ANNUAL ENVIRONMENTAL REPORT.

Cahirsiveen Transfer Station.

Licence ref. No 87 – 1.

March 2009

1) **Reporting Period** 01/01/08 to 31/12/08

2) Details of Activity

The principal activity of the Transfer Station is the compaction of solid waste into 30cu. metre closed containers for subsequent disposal to landfill in accordance with Class 12 of the Third Schedule of the Waste Management Act, 1996.

Other activities include recycling or reclamation of metals in accordance with Class 3 of the Fourth Schedule, recycling or reclamation of inorganic materials including domestic quantities of glass, plastic bottles, aluminium cans, domestic hazardous waste, car batteries, dry cell batteries, fluorescent tubes, oil based paints and varnishes and newspapers.

3) Volume and composition of waste received during the year.

the period from 1st Jan '08 to 31st Dec '08 the following quantities of waste were accepted at the transfer station;

Waste Type	Tonnage	
Municipal Waste	1581.68	
Commercial Waste	119.9	
Flytipping	20.5	
Road Sweepings	40.66	
Industrial Waste	0	
Public Domestic Waste	749.26	
Graveyard Waste	3.14	
Total Waste for Disposal	2515.1	
•		

Waste for Recycling & Recovery	Tonnage	Tonnage	
	2008	2007	
Glass	17.8	15.3	
Metals	0	0	
Paper	67.0	60	
Aluminium	0.66	0.62	
Plastic Bottles	4.57	16.78	
WEEE	95.71	86.04	
Dry Recyclables	4.8	296.64	
Waste Oil	0	2	
Batteries	1.7	11.05	
Domestic Hazardous Waste	0.13	0.1	T
Textiles	2.84	0	
Total for recycling & recovery	195.21	488.74	

4) Projections of the quantities to be accepted and percentages disposed and recycled/recovered for the coming year.

Recycling for 2008 has maintained similar levels to 2007 with the exception of the dry recyclable collection by the refuse trucks which now proceeds directly to KWD in Aghadoe, Killarney.

For the coming year we expect more modest increases in the amount of recycling carried out, probably in the line of 5%.

5) Summary report on Emissions, including wastes from silt traps and interception sumps.

A total of approximately 4 tonnes of silt/sludge were removed from the grease trap and the foul water treatment unit for subsequent disposal at the Cahersiveen Wastewater Treatment plant.

5.1) Foul Water Emmissions

Caherciveen WTS showed no exceedances in foul water emissions during the two six monthly monitoring periods.

5.2) Surface Water Emmissions

Exceedances in the limits of surface water was noted at SW3 & SW5. However since the condition of the foul effluent has been compliant for some time, therefore the impact noted would appear to be coming from old landfill activities.

6.1Dust monitoring.

No dust monitoring was carried out due to the high rainfall in the summer and unseasonal weather. Kerry County Council are satisfied that dust is not a problem as monitoring has shown over the years.

6.2 Noise monitoring.

Noise monitoring results along with an executive summary are attached to this report.

6.3 Monitoring of surface water.

As the surface water drain is adjacent to the old landfill, it may suffer some impact from drainage of small quantities of leachate from this. Also samples taken from surface water drains may be affected by sediment from the base of the drain which is disturbed when the sample is being taken. This may account for the high levels of Suspended Solids recorded in some of the surface water drains.

6.4 Foul Water

Foul water from the facility is monitored every quarter and usually reported every six months and exhibited no exceedances.

6.5 Landfill gas Monitoring.

Results for methane were typical of previous years and are not abnormal for this site. Gas is now monitored every six months as agreed with the EPA in the restoration plan document for the old landfill site.

6) Resource Consumption Summary

Diesel

Diesel usage during the period was approximately 2600 litres.

Electricity

Electricity usage at the facility amounted to about 15000 units. The main power requirement on site is office heating, water pumping and on-site lighting.

Water

Water supply to the site is from a groundwater borehole on site. Water usage on site is mainly for power washing yards, transfer station apron and hopper and washing of bins where required. The consumption was estimated at 200,000 litres during the reporting period.

7) Development works undertaken during the period.

No development works were undertaken.

8) Schedule of Environmental Objectives and Targets.

A revised schedule of environmental objectives and targets has been set and is enclosed in the Appendix. This schedule sets out a series of objectives and a timescale for their achievement.

