



## ANNUAL ENVIRONMENTAL REPORT – 2008

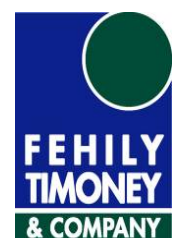
ATHY CIVIC AMENITY CENTRE

ATHY, COUNTY KILDARE

WASTE LICENCE REG. NO. W0175-01

COPY

MARCH 2009





## ANNUAL ENVIRONMENTAL REPORT – 2008

ATHY CIVIC AMENITY CENTRE

ATHY, COUNTY KILDARE

WASTE LICENCE REG. NO. W0175-01

ORIGINAL

MARCH 2009



# ANNUAL ENVIRONMENTAL REPORT – 2008

## ATHY CIVIC AMENITY CENTRE

## ATHY, COUNTY KILDARE

## WASTE LICENCE REG. NO. W0175-01

### REVISION CONTROL TABLE

User is Responsible for Checking the Revision Status of This Document

| Rev. Nr. | Description of Changes | Prepared by: | Checked by: | Approved by: | Date:    |
|----------|------------------------|--------------|-------------|--------------|----------|
| 0        | Issue to Client        | RL/NH/LB     | DB          | <i>R</i>     | 11/03/09 |

Client: Kildare County Council

Keywords: Athy Civic Amenity Centre, Annual Environmental Report (AER), waste recovery & recycling, environmental monitoring

Abstract: This report presents the Annual Environmental Report for Athy Civic Amenity Centre to the Environmental Protection Agency. The report covers the annual reporting period of 2008.

# TABLE OF CONTENTS

## PAGE

|   |           |
|---|-----------|
| <b>1. INTRODUCTION .....</b>                            | <b>1</b>  |
| <b>2. SITE DESCRIPTION AND ACTIVITIES .....</b>         | <b>2</b>  |
| 2.1. WASTE ACTIVITIES CARRIED OUT AT THE FACILITY ..... | 2         |
| 2.2. SITE DESCRIPTION .....                             | 2         |
| <b>3. WASTE QUANTITIES AND COMPOSITION .....</b>        | <b>4</b>  |
| <b>4. SUMMARY OF ENVIRONMENTAL MONITORING .....</b>     | <b>2</b>  |
| 4.1. SURFACE WATER .....                                | 2         |
| 4.2. EMISSIONS TO SEWER .....                           | 2         |
| 4.3. DUST .....   | 6         |
| 4.4. NOISE .....  | 7         |
| 4.5. SUMMARY .....                                      | 8         |
| <b>5. SITE DEVELOPMENT WORKS .....</b>                  | <b>9</b>  |
| 5.1. SITE DEVELOPMENT WORKS DURING 2008 .....           | 9         |
| 5.2. PROPOSED DEVELOPMENT WORKS FOR 2009 .....          | 9         |
| <b>6. ENVIRONMENTAL OBJECTIVES &amp; TARGETS .....</b>  | <b>10</b> |
| 6.1. PROPOSED OBJECTIVES & TARGETS .....                | 10        |
| <b>7. MISCELLANEOUS .....</b>                           | <b>13</b> |
| 7.1. NEW PROCEDURES DEVELOPED DURING 2008 .....         | 13        |
| 7.2. INCIDENTS & COMPLAINTS SUMMARY .....               | 13        |
| 7.3. REVIEW OF NUISANCE CONTROLS .....                  | 13        |
| 7.4. FINANCIAL PROVISION .....                          | 13        |
| 7.5. ENERGY CONSUMPTION AND GENERATION .....            | 13        |
| 7.6. MANAGEMENT & STAFFING STRUCTURE .....              | 13        |
| 7.7. REPORT ON STAFF TRAINING .....                     | 13        |

## LIST OF TABLES

### PAGE

|            |   |   |
|------------|---|---|
| TABLE 3.1: | SUMMARY OF RECYCLABLES RECOVERED (TONNES) FROM THE FACILITY ..... | 4 |
| TABLE 4.1: | RESULTS FOR MONITORING OF SW1 & SW2.....                          | 2 |
| TABLE 4.1: | RESULTS FOR MONITORING OF WW1.....                                | 6 |
| TABLE 4.2: | MONTHLY DUST DEPOSITION RESULTS (MG/M <sup>2</sup> /DAY) .....    | 6 |
| TABLE 4.3: | NOISE MONITORING LOCATIONS .....                                  | 8 |
| TABLE 4.4: | NOISE MONITORING RESULTS .....                                    | 8 |
| TABLE 4.5: | NOISE EMISSION LIMITS .....                                       | 8 |

## APPENDICES

|              |                    |
|--------------|--------------------|
| Appendix I   | Drawings           |
| Appendix II  | Monitoring Results |
| Appendix III | Staffing Structure |

## 1. INTRODUCTION

The Environmental Protection Agency issued Kildare County Council (KCC) a waste licence for their civic amenity facility located at Gallowshill, Athy, County Kildare, on 30<sup>th</sup> October 2003. The waste licence reference number is W0175-01. KCC retained Fehily Timoney & Company (FTC) to assist in the implementation of the conditions of the licence and to prepare the required reports for the Agency. This report addresses Condition 11.4 of the waste licence for the facility.

Condition 11.4 states that:

- 11.4.1. *The licensee shall submit to the Agency for its agreement within one month after the end of each calendar year, an Annual Environmental Report (AER)*
- 11.4.2. *The AER shall include as a minimum the information specified in Schedule F: Content of Annual Environmental Report of this licence and shall be prepared in accordance with any relevant written guidance issued by the Agency*

This report addresses the items listed in *Schedule F: Content of the Annual Environmental Report* of the waste licence for the facility. It is the third AER for the facility, and covers the reporting period from 1<sup>st</sup> January 2008 up to 31<sup>st</sup> December 2008.

## 2. SITE DESCRIPTION AND ACTIVITIES

### 2.1. Waste Activities carried out at the Facility

Waste activities at Athy Civic Amenity Centre are restricted to those outlined in *Part 1 - Activities Licensed* of the Waste Licence.

#### 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 compaction and storage of municipal solid waste on site, prior to disposal off-site.
- Class 12. Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.**  
This activity is limited to the compaction of municipal solid waste on site, prior to disposal off-site.
- 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 was produced.**  
This activity is limited to the storage of municipal solid waste, prior to disposal offsite.

#### 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 the recycling of textiles, plastics, paper, cardboard, timber, green waste, limited quantities of waste arising from farm and household activities including; household

chemicals, paints, inks, adhesives and resins, waste oils, oil filters, and agrochemical waste.

- Class 3. Recycling or reclamation of metals and metal compounds:**  
This activity is limited to the recycling of scrap metal, aluminium cans, and white goods.
- Class 4. Recycling or reclamation of other inorganic materials:**  
This activity is limited to the recycling of glass, household construction and demolition waste, tyres, electronics, fluorescent tubes, and batteries and accumulators.
- Class 11. Use of waste obtained from any activity referred to in a preceding paragraph of this Schedule:**  
This activity is limited to the re-use of waste such as household construction and demolition waste, white goods or timber.
- Class 12. Exchange of waste for submission to any activity referred to in a preceding paragraph of this Schedule:**  
This activity is limited to the exchange of waste that can be reclaimed and reused such as timber pallets, and tyres.
- 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 waste types authorised by this licence at the facility prior to recovery at an appropriate facility.

Members of the public and small commercial vehicles access the site. The activities carried out at each area are described in the subsections below.

