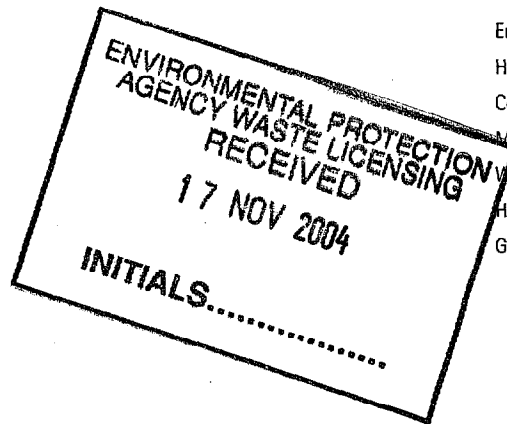


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Environmental Consultancy
Hydrogeology
Contaminated Land
Management Systems
Waste Management
Health & Safety
Geographic Information Systems

Licensing Unit,
Office of Licensing & Guidance,
Environmental Protection Agency,
Headquarters,
PO Box 3000,
Johnstown Castle Estate,
County Wexford



15th November 2004

RE: Waste Licence 202-1

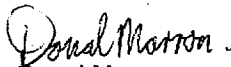
Dear Sir/Madam,

Please find enclosed an original and five copies of the response to the Article 16 Compliance Requirements issued to Mr. Seamus Kelly on 16/8/04. The response to the Article 12 and Article 13 Notices have been submitted separately.

I hope this meets with your satisfaction and if you have any queries please let me know.

Yours sincerely,

On behalf of Seamus Kelly & Sons


Donal Marron
Regional Director

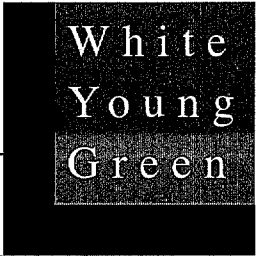
Apex Business Centre, Blackthorn Road, Sandyford, Dublin 18

Tel: +353 1 293 1200

Fax: +353 1 293 1250

Email: dublin@wyg.com

Website: www.wyg.com



**SEAMUS KELLY & SONS,
WASTE RECYCLING CENTRE,
GOREY BUSINESS PARK,
GOREY,
CO. WEXFORD.**

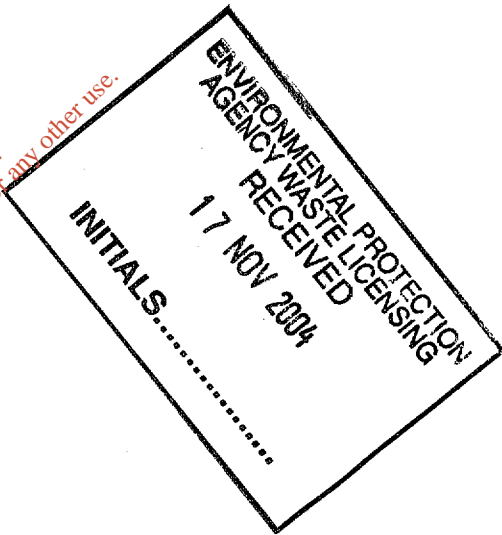
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ARTICLE 16 COMPLIANCE INFORMATION

REG. NO. 202-1

OCTOBER 2004

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Reference: Seamus Kelly & Sons – Article 16			
Issue	Prepared by		Verified by
V1	Oct. 04		
V2	-		
V3	-		
V4	-	Debbie Good BSc HND	Donal Marron
V5	-	Senior Environmental Scientist	Project Director
File Reference: C003587/Reports			
White Young Green Ireland Limited, Unit 14 Penrose Wharf, Penrose Quay, Cork Telephone: 00353214861488 Facsimile: 00353214861489 E-Mail: cork@wyg.com			
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Tel: +353 1 293 1200 Fax: +353 1 293 1250 Email: dublin@wyg.com Website: www.wyg.com

SEAMUS KELLY & SONS,
WASTE RECYCLING CENTRE,
GOREY BUSINESS PARK,
GOREY,
CO. WEXFORD.

ARTICLE 16 COMPLIANCE INFORMATION

REG. NO. 202-1

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Article 16 Compliance Information

6

Figures

- Figure 2.6.1 - Revised Site Drainage Map and Foul Water Monitoring Locations
- Figure 3.3.1 - Process Flow Chart
- Figure 4.3.5.1 - Proposed Noise Monitoring Locations

Attachments

- Attachment A - Non-Technical Summary EIS
- Attachment B - Non-Technical Summary Waste Licence Application
- Attachment C - Noise Survey Report, October 2004.

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ARTICLE 16

D1 Infrastructure

1. *Confirm whether the septic tank and the associated percolation area are suitable and have the capacity to handle the wastewater/effluent being discharged to the system in accordance with the EPA publication Wastewater Treatment Manuals, Treatment Systems for Single Houses.*

The foul water from the canteen, toilets and washrooms will be directed to the proposed proprietary wastewater treatment plant (WWTP) to be located in the southwestern corner of the site. Treated effluent from the WWTP will be discharged to groundwater via the percolation area located to the west of the western boundary wall.

It is planned that there will be 12 full time staff on site. Assuming 60 litres/head/day for each of the staff then there will be some 720 litres of effluent per day generated at the site. This is equivalent to less than 4 person equivalents (PE) and less than the volume generated by a single household. The WWTP will be designed to treat approximately twice this volume and therefore will have ample capacity for the facility. The treated effluent will be discharged to the percolation area located outside and to the west of the western boundary wall. The percolation area was designed in accordance with the SR6:1991 guidelines and is therefore considered adequate to receive and polish the treated effluent.

Any leachate generated in the new processing building will be directed by internal drainage and/or pumped to the underground storage tanks via the two 3-chamber interceptors located in the southwestern part of the site for storage prior to being tankered off site for treatment at the Enniscorthy wastewater treatment plant operated by Wexford County Council. It is likely that there will be a negligible volume of leachate generated within the building however, soiled water from floor washdown will be directed to the storage tanks. Effluent from the proposed wheel wash will also be directed to the underground storage tanks.

2. Section 3.2.5 of the EIS states that it is not proposed to install a wheelwash at the site however the installation of a wheelwash is a requirement of the planning permission issued by Wexford County Council in respect of this facility (Condition 15). Specify your reasons for not installing a wheelwash as well as details of any written agreement you have come to with Wexford County Council in this regard.

It is proposed to install a wheel wash system at the site. The precise location of the wash system has not yet been finalised. Details on the system will be submitted to the Agency as soon as they become available. The system will be a modern wash plant that incorporates the recycling of water. This will reduce the amount of waste water generated by the system. Any waste water generated will be drained via the two 3-chamber interceptors to the underground storage tanks located in the southwestern corner of the site and tankered off site for treatment and disposal at the Enniscorthy wastewater treatment plant.

