

**For the Attention of**  
Waste Licensing (Applications) Unit  
c/o Mr. Michael Owens  
Environmental Protection Agency  
PO Box 3000  
Johnstown Castle Estate  
Co. Wexford

Our Ref.: RG0203/WLA-REIS  
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Date: 29<sup>th</sup> May 2013

Dear EPA,

**Re.: Rehab Glassco Ltd. Waste Licence Application W0279-01  
Remedial Environmental Impact Statement (March 2013)**

Patel Tonra Ltd., Environmental Solutions, is acting on behalf of our client, Rehab Glassco Ltd. A Waste Licence Application (Ref. W0279-01) was lodged with the Agency in July 2011, on behalf of Rehab Glassco Ltd., for its glass recycling facility at an existing waste management facility at Unit 4, Osberstown Industrial Park, Caragh Road, Naas, Co. Kildare.

An application for Substitute Consent, accompanied by a Remedial Environmental Impact Statement (REIS), was submitted to An Bord Pleanála for the Rehab Glassco facility in March 2013 (An Bord Pleanála case reference: PL09.SU0015). The application was for the purpose of regularising the existing glass recycling facility and ancillary activities at Unit 4, Osberstown Industrial Park, Caragh Road, Naas, Co. Kildare. Details relating to the requirement for a REIS are contained in Section 1.3 of the REIS.

We enclose 2 No. print copies and 16 No. CD-ROM copies of the REIS.

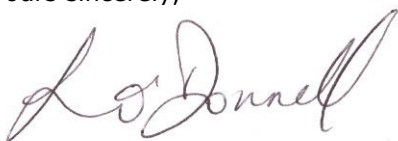
A comparison study for the purposes of outlining any changes to the original Waste Licence Application (WLA) (July 2011) resulting from the REIS (March 2013) has been completed and the following is noted:

- The WLA Application (July 2011) was comprised of five parts: (1) Application Form, (2) Attachments, (3) Photographs, (4) Appendices and (5) Drawings. Tables 1 to 5, attached, outline any amendments to each of the five parts of the WLA as a result of the REIS.
- 'Section H.1: Waste Types and Quantities' of the WLA application form has been superseded by 'Section H.1: Waste Types and Quantities\_ Revised May 2013'; revised version attached.
- The Non-technical Summary included as WLA Attachment A has been superseded by 'Attachment A: Non-technical Summary\_ Revised May 2013'; revised version attached.

Please accept this letter as a declaration that the content of the electronic files on the accompanying CD-ROMs is a true copy of the original.

If you have any further queries in relation to this matter please do not hesitate to contact me.

Yours sincerely,



Louise O'Donnell  
Director, Patel Tonra Ltd.

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### Note:

**REIS** = Remedial Environmental Impact Statement (Patel Tonra Ltd., March 2013)

**Waste Licence Application** = Waste Licence Application (Patel Tonra Ltd., July 2011)

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**Table 1: Amendments arising from the REIS - Waste Licence Application, TAB 1: APPLICATION FORM**

<b>WLA, TAB 1: APPLICATION FORM</b>	<b>Summary of changes resulting from REIS (March 2013)</b>	<b>REIS Section</b>
<b>Checklist</b>		
Article 12(1) to 12(5)(b)	No change	-
Article 13	REIS required. Copies enclosed, as per EPA requirements.	-
<b>Section A: Non-Technical Summary</b>		
See Attachment A.	See Attachment A (Table 2).	-
<b>Section B: General</b>		
B.1 Applicant Details	No change	-
B.2 Location of Activity	No change	-
B.3 Planning Authority	An Bord Pleanála is the Planning Authority. An application for Substitute Consent (ref. PL09.SU0015) is currently being assessed.	1.3
	An updated planning history is provided in the REIS.	1.5
B.4 Sanitary Authority	No change	-
B.5 Other Authorities	No change	-
B.6 Notices and Advertisements	No change	-
B.7 Type of Waste Activity - Table B.7.2	The maximum annual tonnage is 97,000 tpa.	2.3.8
B.8 Seveso II Directive	No change	-
<b>Section C: Management of the Facility</b>		
See Attachment C.	See Attachment C (Table 2).	-
<b>Section D: Infrastructure and Operation</b>		
See Attachment D.	See Attachment D (Table 2).	-
<b>Section E: Emissions</b>		
See Attachment E.	See Attachment E (Table 2).	-
<b>Section F: Control and Monitoring</b>		
See Attachment F.	See Attachment F (Table 2).	-
<b>Section G: Resources Use and Energy Efficiency</b>		
See Attachment G.	See Attachment G (Table 2).	-
<b>Section H: Material Handling</b>		
H.1 Waste types and quantities	Revised H.1 attached.	2.3.8
H.2 to H.4	See Attachment H (Table 2).	-
<b>Section I: Existing Environment and Impact of Facility</b>		
See Attachment I.	See Attachment I (Table 2).	-

**Table 1: Amendments arising from the REIS - Waste Licence Application, TAB 1: APPLICATION FORM**

<b>WLA, TAB 1: APPLICATION FORM</b>	<b>Summary of changes resulting from REIS (March 2013)</b>	<b>REIS Section</b>
<b>Section J: Accident Prevention and Emergency Response</b>		
See Attachment J.	See Attachment J (Table 2).	-
<b>Section K: Remediation, Decommissioning, Restoration And Aftercare</b>		
See Attachment K.	See Attachment K (Table 2).	-
<b>Section L: Statutory Requirements</b>		
See Attachment L.	See Attachment L (Table 2).	-
<b>Section M: Declaration</b>		
Declaration	No change	-
<b>Annex 1: Standard Forms</b>		
Tables E.1	No change	-
Tables E.2	No change	-
Tables E.3	No change	-
Tables E.4	No change	-
Tables E.5	Additional noise monitoring conducted for purposes of REIS.	6.3
Tables F.1-Ff	No change	-
Table G.1	No change	-
Table H.4(i)	No change	-
Table H.4(ii)	Approx. 8,083 tonnes/month of glass/cans	-
Table I.2(i)-I.4(i)	No change	-
Table I.6(i)	Additional noise monitoring conducted for purposes of REIS.	6.3

**Table 2: Amendments arising from the REIS - Waste Licence Application, TAB 2: ATTACHMENTS**

<b>WLA, TAB 2: ATTACHMENTS</b>	<b>Summary of changes resulting from REIS (March 2013)</b>	<b>REIS Section</b>
<b>Attachment A: Non-technical summary</b>		
A. Non-technical summary (NTS)	Revised NTS attached	-
<b>Attachment B: General</b>		
B.0 Background and Context	No change	-
B.1 Applicant Details	No change	-
B.2 Location of Activity	No change	-
B.3 Planning Authority	An Bord Pleanála is the Planning Authority.	1.3
	An updated planning history is provided in the REIS.	1.5
B.4 Sanitary Authority	No change	-
B.5 Other Authorities	No change	-
B.6 Notices and Advertisements	No change	-
B.7 Type of Waste Activity	No change	-
B.8 Seveso II Directive	No change	-
<b>Attachment C: Management of the Facility</b>		
C.1 Technical Competence and Site Mgt.	No change	-
C.2 Environmental Management System	No change	-
C.3 Hours of Operation	Revised hours of waste acceptance and operation are outlined in REIS.	2.3.5
C.4 Conditioning Plan	No change	-
<b>Attachment D: Infrastructure and Operation</b>		
D.1 Infrastructure	Additional boundary treatment which includes tree planting and a noise barrier have been completed as remedial measures.	2.4.37
	A gas storage tank has been installed on site.	2.4.35
	Fuel storage areas – the location of fuel storage tanks has been adjusted.	2.4.33

