

Annual Environmental Report Mulleady's Ltd.

January 2009 - December 2009

Mulleady's Ltd.,
Cloonaugh,
Drumlish,
Co. Longford.

EPA Waste Licence – W0169-01

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Appendix

- 1 Summary of Objectives and Targets for a 5 year period.
Summary of Objectives and Targets for 2010.
- 2 Environmental Management Plan for 2010.

Executive Summary

This is the seventh Annual Environmental Report (AER) produced for Mulleady's Ltd waste recycling and transfer station and has been compiled in accordance with the content requirements of Schedule G of Waste Licence W0169-01. The report is structured similar to the waste licence, with headings from Schedule G incorporated under the appropriate condition and clause number.

Progress has been made towards implementing the measures required by the licence particularly in the areas of infrastructure, waste acceptance and handling, daily site operational records and in the area of environmental monitoring. We did however have 2 fires at the facility, one on January 15th and one on December 10th 2007 which caused some major setbacks within the company but the company is now striving to fulfill its obligations under the waste licence and continues to continually improve processes and procedures. A New Shed (Recycling Shed No. 3) was constructed in October 2008 and will be equipped with new recycling equipment during 2010. This will further increase the rate of recycling at Mulleady's Ltd.

Mulleady's will implement organic waste collection in July 2010, providing organic waste collection to Mulleady's customers.

Introduction and Site Description

Condition	Details
Condition 10 – Reports and Notifications	10.6 – The licensee shall submit to the Agency for its agreement, within thirteen months from the date of grant of this license, and one month after the end of each calendar year thereafter, an Annual Environmental Report (AER).
Schedule G	AER Content

- 1.1 The Annual Environmental Report (AER) for Mulleady's Ltd. waste recycling and transfer station includes where applicable the information specified in Schedule G of the Waste Licence, *Content of Annual Environmental Report*, in accordance with the EPA publication *Waste Licensing – Draft Guidance on Environmental Management Systems and Reporting to the Agency*.

Waste Licence Register Number

- 1.2 The Waste Licence Register Number is W0169-01

Name of Operator, Name and Address of Facility

- 1.3 Mulleady's Ltd.
Cloonaugh,
Drumlish,
Co. Longford.

Reporting Period

- 1.4 The reporting period for the purposes of this AER refers to January 2009 to December 2009.

SITE DESCRIPTION

Local Environmental Conditions

- 1.5 The waste recycling and transfer station is located in the townland of Cloonaugh, Drumlish, Co. Longford. The facility is known and operates as Mulleady's Ltd.
- 1.6 The site is located 5 km from Longford Town (main population centre in Co. Longford) and 1km from Drumlish village on the R198. The land use in the area is predominantly agricultural with a mainly livestock pasture surrounding the facility.

Soil and Geology

- 1.7 Old Red Sandstone and volcanic rocks are dominant in the Drumlish-Cloonaugh area. The surrounding soil type is generally fertile with low fertiliser requirements.

Groundwater and Hydrogeology

- 1.8 Mulleady's Ltd. site is not located over a regionally or locally classed aquifer. There is one monitoring well on the site. Mulleady's Ltd. facility is presently served by Longford County Council public water supply.
- 1.9 There are no large-scale groundwater abstraction points in the vicinity of the site although there are a number of domestic wells currently in use in the area.

Site Area

- 1.10 The waste recycling and transfer station at Cloonaugh, Drumlish, Co. Longford occupies an area of 8.83 acres (3.57 hectares).

Waste Activities On-Site

- 1.11 Mulleady's Ltd. are licensed to accept solid non-hazardous wastes only. The waste types that were accepted at this facility include household, commercial, industrial and construction and demolition wastes. No hazardous, except small amounts of household hazardous wastes (fridges, batteries, waste oil and fluorescent tubes) were accepted at the facility. No liquids were accepted at the facility.

The site consists of Recycling Shed No. 1, Recycling Shed No. 2, Recycling Shed No.3 a Fines Storage Shed and concrete storage bays.

Recycling Shed No. 1 deals with incoming mixed waste loads. Large recyclable items such as clean cardboard, plastic, metal and timber are removed from incoming skips. Refuse collection lorries also empty in this shed into the waste inspection area. The waste from general refuse collections and the remaining material from the sorted skips is passed through a shredder and then through a trommel where fines material < 50mm is removed and conveyed to the fines

storage shed prior to loading and transportation off-site to a reputable licenced / permitted treatment facilities agreed in writing with the Agency.
 The oversize material from the shredded and trolled waste is dropped loose to the ground where a grab takes this material and compacts it into an ejector trailer prior to transportation off-site to the landfill.

Any waste loads containing unacceptable wastes as per our 'unacceptable waste list', is stored in the waste quarantine area prior to disposal at the appropriate facility or to be taken back by the contractor responsible.

Recycling Shed No. 2 deals with dry recyclables. All separately collected and delivered recyclables undergo final segregation, baling and storage in Recycling Shed No. 2 prior to transportation off-site to a reputable recycler. A picking station deals with mixed dry recyclables from mixed dry recyclables collections from domestic collections and commercial / industrial collections.

Recycling Shed No. 3 was constructed in October 2008 and was used for the storage of recyclable materials during this time.

The Fines Storage Shed is used for the storage of fines prior to loading into tipping trailers for transportation off-site to a reputable treatment facility.

The quantity of waste accepted into the facility during this reporting period was 21389.95 Tonnes in 2009 (22,998.57 tonnes in 2008).

MANAGEMENT OF THE FACILITY

Licence Reference

Condition	Details
Condition 2 Management of the Facility	2.1 Facility Management
	2.2 Management Structure
	2.3 Environmental Management System
	2.4 Communications

- 2.1 The site is operated by Mulleady's Ltd. Details of the management structure during 2009 was as follows:

Managing Director – Anthony Mulleady
 Environmental Manager – Edel Hughes
 Deputy Environmental Manager – Ludmila Gabrisova
 Facility Supervisor / Facility Deputy – Oliver Sweeney
 Deputy Facility Supervisor – Pat Kelly
 Yard Supervisor – Harri Soomets

Environmental Management System

2.2 Submitted to the Agency for agreement on February 28th 2004. An Environmental Management System was introduced to the site in February 2004. This system was developed as part of the overall Environmental Management Programme and included the development of:

- A register of Environmental information; containing all correspondence to and from the Agency, including plans and reports.
- Site Operating Procedures
- Environmental Policy
- All monitoring records
- Waste acceptance docketts
- Incident Reports
- Complaints Reports
- Nuisance Inspection Daily Report Sheets
- Drainage Inspection Sheets
- Daily Plant Washdown Records
- Surface Water Daily Checks
- Monthly Waste Figures
- Once off-reports submitted to the Agency
- Training Modules

Environmental Management Plan

2.3 An environmental management plan (EMP) was developed for the facility. The Environmental Management Plan developed over this reporting period can be seen in Appendix 2. The objective of the EMP is to act as the site manual, which will assist the site in achieving its objectives and targets and licence compliance during the current and future operation of the site.

Schedule of Objectives and Targets for the Forthcoming Year

2.4 The schedule of proposed Environmental Objectives and Targets for 2010 are outlined in Appendix 1.

Report on the progress towards achievement of the Environmental Objectives and Targets for 2009

2.5 The summary table of the progress towards the achievement of objectives and targets for the reporting period is included in Appendix 2. The status of the objectives and targets are outlined in this summary. 4 new objectives have been set for 2010.

Environmental Procedures

In summary 14 procedures were operational as part of the EMP during the reporting period and are outlined below. Each procedure has a corresponding reference number and are retained on file at the site office. The EMS was submitted to the Agency on February 28th 2004.

Waste Rejection Procedure – MULL/SOP/003 – Waste as not acceptable in the licence is rejected when discovered and then the rejected load held in the waste quarantine area until arrangements are made for suitable disposal.

