Environmental Protection Agency
An Ghníomhaireacht um Chaomhnú Comhshaoil

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Mr. Niall McGuigan
Director of Services, Environment
Wexford County Council
County Hall
Spawell Road
Wexford

12th December 2007 Reg No: W0241-01

Dear Mr. McGuigan

I am to advise you that the Agency has received an application for a Waste Licence from Greenstar Limited, for a facility located at Clavass, Enniscorthy, County Wexford.

The applicant proposes, as part of this application, to provide for the discharge of process effluent to a sewer, which the applicant has stated is vested in, or controlled by, your Council. Process effluent includes trade effluent or other matter (other than domestic sewage or storm water). I enclose copy extracts from the application form, which detail proposed discharges.

The provisions of Section 52 of the Waste Management Acts, 1996 to 2007, provides that the Agency shall obtain the consent of the sanitary authority to the proposed discharge from an activity which involves the discharge of trade effluent or other matter (other than domestic sewage or storm water), to a sewer vested in or controlled by a sanitary authority.

In order to expedite the Agency's consideration of this waste licence application, I am to request your authority's consent to the proposed discharge/s. It should be noted that, your authority's consent may be subject to such conditions as your authority considers appropriate as provided for in Section 52 of the Waste Management Acts, 1996 to 2007 and Section 99E(3) of the Environmental Protection Agency Acts, 1992 and 2007. Your attention is drawn to paragraphs (3) and (4) of the attached copy of the relevant section of the Act. For your convenience please find attached a reply form including a list of draft conditions compiled by the Agency.

In accordance with paragraph (2) of this section of the Act, you are requested to forward your response within 5 weeks of the date of this letter. Please note that any decision given after the expiry period shall be invalid and in those circumstances the Agency may proceed to determine the application concerned as if consent was obtained. Yvonne Furlong is dealing with this matter and can be contacted at the Licensing Unit, Office of Climate, Licensing & Resource Use, PO Box 3000, Johnstown Castle Estate, Wexford, Tel 0539160600, if you have any queries.

Your co-operation in this matter is appreciated.

Yours sincerely,

pp Elizabeth Leacy
Programme Officer
Licensing Unit
Office of Climate, Licensing & Resource Use

Section 99E (3) & (4) of the Environmental Protection Agency Acts, 1992 and 2003

(3) Subject to subsection (4), a consent under subsection (1) may be granted subject to or without conditions and if it is granted subject to conditions the Agency shall include in the licence or revised licence concerned conditions corresponding to them or, as the Agency may think appropriate, conditions more strict than them.

(4) The conditions that may be attached to a consent by a sanitary authority under this section are the following and no other conditions, namely conditions-

(a) relating to-

(i) the nature, composition, temperature, volume, level, rate, and location of the discharge concerned and the period during which the discharge may, or may not, be made,

(ii) the provision, operation, maintenance and supervision of meters, gauges, manholes, inspection chambers and other apparatus and other means for monitoring the nature, extent and effect of emissions,

(iii) the taking and analysis of samples, the keeping of records and furnishing of information to the sanitary authority,

(b) providing for the payment by the licensee to the sanitary authority concerned of such amount or amounts as may be determined by the sanitary authority having regard to the expenditure incurred or to be incurred by it in monitoring, treating and disposing of discharges of trade effluent, sewage effluent and other matter to sewers in its functional area or a specified part of its functional area,

(c) specifying a date not later than which any conditions attached under this section shall be complied with,

(d) relating to, providing for or specifying such other matter as may be prescribed.