**Table 2: Amendments arising from the REIS - Waste Licence Application, TAB 2: ATTACHMENTS**

<b>WLA, TAB 2: ATTACHMENTS</b>	<b>Summary of changes resulting from REIS (March 2013)</b>	<b>REIS Section</b>
D.2 Facility Operation	Pelletising of glass fines (pilot process), a complementary glass recovery process within the Drying Plant building, is an additional unit operation.	2.3.19
<b>Attachment E: Emissions</b>		
E.1 Emissions to Atmosphere	No change	-
E.2 Emissions to Surface Waters	No change	-
E.3 Emissions to Sewer	No change	-
E.4 Emissions to Groundwater	No change	-
E.5 Noise Emissions	See Attachment I.6.	-
E.6 Environmental Nuisances	Bird control: remedial and ongoing mitigation measures outlined in REIS.	13.2.4
	Dust control: remedial and mitigation measures for dust outlined in REIS.	5.6 and 5.8
	Litter control: remedial and ongoing mitigation measures outlined in REIS.	13.2.1
<b>Attachment F: Control and Monitoring</b>		
F.1 Treatment, Abatement and Control System	Dust Suppression: remedial and mitigation measures for dust outlined in REIS.	5.6 and 5.8
F.2 Air Monitoring and Sampling Points	Air: air emissions monitoring completed – see Attachment I.1. No change to proposed air monitoring location.	-
	Dust: no change	-
F.3 Surface Water Monitoring and Sampling Points	No change	-
F.4 Sewer Monitoring and Sampling Points	No change	-
F.5 Groundwater Monitoring and sampling Points	No change	-
F.6 Noise Monitoring and Sampling Points	No change	-
F.7 Metrological Data Monitoring and Sampling	No change	-

**Table 2: Amendments arising from the REIS - Waste Licence Application, TAB 2: ATTACHMENTS**

<b>WLA, TAB 2: ATTACHMENTS</b>	<b>Summary of changes resulting from REIS (March 2013)</b>	<b>REIS Section</b>
<b>Attachment G: Resources Use and Energy Efficiency</b>		
G.1 Raw material and Product	Gas: A gas storage tank has been installed on site and is used as a fuel source for the Drying Plant operation.	2.4.35
	Fuel storage areas: the location of fuel storage tanks has been adjusted.	2.4.33
	The (pilot) pelletising process within the Drying Plant building uses small volumes of water and sodium silicate as a binding agent (no resulting water output).	2.3.19
	Dust suppression: remedial and mitigation measures for dust outlined in REIS.	5.6 and 5.8
G.2 Energy Efficiency	No change	-
<b>Attachment H: Material Handling</b>		
H.1 Material Types and Quantities – Existing and Proposed	Waste quantities updated in REIS. The application tonnage for the purposes of the REIS and the WLA is 97,000 tpa.	2.3.8
H.2 Waste Acceptance Procedures	No change	-
H.3 Waste Handling	The rotating drying unit [in the Drying Plant] operates at approximately 200-250°C.	2.3.19
	Pelletising of glass fines (pilot process), a complementary glass recovery process within the Drying Plant building, is an additional unit operation.	2.3.19
H.4 Waste Arisings	No change	-
H.5 Re-use and Recycling	No change	-
<b>Attachment I: Existing Environment and Impact of Facility</b>		
I.1 Assessment of Atmospheric Emissions	Additional information/monitoring data available for the purpose of the REIS; remedial/mitigation measures outlined.	Chapter 5

**Table 2: Amendments arising from the REIS - Waste Licence Application, TAB 2: ATTACHMENTS**

<b>WLA, TAB 2: ATTACHMENTS</b>	<b>Summary of changes resulting from REIS (March 2013)</b>	<b>REIS Section</b>
I.2 Assessment of Impacts of Surface water Discharges on Receiving Waters	Additional information/monitoring data available for the purpose of the REIS; remedial/mitigation measures outlined.	Chapter 10
I.3 Assessment of Impact on receiving Sewer	No change	-
I.4 Assessment of Impact to Groundwater and soils	Additional information available for the purpose of the REIS; mitigation measures outlined.	Chapter 9
I.5 Ground and/or Groundwater Contamination	Additional information available for the purpose of the REIS; mitigation measures outlined.	Chapter 9
I.6 Noise Impact	Additional information/monitoring data available for the purpose of the REIS; remedial/mitigation measures outlined.	Chapter 6
I.7 Assessment of Ecological Impacts and Mitigation Measures	Additional information available for the purpose of the REIS; mitigation measures outlined.	Chapter 8
<b>Attachment J: Accident Prevention and Emergency Response</b>		
J: Accident Prevention and Emergency Response	No change	-
<b>Attachment K: Remediation, Decommissioning, Restoration And Aftercare</b>		
K: Remediation, Decommissioning, Restoration And Aftercare	No change	-
<b>Attachment L: Statutory Requirements</b>		
L.1: Statutory Requirements	Remedial/mitigation measures outlined in REIS to be implemented in full (and subject to Substitute Consent planning application).	Chapter 14
L.2: Fit and Proper Person	No change	-
L.3: Application of the Waste Hierarchy	No change	-
L.4: Self-sufficiency and Proximity	No change	-



**Table 3: Amendments arising from the REIS - Waste Licence Application, TAB 3: PHOTOGRAPHS**

<b>WLA, TAB 3: PHOTOGRAPHS</b>	<b>Summary of changes resulting from REIS (March 2013)</b>	<b>REIS Section</b>
Photographs	Updated and additional photographs submitted as part of REIS	Tab 4

**Table 4: Amendments arising from the REIS - Waste Licence Application, TAB 4: APPENDICES**

<b>WLA, TAB 4: APPENDICES</b>	<b>Summary of changes resulting from REIS (March 2013)</b>	<b>REIS Section</b>
Appendix B.1.1	No change	-
Appendix B.3.1	Updated planning history	Appendix 1.3
Appendix B.3.2	No change	-
Appendix B.3.3	No change	-
Appendix B.3.4	No change	-
Appendix B.3.5	No change	-
Appendix B.6.1	No change	-
Appendix B.6.2	No change	-
Appendix C.2.1	No change	-
Appendix H.1.1	No change	-
Appendix J.1.1	No change	-
Appendix J.1.2	Not referenced in REIS; updated certificate of insurance available on request.	-

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**Table 5: Amendments arising from the REIS - Waste Licence Application, TAB 5: DRAWINGS**

