## PREAMBLE TO WASTE LICENCE APPLICATION

Enclosed is a Waste Licence Application (WLA) that has been prepared to comply with the Waste Management (Licensing) Regulations 2004 (SI No. 395 of 2004). The WLA has been prepared by Golder Associates Ireland and Environmental Management Services on behalf of Thornbush Holdings Limited (Thornbush or the Applicants). Thornbush is a joint venture company owned by the SWS Group and the O'Flynn family Co. Cork.

The format of this Application follows the format of the Application Form prepared by the Environmental Protection Agency (EPA or Agency). This document contains:

- The application form with sections A to M completed;
- Attachment relating to each section of the application;
- Figures relating to each section of the application; and
- An EIS containing Volumes 1, 2 and the Non Technical Summary.

This Waste Licence Application (WLA) is for a proposed Construction, Demolition & Excavation Waste Recovery Facility (C,D&E, Facility) together with the associated management and restoration of waste lagoous, ponds and other lands covered by IPPC Licence Register No. P0389-01. The total WLA area is ca. 29.0 ha. A planning application for the proposed C,D&E Facility was lodged with Cork Co. Council in early May 2008. The site was formerly used by Mitsui Denman (Ireland) Limited a subsidiary of the Mitsui Mining and Smelting Co. Ltd, Tokyo Japan. Mitsui Mining and Smelting Company began producing Electrolytic Manganese Dioxide (EMD), for use in the manufacture of dry cell batteries in Wallingstown, Little Island, Co. Cork. The production of EMD commenced in early 1976 and continued until the facility closed in 2003.

The Environmental Protection Agency issued Mitsui Denman (Ireland) Limited an IPPC license in July 1999 for the facility to carry out the "processing of nonferrous metals, their compounds or other alloys including manganese" of which the waste lagoons constituted a secondary activity. The site previously encompassed approximately 100 acres of land of which approximately 40 acres were utilised for manufacturing, production, office facilities, landscaping and ancillary infrastructure with the remaining lands utilised for waste management activities.

Thornbush acquired the site from Mitsui Denman (Ireland) Ltd in 2004 subsequent to the closure of Mitsui Denman (Ireland) Ltd in 2003. When Mitsui Denman (Ireland) Limited informed the Agency of its decision to cease operations in July 2003, the Agency requested in accordance with Condition 13.1 of the company's IPPC Licence that all plant and equipment be decommissioned and rendered safe for the environment. Mitsui Denman commissioned O

Callaghan Moran & Associates to undertake an exit audit of the facility. This report was submitted to the Agency in December 2003. The scope of the exit audit was to identify all environmental liabilities and remediation issues, undertake an independent exit audit identifying the decommissioning, rendering safe or removal for disposal/recovery, of any soil, subsoil's, buildings, plant or equipment, or any waste materials or substances or any other matter contained therein or thereon, that may result in environmental pollution. In January 2004 the Agency independently undertook an exit audit of the site excluding the waste lagoon area.

In March 2004, the Agency confirmed that the Exit Audit was to their satisfaction. At this time the SWS Group and the O'Flynn Family as a joint venture company purchased the proposed site from Mitsui Denman (Ireland) Limited. The IPPC Licence No. 389 was transferred to the name of Thornbush Holdings Limited in March 2004. Decommissioning of the manufacturing facility commenced in 2004 and was completed in 2006. The EPA accepted a boundary revision to exclude these lands from licensable activities in February 2007. The lands outside the revised boundary were subsequently purchased for redevelopment by Howard Holdings PLC.

The remainder of the former site comprising the former waste lagoons remain under IPPC license and are the subject of this WLA. The waste lagoons require restoration and capping in accordance with Planning and Regulatory conditions set within the IPPC licence and Planning Permission (PL Ref: 1466/73).

Thornbush commissioned Golder Associates (UK) Ltd. to undertake a detailed site geotechnical assessment, trial cell restoration programme and ground improvements report for the restoration of the site.