Unacceptable Waste List – MULL/SOP/004 – A list of unacceptable waste types was devised detailing wastes not accepted at the facility.

Nuisance / Housekeeping Inspection Procedure – MULL/SOP/006 – Inspections of a minimum of a daily basis of the site and immediate surrounds are carried out and recorded to ensure nuisances are minimised.

Monitoring Procedure – MULL/SOP/008 – All monitoring points and equipment are maintained and operated to enable monitoring to be carried out at the required frequencies. Monitoring results are analysed and any corrective action carried out. Results and interpretative reports are forwarded to the Agency in accordance with schedule E. Records, results are held at the facility office.

Environmental Incident Investigation Procedure – MULL/SOP/012 – An incident is identified as an exceedance of emissions trigger levels, equipment breakdown, minor spills, discharge to surface water course. Relevant authorities notified within required timescale, with a written report on cause, response and corrective action.

Environmental Complaints Procedure – MULL/SOP/014 – A log of complaints received is maintained on site with a procedure for details to be documented on receipt of any environmental complaint. The cause and corrective action for each complaint is monitored by the Environmental Manager.

Drainage Inspection Procedure – MULL/SOP/016 – Weekly site inspections are carried out by the Yard Supervisor, documented and corrective action carried out where required.

Environmental Non-Compliance Procedure – MULL/SOP/019 – In the event of receiving notification on non-compliance with the waste licence, the Environmental Manager has the responsibility of determining the reason(s) why the requirements were not met, plan how to correct non-compliance, implement and/or correct any changes and procedures.

Environmental Objectives & Targets – MULL/EMS/003 – Environmental Objectives and Targets are identified for the site and recorded and actioned throughout the life of the site.

Environmental Training Procedure – MULL/EMS/005 – Training needs are established to ensure that all relevant personnel receive appropriate training in relation to the licence conditions and requirements, roles and responsibilities and environmental effects of work activities.

Emergency Response Procedure – MULL/EMS/009 – An emergency situation is identified as a fire/explosion, significant spillage or equipment breakdown. Arrangements for dealing with an emergency are in place. The control of operations in an emergency response is the responsibility of the Environmental Manager.

Document Control – MULL/EMS/013 – All documentation pertaining to the site's activities is maintained on site. All records and reports as set out in Schedule E of the licence are maintained and forwarded to the Agency at the required frequencies.

Records Management Procedure – MULL/EMS/016 – All records pertinent to the support and maintenance of the EMS are maintained. The Environmental Manager will ensure that all documentation pertinent to this EMS is adhered to.

Chemical Spill Handling Procedure – MULL/EMS/019 – All preventative measures are taken to prevent spills through regular inspections, monitoring of employees handling techniques and providing staff with information.

- 2.6 A communications procedure, waste acceptance, waste handling and daily surface water visual check sheet were developed in 2003.
- 2.7 Communication of information pertaining to the site is made available to the public.
- 2.8 One leaflet on site activities and services was published and distributed to members of the local community during 2003. These leaflets are available to the public at the facility office. A website on the facility and services the company offer was set up in 2006. Also an annual newsletter was set up and is available to the public at the facility office since April 2006.

FACILITY INFRASTRUCTURE

Condition	Details
Condition 3 Facility Infrastructure	3.1 – Facility Entrance
	3.2 – Facility Notice Board
	3.3 – Facility Security
	3.4 – Facility Surfaces and Site Surfaces
	3.5 – Facility Office
	3.6 – Waste Inspection and Quarantine Area
	3.7 – Waste Handling, Ventilation & Processing Plant
	3.8 – Wastewater / Sewage Collection
	3.9 – Surface Water Collection
	3.10 – Vehicle Wash Area
	3.11 – Tank and Drum Storage Areas
	3.12 – Drainage System, Pipeline Testing
	3.13 – Monitoring Infrastructure

Report on Development works undertaken during the Reporting Period

Facility Entrance

- 3.1 The facility entrance was opened November 10th 2003. Access to the facility through new entrance also took place from that date.

Facility Notice Board

- 3.2 The facility notice board was erected on December 11th 2003.

Facility Security

- 3.3 The post and chain link fence was erected in March 2004. Temporary fencing exists between Mulleady's Ltd. and an adjacent farmer where land reclaiming measures still have to be completed.
- 3.3.1 The reinforced concrete post and concrete panel with timber infill panel which separates the site from Longford Precast was erected in November 2004. A dividing wall was erected between Longford Precast Ltd. and Mulleady's Ltd. in

June 2005 and an area located on the south of site was concreted in September 2005.

- 3.3.2 An entrance barrier was installed and operational since September 2006. It has greatly increased traffic management within the facility. Mulleady's Ltd. employees use a swipe card and customers using the civic amenity site use barrier coins to exit through barrier. The barrier is on a timer which allows entry to the facility from 8 am through to lunchtime. Between 1 and 1:45 pm the facility is closed for lunch. At 1: 45 pm the barrier is reactivated and customers can access the site until 5 pm.

Facility Surfaces and Site Roads

- 3.4 The areas where waste vehicle movement and waste receptacle storage areas are concreted since May 2004. The facility entrance was concreted during March 2006. In the event of any minor oil seepages from lorries or trailers an oil spill detergent kit that removes hydrocarbon and liquid paint spills from road surfaces was purchased. This solution is diluted and sprayed on to the spill where it can be harmlessly washed away after use. This clean up measure was commenced in November 2005. In November 2005 special oil collecting 'Bio Tubes' were added to the interceptor in the main yard area (1 bio tube) and into the class 1 interceptor (2 bio tubes) so that when any oils that may spill in the general yard area are washed into the surface water line, these pillows will absorb the oil and biologically break it down before release. These 'Bio Tubes' are replaced annually.

Facility Office

- 3.4.1 The new facility office is in operation since November 10th 2003.

Waste Inspection and Quarantine Areas

- 3.5 Waste Inspection areas are set up in 2003 and labelled in 2004. Waste Quarantine areas are set up in 2003 and labelled during 2004.

Waste Handling, Ventilation and Processing Plant

- 3.6 The duty and standby capacity in tonnes per day of the waste handling and processing equipment used at the facility was submitted to the Agency on November 6th 2003.

Wastewater / Sewage Collection

- 3.7 Wastewater collection system completed in February 2004.
 - 3.7.1 High Level alarm was installed in November 2003 in the wastewater collection tank.
 - 3.7.2 All sewage generated at the facility and run-off from the weighbridge is collected and treated at the on-site sewage treatment system since December 22nd 2003.

Surface Water Collection

- 3.8 Surface Water Collection System completed in March 31st 2004. Shut-off valve in place since August 2004.

Vehicle Wash Area

- 3.9 Installation of vehicle wash closed loop recycling system completed on February 7th 2004 and vehicle wash area is drained to the waste water collection system since February 25th 2004

Tank and Drum Storage Areas

- 3.10 A hazardous storage area was provided for hazardous waste found within waste loads coming in to the site. A bunded box has been supplied by Returnbatt Ltd. for the collection of batteries and a bunded tank has been provided for the collection of any waste oil found within waste on inspection. A box has been supplied by Atlas Environmental for the storage of fluorescent tubes. Gas cylinders are stored in a skip in the hazardous storage area. The storage of fluorescent tubes, batteries and waste oils were moved to the Civic Amenity Area in June 2005. Gas cylinders remain in the old hazardous waste storage area.

Drainage System / Pipeline Testing

- 3.11 Marking of manholes was carried out on site manholes. Surface water painted blue, wastewater painted red, sewage line painted yellow and ESB ducting line painted green during this reporting period. This procedure is ongoing.

Storage Tank Certification

- 3.12 All tanks were certified and inspected in February 2004.

Labelling of Sampling and Monitoring Points

- 3.13 Sampling and Monitoring Points labelled since March 31st 2004

Landscaping Programme

- 3.14 Landscaping Programme submitted to the Agency on October 27th 2004. The area on the right hand side along the entrance to the site has been leveled and seeded since summer 2004. During 2005 the left hand side of the entrance road was leveled and seeded. Planting of trees and shrubs along both sides of the entrance to the facility were carried out during April and May of 2006.