<b>WLA, TAB 5: DRAWINGS</b>	<b>Summary of changes resulting from REIS (March 2013)</b>	<b>REIS Section</b>
Drawing WLA-01: Site Location Map	No change	-
Drawing WLA-02: Ownership Plan	No change	-
Drawing WLA-03: Site Location Map (with 500m offset)	No change	-
Drawing WLA-04: Site Plan	Additional items inserted in Site Layout and Site Operations for 2013	Drawing REIS-2.1
Drawing WLA-05: Services Plan	No change	-
Drawing WLA-06: Site Drainage Drawing	No change (existing drainage layout)	-
	Proposed attenuation layout	Drawing REIS-10.2
Drawing WLA-07: Unit Operations	Pelletising of glass fines (pilot process), an additional glass recovery process within the Drying Plant building, is identified.	Drawing REIS-2.3
Drawing WLA-08: Main Process (Sorting) Plant General Layouts (Sheet 1)	No change	-
Drawing WLA-09: Main Process (Sorting) Plant General Layouts (Sheet 2)	No change	-
Drawing WLA-10: Main Process (Sorting) Plant – Elevations and Section	No change	-
Drawing WLA-11: Garage Building – Plans, Elevations and Section	No change	-
Drawing WLA-12: Drying Plant Building – Plans, Elevations and Section	No change	-
Drawing WLA-13: Emissions Points	No change	-
Drawing WLA-14: Monitoring Locations	No change	-

## **Section H.1: Waste Types and Quantities \_ Revised May 2013**

This supersedes Section H.1 of the WLA application form, July 2011.

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**SECTION H MATERIALS HANDLING**

**H.1 Waste Types and Quantities – Existing & Proposed**

Provide an estimation of the quantity of waste likely to be handled in relation to each class of activity applied for. This information should be included in Table H.1(a).

**TABLE H.1(A). QUANTITIES OF WASTE IN RELATION TO EACH CLASS OF ACTIVITY APPLIED FOR**

Waste Management Acts 1996 to 2010 3rd Schedule (Disposal) Operations			Waste Management Acts 1996 to 2010 4th Schedule (Recovery) Operations		
Class of Activity Applied For		Quantity (tpa)	Class of Activity Applied For		Quantity (tpa)
Class D 1			Class R 1		
Class D 2			Class R 2		
Class D 3			Class R 3		
Class D 4			Class R 4		2,910
Class D 5			Class R 5		92,150
Class D 6			Class R 6		
Class D 7			Class R 7		
Class D 8			Class R 8		
Class D 9			Class R 9		
Class D 10			Class R 10		
Class D 11			Class R 11		
Class D 12			Class R 12		970
Class D 13			Class R 13		485
Class D 14					
Class D 15		485			

All figures are estimated.

In Table H. 1 (B) provide the annual amount of waste handled/to be handled at the facility. Additional information should be included in **Attachment H.1**. The tonnage per annum should be given of that expected for the life of the licence, with at least the next five years tonnages provided. For Landfill Review applications provide an estimate of the quantity of waste already deposited in (i) lined cells; (ii) unlined cells.

**TABLE H.1(B) ANNUAL QUANTITIES AND NATURE OF WASTE**

Year	Non-hazardous waste (tonnes per annum)	Hazardous waste (tonnes per annum)	Total annual quantity of waste (tonnes per annum)
2012	96,565		96,565
2013 onwards	97,000		97,000

A detailed inventory of the types and quantities of wastes currently handled at the site and proposed to be handled should be submitted as Table H.1 (C).

**TABLE H.1 (C) WASTE TYPES AND QUANTITIES**

WASTE TYPE	TONNES PER ANNUM (existing)	TONNES PER ANNUM (proposed)	TOTAL (over life of site) tonnes
Household	71,458	71,780	Not known
Commercial	24,141	24,250	Not known
Sewage Sludge			
Construction and Demolition	966	970	Not known
Industrial Non-Hazardous Sludges			
Industrial Non-Hazardous Solids			
Hazardous *(Specify detail in Table H 1.2)			
Inert Waste imported for restoration purposes	COMPLETELY FOR LANDFILL & CONTAMINATED LAND FACILITIES ONLY <i>For inspection purposes only. Consent of copyright owner required for any other use.</i>		

**\* TABLE H.1.2 HAZARDOUS WASTE TYPES AND QUANTITIES**

HAZARDOUS WASTE	DETAILED DESCRIPTION * REFERENCE SHOULD BE MADE TO THE RELEVANT EUROPEAN WASTE CATALOGUE CODES AS PRESENTED BY COMMISSION DECISION 2000/532/EC	Tonnes Per Annum (Existing)	(Tonnes Per Annum Proposed)
Waste Oil			
Oil filters			
Asbestos			
Paint and Ink			
Batteries			
Fluorescent Light Bulbs			
Contaminated Soils			
<b>OTHER HAZARDOUS WASTE (APPLICANT TO SPECIFY)</b>			

*WASTE Application Form*

**Attachment H.1** should contain any relevant additional information.

**It should be noted that an applicant may be issued with a licence which restricts the type of wastes which may be deposited.**

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## ***Attachment A: Non-technical Summary\_ Revised May 2013***

This supersedes the Non-technical Summary included as 'Attachment A' in Waste Licence Application, July 2011.

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## Attachment A: Non-technical Summary (NTS)

### A.a NTS: Contents

A.a.1 This non-technical summary (NTS) comprises the following:

- A.a: Contents
- A.b to A.l: Non-technical summary of each section of the Waste Licence Application
- A.m: Selected Waste Licence Application drawings to accompany the non-technical summary, to identify and describe the activity.

A.a.2 The NTS was revised in May 2013 in response to a Remedial Environmental Impact Statement (REIS), which was prepared for the subject facility (Patel Tonra Ltd., March 2013). A comparison study for the purposes of outlining any changes to the original Waste Licence Application (July 2011) resulting from the REIS was completed. The REIS and the comparison study were submitted to the Agency in May 2013.

### A.b NTS: Section B - General

A.b.1 This Waste Licence application is being made by Rehab Glassco Ltd. (also referred to as 'Rehab Glassco' hereinafter) for a glass and can recycling facility at Unit 4, Osberstown Industrial Park, Caragh Road, Naas, Co. Kildare, Ireland. The site is a fully operational, state-of-the-art glass and can recycling facility. The facility is a key piece of waste management infrastructure in Ireland and accounts for approximately 80% of Ireland's glass recycling.

A.b.2 The application has been prepared by Patel Tonra Ltd., Environmental Solutions on behalf of Rehab Glassco.

A.b.3 The facility currently operates under a Waste Facility Permit issued by Kildare County Council; Waste Permit Register number WFP-KE-08-0357-01. Due to increased tonnage inputs in 2011, the EPA confirmed the requirement to apply for a Waste Licence for the facility.

A.b.4 Rehab Glassco Ltd. was formed as a result of the acquisition of Glassco Recycling Ltd. by The Rehab Group in December 2009. Rehab Recycle (part of The Rehab Group) operated a glass recycling facility in Ballymount, South Dublin under Waste Facility Permit (No. WPR 004/2); the Ballymount facility closed in February 2011. From February 2011 onwards, all material was directed to the Osberstown (Naas) facility.

A.b.5 The Osberstown (Naas) facility has been operated as a glass recycling facility by Rehab Glassco/Glassco Recycling Ltd. since 2008, under permit from Kildare County Council (No. WFP-KE-08-0357-01).