C6 Hydrogeology

1. Section 3.2.11 of the EIS – All Services – states that “Water is supplied by a private well on site”. Please provide a sample of analysis of water from the on site well to include all of the parameters shown on Table 1.5 “Groundwater Quality” of the application form.

A representative groundwater sample was collected on the 16th of September 2004 from the water tap located on site. The water tap was running for some time before the sample was obtained and decanted into a laboratory-designated container and stored in a cooler box to maintain sample temperature below 4^oC.

The results of the groundwater sampling are presented in Table 2.1 overleaf.

Table 2.1: Groundwater Quality

Parameter	Unit	PV	IGV	GW1
pH	pH units	6.5 – 9.5	6.5 – 9	6.5
Temperature	°C	-	-	
Electrical Conductivity	mS/cm	2.5	1	6.7
Ammoniacal Nitrogen	mg/l	0.3	0.15	<0.2
Dissolved Oxygen	mg/l	-	no abnormal change	9.6
Calcium	mg/l	-	-	160.8
Cadmium	mg/l	0.005	0.005	<0.0004
Chromium	mg/l	0.05	0.03	0.007
Chloride	mg/l	250	30	2202
Copper	mg/l	2	0.03	<0.006
Cyanide	mg/l	0.05	0.01	<0.05
Iron	mg/l	0.2	0.2	0.027
Lead	mg/l	0.01	0.01	<0.005
Magnesium	mg/l	-	50	61.6
Manganese	mg/l	0.05	0.05	3.6
Mercury	mg/l	0.001	0.001	<0.0005
Nickel	mg/l	0.02	0.02	0.016
Potassium	mg/l	-	5	6.0
Sodium	mg/l	200	150	1300
Phosphate	mg/l	-	-	<0.03
Sulphate	mg/l	250	200	186
Zinc	mg/l	-	0.1	0.112
Total Alkalinity	mg/l	-	no abnormal change	160
Total Organic Carbon	mg/l	No abnormal change	no abnormal change	5
Total Oxidised Nitrogen	mg/l	-	-	2.3
Arsenic	mg/l	0.01	0.01	<0.002
Barium	mg/l	-	0.1	0.06
Boron	mg/l	1.0	1.0	<0.05
Fluoride	mg/l	1	1	<0.1
Phenol	mg/l	-	0.0005	<0.01
Phosphorus	mg/l	-	-	<0.05
Selenium	mg/l	0.01	-	<0.002
Silver	mg/l	-	-	<0.01
Nitrite	mg/l	0.5	0.1	<0.05
Nitrate	mg/l	50	25	9.9
Faecal coliforms	/100ml	-	0	<1
Total coliforms	/100ml	-	0	1
Water level		-	-	

Legend

mg/l = milligrams per litre

- = indicates no limit value was published

The analytical results for groundwater are discussed with reference to the PV (Parametric Values) in the European Communities (Drinking Water) Regulations, 2000 (98/83/EC) as enacted in Irish Law by Statutory Instrument No. 439 of 2000 and the recent (September 2003) Environmental Protection Agency (EPA), Interim Guideline Values (IGVs) as detailed in the "Interim report towards setting guideline values for the protection of groundwater in Ireland". The results indicated elevated levels of conductivity (6.755 mS/cm), chloride (2,202 mg/l), manganese (3.6 mg/l) and sodium (1,300 mg/l) all of which exceeded their respective PV and IGVs, an elevated level of sulphate and a low positive total coliform count of 1 cfu/100ml. There was little evidence of organic contamination with low levels of the main indicator parameters such as ammonia, nitrite, nitrate, phosphate, TON and faecal coliforms and a relatively high dissolved oxygen level.

The elevated levels of sodium and chloride are likely the reason for the elevated conductivity level and are indicative of saline water. However, there are no apparent reasons for saline conditions to be present in the local groundwater and no evidence of a potential geological source of salts in the bedrock. Other potential sources of elevated sodium, chloride, sulphate and conductivity levels include localised construction works that entailed cement or concrete structures that may have contaminated groundwater or perhaps other undocumented sources of salt contamination. It is recommended that a further sample be collected and analysed to confirm this initial set of results and an inspection of the local environment carried out to identify any possible sources of the elevated levels of sodium, chloride, conductivity etc.

C8 Noise

1. *Provide a new survey of daytime noise levels, to be carried out at;*

- *The northwestern, western, and southern boundaries of the site, and at*
- *A further location outside the eastern site boundary; and at*
- *All noise sensitive locations identified within 1km radius of site*

The survey should be carried out while the plant at the facility are operational.

Refer to Attachment C for a copy of the Noise Survey Report, October 2004.

2. *Provide a map clearly showing*

- *The noise monitoring locations*
- *The location of all residential buildings and*
- *Any other Noise Sensitive Locations (NSLs), within 1km radius of the site.*

Include the location of the noise sensitive location N1, referred to in the text of Section 2.3.4.1 of the EIS.

Refer to Figures 1 and 2, Attachment C Noise Survey Report, October 2004. Noise sensitive location N1, referred to in the text of Section 2.3.4.1 of the EIS is labelled as Noise Monitoring Location N5 in Figure 1, Attachment C Noise Survey Report, October 2004.

3. *The noise results and frequency spectra provided in Appendix 2.3.1 show a tonal noise element at several frequencies at locations N1. Please provide a frequency spectrum of noise measurements taken at boundary locations (NW, W and S boundary wall) and a separate frequency spectrum of noise measurements taken at NSLs in order to eliminate the Waste Transfer Facility as the source of the tonal element in the noise character. Please refer to the EPA's Guidance "Environmental Noise Survey".*

Refer to Attachment C Noise Survey Report, October 2004.

4. *Please indicate why all Noise Sensitive Locations monitored are regarded as being noise sensitive.*

Noise sensitive Location is defined by the EPA as "Any dwelling house, hotel or hostel, health building, educational establishment, place of worship or entertainment, or any other facility or area of high amenity which for its proper enjoyment requires the absence of noise at nuisance levels". The noise monitoring locations in the October 2004 noise survey are therefore regarded as potential noise sensitive locations.

C9 Surface Water

1. *Provide surface water monitoring results and a full interpretation of these results at the surface water discharge point at the site entrance.*

Surface water monitoring was carried out at the surface water discharge point, at the site entrance, on the 16th September 2004. Sampling was carried out by full submergence of the designated sample container into the surface water body. During submergence every effort is

made to keep the container steady so as to prevent sediment disturbance. The sample was stored in a cooler box to maintain sample temperature below 4°C. The sample was submitted to the Alcontrol Geochem laboratory within 24 hours of sampling. Surface water quality results are presented in Table 3.1 overleaf.

