

## INSPECTORS REPORT

WASTE LICENCE REGISTER NUMBER 34-1

### DUNDALK URBAN DISTRICT COUNCIL - Town Hall, Dundalk, Co. Louth DUNDALK LANDFILL FACILITY

*Inspector's Recommendation: A licence be granted subject to conditions*

#### (1): INTRODUCTION

##### 1.1 Summary

<b>Description of Principal Activity</b>	Landfill
<b>Quantity of waste (tpa)</b>	Maximum 25,740tpa (plus 2,560t C&D)
<b>Environmental Impact Statement Required</b>	No
<b>Number of Submissions Received</b>	65 valid; 2 invalid.

#### FACILITY VISITS:

DATE	PURPOSE	PERSONNEL	OBSERVATIONS
27/03/98	Site visit and check site notice	B Wall	Site Notice complies with Art. 8
23/08/99	Site visit	B Wall	Site Visit
21/8/00	Site visit	B Wall & M Doak	Site Visit and visit to residences on Newry Road

##### (i) Landfill

Dundalk Landfill (also known as Newry Road Landfill) at Newry Road, Dundalk is an existing landfill facility operated by Dundalk Urban District Council on the northern outskirts of Dundalk. The site was developed in 1963 as an unlined landfill. The boundary of the combined landfill and Civic Waste Facility backs east onto the main N1 Dublin – Belfast Road, and the Newry Road to the west<sup>1</sup>. The north side of the site is bounded mainly by open fields with an adjacent concrete batching plant towards the north west. The southern margin is formed by the banks of the Castletown River Estuary where at low tide mudflats are exposed. The mudflats adjacent to the facility

<sup>1</sup> Appendix 1 contains a site location map and a plan showing the layout of the facility.

have not been designated for conservation or nature protection but the outer estuary which lies 1.8 km east is a designated SPA (birds).

The northern urban area of Dundalk lies immediately adjacent to the south-western portion of the facility. This urban area includes a grain store, petrol service stations, a public house/restaurant and a number of residences arranged as terraced housing which front onto Newry Road. The terraced housing lies 280m directly west of the landfill mound. A housing development called Riverside Crescent lies within 80m of the landfilled area.

A Civic Waste Facility was constructed in 1999 to replace the main reception area of the landfill. The combined landfill and Civic Waste Facility site form a rectangular footprint of c.17.5 hectares. The landfill facility (c.12 hectares) has no infrastructure to facilitate leachate collection, treatment or landfill gas management, and operates on the dilute and disperse principle.

The landfill facility currently accepts 25,740 tonnes of waste and 2,560 tonnes of construction and demolition waste per annum. The proposed remaining capacity (applicant's statistics, June 2000) is in the region of 534,000 tonnes. Based on the current waste intake and proposed increase the applicant proposes to operate the landfill facility for a further minimum of 16 years before closure.

A recent visit to the site (21/8/00) indicates that the landfill mound as bounded by the perimeter bunds is near to full capacity and there is limited scope for further disposal. A significant increase in the height of the landfill would be necessary to facilitate a further 16 years of waste disposal.

The applicant has applied for an 70 fold increase in the amount of sewage sludge to be deposited in 2000, from 60 tonnes to 4,300 tonnes, when the new Dundalk sewage plant comes into operation. *Condition 5.12.1* of the proposed decision restricts the amount of sludge to current annual intakes. It is noted that the 4,300 tonnes per annum is close to the EIA requirement's threshold of 5,000 tonnes. It is unclear how the landfill can take sewage sludge to any further extent. The disposal of sludge at the unlined landfill will transfer the polluting load back into the estuary which mitigates against the benefits to be gained in estuary water quality from the opening of the new waste water treatment plant.

The *Draft Waste Management Plan for the North East Region, November 1999* does not consider the Dundalk landfill to be part of the medium to long term waste plan for the Region's waste and notes that this facility is a 'short-term landfill' which should plan to close within the next 2-3 years (*Section 10.5.1; page 77*).