9a) Report on progress towards achievement of Environmental Objectives and Targets in previous years report.

- 1. Promotion of home composting continued by word of mouth through the Transfer Station Manager and the Local Area Office. KCC continue to make available home composters to the general public.
- 2. Recycling continues to be promoted locally and countywide through a wide variety of media means.

9) Full title and written summary of any procedures developed by the licensee during the previous year.

No additional environmental procedures have been developed during the reporting period.

Comprehensive Financial and Safety procedures were developed during 2008 period.

10) Drum, Tank and Bund Testing.

No leakage was noted during 2008.

11) Reported Incidents and Complaints Summaries.

No incidents were reported during the reporting period. Complaints were received in relation to the access to the facility during the reporting period. Kerry County Council sanctioned surface dressing of the entire access road to be completed during the summer of 2008. However KCC held off on this due to the possible purchase of land to widen the road to the facility.

14) Report on financial provisions made under this licence, management and staffing structure of the facility and a programme for public information.

Appendix A lists the estimated cost of operation of the facility for the year 2008.

Appendix B shows the present staffing arrangements.

Appendix C. Organisation Chart.

Appendix D. Communications Programme.

Appendix E. Environmental Objectives and Targets.

Appendix F. Gas Summary. Appendix G. Foul & Surface Water Summary. Appendix H. Noise Summary.

$\label{eq:Appendix A.} \textbf{ The estimated cost of operation of the facility for the year 2008.}$

Accelem(T)	Job	Job(T)	EURO
Wages	5111004H	Cahersiveen Transfer Stn	21,543.01
Salaries	5111004H	Cahersiveen Transfer Stn	2,059.06
ER PRSI	5111004H	Cahersiveen Transfer Stn	3,485.23
Overtime	5111004H	Cahersiveen Transfer Stn	8,548.07
Arrears	5111004H	Cahersiveen Transfer Stn	368.7
Sick Pay	5111004H	Cahersiveen Transfer Stn	542.91
Annual Leave	5111004H	Cahersiveen Transfer Stn	1,916.69
Bank Holiday Leave	5111004H	Cahersiveen Transfer Stn	138.38
Travel/Subsistence	5111004H	Cahersiveen Transfer Stn	3,975.50
Eating on site allowance	5111004H	Cahersiveen Transfer Stn	119.48
Other Allowances	5111004H	Cahersiveen Transfer Stn	338.6
Minor Contracts- Trade Services & other works	5111004H	Cahersiveen Transfer Stn	66,836.60
Non-Capital Equip Purchase - Computers	5111004H	Cahersiveen Transfer Stn	954.46
Non-Capital Equip Purchase - Office Equip/Furn	5111004H	Cahersiveen Transfer Stn	119.79
Non-Capital Equip Purchase - Other	5111004H	Cahersiveen Transfer Stn	-7,442.55
Repairs & Maint - Plant	5111004H	Cahersiveen Transfer Stn	2,075.47
Repairs & Maint - Other Equip	5111004H	Cahersiveen Transfer Stn	1,795.80
Transfers from Machinery Yard	5111004H	Cahersiveen Transfer Stn	6,268.00
Other Vehicle Expenses	5111004H	Cahersiveen Transfer Stn	85
Materials	5111004H	Cahersiveen Transfer Stn	430.57
Issues from Stores	5111004H	Cahersiveen Transfer Stn	6,173.12
Insurance	5111004H	Cahersiveen Transfer Stn	136.45
Staff Travelling & Subsistence Expenses	5111004H	Cahersiveen Transfer Stn	2,708.55
Communication Expenses	5111004H	Cahersiveen Transfer Stn	1,648.94
Courier	5111004H	Cahersiveen Transfer Stn	61.12
Security - Property	5111004H	Cahersiveen Transfer Stn	1,218.43
Training	5111004H	Cahersiveen Transfer Stn	268.96
Consultancy/Professional Fees and Expenses	5111004H	Cahersiveen Transfer Stn	1,348.66
Printing & Office Consumables	5111004H	Cahersiveen Transfer Stn	843.48
Statutory Contributions to Other Bodies	5111004H	Cahersiveen Transfer Stn	7,958.00
Energy	5111004H	Cahersiveen Transfer Stn	4,127.36
			140,651.84
Accelem(T)	Job	Job(T)	EURO
. ,		Caherciveen T/F Stn	
Wages	5020003X	Recycling	12,575.17
		Caherciveen T/F Stn	
Salaries	5020003X	Recycling	2,059.06
ER PRSI	5020003X	Caherciveen T/F Stn Recycling	2 207 90
EK FK3I	3020003A	Caherciveen T/F Stn	2,297.89
Overtime	5020003X	Recycling	5,584.01
o vortaine	00200007	Caherciveen T/F Stn	0,001.01
Arrears	5020003X	Recycling	179.87
		Caherciveen T/F Stn	
Annual Leave	5020003X	Recycling	2,381.34
Transl/Cub sisters as	E000000\	Caherciveen T/F Stn	0.440.70
Travel/Subsistence	5020003X	Recycling Caherciveen T/F Stn	2,416.72
Eating on site allowance	5020003X	Recycling	314.88
Staff Travelling & Subsistence Expenses	5020003X	Caherciveen T/F Stn	439.3
Stail Haveling a Subsistence Expenses	002000X	Carlototvocti I/I Otti	700.0

