



## Planning Appeal Online Observation

Online Reference  
NPA-OBS-003032

LID: 08/01/24  
LDG:  
PMT 053707-73

### Online Observation Details

Contact Name  
Keith kavanagh

Lodgement Date  
20/12/2023 19:54:50

Case Number / Description  
318566

### Payment Details

Payment Method  
Online Payment

Cardholder Name  
keith kavanagh

Payment Amount  
€50.00

### Processing Section

S.131 Consideration Required

☒ Yes — See attached 131 Form

☐ N/A — Invalid

Signed

EO

Date

21/12/23

### Fee Refund Requisition

Please Arrange a Refund of Fee of

€

Lodgement No

LDG—

Reason for Refund

Documents Returned to Observer

☐ Yes ☐ No

Request Emailed to Senior Executive Officer for Approval

☐ Yes ☐ No

Signed

EO

Date

### Finance Section

Payment Reference

ch\_3OPVqwB1CW0EN5FC0boyqI0S

Checked Against Fee Income Online

EO/AA (Accounts Section)

Amount

€

Refund Date

Authorised By (1)

SEO (Finance)

Authorised By (2)

Chief Officer/Director of Corporate Affairs/SAO/Board Member

Date

Date

File With

## SECTION 131 FORM

Appeal No

ABP— 318566-23

Defer Re O/H

☒

Having considered the contents of the submission dated/received from Keith Keenanagh I recommend that section 131 of the Planning and Development Act, 2000 be/~~not~~ be invoked at this stage for the following reason(s):

No. 1a planning grounds.

Section 131 not to be invoked at this stage.

☐

Section 131 to be invoked — allow 2/4 weeks for reply.

☐

Signed

Date

EO

Signed

Date

SEO/SAO

M

Please prepare BP — Section 131 notice enclosing a copy of the attached submission.

To

Task No

Allow 2/3/4 weeks

Signed

Date

EO

Signed

Date

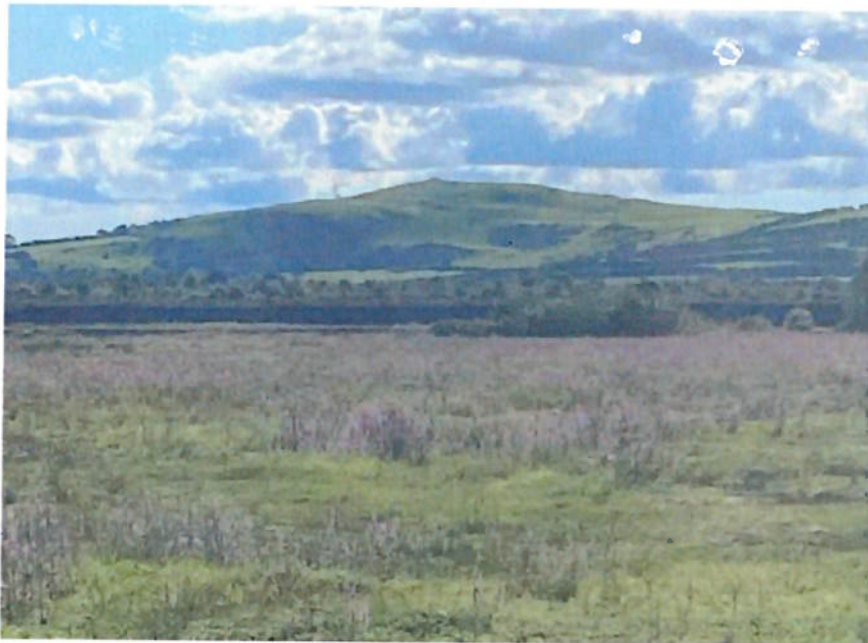
AA

## **Appeal Observation**

### **OXIGEN FACILITY**

**ABP 318566 Offaly County Council Ref 22490**

#### **ON BEHALF OF RESIDENTS ASSOCIATION OF RHODE & CROGHAN**



**Figure 1 Picture from Proposed Waste Facility Location Derryarkin, Rhode, Offaly**

#### **DERRYARKIN, RHODE**

**Keith Kavanagh BEng MEng MIEI**

**Postal Address: Coolcor Rhode Co Offaly R35K523**

**on behalf of Residents Association of Rhode & Croghan**

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## 1.1 Observation

This submission serves as an online observation on behalf of the **Residents Association of Rhode and Croghan** to the proposed development (ABP 318566-23 / Offaly County Council Ref 22490) at Derryarkin, Rhode, Co Offaly. The diversion of waste from landfill, through the recovery of resources to create closed material life cycles as outlined in the *Waste Action Plan for a Circular Economy*<sup>1</sup> is welcomed. However, the conclusions and underpinning rationale within the submission and the EIAR are heavily biased and flawed. It is noteworthy, that the data pertaining to traffic baselines within the original submission are more than 2 years out of date.