The draft PD recommends the grant of a waste licence subject to cessation of disposal at the landfill within eighteen months of the date of grant of the licence (Condition 5.1). The draft PD specifies that the total quantity of waste for disposal to be accepted

at the landfill shall not exceed the existing figure of 25,740 tonnes per annum over the remaining life span (Condition 5.2). The PD also limits sludge disposal to that all ready accepted at the facility (i.e. 60 tonnes rather than the 4,300 tonnes applied for). The reasons for these limitations are the following :

1. I am not satisfied that the proposed disposal of over a half a million tonnes of waste at the unlined facility over a period of 16 years is BATNEEC and that the location is suitable for the long term operation of a landfill;
2. I am not satisfied that the capacity exists for the amount of waste proposed to be deposited;
3. Monitoring wells show elevated cyanide and phenol (List 1 substances) in the groundwater downgradient of the landfill. High concentrations of ammonia are also evident indicating leachate contamination;
4. I am not satisfied that the disposal of 4,300 tonnes of sewage sludge will not cause environmental pollution.

In making this recommendation I have had regard to the above mentioned *Draft Waste Management Plan for the North East Region*. Wastes accepted at the landfill over the recommended eighteen month period of operation can be used to profile the site to minimise rainwater infiltration. After this period only inert construction and demolition waste can be accepted at the landfill for use in the restoration of the site. Although there is evidence for the discharge of leachate (contaminated with List 1 substances) directly into groundwater at the landfill, groundwater is considered to be permanently unsuitable for domestic and agricultural use. This is due to a combination of factors, including the very restricted area between the facility and the Castletown River and the saline quality of the groundwater caused by tidal influences at this location. The draft PD contains several conditions to deal with the groundwater contamination and prevent discharges to the estuary, and all infrastructure must be in place by the time the landfill closes.

Potential nuisances are controlled by Condition 6 and by the requirements of Condition 4.16, which requires a more effective cover regime. Condition 4.16.1 requires that the within one month all previously deposited waste must be covered by an intermediate layer of at least 300mm. It is expected that these conditions will mitigate a historic problem at the facility of odour complaints and fly infestation. Inspections carried by the Agency have shown that the covering of the waste is inadequate. Up to 0.7 ha of waste was observed exposed with no cover material during an inspection on the 21/8/00. Copies of photographs taken during this site inspection are attached as Appendix 2. The Agency wrote to Dundalk UDC on the 1/9/00 informing them of the inadequate covering of waste and reminding them of the requirements of the manual on *Landfill Operational Practices*.

Scavenging birds are a problem at the facility and are to be controlled by Condition 6.9 and 6.11. The landfill gas management system required to be installed should control of the occurrence of odour.

The hours of opening and operation of the landfill are 8.00am to 5.00pm Monday to Friday inclusive and Saturdays 9.00am to 12.00pm (*Condition 5.8*). Hours for waste acceptance are 8.30am to 4.30pm Monday to Friday and 9.30am to 11.30am Saturday. Opening and waste acceptance hours for the Civic Waste Facility are 10am to 6pm Monday to Friday and 9.00am to 1.00pm Saturday.

The front section of the facility in the vicinity of the civic amenity area has been landscaped. The system of final capping in Condition 4.16 meets the requirements of the Landfill Directive. A detailed landscaping and restoration scheme must be submitted for agreement to the Agency within nine months (*Condition 8.2*). This plan must specify amongst other requirements the final contours of the landfill taking into consideration the reduced waste intake. Inert waste can be used for the restoration of the landfill. All restoration works must be completed within 4 years of the date of grant of the licence (Condition 8.5). An objective of the Dundalk UDC Development Plan 1996 is 'to develop the landfill site on the Newry Road as a public recreation and amenity facility following the termination of landfilling on site'.

## **(ii) Civic Waste Facility**

In contrast to the landfill a modern Civic Waste Facility is operated at the site under sub-contract by V & W Recycling (Dundalk) Ltd. Here the public may deposit sorted recyclables at no charge into dedicated receptacles and, for a charge, unsorted municipal waste into a compactor. The Civic Waste Facility currently operates under a Certificate of Registration (No. R221, issued by EPA 7.3.00) which authorises an annual intake of waste not exceeding 5,000 tonnes. The facility is only used by members of the public and the applicant has not applied to use the facility for a waste transfer station for council or commercial waste collection vehicles.

The Proposed Decision covers the operation of the Civic Waste Facility as a licensable activity in Condition 4.18 and 5.20, and increases the maximum annual intake of waste to 10,000 tpa. The proposed decision permits the storage of recyclable materials such as aluminium and steel cans, glass, used engine oil, scrap metal and fridges.

Access to Dundalk landfill is via the Civic Waste Facility point. Unauthorised access to the landfill is restricted by 2m high wire fencing (apart from the west). The west side is controlled by the security system (CCTV) operating in the Civic Waste Facility. Wastes for disposal entering the facility are weighed at the weighbridge and brought to the landfill. The landfill has no internal bank or cell structure and waste is spread in shallow layers and compacted.

