

ORIGINAL RECEIVED
21 SEP 2004
INITIALS

**THE OPERATION OF A BALING
STATION FOR
OXIGEN ENVIRONMENTAL LTD.
AT
ROBINHOOD INDUSTRIAL ESTATE,
ROBINHOOD ROAD, DUBLIN 22.**

- An Environmental Impact Statement -

For inspection purposes only.
Consent of copyright owner required for any other use.

Date: September 2004

A Submission by Bord na Móna Environmental Limited on behalf of
Oxigen Environmental Ltd.



Oxigen

working for a cleaner environment

TABLE OF CONTENTS

- 1.0 INTRODUCTION**
 - 1.1 Development proposal – overview**
 - 1.1.1 Need for development and waste management
 - 1.1.2 Alternatives Considered
 - 1.2 Site Description**
 - 1.3 Environmental Impact Statement (EIS)**
 - 1.4 Structure of the Environmental Impact Statement (EIS)**
 - 1.5 Consultation and Scoping**
 - 1.6 Consulting Team**
- 2.0 DESCRIPTION OF THE PROPOSED BALING FACILITY**
 - 2.1 Proposed Operations**
 - 2.1.1 General Overview
 - 2.1.2 Site Design
 - 2.2 Waste Acceptance and Handling**
 - 2.3 Waste Quantities**
 - 2.4 Operational Details**
 - 2.5 Raw Materials/Energy/Plant**
 - 2.6 Environmental Nuisances**
 - 2.7 Decommissioning and Aftercare**
- 3.0 ENVIRONMENTAL IMPACTS AND REMEDIAL MEASURES**
 - 3.1 Human beings**
 - 3.1.1 Introduction
 - 3.1.2 Existing Environment
 - 3.1.2 Impacts on Human Beings

3.2 Flora & Fauna

- 3.2.1 Introduction
- 3.2.2 Description of the Receiving Environment
- 3.2.5 Conservation Value and Designated Areas
- 3.2.6 Potential Impacts of the Proposed Development
- 3.2.7 Proposed Mitigation Measures

3.3 Soil & Geology

- 3.3.1 Introduction
- 3.3.2 Study Assessment and Methodology
- 3.3.3 Description of the Receiving Environment
- 3.3.4 Potential Impacts of the Proposed Development
- 3.3.5 Proposed Mitigation Measures

3.4 Hydrology

- 3.4.1 Introduction
- 3.4.2 Baseline Surface Water Assessment
- 3.4.3 Potential Impacts of the Proposed Development
- 3.4.4 Proposed Mitigation Measures

3.5 Hydrogeology

- 3.5.1 Introduction
- 3.5.2 Study and Assessment Methodology
- 3.5.3 Description of the Receiving Environment
- 3.5.4 Potential Impacts from the Proposed Development
- 3.5.5 Proposed Mitigation Measures

3.6 Air

- 3.6.1 Introduction
- 3.6.2 Overview of Potential Pollutants
- 3.6.3 Baseline Data
- 3.6.4 Environmental Impacts
- 3.6.5 Mitigation Measures

3.7 Noise

- 3.7.1 Introduction
- 3.7.2 Study and Assessment Methodology
- 3.7.3 Environmental Impacts
- 3.7.4 Mitigation measures

- 3.8 Traffic**
 - 3.8.1 Introduction
 - 3.8.2 Overview of the Road Network and Traffic Volumes
 - 3.8.3 Environmental Impacts
 - 3.8.4 Mitigation Measures

 - 3.8.5 Conclusion
- 3.9 Climatic Factors**
 - 3.9.1 Introduction
 - 3.9.2 Baseline Data
 - 3.9.3 Environmental Impacts
 - 3.9.4 Mitigation Measures

- 3.10 Landscape & visual impacts**
 - 3.10.1 Introduction
 - 3.10.2 Baseline Visual and Landscape Assessment
 - 3.10.3 Environmental Impacts
 - 3.10.4 Mitigation measures

- 3.11 Cultural Heritage**
 - 3.11.1 Introduction
 - 3.11.2 Baseline Cultural Heritage Assessment
 - 3.11.3 Environmental Impacts
 - 3.11.4 Mitigation Measures

- 3.12 Material Assets**

- 3.13 Interactions of the Foregoing**

APPENDICES

- Appendix 1 Consultation Organisations and Written Correspondence Received
- Appendix 2 List of Drawings
- Drawing No.: D.1 - Site Infrastructure
- Appendix 3 Existing Waste Licence (Register No. 152-1).
- Appendix 4 Waste Acceptance Procedure
- Appendix 5 TMS Monitoring Results (dust and noise results)
- Appendix 6 Meteorological data

NON-TECHNICAL SUMMARY

For inspection purposes only.
Consent of copyright owner required for any other use.

