This memo has been cleared for 15 Submissions were received on this submission to the board by application. They can be viewed on Dr Tom McLoughlin, Senior Inspector. Signed: <u>Dg/Esby</u> Date: 26/09/2013 eDMS or the Web. Thank you. OFFICE OF CLIMATE, **LICENSING & RESOURCE USE INSPECTOR'S REPORT ON A LICENCE APPLICATION** TO: DIRECTORS Environmental FROM: Patrick Geoghegan Licensing Programme DATE: 26th September 2013 Application for a review of a waste Licence from Greenstar Recycling (Munster) Ltd., Sarsfieldcourt Industrial Estate, RE: Sarsfieldcourt, Glanmire, Co. Cork, Licence Register NO. W0136-03

1 Application Details

Licence application received:	05 July 2010		
EIA Required:	Yes. An EIS was lodged as part of Greenstar's application for Planning Permission to extend the waste acceptance hours; to increase the volume of waste which it can accept and to operate a civic amenity area.		
	This EIS was also submitted as part of the Waste licence application.		
	See Section 9 of this Memo for further details.		
Class(es) of Activity (P = principal activity):	3 rd Schedule: D13; D14; D15		
	4 th Schedule:		
	Principal Activity: R3 - Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological processes).		
	Other Recovery Activities:		
	R4: Recycling or reclamation of metals and metal compounds		
	R5: Recycling or reclamation of other inorganic materials		
	R13: Storage of waste intended for submission to any activity to above, other than temporary storage, pending collection, on		

1

	the premises where such waste is produced.
IPPC Directive class of activity:	None
Category of Activity under First Schedule to the EPA Acts 1992 to 2013	Class 11.4 (b) (ii): Recovery, or a mix of recovery and disposal, of non-hazardous waste with a capacity exceeding 75 tonnes per day involving: Pre-treatment of waste for incineration or co-incineration.
Third party submissions:	Yes, 15 No.
Site Inspection:	12 July 2013

2 Applicant and facility

Applicant:	Greenstar Recycling (Munster) Ltd has operated its waste Materials Recovery and Transfer Facility at Glanmire since 2003 and is seeking a licence review to facilitate expansion of its existing operations (see reasons for licence review below). The licence was first reviewed in 2004 (W0136-02).		
Reason for licence review	 It is not proposed to alter the classes of activity allowed under the existing waste licence. The purpose of the licence review is as follows: To extend the waste acceptance limits from 100,000 tonnes annually to 200,000 tonnes annually and operational hours to allow for 24 hour acceptance and operation; To allow the operation of a Civic Amenity Area (to include the acceptance of up to 10 tonnes of hazardous waste annually from members of the public); To remove the existing licence requirement to achieve a 50% recovery rate; To revise the compliance locations for noise emission limits from the site boundary to the nearest noise sensitive location 		
Type of facility:	The facility currently accepts and processes source separated and mixed non-hazardous solid waste.Waste types predominantly consists of Household, Commercial & Industrial waste with small quantities of Construction & Demolition waste. Day to day operations involve the production of Refused Derived Fuel (EWC Code: 19 12 10) for transfer off-site for incineration or co-incineration, along with disposal of residual		

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	waste to landfill facilities.			
	The facility is also authorised under its existing waste licence to compost biodegradable waste but the compost plant has not been built. Information received in writing from Greenstar on 15/7/2013 confirms that the company no longer intends to develop a composting facility at the licensed site.			
Existing or new development	This is an existing developr commencing in July 2003. Th issued on 26/07/2001.	nent, with waste acceptance he original waste licence was		
Quantity of waste	Current	Proposed		
per annum and proposed:	Mixed Household waste: 44,629 T	Mixed Household waste: 90,000 T		
	Commercial/Industrial waste: 26,065 T	Commercial/Industrial waste: 52,500 T		
	C/D Waste: 4,758 T	C/D Waste: 10,000 T		
	Industrial non hazardous solids: 23,565 T	Industrial non hazardous solids: 47,490 T		
	Household hazardous waste: 0 tonnes	Household hazardous waste: 10.0		
	Total: 99,017 Tonnes	Total: 200,000 Tonnes		
Main classes of waste:	Dry recyclable non-hazardous household, commercial & industrial wastes.			
Waste activities and/or treatment processes:	Processing of all waste occurs in the Materials Recovery Transfer Facility building with separate assigned areas for Dry Waste and Mixed Waste. The building is maintained under negative pressure with automated door openings.			
	The source separated dry recyclables are off-loaded in the Dry Waste area, then moved for baling or compaction before being stored pending removal to off site recycling facilities.			
	The mixed solid waste is off-loaded in the Mixed Waste area followed by mechanical treatment including metal and organic fines extraction; is compacted, baled and wrapped as Refused Derived Fuel (RDF) prior to shipment to Denmark fo incineration. Recovered and residual materials are transferred off-site to licensed outlets. Construction & Demolition waste undergoes segregation Recovered materials are extracted and sent off-site for reuse or recycling. The non-recyclable materials are transferred to a licensed landfill.			