The restoration of the site is being undertaken to meet the objective of beneficial after-use of the site. The capping system is to provide engineering and restoration layers consistent with the environmental management and the beneficial after-use of the facility. The Agency have communicated to the Licensee that they are supportive of any initiative to bring the site into productive use.

Thornbush previously sought in 2005, through its subsidiary company Recycled Aggregates Ltd, planning permission (Planning Ref: 05/5616) to develop and operate a C,D&E waste recovery facility on lands, adjacent and to the south east of, the existing waste lagoons at Wallingstown, to provide recovered inert C,D&E materials to cap the waste lagoons. A third party lease was secured for these adjacent lands (2.59 ha) at Wallingstown, Little Island. The location of the proposed site was selected as it was considered to be the most suitable location for the proposed development at that time, taking into consideration the following:

• Development constraints associated with the un-restored former Mitsui Denman waste lagoons; and

• Legal and licensing restrictions associated with the IPPC licensed site where the principal activity had ceased.

There was one appellant to the proposed development (Planning Ref: 05/5616). The Planning Authority refused planning for the proposed development. The lease for those lands has expired and the owners are in the process of developing the site. Thornbush has no legal or financial interests in the lands that were proposed under Planning Ref. 05/5616).

In consideration of the decision of the Planning Authority and noting the considered opinion of the Planning Authority to locate the proposed facility within the existing waste lagoon area Thornbush subsequently met with the EPA on the 9th of October 2007 to review the restoration plan for the site and to discuss the proposal of locating the proposed C,D&E Facility within the existing IPPC licence boundary.

Thornbush was informed by the EPA that such a development can be facilitated within a capped/restored area of the waste lagoons subject to Thornbush surrendering its current IPPC licence while at the same time securing from the EPA a Waste Licence to (i) operate a C,D&E Facility on the existing IPPC site; and (ii) complete the required restoration of waste lagoons, as required by the current IPPC licence. It was agreed with the EPA that considering the planning history for the proposed development that this proposal was the most appropriate for the remediation of the waste lagoons.

Thornbush lodged a planning application on the 1<sup>st</sup> of May 2008 to locate the proposed C,D&E Facility on a ca. 2.2 ha site within the IPPC licence boundary/Thornbush Site. The Planning Application Site is located on part of the waste lagoons, known as Cell 8, which is currently being capped with processed clean imported granular (hard core) materials as agreed by the EPA in October 2007.

A Waste Licence pre-application meeting was held with two Agency inspectors at the Cork Inspectorate offices on 21 May 2008.

This Waste Licence Application is the penultimate step in ensuring that the Thornbush site is restored. The ultimate surrender of the IPPC licence and the granting of a Waste Licence that includes the proposed C,D,&E Facility, the capping, restoration, monitoring, management, and aftercare of the site that is currently subject to the conditions of the IPPC Licence (Register No. P0389-01) will facilitate the completion of the obligations of Thornbush Holdings in respect to restoring its site in Wallsingtown and Inchera Little Island Co. Cork.

Provided below is a master table of contents for the Waste Licence Application and references to locations at which relevant information/data may be found.

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Sub-Section	Title	Location of Information
A.1	Non-Technical Summary	WLA p.12 and Attachment A.1
B.1	Applicant Details	WLA p.13-14 and Attachment B.1
B.2	Location of Activity	WLA p.14-15 and Attachment B.2
B.3	Planning Authority	WLA p.15 and Attachment B.3
B.4	Sanitary Authority	WLA p.16 and Attachment B.4
B.5	Other Authorities	WLA p.16
B.6	Notices and Advertisements	WLA p.16 and Attachment B.6
B.7	Type of Waste Activity	WLA p.17-18 and Attachment B.7
B.8	Seveso II Regulations	WLA p.18 and Attachment B.8