A.b.6 A copy of the newspaper page containing the Waste Licence Application advertisement is attached with this application. A site notice is affixed adjacent to the facility entrance.



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### **Substitute Consent and Remedial Environmental Impact Statement (REIS)**

- A.b.7 Rehab Glassco Ltd. sought leave to apply for substitute consent for its facility at Osberstown Industrial Park on 8<sup>th</sup> February 2012. 'Substitute consent' means substitute consent granted under section 177K of the Planning and Development (Amendment) Act 2010. An Bord Pleanála (ABP) granted Rehab Glassco Ltd. leave to apply for substitute consent on 17<sup>th</sup> September 2012.
- A.b.8 The ABP decision determined that the development is one where an environmental impact assessment is required. The notice directed that the application for substitute consent must include a Remedial Environmental Impact Statement (REIS).
- A.b.9 A REIS considers the significant environmental effects (if any) of a development which have occurred, which are occurring or which can reasonably be expected to occur. If significant adverse effects are identified, remedial measures must be undertaken or proposed to be undertaken to remedy those effects. Timeframes for remedial measures must be stated.
- A.b.10 Correspondence was issued to 14 No. statutory agencies and other bodies regarding scoping of the REIS and inviting comments on same. Written correspondence was also delivered to 4 No. residential properties located within 250m of the Rehab Glassco site to advise residents of the substitute consent application, REIS and affording residents an opportunity to make observations on the application or the operation of the facility. Residents were also invited to meet with the Applicant/consultant team for further information.
- A.b.11 An application for Substitute Consent, accompanied by a Remedial Environmental Impact Statement (REIS), was submitted to An Bord Pleanála for the Rehab Glassco facility in March 2013 (An Bord Pleanála case reference: PL09.SU0015). The application was for the purpose of regularising the existing glass recycling facility and ancillary activities at Unit 4, Osberstown Industrial Park, Caragh Road, Naas, Co. Kildare.
- A.b.12 The REIS outlines the physical elements of the facility as follows:
- The site area is 21,300m<sup>2</sup>.
  - Main Process building – a portal frame structure; floor area: 734m<sup>2</sup>, dimensions: 41.26m x 17.79m, 12m maximum height. The purpose-designed Main Process building contains the recycling plant for the segregation and processing of glass (and small volumes of other recyclables) for recovery purposes. This is the principal activity carried out on site. Offices, staff canteen and toilets are also contained within the Main Process building.
  - Drying Plant building - a steel-framed, fabric-covered structure; floor area: 314m<sup>2</sup>, dimensions: 19.46m x 16.14m, 8.34m maximum height. The Drying Plant building houses a rotating drying unit, with associated conveyor, bagging and ancillary equipment. This building is used to manufacture a specified product from reject glass for remanufacturing uses
  - Vehicle Maintenance building - a steel-framed, fabric-covered structure; floor area: 241m<sup>2</sup>, dimensions: 19.4m x 12.4m, 7.0m maximum height. The building is used for maintenance of Rehab Glassco vehicles only (no third party vehicles).

- Outdoor storage areas, including storage bays and an open storage area for recycling bins/banks, pallets, etc. in the northern corner of the site. There are approximately 19 No. outdoor storage bays, ranging in area from 70m<sup>2</sup> to 1000m<sup>2</sup>. They are constructed of permanent pre-cast concrete wall panels or moveable pre-cast concrete blocks. The maximum height of the wall is approx. 3.6m above ground level and material is stored to a maximum of 3m above ground level.
- Vehicle parking (approximately 34 No. car parking spaces and approx. 11 No. truck parking spaces) and internal access routes, completed in concrete hardstanding. A wayleave associated with the Newbridge Rising Main runs along the north-eastern boundary of the site (plastic matting system applied as surface treatment to permit access, if required).
- Ancillary activities and infrastructure, including weighbridge, truck wash, foul and surface water management infrastructure (including interceptors and underground attenuation tank), fuel storage (gas and diesel), security gates and boundary fencing/landscaping.
- All of the above features are existing and operational at the time of writing.

#### **Type of Waste Activity**

- A.b.13 In accordance with the Third and Fourth Schedules to the Waste Management Acts 1996 to 2011<sup>1</sup>, the principal waste activity is Fourth Schedule, Recovery Operations, Class **R 5**: *Recycling/reclamation of other inorganic materials, which includes soil cleaning resulting in recovery of the soil and recycling of inorganic construction materials*. This activity at Rehab Glassco relates to the separation and recycling of glass.
- A.b.14 Metals are also recovered at the facility (e.g. drinks cans, food tins); therefore Fourth Schedule, Recovery Operations, Class **R 4**: *Recycling/reclamation of metals and metal compounds*, is relevant.
- A.b.15 In relation to the operation of the Drying Plant at Rehab Glassco, the following class of activity is relevant: **R 12**: *Exchange of waste for submission to any of the operations numbered R 1 to R 11 (if there is no other R code appropriate, this can include preliminary operations prior to recovery including pre-processing such as, amongst others, dismantling, sorting, crushing, compacting, pelletising, drying, shredding, conditioning, repackaging, separating, blending or mixing prior to submission to any of the operations numbered R1 to R11)*.
- A.b.16 Small amounts of residual material will be temporarily stored on-site pending off-site recovery or disposal at an appropriately licensed/permitted waste facility; therefore the following classes are relevant:
- Third Schedule, Disposal Operations, Class **D 15**: *Storage pending any of the operations numbered D 1 to D 14 (excluding temporary storage (being preliminary storage according to the definition of 'collection' in section 5(1)), pending collection, on the site where the waste is produced)*.
  - Fourth Schedule, Recovery Operations, Class **R 13**: *Storage of waste pending any of the operations numbered R 1 to R 12 (excluding temporary storage (being preliminary storage according to the definition of 'collection' in section 5(1)), pending collection, on the site where the waste is produced)*.

<sup>1</sup> Including amendments by the European Communities (Waste Directive) Regulations, 2011

A.b.17 The activity is not for the purposes of an establishment to which the European Communities (Control of Major Accident Hazards involving Dangerous substances) Regulations, 2000 (S.I. No. 476 of 2000), apply.

### **A.c NTS: Section C - Management of the Facility**

A.c.1 Rehab Glassco offers unparalleled experience in glass collection and recycling services in Ireland. The site has been an operational glass recycling facility since 2008, under the conditions of a Waste Facility Permit from Kildare County Council. Prior to the formation of Rehab Glassco, Glassco Recycling Ltd. operated in the glass recycling sector for 11 years, and Rehab Recycle operated in the glass recycling sector for 15 years.

A.c.2 An organisational chart for the facility is included in Attachment **C**.

A.c.3 Rehab Glassco is currently implementing an Environmental Management System in line with the International Standard ISO14001:2008.

#### **Hours of Operation**

A.c.4 The hours of waste acceptance<sup>2</sup> are:

- Monday to Saturday (including bank holidays): 07:00 (7am) to 19:00 (7pm)
- Sunday: closed

A.c.5 The hours of operation<sup>3</sup> are:

- Monday to Friday (including bank holidays): 24-hours
- Saturday: 07:00 (7am) to 23:00 (11pm)
- Sunday: closed

A.c.6 Shift patterns for plant operatives operate on the following basis (approximate):

- Shift #1: 7am to 3pm
- Shift #2: 3pm to 10pm
- Shift #3: 10pm to 7am

A.c.7 No construction/development works are proposed as part of this application.