Dust and Odour Control in Waste Transfer Buildings

- 3.15 Dust and odour control measures are in place in Recycling Shed No. 1, Recycling Shed No. 2 and the Fines Storage Shed since February 7th 2004.

Localised dust and odour suppression units at the waste shredder and trommel units were provided by May 7th 2004.

These units were destroyed in the facility fire which occurred on December 10th 2007, replaced Mid 2009.

Access to Monitoring Points at the Facility

- 3.16 Safe access to sampling and monitoring points are provided within the site area itself for any samples required to be taken within the site area

Monitoring Infrastructure

- 3.17 The groundwater well is maintained for use for abstraction of groundwater samples and has been garded with a steel railing and gate since November 15th 2004.

Monitoring points are now labelled where possible for the collection of samples.

Bird Control Measures

Bird Control Measures are provided on the site since March 15th 2004. Upgraded bird control measures were part of the objectives and targets for 2009 (see project number 75). A New system of audio bird control was set up and operational during September 2009.

FACILITY OPERATIONS

Condition	Details
Condition 4 Facility Operations	4.1 Waste Processing
	4.2 Waste Acceptance and Characterization
	4.3 Operational Controls
	4.4 Composting Operations
	4.5 Compost Quality / Use
	4.6 Off-Site Disposal and Recovery
	4.7 Civic Waste Facility
	4.8 Waste Storage
	4.9 Wastewater Management
	4.10 Maintenance
	4.11 Landscaping

Report on Facility Operation during the Reporting Period

Waste Processing

- 4.1 All waste processing was carried out indoors.

Waste Acceptance and Characterization Procedures

- 4.2 Waste acceptance and characterization procedures in place since September 7th 2003.
- 4.2.1 Waste loads were inspected upon tipping
- 4.2.2 A record of all inspections of incoming waste loads are maintained.

Operational Controls

- 4.3 The floor of the transfer station was swept daily using manual brushing and a roadsweeper with water jets for washing. Plant was cleaned off using manual brushing.
- 4.3.1 Adequate lighting was in place at the facility since November 7th 2003.

Composting Operations

- 4.4 Composting operations were not carried out in this reporting period.

Compost Quality / Use

- 4.5 Not applicable during this reporting period.

Off-site Disposal and Recovery

- 4.6 Waste loads sent off-site for recovery or disposal are conveyed by a waste carrier agreed in writing with the Agency. All waste transferred from the facility was transferred to a facility that was agreed in writing with the Agency.

Civic Waste Facility

- 4.7 A civic amenity facility was set up in June 2005. The amount of people using this facility is approximately 55 to 70 cars per day with increases on Fridays, bank holidays and during the Christmas period. The items accepted on this site are general household waste, timber, glass, green waste, batteries, metal, fluorescent tubes, waste oil, plastics, paper, cardboard, aluminium cans, food cans, textiles and white goods. Longford County Council has approved this civic amenity facility as an outlet for WEEE, and in turn the public are bringing in white goods into the Civic Amenity facility free of charge since August 2005. White goods accepted at the site are fridges, cookers, washing machines, dryers, televisions, videos, microwaves and small electrical goods. Since the WEEE Directive was implemented this facility for the public is proving very popular. This facility has also diverted traffic from Recycling Shed No. 1 which increases public safety on the site.

Waste Storage

- 4.8 Baled and wrapped low density plastic, baled and wrapped plastic bottles, baled tetra pak, mixed timber, mixed glass, tyres and white goods at civic amenity were stored outside during the reporting period.

Waste water Management

- 4.9 There were 45 wastewater shipments to Longford Wastewater Treatment Plant in 2009.
- 4.9.1 Civil works to wastewater tank were completed in February 2004.

Maintenance

- 4.10 All waste handling plant was maintained in accordance with the manufacturers instructions.

Landscaping

- 4.11 The existing hedgerow network that forms the boundary of the facility was retained.
- 4.12 The grass area on the right along the entrance was leveled and seeded during 2004 and in 2005 the left hand side of entrance was leveled and seeded.
- 4.13 Planting of trees and shrubs along the entrance road was carried out during A
- 4.14 A landscaping programme for the facility was submitted to the Agency on October 27th 2004.

EMISSIONS

Condition	Details
Condition 5 Emissions	5.1 Emission Limits
	5.2 Emissions to Surface Water
	5.3 Disposal of Wastewater
	5.4 Wastewater Tankered to Wastewater Treatment Plant.

Report of Facility Emissions during the Reporting Period

Emission Limits

- 5.1 There were six exceedances of the waste licence emission limits for dust (5) and sewage treatment plant (1) emissions. Details in section 8.1 (Environmental Incidents).

Emissions to Surface Water

- 5.2 Surface water discharge from the facility is via two silt traps and two oil interceptors one of which is Class 1 as required by the licence. In November 2005 a preventative pollution method involving an oil collection pillow was added to the surface water interceptors. These are bio tubes which contain a blend of oil digesting bacteria and digest up to 2 kg of oil per week. Two bio tubes were lowered into the Class 1 interceptor into 2 different chambers and 1 into interceptor number 1 into the last chamber. These are changed annually.

Disposal of Wastewater

- 5.3 No wastewater was discharged to the surface water stream.

Wastewater Tankered to Wastewater Treatment Works

- 5.4 There were 45 consignments (1082380 Litres) of wastewater to Longford Treatment Works in 2009.

NUISANCE CONTROL

Condition	Details
Condition 6 - Nuisance Control	6.1 Litter Control
	6.2 Dust Control
	6.3 Odour Control
	6.4 Vermin Control

Litter Control

- 6.1 The road network in the vicinity of the facility and all facility roads and surfaces were kept free from debris from vehicles entering and leaving the facility. All litter was removed without delay. Litter picking was carried out daily and as required

Dust Control

- 6.2 Waste loads were dealt with inside Recycling Shed No. 1 to avoid dust nuisance. Dust control equipment in place since February 7th 2004.
- 6.2.1 In dry weather, site roads were sprayed with water when it was required to minimise airborne dust nuisance. A sprinkler system was commissioned along the facility entrance in August 2005. This sprinkler is turned on and off as required and is proving very useful during dry and dusty conditions on the entrance road. A localised dust suppression unit was set up in Recycling Shed No. 1 to spray over dusty and bad smelling loads in the waste inspection area. As a result of the fire on-site on December 10th 2007 a new full dust suppression system will need to be set up in Recycling Shed 1. Due for completion till the end of July 2010.

Odour Control

- 6.3 All wastes that were stored overnight at the facility were suitably covered so as to avoid generation of odours at the facility.

Vermin Control

- 6.4 There are 10 bait points set up around Recycling Shed No. 1, Recycling Shed No. 2, Recycling Shed No.3 and the Fines Storage Shed. Monthly inspections were carried out by Paddy Dowd Pest Control Services during this reporting period.
- 6.4.1 Daily visual inspections for the presence of vermin were also carried out on-site.

MONITORING

Condition	Details
Condition 7 Monitoring	7.1 Noise Monitoring
	7.2 Surface Water Monitoring
	7.3 Groundwater Monitoring
	7.4 Wastewater
	7.5 Nuisance Monitoring

Noise Monitoring

- 7.1 Three noise monitoring locations were identified and agreed with the Agency in November 2003. These include N1 (outside between Recycling Shed No. 1 and Recycling Shed No. 2), N2 (Reilly residence) at the north east of the facility and N3 (Mc Keon residence) at the south west of the facility.
- 7.11 Noise monitoring was conducted daytime on 25/06/09 for at points N1, N2 and N3 for parameters as required under Schedule D.3 of the Waste Licence.