SANITARY AUTHORITY RESPONSE

re: SECTION 52 OF THE WASTE MANAGEMENT ACTS, 1996 to 2005

Name & Address of Sanitary Authority: **Wexford County Council, County Hall, Spawell Road, Wexford, .**

Waste Reg. No. **W0241-01**

Waste Facility: **Greenstar Limited (Enniscorthy), Clavass, Enniscorthy, ,**

Waste Licence Applicant: ***Greenstar Limited***

Consent: Indicate Yes to one of the following statements:

Consent granted subject to the consent conditions outlined below	
Consent granted without conditions	
Consent refused [Note 1]	

Note 1 ***Where it is proposed to refuse permission the reasons for the refusal should be clearly outlined in the response.***

GENERAL CONSENT CONDITIONS	Condition to be included *(Yes/No)*
1. No specified emission from the installation shall exceed the emission limit value set out in *Schedule B: Emissions Limits to Sewer*. There shall be no other emission to sewer of environmental significance.	
2. The licensee shall carry out such sampling, analyses, measurements, examinations, maintenance and calibrations as out in *Schedule C*.	
3. Monitoring and analytical equipment shall be operated and maintained as necessary so that monitoring accurately reflects the discharge or emission.	
4. The licensee shall permit authorised persons of the Agency and the Sanitary Authority to inspect, examine and test, at all reasonable times, any works and apparatus installed, in connection with the process effluent, and to take samples of the process effluent.	
5. All automatic monitors and samplers shall be functioning at all times (except during maintenance and calibration) when the activity is being carried on unless alternative sampling or monitoring has been agreed in writing by the Agency for a limited period. In the event of the malfunction of any continuous monitor, the licensee shall contact the Agency as soon as practicable, and alternative sampling and monitoring facilities shall be put in place. Prior written agreement for the use of alternative equipment, other than in emergency situations, shall be obtained from the Agency.	
6. The licensee shall record all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence.	
7. The licensee shall provide safe and permanent access to all on-site sampling and monitoring points and to off-site points as required by the Agency.	
8. The licensee shall at no time discharge or permit to be discharged into the sewer any liquid matter or thing which is or may be liable to set or congeal at average sewer temperature or is capable of giving off any inflammable or explosive gas or any acid, alkali or other substance in sufficient concentration to cause corrosion to sewer pipes, penstock and sewer fittings or the general integrity of the sewer.	
9. In the event of any incident which relates to discharges to sewer, having taken place, the licensee shall notify the Agency, Local Authority and Sanitary Authority as soon as practicable after the incident.	

ADDITIONAL GENERAL CONSENT CONDITIONS **in respect of discharges or emissions to sewers, in accordance with Section 52** **of the Waste Management Acts, 1996 to 2005** ***(specify, if required)***

Limit Values for Process Effluent to Sewer

Schedule B: Emission Limits

Waste licence application Register No. **W0241-01**

Emission Point Reference No: _____

Emission to *(sewer description)*: _____

Volume to be emitted: Maximum in any one day: _____ m^3

Maximum rate per hour: _____ m^3

Parameter *(delete parameters which are not applicable)*	**Emission Limit Value**	
	Daily Mean Concentration (mg/l)	**Daily Mean Loading (kg/day)**
BOD		
COD		
Suspended Solids		
PH		
Temperature		
ADDITIONAL PARAMETERS *(if required)*		

Frequency of Monitoring Process Effluent to Sewer

Schedule C

Waste Licence application Register No. **W0241-01**

Emission Point Reference No:_____

Parameter *(delete parameters which are not applicable)*	**Monitoring Frequency (e.g. monthly, quarterly, annually)**	**Sampling Type** *(grab, composite)*
Flow to sewer		
Temperature		
pH		
BOD		
COD		
Suspended Solids		
ADDITIONAL PARAMETERS *(if required)*		

SANITARY AUTHORITY CHARGES	
Charge per cubic metre of process effluent (per s52 of the Waste Management Acts, 1996 to 2005)	
Payment Frequency	
Annual Monitoring Costs	

Signed on behalf of Wexford County Council

_____ Date_____

9. SURFACE WATER

This Section describes the surface water regime at the site and includes an assessment of the significance of the impacts of the facility during construction and operation.

9.1 Catchment Area

The facility is in the catchment of the River Slaney, which is to the north and east of the site, and approximately 2 km from the site boundary.