.

Description of site:	The site consists of 1.6 hectares and is located in Sarsfield Industrial Estate, approximately 8km north of Glanmire village. The Industrial Estate is in a rural area where the surrounding land use is primarily agricultural, with some low density
Number of employees at facility:	20 people are currently employed on site.

Facility Process:

Table 1 below provides an outline of the processes at the facility together with key outputs. All pertinent information on emissions is provided in section 5.

Inputs	Process	Outputs	Emissions
Mixed residual municipal,commercial and industrial waste	Mechanical treatment – trommeling, removal of organic fines and recovery of combustible fractions for Solid Recovered Fuel/Refuse Derived Fuel manufacture	Organic fines SRF/RDF	Emissions to air of exhaust air from Materials Recovery and Transfer building – treated through dust and carbon filtration.
C&D waste	Segregation for extraction of recovered materials	Recovered materials and residual for landfill	-
Proposed Hazardous and non-hazardous household waste	Collection at proposed Civic Amenity Area (Bring Bank)	Direct transfer for Reuse/recycling off-site	

Table 1.

3 Operational changes proposed

3.1 Operational hours:

The application seeks approval for 24 hour operations for a 7 day period. While the majority of the wastes will continue to be accepted during normal business hours Monday to Saturday, the applicant claims they may need to accept waste outside of normal business hours, to satisfy customer demands, particularly in relation to collection in urban areas.

The applicant also states that the processing plant and equipment at the facility is currently underused due to the restriction the existing licence places on the operational hours and amount of waste that can be accepted. The design capacity of the plant confirms its suitability for full-time operation as proposed in the licence review application.

Planning permission was granted on 05/01/2011 to allow for an extension of the waste acceptance hours to 24 hour, 7 days per week within a limit of 200,000 tonnes per annum.

Condition 1.6 of the RD allows waste acceptance and operation in line with the facility's planning permission.

3.2 Civic Amenity Area:

The applicant proposes the construction of a small Civic Amenity Area or "Bring Centre" within the site and adjacent to the site's entrance, to accept up to approximately one tonne of waste per day. This facility will benefit the public and will cater for a range of household waste to include dry recyclables, mixed household waste, bulk items, WEEE and small amounts of household hazardous waste.

Planning permission allows the installation of a civic amenity area on-site. The RD requires a proposal as Specific Engineering Works for the construction of the civic amenity area for agreement. Condition 3.10 of the RD also contains conditions to control the operation of the civic facility.

3.3 Waste handled versus waste recovered:

The applicant asks for consideration to be given to the removal of the existing licence requirement to achieve a 50% recovery rate i.e. "*At least 50% of waste handled at the facility per annum shall be recovered either on site or at another authorised facility"*.

In 2006, Greenstar acquired a Dry Recyclable Facility in Glanmire which operates under a Waste Facility Permit. As dry recyclables are diverted to that site and as changes are proposed to waste volumes for processing at the licensed site, together with a significant reduction in C&D waste handled, the condition can not readily be met.

Article 11 of the Waste Directive (2008/98/EC) sets a target date of 2020, for preparing for re-use and the recycling of waste materials such as at least paper, metal, plastic and glass from households, shall be increased to a minimum of 50% by weight.

The facility at Sarsfieldcourt is primarily a recycling/recovery activity and will continue to contribute to the State's overall objective to meet waste recycling/recovery targets. The RD removes the condition as contained in the existing licence.