The following is included as a basis for the observation on behalf of the Residents Association:

1. Roads Built on Peat (R400)
2. Capacity and Condition of the R400
3. Designation of the R400 (Westmeath Versus Offaly)
4. Use of Obsolete Traffic Surveys 2021
5. R400 Forecasted Cumulative HGV increases from 71K to 102K
6. An Bord Pleanála Condition 8 Ref. 19.PA0032
7. Ground Water Vulnerability - Peat Coverage (Hydrology)
8. Proximity of a Tributary Stream of the Yellow River (< 6m)
9. Designated Proposed Route
10. Contradictory AADT Figures
11. Transfer of Waste from Urban Centres
12. Failure to Update EIAR Obsolete Information
13. Site Selection Methodology
14. Lack of Public Consultation and Evasive Approach
15. Compliance History of the Developer Oxygen
16. Lack of Independent Means of Monitoring Activities
17. Future Granting of an EPA License
18. Flawed and Pervasive Methodology of Biodiversity Surveys
19. Designation of Croghan Hill under the Offaly County Development Plan
20. Impacts of Cumulative Development on the Local residents
21. Bord Na Mona Gas Generation Plant Derrygreenagh
22. Proximity of Private Dwellings
23. Noise
24. Socioeconomic Impacts

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<sup>1</sup> [gov.ie](http://www.gov.ie) - Waste Action Plan for a Circular Economy ([www.gov.ie](http://www.gov.ie))

## 1.2 Roads Built on Peat (R400)

The development for Oxygen's waste processing facility is proposed to utilise the R400 for 44% of imports and 5% of exports from the facility<sup>2</sup>. This will require HGVs to deliver the planned 90,000 tonnes of waste annually; requiring HGVs (12-15T) to arrive full and leave empty and consequently larger HGVs (20T) to arrive empty and leave full. The R400 is constructed on peat and Offaly Council in their RFI under a non-related application Ref: 21291 (Edenderry Power Plant [iDocs Web \(eplanning.ie\)](#)), subsequently granted by an Bord Pleanála, noted their concerns for roads build on peat. Point 1 of the further information quoted *"HGVs can be detrimental to vulnerable roads, particularly those founded on peat"*.

The Offaly County Development Plan 2021-2027<sup>3</sup> identifies the R400 as a restricted regional route as shown in Figure 2 citing carrying capacity as the reason for this classification.

13.5.4 Planning Policy and Development Control

13.5.4.1 Offaly County Development Plan 2021-2027

Offaly County Development Plan 2021-2027, Table 8.4 'Restricted Regional Routes in County Offaly' lists R402 between Ballina and Edenderry as restricted and the reason is on account of carrying capacity. The R400, R420 are similarly listed in the plan. Offaly County Development Plan 2021-2027, Figure 8.10 provides a map showing all restricted regional routes throughout the county.

The R400, R420 and R402 are all routes that are highlighted in Offaly County Development Plan 2021-2027, Figure 13-1 as those facilitating transport of materials to the proposed development site.

PL2 / 22 / 490  
21 / 09 / 2022

Figure 2 R400 within the Offaly County Development Plan

This classification includes the section of road from Rhode village to the county boundary with Westmeath (Figure 3). All HGV traffic entering and existing the site will be required to use a section of this road. The County Development Plan as noted in Figure 3 details *"a restrictive policy on new development in the interests of preserving the traffic capacity and to avoid the creation of hazards"*.