Monitoring Point	L (Aeq,30 min)	L (A10, 30 min)	L (A90, 30 min)
N1	65 dBA	69 dBA	55 dBA
N2	71 dBA	75 dBA	46 dBA
N3	50 dBA	51 dBA	55 dBA

- 7.12 N1 – Noise from processing plants within Recycling Sheds and external equipment.
 N2 – Noise environment dominated by passing traffic along R198. Noise from reversing beepers in Recycling and transfer facility.
 N3 - Occasional local traffic. Noise from traffic along R198. Noise from Concrete Plant. Noise from reversing beepers.
- 7.13 The noise climate of the locality can be described as rural, with dominant sources limited to passing traffic. Noise sources at the transfer station are attributed to transfer station plant machinery and incoming waste traffic.

Surface Water

- 7.2 In 2009 the monitoring of surface water was carried out in accordance with Schedule D4 of the waste licence.
- 7.2.1 Daily visual inspections are carried out on the surface water points SD-1 (Discharge Pipe), SW-1 (Surface Water Upstream – 10 metres upstream) and SW-2 (Surface Water Downstream – 10 metres downstream).
- 7.2.2 During this reporting period four set of results were obtained for SD-1, SW-1 and SW-2 for samples taken. All test results were in compliance with there surface water limits.

First Quarter – 2009

Sample Taken – March 16th 2009

Parameter	Surface Water Monitoring Results		
	SD-1	SW-1	SW-2
pH (pH units)	7.4	7.6	7.55
Chemical Oxygen Demand (mg/l)	36	21	20
Biological Oxygen Demand (mg/l)	<2	<2	<2
Electrical Conductivity (mS/cm)	0.745	0.368	0.336
Suspended Solids (mg/l)	<10	<10	<10
Ammonical Nitrogen (mg/l)	1.3	<0.2	<0.2
Mineral Oils (ug / l)	<10	<10	<10

Second Quarter – 2009

Sample Taken – June 2nd 2009

Parameter	Surface Water Monitoring Results		
	SD-1	SW-1	SW-2
pH (pH units)	8.57	8.34	8.34
Chemical Oxygen Demand (mg/l)	46.7	23.6	21.0
Biological Oxygen Demand (mg/l)	<1.00	<1.00	1.02
Electrical Conductivity (mS/cm)	0.650	0.321	0.323
Suspended Solids (mg/l)	6.50	2.00	<2.00
Ammonical Nitrogen (mg/l)	1.71	<0.200	<0.200
Mineral Oils (ug / l)	<10	<10	<10

Third Quarter – 2009

Sample Taken – September 14th 2009

Parameter	Surface Water Monitoring Results		
	SD-1	SW-1	SW-2
pH (pH units)	7.87	8.07	7.97
Chemical Oxygen Demand (mg/l)	46.7	33.1	33.0
Biological Oxygen Demand (mg/l)	1.21	<1.00	<1.00
Electrical Conductivity (mS/cm)	0.571	0.313	0.313
Suspended Solids (mg/l)	6.00	2.50	2.00
Ammonical Nitrogen (mg/l)	1.27	<0.200	<0.200
Mineral Oils (ug / l)	<10	<10	<10

Fourth Quarter – 2009

Sample Taken – November 30th 2009

Parameter	Surface Water Monitoring Results		
	SD-1	SW-1	SW-2
pH (pH units)	7.82	7.95	7.96
Chemical Oxygen Demand (mg/l)	36.2	28.5	31.3
Biological Oxygen Demand (mg/l)	1.97	1.99	1.91
Electrical Conductivity (mS/cm)	0.581	0.336	0.373
Suspended Solids (mg/l)	7.00	272	72.5
Ammonical Nitrogen (mg/l)	1.16	0.223	0.271
Mineral Oils (ug / l)	<10	<10	<10

Groundwater

- 7.3 In 2009 the monitoring of groundwater water was carried out in accordance with Schedule D8 of the waste licence.
- 7.3.1 During this reporting period two set of results were obtained for groundwater point GW-1. The tables below summarise the results. All test parameters were in compliance with their waste licence limits.

First Bi-Annual – 2009

Sample Taken – June 2nd 2009

Parameter	Ground Water Monitoring Results
	GW-1
Ammonia (mg/l)	<0.2
Mineral Oils (ug / l)	26.5

Second Bi-Annual – 2009

Sample Taken – September 14th 2009

	Ground Water Monitoring Results
Parameter	GW-1
Ammonia (mg/l)	<0.2
Mineral Oils (ug / l)	<10

DUST

- 7.4 In 2009 the monitoring of dust levels was carried out in accordance with Schedule D.2 of the waste licence.
- 7.4.1 During this reporting period three set of results were obtained for dust.
- 7.4.2 Standard method VDI12119 (Measurement of Dustfall, Determination of Dustfall using Bergerhoff Instrument (Standard Method) German Engineering Institute) was utilized for analysis.
- 7.4.3 Dustfall measurements were taken twice during the period May to September. Sampling points were reduced to three with the agreement of the Agency (D2 was excluded as results from this point are not re-presentative of the waste facility.) On one out of the three sampling periods there was one exceedence on one occasion.

Dust Monitoring – No. 1 – 2009

Sample Taken – August 25th 2009 – Limit 350 mg/m²/day. Two Non-Compliances.

	Dustfall Results		
Parameter	D1	D3	D4
Gravimetric Analysis (mg/m ² /day)	503	300	556

Dust Monitoring – No. 2 – 2009

Sample Taken – September 22nd 2009. – No non compliances.

Parameter	Dustfall Results		
	D1	D3	D4
Gravimetric Analysis (mg/m ² /day)	169	225	87

Dust Monitoring – No. 3 – 2009

Sample Taken – November 13th 2009 – Limit 350 mg/m²/day. There were three exceedences.

Parameter	Dustfall Results		
	D1	D3	D4
Gravimetric Analysis (mg/m ² /day)	1025	945	924

Treated Sewage

- 7.5 In 2009 the monitoring of treated sewage was carried out in accordance with Schedule D.6 of the waste licence.
- 7.5.1 During this reporting period one set of results was obtained for treated sewage.
- 7.5.2 There was one exceedence of the waste licence limits.

Annually – 2009

Sample Taken – November 30th 2009

Parameter	Treated Sewage Emissions to Percolation Area
	SG-1
pH (pH units)	8.13
Biological Oxygen Demand (mg/l)	18.7
Suspended Solids (mg/l)	23.5
Total Ammonia (mg/l)	16.7
Nitrate (mg/l)	3.78

There was an exceedence in the levels of ammonia (as N) within the sample. The Licence limit is 5mg/l, the result was 16.7mg/l.

Wastewater

- 7.6 There were 45 shipments of wastewater to Longford Sewerage Works in 2009.

Vermin Control

- 7.7 Paddy Dowd Pest Control Services called on a monthly basis to service the 10 bait points surrounding Recycling Shed No. 1, Recycling Shed No. 2, Recycling Shed No.3 and the Fines Storage Shed.
- 7.7.1 Daily visual checks for vermin were carried out during this reporting period.

CONTINGENCY ARRANGEMENTS

Condition	Details
Condition 8 Contingency Arrangements	8.1 Environmental Incidents
	8.2 Emergency Response Procedures

Report of Contingency Arrangements for the Reporting Period

Environmental Incidents - 2009

8.1 There were 3 environmental incidents during this reporting period.

Date	Summary	Corrective Action
25/08/09	Dust licence limits were exceeded on sampling ending August 25 th 2009. The limit is 350 mg/m ² /day. 503 mg /m ² /day was the result at D1 (at the weighbridge) and 556mg/l was result at located at the south west boundary o of the site	The water tanker was further used to spray the yard to further reduce dust emissions. Increased overall dust control procedures were carried out in the yard area.
13/11/09	Dust licence limits were exceeded on sampling ending November 13 th 2009. The limit is 350 mg/m ² /day. 1025 mg /m ² /day was the result at D1 (at the weighbridge), 945 mg/l was the result at D3 located at the south west boundary of the site and 924 mg/l was the result at D4 located at the south west boundary of the site	The water tanker was used to spray the yard to further reduce dust emissions. Increased overall dust control procedures were carried out in the yard area.
30/11/09	Sewage Treatment plant limits were exceeded on sampling occasion on November 30 th 2009. The total ammonia result was 16.7 mg/l exceeding our waste licence limit of 5 mg/l	The system to be researched in more depth in 2010

Environmental Complaints

- 8.2 There was one environmental complaint logged during the reporting period. Complaints are recorded and responded to as soon as possible on complaints record form. Corrective action, if considered necessary is carried out and recorded.