9.2 Surface Water Drainage System

There are no surface water drains within the site boundary. The proposed surface water drainage system is shown on Drawing No. D1080D2. Surface water run-off from the roofs and paved areas will discharge to the existing 400mm storm water sewer, which runs along the western site boundary. It is understood that this sewer, which was installed as part of the development of the adjoining Commercial Park, connects to the municipal storm sewer. It will be necessary to reroute the existing storm sewer, as shown on the Drawing, to allow the provision of a surface water attenuation tank.

9.3 Hydraulic Loading Impacts and Mitigation

A maximum outflow from the site of 5.7 litre/second will be regulated by a flow control device fitted at the connection to the existing storm sewer. A surface water attenuation tank will be provided at the location shown on Drawing No. D1080D2. The tank has a capacity of 536m^3 and is designed to accommodate 1:5 year rainfall events, with a 20% surplus to take account of climate change. The controlled discharge from the site will minimise the potential for any impact on the receiving municipal storm sewer. Storm design data is included in Appendix 4.

9.4 Surface Water Quality Impacts and Mitigation

Site activities with the potential to impact on surface water quality if uncontrolled, include: -

- Facility construction,
- Run-off from open yard areas,
- Spills and leaks,
- Foul Wastewater,
- Floor Washdown,
- Vehicle Washwater.

Potential short-term impacts from the construction of the facility include silting of the municipal sewer. Silt control measures will be provided during the construction phase to ensure that this does not occur. All fuel tanks and oil storage compounds used on site during construction will be provided with adequate secondary containment to prevent spills or leaks from entering the surface water drainage system.

When operational, surface water from the paved areas could potentially contain silt and small amounts of oils from minor leaks from road vehicles and the mobile plant. All surface water from the open yard areas, with the exception of the vehicle wash and refuelling area, will be collected in the surface water drainage system and discharged to the storm water sewer via a silt trap and oil interceptor. The location of the silt trap and proposed Klargester ByPass Separator are shown on Drawing No. D1080D2.

The volume of oils, anti-freeze, detergents and disinfectants stored at the facility will be kept to the minimum required for continued operation. These materials will be stored inside the MRTF Building in specifically designed storage cabinet/units provided with spill containment. Diesel will be stored in a properly bunded refuelling area. Spill containment kits will be provided and maintained on-site and facility personnel will be trained in the proper use of the kits to contain and clean up any major spills that occur.

Sanitary and sink wastewater from the Administration Building, wash water from the vehicle wash area and run-off from the refuelling area will be discharged to the facility's foul drainage system, which is separate from the surface water system. The foul sewer system will connect to an existing foul water pumping station, located to the south of the site. There is a rising main from the pumping station, which connects to the municipal foul sewer serving the area.

It is understood that the municipal WWTP serving Enniscorthy is currently operating at close to maximum capacity. It is also understood that the planned augmentation of the treatment capacity will not be completed until 2011. It is the long term preferred solution to discharge the floor wash water and vehicle washwater to the sewer. However if Wexford County Council considers this organic loading presents a risk to the proper operation of the WWTP, then there are practical alternatives.

As the volume of floor wash water that will be generated is relatively small, it can readily be contained within a water tight storage tank and removed off site for treatment at another WWTP. A closed loop vehicle wash can be installed that will recirculate the washwater. The silt/sediment accumulating in the system will be removed off-site for treatment.

9.5 Firewater Retention

A fire sprinkler system will not be provided and all firewater will be obtained from the hydrants on the firemain, as shown on Drawing No. D1080D2. The paved areas will be surrounded by a concrete kerb (approximately 150mm high). Firewater generated within the site will be contained inside the MRTF Building and the open paved areas. A shut off-valve will be installed on the surface water sewer upstream of the silt trap/interceptor and also on the foul sewer connected to the Mixed Waste area n the MRTF building. In the event of a fire these valves can be shut to contain run off inside the site.