Table 3.1: Surface Water Quality Results

Parameter	Unit	Limit Value for A1 waters	EQS	SW1
pH	pH units	5.5 – 8.5	-	7.5
Temperature	C	-	-	
Electrical Conductivity	mS/cm	1	-	0.6
Ammoniacal Nitrogen	mg/l	0.2	0.02	0.2
Chemical Oxygen Demand	mg/l	-	-	84
Biochemical Oxygen Demand	mg/l	5	-	30
Dissolved Oxygen	mg/l	-	-	3.9
Calcium	mg/l	-	-	103.4
Cadmium	mg/l	0.005	0.005	<0.0004
Chromium	mg/l	0.05	0.03	<0.001
Chloride	mg/l	250	250	17
Copper	mg/l	0.05	0.03	<0.005
Iron	mg/l	0.2	1.0	0.062
Lead	mg/l	0.05	0.01	<0.005
Magnesium	mg/l	-	-	2.8
Manganese	mg/l	0.05	0.3	0.147
Mercury	mg/l	0.001	0.001	<0.0005
Nickel	mg/l	-	0.05	<0.001
Potassium	mg/l	-	-	5.0
Sodium	mg/l	-	-	12.5
Sulphate	mg/l	200	200	184
Zinc	mg/l	3	0.1	0.243
Total Alkalinity	mg/l	-	-	250
Total Organic Carbon	mg/l	-	-	
Total Oxidised Nitrogen	mg/l	-	-	

Legend

mg/l = milligrams

Limit Value for A1 surface waters from the Surface Water Regulations S.I. No. 294 of 1989.

EQS= Environmental Quality Standards for the Aquatic Environment, EPA Discussion Document.

- = Indicates no limit value published

As a guide, parameters have been compared to the Limit Values for A1 waters under S.I. No. 294 of 1989. These regulations categorise surface waters from which water for public supply will be taken as A1, A2 or A3, depending on the (increasing) degree of treatment which will be applied, and they set out quality standards for a total of 39 parameters. A1 waters are those which require simple physical treatment and disinfection. A2 waters are those which require normal physical treatment, chemical treatment and disinfection. A3 waters are those which require intensive physical and chemical treatment, extended treatment and disinfection.

The results from this sampling exercise were within the limit values for A1 waters under S.I. 294 of 1989 with the exception of manganese and biochemical oxygen demand. The level of manganese (0.147 mg/l) recorded was above the limit value for A1 waters but within the limit value for A2 waters under S.I. 294 of 1989. An inspection of the drainage system was carried out to investigate the relatively high level of BOD (30mg/l) reported. No apparent reason for the elevated concentration of BOD was determined. It is recommended that the drainage system be cleared out and a further sample collected to provide additional information on surface water quality.

It is considered that after the proposed redevelopment of the site and the construction of the new building that the only discharge to surface water will consist of clean rainfall from roof drainage and will have no detrimental impact on the local surface water network.

D1 Site Infrastructure

1. *Provide details of fuel storage bunding design. Include details on the drainage arrangement at the fuel dispensing area and specify how leaks/spillages are handled particularly during fuel dispensing.*

All fuel storage tanks are contained inside a steel containment structure. The structure has a steel floor, roof and walls on three sides and is fully integrated and sealed. There is a low steel wall on the northern side which allows for oils to be loaded/unloaded. The structure has a minimum capacity of 110% of the largest tank contained within. All valves and taps are located within the structure and will be easily accessible. The area adjacent to the structure where oil trucks will load/unload oils will be contained by a reinforced concrete floor and low concrete ramps in the unlikely event of any spillages occurring during filling operations.

2. *Revise Figure 2.6.1 (Site Drainage) to show the proposed drainage system for the waste transfer station. The revised drawing should show the source (e.g. toilets, canteen, shredder, floor wash, etc) of all waste water and surface water run off generated within the facility, foul water underground storage tanks, manholes and "acodrains" as well as pipework to which it connects, including diameter.*

Figure 2.6.1 has been revised and is included in this submission.

3. *Section 3.2.7 of the EIS states "Fuel is stored in 2 plastic tanks...the tanks include 2(No.) 1,000 litre tanks and 1 (No) 1,300 litre tank", ie 3 tanks". Please clarify the number of fuel tanks and the quantity of fuel stored on site.*

There are three 1,000 litre plastic fuel storage tanks located in the steel containment structure at the southwestern area of the site adjacent to the weighbridge office.

4. *According to the Section 3.2.12 of the EIS, Sewerage and surface water drainage infrastructure, foul water in the loading pit is collected in a sump, how is foul water which accumulates elsewhere on site and in particular within recycling building directed to the storage tanks?*

All internal floor drainage in the newly built recycling building will be drained via the yard drainage system to two 3-chamber oil interceptors located in series and from there to the underground foul water storage tanks. Any leachate or floor washdown draining to the sump in the existing shed will be pumped from the sump directly to the foul line feeding into the oil interceptors and from there to the underground water storage tanks. An acco drain traversing the site entrance will drain to the interceptors and foul water storage tanks. Sewerage and effluent from the canteen and washrooms will be directed to the proposed waste water treatment plant on site via a pipe laid underground along the line of the boundary wall. Effluent from the toilets will be drained directly to the WWTP.

D2 Facility Operation

1. *Figure No. 3.3.1. Process Flow Chart shows arrows labelled:*

- *"Cardboard, Plastic, Cans" going from "Waste Transfer" to "Segregation, Recovery, Bailing and Storage".*
- *"Cardboard, Plastic, Cans, Textiles" going to and from "C&D waste Recovery" and "Segregation, Recovery, Bailing and Storage".*

Please explain/clarify and if appropriate, update and revise Figure No. 3.3.1, Process Flow Chart, accordingly.

Refer to the updated Figure No. 3.3.1 attached.

H1 Air

2. *Specify the mitigation measures that will be employed in the event of rising dust levels as referred to in Section 3.10.3.*

Seamus Kelly & Sons propose to construct a new building, to cover the yard area to the west of the existing Recycling Building, consequently roofing in the entire site. This will ensure that the tipping and handling of all waste material takes place indoors thereby significantly reducing dust levels on site. Once constructed, the new building will house all site operations. A dust suppression sprinkler system similar to those operating in other waste facilities will be installed in this area. The yard and the main recycling building will be kept in a clean condition by regular sweeping and power washing if required.

J5 Discharge to Sewer

1. *Estimate the quantity of waste water effluent arising from the toilet, canteen, floor wash, shredder and vehicle wash bay. Complete Table H.10. "Details of Discharges to Sewer" of the application form for each discharge point.*

It is planned that there will be 12 permanent staff on site to operate the facility. It is estimated that at 60 litres/head/day that some 720 litres/day effluent will be generated and directed to the proposed wastewater treatment plant on site and from there to the percolation area. The treatment plant will be designed to cater for up to 20 permanent staff per day and therefore will be oversized and will allow for optimum treatment of the effluent. The percolation area was designed in accordance with SR6:1991 and is adequate to cater for the treated effluent.