### 2.2. Site Description

Athy Civic Amenity Centre is a purpose built waste management facility and is located

approximately 200 metres off the N78 road between Athy and Kilcullen. A site location map is given in Appendix I. The facility was constructed on land owned by Kildare County Council which had historically been used for the storage of road maintenance equipment. The Site Layout Map for the facility (given in Appendix I of this report) shows clearly the overall layout of the facility.

The household hazardous waste building was constructed with a bunded concrete floor slab, structural steel frame, profiled metal cladding and blockwork walls. The control building was constructed as a single storey 'bungalow like' structure. It contains the administration office, canteen, toilets and shower area. An 18 m long weighbridge was installed adjacent to the control building.

The site consists of a split level area in the middle of the facility to allow for members of the public to dispose of and recycle waste. This was constructed in a 'zig-zag' fashion to accommodate the skips below. A compactor unit was also installed adjacent to the split level area. This facilitates the disposal and compaction of municipal waste.

The civic amenity centre is surrounded by a 2m high palisade fence for security of the site.



### 3. WASTE QUANTITIES AND COMPOSITION

The quantity and composition of material received for recovery at the facility from 1<sup>st</sup> January 2008 to 31<sup>st</sup> December 2008 is outlined in Table 3.1.

**Table 3.1: Summary of Recyclables Recovered (Tonnes) from the Facility (2006 - 2008)**

| Material            | 2006 (t)      | 2007 (t)      | 2008 (t)      |
|---------------------|---------------|---------------|---------------|
| Cardboard           | 48.86         | 54.90         | 49.86         |
| Newspaper           | 46.28         | 53.08         | 55.52         |
| Bottles             | 32.62         | 45.18         | 48.88         |
| Cans                | 2.61          | 4.02          | 5.48          |
| Clothes             | 15.96         | 23.84         | 24.82         |
| Electrical Goods    | 80.06         | 69.10         | 87.22         |
| Batteries           | 6.46          | 5.74          | 3.40          |
| Flat Glass          | 3.36          | -             | -             |
| Vegetable Oil       | 0.52          | 1.90          | 1.18          |
| Gas Bottles         | 0.44          | -             | -             |
| Fluorescent Tubes   | 0.1           | 0.12          | 0.08          |
| Paints              | 0.24          | -             | -             |
| Metal               | -             | 24.96         | 38.04         |
| Plastic             | -             | 12.70         | 7.76          |
| Green Waste         | -             | 27.26         | 84.60         |
| Misc. Hazardous     | -             | 12.30         | 3.38          |
| Bulk Waste          | -             | 154.78        | 196.62        |
| Bulk Domestic Waste | -             | 319.26        | 323.02        |
| <b>TOTAL</b>        | <b>237.51</b> | <b>809.14</b> | <b>929.86</b> |

The figures given above outline the recovery of recyclables for the 2006, 2007 and 2008 reporting periods. These figures show that the recovery of recyclables at the facility increased by approximately **15%** during 2008. This was mainly a result of the increase in the quantity of electrical waste, metal and bulky waste being brought to the facility but the rate of recovery of almost all recyclables increased in comparison with the figures for 2007.

## 4. SUMMARY OF ENVIRONMENTAL MONITORING

Condition 8 and Schedule D of the waste licence (Reg. No. W0175-01) specify the environmental monitoring requirements for the facility. The following sections (4.1 to 4.7) discuss the results from the monitoring events during the reporting period.

Environmental monitoring of the surface water and the emissions to sewer at the facility was carried out on 8<sup>th</sup> August 2008 and 19<sup>th</sup> January 2009. Noise monitoring was carried out on the 11<sup>th</sup> December 2008. Dust monitoring was carried out twice during the reporting period: over a period of 31 days during the months of August to September and over a period of 28 days from September to October. The environmental media monitored at the facility are as follows:

1. Surface water

**Table 4.1: Results for Monitoring of SW1 & SW2**

| Sample Date                      | SW1        |            | SW2        |            |
|----------------------------------|------------|------------|------------|------------|
|                                  | 08/08/2008 | 19/01/2009 | 08/08/2008 | 19/01/2009 |
| pH                               | -          | 8.10       | 7.90       | 8.09       |
| Biochemical Oxygen Demand (mg/l) | -          | <2         | 127        | 3          |
| Total Suspended Solids (mg/l)    | -          | 869        | 82         | 22         |
| Fats, Oils, Grease (mg/l)        | -          | 3          | 1          | <1         |
| Temperature (°C)                 | -          | 3.2        | 18.3       | 3.7        |

### 4.1.1. Interpretation of Results

The results for BOD and total suspended solids were elevated in SW2 in the August samples and the total suspended solids level was also elevated in SW1 in the January sample. The flows in this stream are very low and the stream runs dry for long periods at a time.

Heavy rainfall experienced in Summer 2008 led to a situation where soil was near to saturation, meaning that the ground had no capacity to soak up large amounts of rainfall. As a result, large quantities of water flowed overland resulting in a high suspended solid content in the water due to lack of underground filtration. This was most likely the cause of the higher value of TSS experienced in SW2 in August 2008.

Previously, the low flow experienced at SW1 has led to problems obtaining a sample. During January 2009, a sample was obtained but the flow was still low. It is likely that the high

2. Emissions to Sewer
3. Air Quality - Dust
4. Noise

Unless otherwise specified, monitoring was carried out at those locations set out in Table D.1.1 of the Waste Licence and in Figure J.1.1: Map of Environmental Monitoring Locations which is included in Appendix I.

## 4.1. Surface Water

Two surface water monitoring points are defined in Schedule D of Waste Licence W0175-01, SW1 and SW2. The locations of these monitoring points are shown in Figure J.1.1: Map of Environmental Monitoring Locations.

During the August monitoring event SW1 was dry and it had only a low flow during the January event.

suspended solid content identified in the result is owing to the capturing of bottom sediment

incorporated into the water sample, and is not indicative of the solids content in the flowing water. It is unlikely that the operation of the facility is having an adverse effect on the surface water in the area. However, monitoring results will continue to be analysed for any trends in these parameters.

The surface water runoff from the site will continue to be monitored and analysed for these parameters on a bi-annual basis in 2009.

## 4.2. Emissions to Sewer

### 4.2.1. Monitoring Locations

Samples were taken from the point of emission to sewer (WW1) as shown on Figure J.1.1: 1 to 2500 Map of Environmental Monitoring Locations.

During August the gullies on the yard were empty and it was not possible to obtain a representative sample.

In January, the sample was obtained from the gully closest to the domestic waste compactor. This location is the preferred option for future sampling to enable comparisons between results.

#### 4.2.2. Monitoring Parameters

The samples were analysed for the parameters listed in Table D.5.1 in the waste licence by AlControl Laboratories. The results are presented in Table 3.1 and the Certificates of Analysis as issued by the laboratory are included in Appendix II.

**Table 4.2: Results for Monitoring of WW1**

| Sample Date                      | 08/08/2008 | 19/01/2009 |
|----------------------------------|------------|------------|
| pH                               | -          | 8.08       |
| Biochemical Oxygen Demand (mg/l) | -          | 3          |
| Chemical Oxygen Demand (mg/l)    | -          | <15        |
| Total Suspended Solids (mg/l)    | -          | 94         |
| Fats, Oils, Grease (mg/l)        | -          | 1          |
| Temperature (°C)                 | -          | 2.1        |
| Total Phosphorous (mg/l)         | -          | 0.27       |
| Total Oxidised Nitrogen          | -          | <0.3       |

#### 4.2.3. Interpretation of Results

pH, COD, COD, fats, and oils and grease values remained similar to those obtained during 2007. However, total suspended solids increased from <10 mg/l in 2007 to 94 mg/l in 2008 and total phosphorus values increased from <0.05 mg/l P in 2007 to 0.27 mg/l P in 2008.