Date	Summary	Corrective Action
25/09/09	Response to a phone call by Ms Edel Mimmagh regarding offensive odour from the facility that day.	Trailers with waste fines were parked in the wrong area but were re located to inside the back entrance to Recycling Shed No. 2 prior to disposal at the appropriate facility.

Emergency Response Procedures

- 8.3 An emergency response team was formed during 2004. During 2004 period a fire assembly point located at the end of the canteen on the side facing the transfer buildings. Spill Kits have also been provided for the clean up of any accidental spillage that may occur on site. Spill kit located in Civic Amenity Site during 2005.
- 8.4 The emergency response procedure defines the actions taken by the emergency response team in the event of a fire evacuation, accidental spillages of hazardous material and breakdown of environmental control equipment. The main focus of this procedure is to initiate the correct action to minimise injury to personnel and damage to the plant until the arrival of the emergency services.
- 8.5 There are currently three people on the Emergency Response Team:
Mr. Anthony Mulleady (Managing Director)
Miss Edel Hughes (Environmental Manager)
Mr. Ollie Sweeney (Facility Supervisor)
Mr. Pat Kelly (Facility Deputy)

RECORDS

Condition	Details
Condition 9 Records	9.1 Documents at Facility Office
	9.2 Waste Load Records
	9.3 Other Written Records at Facility Office
	9.4 Complaints
	9.5 Wastewater Consignments
	9.6 Civic Waste Records

Report on Documents Present During the Reporting Period

Documents at Facility Office

9.1 In 2009 the following documents were kept at the facility office:

- Waste Licence
- EPA Submissions Folder
- Unacceptable Waste List
- Nuisance / Housekeeping Records
- Monitoring Records
- Environmental Incidents Records
- Environmental Complaints Records
- Drainage Inspection Records
- Environmental Objectives & Targets
- Environmental Training Records
- Emergency Response Documents
- Communications Procedure
- Waste Acceptance and Handling Procedures
- Surface Water Check Sheets
- Plant daily cleaning Check Sheets
- Environmental Training Modules

Waste Load Records

9.2 Waste records are stored at the facility office which has been in operation since November 10th 2003. A new weighbridge computer package was installed for computerised weighbridge transactions on November 10th 2003. In 2005 some outgoing loads were pre-weighed the evening before departure the next morning. An Avery Berkel Bridgemont system whereby drivers can key in their weights and generate tickets was installed during December 2005 but was not in operation during this reporting period.

Additional Written Records at the Facility Office

- 9.3 Monthly reports on incoming and outgoing waste loads are filed at the facility office.

Complaints

- 9.4 There was one complaint during this reporting period. Complaint information is stored at the facility office.

Wastewater Consignments

- 9.5 There were 45 wastewater consignments (1082380 Litres) during 2009 to Longford Sewage Treatment Works.

Civic Waste Records

- 9.6 The Civity Amenity site opened in June 2005. The accepted materials are cardboard, newspapers and magazines, plastic bottles, plastic film, steel cans, aluminium cans, green waste, metal, timber, white goods, all electrical goods, textiles, batteries, fluorescent tubes, general mixed waste and waste oils. At the end of each day the skips from the civic amenity site are emptied into either Recycling Shed No. 1 or Recycling Shed No. 2 depending on the material type. A record of all these skips and of any other collections of materials from this site i.e textiles, waste oil, batteries etc. were recorded during this reporting period.

REPORTS AND NOTIFICATIONS

Condition	Details
Condition 10 Reports and Notifications	10.1 Reporting to the Agency
	10.2 Incident Reporting
	10.3 Restoration and Aftercare
	10.4 Waste Recovery Report
	10.5 Monitoring Locations
	10.6 Annual Environmental Report

Report on Reports and Notifications to the Agency

Reporting to the Agency

- 10.1 All copies of environmental data and prescribed reports obtained and prepared on behalf of the licensee were forwarded to the Agency. Copies of reports and correspondence are retained at Mulleady's Ltd. facility office.
- 10.2 Waste records were retained in the site office.

Incident Reporting

- 10.3 During the reporting period 3 incidents. The incidents that occurred are documented and filed at the facility office.

Restoration and Aftercare

- 10.4 Decommissioning and Aftercare Plan submitted to the Agency on September 27th 2004.

Waste Recovery Report

- 10.5 The Waste Recovery Report was submitted to the Agency on September 29th 2004.

Monitoring Locations

- 10.6 A scaled drawing showing all the monitoring locations that are stipulated in the licence including reference code of each monitoring point were submitted to the Agency on November 6th 2003 and have been agreed.

Annual Environmental Report

- 10.7 This is the seventh Annual Environmental Report to be submitted to the Agency since the issue of Waste Licence W0169-01 to Mulleady's Ltd. This document reports the environmental details of the company from January to December 2009. The next Annual Environmental Report will be reporting on the period January to December 2010.

CHARGES AND FINANCIAL PROVISIONS

Condition	Details
Condition 11 Charges and Financial Provisions	11.1 Financial Provision for Closure, Restoration and Aftercare

Report for Financial Provision for this Reporting Period

Financial Provision for Closure, Restoration and Aftercare

- 11.1 An independent third party risk assessment of the facility was carried out and submitted to the Agency in May 2004.

12 WASTE ACCEPTANCE

- 12.1 The Agency under Section 40 (1) of the Waste Management Act, 1996 granted this Waste Licence to Mulleady's Ltd. to carry out the waste activities listed below at the waste recycling and transfer station in Cloonaugh, Drumlish, Co. Longford.

Licensed Waste Disposal Activities, in accordance with the Third Schedule of the Waste Management Act 1996

Class 11: Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this schedule (This activity is limited to the bulking and transfer of waste at the facility).

Class 12: Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule (This activity is limited to the bulking and transfer of waste at the facility).

Class 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 (This activity is limited to the storage of wastes at the facility prior to movement off-site for disposal).

Licensed Waste Recovery Activities, in accordance with the Fourth
Schedule of the Waste Management Act 1996

Class 2: Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes (This activity is limited to composting biodegradable wastes at the facility).

Class 3: Recycling or reclamation of metals and metal compounds (This activity is limited to the collection of metals at the facility for recovery

Class 4: Recycling or reclamation of other inorganic materials (This activity is limited to the collection of inorganic wastes at the facility (e.g. waste glass, construction and demolition wastes).

Class 13: Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced (This activity is limited to the storage of wastes at the facility prior to removal off-site for recovery.

From January to December 2009 waste records were maintained on paper file. From November 10th 2003 all waste figures were recorded on a computer system linked to the weighbridge and a corresponding computer printout was generated. From January 1st to December 31st 2005 all waste figures were maintained on computer files. In June 2009 an updated version of our computer weighbridge recording system was in operation. This is resulting in continual improvement of our data recording and invoicing system. The following details were recorded and retained at the site office:

- Docket Number
- Vehicle Registration / Trailer Number
- Driver
- Customer
- Waste Permit / Waste Licence Details – Where applicable
- Waste Collection Permit No. – Where Applicable
- Incoming Waste Load Inspections
- Weight In
- Weight Out
- Nett Weight
- Time In
- Time Out
- Driver Signature
- Weighbridge Operator Signature

Wastes that were delivered to the site were initially weighed and inspected in Recycling Shed No. 1 or Recycling Shed No. 2. These inspections were carried out mainly by the Facility Supervisor, the Deputy Facility Supervisor, Environmental Manager and the Deputy Environmental Manager.