Firewater run-off will be contained within the Main Building and in the kerbed area to the south. The available storage capacity in the Dry Waste and Mixed Waste area is approximately 400m^3 and the storage capacity in the external kerbed area is approximately 250m^3. The required storage capacity, based on published guidelines on firewater generation, which is calculated using flow rate of 5 m^3/minute for 60 minutes, is 300 m^3.

5.13 Surface Water Management

The proposed surface water drainage system is shown on Drawing No. D1080D2. Surface water run-off from the paved yard areas will be collected in the on-site surface water drainage system and discharged to the exsiting storm sewer, which serves the Commercial Park to the north. A silt trap, oil interceptor and an attenuation tank will be provided as shown, on Drawing No. D1080D2. More details on the proposed drainage system are presented in Section 9.

5.14 Wastewater

Sanitary and sink wastewater from the site offices will be discharged to the facility's foul drainage system, as shown on Drawing No. D1080D2. Storm water run-off from the refuelling area will be directed to the foul sewer, via a Class 2 Klargester Full Retention Separator.

Washwater from the vehicle wash will be directed to the foul sewer also via this separator, as shown on Drawing No. D1080D2. Given the nature of the materials that will be handled in the Dry Waste area, floor wash down will not be required here. The floor of the Mixed Waste area will be washed down as required. The wash water will be collected in a gully provided in the floor and will be piped to the foul sewer system, as shown on Drawing No. D1080D2.

5.14.1 Wastewater Volumes

The volume of wash water is estimated at 250 litres per 500 m^2 floor area per wash event. The only area of the floor that will actually be washed is where mixed waste is handled (ca 1600m^2). It is estimated that approximately 0.81 m^3 of wash water will be generated in each washdown. It is likely that the washdowns will be carried out weekly and the total volume of wastewater generated will be approximately 42m^3/year. It is estimated that the vehicle wash will generate approximately 10m^3 of wash water daily.

5.14.2 Wastewater Quality

Table 5.3 shows the likely quality of the combined wastewater discharged to sewer from the vehicle wash, floor washdown and runoff from the refuelling area.

Table 5.3 Wastewater Quality

Parameter	**Concentration**
Temperature	20 °C
BOD	3,500 mg/l
COD	7,000 mg/l
pH	6 – 10
Ammoniacal Nitrogen	100 mg/l
Suspended Solids	2000 mg/l
Sulphates (as SO_4)	1000 mg/l
Detergents (as MBAS)	100 mg/l
Fats, Oils, Grease	100 mg/l

5.15 Waste Generation

The facility will generate small volumes of office type wastes. Greenstar will operate a source segregation policy to maximise the recovery of potential recyclable materials from these waste streams. All recovered materials will be transferred off-site to recovery/recycling facilities.

Unsuitable materials, e.g. batteries, gas cylinders, miscellaneous plastics, bricks and mortar etc. removed from the wastes delivered to the site and which cannot be removed by the delivery vehicle, will be stored on-site on suitable storage units (cages, skips, bins) pending removal off-site for disposal at appropriately licensed facilities.

The mobile plant will be subject to on-site maintenance by a contract mechanic company. Waste oils and batteries will be removed off-site for disposal/recovery at licensed treatment/recovery facilities.

The oil interceptors and silt trap on the surface water drainage system will be routinely cleaned and emptied, and the contents removed off-site for disposal/treatment at an appropriately licensed facility.

Greenstar will identify appropriately licensed or permitted waste disposal/treatment facilities for all wastes generated at the facility. Greenstar will obtain details of the proposed disposal/treatment facilities, including the relevant permit and/or licence registration numbers, before any waste is moved off-site. All wastes leaving the facility will be weighed at the on-site weighbridge and Greenstar will retain records of the waste types (EWC codes), volumes (tonnes) and the destination.

EPA. The facility operations, when carried out in accordance with licence conditions, will not cause environmental pollution.