A.c.8 No other relevant hours of operation are anticipated.

<sup>2</sup> **Hours of Waste Acceptance:** The hours during which the facility accepts waste.

<sup>3</sup> **Hours of Operation:** The hours during which the facility is operational.

## **A.d NTS: Section D - Infrastructure & Operation**

A.d.1 The facility has completed a range of infrastructural works in line with the requirements of the Waste Facility Permit issued by Kildare County Council (WFP-KE-08-0357-01). Site infrastructure is shown on Drawing **WLA-04**.

### **Site security arrangements including gates and fencing**

A.d.2 Site security gates and fencing are in place at the site. Additional tree plant and the installation of a noise barrier have been recently completed at the western boundary. The site currently operates a CCTV security system. The site is manned overnight for operational purposes and site personnel are available to deal with any emergencies and or security breaches. All site buildings are lockable.

### **Designs for site roads**

A.d.3 The site is located within the existing Osberstown Industrial Park, Naas, Co. Kildare, which has a well developed road network; therefore there is no requirement for new access roads to the site. Traffic movement is controlled by a designated one-way system on site.

### **Design of hardstanding areas**

A.d.4 The site is overlaid by concrete hardstanding, with the exception of a designated wayleave 20m in width along the northern site boundary, which is dedicated for the Newbridge rising main.

### **Plant**

A.d.5 The primary items of plant relate to: (i) the Main Process Building, and (ii) Drying Plant. No additional plant is proposed for the purposes of this Waste Licence Application. The Main Process Building includes the following plant and equipment:

- Screens
- Crushers
- Magnetic separation units
- Eddy current separators
- Air classifiers
- Optical sorting equipment
- Conveyor systems
- Process control system
- Fire detection and alarm system

A.d.6 The Drying Plant building houses a rotating drying unit, with associated conveyor, bagging and ancillary equipment. Pelletising of glass fines (pilot process), a complementary glass recovery process within the Drying Plant building, is an additional unit operation.

A.d.7 There is currently a single weighbridge on site, which will be maintained for ongoing use. The weighbridge software is of bespoke design, commissioned by Rehab Glassco to meet their specific business requirements.

**Wheelwash**

- A.d.8 A wheel cleaning system and a truck wash facility is currently in place on site. Vehicle washing and wheelwash facilities are provided using a power-washing system on site, if required; however, the majority of vehicles which enter/exit the site arrive on the public road network onto a fully concreted site and the risk of carrying mud/dirt off-site is insignificant.

**Laboratory facilities**

- A.d.9 No on-site laboratory for environmental analysis is proposed. Any samples collected as part of the environmental monitoring programme will be analysed by an independent accredited laboratory. There is currently a quality control laboratory on site for the control of the processed glass cullet product.

**Design and location of fuel storage areas**

- A.d.10 There are currently two diesel storage tanks on site: Tank#1 is a 10,000-litre capacity diesel storage tank, located at the Vehicle Maintenance building; Tank#2 is a 2,500-litre capacity diesel storage tank, located adjacent to the Drying Plant. Tank#1 is used for truck refuelling and Tank#2 to fuel site machinery. Both tanks are bunded/double skinned.
- A.d.11 There is a gas storage tank in the north of the site. The dimensions of the tank are approximately 7.4m long x 3.8m diameter.

**Waste Quarantine and Inspection Areas**

- A.d.12 There is an established waste inspection and quarantine procedure in place at the facility.

**Traffic Control**

- A.d.13 There is a one-way traffic management system in place on site, as indicated by directional signage. All incoming and outgoing vehicles must report to the weighbridge. All drivers are required to drive with due consideration for site safety. There are designated parking areas on site.

**Sewage and Surface Water Drainage Infrastructure**

- A.d.14 A purpose-designed surface water management system has been installed at the facility, to include an engineered surface water drainage network, a silt trap and 2 No. interceptors.

**All other services**

- A.d.15 Electricity is supplied to the facility by a sub-station on site supplying 1,000 KVA. The site is fully equipped with a modern telecommunications system, including broadband, internet access, email, telephone and fax.

**Plant sheds, garages and equipment compound**

- A.d.16 In addition to the Main Process Building and the Drying Plant, there is an on-site garage building used for the purpose of standard vehicle maintenance for Rehab Glassco vehicles.

**Site Accommodation**

- A.d.17 Site offices, including the weighbridge office, are contained within the Main Process Building.

**Fire Control System, including water supply**

- A.d.18 A fire detection and alarm system is installed at the premises.

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## Facility Operation

- A.d.19 There are two unit operations on site: (i) main glass/can processing, and (ii) drying plant operation.

## A.e NTS: Section E - Emissions

### Emissions to Atmosphere

- A.e.1 There is one air emission point source – the source of this emission point relates to the drying unit in the Drying Plant building. There are potential fugitive emissions to air from dust and vehicle emissions; however management and control procedures will be implemented to mitigate against such impacts.

### Emissions to Surface Waters

- A.e.2 Discharge from two on-site interceptors combines at an on-site manhole close to the northern corner of the site. This combined site surface water emission discharges to a culvert and the industrial estate's surface water drainage system.

### Emissions to Sewers

- A.e.3 Toilet and washing facilities from the Office/Administration building are the only emissions to sewer.

### Emissions to Groundwater

- A.e.4 There will be no direct discharges to groundwater or any groundwater abstractions as part of the development.

### Noise Emissions

- A.e.5 Potential noise emissions are associated with plant and equipment, vehicle movements and loading/unloading operations.

### Environmental Nuisances

#### **Bird Control**

- A.e.6 Remedial and ongoing mitigation measures relating to bird control are outlined in the REIS.

#### **Dust Control**

- A.e.7 Remedial and ongoing mitigation measures relating to dust management are outlined in the REIS.

#### **Fire Control**

- A.e.8 Emergency response procedures will be prepared and submitted to the EPA as part of the Environmental Management Programme.

#### **Litter Control**

- A.e.9 Remedial and ongoing mitigation measures relating to litter control are outlined in the REIS.

**Traffic**

- A.e.10 Access to the site will be controlled; the general public does not have access to the facility. There are designated staff, visitor and truck parking areas. On-site traffic flow patterns/routes, based on a one-way system, are specified. No traffic queuing is permitted outside the facility.

**Vermin Control**

- A.e.11 Rehab Glassco retains the services of a pest control contractor and bait boxes are in place at a number of locations on site.

**A.f NTS: Section F - Control & Monitoring**

**Treatment, Abatement and Control Systems**

- A.f.1 Remedial and mitigation measures for dust are outlined in the REIS (see also **Section A.i.1**).

- A.f.2 A fire detection and alarm system is installed at the premises.

- A.f.3 A purpose-designed surface water management system has been installed at the facility.

**Air Monitoring and Sampling Points**

- A.f.4 The air emission point at the Drying Plant has been subject to monitoring, as detailed in the REIS. It is proposed that this will be an ongoing monitoring location.

- A.f.5 The Waste Licence application also specifies proposed dust monitoring locations.