Waste Figures – January 2009 to December 2009 Incoming Waste		
Waste Type	EWC Code	Weight (Tonnes)
Wheelie Bins and Bags	20 03 01	7327.18
Mixed Dry Recyclables	20 03 01	2941.37
Mixed Commercial and Domestic Waste	20 03 01	58.060
Construction and Demolition Waste	17 09 04	511.67
Street Cleaning Waste	20 03 03	143.480
Industrial Waste	20 03 01	1924.97
Commercial Waste	20 03 01	958.68
General House Clearance	20 03 01	4571.96
Plastic	20 01 39	122.86
Cardboard	20 01 01	919.020
Paper	20 01 01	206.76
Glass	20 01 02	900.370
Metal	20 01 40	226.220
Wood	03 01 05	131.650
Miscellaneous Recyclables	20 03 01	422.880
Tyres	16 01 03	22.820
Total		21389.950 Tonnes

Waste Figures – January 2009 to December 2009 Outgoing Waste		
Waste Type	EWC Code	Weight (Tonnes)
Waste	19 12 12	8097.640
Mixed commercial and industrial waste untrommeled	20 03 07	1462.74
Waste Fines	19 12 12	5719.870
Cardboard	19 12 01	1559.580
Newspaper & Magazines	20 01 01	1345.700
Office Paper	20 01 01	111.100
Ldpe Plastic	20 01 39	157.110
Plastic Bottles	20 01 39	336.300
Hard Plastic	20 01 39	71.080
Metal	20 01 40	442.000
Steel Cans	19 12 02	164.820
Aluminium Cans	20 01 40	23.960
Glass	20 01 02	1213.640

Mixed Dry Recyclables	20 03 01	482.000
Wood	20 01 38	654.930
Textiles	20 01 11	20.680
WEE Recycled	20 01 36	135.060
Batteries	16 06 01	9.300
Fluorescent Tubes	20 01 21*	0.780
Copper	17 04 01	0.660
Cable	17 04 11	14.720
Steel	17 04 05	0.940
Waste Oil	13 02 08	2.080
Plasterboard	17 08 02	46.400
C&D Waste (Mulleady's Yard Fill)	17 01 07	213.340
Gas Cylinders	16 05 05	0.420
Total		22286.85 Tonnes

Waste Recovery Report – January to December 2009	
Waste Landfilled	9560.380 Tonnes (43%)
Dry Recyclables Recycled	7006.600 Tonnes (31%)
Waste Fines Stabilised	5719.870 Tonnes (26%)
Total	22286.85 Tonnes (100%)

The estimated intake of waste for 2010 is 25,000 tonnes.

13 Energy and Resource Consumption

The amount of energy consumed by Mulleady's Ltd. from January to December 2009 was 324,800 kW hours (meter readings from ESB).

The amount of water consumption at the facility from January to December 2009 was 2852 m³.

Appendix 1

Mulleady's Ltd.

Objectives & Targets – 5 Year Targets

Project No.	Objective	Waste Licence 169-1 - Condition No.	Target to be Completed	Responsibility	Completion Date	Status
1	Management Structure Submission	2.2.1	Management Structure to be submitted to the EPA	Environmental Manager	November 7 th 2003	Completed
2	Environmental Management System	2.3.1	EMS to be submitted to the EPA	Environmental Manager	February 28 th 2004	Completed
3	Communication Programme	2.4	Communication Programme to be submitted to EPA.	Environmental Manager	November 7 th 2003	Completed
4	Facility Notice Board	3.3	Facility Notice Board to be erected.	Environmental Manager	December 15 th 2003	Completed
5	Facility Security	3.4	Post and chain link fence around site.	Managing Director	February 28 th 2004	Almost complete
5	Facility Security	3.4	Reinforced concrete dividing wall to separate site from Longford Precast Ltd.	Managing Director	August 31 st 2004	Complete
6	New Facility Entrance	3.4.2	Access to the facility through new entrance.	Managing Director	November 7 th 2003	Complete
7	Facility Roads and Site Surfaces	3.5	Areas of waste vehicle movement and waste receptacle storage areas to be concreted.	Managing Director	May 7 th 2004	Complete
7	Facility Roads and Site Surfaces	3.5	Car park area, facility entrance and areas of little vehicular use to be concreted.	Managing Director	April 30 th 2005	Under completion during March 2006

Project No.	Objective	Waste Licence 169-1 - Condition No.	Target to be Completed	Responsibility	Completion Date	Status
8	Temporary Facility Office	3.6	Facility Office to be in place.	Managing Director	November 7 th 2003	Completed
9	Waste Inspection & Waste Quarantine Areas.	3.7	Waste Inspection & Waste Quarantine Areas to be in place.	Managing Director	February 25 th 2004	Completed
10	Waste Handling and Processing Equipment- Duty & Standby Capacity.	3.8.2	Submit report on the duty and standby capacity of waste handling equipment.	Managing Director	November 7 th 2003	Completed
11	Waste Water Collection	3.9.1	All wastewaters generated are collected and drain to the waste water storage tank.	Managing Director	February 27 th 2004	Completed
12	Waste Water Collection Tank - High Level Alarm.	3.9.2	An alarm shall be installed to read the level of the wastewater tank.	Managing Director	November 7 th 2003	Completed
13	Sewage and weighbridge collection system	3.9.3	All weighbridge run-off and sewage to be treated by an on-site sewage treatment plant.	Managing Director	December 22 nd 2003	Completed
14	Sewage Treatment Plant	3.9.4	Sewage treatment plant to be in place at the facility	Managing Director	February 7 th 2004	Completed
14	Sewage treatment Plant	3.9.4	Submission of report on percolation area to the EPA	Managing Director	February 27 th 2004	Submitted June 28 th 2004
15	Surface Water Collection	3.10	Surface water collection system and shut-off valve to be in place.	Managing Director	March 31 st 2003	Shut-off valve in since Aug 19 th 2004
16	Vehicle Wash Area	3.11	Installation of vehicle wash closed loop recycling system	Managing Director	February 7 th 2004	Completed
16	Vehicle Wash area	3.11	Vehicle wash area is to be drained to the waste water collection system.	Managing Director	February 25 th 2004	Completed

Project No.	Objective	Waste Licence 169-1 - Condition No.	Target to be Completed	Responsibility	Completion Date	Status
17	Tank and Drum storage Areas	3.12	Installation of a bunded container to house hazardous waste.	Managing Director	March 31st 2004	Ongoing
18	Bund Integrity Testing	3.12.5	To bund areas where required as they occur.	Managing Director	Completed when required and agreed with the EPA	
18	Bund Integrity Testing	3.12.5	The integrity of the bunds to be tested as required.	Managing director	Completed when required and agreed with the EPA	
19	Written Records for Drainage System	3.13.1	To provide written records on the drainage system.	Environmental Manager	June 6 th 2004	Ongoing
20	Integrity Testing of Underground Pipes & Tanks	3.13.2	Submission of records of all integrity tests to the EPA.	Managing Director	February 28 th 2004	Complete
21	Marking of Drainage System	3.13.3	The Drainage System shall be clearly marked.	Managing Director	February 7 th 2004	Ongoing
22	Waste Storage Areas	3.16	A drainage system from waste storage areas to waste water treatment tank shall be in place.	Managing Director	February 7 th 2004	Completed
22	Waste Storage Areas	3.16	Waste Storage areas to be labeled.	Managing Director	March 31 st 2004	Completed
23	Waste Acceptance and Characterisation.	4.2	Waste acceptance and characterisation procedures to be in place.	Environmental Manager	September 7 th 2003	Completed
23	Waste Acceptance and Characterisation	4.2	Waste Inspection & Quarantine Area in Recycling shed No.1 & 2	Environmental manager	February 25 th 2003	Completed