Floor wash down generated at the site is estimated at approximately 1.6 m³ per month. The wheelwash will be a modern type that allows for maximum recycling of water and it is estimated that it will generate some 4m³ per month. Floor washdown and effluent from the wheel wash will be directed through the two oil interceptors (located in series) and from there to the four underground storage tanks. Effluent will be collected from the sealed storage tanks and tankered from there to the wastewater treatment plant at Enniscorthy for treatment and disposal.

2. *Supply an estimate of the volume to be discharged from the facility, to the foul water holding tanks, per day, including minimum and maximum figures.*

As above, the volume of floor wash down and wheelwash effluent to be discharged to the storage tanks is estimated at some 5.6 m³ per month. No other discharges are planned to the storage tanks.

3. *Section 3.2.12 of the EIS states that foul water generated on site is currently held in 4 (No) 4,000 litre tanks while Figure 2.6.1 states 4 x 1000 litre holding tanks. Please clarify the capacity of the holding tanks and revise Figure 2.6.1 accordingly.*

There are four 1,000 gallon tanks on site with a cumulative capacity of 4,000 gallons or 18,000 litres.

4. *Provide a site drawing showing the location of the foul water monitoring sites FW1 and FW2.*

Refer to Figure No. 2.6.1 attached.

J7 Noise

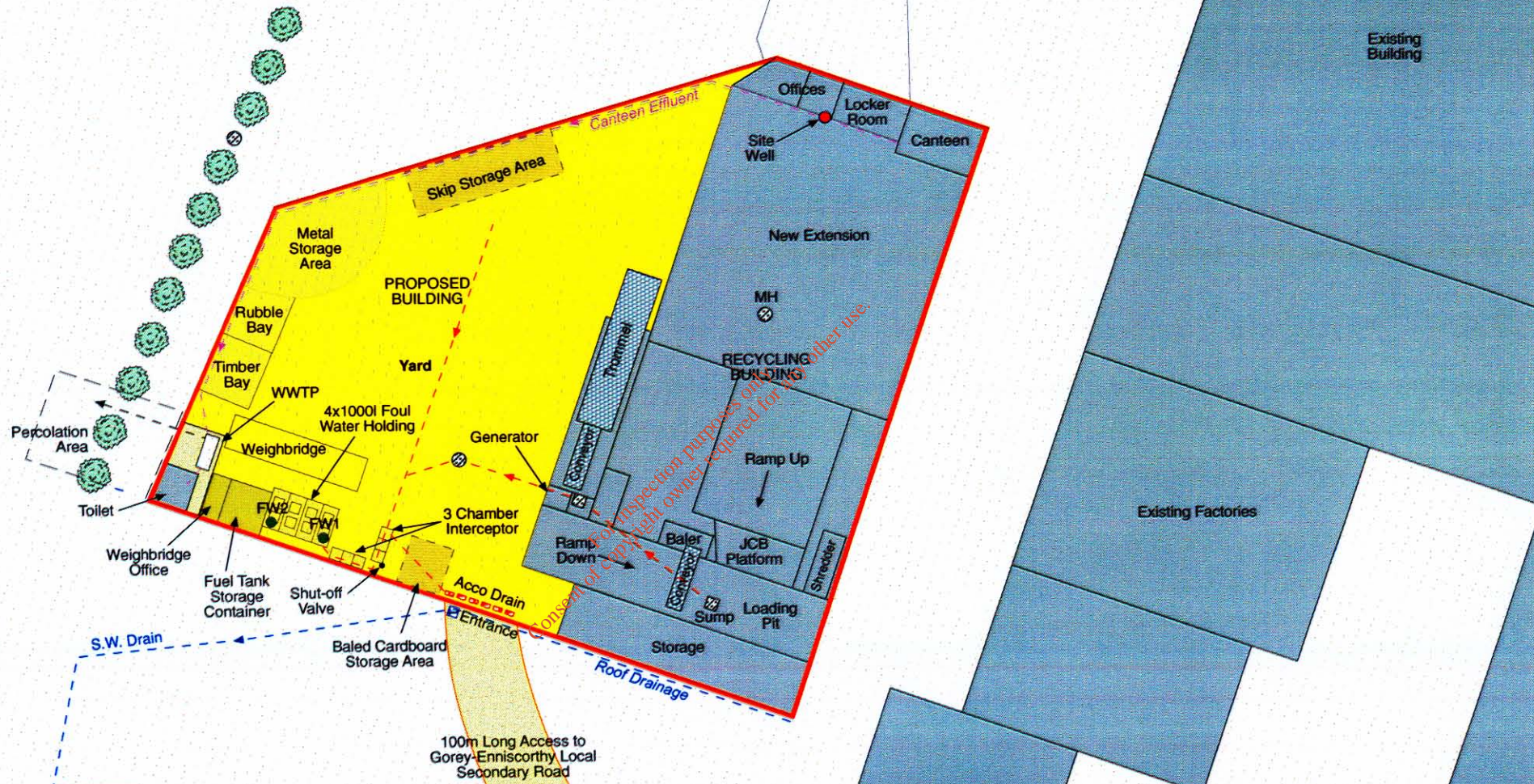
1. *Please provide a drawing showing the proposed noise monitoring locations. Section 4.3.5 of the EIS states that proposed noise monitoring locations are outlined in figure 4.3.5.1 however figure 4.3.5.1 has not been provided.*

Refer to Figure 4.3.5.1 attached.



NOTE: Drawing is schematic. No measurements to be taken.