<sup>2</sup> [View Files \(eplanning.ie\)](#) Page 5 of 46 of EIAR Chapter 13

<sup>3</sup> [County Development Plan 2021-2027 Archives - Offaly County Council](#)



## Rhode & Croghan Residents Association

Offaly County Development Plan (2021 – 2027) Table 8.4 and corresponding Figure 8.10 identify R400 from Rhode to the county boundary with Westmeath as a 'Restricted Regional Route'. The Development Plan highlights such regional routes as being of strategic importance to the county and region and outlines that in the case of these regional routes, especially those that carry higher volumes of traffic, the Council adopts a restrictive policy in relation to new development in the interests of preserving the traffic capacity and in order to avoid the creation of traffic hazards.

**Figure 3 R400 Designation From Rhode to County Boundary with Westmeath**

R400 is constructed over bog and in places the condition and structure of the road is considered poor. Offaly County Council Planning File Ref. PL2/21/291 provides as part of a Response to A Request for Further Information dated 10-May-2021 a comprehensive Road Condition Survey for the R400 between R402 and the M6 Motorway Junction 3 which was undertaken by PMS Ltd. The survey includes a Structural Evaluation and Pavement Investigation together with Road Surface Profile Survey. The PMS reports are dated September 2021.

**Figure 4 Further Info. Request under Ref PL2/21/291 a comprehensive road survey**

Offaly Council as shown in Figure 4 sought further information relating to planning reference PL2/21/291 which included a comprehensive structural road survey of several sections of road including the R400. The findings pertaining from this survey for the R400 and its extremely poor condition are shown in the subsequent sections of this submission.

### 13.5.3 Heavy Goods Vehicles (HGV) Routing

#### 13.5.3.1 General

For clarity it is proposed that HGV will use the R400 and extended regional and national road network. Except in the case of potential local refuse collection and skip collection. No HGV traffic arising at the proposed development will be required to use the local road network or county roads. The following routing for site generated HGV traffic is based upon the current commercial activities of the Applicant. The volume of material transported to the facility is commercially driven and sources may vary as contracts arise and expire as is the nature of such operations. The rate of materials arising in any one particular area can fluctuate over time. The following traffic distribution figures are based upon examination of existing commercial activities and collection routes. It is accepted that local pick-up routes will alter nevertheless the macro picture of haul routes to and from the site is considered likely to be representative over the long-term.

**Figure 5 OXIGEN Stated Local road Network not being used**

As will be shown later in the submission, 15K additional HGV trips will be generated by the facility annually all requiring routing through Rhode Village. The developer stating that no local roads will be used (as in Figure 5) is completely inaccurate. Later in Chapter 13 of the EIAR the reports states (shown in Figure 6) that the development does not generate traffic in a residential area. This is wholly inaccurate given the facility will directly generate 15K trips through the main residential area of Rhode village. All 15K HGVs will pass the local primary school.



## Rhode & Croghan Residents Association

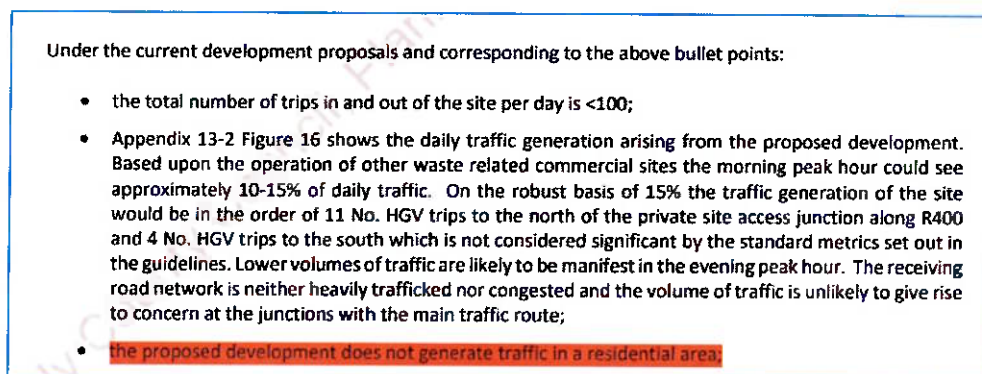


Figure 6 Page 34 of Chapter 13 of the EIAR citing no traffic in a residential area

### 1.3 Capacity and Condition of the R400

The consultant acting on behalf of OXIGEN for this proposed facility (Fehily / Timony) commissioned a structural road survey on behalf of another client, Bord Na Mona, for planning reference PL2/21/291. This survey and subsequent report were completed by PMS in 2021. This included a very comprehensive structural road survey of several sections of road, including a 15km section of the R400 which is quoted as the N6 to the R402 junction. The R400 intersects and passes beyond both junctions in both directions.

