ATTACHMENT D INFRASTRUCTURE AND OPERATION

D.1 & D.2 Infrastructure and Operation

See Sections 3.1 to 3.3 of the EIS.



ATTACHMENT E **EMISSIONS**

E.1 **Emissions to Atmosphere**

See section 2.2 and 4.2 of EIS.

E.2 **Emissions to Surface Water**

See section 2.6 and 4.6 of EIS.

E.3 **Emissions to Sewer**

ther There are no emissions to public sewer at the facility. Foul water is treated in the on-site Biocycle treatment plant located to the northwest of the existing site offices adjacent to the western boundary and discharged to percolation area in the northwestern cormer of the site. See section 3.1.11 and 4.5 of the EIS.

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Emissions to Groundwater E.4

con See section 3.1.11 and 4.5 of the EIS.

E.5 **Noise Emissions**

See section 2.3 and 4.3 of the EIS.



E.6 Nuisances

Table E.6

Bird Control-Section 3.4.2 of EIS. Dust Control - Sections 3.4.3, 3.5.2 and 4.2 of EIS. Fire Control – Sections 3.1.13 and 3.8.5 of EIS. Litter Control – Section 3.4.4 of EIS. Traffic Control – Sections 3.1.10 and 3.4.8 of the EIS. Vermin Control – Section 3.4.6 of EIS.

Road Cleansing – The internal roads and hardstanding areas at the facility will be monitored on a daily basis and if required will be power swept to remove any accumulations of mud or dust.

A wheelwash will be constructed to the east of the weighbridge and all trucks entering or exiting the site will pass through the wheelwash. This will aid in preventing silt or mud being brought onto and off the site.

Consent of constitution purposes only, and other use.

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ATTACHMENT F **CONTROL AND MONITORING**

F.1 **Treatment, Abatement and Control Systems**

The abatement and control systems to be employed at the facility for reducing emissions are described in Sections 3.4 and 3.5 of the EIS. Other detailed information is provided in Section 4 of the EIS.

F.2 **Dust, Odours**

Dust - See Section 3.6.1 of EIS. Odours - See Section 3.6.9 of EIS.

F.3 Surface Water

See Section 3.6.4 of EIS.

F.4 **Sewer Discharge**

For inspection purposes only any other use. ont There are no discharges to public sewer from the facility and therefore no sewer monitoring is proposed as (Section 3.6.7 of EIS).

F.5 Groundwater

See Section 3.6.5 of EIS.

F.6 Noise

See Section 3.6.3 of the EIS.



ATTACHMENT G **RESOURCES USE AND ENERGY EFFICIENCY**

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G.1 Raw materials, Substances, Preparations and Energy

The raw materials/energy requirements are presented in Table G.1 below

Table G.1 Projected raw materials/energy requirements for the proposed facility NITIAI

Utilities Requirements						
toppes/appum	25000	50000	75000	90000		
Electricitv €	80000	150000	220000	290000		
Diesel €	25000	50000	75000	100000		
Oils Hydraulic Litres €	800	1600	2300	3000		
Oils Engine €	700	1400 3	2000	1600		
Water Cu. M.	600	1200 01 tot	1800	2400		
		170 sileo				
G.2 Energy Efficiency For inspection de le constant de la constant						

Energy Efficiency G.2

rot usper whet Usage of energy at the site will be kept to a minimum. Energy efficiencies will be achieved by using modern plant and equipment and servicing the equipment on a scheduled basis. Plant and equipment not in use will be shut off or throttled back to idle where possible.

Bulk oil storage on site will aid in reducing traffic movements to/from the site.

All wastes for export off site will be bulked up at the site and sent in large containers thus reducing energy usage from multiple trips with smaller vehicles.

Temperature control systems on site will include use of thermostats and time controls to reduce excessive use of these systems.

The benefits of updating plant and equipment that are more energy efficient will be continually reviewed.

Some of the waste produced will include refuse derived fuels (RDF). These can be exported to approved facilities to replace fossil fuels.

Consent for inspection purposes only any other use.

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ATTACHMENT H MATERIALS HANDLING

H.1 Hazardous Waste.

It is not proposed to accept any hazardous waste at the facility. However, it is possible that some minor quantities of hazardous waste typically comprising oil, batteries and perhaps fluorescent tubes will be inadvertently received at the site in the middle of large waste loads. These will be segregated out and stored in contained structures ready for export off site to appropriately licensed facilities (e.g. Returnbatt, Atlas Oil).

The waste types and quantities to be accepted at the facility are given in Section 3.3.2 of the EIS.

... of the EIS. waste Handling See Sections 3.2 and 3.3 of the EIS. For interference on the former of the forme

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ATTACHMENT I

EXISTING ENVIRONMENT AND IMPACT OF THE FACILITY

1.1 **Assessment of Atmospheric Emissions**

See Sections 2.2 and 4.2 of the EIS.