**Table 4.3: Monthly Dust Deposition Results (mg/m<sup>2</sup>/day)**

| Monitoring Period |          | D1                   | D2                   | D3                   | D4                   |
|-------------------|----------|----------------------|----------------------|----------------------|----------------------|
| From              | To       | mg/m <sup>2</sup> /d | mg/m <sup>2</sup> /d | mg/m <sup>2</sup> /d | mg/m <sup>2</sup> /d |
| 08/08/08          | 08/09/08 | 72                   | 189                  | 47                   | 63                   |
| 08/09/08          | 06/10/08 | 68                   | 129                  | <10                  | 61                   |

Large quantities of leaves and mud were caught at the bottom of WW1 and were the cause of a higher than average total suspended solids content in January 2009. There is no previous history of elevated phosphorus levels at this site and this parameter will be monitored closely for any trends.

If an increasing trend becomes evident after future sampling events, recommendations will be made which will reduce phosphorus results.

The wastewater from the site will continue to be monitored for these parameters on a bi-annual basis in 2009.

#### 4.3. Dust

##### 4.3.1. Monitoring Locations

Dust monitoring was carried out at 4 locations in accordance with Schedule D of the licence, and the locations of these monitoring locations are shown on Figure J.1.1: 1 to 2500 Map of Environmental Monitoring Locations. Two of these locations are on the site boundary and two are located within the work yard of a neighbouring road maintenance yard.

##### 4.3.2. Monitoring Parameters

Bergerhoff gauges were used to determine total dust deposition. Four gauges were set up so that the dust jars were at a height of at least 1.5 m above the ground and the jars were set in place during the monthly monitoring events.

The samples were submitted to Southern Scientific Laboratories for analysis.

##### 4.3.3. Monitoring Results

The results for total dust deposition are presented in Table 4.1 and the Certificate of Analysis, as issued by the laboratory is included in Appendix II.

#### 4.3.4. Interpretation of Results

The dust deposition levels at all monitoring locations are below the mean daily dust deposition limit as set out in Schedule C.2 of the waste licence for the facility (350 mg/m<sup>3</sup>/day).

### 4.4. Noise

#### 4.4.1. Monitoring Parameters

As per Schedule D of the waste licence the annual noise survey was carried out on the 11<sup>th</sup> December 2008 when the conditions were found to be suitable. Noise monitoring was undertaken at the four locations outlined on the Figure J.1.1: Map of Environmental Monitoring Locations.

Noise monitoring was carried out during the day between the hours of 13:45 and 16:00 for 30 minute intervals at each location. No night time noise monitoring is required at the facility. All measurements were taken in accordance with ISO 1996 (Description and Measurement of Environmental Noise) and the EPA Environmental Noise Survey Guidance Document.

The survey was carried out using a Brüel and Kjær 2260 Type 1 Sound Level Meter (SLM) with an outdoor microphone unit Type 4198.

The instrument was calibrated prior to commencing the survey using the recommended calibration procedure and a known pure tone noise source. The unit was again calibrated on completion of the survey to record drift during the course of the day. Drift is normally associated with battery fade and temperature. The unit had not drifted.

Good measurements require calm conditions to avoid spurious effects on the microphone, particularly at low frequencies. An average wind speed of less than 5 m/s is the preferred limit when noise measurements are being taken, with 7 m/s an upper limit. Weather conditions during the monitoring were damp and calm and wind speed was less than 7 m/s for the entire period.

#### 4.4.2. Measurement Units, Standards & Definitions

The unit of sound pressure level is the decibel (dB). This is calculated as a logarithm of sound. A change of 10 dB corresponds approximately to halving or doubling the loudness of sound. The

use of decibels (A-weighted), dB(A), as the basic unit for general environmental and traffic noise is widely accepted. Decibels measured on a sound level meter incorporating this frequency weighting differentiates between sounds of different frequencies in a manner similar to the human ear. That is, measurements in dB(A) broadly agree with human beings assessment of loudness. It has been demonstrated that noise levels in dB(A) from a wide range of sources adequately represent loudness.

In order to understand the terms used below, some definitions of the terms used are outlined as follows:

**L<sub>AF10</sub>** Refers to those noise levels in the top 10 percentile of the sampling period; it is the level which is exceeded for 10% of the measurement period.

It is used to determine the intermittent high noise level features of locally generated noise and usually gives an indicator of the level of traffic.

**L<sub>AF90</sub>** Refers to those noise levels in the lower 90<sup>th</sup> percentile of the sampling interval; it is the level which is exceeded for 90% of the measurement period. It will therefore exclude the intermittent features of traffic and is used to estimate a background level.

**L<sub>Aeq</sub>** The average level recorded over the sampling period. The closer the L<sub>Aeq</sub> value is to either the L<sub>AF10</sub> or L<sub>AF90</sub> value indicates the relative impact of the intermittent sources and their contribution. The relative spread between the values determines the impact of intermittent sources such as traffic on the background.

**Impulsive noise:** a noise of short duration (typically less than one second), the sound pressure level of which is significantly higher than the background.

**Tonal noise:** A noise source that is concentrated in a narrow band of the frequency spectrum.

#### 4.4.3. Monitoring Locations

Monitoring was conducted at four locations as specified in the waste licence. Noise monitoring locations are shown in Figure J.1.1: 1 to 2500 Map of Environmental Monitoring Locations and summarised in Table 5.1.

Table 4.4: Noise Monitoring Locations

| Monitoring Location | Description  |
|---------------------|--|
| N1                  | Located on the south western boundary of the facility                          |
| N2                  | Located just to the east of the facility in the grounds of the adjacent quarry |
| S1                  | Located to the west of the facility adjacent to the access road                |
| S2                  | Located in a housing estate northwest of the facility                          |

#### 4.4.4. Monitoring Results

Table 4.5: Noise Monitoring Results

| Location | Date     | Time          | L <sub>Aeq</sub> | L <sub>AF10</sub> | L <sub>AF90</sub> |
|----------|----------|---------------|------------------|-------------------|-------------------|
| N1       | 11/12/08 | 14:30 – 15:00 | 51               | 52                | 43                |
| N2       | 11/12/08 | 15:00 – 15:30 | 49               | 48                | 42                |
| S1       | 11/12/08 | 15:30 – 16:00 | 51               | 53                | 43                |
| S2       | 11/12/08 | 13:45 – 14:15 | 53               | 57                | 45                |

#### 4.4.5. Interpretation of Results

Noise emission limits are given in Table C.1 of the waste licence and are reproduced here in Table 4.5.

Table 4.6: Noise Emission Limits

| Day dB(A) L <sub>Aeq</sub><br>(30 minutes) | Night dB(A) L <sub>Aeq</sub><br>(30 minutes) |
|--|--|
| 55   | 45   |

The noise levels at all of the monitoring locations were within the noise emission limits. No tonal element was present in the noise data at any of the locations.

#### 4.4.6. Assessment of Tonal Components

All measurements were subject to a one-third octave band analysis to identify tonal components within the noise measured. No tonal element was present in the noise data analysed.

### 4.5. Summary

This report presents the monitoring results from the Athy Civic Amenity Centre, in compliance with the requirements of EPA Waste Licence Reg. No. W0175-01.

Monitoring of the environmental media as discussed above indicate that activities at the civic amenity site are not having a significant impact on the surrounding environment. The next monitoring report is due in 2010.

## **5. SITE DEVELOPMENT WORKS**

### **5.1. Site Development Works during 2008**

#### **5.1.1. Civic Waste Facility**

The Civic Amenity Site opened in August 2005 and has been maintained to a high standard by Kildare County Council. The following items have been completed during 2008:

- The installation of speed ramps on the site as vehicles enter the site
- A finger board has been installed at the junction of the access road and the N78
- A gully has been installed at the weighbridge.