The facility Manager and Deputy will complete the FAS Waste Management Training Programme, or equivalent agreed with the Agency, prior to the start of waste acceptance.

Energy will be used efficiently in the carrying out of proposed activities although the proposed composting process is not energy intensive. Necessary measures will be taken to ensure limited consequences for the environment from accidents or the permanent cessation of activities at the site.

Source, Location, Nature, Composition, Quantity, Level and Rate of Emissions

Surface Water / Groundwater

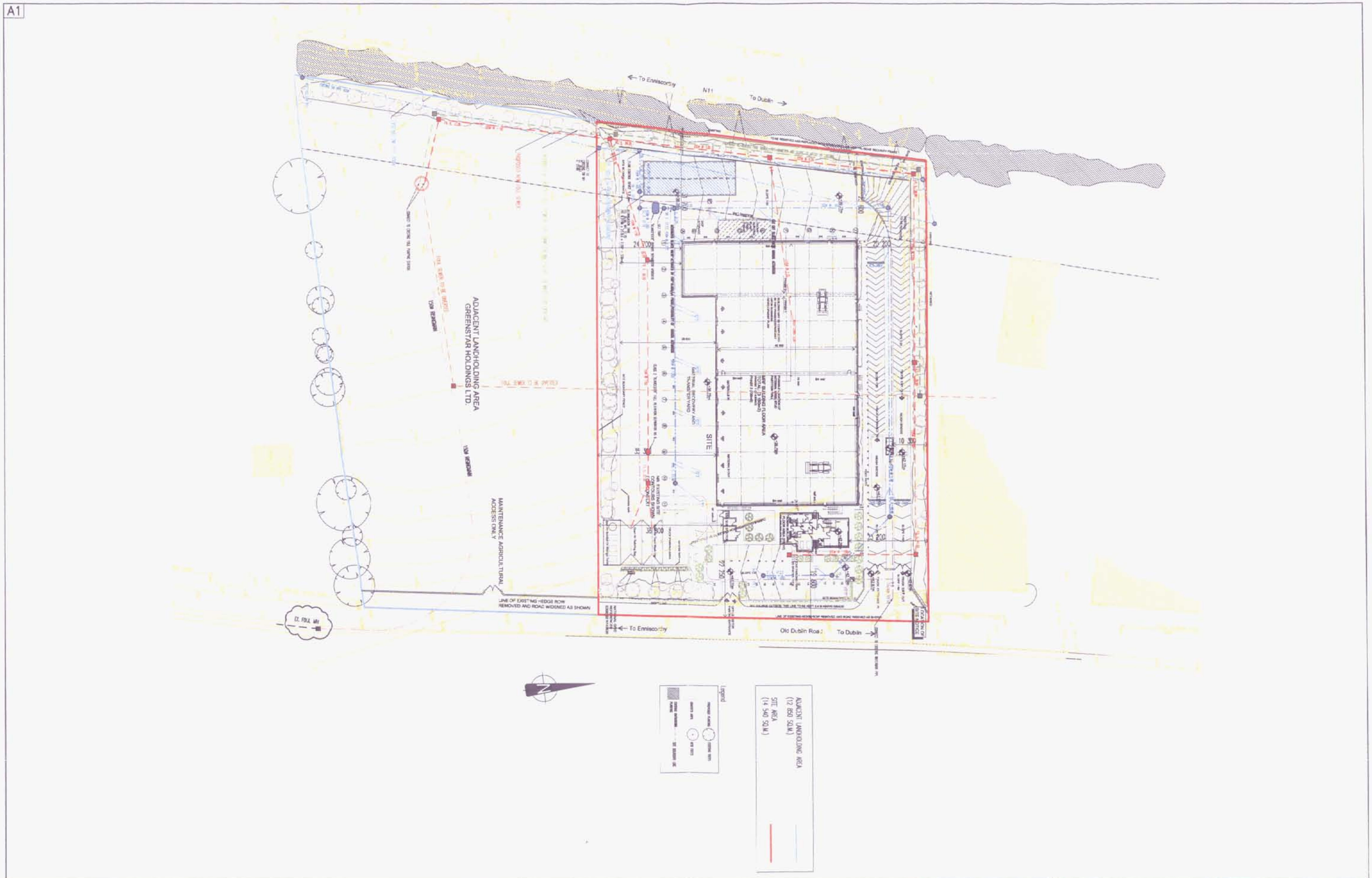
The site is in the catchment of the River Slaney, which is to the north and east of the site and approximately 1.5 km from the site boundary. There are no surface water drains on the site. Surface water from rainfall on the roof and open yards will be directed to the surface water sewer that runs along the western boundary. Silt traps and an oil interceptor will be provided to prevent sediment and any oils that may occur as a result of accidental spills, from entering the sewer. The rate of water flow from the site will be controlled by means of a valve and holding tank to ensure that the flows do not affect the integrity of the sewer.