1.2 Assessment of Impact on Receiving Surface Water

See Sections 2.6 and 4.6 of the EIS.

1.3

See Sections 3.1.11 and 3.5.3 of EIS.

Assessment of Impact of Sewage Discharge 1.4

See Sections 2.4, 2.5, 4.4 and 4.5 of the EIS.

1.5 Ground and/or Groundwater Contamination

There are no known historical underground or overground tanks or disused waste disposal/treatment areas on site.

The previous owners recorded a small oil spill in the area of the ESB substation and this was reported to be investigated and remediated by a firm of environmental consultants (S.M Bennett & Associates).

1.6 Noise Impact

2 SEP 2005 INITIALS.

See sections 2.3 and 4.3 of the EIS.

I.7 Assessment of Ecological Impacts and Mitigation Measures

See Sections 2.7 and 4.7 of the EIS.

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ATTACHMENT J ACCIDENT PREVENTION AND EMERGENCY RESPONSE

J Accident Prevention and Emergency Response

See Section 3.8 of the EIS. Any accidents outside of normal working hours will be handled by the facility manager or in his absence by the operations director.

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ATTACHMENT K

REMEDIATION, DECOMMISSIONING, RESTORATION AND AFTERCARE

K Remediation, Decommissioning, Restoration and Aftercare

See section 3.7 of the EIS.



ATTACHMENT L STATUTORY REQUIREMENTS

L.1 Section 40(4) WMA

Compliance with Emissions L.1.1

Dust

There are no National or EU standards for dust deposition. By law the plant will be required to be in compliance with Air Pollution Act, 1987 and should meet the EPA recommendation of 350 mg/m²/day. The dust levels recorded (Table 2.2.2 of the EIS) were well below the EPA recommended level. Dust emissions are not expected to pose a problem at the facility as the processing operation will be carried out inside the main warehouse with various dust control systems. Regular yard sweeping and washdown will be carried out and a wheelwash is planned for the facility.

Odours Odours from the site have not been a problem in the past. For this reason it is not considered necessary to monitor odours at the site. There are no National or EU standards for odour emissions. The site manager and staff operatives will perceive odours on an ongoing basis and a complaints register will be set up in the office. In the event of receiving complaints from neighbouring premises or residents with regard to odours, details will be taken on a complaint form and appropriate remedial action will be taken to reduce odour emissions and this action will have regard to the principles of BAT. Odours, if they arise, will also be mitigated by the use of deodorizing agents in the dust control system.

Noise

There are no legal limits currently in place for noise emissions from industry. The EPA have set a day-time guideline for LAeg of 55 dB(A) and a nighttime level of 45 dB(A) at sensitive locations for other similar developments. Processing all waste indoors in the proposed new recycling building will reduce noise emissions from the facility.

Water

The risk to groundwater posed by the activities at the site is considered insignificant and no groundwater monitoring is proposed. Processing and storing all waste inside a fully contained building with concrete floors and lower walls will serve to eliminate potential leachate generation from rainfall. Any soiled water generated from floor wash down will be contained within the building, collected to the contained underground sumps and tankered off site to an appropriate wastewater treatment plant. Foul water from the canteen, toilets and washrooms will be treated in the Biocycle wastewater treatment plant on site and discharged to groundwater in the percolation area located in the northwestern corner of the site. This system will ensure minimal impact on local groundwater from the facility.

All surface water run-off from the yard will be collected in silt trap gullies and directed to a Klargester Class 1 full retention oil interceptor. All drainage from the roofs and interceptor will be directed to stormwater attenuation tanks incorporating a hydrobrake. These systems will ensure no impact from silt or hydrocarbons on the receiving Ballough stream and prevent the potential for flooding in the stream.

Environmental Pollution L.1.2

.conm The design and operating practices that ensures that environmental pollution is avoided are listed below.

Risk to Waters is avoided by:

- All hydrocarbon tanks will be double contained. ٠ FO
- Clean roof water will discharge directly to the storm water attenuation tanks. All open yard drainage will be collected and passed through a Class 1 Klargester oil interceptor prior to discharge to the storm water attenuation tanks. The attenuation tanks incorporate a hydrobrake and will regulate the rate of outfall from the tanks to the Ballough stream...
- All waste materials will be handled in a covered building with contained concrete floors.
- All floors within the building will be concreted and incorporate a drainage system to underground contained sumps. Any leachate arising in the sumps will be pumped out to a road tanker and exported off site to an appropriate wastewater treatment facility.
- All foul water will be collected and treated in a Biocycle wastewater treatment plant prior to • discharge to the percolation area designed and constructed in accordance with recognized standards.