Project No.	Objective	Waste Licence 169-1 - Condition No.	Target to be Completed	Responsibility	Completion Date	Status
24	Adequate Lighting	4.3.4	Adequate Lighting shall be in place	Managing Director	November 7 th 2003	Completed
25	Storage Tank Certification	4.10.2	All storage tanks shall be inspected and certified.	Managing Director	February 28 th 2004	Completed
26	Labelling of Sampling and Monitoring Points	4.10.3	Label sampling and monitoring points.	Environmental Manager	March 31 st 2004	Completed
27	Landscaping Programme	4.11	To implement a landscaping programme	Environmental Manager	July 31 st 2004	Commenced March 21 st 2006
28	Dust and Odour Control from Waste Transfer Buildings.	6.4	Dust and odour control emissions from Transfer Stations shall be in place	Environmental manager	February 7 th 2004	Completed
28	Dust and Odour Control From Waste Transfer Buildings	6.4	Localised dust / odour suppression at the waste shredder and trommel	Environmental Manager	May 7 th 2004	Complete
29	Safe Access to Sampling and Monitoring Points	7.4	Safe access to all on-site sampling and monitoring points	Managing Director	May 7 th 2004	Complete
30	Monitoring	7	Monitoring of various media at the facility as per <i>Schedule D: Monitoring</i>	Environmental Manager		Ongoing as per <i>Schedule D: Monitoring</i>
31	Incident Reporting	8.1	Monitoring of environmental incidents as they occur	Environmental Manager		Ongoing
32	Emergency Response Procedure	8.2	Emergency Response Procedures shall be in place	Environmental Manager	February 28 th 2004	Completed

Project No.	Objective	Waste Licence 169-1 - Condition No.	Target to be Completed	Responsibility	Completion Date	Status
33	Accidental Spillage Measures	8.3	Spillage kits shall be at the facility	Environmental Manager	March 1 st 2004	Completed
34	Record keeping	9	Written records shall be kept at the facility	Environmental manager		Ongoing
35	Incident Reporting	10.2	Submission of written records to the EPA as the incident occurs.	Environmental Manager		Ongoing
36	Restoration & Aftercare Plan	10.3	Submission of a Restoration & Aftercare Plan to the EPA	Environmental manager	July 31 st 2004	Completed September 2004
37	Waste Recovery Report	10.4	Submission of Waste Recovery report to the EPA	Environmental Manager	May 7 th 2004	Completed October 29 th 2004
38	Monitoring Locations	10.5	Submission of a scaled drawing on monitoring points to the EPA	Environmental Manager	November 7 th 2004	Completed
39	Annual Environmental Report	10.6	Submission of Annual Environmental Report to the EPA	Environmental Manager	March 31 st 2006	March 2006
40	Composting Facility		To provide a composting facility on-site	Managing Director	June 30 th 2006	At Planning Application Stage
41	Civic Amenity Facility		To provide a Civic Amenity Site on-site	Environmental Manager	December 31 st 2004	Completed June 2005

Project No.	Objective	Waste Licence 169-1 - Condition No.	Target to be Completed	Responsibility	Completion Date	Status
42	Construction and Demolition Waste Facility		To provide a Construction and Demolition Waste Facility on-site	Managing Director	June 30 th 2006	At Drawing Stage
43	Bird Control Measures	7.10	To provide Bird Control Measures on Site	Environmental Manager	March 15 th 2004	Completed
44	On- Site Picking Station		To provide an on site Picking Station for the segregation of mixed dry recyclables	Managing Director	August 31 st 2004	Completed
45	Introduce Blue Wheelie Bins for Mixed Dry Recyclables Collections		To Supply a Blue Wheelie Bin to our Customers for Mixed Dry Recyclables	Environmental Manager	June 31 st 2005	Complete
46	Introduce Brown Wheelie Bins for Biodegradable Waste		To Supply a Brown Wheelie Bin to our Customers for Organic Waste Collection	Environmental Manager	November 30 th 2006	Incomplete
47	Increase On-Site Security Measures		To Increase the Provision of on-site Security Measures	Environmental Manager	March 31 st 2005	Complete
48	To set up a web page on the Internet		To set up a web page to include company Environmental Information	Environmental Manager	July 31 st 2005	Complete
49	To set up an Occasional Newsletter on Facility Activities		To set up an Occasional Newsletter on Facility Activities	Environmental Manager	July 31 st 2005	Complete
50	To set up Monthly Site Inspections		To assess the site on a monthly basis identifying site needs	Environmental Manager	July 31 st 2005	Commenced February 2006
51	Visitors Sign In Procedure		To sign in Visitors at Reception	Environmental Manager	August 31 st 2005	Complete

Project No.	Objective	Waste Licence 169-1 - Condition No.	Target to be Completed	Responsibility	Completion Date	Status
52	To set up an Open Day for public to view Facility		To set up an Open Day for the Public to View Facility	Environmental Manager	August 31 st 2005	Ongoing Groups attending site visits
53	To install sprinkler system to help alleviate dust during dry weather along entrance road		To install sprinklers along entrance to facility to alleviate any dust that may arise during site operations	Managing Director	September 30 th 2005	Complete
54	To set up Pay-By-Weight for Wheelie Bin Customers		To microchip wheelie bins and set up weighing equipment on lorries to weigh wheelie bins to further encourage recycling	Managing Director	January 1 st 2006	Completed
55	To construct and maintain new facility office		To construct a new facility office	Managing Director	December 31 st 2006	Complete
56	To set up 3 Metre marker at Waste Storage Areas	4.8.2	To set up a 3 metre marker at the waste storage bays to adhere to the 3 metre condition as set down by the EPA	Environmental Manager	June 30 th 2006	Complete
57	To set up tanker to spray main yard area during dry dusty spells		To set up spaying of main yard on a more regular basis during dry dusty weather	Environmental Manager	March 31 st 2006	Complete since March 21 st 2006
58	To research the area of wind energy for use on site		To research the area of wind energy to generate electricity on the site	Environmental Manager	Ongoing	Ongoing
59	To research the use of biofuels to use in our		To research the area of biofuels as an alternative fuel source for	Environmental Manager	Ongoing	Ongoing

	lorries		Mulleady vehicles			
60	Upgrade Emergency Response Procedures		To upgrade the existing emergency response procedures on site to deal with particularly fires	Environmental Manager	December 31 st 2006	Ongoing
61	To activate and run Avery Berkel weighing system for out of hours weighing for drivers		To provide and maintain an out of hours weighing system for drivers to record weights and generate tickets for each transaction	Environmental Manager	June 30 th	Incomplete. New system in
62	Install and update waste and recycling equipment in Recycling Shed No. 1		Upgrade recycling and waste equipment in Recycling Shed No. 1 to further reduce the amount of waste going to landfill.	Managing Director	December 31 st 2006	Incomplete
63	To upgrade fire hydrant in the event of fire at the facility		To increase the amount of water available on-site in the event of a fire at the facility	Managing Director	September 2007	Complete
64	To drain the temporary metal storage area to the Wastewater Tank (WWT-1)		To divert any run-off to the wastewater tank from the temporary storage of metals before being loaded into trailers for collection	Managing Director	June 30 th 2007	Incomplete
65	To construct a loading ramp and dock leveler for the loading of containers		To increase the safety in loading containers and reduce the wear and tare on machines used in previous methods	Managing Director	April 30 th 2007	Complete
66	To provide a new diesel tank on the waste facility grounds to fuels waste collection vehicles		To provide a separate fuelling area for waste collection vehicles	Managing Director	April 30 th 2007	Complete
67	To provide cameras at the facility for extra security		To provide 7 cameras to increase security at the facility	Managing Director	February / March 2007	Complete