The water from the sinks and toilets will go to the new foul sewer system and will be pumped to the Council's sewer. Wash water from cleaning the floor in the main building, water from the vehicle wash area and rainwater from the refuelling area will also go to the foul water sewer.

The soils are a shale till (clay) ranging from 3 to 10 metres deep. The underlying bedrock is rhyloitic volcanics and grey and brown slates. The subsoils are not significantly water bearing. The bedrock is classified as a Regionally Important Aquifer and its vulnerability to pollution ranges from high to low. There will be no direct or indirect routine emission to ground or groundwater.

Dust/Odours/Exhaust Emissions

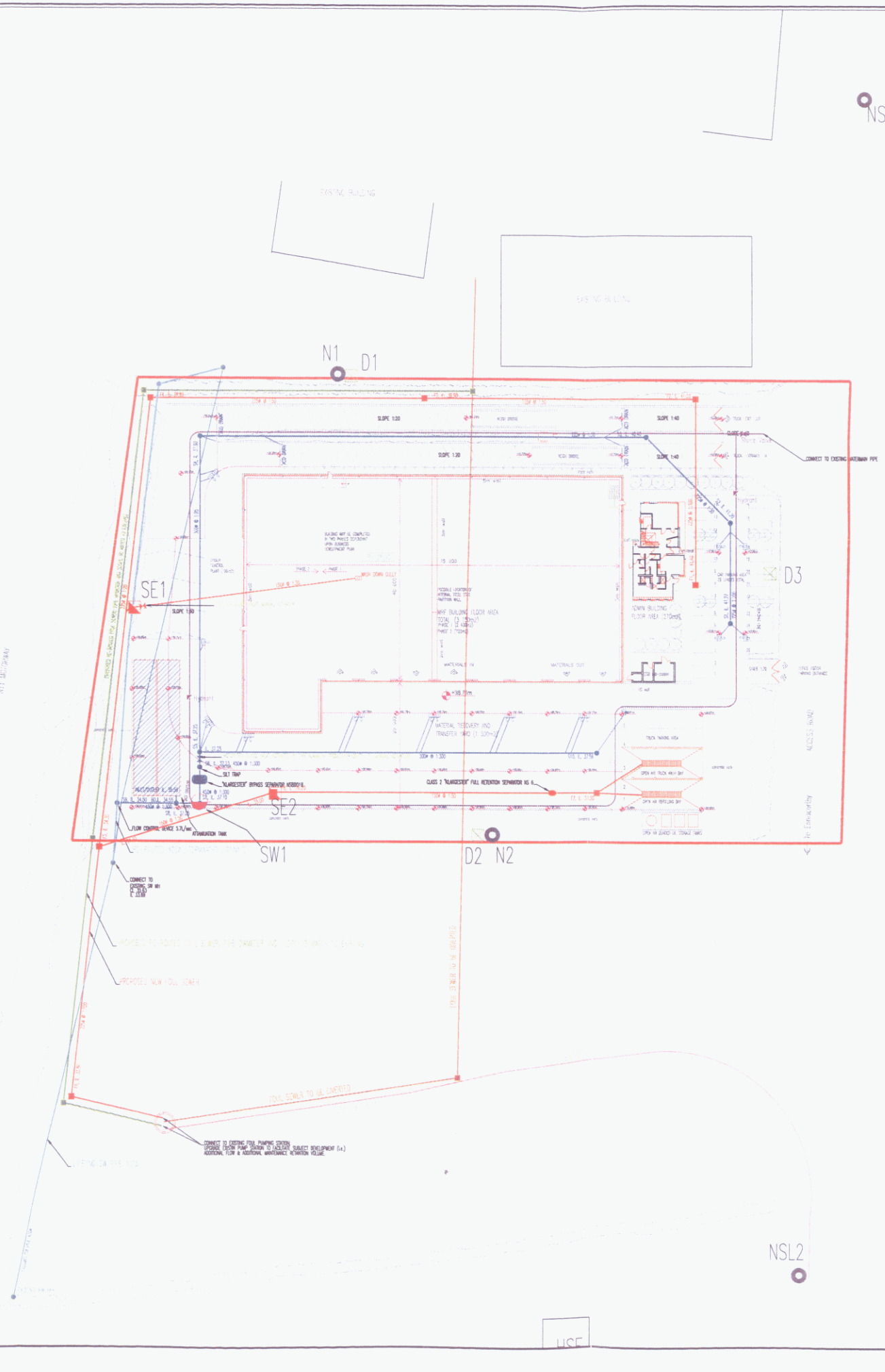
Air quality surveys were carried out to establish the current conditions. The surveys indicate that air quality at the site is generally good. The proposed development will be a source of emissions to air lined to traffic and the waste activities. These emissions include dusts, vehicle exhaust gases and odours.