SCALE 1 : 500 METRES



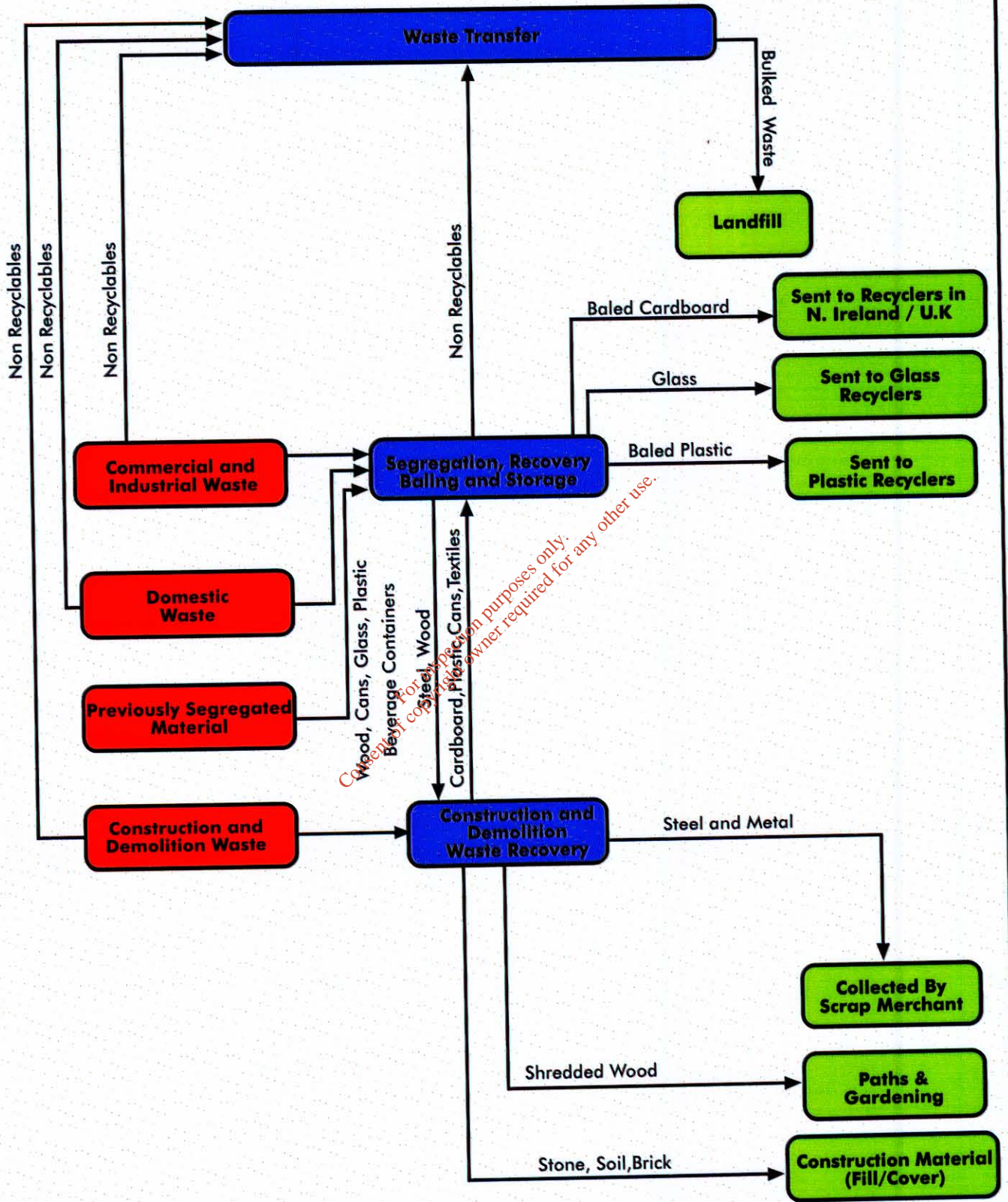
LEGEND

- Site Boundary
- Existing Buildings
- Coniferous Trees
- MH Manhole
- Floor Drainage
- Surface Water Drainage
- Sewage Drain
- FW1 Foul Water Monitoring Location
- Proposed New Building

Seamus Kelly & Sons
Proposed Site Drainage

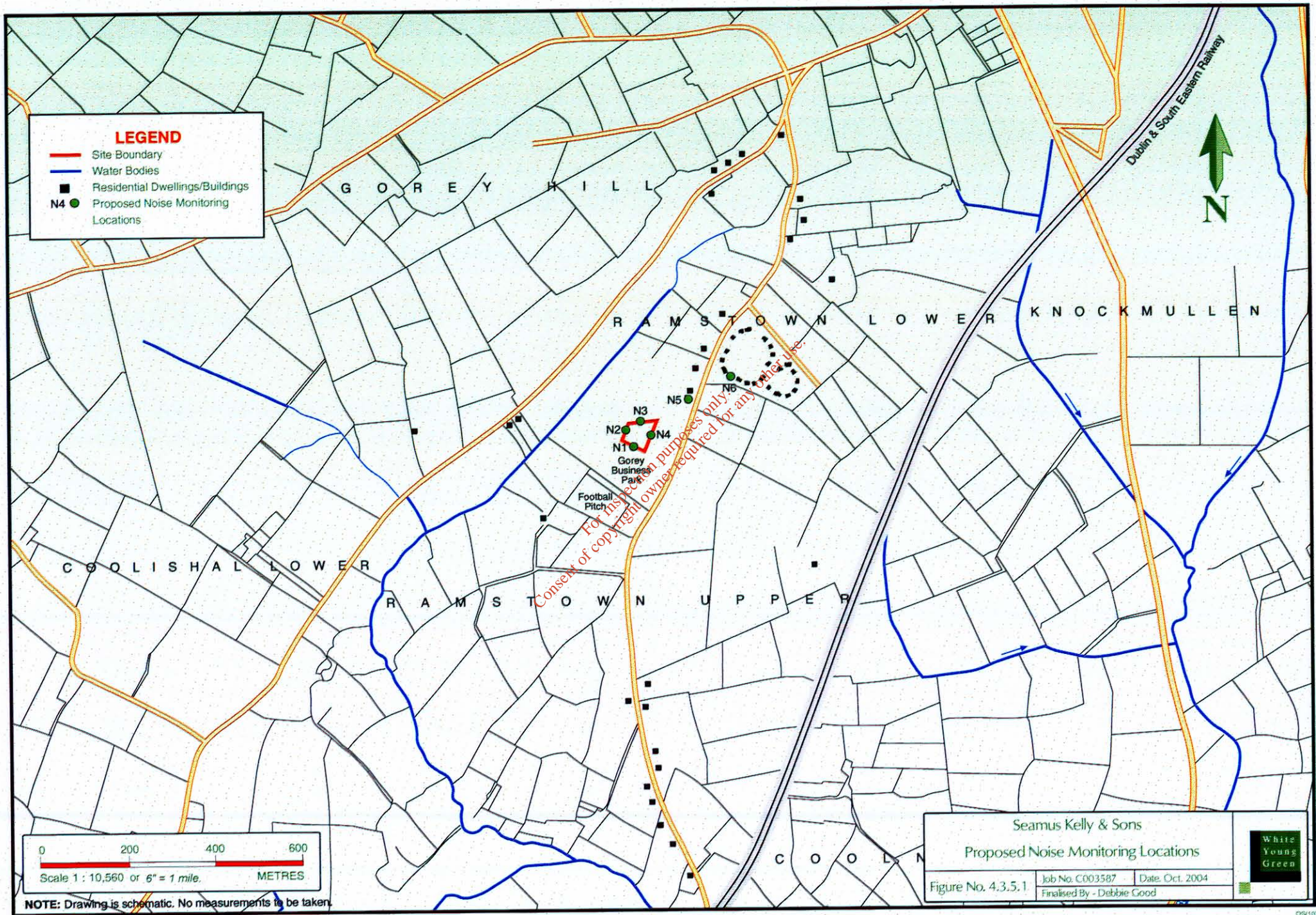
Job No. C003587	Figure No. 2.6.1
Date. Nov. 2004	

Process Flow Chart



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Seamus Kelly Process Flow Chart			
Figure No. 3.3.1 (Rev A)	Job No. C003587	Date: Nov 2004	
Finalised By - DM			



ATTACHMENT A
EIS, NON-TECHNICAL SUMMARY

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EIS, Non Technical Summary

1. General

This non-technical summary is provided as required by Article 6 of the European Communities (Environmental Impact Assessment) Regulations, 1998 (S.I. No. 351/1998) which amends Article 25 of the European Communities (Environmental Impact Assessment) Regulations, 1989 (S.I. No. 349/1989).

