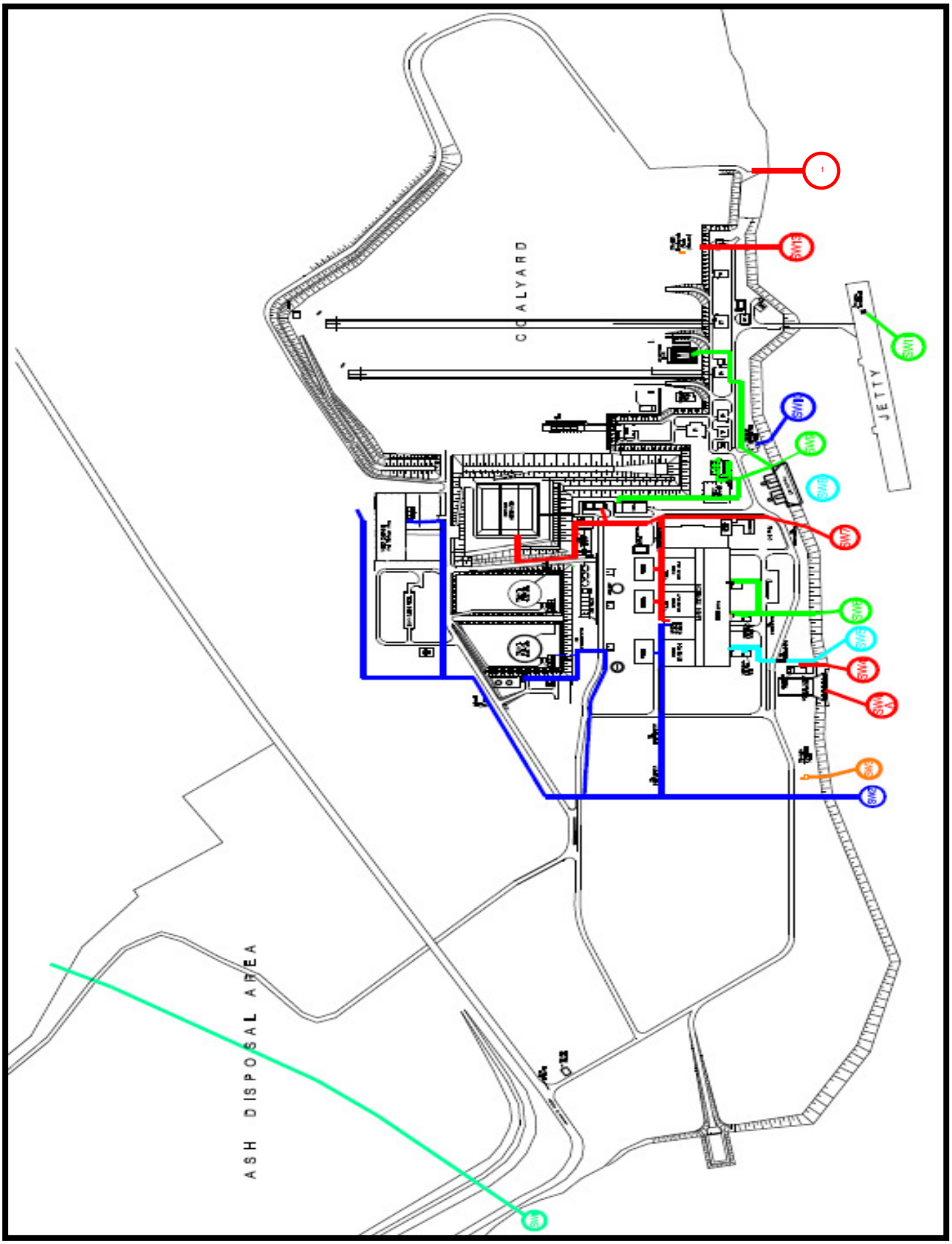
7. Summary

The results of these tests show that the Station is clearly compliant with the requirements of its noise IPCL set at (Leq30) 55db Day and 45db Night, particularly with the La90 background values. Tonal components are not present given the very low LEQ levels achieved.