### **5.2. Proposed Development Works for 2009**

Currently, there are no development works planned for the site for 2009.

## 6. ENVIRONMENTAL OBJECTIVES & TARGETS

In compliance with Condition 2.3 of the Waste Licence, an Environmental Management System has been established for the facility.

The EMS includes the timescale for achieving the Objectives and Targets and the designation of responsibility for achieving the Objectives and Targets.

### 6.1. Proposed Objectives & Targets

The Objectives and Targets proposed for 2009 are listed below.

**Objective 1** - Operate facility in order to maintain the high standards set and promote continual environmental improvement

It is the objective of Kildare County Council to comply with the conditions of the EPA waste licence for the facility and promote continual environmental improvement. This will ensure compliance with all licence conditions and, in return, improve the management and operation of the facility. The targets are tabulated below with a target date for the implementation of the goal.

| Target |   | Responsible      |
|--------|---|------------------|
| 1      | Review training schedule of each staff member & identify training needs   | Facility Manager |
| 2      | Implement the environmental management system   | Facility Manager |
| 3      | Continue programme of regular inspections   | Facility Manager |
| 4      | Continue to maintain the appropriate records at the facility in accordance with Condition 11 of the waste licence | Facility Manager |

#### Responsible Personnel

The facility manager is responsible for achieving this objective.

#### Timetable for Achievements of Tasks

| Target | 2009 |     |     |     |     |     |     |     |     |     |     |     |
|--------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|        | Jan  | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| 1      |      |     |     |     |     |     |     |     |     |     |     |     |
| 2      |      |     |     |     |     |     |     |     |     |     |     |     |
| 3      |      |     |     |     |     |     |     |     |     |     |     |     |
| 4.     |      |     |     |     |     |     |     |     |     |     |     |     |

**Objective 2** - Maximise recycling/recovery within the civic amenity and site office

It is the objective of the licensee to maximise the recycling of waste materials at the facility and site offices. There was an increase in the materials recovered at the facility in 2008. The licensee aims to maintain this rate and increase on it further during 2009.

This objective will be achieved by carrying out the following tasks:

| Target |   | Responsible      |
|--------|---|------------------|
| 1      | Promote recycling in-house within the site offices                      | Facility Manager |
| 2      | Continue efforts to source new markets for recyclable products          | Facility Manager |
| 3      | Increase public awareness of the recycling facility through advertising | Facility Manager |

**Responsible Personnel**

The facility manager is responsible for achieving this objective.

**Timetable for Achievements of Tasks**

| Target | 2009 |     |     |     |     |     |     |     |     |     |     |     |
|--------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|        | Jan  | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| 1      |      |     |     |     |     |     |     |     |     |     |     |     |
| 2      |      |     |     |     |     |     |     |     |     |     |     |     |
| 3      |      |     |     |     |     |     |     |     |     |     |     |     |

**Objective 3 - Maximise energy efficiency within the site office**

It is the objective of the licensee to constantly improve and maintain energy efficiency measures to maximise efficiency within the site offices.

This objective will be achieved by carrying out the following tasks:

| Target |  | Responsible      |
|--------|--|------------------|
| 1      | Promote energy awareness in-house amongst all staff  | Facility Manager |
| 2      | Any new appliances purchased for use in the site offices will have a high energy rating  | Facility Manager |
| 3      | All lights and appliances will, where possible, be powered off at night and over weekends. Energy efficient light bulbs will be utilised where possible. | All Staff        |

**Responsible Personnel**

The facility manager is responsible for achieving this objective. All staff will be responsible

**Timetable for Achievements of Tasks**

| Target | 2009 |     |     |     |     |     |     |     |     |     |     |     |
|--------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|        | Jan  | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| 1      |      |     |     |     |     |     |     |     |     |     |     |     |
| 2      |      |     |     |     |     |     |     |     |     |     |     |     |
| 3      |      |     |     |     |     |     |     |     |     |     |     |     |

**Objective 4 - Minimisation of Complaints**

It is the objective of the licensee to maintain the low level of complaints received regarding the operation of the facility. No complaints were received during 2008 and the licensee aims to repeat this in 2009. By maintaining good housekeeping procedures and ensuring the site is maintained in a proper manner, this will ensure the minimisation of complaints. An open and effective communications programme at the facility will continue to be used to ensure that any complaints received at the facility are dealt with and addressed in so far as possible to the satisfaction of the complainant.

| Target |   | Responsible      |
|--------|---|------------------|
| 1      | Effectively deal with complaints  | Facility Manager |
| 2      | Formulate action plans for next period to minimise complaints   | Facility Manager |
| 3      | Maintain the high standard of housekeeping practices at the facility to minimise the number of complaints | Facility Manager |



**Responsible Personnel**

The facility manager is responsible for achieving this objective.

**Timetable for Achievements of Tasks**

| Target | 2009 |     |     |     |     |     |     |     |     |     |     |     |
|--------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|        | Jan  | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| 1      |      |     |     |     |     |     |     |     |     |     |     |     |
| 2      |      |     |     |     |     |     |     |     |     |     |     |     |
| 3      |      |     |     |     |     |     |     |     |     |     |     |     |

## 7. MISCELLANEOUS

### 7.1. New Procedures Developed During 2008

- New domestic recycling charges by weight will be introduced from 2<sup>nd</sup> January 2009.
- The acceptance of Gypsum waste commenced in June 2008.

### 7.2. Incidents & Complaints Summary

The facility manager records all site incidents and complaints on a register, which is held at the site office.

There were no incidents or complaints recorded at the facility during 2008.

### 7.3. Review of Nuisance Controls

Athy Civic Amenity Centre is maintained to a very high standard by Kildare County Council. All loose litter at the site and on the site access road is removed immediately by site staff and all vehicles delivering or removing waste to or from the site are appropriately covered to minimise littering.

### 7.4. Financial Provision

Kildare County Council pays to the Agency an annual contribution of €7,732 towards the cost of monitoring the facility or otherwise in performing any functions in relation to the activity.

### 7.5. Energy Consumption and Generation

The figures for energy use in 2008 are as follows:

- Electricity : 73,400 kW/hr (approximate)
- Fuel: 5,000 litres (approximate)
- Water: 1,000 m<sup>3</sup> (approximate)

Water usage is not metered, so consumption is approximate. The electrical usage is also estimated.

### 7.6. Management & Staffing Structure

The Management & Staffing Structure has been included in Appendix III.