The Civic Waste Facility consists of an entrance office and weighbridge with a large drive up to a warehouse type building for recovery and recycling. Included is security

fencing, an administration building and a car park area. The public tipping area for disposal is situated on the main ramp and consists of a compactor unit and skip. Full skips are hauled to the working area within the landfill and must be transferred off site once the landfill closes.

<b>2 Waste Types and Quantities</b>
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The total quantity of waste deposited at the facility is shown below.

	<b>NON-HAZARDOUS WASTE</b>	<b>HAZARDOUS WASTE</b>	<b>TOTAL QUANTITY OF WASTE</b>
<b>Already deposited</b>	882,650 tonnes **	Not Applicable	882,650 tonnes
<b>To be deposited prior to closure</b>	534,050 tonnes	Not Applicable	1,416,700 tonnes

\*\* figure given at time of further Article 16 information (dated 19 June 2000)

The applicant's expected life of the facility and the expected maximum annual tonnage are indicated below.

<b>Expected life of the facility, (in years)</b>	16 years from mid 2000
<b>Current Annual Tonnage</b>	<b>28,300 tonnes</b>
<b>Proposed Maximum Annual Tonnage</b>	32,450 tonnes

Conditions 5.1 and 5.3 of the proposed decision restricts the waste types to be disposed of at the facility to household, commercial and industrial wastes. Hazardous wastes are prohibited.

The applicant proposes to carry out the composting of waste at the facility in the future and outline details of this were provided in the application. It is noted that the draft Waste Management Plan proposes to locate a Garden "green" waste composting plant in Dundalk. The PD allows for outdoor composting of green waste and source separated organic waste and requires that a location and a detailed proposal with respect to this operation is made to the Agency for the latter's agreement prior to such an activity commencing (Condition 4.18.8 and 5.21.9). Condition 5.21 limits the size of the composting facility to 1,000 m<sup>3</sup> at any one time.

<b>3 Emissions to Air</b>
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The main emissions to air include landfill gas and dust. Landfill gas is presently allowed to vent to atmosphere in an uncontrolled manner. Annual quantities of gas production are estimated to be around 5.6 million m<sup>3</sup>.

Investigations carried out by the applicant in response to notices issued by the Agency revealed high concentrations of methane immediately adjacent to the grainstore and at other locations around the perimeter the landfill both inside and outside the facility boundary. These investigations have indicated that the high concentrations of methane maybe due to historical relatively shallow waste deposits which extend to the south of the landfill facility. No methane was detected during once-off landfill gas monitoring carried out within the grainstore itself and at a number of properties along the Newry Road and in the Riverside Crescent Estate. Two consultants reports (a) Landfill Gas Monitoring and Risk Assessment (Kirk McClure Morton, March 1999), and (b) Landfill Gas Risk Assessment Dundalk Landfill (Aspinwall & Co., October 1998); submitted as part of the application have recommended a number of mitigation measures to control landfill gas including the installation of a landfill gas trench. The Agency wrote to the applicant on 6 November 1998 outlining its concerns about the methane concentration detected and advised that the trench as recommended in the consultants reports should be installed as a priority. A letter from Dundalk UDC received on the 26/11/98 indicated that "It is proposed to commence work on the installation of the cut-off trench forthwith". Information received on the 11/2/99 indicated that the council is implementing construction of a passive gas venting trench along sensitive boundaries. The area for the proposed trench is inside the site boundary. No trench was evident during the inspection on the 21/8/00.

The proposed decision requires an extensively improved landfill gas management regime. A gas trench (*Condition 4.15.1*) and an active gas extraction system (*Condition 4.15.6*) will need to be in place within three and six months respectively.

Emission limits for the flarestack and trigger levels for landfill gas migration are conditioned in the draft PD. Increased perimeter landfill monitoring has been established under Condition 9.2. Landfill gas monitoring in some of the adjoining properties is also required (subject to the property owners consent) but this maybe reduced once the active landfill gas management system is in place. Condition 4.15.6 requires that the pipework for the extraction of landfill gas must extend into the areas outside the boundary which have been historically used for shallow landfilling and which show significant concentrations of methane (subject to the consent of the landowners).

In relation to noise the only area of significant impact is caused by traffic turning into the site entrance at the civic waste facility. Noise emission limits are established by *Conditions 7.1* and *7.3*.