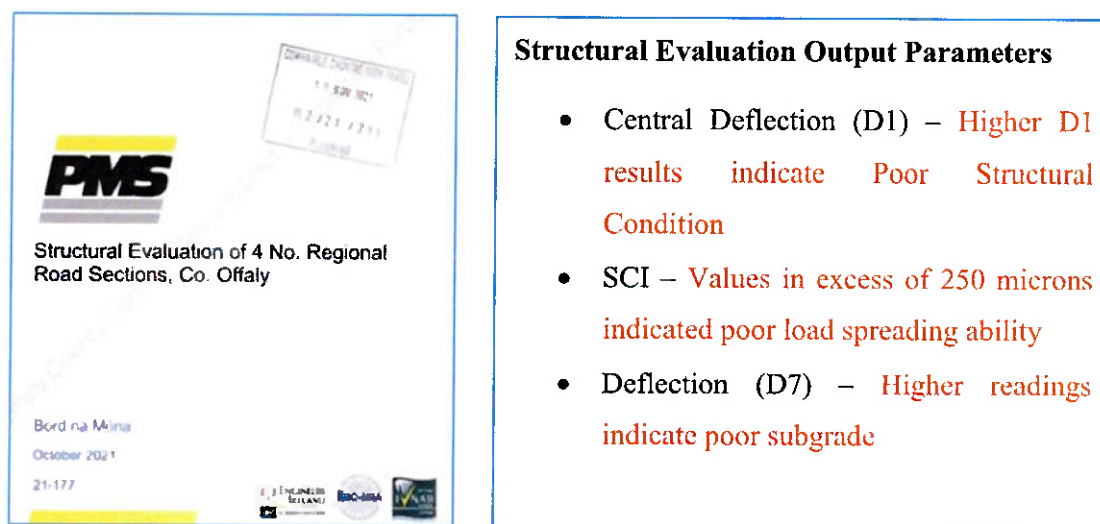


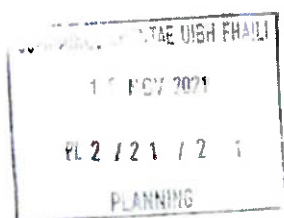
Figure 7 Survey Completed by PMS dated Oct 2021 & Key Performance Parameters

## Rhode & Croghan Residents Association

The engineering criteria outlined in the report<sup>4</sup> specify several output parameters including:

- Central Deflection (D1)
- Surface Curvature Index (SCI)
- Deflection (D7)

The right-hand section of Figure 7 above (taken from the report) notes that higher values of Central Deflection (D1) and Deflection (D7) indicate poor structural condition and poor subgrade respectively. Whilst Surface Curvature Index (SCI) values in excess of 250 microns indicate poor load spreading ability.



Description	Regional Road (microns)
Good	< 300
Good to Poor	300 to 500
Poor to Bad	500 to 800
Bad	> 800

Table 2: Categorisation of D1 Deflection Results

Upper Pavement Description	Regional Road SCI (microns)
Good	< 150
Good to Poor	150 to 250
Poor to Bad	250 to 400
Bad	> 400

Table 3: Categorisation of SCI Results

Subgrade Description	Regional Road D7 (microns)
Stiff	< 15
Stiff to Moderate	15 to 30
Moderate to Weak	30 to 45
Weak	> 45

Table 4: Categorisation of D7 Deflection Results

Figure 8 Good, Poor and Bad Classification (PMS Report)

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<sup>4</sup> [iDocs Web \(eplanning.ie\)](#)

[View Files \(eplanning.ie\)](#)

## Rhode & Croghan Residents Association

The survey included 4 road sections totalling approximately 36 kms. The 4 road sections are divided into 32 chainage sub sections. The R400 accounts for 15Kms of the total routes surveyed. The performance of the R400 as graphed in Figure 9 shows **poor structural condition, poor load spreading ability and poor subgrade** throughout and further notes the initial sections from the N6 (from Rochfortbridge) through Rhode village as being in particularly bad condition.