Seamus Kelly and Sons (SK&S) operate a domestic, commercial and industrial waste collection and recycling business from Gorey Business Park, Ramstown Gorey, Co. Wexford. The facility has planning permission to operate a waste transfer station since 1995. Significant changes are now necessary to allow the company to expand its recycling processes and to improve the environmental performance and the overall efficiency of operations at the site. This environmental impact statement (EIS) will be sent to the EPA to accompany the waste licence application which was submitted in February 2004.

2. Description and characteristics of the development

The facility currently handles household, commercial, industrial, and construction and demolition waste as described above. All wastes handled are non-hazardous in nature. Recycling at the facility comprises recovery of paper, wood, cardboard, metal, plastic and construction and demolition materials. There is one picking lines for the recovery of construction and demolition waste. This picking line can also be used for the recovery of other waste types. Any non-recyclable waste is bulked up on the premises and transferred to landfill in covered trailers. SK&S also provide a service for the collection of dry recyclables from householders and the Company hopes to expand this service in the region.

The existing facility consists of one main building dedicated to waste handling which also houses the office areas, canteen and changing rooms. The site also contains a weighbridge, a weighbridge cabin, toilets, fould water storage tanks, percolation area, vehicle wash bay, recycled materials storage bays and a fuel storage area.

The facility currently handles approximately 16,500 tonnes per annum. The opening hours at the facility are from 8.00a.m. to 5.00 p.m. Monday to Friday and 8.00a.m. to 1:00p.m. on Saturdays. It is proposed to extend the opening hours to 7:30am to 6:30pm Monday to Friday and from 8:00am to 2:00pm on Saturdays. The Waste Licence Application accompanied by this EIS includes a proposal to increase the current licensed tonnage to 30,000 tonnes per annum over five years. The proposed changes to the facility include a proposal to construct a new building which will

cover the entire site ensuring all activities take place indoors and the provision of a proprietary wastewater treatment plant.

3. Data necessary to identify and assess the main effects which the development is likely to have on the environment

The data necessary relates to the site development characteristics and the existing environment in which the development has been situated as follows:

Site Statistics and Development Characteristics

Although strictly speaking, site statistics are not an aspect of the environment, per se, they form the database upon which most of the calculations related to impacts on the environment are based. The site statistics include site area, building size, hours of operation and traffic generation.

Climate

Climatological data for a number of stations in County Wexford relating to rainfall, wind and evapotranspiration was compiled as a baseline for evaluating the development. The annual rainfall at the site was estimated at 877mm/annum and the prevailing wind was determined to be from the west and southwest.

Air Quality

Dust measurements were made at three monitoring stations. Elevated dust levels were recorded at the site with higher levels recorded upwind of the site on the west and northwest boundaries. Historically the handling of C&D waste had been an additional source of dust on site but the proposed enclosure of C&D waste handling inside the proposed new building and the provision of a dust suppression spray system inside the building will minimise the risk of future dust emissions from this activity.

Noise Environment

Baseline noise levels were recorded at four boundary locations on site and at ten of the nearest sensitive receptors. Noise assessment was carried out during daytime operations at the site. Background noise levels in the surrounding area are influenced by a combination of site activities, passing road traffic and neighbouring activities.

Geology and Soils

The site is underlain by the Campile Formation, which forms the top of the Duncannon Group, Lower Palaeozoics. The overlying soils consists of glacial drift of sandy, gravelly clays. Previous investigations within the Ramstown area recorded deposits of clayey material ranging in thickness from 9.5m to 20.5m.

Groundwater

The groundwater direction flow in the bedrock is most likely in an easterly direction towards the Banoge River. The site is underlain by rocks of the Campile Formation of the Duncannon Group which is considered to be a major aquifer.

A groundwater sample collected from the on-site well recorded groundwater with elevated levels of manganese, sodium, chloride, conductivity and to a lesser extent sulphate. There was little evidence of organic contamination as indicated by the low levels of ammonia, nitrite, nitrate, phosphate, TON and a relatively high concentration of dissolved oxygen.

Surface Water

The site is located in an industrial area therefore surface water from roofs and paved areas of the site currently runs-off to constructed storm drains. All non-roof surface water passes through 2 (No.) petrol interceptors prior to discharge to a percolation area. It proposed to roof in the entire site therefore all surface water run-off will be in the form of clean roof water.

Flora and Fauna

The site is not covered by any designations of nature conservation interest. There are no natural or semi-natural habitats on site.

Human Beings/Local Population

The site is located in an industrial area, which is zoned "To provide for Industrial Uses" in the Gorey Local Area Plan 2002. Therefore the predominant land use in the vicinity of the site is industrial. An urban residential area is located 200m to the northeast.

Traffic and Road Network

A traffic survey carried out at the site indicated that the existing junction, site entrance, and circulation areas work well with the existing traffic volume. The site is convenient to the N11, thus providing good access to the National Roads network.

Landscape

The existing recycling centre is located within an extensive area of industrial development and therefore has low impact on the landscape environment. The site boundary comprises concrete block walls fitted with corrugated sheeting.

Cultural Heritage

An appraisal of the cultural heritage was undertaken, detailing relevant aspects of local history and providing an archaeological assessment of the site and its environs. The study concluded that historical industrial development had removed or disturbed any areas on the site where archaeological remains could have survived. Nothing of archaeological significance was noted in the field assessment.

Material Assets

The material assets of the local area comprise other industrial premises, housing some distance away together with public infrastructure including roads, a railway and overhead electric wires. The N11 is dominated by heavy commercial traffic. There are no tourist sites of note in the vicinity of the development.

4. Likely significant environmental effects and measures envisaged to avoid, reduce or remedy them

Climate

No significant adverse impact upon the climate is predicted as a result of the operation of the facility.

Air Quality

No adverse effects on air quality from aerosols or decomposition gases are predicted. Further dust control measures will be put in place at the facility including the construction of a new

building to entirely cover the facility and the installation of a dust suppression spray system. This will further reduce potential dust emissions from the site.

Noise

The proposed expansion of the Recycling Centre is likely to increase the number of waste haulage vehicles and associated noise. Additional noise from daytime traffic will be insignificant in terms of existing heavy industrial traffic on the N11. All on-site operations will be totally enclosed by the new building which will reduce noise emissions. Other mitigation measures will include using modern plant and equipment, maintaining/servicing plant and equipment and switching off or throttling back plant when not in use.

Geology and Soils

The concrete floors and drainage systems in the existing and new buildings and yards at the site will prevent any contaminants from the waste materials migrating into the underlying clay and no impact on soil quality is predicted. This boulder clay provides a very good barrier between the development and the bedrock and no impacts from the development are predicted.