#### **4 Emissions to Groundwater**

The geology of the area consists of Ordovician sandstones overlain by Quaternary sands and gravels. The sand and gravel deposits are overlain by more recent estuarine clays and silts, on which the Dundalk landfill is sited. Depth to rock in the vicinity is reported to be in excess of 25m. The units of sands and gravels are classified as a Regionally Important Aquifer, in accordance with 'Groundwater Protection Schemes' published by the Department of the Environment and Local Government, the Agency and the Geological Survey of Ireland.

Regional groundwater flow is north to south where it discharges into the estuary of the Castletown River. The groundwater contour plan for August 1998 shows a 'recharge mound' is coincident with the highest point of landfill. Such a recharge mound indicates that rainfall and leachate arising in the landfill are discharging directly into the underlying groundwater body and aquifer at this point. Groundwater/leachate levels at the landfill were recorded to be 3m above sea level in August 1998.

Seven monitoring wells were installed in and around the perimeter of the facility in 1998. Groundwater quality results have been periodically supplied for these boreholes. The water table at the landfill is influenced by the tide and conductivity levels of 3,500 – 4,500  $\mu\text{S}/\text{cm}$  in the two downgradient boreholes confirm that the underlying groundwater is saline in quality. The downgradient monitoring wells show elevated List I substances: cyanide (0.15mg/l), and phenol (0.12mg/l). Levels of these List I substances were below the Dutch intervention values (cyanide 1.5mg/l and phenol 2mg/l) but elevated above drinking water standards (cyanide 0.05mg/l and phenol 0.0005mg/l). Elevated List II substances were also recorded including high concentrations of ammonia (180mg/l to 500mg/l). The elevated ammonia is a clear indication that groundwater is being contaminated by leachate. Trace levels of some organic solvents were detected in leachate samples at levels below the Dutch Intervention level. List I substances are prohibited from entering groundwater (S.I. No. 142 of 1999). However, the regulations allow a discharge authorisation (waste licence) to be granted if the groundwater is permanently unsuitable for uses such as agriculture, fisheries and domestic use and technical precautions are taken to prevent the entry of List 1 substances to water. In this case I consider that the aquifer is unsuitable due to a combination of three factors; (1) the landfill is on the edge of the estuary, (2) the groundwater is saline and (3) access to the contaminated groundwater is through the waste mass. In any case the draft PD recommends the phased closure and restoration of the landfill and technical precautions to be implemented to prevent discharge of leachate to the estuary. It is also noted that the List I substances are below the Dutch intervention value for groundwater.

The landfill is unlined and the applicant has not proposed to carry out any future lining works. There are currently no technical precautions to prevent discharge of leachate (with List 1 substances present) to groundwater and subsequently to the Castletown Estuary. The annual volume of leachate generated is estimated to be 34,000m<sup>3</sup> per annum. Conditions of the proposed decision require extensive mitigation to reduce

considerably any leachate discharge and hence the risk of consequential significant pollution to be installed to address the following:

- Reducing leachate levels in the deposited wastes and off-site removal (*Condition 4.14*);
- capping works to prevent rainfall ingress (*Conditions 4.16 and 8*) and;
- leachate diversion between the facility and the Castletown Estuary itself (*Condition 4.14.1*).
- measures to control discharges to surface water (*Condition 4.17*).

## **5 Emissions to Surface Water**

The Agency's report on *Water Quality in Ireland 1995 – 1997* reports that the inner part of the Castletown Estuary regularly exhibited low daytime oxygen levels. High BOD and ammonia concentrations were also recorded. The report notes that with the commissioning of the new waste water treatment plant it is expected that episodes of poor water quality will be greatly reduced. Monitoring of the Castletown Estuary from 1993 to 1997 shows that ammonia concentrations upstream (c.0.05 to 0.4mg/l) and downstream (c. 0.01 to 0.3 mg/l) of the landfill were generally comparable.

The applicant has indicated that historical studies carried out on the estuary indicated that the impact of the leachate is localised and could not be detected beyond the immediate area of the landfill. Following the commissioning of the waste water treatment plant the impact of leachate on the estuary will become more apparent. Sampling on the 8/4/99 showed that leachate with ammonia levels of 654 mg/l is discharging from the culvert which runs north-south under the landfill and discharges at monitoring point SW6 (see plan). River samples taken at the low ebb tide both above and below the landfill both showed elevated ammonia concentrations and no significant increase was detected as a result of the landfill. *Condition 4.17.3* requires that the culvert must be sealed within three months of the date of grant of the licence. Ammonia levels at three points on the surface water drainage ditch along the northern boundary (SW 1, 2, 3) were elevated with values in the range of 89 to 109 mg/l indicating localised leachate contamination.