C.1	Site Management	WLA p.19 and Attachment C.1 EIS Vol.1, Section 2.7
C.2	Environmental Management System	WEA p.19 and Attachment C.2
C.2	(EMS)	ATX .
C.3	Hours of Operation	WLA p.19 and Attachment C.3
C.5	nours of Operation	EIS Vol.1, Section 2.7
C.4	Conditioning Plan	WLA p.19 and Attachment C.4
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D.1	Infrastructure to corr	WLA p.20 and Attachment D.1 EIS Vol.1, Section 2.5
D.2	Facility Operation	WLA p.21 and Attachment D.2 EIS Vol.1, Section 2.6
D.3	Liner System	WLA p.21 and Attachment D.3
D.4	Leachate Management	WLA p.22 and Attachment D.4
D.5	Landfill Gas Management	WLA p.22-23 and Attachment D.5
D.6	Capping System	WLA p.24 and Attachment D.6

E.1	Emissions to Atmosphere	WLA p.25 and Attachment E.1 EIS Vol.1, Section 9.0
E.2	Emissions to Surface Waters	WLA p.25 and Attachment E.2 EIS Vol.1, Section 7.0
E.3	Emissions to Sewers	WLA p.25 and Attachment E.3 EIS Vol.1, Section 2.5
E.4	Emissions to Groundwater	WLA p.25 and Attachment E.4 EIS Vol.1, Section 7.0
E.5	Noise Emissions	WLA p.25 and Attachment E.5 EIS Vol.1, Section 10.4
E.6	Environmental Nuisances	WLA p.26 and Attachment E.6

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Sub-Section	Title	Location of Information
F.1	Treatment, Abatement, and Control Systems	WLA p.27 and Attachment F.1 EIS Vol 1, Section 2.5
F.2	Monitoring and Sampling Points - Air	WLA p.27 and Attachment F.2
F.3	Monitoring and Sampling Points – Surface Water	WLA p.27 and Attachment F.3
F.4	Monitoring and Sampling Points – Sewer Discharge	WLA p.28 and Attachment F.4 EIS Vol 1, Section 2.5
F.5	Monitoring and Sampling Points – Groundwater	WLA p.28 and Attachment F.5
F.6	Monitoring and Sampling Points – Noise	WLA p.28 and Attachment F.6
F.7	Monitoring and Sampling Points – Meteorological Data	WLA p.28 and Attachment F.7
F.8	Monitoring and Sampling Points – Leachate	WLA p.28 and Attachment F.8
F.9	Monitoring and Sampling Points – Landfill Gas	WLA p.29 and Attachment F.9

G.1	Supplementary Information: Raw Materials, Substances, Preparations, and Energy	WLA p.30 and Attachment G.1 EIS Vol. 1, Section 2.0
G.2	Energy Efficiency	WLA p.30 and Attachment G.2 EIS Vol. 1, Section 2.0
	of the	

H.1	Waste Types and Quantities – Existing &	WLA p.31-33 and Attachment H.1	
11.1	Proposed	EIS Vol. 1 Section. 2.0	
	ctilynet	WLA p.33 and Attachment H.2	
H.2	Waste Acceptance Procedures	EIS Vol. 1 Section. 2.0	
	COT THEFT	EIS Vol. 2 App. 2.0	
	COS.	WLA p.33 and Attachment H.2	
H.3	Waste Handling	EIS Vol. 1 Section. 2.0	
	AS SEAL	EIS Vol. 2 App. 2.0	
11.4	Weste Arising	WLA p.33-34 and Attachment H.4	
H.4	Waste Arisings		

I.1	Assessment of Atmospheric Conditions	WLA p.34 and Attachment I.1 EIS Vol. 1 Section 9.0 & 10.0	
L.2	Assessment of Impacts to Surface Water	WLA p.34 and Attachment I.2	
1.2	Discharges on the Receiving Waters	EIS Vol. 1 Section 7.0	
L3	Assessment of Impost on Dessiving Water	WLA p.34 &35 and Attachment I.2	
1.5	Assessment of Impact on Receiving Water	EIS Vol. 1 Section 7.0	
т.4	Assessment of Impact to Groundwater and	WLA p.35 and Attachment I.2	
I.4	Soils	EIS Vol. 1 Section 6.0 & 7.0	
L.5	Ground and/or Groundwater Contamination	WLA p.35 and Attachment I.5	
1.5		EIS Vol. 1 Section 7.0	
L6	Noise Impact	WLA p.35-36 and Attachment I.6	
1.6		EIS Vol. 1 Section 10.0	
L.7	Assessment of Ecological Impacts &	WLA p.37 and Attachment I.7	
1.7	Mitigation Measures	EIS Vol. 1 Section 5.0	