**Surface Water Monitoring and Sampling Points**

- A.f.6 One surface water emission monitoring point is proposed.

**Noise Monitoring and Sampling Points**

- A.f.7 Annual noise monitoring is proposed at the nearest residential noise sensitive receptor.

**A.g NTS: Section G - Resources Use & Energy Efficiency**

- A.g.1 The input material to the facility is glass and cans. Input glass may be colour-segregated or mixed-colour. Material is subject to a range of sorting/processing techniques. There is no washing of material. No chemicals/additives are applied. The process aims to maximise the recovery of glass and cans.

- A.g.2 The (pilot) pelletising process within the Drying Plant building uses small volumes of water and sodium silicate as a binding agent (no resulting water output).

- A.g.3 All office space heating is powered by electricity (storage heaters). Diesel is stored in 2 No. on-site tanks; diesel is used to fuel site vehicles. A gas storage tank has been installed on site and is used as a fuel source for the Drying Plant operation. Oils, lubricants, etc. associated with vehicle maintenance and garaging activities are stored in the Garage Building. Water is used for drinking water and sanitary purposes.

- A.g.4 Rehab Glassco has invested in state-of-the-art sorting equipment for its plant at Osberstown. The equipment was procured with due regard for energy efficiency specifications. The main switch room is fitted with power factor correction which regulates power supply to the facility to maximise efficiency and minimise any losses.
- A.g.5 Energy use is monitored and measured and opportunities for improved energy performance are examined on an ongoing basis. Records of resource and energy use will be maintained on site and reported to the EPA as required.

## **A.h NTS: Section H - Materials Handling**

### **Waste Types and Quantities**

- A.h.1 Rehab Glassco offers a nationwide collection and recycling service for glass and cans. Materials are collected from pubs, hotels, restaurants, sports clubs, financial institutions, office blocks, apartments and housing developments, council bring sites, civic amenity centres, industrial units and waste companies.
- A.h.2 The following materials are accepted for recycling:
- bottles and jars
  - aluminium and steel cans
  - car windscreens
  - double glazed units
  - picture frame and window off cuts
  - wired glass and mirrored glass
- A.h.3 The facility has the capability of sorting mixed glass into colour-separated glass cullet.
- A.h.4 The Waste Licence application seeks an input tonnage of 97,000 tonnes per annum.

### **Waste Acceptance Procedures**

- A.h.5 Incoming loads are weighed in and full details recorded on the weighbridge software. The weighbridge operator directs the incoming vehicle to the appropriate storage bay for unloading. Waste sources and inputs to the Rehab Glassco facility are controlled. All waste loads arriving at the facility are tipped and visually inspected prior to processing. Any contaminated/unsuitable loads may be recorded as a 'rejected load' and returned to source or removed to an appropriately licensed/permitted site, with the Agency's consent.
- A.h.6 Any loads which may require to be further inspected or quarantined will be appropriately cordoned off in a storage bay pending further investigation and the material will be dealt with in the appropriate manner. Any smaller non-conforming items within an incoming loaded may be removed to the residual waste storage area or mobile hopper bins, pending removal off-site to an appropriately licensed/permitted facility.



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## Waste Handling

### Main Process

- A.h.7 The Rehab Glassco glass processing and cleaning plant is a state-of-the-art facility, relying on proven technology which includes sophisticated optical technology, screening systems and air classification to separate various mixes and colours of glass-based material into furnace-ready clean cullet for remanufacture into glass products. The process also uses manual pre-sort and quality control techniques to separate out certain contaminants at the early stages of the process.

### Drying Plant

- A.h.8 The on-site Drying Plant is used to treat certain residual glass materials from the Main Process on site. The Drying Plant operation includes magnetic extraction, manual pre-sort, drying, screening, crushing and separation of the clean glass into various size fractions. Material is fed via a hopper and passes under an over-band magnet to a manual picking line. Acceptable material passes from the picking line to the rotating drying unit, which operates at approximately 200-250°C.

- A.h.9 The glass output from the drying unit is screened into the following fractions: >8mm fraction, which is transferred onwards to the main processing plant for re-processing; the <8mm fraction is crushed and screened to form various grades of glass fines and is marketed as a saleable product.

### Pelletising of glass fines (pilot process)

- A.h.10 The very fine-grained glass residue (<1mm) which is light and dusty in nature, is pelletised to form a marketable product. The process involves the addition of small volumes of water and sodium silicate (binding agent) to the glass dust fraction, within an enclosed mixing unit. The output from the process is pellets or granules of the fine-grained glass dust fraction. The product is a furnace-ready raw material for the glass manufacturing industry. This operation is housed within the Drying Plant building.

### Waste Arisings

- A.h.11 Small amounts of residual waste arise from the Main Process and the Drying Plant operations. Residue consigned to landfill is minimised through the operation of the Drying Plant. Overall waste residue is estimated at approximately <1% of input, by weight.
- A.h.12 Non-process wastes generated at the facility include: general municipal-type waste, office paper waste and waste from garaging activities. Records of all wastes removed from site are retained by Rehab Glassco. Only appropriately licensed/permitted waste contractors and facilities are used.

### Re-use and Recycling

- A.h.13 The facility produces glass cullet, which is a market-ready raw material used to manufacture new glass products; this is known as 'closed-loop' recycling. The environmental benefits of closed-loop glass recycling are well documented, including substantial energy savings, with positive climate change implications, and avoiding the need for quarrying and related emissions associated with using virgin raw materials for glass manufacturing.

- A.h.14 The Rehab Glassco facility plays a critical role in the recycling and recovery of glass in the context of the Irish waste management sector. The operation of this facility makes a substantive contribution towards meeting Ireland's recycling and recovery targets for glass: it accounts for approximately 80% of the country's glass recycling.

## **A.i NTS: Section I - Existing Environment & Impact of the Facility**

### **Assessment of atmospheric emissions**

- A.i.1 The following remedial/mitigation measures were identified in the REIS:

#### *Remedial Measures*

The following remedial measures have recently been put in place:

- A new water bowser was purchased by the operator as a dust management technique (in particular for concrete hardstanding areas) and its use on site commenced in February 2013.
- The primary dust suppression system (e.g. at conveyors, material drop points/chutes/hoppers) in the Drying Plant building was modified at the end of December 2012, to include the installation of a new fan which provided additional extraction capacity, and new dust hoods at critical points.

The following additional (dust management) remediation measures are proposed:

- The primary conveying system and storage bin transfer chutes and openings [for end product] in the Drying Plant will be fully enclosed/contained and connected to the dust suppression system to prevent the release of fine, dusty material to air. This should be identified, reviewed and remedied within three months of the relevant authorisations being received from the Planning Authority.
- Housekeeping in the Drying Plant building will be improved, including the clean-up of spillage of material/product (effective immediately).
- Pilot operations at the pelletising unit (housed in the Drying Plant) will be reviewed for dust containment and dust management measures. The pelletiser unit should be contained, insofar as possible, with exhaust emissions managed through the existing bag-house filtration system (or modified/enhanced, as required). These works will be completed within three months of the relevant authorisations being received from the Planning Authority. Works will be overseen by a competent person.
- The operation, robustness and effectiveness of the dust extraction/filtration system at the Drying Plant will be reviewed by a competent person. A documented evaluation report will be retained as part of site records. This assessment will be completed within six months of the relevant authorisations being received from the Planning Authority.
- Repeat dust monitoring is proposed at the three dust monitoring locations identified in REIS Section 5.2. Monitoring will be completed between May and September 2013. Repeat monitoring is required to determine if there are consistently high dust levels associated with site activities.