### 7.7. Report on Staff Training

Training completed by site staff in 2008 is as follows:

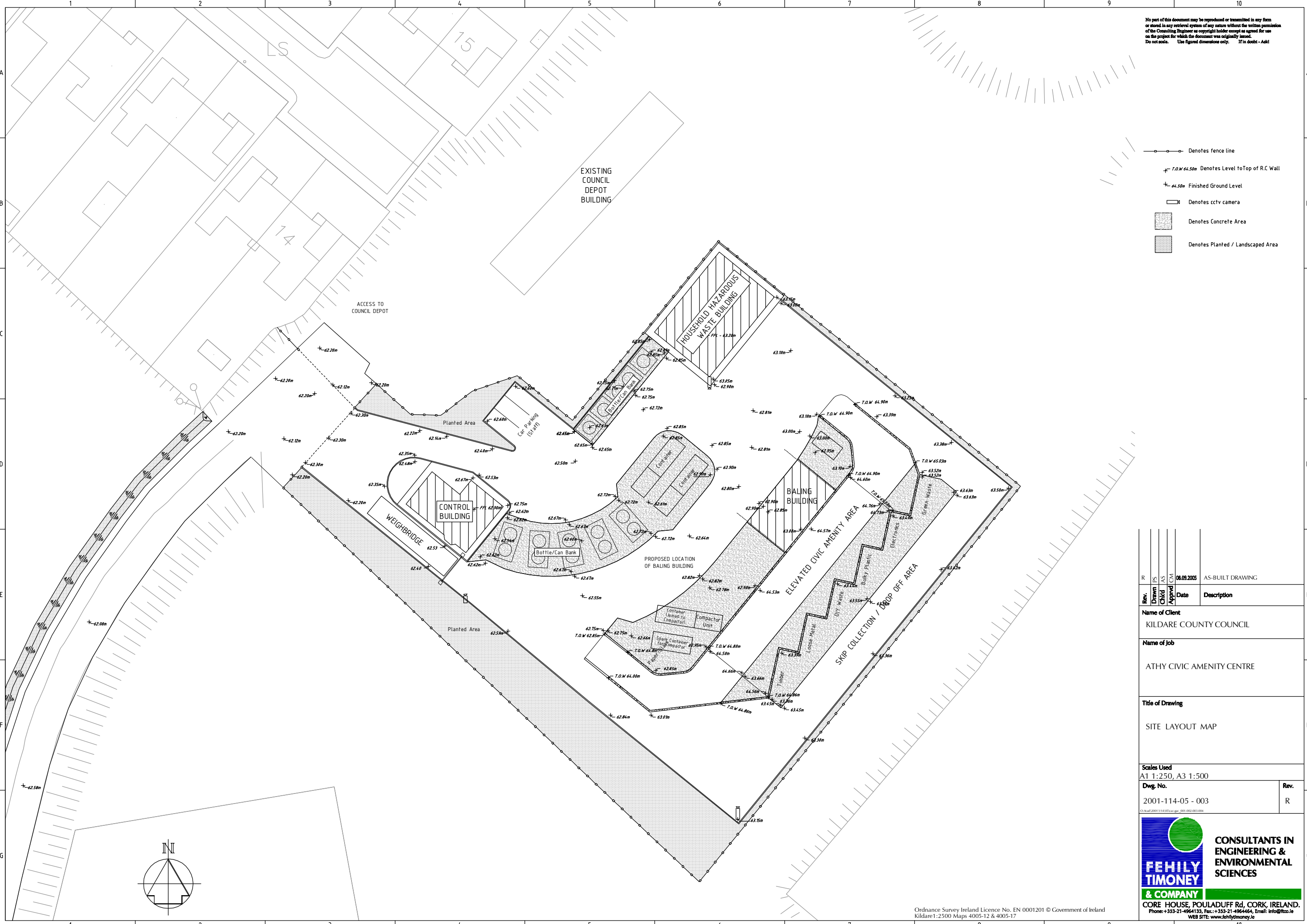
- Two employees received training in Fire Safety
- One employee completed an Introduction to computers
- One employee received a manual handling update
- One employee is completed a Certificate in Local Government Studies
- One employee completed Health Care Provider training
- One employee completed a safe pass course.
- One employee completed a Stress Management course.

# Appendix I

Drawings

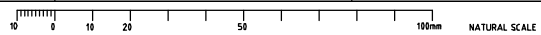
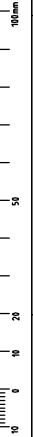






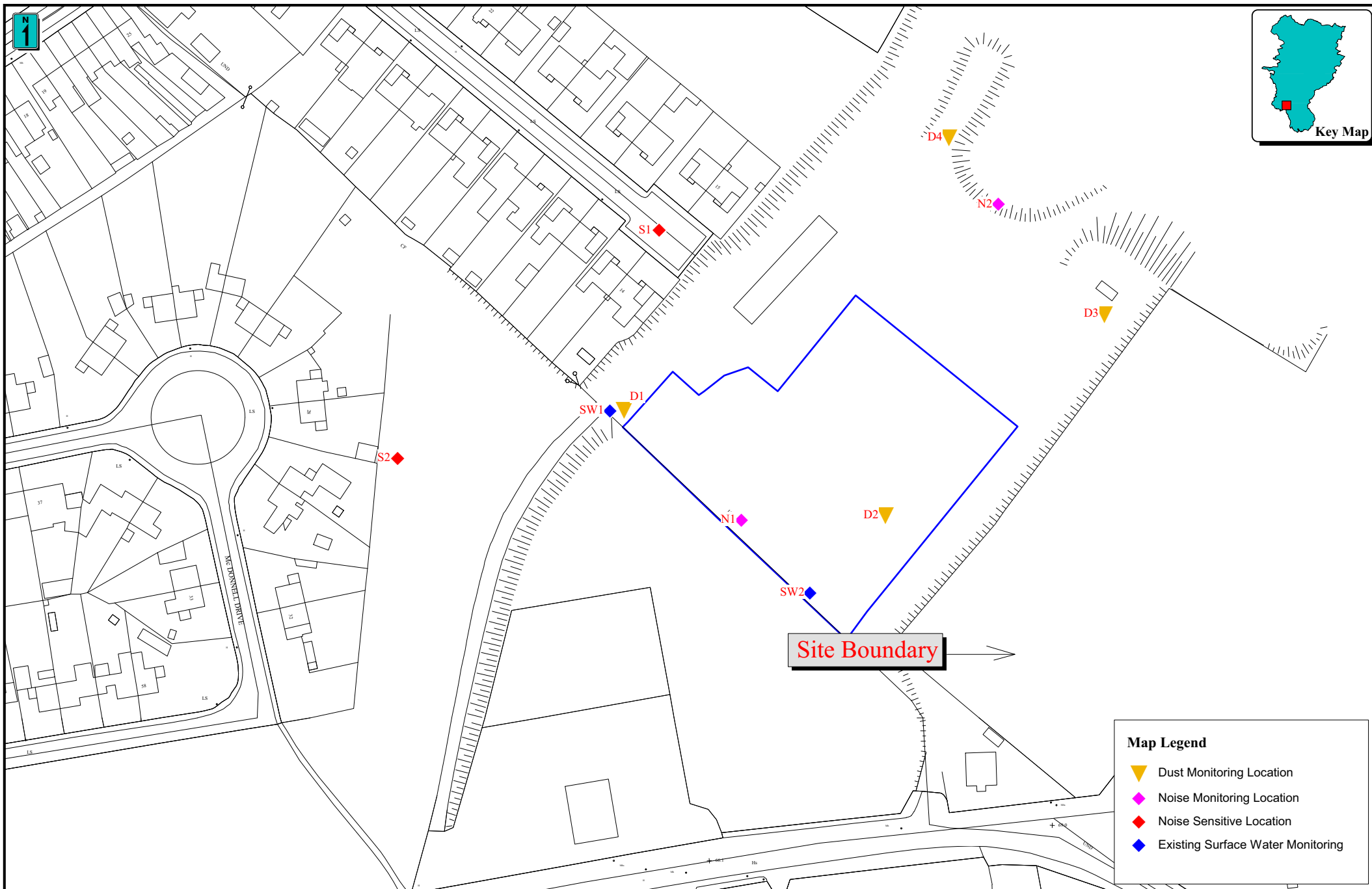
- Denotes fence line
- +— T.O.W 44.50m Denotes Level to Top of R.C Wall
- + 44.50m Finished Ground Level
- Denotes CCTV camera
- ▨ Denotes Concrete Area
- ▩ Denotes Planted / Landscaped Area