Groundwater

The vulnerability of the bedrock aquifer is moderate. All rainwater falling on the upgraded site will be in the form of clean roof water. Foul water generated within the site from toilets/canteen etc. will be treated on site in a wastewater treatment system and discharged to the percolation area. Any leachate generated within the processing building (from floor wash down or the wheel wash.) will be directed through two 3-chamber oil interceptors to the storage tanks and tankered off site to the Enniscorthy wastewater treatment plant as and when required. The risk of groundwater pollution will be reduced by the proposed development and therefore the net impact of the development is considered to be positive in groundwater terms.

Surface Water

The proposed roofing of the entire site, by the construction of the new building, is considered as a positive impact in terms of surface water quality. All rain falling on the site will run off the roofs to the storm water system and will consist of clean rainfall. No additional mitigation measures are considered necessary.

Flora and Fauna

Pest Control measures are in place on site for the control of vermin. The proposed roofing of the entire site will mitigate for any potential impacts on water quality in the Banoge River and its tributaries. With these mitigation measures in place no negative impact is anticipated on flora or fauna in the vicinity of the development.

Human Beings/Local Population

The proposed expansion is not expected to have a negative impact on the residents living adjacent to the site. The construction of the additional building will have a positive effect on dust, noise and odour control in the surrounding area. The expansion of the facility will lead to an increase in employment locally. With appropriate emissions-related mitigation measures in place no adverse significant impact is anticipated to human beings.

Traffic and Road Network

The proposed increase in traffic associated with the expansion of the SK&S facility will be easily absorbed by the existing capacity of the N11 and the adjacent national network. No adverse impact on the surrounding road network or road users is predicted from the proposed expansion of the SK&S recycling centre.

Landscape

The proposed development is visually in keeping with the surrounding industrial land use. The development has no conflict with the County Wexford Development Plan or the Gorey Local Area Plan. No negative visual or landscape impact is anticipated.

Cultural Heritage

The nature of pre-existing industrial development has rendered the survival of archaeological remains highly unlikely. There is no discernible impact on the archaeological or historical resource and no mitigation measures are recommended.

Material Assets

No negative impact is predicted on the material assets of the Ramstown or Gorey areas.

Interactions

A number of potential impacts resulting from interactions between environmental media were identified. Mitigation measures for these potential impacts are proposed in specific Sections of the EIS (e.g. surface water, air, noise etc.). Impacts from interactions of environmental media at the site are considered low or insignificant.

5. Effects of the Development due to use of Natural Resources

No natural resources, other than groundwater, are used directly to operate the facility. Fossil fuels are used to power vehicles and plant. Electricity is used which is derived from the burning of fossil fuels by the ESB. The overall effect of the development on natural resources is considered insignificant. Since wastes handled by the facility are produced regardless of the development some other similar operation would still be required.

6. Effects due to Emissions

The effects of emissions from the facility are addressed in Section 3 of the EIS. This includes the short, medium and long term effects, and the permanent, temporary, positive and negative effects of any environmental emissions.

7. Forecasting Methods Used to assess any Effects on the Environment

Professional judgement based on site reconnaissance, desk studies and calculations were used to assess effects of the proposed development on the environment.

8. Alternatives

The alternatives available to the operator are addressed in Section 1 of the EIS. These include alternative locations, alternative processes and the do-nothing alternative. In practical terms the expansion of an existing facility is favourable to the installation of a new facility. The location of the existing centre in an industrial estate with good access to the national road network is considered a very favourable location for a waste management centre. SK&S are attempting to improve the recycling infrastructure at the site to maximise the volumes of material recycled and minimise landfilling, as required by National and EU Policy. The do-nothing alternative is considered less favourable than the present situation.

9. Difficulties encountered in compiling specified information

No difficulties were encountered.

ATTACHMENT B
WASTE LICENCE APPLICATION, NON-TECHNICAL SUMMARY

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Waste Licence Application, Non Technical Summary

As required by Article 12 (1) (q) of the Waste Management (Licensing) Regulations, 2000 a non technical summary is provided below which contains information on the matters listed in article 12(1)(e) to (p).

A.1 Nature of the Facility

This section relates to Article 12(1)(e)

Seamus Kelly & Sons (SK&S) operates a waste management centre at Gorey Business Park, Ramstown, Gorey, Co. Wexford. The facility is primarily used as a recycling centre for construction and demolition waste, commercial and industrial waste and household waste.

In response to a marked demand for recycling services in the south-eastern waste management region, the Company intends to expand the existing facility to allow for an increase in the volumes of waste handled and recycled at the facility. A waste licence is required to allow the expansion of the waste management centre and an environmental impact statement (EIS) will accompany SK&S application for the waste licence..

The facility currently handles household, commercial, industrial, and construction and demolition waste as described above. All wastes handled are non-hazardous in nature. Recycling at the facility comprises recovery of paper, wood, cardboard, metal, plastic and construction and demolition materials. There is one picking line for the recovery of construction and demolition waste. This picking line can also be used for the recovery of other waste types. Any non-recyclable waste is bulked up on the premises and transferred to licensed landfill sites in covered trailers. SK&S also provide a service for the collection of dry recyclables from householders and the Company hopes to expand this service in the region.

The existing facility consists of one main building dedicated to waste handling which also houses the office areas, canteen and changing rooms. The site also contains a weighbridge, a weighbridge cabin, toilets, percolation area, vehicle wash bay, recycled materials storage bays and a fuel storage area.

The facility currently handles approximately 16,500 tonnes per annum. The opening hours at the facility are from 8.00a.m. to 5.00 p.m. Monday to Friday and 8.00a.m. to 1:00p.m. on Saturdays. It is proposed to extend the opening hours to 7:30am to 6:30pm Monday to Friday and from 8:00am to 2:00pm on Saturdays. This Waste Licence Application includes a proposal to increase the current licensed tonnage to 30,000 tonnes per annum over five years. The proposed changes to

the facility include a proposal to construct a new building which will cover the entire site ensuring all activities take place indoors and the provision of a wastewater treatment plant.

The site is located in the catchment of the Banogue river and within 1km of the N11 Dublin to Rosslare road. Surrounding activity is primarily industrial, with mixed agriculture and some residential developments.

The facility design, operation and management is fully described at Section 3 of the Main Text of the EIS that accompanies this Waste Licence Application, and on Figures and Drawings that are enclosed.