4 Fit & Proper Person Assessment

The "Fit & Proper Person" assessment requires 3 areas of examination:

(i) Legal Standing:

Greenstar Recycling (Munster) Ltd was prosecuted by the Agency in 2006 under Section 39 of the Waste Mangement Acts 1996-2013 in relation to odour nuisance.

Since then, Greenstar have installed an air abatement system for the Materials Recovery Transfer Building in line with BAT and also have an odour management plan in place. (see Section 5 of this report for further details).

(ii) Technical Ability:

Since 2006, facility personnel with responsibility for the management of the waste activities have completed the FAS waste management training course and the activity has a suitably qualified and experienced facility manager in charge of operations.

(iii) Financial Standing:

Greenstar's waste collection, waste transfer stations and landfill gas utilisation parts of the Greenstar Group continue to operate in receivership. The company Greenstar Recycling (Munster) Ltd still exists and the Agency have received financial provision costings in the event of site closure and for ELRA.

Having regard to the provision of Section 40(8) of the WMActs 1996-2013, the applicant can be deemed a Fit and Proper Person for the purpose of this licence review.

5 Emissions

5.1 Air:

All waste processing occurs in a dedicated Material Recovery Transfer building which incorporates interlocked automated roller doors to contain odours within the building. The building is fitted with an odour control system, which provides negative pressure ventilation to the main building handling the putresible waste (i.e. where odours are generated).

A building integrity test using smoke generation, to assess the containment efficiency of the building fabric and identify any leakage points (fugitive emission), has been carried out. The result was satisfactory.

All odorous air is extracted to the existing carbon filtration system before exhausting to atmosphere. An odour impact assessment of the upgraded carbon filtration system was carried out out in March 2010. Dispersion modelling was also carried out as part of the application. The assessment indicates the predicted ground level concentrations of odour in the vicinity of the facility are in compliance with the odour impact criterion of less than or equal to 3.0 Oue/m³ at the 98th percentile of hourly averages for 5 years of meteorological data.

An updated Odour Management Plan (OMP) to take account of proposed increases in waste tonnages was submitted as part of the application. Condition 2.2.3 of the RD requires its regular review as part of the facility's Environmental Management System (EMS).

Daily systems checks on the odour abatement system form part of the facility's EMS. Quarterly systems checks with odour threshold concentration determination is carried out independently on a quarterly basis.

The proposed increase in waste inputs do not require increases to the volume or area of the building where waste is processed. The overall ventilation rate and negative pressure applied will therefore remain unchanged.

Schedule C of the RD requires daily checks on the carbon filtration abatement system together with quarterly odour monitoring.

Condition 6.1 of the RD requires an annual audit on the air abatement system, to examine the suitability and adequacy of the system and its associate maintainence programmes to deal with emissions.

The RD retains the standard condition requiring the activity to ensure that emissions do not result in significant impairment of, or significant interference with the environment beyond the site boundary.

5.2 Dust:

Dust deposition levels have been routinely monitored as part of the existing licence, at 4 locations at the site boundary. The monitoring results in the AER indicate broad compliance with the licence. The entire site is paved and contains a wheel wash facility.

The RD stipulates BAT level of 350mg/m²/day and requires quarterly dust monitoring.

5.3 Emissions to Sewer

As there is no sewer connection from this facility, all process and non-process effluent is directed to underground storage/holding tanks. The only sources of process wastewater are the on-site wheel-wash facility and wastewater from the floor of the process building and both of these sources are directed to an underground storage tank.

Non process (sanitary) effluent is discharged to a separate underground storage tank. Both process wastewater and sanitary effluent are collected and disposed of at either Tralee or Leixlip WWTP.

Condition 6.10 of the RD requires the integrity testing of all underground storage tanks.

Condition 11.11 of the RD requires a full record of all process wastewater sent offsite for recovery or disposal.

Condition 3.17 of the RD requires sumps, storage tanks to be fitted with liquid level alarms.

5.4 Storm Water Runoff

A site drainage map was submitted together with drainage survey. The sources of stormwater consists of yard areas, building roof areas and carpark/hard standing areas. There is a single discharge point (SW3) from the facility, via silt traps and a class I interceptor, to a common surface water drainage system serving the entire

industrial estate. Other premises in the industrial estate are reported to input to this drainage system.

The application also contains results of routine monitoring conducted as part of their existing licence at the licensed discharge point (SW3) where the storm run-off exits the Greenstar site and joins the Estate's surface water sewer, out of which two outfalls exists.