68	To provide fire detectors and alarms in the office buildings		In the event of a fire in the facility office and canteen, the fire will be detected and the alarms raised automatically	Managing Director	March 2007	Complete
69	To redirect water and silt from culvert into first chamber of on site interceptor		To divert water from culvert to interceptor tank to trap silt and settle out solids from surface water flow	Managing Director	August 2007	Complete
70	Smoke Alarms and flame detectors for Shed 1 and Shed 2 and increased security for the site		To further increase the security on the site since the on-site fire on December 10 th 2007.	Managing Director	June 2009	Almost Complete
71	24-7 Security by Nett Watch. Nett Watch will have control over any intruders to the site		To further increase the security on the site since the two on-site fires in January and December 2007.	Managing Director	July 2009	Completed September 2009
72	To allow for segregated glass storage on-site		To divide up the glass bay into three sections for glass segregation to further increase the recycling rates of glass	Managing Director	September 2009	Complete
73	Purchase of Tyre Baler to recycle tyres		To bale the tyres in Shed 2 utilising a new baler and neatly stack them for eventual off-site recycling to an appropriate facility	Managing Director	August 2009	Complete
74	Direct baling of Aluminium cans, Steel Cans and Plastic Bottles from Recycling Shed No. 2		To decrease littering at the facility for the storage of aluminium and steel cans and plastic bottles.	Managing Director	June 2009	Complete

75	Investigation into an electrical driven bird / crow deterrent to deter crows, jackdaws and other nuisance birds off-site		To reduce the amount of roosting of birds at the facility	Environmental Manager	December 2009	Completed September 2009
76	Construction of Shed No. 3. for increased recyclable storage		To reduce the storage of recyclables outside and to cater for increased loads of recyclables	Managing Director	December 2009	Completed November 2009
77	Ammonia Treatment of sewage effluent at the facility		To reduce the ammonia levels currently obtained from current BMS system to reduce it to our licence limit of 5mg/l Ammonia	Environmental Manager	December 2009	Incomplete
78	To have new picking station up and running in Shed No. 3		To further increase the amount of recycling on site by June 30 th 2009	Managing Director	Ongoing	Incomplete
79	Research into Tyre Shredding for Fuel		To investigate the possibility of using shredded tyres as fuel.	Managing Director and Environmental Manager	Ongoing	Incomplete
80	Introduce Organic Waste Collection		To introduce a pilot scheme to collect organic waste from approximately 600 people as a pilot to begin with.	Environmental Manager	Ongoing as a different new objective	Incomplete
81	Research into Oversize Waste (Waste > 50 mm) used as a fuel		To establish whether oversize waste material is suitable for use as a fuel	Environmental Manager and Managing Director	Ongoing	Incomplete

Mulleady's Ltd.

Objectives & Targets – 2010

Project No.	Objective	Waste Licence W0169-01 - Condition No.	Target to be Completed	Responsibility	Completion Date	Status
82	To have new canteen and office for yard supervisor in Shed No. 3		To ensure new sorting equipment is properly supervised and maintained	Managing Director	September 2010	Incomplete
83	Introduce Organic Waste Collection to Mulleadays Customers		To help achieve target of 36% organic waste diversion from landfill.	Managing Director and Environmental Manager	July 2010	Incomplete
84	Research into 0% to waste to landill project.		To help achieve waste diversion form landfill.	Managing Director and Environmental Manager	Ongoing	Incomplete
85	Research into reducing a moisture content of organic fines.		To further increase the amount of recycling.	Managing Director and Environmental Manager	Ongoing	Incomplete.

Environmental Management Plan

Project 82: New Office for facility supervisor & Canteen in Shed 3.	
Relationship to Objectives & Targets	To provide a new office for facility supervisor and canteen for operating staff in Shed 3.
Reason for Undertaking Project	To provide a new office to accommodate the requirements of staff and to ensure new sorting equipment in Shed 3 is properly supervised and maintained.
Target	To have the office in Shed 3. complete by September 1 st 2010
Project Summary	
<p>(1) To construct a new office to accommodate the requirements of staff.</p> <p>(2) To ensure new sorting equipment in Shed 3 is properly supervised and maintained.</p>	
Designation of Responsibility	The Managing Director is responsible for the implementation of the project.
Investment in project and payback time	The cost of the above project is estimated at €35 K. Pay back can be quantified on the basis of improved maintenance of new sorting equipment and prompt emergency response.
Time-frame / Status	To be completed by September 2010.

Project 83: Introduce Organic Waste Collection	
Relationship to Objectives & Targets	To provide Organic Waste Collection to Mulleadays Customers
Reason for Undertaking Project	To help achieve target of 36% organic waste diversion from landfill.
Target	To supply brown caddy and small kitchen caddy to Mulleadays Customers by July 1 st 2010.
Project Summary	
<ol style="list-style-type: none"> 1. Brown 30 Litre Bin and 7 Litre Kitchen Caddy to be distributed to Mulleadays Customers. 2. Brown Bin to be collected every second week, same week as recyclables, collected by a separate vehicle. 3. Items to be collected in the Brown Bin will be as follows: Meat, Poultry, Fish, Shellfish & Bones, Egg & Dairy Products, Bread, Dough, Pasta, Plate Scrapings & Soiled kitchen towels, Fruit & Vegetables, Grains & Cereals, Coffee Grounds, Filters & Tea Bags 4. An information leaflet will be provided with each Brown Bin delivered explaining the Organic Waste Collection System. 5. A pre-printed list detailing what is permissible in the Brown Bin will be on the lid of each 7 Litre Kitchen Caddy. 6. The bins will be microchipped to allow recording of brown bin presence 	
Designation of Responsibility	The Environmental Manager is responsible for the implementation of the project.
Investment in project and payback time	The cost of the above project is estimated at €150 K. Pay back can be quantified on the basis of recycling of organic wastes from the waste stream of households and businesses.
Time-frame / Status	To have all Mulleadays Customers covered with an organic waste collection by July 1 st 2010.

Project 84: Research into 0 % waste to landfill project	
Relationship to Objectives & Targets	To research the possibility of recovering the maximum possible volume of waste and using residual (leftover) material as a fuel for co-incineration.
Reason for Undertaking Project	To research the possibility of recovery and recycling waste further increase recycling rates for the company.
Target	This is an ongoing project to establish the possibility of maximum recovery of waste and possibility of using waste as a fuel.
Project Summary	
<ol style="list-style-type: none"> 1. Research will be carried out to establish maximum possibility of waste recovery and recycling. 2. Research will be carried out to establish the suitability of residual waste as a fuel e.g. fuels for co-incineration. 3. Research will incorporate visits and talks to companies involved or interested in similar activities both in Ireland and abroad. 	
Designation of Responsibility	The Managing Director and Environmental Manager are responsible for the implementation of the project.
Investment in project and payback time	The cost of the above project is estimated at €15 K. Pay back can be quantified on the basis of recycling of oversize waste from both domestic and commercial waste streams.
Time-frame / Status	To have this research carried out and it will be on-going.

Project 85: Research into reducing a moisture content of organic fines	
Relationship to Objectives & Targets	To research the possibility of drying of organic fines to reduce the moisture content.
Reason for Undertaking Project	To research the possibility of utilizing organic fines (< 50mm) further increase recycling rates for the company (plastic fraction of organic fines).
Target	This is an ongoing project to establish the possibility of reducing moisture content of organic fines and better recovery of recycling materials.
Project Summary	
<ol style="list-style-type: none"> 1. Research will be carried out to establish the suitability of organic fines (< 50mm) for drying to reduce the moisture content. 2. Research will be carried out to establish the suitability of dried organic fines (< 50mm) as a fuel e.g. fuels for cement kilns. 3. Research will incorporate visits and talks to companies involved or interested in similar activities both in Ireland and abroad. 	
Designation of Responsibility	The Managing Director and Environmental Manager are responsible for the implementation of the project.
Investment in project and payback time	The cost of the above project is estimated at €20 K. Pay back can be quantified on the basis of recycling of organic fines from both domestic and commercial waste streams.
Time-frame / Status	To have this research carried out and it will be on-going.