A.2 Classes of Activity

This section relates to Article 12(1)(f)

In accordance with the Third and Fourth Schedules of the Waste Management Act, 1996 (WMA, 1996) the following classes of activity will be carried out on the site:

Third Schedule-Waste Disposal Activities

11. *Blending or Mixture prior to submission to any activity referred to in this (Third) Schedule.*
12. *Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.*
13. *Storage prior to submission to any activity referred to in this (Third) Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.*

Fourth Schedule-Waste Recovery Activities

2. *Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).*
3. *Recycling or reclamation of metals and metal compounds.*
4. *Recycling or reclamation of other inorganic materials.*

11. *Use of waste obtained from any activity referred to in a preceding paragraph of this Schedule.*
12. *Exchange of waste for submission to any activity referred to in a preceding paragraph of this Schedule.*
13. *Storage of waste intended for submission to any activity referred to in a preceding paragraph of this (Fourth) Schedule, other than temporary storage, pending collection, on the premises where the such waste is produced.*

A.3 Quantity and Nature of the Waste to be Disposed

This section relates to Article 12(1)(g)

The SK&S facility handles commercial, construction and demolition, industrial and household wastes. The Company handles 16,500 tonnes per annum of non-hazardous waste. It is proposed to increase the amount of waste handled to 30,000 t/a. It is expected to recycle approximately 50% of this material.

A.4 Raw and Ancillary Materials, Substances, Preparations used on the Site

This section relates to Article 12(1)(h)

The main raw materials used on site are diesel, potable water and electricity. Minor amounts of engine oil and hydraulic oil are used in the day-to-day operation of the facility. The quantities are provided in Section 3.5.7 of the EIS.

A.5 Plant Operating Procedures

This section relates to Article 12(1)(i)

The facility currently operates from 8:00 am to 5:00 pm Monday to Friday and from 8:00am to 12:30pm on Saturday. The Company employs a total of 35 full time staff. Plant currently used at the facility includes 1 (No.) trommel, 1 (No.) front end loader, 1 (No.) timber shredder, 1 (No.) forklift, 1 (No.) picking station, 1 (No.) shredder, 1 (No.) cardboard baler. It is proposed to purchase 1 (No.) new telehandler with claw and 1 (No.) excavator.

Waste processing operations on site are currently carried out in the existing waste recycling building. Skip waste from commercial premises and construction and demolition sites is segregated on the floor of the processing yard and processed on the picking line. Metal and wood

are extracted for recycling and stored in the recycling bays in the yard area. Cardboard is segregated and baled for transfer to markets. Residual waste is sent to landfill.

The Company will agree all processes and engineering works in advance with the EPA.

The site will be operated and monitored in accordance with conditions issued by the EPA and specified in the Waste Licence. Regular environmental monitoring will be carried out and an annual status report will be prepared and submitted to the EPA.

A.6 Emissions

This section relates to Article 12(1)(k)

The potential emissions from the facility are divided into emissions to air, groundwater, surface water and noise emissions.

Emissions to Air

See Section 3.7.1 of the EIS

Emissions to Groundwater

See Section 3.7.2 of the EIS

Emissions to Surface Water

See Section 3.7.3 of the EIS

Noise Emissions

See Section 3.7.4 of the EIS

A.7 Assessment of the Effects of Emissions on the Environment

This section relates to Article 12(1)(1)

The impacts on groundwater and surface water from effluent discharge and potential air and noise impacts were seen as potential negative effects of the development and mitigation

measures for each of these issues are proposed. It is predicted that there will be no significant adverse effects from the development after mitigation measures are in place.

A.8 Information related to Section 40(4) (a) to (d) of the WMA, 1996

This section relates to Article 12(1)(j)

A.8.1 Compliance with Emissions

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. Dust levels measured at the site were elevated when compared to the EPA recommendation of 350 mg/m²/day. However, dust levels recorded at the western and northwestern boundaries of the site (upwind) were higher than the levels recorded downwind of the site. Dust emissions are not expected to pose a problem at the upgraded facility as the entire site will be roofed-in and a dust suppression spray system installed thereby preventing the escape of any dust.

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. In the event of receiving complaints from neighbouring premises 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 BATNEEC. 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 L_{Aeq} of 55 dB(A) and a nighttime level of 45 dB(A) at sensitive locations. Processing all waste indoors in the proposed new recycling building will reduce noise emissions for the facility.

Water

The risk to the groundwater posed by the activities at the site are 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 or from the wheel wash will be contained within the building, collected and drained through two 3-chamber oil interceptors to the storage tanks in the southwestern corner of the site and tankered off site to the wastewater

treatment plant at Enniscorthy. Foul water from the canteen, toilets and washrooms will be treated in a proposed wastewater treatment plant on site and discharged to groundwater in the percolation area located adjacent to the western boundary wall. The percolation area was designed in accordance with specifications in SR6:1991 published by NSAI. This system will ensure minimal impact on local groundwater from the facility.

A.8.2 Environmental Pollution

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 bunded.
- Only clean roof water will discharge to the surface water drains.
- All waste materials will be handled in a covered building with concrete floors.
- All floors within the building will be concreted.
- All foul water will be contained, collected and treated either on site or at the Enniscorthy wastewater treatment plant.

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 suppression spray system.

Risk to Land, Soil, Plants or Animals is avoided by:

- Risk to land and soil beneath the site is avoided by the same controls that avoid risk to Waters as described above.
- Risk to plants and animals is 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, Odours 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.

These pollution control measures will also have the effect of reducing the nuisance of dust emissions from the site.

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

- Operating the site with adequate environmental controls.

A.8.3 - Best Available Technology not Entailing Excessive Costs (BATNEEC)

With respect to the SK&S facility the principal of employing BATNEEC is being applied in respect to emissions as follows.

SK&S 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 modern management practices include 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 and weighbridge are examples of the best available technology for such facilities.

Specialist consultants have and will also 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 SK&S's annual revenues or short term bank loans.

A.8.4 Fit and Proper Person

As stated in Section L.1, no employee of SK&S has been convicted of an offence under the Waste Management Act 1996.

As outlined in Section L.2, the Managing Director has 20 years experience in the waste business. Financial commitments may be required to cover decommissioning, aftercare management and environmental pollution. The Company's sound financial position and its ability to cover the cost of environmental issues at the site are outlined in Section L.3.

A.9 Monitoring and Sampling Points

This section relates to Article 12(1)(m)

Proposed environmental monitoring is as follows :

Dust	-three times a year (twice in Summer and once in Winter)
Noise	-annually
Surface Water Discharge	-quarterly
Foul Water Discharge (from storage tanks)	-one load in four
Wastewater treatment plant discharge	-quarterly

A.10 Off-site Treatment or Disposal of Wastes

This section relates to Article 12(1)(n)

The destination of wastes currently leaving the facility are outlined in Section 1.7.2 of the EIS. All residual wastes that cannot be recycled are disposed of at licensed landfill sites.

A.11 Emergency Procedures to prevent Unexpected Emissions

This section relates to Article 12(1)(o)

In the event of unexpected contaminated water emissions, the surface water discharge pipes will be cut off with shut-off valves.

Additional measures outlining procedures to be taken in the event of emergencies are outlined in Section 3.10 of the EIS.

A.12 Closure, Restoration and Aftercare of the Site

This section relates to article 12(l)(p)

Operations at the facility are ongoing with an open ended life span and to date a closure plan has not been developed. In the event of the closure of the facility a closure plan will be developed as outlined in Attachment G.1 (and in Section 3.9 of the EIS).

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