Appendix B. Management Structure.

Responsibilities of Personnel

Denis O Connor responsible for

- Overall implementation of Waste Management Plan for the county.
- Development of waste management infrastructure.
- Development of waste management policy for the county.
- Groundwater and Surface water protection.
- Allocation of responsibilities to staff
- Senior Budget Holder for the Department.

Fehily Timoney & Co. responsible for;

- Design of facility
- Preparation of landfill closure plan
- Preparation of contract documents for future developments
- Provision of technical advice
- Assistance in liasing with EPA.

David Lenihan responsible for;

• Carrying out of monitoring of surface water and groundwater for the parameters and at the frequency required by the licence and the interpretation of these results.

John Aherne responsible for;

- Overall implementation of the licence.
- Overseeing correspondence to the Agency in relation to the licence.
- Waste management throughout the county..
- Overall review of Licence implementation.
- Establishment of the Environmental Management Programme.
- Overall implementation of closure plan for old landfill.
- Senior Budget Holder for Waste Management.

Pat Phelan responsible for;

- Correspondence to the Agency required by the licence.
- Inspection of the site regularly to ensure compliance with licence.
- Organisation and provision of staff training.
- Preparation of procedures required by licence.
- Ensuring required monitoring is carried out in accordance with the licence.
- Ensuring appropriate reports are forwarded to EPA at the required intervals.
- Preparation of EMP and AER
- Ensuring accurate records are compiled and maintained by relevant staff.

John Mannix responsible

- regular inspection of the facility
- inspection of site records
- ensuring all nuisance control procedures are carried out

- deal with implementation of Litter Control Act.
- Landfill gas monitoring.
- Organising of refuse collection

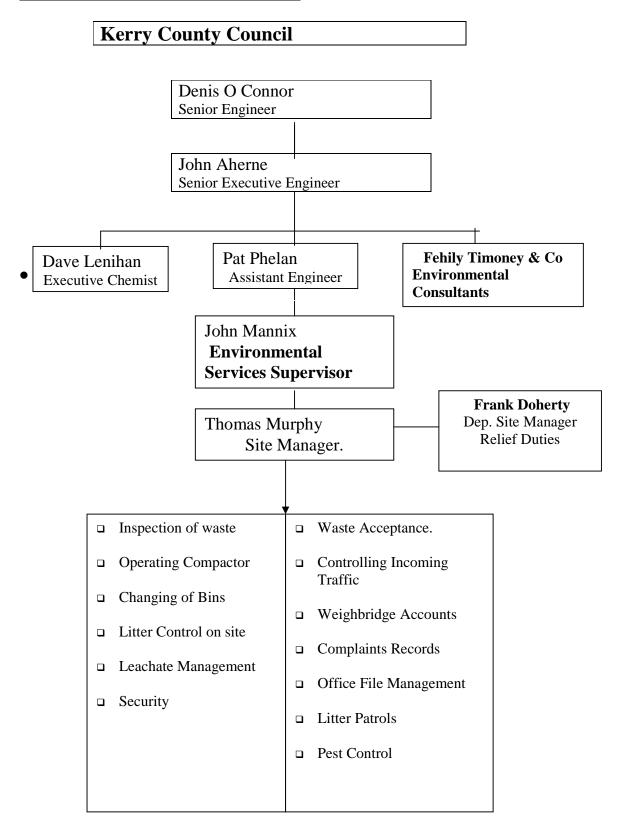
Tom Murphy and/or Dep. Manager;