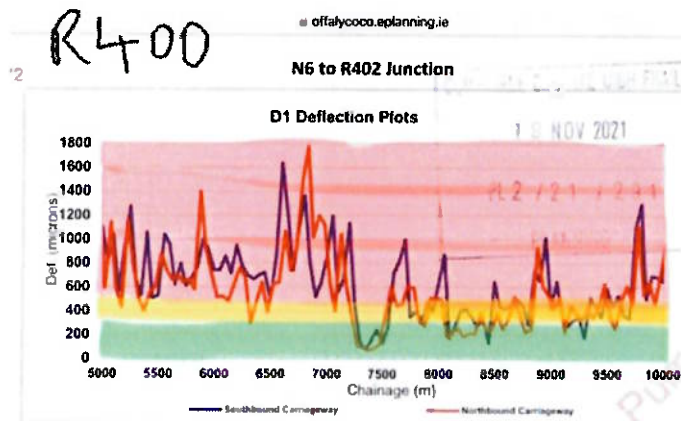


Figure 4 D1 Deflection Plots

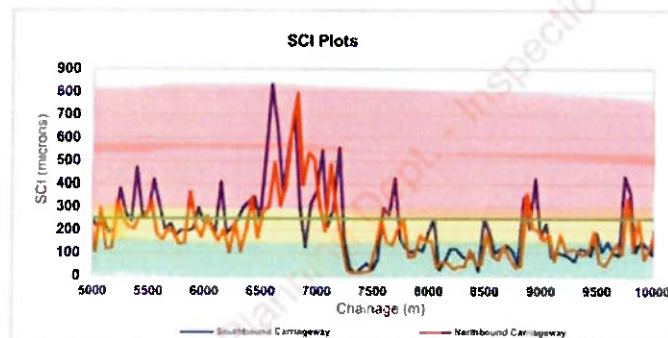


Figure 5 SCI Plots

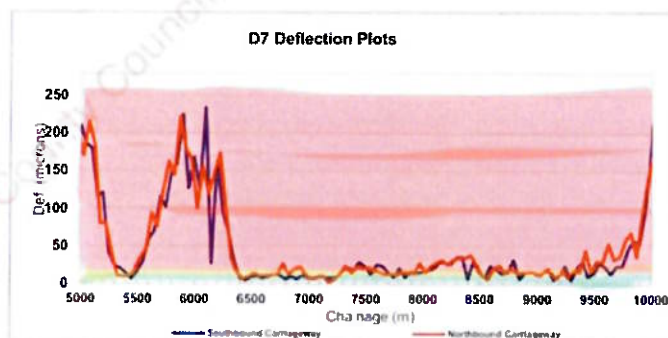


Figure 9 R400 Performance - Good, Poor and Bad Classification

## Rhode & Croghan Residents Association

Figure 10 that follows shows the results for each of the 4 roads and all associated 32 chainages.

# R400

Section	Lane	Chainage (m)	Road Classification	Average D1 (microns)	Description	Average SCI (microns)	Description	Average D7 (microns)	Description
1 N4 to R402 Junction <b>14.8 KM</b>	Southbound	0 - 1700	Regional Road	233	Good	51	Good	89	Weak
		1700 - 4650		736	Poor to Bad	233	Good to Poor	121	Weak
		4650 - 7350		804	Bad	299	Poor to Bad	74	Weak
		7350 - 10450		523	Poor to Bad	146	Good	42	Moderate to Weak
		10450 - 14800		572	Poor to Bad	230	Good to Poor	26	Soft to Moderate
	Northbound	25 - 1775		262	Good	71	Good	74	Weak
		1775 - 4625		695	Poor to Bad	211	Good to Poor	124	Weak
		4625 - 7275		775	Poor to Bad	267	Poor to Bad	88	Weak
		7275 - 10425		455	Good to Poor	121	Good	41	Moderate to Weak
		10425 - 14775		470	Good to Poor	183	Good to Poor	28	Soft to Moderate
2 Mount Lucas to R401 Junction <b>12.9 KM</b>	Eastbound	0 - 2700	Regional Road	374	Good to Poor	143	Good	26	Soft to Moderate
		2700 - 6100		256	Good	100	Good	10	Soft to Moderate
		6100 - 11000		214	Good	80	Good	17	Soft to Moderate
		11000 - 12900		358	Good to Poor	143	Good	16	Soft to Moderate
		25 - 2925		363	Good to Poor	141	Good	26	Soft to Moderate
	Westbound	2925 - 6575		273	Good	102	Good	19	Soft to Moderate
		6575 - 11375		238	Good	86	Good	13	Soft
		11375 - 12875		402	Good to Poor	157	Good to Poor	19	Soft to Moderate