NATURAL SCALE



|                           |       |       |    |    |            |                  |
|---------------------------|-------|-------|----|----|------------|------------------|
| Rev.                      | Drawn | Check | AS | CM | Date       | Description      |
|                           |       |       |    |    | 08.09.2005 | AS-BUILT DRAWING |
| Name of Client            |       |       |    |    |            |                  |
| KILDARE COUNTY COUNCIL    |       |       |    |    |            |                  |
| Name of Job               |       |       |    |    |            |                  |
| ATHY CIVIC AMENITY CENTRE |       |       |    |    |            |                  |
| Title of Drawing          |       |       |    |    |            |                  |
| SITE LAYOUT MAP           |       |       |    |    |            |                  |
| Scales Used               |       |       |    |    |            |                  |
| A1 1:250, A3 1:500        |       |       |    |    |            |                  |
| Dwg. No.                  |       |       |    |    |            | Rev.             |
| 2001-114-05 - 003         |       |       |    |    |            | R                |

**FEHILY  
TIMONEY  
& COMPANY**  
 CONSULTANTS IN  
 ENGINEERING &  
 ENVIRONMENTAL  
 SCIENCES  
 CORE HOUSE, POULADUFF Rd, CORK, IRELAND.  
 Phone: +353-21-4964133, Fax: +353-21-4964464, Email: info@ftco.ie  
 WEB SITE: www.fehilytimoney.ie



# Appendix II

## Monitoring Results





## CERTIFICATE OF ANALYSIS

---

**Client:** Fehily Timoney & Company (Dublin)

Floor 2  
Mill House  
Ashtowngate  
Navan Road  
Dublin 15

**Attention:** Nicola Hoare

**Date:** 26 August, 2008

**Our Reference:** 08-B04655/01

**Your Reference:** DE07-114-07

**Location:**

A total of 2 samples was received for analysis on Friday, 8 August 2008. Accredited laboratory tests are defined in the log sheet, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation. We are pleased to enclose our final report, it was a pleasure to be of service to you, and we look forward to our continuing association.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Signed

*Dylan Halpin*

*Lorraine McNamara*

**Dylan Halpin**

Team Leader Project Co-ordination

**Lorraine McNamara**

General Manager

**Compiled By**

*Mark Butler*

.....  
Mark Butler





# Alcontrol Laboratories Ireland

## Test Schedule

**Ref Number: 08-B04655/01**

**Sample Type: WATER**

Client: Fehily Timoney & Company (Dublin)

Location:

Date of Receipt: 08/08/2008

Client Contact: Nicola Hoare

Client Ref: DE07-114-07

| UKAS Accredited [Testing Laboratory] No. 1291 | Detection Method |          | 5 DAY ATU              | ✓       | Calculation | ✓ | GC FID/CALC | GRAVIMETRIC | ✓ | ICP IRIS | ✓ | IR | Oils, Fats & Greases (Dissolved) | Nitrate as NO3 | ✓ | Nitrite as NO2 | ✓ | SPECTRO | ✓ |  |  |  |  |  |  |  |       |  |
|---|------------------|----------|------------------------|---------|-------------|---|-------------|-------------|---|----------|---|----|----------------------------------|----------------|---|----------------|---|---------|---|--|--|--|--|--|--|--|-------|--|
|   | Sample Identity  | Other ID |                        |         |             |   |             |             |   |          |   |    |                                  |                |   |                |   |         |   |  |  |  |  |  |  |  | P / V |  |
| 08-B04655-S0004-A01                           | WW1              | UNKNOWN  | Glass Bottle           | -       | X           | - | -           | -           | - | -        | X | X  | X                                | X              | - | X              | - | -       |   |  |  |  |  |  |  |  |       |  |
| 08-B04655-S0004-A06                           | WW1              | UNKNOWN  | Plastic Bottle         | X       | -           | - | -           | X           | X | X        | - | -  | -                                | -              | - | -              | X |         |   |  |  |  |  |  |  |  |       |  |
| 08-B04655-S0004-A11                           | WW1              | UNKNOWN  | Plastic Bottle + H2SO4 | On Hold | -           | - | -           | -           | - | -        | - | -  | -                                | -              | - | -              | - |         |   |  |  |  |  |  |  |  |       |  |
| 08-B04655-S0005-A01                           | SW2              | UNKNOWN  | Glass Bottle           | -       | -           | - | X           | -           | - | -        | X | X  | X                                | X              | - | -              | - |         |   |  |  |  |  |  |  |  |       |  |
| 08-B04655-S0005-A04                           | SW2              | UNKNOWN  | Plastic Bottle         | X       | -           | - | -           | X           | X | -        | - | -  | -                                | -              | - | -              | - |         |   |  |  |  |  |  |  |  |       |  |
|   |                  |          |                        |         |             |   |             |             |   |          |   |    |                                  |                |   |                |   |         |   |  |  |  |  |  |  |  |       |  |
|   |                  |          |                        |         |             |   |             |             |   |          |   |    |                                  |                |   |                |   |         |   |  |  |  |  |  |  |  |       |  |
|   |                  |          |                        |         |             |   |             |             |   |          |   |    |                                  |                |   |                |   |         |   |  |  |  |  |  |  |  |       |  |
|   |                  |          |                        |         |             |   |             |             |   |          |   |    |                                  |                |   |                |   |         |   |  |  |  |  |  |  |  |       |  |
|   |                  |          |                        |         |             |   |             |             |   |          |   |    |                                  |                |   |                |   |         |   |  |  |  |  |  |  |  |       |  |
|   |                  |          |                        |         |             |   |             |             |   |          |   |    |                                  |                |   |                |   |         |   |  |  |  |  |  |  |  |       |  |
|   |                  |          |                        |         |             |   |             |             |   |          |   |    |                                  |                |   |                |   |         |   |  |  |  |  |  |  |  |       |  |
|   |                  |          |                        |         |             |   |             |             |   |          |   |    |                                  |                |   |                |   |         |   |  |  |  |  |  |  |  |       |  |
|   |                  |          |                        |         |             |   |             |             |   |          |   |    |                                  |                |   |                |   |         |   |  |  |  |  |  |  |  |       |  |
|   |                  |          |                        |         |             |   |             |             |   |          |   |    |                                  |                |   |                |   |         |   |  |  |  |  |  |  |  |       |  |
|   |                  |          |                        |         |             |   |             |             |   |          |   |    |                                  |                |   |                |   |         |   |  |  |  |  |  |  |  |       |  |
|   |                  |          |                        |         |             |   |             |             |   |          |   |    |                                  |                |   |                |   |         |   |  |  |  |  |  |  |  |       |  |
|   |                  |          |                        |         |             |   |             |             |   |          |   |    |                                  |                |   |                |   |         |   |  |  |  |  |  |  |  |       |  |
|   |                  |          |                        |         |             |   |             |             |   |          |   |    |                                  |                |   |                |   |         |   |  |  |  |  |  |  |  |       |  |
|   |                  |          |                        |         |             |   |             |             |   |          |   |    |                                  |                |   |                |   |         |   |  |  |  |  |  |  |  |       |  |
|   |                  |          |                        |         |             |   |             |             |   |          |   |    |                                  |                |   |                |   |         |   |  |  |  |  |  |  |  |       |  |
|   |                  |          |                        |         |             |   |             |             |   |          |   |    |                                  |                |   |                |   |         |   |  |  |  |  |  |  |  |       |  |
|   |                  |          |                        |         |             |   |             |             |   |          |   |    |                                  |                |   |                |   |         |   |  |  |  |  |  |  |  |       |  |
|   |                  |          |                        |         |             |   |             |             |   |          |   |    |                                  |                |   |                |   |         |   |  |  |  |  |  |  |  |       |  |
|   |                  |          |                        |         |             |   |             |             |   |          |   |    |                                  |                |   |                |   |         |   |  |  |  |  |  |  |  |       |  |
|   |                  |          |                        |         |             |   |             |             |   |          |   |    |                                  |                |   |                |   |         |   |  |  |  |  |  |  |  |       |  |
|   |                  |          |                        |         |             |   |             |             |   |          |   |    |                                  |                |   |                |   |         |   |  |  |  |  |  |  |  |       |  |
|   |                  |          |                        |         |             |   |             |             |   |          |   |    |                                  |                |   |                |   |         |   |  |  |  |  |  |  |  |       |  |