- Office file management
- Weighbridge records
- Control of waste accepted at the facility.
- Controlling traffic on site.
- Litter patrol
- Weekly inspection for nuisances, inspection of surface water drains and oil interceptors and records of same.
- Complaints records, incident records
- Organising regular removal of waste bins and materials from Civic Amenity area.
- operation of compactor
- site cleanliness
- foul water management
- security

APPENDIX C

ORGANISATION CHART

Cahirsiveen Transfer Station



Cahirsiveen Transfer Station.

Site Manager. Mr Thomas Murphy

Mr Tom Murphy has been employed by Kerry Co. Council since 1995 as site manager on the old Cahirsiveen landfill site and more recently on the temporary transfer station. Prior to that he was employed as a road operative in the Cahirsiveen area since 1981.

He is capable of managing and controlling a site and has shown his capabilities over quite a number of years. He is also capable of maintaining appropriate records as required.

Mr Murphy does not have any formal qualification relevant to the post but has gained substantial experience during his time operating the landfill site.

He will also be provided with additional training on the proper management of the site as required. In the absence of formal training organised by FAS then the training will be provided by experienced Council personnel.

Environmental Services Supervisor Mr. John Mannix.

Mr John Mannix as Environmental Services Supervisor has responsibility for regular supervision of refuse collection service and the transfer stations. He is responsible for ensuring that the transfer station is operated and maintained properly by the site operatives. He is also responsible for ensuring that the operatives are supplied with all necessary equipment, tools, safety gear, etc. and that relief staff are available to cater for absences of the site manager.

Mr Mannix was prior to this a litter warden for South Kerry from April '00. From June '94 to April '00 he worked in Castleisland as traffic warden and litter warden . He had been employed previously from Sept '82 as a roads foreman in the Killarney area.

His experience as litter warden ensures he has experience of implementing the Litter Act. He also understands the importance of keeping records and complying with legislation.

Relief /Deputy site manager Mr Frank Doherty.

Frank previously worked as a fitter for Liebher, Killarney and now has almost a year's extensive on the job experience as a relief site manager at all of our 4 sites. He has also completed the FAS Waste Facility Operative training.

Act. Senior Exec. Engineer John Aherne.

John qualified as a B.E. Civil Engineering from UCC in 1995 and also has a diploma in Environmental Engineering. He has extensive experience in the Roads Section of Kerry County Council and will be undertaking the FAS Waste Management Certificate in 2008/2009.

Assistant Engineer Environment Dept. Mr. Pat Phelan B.E. qualified in 1986 with a degree in Civil Engineering and has completed a Diploma in Project Management in 2005. He has also completed the FAS Waste Management Training course between September 2004 and December 2004. He has previously worked in Construction &

Civil Engineering in the UK and has spent 5 years in the Highways Agency working mainly in Environmental Research.

Mr. Phelan has direct responsibility for the 4 Transfer Stations/CA sites in Kerry and one newly designed Civic Amenity site.

Appendix D.

Cahirsiveen Transfer Station

Licence Ref. No 87-1

COMMUNICATIONS PROGRAMME

Jan 2009

Kerry County Council have the following files available for public inspection on request at the transfer station.

		Submitted	Agreed by
	Title of Report	to EPA	EPA
1.	Waste Licence for Cahirsiveen Transfer station.	-	-
2.	Corrective Action procedure.	03/01	Yes
3.	Emergency response procedure.	04/01	Yes
4.	Communications Programme.	01/02	-
5.	Awareness & Training Procedure	03/01	Yes
6.	AER	03/07	-
7.	EMP & EMS	02/06	-

Kerry County Council have the above listed files plus the following files available for public inspection on request at the Environment Dept., Kerry County Council, County Buildings, Rathass, Tralee, Co. Kerry.