Section	Lane	Chainage (m)	Road Classification	Average D1 (microns)	Description	Average SCI (microns)	Description	Average D7 (microns)	Description			
3 Power Station North to R402 <b>4.6 KM</b>	Southbound	0 - 750	Regional Road	421	Good to Poor	248	Good to Poor	9	Soft			
		750 - 2900		599	Poor to Bad	213	Good to Poor	65	Weak			
		2900 - 4100		418	Good to Poor	117	Good	86	Weak			
		4100 - 4700		578	Poor to Bad	153	Good to Poor	135	Weak			
		25 - 725		394	Good to Poor	238	Good to Poor	7	Soft			
	Northbound	725 - 2875		535	Poor to Bad	197	Good to Poor	58	Weak			
		2875 - 4875		398	Good to Poor	102	Good	104	Weak			
		4875 - 4675		578	Poor to Bad	160	Good to Poor	140	Weak			
		4 Power Station South to Croghan <b>3.3 KM</b>		Southbound	0 - 450	Regional Road	542	Poor to Bad	174	Good to Poor	60	Weak
					450 - 1200		222	Good	71	Good	19	Soft to Moderate
1200 - 3350	508		Poor to Bad		203		Good to Poor	22	Soft to Moderate			
25 - 475	731		Poor to Bad		183		Good to Poor	125	Weak			
475 - 1175	281		Good		80		Good	19	Soft to Moderate			
1175 - 3325	573		Poor to Bad	231	Good to Poor		22	Soft to Moderate				

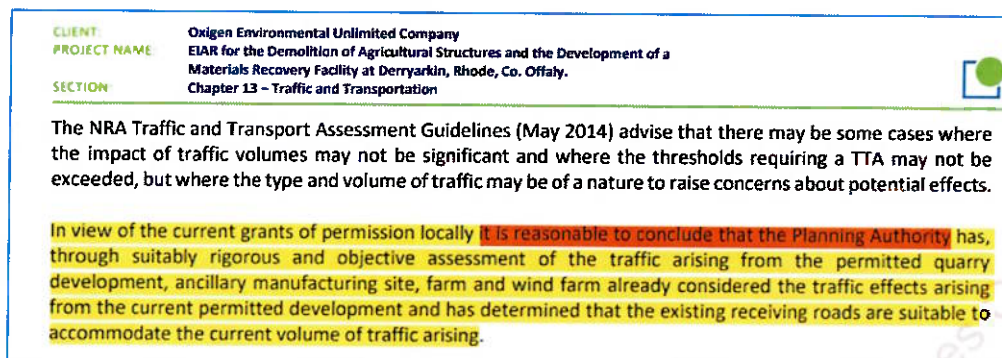
Table 5: Homogenous Segment Categorisation (Continued)

**Figure 10 Overall Results across all 32 Chainages**

Of note, the R400 has:

- a 2.7 km chainage (the only one of the 32) with average D1 designated as “Bad”.
- 5 further chainages with D1 values designated as “Poor to Bad”.
- 2 chainage sections where the SCI values are designated as “Poor to Bad”, noting no other road chainages of the 32 had similarly bad results.
- 6 of the 10 chainages with D7 values designated as “Weak”.

## Rhode & Croghan Residents Association



**Figure 11 Assumption of Rigorous Assessment by OCC**

The excerpt from Section 13<sup>5</sup> of the EIAR Transport chapter as shown in Figure 11 quotes “*it is reasonable to conclude that the planning authority has through suitable rigorous and objective assessment*” ...concluded ...“*that the existing receiving roads are suitable to accommodate the current volume of traffic arising*”. Given the road condition outlined in the PMS report and the capacity issues evident on the R400 already, such an assumption cannot be taken to be likely or robust.

The report<sup>6</sup> includes further engineering parameters including International Roughness Index (IRI), Rut Depth and Longitudinal Profile variance (LPV).. High IRI and LPV indicate rough roads with poor ride quality and the ride quality of the pavement from the user’s perspective. Figure 12 shows the R400 being again the worse performing road section when all parameters are considered together. Noting that 2 of the 3 highest LPV values are from the R400 sections.