These two outfalls from the Estate's drainage system discharge to a stream locally known as "Sarsfieldcourt stream". The outfalls are appromimately 300m apart.

The licence application contains a Biological Assessment of the Sarsfieldcourt stream. The assessment applied Q ratings and Small Stream Risk Scores (SSRS), as devised by the EPA, as a biological monitoring tool for 1st and 2nd order streams as part of the water framework directive monitoring programme. The assessment indicates a decline in water quality downstream of both outfalls. The worst location is considered slightly polluted (3-4), equivalent to WFD Moderate Status with a risk score of 5.6 (at risk). Q values at upstream locations are 4-5 and a corresponding SSR Score of 8 (probably at risk). Regarding attributing the observed decline in water quality to the Greenstar facility, the biological assessment is inconclusive.

The Biological Quality Rating (BQR) of the Glashaboy River, into which the "Sarsfieldcourt stream" flows, is recorded by EPA as 4 with assessment: "Satisfactory, with good ecological quality at all locations".

The quarterly monitoring results for the licensed monitoring point (SW3), contained in the AER's for 2012, 2011 and 2010 are compliant with ELV's for Mineral oils as well as with trigger levels for BOD and Suspended Solids, set in the existing licence. However other parameters such as ammonia, nitrate and both total and faecal coliforms were high on several occasions in the period 2010 to 2012. (maximum 1.88mg/l, 25.6mg/l and 460,000cfu/100mls for ammonia, nitrates and total coliforms, respectively).

The sources of these pollutants in the discharge SW3 is likely to be run-off from yard areas.

The range for the above parameters, obtained from 2010-2012 AER's are outlined in Table 2 below:

Parameter	Current trigger level (licence)	Range 2000-2012 (AER data)	EQS
Ammonia	-	0.05 - 1.88mg/l	0.14
Nitrates	-	3.7 – 25.6mg/l	-
Total Coliforms	-	4,66 – 460,000 cfu/100mls	-
BOD	25 mg/l	1 – 7mg/l	-
Suspended Solids	35 mg/l	<10 – 27mg/l	-

Table 2.

It is appropriate that the licensee considers trigger and action levels for additional parameters in the context of applicable environmental quality standards in the EC Environmental Ojectives (Surface Waters) Regulations 2009. Condition 5.4 of the RD requires the tightening of existing trigger levels and the setting of a trigger level for total ammonia for the storm water discharge. Condition 6.11.2 of the RD also requires the investigation of high coliform levels in the discharge. The condition also requires a response programme to address exceedance of trigger level values so as to ensure that the storm water discharge will not cause environmental pollution.

The RD sets out the following specific requirements:

- Retention but tightening of the setting of trigger levels for BOD and Suspended Solids from the existing licence and extension of parameters to include Total Ammonia;
- An investigation into high coliforms levels in the storm water discharge;
- retention of an Emission Limit Value for mineral oils;
- a response programme to address exceedance of trigger level values in order to ensure there will be no emissions to surface water of environmental significance.

Storage/Bunding:

All diesel fuel, hydraulic and lubricating oils, detegents and disinfectants are stored in a dedicated covered bunded oil storage area. The application contains a report on inspection and integrity testing of all bunded areas on-site. All bunded structures meet the requirements of the existing licence.

Firewater Retention:

Firewater generated within the site will be contained within the Material Recovery and Transfer Facility building and the open paved areas. A shut off valve is provided on the storm water sewer upstream of the interceptors. Site Operational Procedures address the manual control of this valve, in the event of fire, to contain all fire/storm water on-site. The activity has an emergency response procedure in place under ISO 14001.

5.5 Emissions to Ground/Groundwater:

There are no existing or proposed emissions to ground or groundwater from this facility and the RD prohibits any such discharges. The facility is paved with runoff directed to a surface water drainage system. All waste processing occurs internally in the Material Recovery Transfer building.

There are two wells on-site. Groundwater monitoring is required bi-annually under the existing licence for Boreholes W-1 and W-2. Monitoring records indicate satisfactory groundwater quality. The wells are the source of water supply for sanitary and wash down purposes on-site.

All fuel storage areas on-site are bunded and have been integrity tested as part of the existing licence.