		Submitted	Agreed by
	Title of Report	to EPA	EPA
1.	Six Monthly reports on Surface Water monitoring,	Yes	-
	Foul Water monitoring and landfill gas monitoring.		
2.	Annual reports on Noise monitoring, Dust monitoring.	Yes	-
3.	Records of Incidents.	Yes	-
4.	Restoration and aftercare plan for old landfill site.	05/01	Yes
5.	Decommissioning & After care plan for Transfer	08/01	Yes
	Station.		
6.	AER	03/07	-
7.	EMP & EMS	02/06	-

A list of these all the above files and their location will be placed in a prominent location at the site office in the transfer station. The list will be updated as new reports become available.

Appendix E. Environmental Objectives and Targets.

Objective	Target	
1.Continue to promote recycling in all forms.	Overall, aim to achieve 5% increase in recycling in 2009 period.	
2. Implement new safety procedures.	By March 2009.	
3. Improve access by widening to make it more desirable for customers to use facility.	* * *	
4. Implement new financial procedures.	By May 2009.	

Responsibility. The Supervising Engineer in charge will have responsibility for implementation of the objectives and targets. The Senior Engineer Environment Dept will have responsibility for allocating staff and resources to implement the objectives and targets.

Appendix F. Gas Summary.

Caherciveen Waste Transfer Station & Civic Amenity Site

Date	Ref.	CH4	CO2	O2	Atm. Pressure	Temperature
		% v/v	% v/v	% v/v	Mbar	Degrees Celcius
20/11/07	L1a	15.3	4.8	19.1	1007	10
13/12/07	L1a	9.4	2.3	18.7	1010	8
11/01/08	L1a	5.6	2.4	18.6	1011	5
04/02/08	L1a	6.2	4.1	21.2	1008	10
13/03/08	L1a	4.6	2.1	20.6	1009	14
11/04/08	L1a	3.2	1.2	21.4	1011	16
3/10/08	L1a	4.6	2.3	20.9	1009	12

Comments: Monitoring results were low due to alternative borehole being used.

Weekly office monitoring results were consistently near zero.

Appendix G. Foul & Surface Water Summary.

Attn: Pat Phelan, EE Waste Management 16 March 2009
Re: Foul Emission Results for Transfer stations: July to Dec 2008

Enclosed are results (2003 –Date) of monitoring of designated Foul Emission points sampled as set out in EPA licence conditions for following landfill transfer stations: *Milltown*, *Coolcaslagh*, *Kenmare* and *Caherciveen*.

The latest results (Nov 2007- Dec 2008) indicate that 1 out of four transfer stations had some exceedances in limits i.e. *Coolcaslagh*

Coolcaslagh exceeded limits for suspended solids. At present this effluent is been tankered away from site.

Caherciveen, Milltown and *Kenmare* foul emissions exhibited no exceedances of limits during this reporting period

David Lenihan MSc Senior Executive Chemist Attn: Pat Phelan EE Waste Management 16 March 2009

Re: Surface water Results for Transfer stations: Jul to Dec 2008

Enclosed are results (2003 – date) of monitoring of designated Surface water points sampled as set out in EPA licence conditions for following landfill transfer stations *Milltown*, *Coolcaslagh*, *Kenmare* and *Caherciveen*. The latest results are for July-Dec 2008.

Caherciveen:

Significant deterioration in status at SW5 is evident by high level of Ammonia. This is unacceptable for a site so close to watercourse. However since condition of foul effluent have been compliant for some time the impact noted here would appear to have been coming from old landfill activities. *Further villagance and investigation is recommended*

Coolacaslagh

Evidence of significant siltation was noted in drains within landfill i.e. SW3 and SW4 earlier in year. As effluent from transfer station is now tankered away from site it is evident that this contamination is not due to transfer station activity. At present the overwhelming evidence for this siltation pointed to activity upstream of landfill site i.e. excavation works in land adjacent to site. Following remedial works to address siltation problem the situation would appear to have improved from this quarter.

Kenmare

As in previous reports impact was noted judging from Ammonia levels at SW1 and SW3. However it is more probable that impact at this point is from old landfill activities rather than Transfer station

Milltown:

Evidence of contamination are still been noted at SW3c and SW4b.

Surface water contamination however in the main would indicate impact from old landfill activities.

David Lenihan MSc Senior Executive Chemist

Appendix H. Noise Summary.