- Should repeat dust monitoring demonstrate a persistent dust nuisance, the Drying Plant building will be contained. The operator will assess feasibility options for total enclosure of the building, and consider the following: heavy-duty plastic strip curtains, fast-opening roller shutter doors, or alternative, at the Drying Plant building entrance. This will mitigate against dust emissions from the building to the environment. If dust levels associated with the operation of the Drying Plant remain high, a whole-building system, e.g. negative air pressure system, or equivalent, will be investigated.

#### *Mitigation Measures*

The following dust mitigation measures are ongoing/proposed:

- Continued annual dust monitoring in line with regulatory requirements will be undertaken<sup>4</sup>. Results will be reported to the regulator. Any exceedance of prescribed limit values will be recorded as an incident, with an appropriate level of response identified.
- Continued annual monitoring of point source emissions from the Drying Plant, in line with regulatory requirements. Emission Limit Values will be agreed with the Regulator. Any exceedance of prescribed limit values will be recorded as an incident, with an appropriate level of response identified.
- All emissions from the Drying Plant will be managed through the plant's primary and secondary (whole-building) air suppression and filtration system, which includes a combination of cyclone filters and bag-house filtration systems. An ongoing filter checking, maintenance and replacement programme will be implemented, with filters replaced regularly (and annually, as a minimum). Records of the maintenance/replacement programme will be retained on site.
- Fine product (i.e. output from the Drying Plant <0.2mm), which is light and has the potential to become wind-blown will be stored in sealed bags and covered/wrapped, as appropriate.
- The height of outdoor stockpiles will be restricted to a maximum of 3m.
- The continued use of the water bowser during spells of dry weather, or as otherwise may be required, as a dust control measure.
- Regular sweeping of the yard/hardstanding areas using a mechanical sweeper will be undertaken.
- Regular and routine housekeeping measures will be undertaken on site, i.e. dust cleaning/wiping and sweeping.

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<sup>4</sup> More frequent monitoring may be appropriate, in the short-term, to evaluate the effectiveness of remedial measures.

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## Assessment of impacts of surface water discharges on the receiving waters

A.i.2 The following remedial/mitigation measures were identified in the REIS:

### *Remedial Measures*

Current attenuation capacity for the site is inadequate and the installation of additional attenuation capacity is in line with regional drainage policies<sup>5</sup>. It is proposed that a storm-water attenuation pond is constructed in the north-east of the site, as shown in Drawing REIS-10.2. Engineering design calculations for the attenuation pond are included in the REIS. The construction of the new storm-water attenuation pond should be completed within three months of the relevant authorisations being received from the Planning Authority. Mitigation measures relating to the construction of the attenuation pond area are discussed in REIS Section 10.8.

Storage of bulk, uncontained input materials and product will be restricted to hardstanding areas only. Stockpiled input material, which had previously been stored outside of the hardstanding areas, in the south-east of the site was moved to the processing area/and or the concrete hardstanding area during Quarters 3-4, 2012. During 2012, measures have been taken to reduce the amount of material retained in the stockpile area, and to reduce the length of storage time on site. Stockpile areas require ongoing management and control, as detailed in the mitigation measures in REIS Section 10.8.

In response to elevated levels of suspended solids and BOD detected in the interceptor discharge sample, an additional silt trap will be installed at the interceptor, prior to discharge to surface water. The installation of the new silt trap will be completed within one month of the relevant authorisations being received from the Planning Authority. Repeat sampling of discharge to surface water is recommended as soon as possible. Ongoing monitoring at this point is detailed as a mitigation measure in REIS Section 10.8.

Litter management and housekeeping issues (which impact on the stream/ditch at the north-eastern site boundary) are discussed in REIS Chapter 13.

### *Mitigation Measures*

The following mitigation measures have been implemented, and are required to be maintained on an ongoing basis:

- Control of surface water emission at one discharge point only, via the site drainage system, 2 No. interceptors and silt trap at the vehicle washing/power-wash area. Drains, silt traps and interceptors are subject to ongoing inspection, cleaning and maintenance.
- Emissions to surface water at the discharge point are sampled on a bi-annual basis (with a weekly visual inspection), in accordance with Waste Facility Permit regulatory requirements.
- There are currently two fuel storage tanks on site (see Drawing REIS-2.1). Both tanks are bunded/double skinned. Inspections and conformance records will be retained on-site.
- Bunded drip trays are in place in the Vehicle Maintenance building and all hazardous liquids will be stored thereon.

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<sup>5</sup> The Greater Dublin Strategic Drainage Study (GDSDS)

- Temporary ground covers only [no permanent fixtures] are used on the wayleave area (Newbridge Rising Main) on the north-eastern boundary, to permit access by the authorities, if required.
- Storage of bulk, uncontained input materials and product is on hardstanding areas only (ongoing operational requirement as good site practice). Storage outside of the hardstanding areas is only permissible for bagged/contained materials.
- The height of stockpiles will be restricted to 3m maximum to ensure the consistent movement of material through the process, thereby avoiding the on-site storage of material for prolonged periods.
- Non-conforming input wastes and waste residues are contained in appropriate waste receptacles, e.g. bins, skips or specialist containers.
- A documented emergency response system is in place.
- Any environmental incidents are logged and reported to the regulator, as required.
- Use of the bowser as a dust mitigation measure is considered in REIS Chapter 5.

The additional mitigation measures proposed are as follows:

- It is recommended that construction works associated with the storm-water attenuation pond works are supervised by a competent engineer. Works to be completed in line with Eastern Regional Fisheries Board guidelines<sup>6</sup>, to include the following precautionary measures:
  - Fuels, oils, greases and hydraulic fluids must be stored in banded compounds well away from the watercourse. Refuelling of machinery, etc., should be carried out in banded areas.
  - Runoff from any machine service and concrete mixing areas must not enter the watercourse.
  - Stockpile areas for sands and gravel should be kept to minimum size, well away from the watercourse.
  - Watercourse banks should be left intact if possible. If they have to be disturbed, all practicable measures should be taken to prevent soils from entering the watercourse.
- To avoid soils washing into the stream/ditch along the north-eastern site boundary (during the operational phase), a suitable level of planting is recommended to ensure the stability of the bank. This is further discussed in REIS Chapter 8, Flora and Fauna.
- Litter management procedures and litter picks will be strictly enforced, with particular reference to the potential for site-generated litter and glass residue to enter the stream/ditch on the north-eastern boundary. This is further discussed in REIS Chapter 13.
- Emergency spill kits will be positioned at areas of risk. Staff will be trained on environmental emergency response/use of spill kits.
- Future renovation/re-fit works will consider the potential for rainwater harvesting, as a resource-saving and environmental good practice measure.

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<sup>6</sup> *Requirements for the Protection of Fisheries Habitat during Construction and Development Works at River Sites*

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**Assessment of impact on receiving sewer**

A.i.3 No significant wastewater impacts are anticipated.