Schedule C of the RD retains biannual monitoring of both groundwater boreholes.

5.6 Noise:

The facility is located in an industrial estate along with a mixture of industrial/commercial properties, approximately 8 KM from Glanmire village. The predominant landuse in the vicinity of the estate is agriculture pastureland. The nearest domestic residence is approximately 250metres to the north of the facility's boundary.

Noise surveys have been carried out as part of the licence application, the first survey during day-time hours when fully operational and the second during the period 18:40 - 20:00 hours. The objective of this second survey was to replicate the more likely noise impacts during night-time operations. The activities carried out were the same as the proposed night-time operations.

Measurement locations included 5 boundary locations and a noise sensitive location. It is reported that throughout the survey, noise emissions arose from vehicle movements throughout the industrial estate including the Greenstar site.

Results indicate that the Leq 30min level recorded was 67dB at one location just inside the boundary wall of the site, and 66dB at a second location inside the boundary wall, with both measurements impacted by truck movements and the operation of a generator. The L Aeq 30min measured at the nearest noise sensitive location was receorded at 66 dB during day-time hours. The survey was limited in nature in that it did not include an appropriate night-time survey.

The waste recovery operation itself takes place in the enclosed Material Recovery & Transfer Building. No audible tonal or impulsive components in the noise emissions from the facility were found at the noise sensitive location during the survey.

Overall, off-site noise sources, chiefly vehicle movements throughout the entire industrial estate is likely to exceed 55dB during day time hours.

The EPA's Noise Guidance Note (NG4) allows noise limits to be set at noise sensitive locations.

There are no recorded noise complaints in relation to this facility.

Condition 6.12.1 of the RD requires an annual noise monitoring survey. Condition 6.12.2 of the RD requires noise attenuation measures, if required, having regard to the principles of BAT to ensure compliance with specified noise limits.

5.7 Nuisance:

The mixed household and C&I waste contains foodstuff and other putrescible materials and have the potential to give rise to nuisance.

The application states that all waste road transport vehicles are either fully enclosed or that operational procedures require the covering of open vehicles.

All bulk waste handling operations including waste off-loading and processing is carried out inside the Materials Recovery Transfer Building. This building provides negative pressure ventilation.

Large quantities of baled RDF/SRF are stored outside, for transfer off-site and have potential for minor nuisance issues resulting from damaged wrapping.

As greater quantities of waste for processing will increase the amount of RDF/SRF generated on-site, Condition 8.10 of the RD requires a proposal to be submitted as part of the AER, on proposals for the optimal storage arrangements for this material.

6 Use of Resources

The resources consumed at the facility, obtained from the AER are reported in Table 3 below:

Resource	Quantity 2012	Quantity 2011
Electricity	196,000 units	185,000 units
Road Diesel	789,360 litres	707,000 litres
Gas Oil	201,500 litres	147,157 litres
Carbon (air abatement system)	27,000kg	27,000kg

Table 3.

7 Waste Management, Air Quality and Water Quality Management Plans

The Waste Management Plan for County Cork (2004) makes reference to the provision of a network of solid waste transfer stations in Co. Cork which will allow for the efficient and economic transport of waste as well as supporting the collection of hazardous household waste. The recovery facility and proposed changes are in line with such provision.

A review of the 2004 Plan was conducted in August 2008, in accordance with Section 22(2) of the Waste Management Acts, 1996-2013. The review concluded that the existing plan did not require any variation or replacement.

There is no relevant Water Quality Management Plan and no air relevant air quality plan for the immediate environs of the facility.

8 Environmental Impact Assessment Directive(85/337/EEC)

An Environmental Impact Statement (EIS) was prepared in support of planning application Ref. 215F for the proposed changes to the licensed activity, and has been submitted with the Waste licence application. Planning permission was granted for the changes by Cork County Council on 03/01/2012.

I have examined the EIS and having regard to the statutory responsibilities of the EPA, I am satisfied that it complies with the Waste Management (Licensing) Regulations (S.I. No. 394 of 2004, as amended).

I have considered the EIS, planning permission, the planning inspectors report and I have examined the information submitted in the licence application, the EIS,

planning permission, the planning inspector's report and any correspondence between the planning authority and the Agency. I consider that having examined the relevant documents and with the addition of this Inspector's Report that the likely significant direct and indirect effects of the activity have been identified, described and assessed in an appropriate manner as required in Article 3 and in accordance with Articles 4 to 11 of the EIA Directive as respects the matters that come within the functions of the Agency.