Risk to the Atmosphere is avoided by:

- The retention time of waste at the site is insufficient to allow formation of decomposition gases.
- All wastes will be processed inside the main building and dust and odours will be controlled by the dust control systems. These include rotary atomizer spray units in the main building, fine water sprays at relevant parts of the recycling plant and a negative air pressure system in the picking station.
- The yard will be swept and washed on a regular basis.
- A wheelwash will be installed adjacent to the weighbridge and all trucks will be required to pass through the wheelwash when entering or exiting the site.

- Risk to Land, Soil, Plants or Animals is avoided by: only any other new other Risk to land and soil beneath the site is avoid by the same controls that avoid risk to Waters as described above.
- Risk to plants and animals are avoided by location of the development removed from areas of special ecological importance. The flora and fauna in the vicinity of the site are not considered sensitive to the site activities.

Nuisance through Noise or Litter is avoided by:

- All wastes will be handled in a contained building and all vehicles carrying these wastes are • and will continue to be covered.
- Daily litter patrols are, and will be, carried out at the site.
- Machinery and plant on site will be modern and serviced on a regular basis. Any plant not in use will be switched off or throttled back to idle speed.

Adverse effects on the country side or places of interest are avoided by:

 The location of the site was selected so as not to impinge on any places of interest or on the countryside generally. Operating the site with adequate environmental controls will ensure no impact on the surrounding environment.

L.1.3 - Best Available Technology (BAT)

The principle of employing BAT is being applied at the Greenclean facility in respect to emissions as follows.

Greenclean has, and will, employ modern management practices and continue to commit financial resources in order to control all nuisance emissions and ensure protection of the environment. The existing management practices include ensuring that all plant and equipment are fully serviced and operational, transporting waste within covered vehicles, regularly cleaning site surfaces and regularly patrolling for litter.

The existing and proposed equipment on site such as picking lines, shredder, loading shovels, baler, compactor, recycling plant and weighbridge are examples of the best available technology for such facilities.

Specialist consultants have and will be retained as required to monitor potential nuisances and all relevant environmental media set out by the EPA. The consultants will inform the company on a regular basis of improvements in pollution abatement or other relevant technology. The costs of the facility and adhering to the modern management practices will be financed from Greenclean's annual revenues or short term bank loans.

L.2 Fit and Proper Person

L.2.1 Compliance with relevant Acts

Greenclean Waste Management Ltd. or the company directors have never been convicted of any offences under the Waste Management Acts 1996 to 2003, the EPA Act 1992 and 2003, the Local Government (Water Pollution) Acts 1977 and 1990 or the Air Pollution Act 1987.

L.2.2 Technical Competence

Greenclean Waste Management Ltd. are a leading Waste Management company currently operating in Ireland. The company employ c. 55 employees at their waste management facility at Coldwinters, Blakes Cross, Lusk, Co. Dublin. The company have operated a waste collection and recycling business for many years and previously operated a Recycling Centre under waste permit at St. Annes, Cloghran, Co. Dublin. The company presently operate the most up to date recycling plant in the country incorporating trommel, star screen, windshifter, magnets, non-ferrous removal, hand picking stations, compacting, baling etc. The company have demonstrated their technical competence and site management through their continued involvement in the waste industry, the quality of their plant technology and processes and the testament of their clients whom they have served over the years.

The management team is composed of experienced personnel who have spent many years in this sector of the waste industry. The facilities manager will be responsible for all environmental aspects of the operation and in particular compliance with the waste license. He will be assisted by an environmental technician whose duties will include compilation of environmental data and meeting the requirements of the waste license. The facility manager and/or the environmental technician will complete the FAS course for waste facility management.

Name	Position	Responsibilities	Experience	Replacement
Mr. Jackie Boardman	Managing Director	Overall management of Company	25 years experience	
Mr. Derek Boardman	Operations Director	Overall management of company operations and collection services	15 + years experience	Mr. Patrick Boardman
Mr. Patrick	Financial	Management of all	15+ years	Mr. Jackie
Boardman	Director	finance and	experience	Boardman
		administration		
Patrick O'	Facility	Management of site	Over 15	Mr. Derek
Grady	Manager	operations, weighbridge	years	Boardman
		operator & transfer staff,	experience	
		Environmental		
		Management & License		
		Compliance with		
Mr. Richie	Yard	Plant [®] process	5 years	Mr. Patrick
Bannerman	Supervisor	supervisor		O'Grady
	ک	N.		
Operators	14	General Yard work	6 months to	
			5 years	

Table L.2.1 Key Staff at Greenclean Waste Management Ltd.

L.2.3 Financial information

The abridged financial accounts for the company are enclosed. The company wishes to have these accounts held as confidential information.