Appendix 3 Site map



Appendix 4 Location of Surface water sample locations



Appendix 5 PRTR Returns

Environmental Protection Agency

| PRTR# : P0605 | Facility Name : Electricity Supply Board (Moneypoint) | Filename : P0605_2010(1).xls | Return Year : 2010 |

Version 1.1.11

REFERENCE YEAR	2010

1. FACILITY IDENTIFICATION

Parent Company Name	Electricity Supply Board (Moneypoint)
Facility Name	Electricity Supply Board (Moneypoint)
PRTR Identification Number	P0605
Licence Number	P0605-02

Waste or IPPC Classes of Activity

No.	class_name
2.1	The operation of combustion installations with a rated thermal input equal to or greater than 50MW
11.1	##

Address 1	Moneypoint Generating Station
Address 2	Kilrush
Address 3	County Clare
Country	Ireland
Coordinates of Location	-9.42267 52.6075
River Basin District	IEGBNISH
NACE Code	3511
Main Economic Activity	Production of electricity
AER Returns Contact Name	John Wall
AER Returns Contact Email Address	john.wall@esb.ie
AER Returns Contact Position	Station Chemist/Environmental Co-ordinator
AER Returns Contact Telephone Number	065 - 9080408 (Direct) / 087-0507603
AER Returns Contact Mobile Phone Number	
AER Returns Contact Fax Number	065 - 9080303
Production Volume	945.0
Production Volume Units	3
Number of Installations	3
Number of Operating Hours in Year	19133
Number of Employees	250
User Feedback/Comments	
Web Address	

2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
1(c)	Thermal power stations and other combustion installations
50.1	General

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

Is it applicable?	
Have you been granted an exemption ?	
If applicable which activity class applies (as per Schedule 2 of the regulations) ?	
Is the reduction scheme compliance route being used ?	

4.1 RELEASES TO AIR Link to previous years emissions data

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

Please enter all quantities in this section in KGs

POLLUTANT		METHOD			QUANTITY			
No. Annex II	Name	M / C / E	Method Used Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
03	Carbon dioxide (CO2)	M	PER	As in GHG 070-03	3457368573.293	3457368573.293	0.0	0.0
06	Ammonia (NH3)	C	OTH		0.0	0.0	0.0	0.0
02	Carbon monoxide (CO)	C	SSC	VGB as per IPCC	336038.951386494	336038.951386494	0.0	0.0
07	Non-methane volatile organic compounds (NMVOC)	C	SSC	VGB as per IPCC	14935.064506066	14935.064506066	0.0	0.0
05	Nitrous oxide (N2O)	C	SSC	VGB as per IPCC	18668.830632583	18668.830632583	0.0	0.0
08	Nitrogen oxides (NOx/NO2)	M	PER	As per EN 14181 to ISO 10849 (1996)	4374000.0	4374000.0	0.0	0.0
11	Sulphur oxides (SOx/SO2)	M	PER	As per EN 14181 to ISO 7935 (1992)	6582000.0	6582000.0	0.0	0.0
17	Arsenic and compounds (as As)	C	MAB	Based on fuel data	24.43964279	24.43964279	0.0	0.0
18	Cadmium and compounds (as Cd)	C	MAB	Based on fuel data	1.277085558	1.277085558	0.0	0.0
19	Chromium and compounds (as Cr)	C	MAB	Based on fuel data	26.604113928	26.604113928	0.0	0.0
20	Copper and compounds (as Cu)	C	MAB	Based on	14.379575442	14.379575442	0.0	0.0

				fuel data				
21	Mercury and compounds (as Hg)	C	MAB	Based on fuel data	11.148066403	11.148066403	0.0	0.0
22	Nickel and compounds (as Ni)	C	MAB	Based on fuel data	24.981110201	24.981110201	0.0	0.0
23	Lead and compounds (as Pb)	C	MAB	Based on fuel data	11.086768304	11.086768304	0.0	0.0
86	Particulate matter (PM10)	C	MAB	Based on fuel data	190950.0	190950.0	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

Please enter all quantities in this section in KGs

POLLUTANT		METHOD			QUANTITY			
No. Annex II	Name	M / C / E	Method Used 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)

Please enter all quantities in this section in KGs

POLLUTANT		METHOD			QUANTITY			
Pollutant No.	Name	M / C / E	Method Used Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
210	Dust	M	PER	As per EN14181	201000.0	201000.0	0.0	0.0
236	**Vanadium (as V)**	C	MAB	Based on fuel data	98.710778771	98.710778771	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: Electricity Supply Board (Moneypoint)

Please enter summary data on the quantities of methane flared and / or utilised	**T (Total) kg/Year**	**M / C / E**	**Method Used Method Code**	**Designation or Description**	**Facility Total Capacity m3 per hour**	
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	