Environmental Impact Assessment (EIA)

An EIA, as respects the matters that come within the functions of the Agency, has been carried out as detailed below.

Consultation was carried out between the Agency and Cork County Council, but no observations on the EIS were provided.

The submitted EIS and the assessment as described in this Inspector's Report address the likely significant direct and indirect effects arising from the activity, as respects the matters that come within the functions of the Agency.

Likely significant effects

The following section identifies, describes and assesses the main likely significant direct and indirect effects of the proposed activity on the environment, as respects the matters that come within the functions of the Agency, for each of the following factors: human beings, flora, fauna, soil, water, air, climate, the landscape, material assets and cultural heritage. The main mitigation measures proposed to address the range of predicted significant impacts arising from the activity have also been outlined.

Likely significant effect	Description or effect	Mitigation measures proposed by applicant in EIS or waste licence application and/or as outlined in this report
Traffic	Traffic, risks and associated emissions	Planning permission places restrictions on the routes to be used by heavy vehicles serving the site.

1. Human Beings

Human Beings Contd.

Likely significant effect	Description or effect	Mitigation measures proposed by applicant in EIS or waste licence application and/or as outlined in this report
Reduction in air Quality	Emissions of odours and particulates to air.	Odour dispersion modelling shows no predicted impact.
	Fugitive odour emissions.	For process emissions: All waste processing carried

		 out in dedicated enclosed building, maintained under negative air pressure with ventilated gases subject to treatment. Daily checks and quarterly monitoring on air abatement system. Emission limit values for particulates Odour Management Plan
Noise	Disamenity from noise nuisance	Noise limit values. All waste processing handled indoors.
Economic activity	Employment generation	Expansion of employment at the facility
Fire risk and emergency response	Risks to people and risk of emissions from fire and emergency	Accident prevention policy and emergency response procedures in place.
Civic amenity area	Outlet for householders	Facility will provide local people with an additional amenity.

2. Flora & Fauna

Impact of emissions (storm water) on aquatic habitat (Sarsfieldcourt stream)	Reduction quality	in	water	Emission limits and trigger levels for contaminants in storm water discharged from site.
---	----------------------	----	-------	--

3. Soils

i

Likely significant effect	Description or effect	Mitigation measures proposed by applicant in EIS or waste licence application and/or as outlined in this report
Contamination due to spills/leaks	Discharge of contaminated run-off or fire water to soil.	Bunded hazardous liquid storage. Accident prevention policy and emergency response in place.

4. Water

Reduction in surface water quality	Emission to "Sarsfield court stream", tributary of the Glashaboy river of	Emission limits and trigger levels for contaminants in storm water as discharged from the site.
--	--	---

	potentially contaminated storm water.	
Abstraction of groundwater	Reduction in water resource	Limited quantity abstracted. Process is essentially a dry process.
Contamination of groundwater	Groundwater resource	Paved area throughout the site. Bunding of hazardous materials. No direct discharges to groundwater.

5. Air

Reduction in air quality	Emissions of odours and particulates to air.	Odour dispersion modelling shows no predicted impact.
	Fugitive odour emissions.	 For process emissions: All waste processing carried out in dedicated enclosed building, maintained under negative air pressure with ventilated gases subject to treatment. Daily checks and quarterly monitoring on air abatement system. Emission limit values for particulates Odour Management Plan.

6. Climate

Likely significant effect	Description or effect	Mitigation measures proposed by applicant in EIS or waste licence application and/or as outlined in this report
No significant effects		

7. Landscape, Material Assets & Cultural Heritage

Assessment of parts 1 to 7 (significant likely effects) and the interaction of effects and factors.

An EIA as regards the functions of the planning authorities was carried out by the planning authority (Cork County Council) when granting planning permission for the development (Planning File Ref. 215F). Cork County Council did not provide any additional observations to the Agency.

The detailed assessment set out in the remainder of the Inspector's Report fully considers the range of likely significant effects of the activity on human beings, flora, fauna, soil, water, air, climate, landscape, material assets and cultural heritage, as respects the matters that come within the functions of the Agency, as identified in parts 1-7 above, with due regard given to the mitigation measures proposed to be applied.