Notes : NUMERIC VALUES INDICATE ADDITIONAL SCHEDULING

# ALcontrol Laboratories Ireland

## Test Schedule Summary

---

**Ref Number: 08-B04655/01**

**Sample Type: WATER**

Client: Fehily Timoney & Company (Dublin)  
Date of Receipt: 08/08/2008

Location:  
Client Contact: Nicola Hoare  
Client Ref: DE07-114-07

\* SUBCONTRACTED TO OTHER LABORATORY / \*\* SAMPLES ANALYSED AT THE CHESTER LABORATORY

---

| SCHEDULE | METHOD      | TEST NAME                             | TOTAL |
|----------|-------------|---------------------------------------|-------|
| X        | 5 DAY ATU   | BOD Unfiltered                        | 2     |
| X        | Calculation | Total Oxidised Nitrogen               | 1     |
| X        | GC FID/CALC | Mineral Oil by GC                     | 1     |
| X        | GRAVIMETRIC | Total Suspended Solids                | 2     |
| X        | ICP IRIS    | Total Phosphorus                      | 1     |
| X        | IR          | Oils Fats & Greases (Dissolved) by IR | 2     |
| X        | KONE        | Nitrate as NO3                        | 1     |
| X        | KONE        | Nitrite as NO2                        | 1     |
| X        | SPECTRO     | COD Unfiltered                        | 1     |

Interim  
 Validated

## Alcontrol Laboratories Ireland Table Of Results

**Ref Number: 08-B04655/01**

**Sample Type: WATER**

Client: Fehily Timoney & Company (Dublin)

Location:

Date of Receipt: 08/08/2008

Client Contact: Nicola Hoare

(of first sample)

Client Ref: DE07-114-07

| UKAS Accredited [Testing Laboratory] No. 1291 | Detection Method | Method Detection Limit | 5 DAY ATU   |             |           |        |          |           |         |             |                              |                   |                        |                   |                                  |                |                |                |      |
|---|------------------|------------------------|-------------|-------------|-----------|--------|----------|-----------|---------|-------------|------------------------------|-------------------|------------------------|-------------------|----------------------------------|----------------|----------------|----------------|------|
|   |                  |                        | GC FID/CALC | GRAVIMETRIC | ICP IRIS  | IR     | KONE     | KONE      | SPECTRO | Calculation | Total Oxidised Nitrogen as N | Mineral Oil by GC | Total Suspended Solids | Total Phosphorous | Oils, Fats & Greases (Dissolved) | Nitrate as NO3 | Nitrite as NO2 | COD Unfiltered |      |
|   |                  | <2mg/l                 | <10ug/l     | <10mg/l     | <0.05mg/l | <1mg/l | <0.3mg/l | <0.05mg/l | <15mg/l | ✓           | ✓                            | ✓                 | ✓                      | ✓                 | ✓                                | ✓              | ✓              | ✓              | ✓    |
| 08-B04655-S0004                               | WW1              | UNKNOWN                | mg/l        | mg/l        | ug/l      | mg/l   | mg/l     | mg/l      | mg/l    | mg/l        | mg/l                         | mg/l              | mg/l                   | mg/l              | mg/l                             | mg/l           | mg/l           | mg/l           | mg/l |
| 08-B04655-S0005                               | SW2              | UNKNOWN                | 127         | 82          | 10.50     | 1      | <0.3     | 0.06      | 489     | 2           | -                            | <10               | 10718                  | -                 | -                                | -              | -              | -              | -    |
|   |                  |                        |             |             |           |        |          |           |         |             |                              |                   |                        |                   |                                  |                |                |                |      |
|   |                  |                        |             |             |           |        |          |           |         |             |                              |                   |                        |                   |                                  |                |                |                |      |
|   |                  |                        |             |             |           |        |          |           |         |             |                              |                   |                        |                   |                                  |                |                |                |      |
|   |                  |                        |             |             |           |        |          |           |         |             |                              |                   |                        |                   |                                  |                |                |                |      |
|   |                  |                        |             |             |           |        |          |           |         |             |                              |                   |                        |                   |                                  |                |                |                |      |
|   |                  |                        |             |             |           |        |          |           |         |             |                              |                   |                        |                   |                                  |                |                |                |      |
|   |                  |                        |             |             |           |        |          |           |         |             |                              |                   |                        |                   |                                  |                |                |                |      |
|   |                  |                        |             |             |           |        |          |           |         |             |                              |                   |                        |                   |                                  |                |                |                |      |
|   |                  |                        |             |             |           |        |          |           |         |             |                              |                   |                        |                   |                                  |                |                |                |      |
|   |                  |                        |             |             |           |        |          |           |         |             |                              |                   |                        |                   |                                  |                |                |                |      |
|   |                  |                        |             |             |           |        |          |           |         |             |                              |                   |                        |                   |                                  |                |                |                |      |
|   |                  |                        |             |             |           |        |          |           |         |             |                              |                   |                        |                   |                                  |                |                |                |      |
|   |                  |                        |             |             |           |        |          |           |         |             |                              |                   |                        |                   |                                  |                |                |                |      |
|   |                  |                        |             |             |           |        |          |           |         |             |                              |                   |                        |                   |                                  |                |                |                |      |
|   |                  |                        |             |             |           |        |          |           |         |             |                              |                   |                        |                   |                                  |                |                |                |      |
|   |                  |                        |             |             |           |        |          |           |         |             |                              |                   |                        |                   |                                  |                |                |                |      |

Notes : METHOD DETECTION LIMITS ARE NOT ALWAYS ACHIEVABLE DUE TO VARIOUS CIRCUMSTANCES BEYOND OUR CONTROL. NDP = NO DETERMINATION POSSIBLE

Checked By : Mark Butler

**APPENDIX**

## APPENDIX

1. Results are expressed as mg/kg dry weight (dried at 30°C) on all soil analyses except for the following: NRA Leach tests, flash point, and ammoniacal N<sub>2</sub> by the BRE method, VOC, PRO, Cyanide, Acid Soluble Sulphide, TPH by IR, OFGs and SEM.
2. Samples will be run in duplicate upon request, but an additional charge may be incurred.
3. A sub sample of all samples received will be retained free of charge for one month for soils and one month for waters (sample size permitting), but may then be discarded unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage.
4. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.
5. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.
6. When requested, an asbestos screen is done in-house on soils and if no fibres are found will be reported as NFD – no fibres detected. If fibres are detected, then identification and quantification is carried out by ALcontrol Technichem or Alcontrol Shutlers in the UK . If a sample is suspected of containing asbestos, then drying and crushing will be suspended on that sample until the asbestos results are known. If asbestos is present, then no analysis requiring dry sample are undertaken.
7. If no separate volatile sample is supplied by the client, the integrity of the data may be compromised if the laboratory is required to create a sub-sample from the bulk sample – similarly, if a headspace is present in the volatile sample.
8. NDP – No Determination Possible due to insufficient/unsuitable sample.
9. Metals in water are performed on a filtered sample, and therefore represent dissolved metals – total metals must be requested separately.
10. A table containing the date of analysis for each parameter is not routinely included with the report, but is available upon request.