Please enter all quantities in this section in KGs

POLLUTANT								QUANTITY			
No. Annex II	Name	M/C/E	Method Code	Method Used 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

Please enter all quantities in this section in KGs

POLLUTANT								QUANTITY			
No. Annex II	Name	M/C/E	Method Code	Method Used 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)

Please enter all quantities in this section in KGs

POLLUTANT								QUANTITY			

Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Method Used	SW1 Ash disposal area Emission Point 1	SW2 SURFACE DRAIN Emission Point 2	SW4 SURFACE DRAIN # 3 Emission Point 3	SW6 S.D # 6 Emission Point 4	SW7 S.D Emission Point 5	SW8 C.W Emission Point 6	SW9 Emission Point 7	SW10 Emission Point 8	SW13 S.D # 8 Emission Point 9	T (Total) KG/Year	A (Accidental)	F (Fugitive) KG/Year
303	BOD	M	OTH	n/a		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
324	**Mineral oils**	E	OTH	assuming max flow rate and based on 4 samples only		0.0	0.0	0.0	67.0	0.0	0.0	114.0	0.0	0.0	181.0	0.0	0.0
240	Suspended Solids	E	OTH	assuming max flow rate and based on 4 samples only		0.0	1130.0	0.0	1671.0	5930.0	0.0	769.0	0.0	0.0	1650.0	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

8

Quantity (Tonnes per Year)	Method Used	Haz Waste : Name and Licence/Permi	Haz Waste : Address of Next	Name and License / Permit No.	Actual Address of Final

Transfer Destination	European Waste Code	Hazardous		Description of Waste	Waste Treatment Operation	M/C/E	Method Used	Location of Treatment	t No of Next Destination Facility Non Haz Waste: Name and Licence/Permit No of Recover/Disposer	Destination Facility Non Haz Waste: Address of Recover/Disposer	and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
To Other Countries	16 05 04	Yes	0.175	Refridgerant	D9	M	Weighed	Abroad	Rilta,WCP/LK/056/02b	402 Greenogue Business pk,Rathcoole,Dublin,.,Ireland	SBH,.,.,.,.,., Germany	.,.,.,.,Germany
To Other Countries	16 06 01	Yes	0.9	lead batteries	R4	M	Weighed	Abroad	ENVA,184-1	Clonminam ind. Est.,Portlaoise,.,.,Ireland	Accurec,/,.,.,.,.,Germany	.,.,.,.,Germany
Within the Country	13 08 99	Yes	33.4	Wasteoils/oily water	R9	M	Volume Calculation	Offsite in Ireland	ENVA,184-1	Clonminam ind. Est.,Portlaoise,.,.,Ireland	ENVA,WCP/LK/052/02b,.,.,.,.,Ireland	.,.,.,.,Ireland
Within the Country	**16 05 04**	**Yes**	0.1	gases in pressure containers (including halons) containing dangerous substances	D9	M	Weighed	Offsite in Ireland	INDAVER, WCP-DC-08-1121-01	Tolka Quay,.,Dublin,.,Ireland	INDAVER, WCP-DC-08-1121-01	Tolka Quay,.,Dublin,.,Ireland
To Other Countries	13 07 01	Yes	26.115	Solid oily sludge	R1	M	Weighed	Abroad	ENVA,184-1	Clonminam ind. Est.,Portlaoise,.,.,Irelan	LINDERSCHIMDT ,wcp/lk/052/02b,.,.,.,.,	.,.,.,.,Germany