The potential for significant interactions is considered in section 18 of the EIS. I have considered the interaction between the factors referred to in parts 1-7 above and the interaction of the likely effects identified (as well as cumulative impacts with other developments in the vicinity of the activity). The development being proposed mainly relate to operational changes within existing buildings and in this context the EIS states that "the location, design and proposed method of operation have taken all impacts into account" and that "proven effective control measures are used to ensure that the facility has and will have a minimum environmental impact".

I am satisfied that the proposed mitigation measures are adequate. I do not consider that the interactions identified are likely to cause or exacerbate any potentially significant environmental effects of the activity.

Overall Conclusion on Environmental Impact Assessment

All matters to do with emissions to the environment from the activity proposed (existing activity and proposed expanded operations), the licence application documentation and EIS have been considered and assessed by the Agency.

I consider that having examined the relevant documents and with the addition of this Inspector's Report that the likely significant direct and indirect effects of the activity have been identified, described and assessed in an appropriate manner as required in Article 3 and in accordance with Articles 4 to 11 of the EIA Directive, as respects the matters that come within the functions of the Agency.

It is considered that the mitigation measures as proposed and the licence conditions included in the RD will adequately control any likely significant environmental effects from the activity.

9 Cultural Heritage, Habitats & Protected Species

There are two Natura 2000 sites within 15km of the facility. Cork Harbour SPA, is within 6km and the Great Island Channel SAC is within 10km.

A screening for Appropriate Assessment was undertaken to assess, in view of best scientific knowledge and the conservation objectives of the site, if the activity, individually or in combination with other plans or projects are likely to have a significant effect on the European Sites.

The screening assessment undertaken demonstrates that the activity is not lkely to have significant effects, in terms of maintaining favorable conservation status of the qualifying interests, on the European Sites having regard to their conservation objectives. The only emission from the facility with potential to impact on the Natura 2000 sites in Cork Harbour, is surface water run-off, which discharges to the Glashaboy river via the Sarsfieldcourt stream. The proposed changes to the facility's operational times will not result in adverse alteration to either the volume or quality of the surface water run-off from the facility.

In accordance with the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011), pursuant to Article 6(3) of the Habitats Directive, the activity will not adversely affect the integrity, in terms of maintaining favourable conservation status of the qualifying interests of the European Sites, having regard to its conservation objectives.

10 Cross Office Liaison and compliance record

I have had discussions with the OEE Inspector Joe Hunter in June and August 2013 regarding compliance with the existing licence and enquired into any enforcement issues that OEE may have with respect to this site.

The outcome of the discussions was that the site has a good compliance history and that the issues with odour nuisance in the past have been resolved. The only issues commented on were (1) in relation to the storage of large amounts of baled RDF/SRF outdoors awaiting TFS shipment in relation to minor litter and odour nuisance from damaged bales; and (2) presence of high levels of coliforms in the discharged storm water.

Both of these issues have been addressed in the RD under Schedule E and Conditions 6.11.2 respectively.

11 Best Available Techniques (BAT)

I have examined and assessed the application documentation and I am satisfied that the site, technologies and techniques specified in the application and as confirmed, modified or specified in the attached Recommended Decision comply with the requirements and principles of BAT. I consider the technologies and techniques as described in the application, in this report, and in the RD, to be the most effective in achieving a high general level of protection of the environment having regard - as may be relevant - to the way the facility is located, designed, built, managed, maintained, operated and decommissioned.

12 Proposed Decision

I am satisfied that the conditions set out in the RD will adequately address all emissions from the facility and will ensure that the carrying on of the activities in accordance with the conditions will not cause environmental pollution.

13 Submissions

There were 15 submissions made in relation to this application.

There are a number of common themes in relation all of these submissions. These will be considered as follows.

(i) Traffic

Concern is expressed regarding the narrow local roads and the absence of footpaths in the area; the ability of the roads to cope with increased truck movements to and from the facility as a result of increased waste acceptance and operations generally and the danger this poses to other road users and pedestrians.

Comment:- The planning permission granted for the facility places restrictions on the routes to be used by heavy vehicles serving the site.

(ii) Air Quality and odours:

Residents refer to on-going foul odour emissions and dust from the facility, their history of prosecution with regard to odours and increased "fumes" from heavy goods vehicles serving the facility.