The proposed decision requires water sampling of the Castletown Estuary and the surrounding surface water drains at seven locations around the facility (*Condition 9.1*). An ecological survey of the low tide area to the front of the landfill must also be carried out (*Condition 9.14*). *Condition 4.18.6* requires that surface water collected from the hardstanding areas of the Civic Waste Facility must be diverted to the foul sewer via an interceptor. Aspects of *Condition 4.14.1, 4.16 and 8* referred to above under the section on Emissions to Groundwater would minimise leachate discharges to the river.

## **6 Other Significant Environmental Impacts**



None

## **7 Waste Management, Air Quality and Water Quality Plans**

No relevant air quality plans exist. Consideration was given to the *Draft Waste Management Plan for the North East Region* (November 1999). The draft waste management plan notes that the Dundalk Landfill facility is a 'short-term landfill' which should plan to close within the next 2-3 years. Louth County Councils draft waste management plans were also considered, namely (1) *Waste Management Plan 1987 - Draft Report* and (2) *Special Waste Management Plan 1992 - Draft Report*.

## **8 Submissions/Complaints**

A total of **65** valid and two invalid submissions were received in relation to the application. Appendix 3 contains a list of all submissions received during the application. An overview of all the submissions received is provided below with the individual submissions categorised into issues. Details on how the issues raised are dealt with in the draft PD are also provided. I have had regard to the submissions when making my recommendation to the Board.

### **1. Odours**

*The problem of odours arising from the landfill was the most common issue raised. Local residents have reported that odours are very strong, sickening, nauseating and often unbearable. Strong odours at night in summer have prevented residents from opening windows. Concerns were also expressed about the covering of waste and the dumping of odorous wastes. The submissions highlight the significant problems experienced by local residents and residents have made numerous telephone complaints to the Agency in the last two years. Residents have reported that their complaints are being ignored by the council and that the majority of local councillors don't agree that the smell is coming from the dump. Two submissions were received from local doctors outlining their concerns about the odours. It was recently reported that an appalling smell was coming from the dump behind one of the houses on the Newry Road. Some submissions requested meeting with local interested bodies.*

### **Response**

The Agency has written to the UDC on several occasions (31 May 1999; 15 November 1999; 24 May 2000, 15 August 2000; and 1 September 2000) in relation to the odour complaints. Phone complaints were also forwarded on to the council. The council in their replies outlined measures taken to control nuisances. The council have not attributed the odours to the landfill and recently (23/8/00) argue that the odours are caused by the muds of the Castletown Estuary.

It is disappointing to note that despite the Agency's prompting the council have not resolved the ongoing odour problems. The Agency's observations on-site on the 21/8/00 (*i.e.* noticeable odours near the site office and lack of covering material as the attached photographs show) indicate that the landfill is likely to be a source of odours.

The records kept at the site office also indicate that the landfill is a source of odours. The Agency wrote to the council on the 1/9/00 to remind them of the nuisance control measures detailed in the *Landfill Operational Practices Manual*. Agency inspectors called to local residents, Sr. De Lourdes and Annette Seery, during the visit on the 21/8/00.

*Condition 6* requires the control of all nuisances from the facility. *Condition 6.8* requires that activities shall be carried out such that odours do not cause a nuisance or result in significant impairment of or interference with amenities or the environment beyond the facility boundary. *Condition 4.16.1* and *5.11* requires that all uncovered waste must be covered within 1 month. Aspects of *Condition 4.16* i.e. the requirement for the use of daily cover will minimise odours for the remaining eighteen months of operation of the landfill. *Condition 4.15* requires an active landfill gas management system to be installed and this should reduce the potential of landfill gas odours. Landfill gas monitoring is required by *Condition 9.1*. *Condition 8* requires the complete restoration of the landfill site within 4 years.