YARD CONSTRUCTION:

CONC. YARD CONSTRUCTION
200 BRUSH FINISHED CONC. SLAB
WITH 0.9kg/m3 FIBERMESH
ON 1000g VISQUEEN D.P.M. ON
MIN 300 WELL COMPACTED BLINDED HARDCORE.

Job Title: GREENSTAR WASTE FACILITY ENNISCORTHY, Co. WEXFORD	Drawing Title: DRAINAGE LAYOUT	BURKE JENKINS Consulting Engineers, Unit 63 Oakmount Pk. Ballymount, Dublin 12. Tel. 01 - 450 0694, Fax. 01 - 426 4340, Email: sburke@indigo.ie ©	
Architect/Client: MARTIN MURRAY ARCHITECTS	Drawing Status: FOR PLANNING	Scale: 1:500, Date: NOV '07, Drn: HT	
		Job No: D1080	Drawing No: D2, Rev: A



NOTES

LEGEND PROPOSED MONITORING LOCATIONS

- Denotes Sewer Monitoring Location
- Denotes Surface Water Monitoring Locations
- Denotes Noise Monitoring Point
- Denotes Dust Monitoring Point

#	ID	EASTING	NORTHING
1	NSL1	298403	143634
2	NSL2	298383	143394
3	N1	298482	143574
4	N2	298302	143473
5	SE1	298382	143420
6	SE2	298451	143491
7	SW1	298202	143483
8	D1	298283	143575
9	D2	298301	143478
10	D3	298368	143530

REV.	DATE	DESCRIPTION	DRN.	CHKD	APP
A	09/11/07	ISSUE	MW	JOC	**

O' Callaghan Moran & Associates,
Granary House, Rutland Street,
Cork, Ireland.
Tel. (021) 4321521 Fax. (021) 4321522
email : ocm@indigo.ie

CLIENT

GREENSTAR LTD

TITLE

MONITORING LOCATIONS
ENNISCORTHY

SCALE	DRAWING No.	REV.
1:1000 A3	F1	A

DOS Filename : *********