I 1	Accident Prevention and Emergency	WLA p.36 and Attachment J.1
J.1	Response	EIS Vol. 1 Section 2.5

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Sub-Section	Title	Location of Information
K.1	Cessation of Activity	WLA p.37 and Attachment K.1 EIS Vol. 1 Section 2.0
L.1	Statutory Requirements	WLA p.37 and Attachment L.1
L.2	Fit and Proper Person	WLA p.37 and Attachment L.2
M.1	Declaration	WLA p.39 and Attachment M.1

Consent for inspection purposes only any other use.

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## The Figures included in this Application are listed below

Figure No.	Title	Date	Revision/Issue	Scale	Size
A.1	Site Location	28 <sup>th</sup> May 2008	В	1:50,000	A3
A.2	Site Location Map	28 <sup>th</sup> May 2008	В	1:2,500	A3
A.3	Proposed Facility Infrastructure during Capping and Land Reclamation Operations (Schematic)	28 <sup>th</sup> May 2008	В	1:2,500	A3
B.1	Ownership Plan	28 <sup>th</sup> May 2008	В	1:2,500	A3
B.2a	Site Plan and Location of Site Notice	28 <sup>th</sup> May 2008	В	1:2,500	A3
B.2b	Site Location Map	28 <sup>th</sup> May 2008	В	1:5,000	A3
B.2c	Services Plan	28 <sup>th</sup> May 2008	В	1:5,000	A3
B.6	Location of Site Notice	28 <sup>th</sup> May 2008	В	1:2,500	A3
D.1a	Proposed C, D & E Waste Recovery Facility and Existing Conditions on Lagoons	28 <sup>th</sup> May 2008	В	1:2500	A3
D.1b	Proposed Facility Infrastructure during Capping and Land Reclamation Operations (Schematic)	28 <sup>th</sup> May 2008	В	1:2,500	A3
D.1c	Proposed C, D & E Waste Recovery Facility Infrastructure	28 <sup>th</sup> May 2008	В	1:800	A3
D.1d	Proposed Site Reception Detail	28 <sup>th</sup> May 2008	В	1:400	A3
D.1e	Bunded Fuel Tanks Lading Area, Quarantine & Skip Area Details	28 <sup>th</sup> May 2008	В	1:200	A3
E.1	Emissions Points	28 <sup>th</sup> May 2008	В	1:6,000	A3
E.2	Emissions Points	28 <sup>th</sup> May 2008	В	1:800	A3
F.1	Proposed Environmental Monitoring Locations	28 <sup>th</sup> May 2008	В	1:2,500	A3
l.1	Dust, Air & Noise Historic Assessment	28 <sup>th</sup> May 2008	В	1:6,000	A3
1.2	Groundwater & Surface Water Historic Soils/Geology Assessment Locations	28 <sup>th</sup> May 2008	В	1:2,500	A3
1.3	Subsoils Geology	28 <sup>th</sup> May 2008	В	1:10,000	A3
1.4	Bedrock Geology	28 <sup>th</sup> May 2008	В	1:10,000	A3
I.5	Bedrock Aquifer Designations	28 <sup>th</sup> May 2008	В	1:10,000	A3
I.6	Groundwater Vulnerability	28 <sup>th</sup> May 2008	В	1:10,000	A3
l.7	Habitat Map	28 <sup>th</sup> May 2008	В	1:2,500	A3
K.1	Restoration Surface Contours and Drainage	28 <sup>th</sup> May 2008	В	1:2,500	A3
K.2	Cross Sections 1- 4	28 <sup>th</sup> May 2008	В	As Shown	A3