## **2. Flies, Rats and Birds**

*Many local residents complained that because of the flies they were not able to open their windows. Many noted that they were concerned about the health implications of such large numbers of flies. One local lounge and restaurant to the immediate west must employ Rentokil to control flies and rats entering premises. Other businesses are strongly put at a disadvantage with such a fly problem. Residents expressed concerns about not being able to use gardens to grow home produce due to rats. The submissions from two doctors in Dundalk outlined health concerns in relation to flies and rats. An article from the Argus newspaper reports that Dundalk UDC has been asked whether a number of dead birds reported in the Newry Road area may be related to spraying of insecticide at the dump.*

### **Response**

*Condition 6* covers nuisance controls. The waste covering requirements under *Conditions 4.15* and the limiting of the working face dimensions in *Condition 5.9*. should control the flies and rat problem at the facility. A system for insect and vermin control must be agreed under *Condition 6.10*. A possibility is that the death of birds could be linked to the birds scavenging for food on uncovered waste. Significant improvements in the covering of waste are required.

## **3. Dust and Litter**

*Several submission note that dust lodges in nearby houses and commercial properties. Mud on the road was also expressed as a problem. A local car-sales unit must always wash each car to keep them clean prior to sale. Residents report that litter collects in commercial yards and customer carparks and that unsightly wind blown plastic bags are a problem.*

### **Response**

Again aspects of *Condition 6* i.e. the litter control measures (*Condition 6.4*) and Dust Control Measures (*Condition 6.7*) should alleviate the concerns expressed. The requirement for the use of daily cover will minimise wind blown litter.

#### **4. Water Quality**

*One submission from the Eastern Regional Fisheries Board deals with water quality. The Fisheries Board urges that leachate be removed for treatment and report that the Castletown River although not a salmonid river is a valuable salmon and sea trout fishery which is fished heavily in season. They state that it is vital that this resource is safeguarded from potential pollutants.*

#### **Response**

The groundwater monitoring results submitted by the applicant indicates that the groundwater beneath the landfill has been impacted by leachate. Leachate control is covered under *Condition 4.14* which requires the installation of a leachate management system and a vertical cut-off barrier between the landfill and Castletown River, within twelve months. Capping of the facility as per *Condition 4.16* will ensure that leachate generation is minimised. Groundwater and surface water monitoring is specified under Schedule E. Under *Condition 3.3* the Eastern Regional Fisheries Board must be notified of any incident which relates to discharges to surface waters.

#### **5. Health & Safety (Present & future generations)**

*Many of the individual submissions, including two from medical doctors, referred to general health concerns relating to the operation of the facility particularly with regard to the strong foul odours, flies and rats. The main items of concern are listed below.*

- *Concerns for human health and health of children.*
- *Opposition to the proposal on grounds of health and environmental hazards.*
- *Complaints of gas and smells in the area and in particular sewage odours.*
- *Concerns were expressed that the lack of fresh air and the odours severely impacted upon the one elderly seriously ill person in the area.*

#### **Response**

The nuisance and health concerns are dealt with under items 1 and 2 above.

#### **6. Local representative concerns**

*A councillor outlined concerns about the history of complains about the site during his time in the council. He states that a motion was unanimously passed calling for the closure of the landfill site, by members of Dundalk UDC, at their monthly meeting on the 27/6/00 (copy of motion & council minutes enclosed). The councillor also states that it is negligent to allow the facility to operate without a licence. He also notes that some years back the UDC applied to the DOE for permission to create a new landfill on the mudflats but this was turned down on the grounds of "the harmful effect it would have on the environment of the area". A submission from a general medical practitioner and member of the urban and county council outlined residents*

*complaints about nuisances and considers that the site is a major threat to environmental health.*

**Response**

In relation to the reference to plans to create a new landfill, a copy of an EIS prepared by Malachi Cullen & Partners (1992) was included in the application. This EIS reviewed the operation of the existing site and the feasibility of developing a new adjacent site. The EIS recommended a number of improvements including: changing the dilute and disperse method of operation to that of a contained landfill, substantial works and nuisance controls in order to meet the Landfill Directive requirements, the installation of gas trench and the reinstatement of the landfill to a pitch and putt course. In relation to the concern expressed about operating without a licence the legislation allows facilities to continue to operate while their application is being determined provided that the application is submitted by the prescribed date. The draft PD recommends a finite life of eighteen months for the landfill and nuisances caused by the landfill as a result of poor practices in the past will be controlled by the various conditions of the licence.

Signed \_\_\_\_\_

Dated:

Brendan Wall

Assisted by Malcolm Doak

**APPENDIX 1**  
**LOCATION MAP & LAYOUT PLAN**

**APPENDIX 2**

**PHOTOGRAPHS TAKEN DURING THE SITE VISIT ON  
21 August 2000.**