Comment:- The issue of air emissions and odour and dust emissions is addressed in section 5.1 and section 10 of this report.

(iii) Water Quality:

Concern that Greenstar's increased use of groundwater for operations will impact negatively on the supply to other wells in the area serving the community, also leakage or spillages from the facility to ground/surface water as well as spillages from vehicles serving the site.

Additionally, concern is expressed on the risk to the Glashaboy river from drainage from the existing and proposed activities on-site.

Comment: The facility operates essentially as a dry process with water being supplied by a well on-site mainly for sanitary purposes for personnel, but includes washwater for the process. Condition 7.3 of the RD proposes that opportunities for rainwater harvesting be identified. The RD requires loading and unloading of materials to be carried out in designated areas protected against spillage and leachate. The RD also requires the maintenance of a supply of containment booms, to contain any spillage that might occur.

In terms of the risk to the Glashaboy river, this is addressed in section 5.4 of this report.

(iv)Litter

Security of cargo from HGV traffic and increased litter resulting from deliveries to/from the facility.

Comment: The RD requires all HGV's serving the facility to be enclosed or suitably covered.

(v)Devaluation of property

The negative impact that the development has on domestic property values in the area.

Comment: There is no evidence presented to suggest that the development will impact adversely on local property prices.

(vi) Noise

Unsatisfactory noise survey report submitted to EPA and potential for increased noise levels, during full time operations and associated traffic movements, at noise sensitive locations.

Comment: The RD requires a noise monitoring report with the surveyprogramme tol be undertaken in accordance with the Agency's Guidance Note for Noise (NG4). The RD allows for the implementation of any attenuation required on foot of that report. See Section 5.6 of this report for more detail.

(vii) Financial standing and compliance record:

Greenstar's financial standing and assurance regarding their ability to guarantee to implement safe maintenance practices, together with their compliance record with the existing waste licence.

Comment: Costings for financial provision (FP) for this facility have submitted to the Agency. Compliance record is addressed in section 10 of this report.

(viii) Hazardous waste acceptance and operation/policing of the proposed Civic Amenity Area and increased vermin/birds/odours

Comment: The RD places conditions on the operation of the civic amenity (waste) facility.

(IX) objection to 50% recycling rate removal from existing waste licence

Comments:- This is addressed in section 3.3 of this report.

(X) Safety Plan

Safety precautions taken to prevent a major catastrophy occurring.

Comment:- The RD requires a documented Accident Prevention Procedure together with an Emergency Response procedure to be in place. The RD also requires the immediate reporting to the EPA and investigation of all incidents on-site.

(XI) Storage of waste:

Concern there is potential for storage of waste outside of the Material Recovery & Transfer Building.

Comment:- The RD requires all waste processing to be carried out within the Material Recovery & Transfer Building with a requirement to maintain negative pressure at all times in this building. The RD also requires a proposal for the optimal storage of generated RDF/SRF on-site with a minimum requirement for covering of this area.

(XII) Justification for expansion is flawed:

Concern that there is no market requirement for expanded capacity to 200,000 tonnes per year and waste licence review application is being sought to increase market share.

Comment:- The facility has been granted planning permission for increased operations. The existing plant equipment is capable of processing up to 200,000 of waste per year, generating RDF/SRF for domestic or export markets. RDF/SRF is used to generate an alternative energy source to fossil fuels. The national strategy on waste management set out in "A Resource Opportunity" (July 2012) has a clear focus on resource efficiency and the virtual elimination of landfilling of municipal waste. The RD requires a suite of controls to ensure there are no adverse environmental impacts from the facility.

14 Charges

The annual charge for 2013 as set out by OEE is \in 13,920. The charge is retained in the RD as it is not anticipated that there will be significant additional enforcement resulting from the RD.

15 Recommendation

In preparing this report and the Recommended Determination I have consulted with Agency technical and sectoral advisors, Brian Meaney, Jim Moriarty, Joseph Hunter.

I have considered all the documentation submitted in relation to this application and recommend that the Agency grant a licence subject to the conditions set out in the attached RD and for the reasons as drafted.

Signed

Patrick Geoghegan

Procedural Note

In the event that no objections are received to the Proposed Decision on the application, a licence will be granted in accordance with Section 43(1) of the Waste Management Acts 1996-2013.