LIST OF ABBREVIATIONS

BATNEEC	- Best Available Technology Not Entailing Excessive Cost
BAT	- Best Available Technology
bgl	- below ground level
BOD	- Biochemical Oxygen Demand
BS	- British Standard
BTEX	- Benzene, Toluene, Ethyl Benzene, Xylene.
Ca.	- Approximately
CFU	- colony forming units
CO	- Carbon Monoxide
CO ₂	- Carbon Dioxide
COD	- Chemical Oxygen Demand
dB(A)	- decibel weighted scale which matches the human ear
EIA	- Environmental Impact Assessment
EIS	- Environmental Impact Statement
EPA	- Environmental Protection Agency
ESB	- Electricity Supply Board
EU	- European Union
Gal/day	- Gallons per day
Ha	- hectare
HGV	- Heavy Goods Vehicle(s)
kg	- kilogramme(s)
km	- kilometres
km ²	- kilometres squared
kmph	- kilometre(s) per hour
m	- metre(s)
m O.D.	- metres to Ordnance Datum
m/sec	- metre per second
m ²	- square metre
m ² /day	- square metre per day
m ³	- cubic metres
mm	- millimetre(s)
mg/l	- milligram(s) per litre
mg/m ³	- milligram(s) per cubic metre
mg/m ² /day	- milligram per square metre per day
µg/m ³	- microgram(s) per cubic metre
m ³ /d	- cubic meter(s) per day
m ³ /s	- cubic meter(s) per second
NHA	- National Heritage Area
NO _x	- Oxides of Nitrogen
NO ₂	- Nitrogen Dioxide
ou/m ³	- odour unit per cubic metre
S.I.	- Statutory Instrument
SO ₂	- Sulphur Dioxide
SPA	- Special Protection Area
SS	- Suspended Solids
TSS	- Total Suspended Solids
VOC	- Volatile Organic Compound
°C	- Degree(s) Celsius

For inspection purposes only.
Consent of copyright owner required for any other use.

LIST OF TABLES

- TABLE 1.5/1:** Matrix for the possible Environmental Impacts associated with the Waste Baling Facility at Robinhood Road, Dublin 22.
- TABLE 1.5/2:** Summary of the Environmental Impacts of the Waste Baling Facility at Robinhood Road, Dublin 22.
- TABLE 2.1/1:** Management Structure at the Oxygen Environmental Ltd. Waste Baling Facility, Robinhood Road, Dublin 22.
- TABLE 2.5/1** Raw Material Quantities per Annum
- TABLE 3.2/1:** Areas of Conservation in the vicinity of the site
- TABLE 3.4/1:** Surface water monitoring locations
- TABLE 3.4/2:** General Chemical Analysis Results for Kylemore Road Bridge (0400) from 1998 to 2000
- TABLE 3.4/3:** Biological Analysis Results
- TABLE 3.4/4:** General Chemical Analysis Results for Robinhood Stream
- TABLE 3.4/5:** Metal Scan Results for Robinhood Stream2
- TABLE 3.4/6:** Cation Results for Robinhood Stream
- TABLE 3.4/7:** Organic Results for Robinhood Stream
- TABLE 3.4/8:** Surface Water Monitoring Results 2002
- TABLE 3.4/9:** Surface Water Monitoring Results 2003
- TABLE 3.6/1:** Baseline NO₂ and SO₂ Results
- TABLE 3.6/2:** Baseline BTEX Results
- TABLE 3.6/3:** Location of Directional Dust Deposition Gauges
- TABLE 3.6/4:** Historical Total Dust Deposition
- TABLE 3.7/1:** Location of Noise Monitoring Points
- TABLE 3.7/2:** Robinhood Site Noise Measurements 2003
- TABLE 3.7/3:** Robinhood Site Noise Measurements 2004
- TABLE 3.9/1:** Wind Speeds (knots) at Casement Climatological Station 1968 - 1996
- TABLE 3.9/2:** Percentage frequency of wind speeds at Casement Aerodrome 1981 - 2000
- TABLE 3.9/3:** Precipitation Rates at Casement Climatological Station 1968 - 1996
- TABLE 3.9/4:** Air Temperature at Casement Climatological Station 1968 - 1996
- TABLE 3.11/1:** List of Archaeological sites

LIST OF FIGURES

FIGURE 1.2/1:	Regional Location of Site
FIGURE 3.3/1:	Geology of Kildare – Wicklow (GSI 1994)
FIGURE 3.6/1:	Air Monitoring Locations
FIGURE 3.8/1:	Local Road Network
FIGURE 3.10/1:	View from west from Robinhood Road
FIGURE 3.10/2:	View from east from Robinhood Road
FIGURE 3.11/1:	Cultural Heritage Sites Surrounding the Existing Site

For inspection purposes only.
Consent of copyright owner required for any other use.