										d	Germany		
To Other Countries	15 02 02	Yes	18.22	Solid waste / oily rags	R1	M	Volume Calculation	Abroad	ENVA,184-1	Clonminam ind. Est.,Portlaoise,.,.,Ireland	LINDERSCHIMDT ,wcp/lk/052/02b,.,.,.,., Germany	.,.,.,.,Germany	
Within the Country	16 07 08	Yes	0.22	wastes containing oil	R5	M	Volume Calculation	Offsite in Ireland	ENVA,184-1	Clonminam ind. Est.,Portlaoise,.,.,Ireland	ENVA,WCP/LK/052/02b,.,.,.,.,Ireland	.,.,.,.,Ireland	
Within the Country	15 01 10	Yes	3.49	packaging containing residues of or contaminated by dangerous substances	R3	M	Weighed	Offsite in Ireland	ENVA,184-1	Clonminam ind. Est.,Portlaoise,.,.,Ireland	ENVA,WCP/LK/052/02b,.,.,.,.,Ireland	.,.,.,.,Ireland	
To Other Countries	20 01 21	Yes	0.96	Fluorescent tubes	R4	M	Weighed	Abroad	Rilta,WCP/LK/056/02b	402 Greenogue Business pk,Rathcoole,Dublin,.,Ireland	DELA,.,.,.,.,.,Germany	.,.,.,.,Germany	
Within the Country	10 01 02	No	52966.0	coal fly ash	R5	M	Weighed	Offsite in Ireland	Irrish Cement,.	Limerick,.,.,.,Ireland			
Within the Country	10 01 02	No	4878.0	coal fly ash	R5	M	Weighed	Offsite in Ireland	CEMEX,"."	Kileen road,".",Dublin 12,".",Ireland			
Within the Country	10 01 02	No	37421.0	coal fly ash	D1	C	Volume Calculation	Onsite in Ireland	Moneypoint Ash Storage Area,.	Kilrush ,Co Clare,.,.,Ireland			
Within the Country	10 01 02	No	19179.0	coal fly ash	D1	C	Volume Calculation	Onsite in Ireland	Moneypoint FGD Landfill,.	Kilrush,Co Clare,.,.,Ireland			
Within the	10 01 01	No	12716.0	bottom ash, slag and boiler dust	D1	C	Volume Calcula	Onsite in	Moneypoint Ash	Kilrush ,Co Clare,.,.,Ireland			

Country				(excluding boiler dust mentioned in 10 01 04)			tion	Ireland	Storage Area,.	
Within the Country	10 01 05	No	594 22.0	calcium-based reaction wastes from flue-gas desulphurisation in solid form	D1	C	Volume Calculation	Onsite in Ireland	Moneypoint FGD Landfill,.	Kilrush,Co Clare,.,.,Ireland
Within the Country	20 03 99	No	910 0.0	Compost	D1	C	Volume Calculation	Onsite in Ireland	Moneypoint Landfill,.	Kilrush,Co. Clare,..,.,Ireland
Within the Country	15 01 01	No	28.9 045	paper and cardboard packaging	R3	M	Weighed	Offsite in Ireland	Clean Ireland,WCP/LK/073/07D	Cree,Kilrush,Co.Clare,.,Ireland
Within the Country	17 05 04	No	304. 32	Inert fill	D1	M	Weighed	Onsite in Ireland	Moneypoint FGD Landfill,.	Kilrush,Co Clare,.,.,Ireland
Within the Country	15 01 02	No	8.87	Plastic	R3	M	Weighed	Offsite in Ireland	Clean Ireland,WCP/LK/073/07D	Cree,Kilrush,Co.Clare,.,Ireland
Within the Country	17 06 04	No	30.1 8	insulation materials other than those mentioned in 17 06 01 and 17 06 03	R5	M	Weighed	Offsite in Ireland	Clean Ireland,WCP/LK/073/07D	Cree,Kilrush,Co.Clare,.,Ireland
Within the Country	15 01 03	No	28.8 01	wooden packaging	R3	M	Weighed	Offsite in Ireland	Clean Ireland,WCP/LK/073/07D	Cree,Kilrush,Co.Clare,.,Ireland
Within the Country	17 04 07	No	70.1 4	mixed metals	R4	M	Weighed	Offsite in Ireland	Hegerty Metal,WP/05/04	Bally Simon Road,Limerick,.,.,Ireland
Within the Country	17 04 07	No	352. 369	mixed metals	R4	M	Weighed	Offsite in Ireland	Clean Ireland,WCP/LK/073/07D	Cree,Kilrush,Co.Clare,.,Ireland

Within the Country	17 09 04	No	4.048	Rubble	R5	M	Weighed	Offsite in Ireland	Clean Ireland,WCP/LK/073/07D	Cree,Kilrush,Co.Clare,.,Ireland
Within the Country	20 01 25	No	0.56	edible oil and fat	R1	M	Weighed	Offsite in Ireland	Frylite cooking olis,WCP-LK-174	298 Melmount road,Victoria bridge,Strabane,County Tyrone,Ireland
Within the Country	20 01 36	No	1.42	Electrical waste	R4	M	Weighed	Offsite in Ireland	Clean Ireland,WCP/LK/073/07D	Cree,Kilrush,Co.Clare,.,Ireland
Within the Country	20 03 01	No	142.05	mixed municipal waste	D1	M	Weighed	Offsite in Ireland	Clean Ireland,WCP/LK/073/07D	Cree,Kilrush,Co.Clare,.,Ireland