Last updated February 2005



## CERTIFICATE OF ANALYSIS

---

**Client:** Fehily Timoney & Company (Dublin)

Floor 2  
Mill House  
Ashtowngate  
Navan Road  
Dublin 15

**Attention:** Rose Lloyd

**Date:** 28 January, 2009

**Our Reference:** 09-B00212/01

**Your Reference:** 2006-114-10

**Location:**

A total of 3 samples was received for analysis on Monday, 19 January 2009. Accredited laboratory tests are defined in the log sheet, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation. We are pleased to enclose our final report, it was a pleasure to be of service to you, and we look forward to our continuing association.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Signed

*Dylan Halpin*

*Lorraine McNamara*

**Dylan Halpin**

Team Leader Project Co-ordination

**Lorraine McNamara**

Laboratory Technical Manager

**Compiled By**

*Mark Butler*  
.....  
Mark Butler



# ALcontrol Laboratories Ireland

## Test Schedule Summary

|   |   |
|---|---|
| <b>Ref Number: 09-B00212/01</b><br>Client: Fehily Timoney & Company (Dublin)<br>Date of Receipt: 19/01/2009 | <b>Sample Type: WATER</b><br>Location:<br>Client Contact: Rose Lloyd<br>Client Ref: 2006-114-10 |
|---|---|

\* SUBCONTRACTED TO OTHER LABORATORY / \*\* SAMPLES ANALYSED AT THE CHESTER LABORATORY

| SCHEDULE | METHOD      | TEST NAME                             | TOTAL |
|----------|-------------|---------------------------------------|-------|
| X        | 5 DAY ATU   | BOD Unfiltered                        | 3     |
| X        | Calculation | Total Oxidised Nitrogen               | 1     |
| X        | GC FID/CALC | Mineral Oil by GC                     | 2     |
| X        | GRAVIMETRIC | Total Suspended Solids                | 3     |
| X        | ICP IRIS    | Total Phosphorus                      | 1     |
| X        | IR          | Oils Fats & Greases (Dissolved) by IR | 3     |
| X        | KONE        | Nitrate as NO <sub>3</sub>            | 1     |
| X        | KONE        | Nitrite as NO <sub>2</sub>            | 1     |
| X        | SPECTRO     | Ammoniacal Nitrogen                   | 1     |
| X        | SPECTRO     | COD Unfiltered                        | 1     |
| X        | SPECTRO     | Kjeldahl Nitrogen                     | 1     |
| X        | SPECTRO     | Total Nitrogen                        | 1     |

**APPENDIX**



ANALYSIS REPORT

|                     |   |  |                                  |
|---------------------|---|--|----------------------------------|
| <b>CUSTOMER:</b>    | <b>FEHILY TIMONEY &amp; COMPANY</b>                         | <b>SAMPLE TYPE:</b>                        | <b>BERGERHOFF DUST<br/>GAUGE</b> |
| <b>ADDRESS:</b>     | Floor 2, Mill House, Ashtown Gate,<br>Navan Road, Dublin 15 | <b>CONDITION OF<br/>SAMPLE ON RECEIPT:</b> | Satisfactory                     |
| <b>REPORT TO:</b>   | <b>ROSE LLOYD</b>   | <b>DATE SAMPLED:</b>                       | 08 August ~ 08 September 2008    |
| <b>SAMPLED BY:</b>  | ROSE LLOYD  | <b>DATE RECEIVED:</b>                      | 10 September 2008                |
| <b>SAMPLING PT:</b> | <b>ATHY C.A. SITE<br/>[DE08-114-10]</b>                     | <b>DATE ANALYSED:</b>                      | 18 ~ 24 September 2008           |
| <b>ORDER NO:</b>    | -   | <b>DATE REPORTED:</b>                      | 25 September 2008                |
|                     |   | <b>WORK NO.:</b>                           | <b>20523 C</b>                   |

TABLE OF RESULTS

| <i>Method:</i>   | LAB REF:    | YOUR REF: | TOTAL<br>PARTICULATES<br>mg/m <sup>2</sup> /day | ORGANIC<br>PARTICULATES<br>mg/m <sup>2</sup> /day | INORGANIC<br>PARTICULATES<br>mg/m <sup>2</sup> /day |
|------------------|-------------|-----------|---|---|---|
| TA Luft VDI 2119 | C08-Sep 232 | D1        | 72  | 50  | 22  |
| TA Luft VDI 2119 | C08-Sep 233 | D2        | 189   | 148   | 41  |
| TA Luft VDI 2119 | C08-Sep 234 | D3        | 47  | 37  | <10   |
| TA Luft VDI 2119 | C08-Sep 235 | D4        | 63  | 53  | <10   |

*Jennifer Keane*  
Jennifer Keane  
Chemistry Laboratory

|  |
|--|
| <b>FEHILY TIMONEY &amp; CO.</b><br>DUBLIN OFFICE |
| Received by: <i>KL</i>                           |
| Distribution                                     |
| 26 SEP 2008                                      |
| Action:  |
| Job No:  |
| Correspondence No: 3                             |
| Comment  |

- The results relate only to the items tested.
- The analysis report shall not be reproduced except in full without written approval of the laboratory.

ANALYSIS REPORT

|                     |   |  |                                |
|---------------------|---|--|--------------------------------|
| <b>CUSTOMER:</b>    | <b>FEHILY TIMONEY &amp; COMPANY</b>                         | <b>SAMPLE TYPE:</b>                    | <b>BERGERHOFF DUST GAUGE</b>   |
| <b>ADDRESS:</b>     | Floor 2, Mill House, Ashtown Gate,<br>Navan Road, Dublin 15 | <b>CONDITION OF SAMPLE ON RECEIPT:</b> | Satisfactory                   |
| <b>REPORT TO:</b>   | <b>ROSE LLOYD</b>   | <b>DATE SAMPLED:</b>                   | 08 September ~ 06 October 2008 |
| <b>SAMPLED BY:</b>  | ROSE LLOYD  | <b>DATE RECEIVED:</b>                  | 08 October 2008                |
| <b>SAMPLING PT:</b> | <b>ATHY C.A.</b>  | <b>DATE ANALYSED:</b>                  | 10 ~ 12 October 2008           |
| <b>ORDER NO:</b>    | -   | <b>DATE REPORTED:</b>                  | 21 October 2008                |
|                     |   | <b>WORK NO.:</b>                       | <b>20672 C</b>                 |

TABLE OF RESULTS

| <i>Method:</i>          | LAB REF:    | YOUR REF: | TOTAL PARTICULATES<br>mg/m <sup>2</sup> /day | ORGANIC PARTICULATES<br>mg/m <sup>2</sup> /day | INORGANIC PARTICULATES<br>mg/m <sup>2</sup> /day |
|-------------------------|-------------|-----------|--|--|--|
| <i>TA Luft VDI 2119</i> | C08-Oct 164 | D1        | 68   | 43   | 25   |
| <i>TA Luft VDI 2119</i> | C08-Oct 165 | D2        | 129  | 94   | 35   |
| <i>TA Luft VDI 2119</i> | C08-Oct 166 | D3        | <10  | <10  | <10  |
| <i>TA Luft VDI 2119</i> | C08-Oct 167 | D4        | 61   | 61   | <10  |

*Jennifer Keane*  
Jennifer Keane  
Chemistry Laboratory

FEHILY TIMONEY & CO  
DUBLIN OFFICE  
Received by: RL  
Distribution  
23 OCT 2008  
Action:  
Job No:  
Correspondence No: 3  
ment

- The results relate only to the items tested.
- The analysis report shall not be reproduced except in full without written approval of the laboratory.

# Appendix III

## Staff Structure