**Assessment of impact to groundwater and soils**

A.i.4 The following remedial/mitigation measures were identified in the REIS:

*Remedial Measures*

No significant adverse effects on soils, geology or groundwater associated with the subject site have been identified. No remedial measures are required.

*Mitigation Measures*

There are currently two fuel storage tanks on site. Both tanks are bunded/double skinned. The vehicle maintenance building is equipped with spill control equipment, drip trays and bunded pallets. This equipment will be maintained on site and replaced as necessary.

In relation to proposed remedial measures to construct a surface/storm water attenuation pond (Section REIS 10.6), mitigation measures outlined in REIS Section 10.8 should be applied. In addition, and with reference to soils, geology and hydrogeology, any material removed off-site will be diverted to a suitable licensed or permitted facility, with transportation by a Waste Collection Permit holder. Where works involve topsoil stripping, material will be removed and stored in a manner to protect the soil structure for alternative use on site or off-site. Measures will be taken to ensure soil stability and prevent soil erosion. The completed depth of the pond will be approximately 1.2m, which will not impact on groundwater.

Dust management and control measures during construction works are considered in REIS Chapter 5, Air and Climate. Mitigation measures for outdoor storage of input material and processed materials are proposed in relation to surface water/drainage, as detailed in REIS Chapter 10, which will have consequential benefits in terms of protection of ground underlying waste storage areas. Surface water management controls, as detailed in REIS Chapter 10, would also serve to mitigate potential surface water contaminants entering groundwater.

As a waste management activity, the facility will be subject to ongoing waste permitting/licensing requirements.

**Ground and/or groundwater contamination**

A.i.5 There is no known ground and/or groundwater contamination, historical or current, on or under the site.

**Noise Impact**

A.i.6 The following remedial/mitigation measures were identified in the REIS:

*Remedial Measures*

A noise barrier/screen was installed at the western site boundary (in proximity to the nearest residential neighbour) in January 2013. A noise barrier/screen has also been installed at the loading bay of the Main Process building. This is likely to provide a degree of localised noise attenuation.

Point noise sources at the plant will be considered in terms of noise insulation, maintenance and proper use of plant and equipment, Best Available Techniques (BAT) for plant and equipment (choosing inherently quiet plant & machinery), relocation on site of noisy activities, plant or layout changes, screening of noise-generating plant and building doors/openings. These measures will be undertaken within two months of the relevant authorisations being received from the planning authority.

Further noise monitoring will be conducted within three months of the relevant authorisations being received from the planning authority. If monitoring results indicate that noise levels exceed 'Evening' and 'Night-time' by EPA NG4, it is proposed that operations at the Drying Plant (thought to be a major contributor to noise levels at NSL1, the closest residential receptor) will be restricted to meet these requirements, i.e. the Drying Plant will not operate between 19:00hrs and 07:00hrs.

#### *Mitigation Measures*

No material will be accepted into or removed from the facility between the hours of 7pm and 7am; therefore there is no related HGV noise at this time.

Noise monitoring will be conducted annually (as a minimum), or as per waste regulatory requirements. Any incidents will be reported to the regulator, with corrective actions identified, as appropriate.

Any noise complaints will be recorded and investigated.

An ongoing plant and equipment maintenance procedure will be implemented to minimise noise levels. Any new equipment acquired will conform to EU noise standards.

#### **Assessment of Ecological Impacts & Mitigation Measures**

A.i.7 The following remedial/mitigation measures were identified in the REIS:

#### *Remedial Measures*

No remedial measures specified.

#### *Mitigation Measures*

Mitigation of surface drainage water has been built into the site in the form of oil separators and the attenuation tank and if the former are cleaned regularly they will prevent any oil pollution reaching the drain. It is understood that a storm water attenuation pond is to be constructed in the north-east of the site; no impacts on flora and fauna are anticipated.

Vegetation in the drain will re-establish itself naturally but the banks will be strengthened by the proposed planting of willows which will have a positive impact on birdlife and insect life. Purple willows *Salix purpurea* are suggested as they are small trees unlikely to fall over and create soil disturbance.

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**A.j NTS: Section J - Accident Prevention & Emergency Response**

- A.j.1 Rehab Glassco has documented and implemented Emergency Response Procedure Guidelines. All staff receive Health & Safety induction training and are fully equipped with PPE. A fire detection and alarm system is installed at the premises.
- A.j.2 Diesel is stored in double-skinned tanks. Potentially contaminating material stored in the garage building is retained on spill pallets. The surface water drainage system includes two interceptors.

**A.k NTS: Section K - Remediation, Decommissioning, Restoration and Aftercare**

- A.k.1 If the decommissioning of part or all of the Rehab Glassco facility should be required, a phased decommissioning process will be carried out. After all material has been removed a programme of environmental monitoring and a site audit will be carried out to ensure that the local environment has not been adversely affected by the closure of the facility and that no residual material remains on the site.
- A.k.2 It is not envisaged that the activities at the Rehab Glassco facility will have an adverse impact on the site, which will result in detailed aftercare management of the site being required.

**A.l NTS: Section L - Statutory Requirements**

- A.l.1 Section 40(4) of the Waste Management Acts 1996 to 2011 requires that the Agency shall not grant a waste licence unless it is satisfied that its requirements are met. Attachment L of the Waste Licence Application provides information to show that these criteria have been met.
- A.l.2 Remedial/mitigation measures outlined in the REIS to be implemented in full (and subject to Substitute Consent planning application). Environmental monitoring is proposed for air/dust, noise and surface water to ensure that relevant emission limit values are not exceeded.
- A.l.3 The Rehab Glassco activity is deemed to be consistent with the objectives of Kildare Waste Management Plan.
- A.l.4 Rehab Glassco (and previously Glassco Recycling) has been the holder of a Waste Facility Permit for the facility since 2008.
- A.l.5 The Applicant has not been convicted of any offences pertaining to the Waste Management, EPA, Air or Water Pollution Acts.
- A.l.6 The Applicant holds the requisite technical knowledge and qualifications to carry on the proposed activity in an appropriate manner.
- A.l.7 The Applicant is in a position to meet financial commitments/liabilities which may be associated with the activity.



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A.I.8 The Rehab Glassco facility focuses on the recycling of glass and cans, i.e. a *recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes*, in line with the priority order waste hierarchy.

A.I.9 The Rehab Glassco facility plays a critical role in the recycling and recovery of glass and cans in the context of the Irish waste management sector. The facility is strategically located with reference to key waste generation points in the country, with excellent motorway access to all parts of Ireland. The facility is designed and operated to ensure a high level of protection for the environment and public health.

### **A.m Selected Waste Licence Application Drawings to Accompany the Non-technical Summary**

- Drawing WLA-01: Site Location Map
- Drawing WLA-04: Site Plan<sup>7</sup>
- Drawing WLA-07: Unit Operations<sup>8</sup>
- Drawing WLA-14: Monitoring Locations

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<sup>7</sup> Additional items inserted in Site Layout and Site Operations for 2013 as Drawing REIS-2.1.

<sup>8</sup> Pelletising of glass fines (pilot process), an additional glass recovery process within the Drying Plant building, is identified, as Drawing REIS-2.3.