The PMS survey comprehensively demonstrates the extremely poor condition (and comparatively poor condition by contrast) of the R400 and its unsuitability for any increased HGV traffic.

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<sup>5</sup> [View Files \(eplanning.ie\)](#) Chapter 13 page 34 of 46

<sup>6</sup> [iDocs Web \(eplanning.ie\)](#) ref 21291 F.I. Received Doc



## Rhode & Croghan Residents Association

Table 2 presents the overall average IRI, Rut Depth and LPV results for each lane surveyed

Road No.	Section	Lane	Length (m)	IRI (m/km)			Rut Depth (mm)			LPV (3m)		
				Left	Right	Avg.	Left	Right	Avg.	Left	Right	Avg.
R400	N6 to R402 Junction	SB	14810	5.5	4.4	5.0	12.7	2.7	7.7	6.0	3.9	4.9
R400	N6 to R402 Junction	NB	14810	5.4	4.3	4.9	11.9	2.8	7.3	5.7	3.3	4.5
R402	Mount Lucas to R401 Junction	EB	12880	2.3	2.1	2.2	5.8	1.4	3.6	1.1	0.9	1.0
R401	Power Station North to R402	SB	4670	5.1	4.3	4.7	14.5	2.4	8.4	4.8	3.1	4.0
R401	Power Station South to Clonbullogue	SB	3320	5.5	4.6	5.0	10.4	2.4	6.4	4.4	3.1	3.7
R401	Power Station South to Clonbullogue	NB	3320	6.2	4.8	5.5	12.9	3.8	8.4	7.2	3.3	5.2
R401	Power Station North to R402	NB	4670	4.6	4.7	4.7	13.1	2.7	7.9	4.6	3.4	3.7
R402	Mount Lucas to R401 Junction	WB	12890	2.4	2.0	2.2	5.4	1.5	3.4	1.1	0.7	0.9

Table 2: Overall Average Results

Figure 12 IRI, Rut Depth and LPV Poor Outcomes

### 1.4 Designation of the R400 (Westmeath Versus Offaly)



Figure 13 R400 5-Axle Ban in Westmeath (Rochfortbridge to Mullingar)

The R400 travels from Cushina near Portarlinton where it meets the R419 to Mullingar in Westmeath via Rochfortbridge. The section of road from Rochfortbridge to Mullingar (in Westmeath) is in significantly better condition than the sections in county Offaly from Rochfortbridge to Rhode. There is currently a HGV management strategy deployed in Westmeath which prohibits 5 axle vehicles. Despite a poorer road condition and narrower carriageways, no such HGV management strategy is deployed on the County Offaly sections. An example of the unsuitability is shown in Figure 14 where a HGV overturned in February 2022 after meeting another HGV along the narrow carriageways and poor margins.





Figure 14 HGV on R400 in Offaly Feb 2022

### 1.5 Use of Obsolete Traffic Surveys from Sept 2021

Figure 15 notes Automatic Traffic Counter Surveys were conducted in September 2021. Figure 15 notes the use of a 5-day moving average to compensate for the effects of COVID on traffic levels. Given the impact on the R400, the use of two-year-old traffic surveys as a basis to forecast into the future, coupled with the fact that they coincided with the pandemic, falls short of any professional standard that would be reasonably deemed acceptable. This subsequent methodology which incorporated a 5-day moving average for correcting for COVID effects is simply flawed any effects would have been evident throughout this period.

#### 13.5.5 Surveyed Network Traffic Flows

To assess the current traffic characteristics of the receiving road Automatic Traffic Counter (ATC) surveys were carried out by Traffinomics (formerly Abacus Transportation Surveys). ATC equipment was installed on the R400 to the north of the existing private access road serving the development site and Kilmurray Sand and Gravel. The ATC recorded traffic data for one week starting at midnight on Monday 13-Sept-2021 and ending at midnight on Monday 20-Sept-2021. In addition, classified turning count surveys were undertaken at the existing site access and at junctions on R400 between Rhode and Rochfortbridge. These were undertaken in September and November 2021. Comprehensive summaries and analyses of the survey data are presented in this Chapter and a full copy of the base traffic survey data is provided in Appendix 13-1 which includes figures showing the junction count locations and location of ATC count sites are identified by Google Map co-ordinates.

Figure 15 Section 13 EIAR Traffic Surveys

## Rhode & Croghan Residents Association

The ongoing Covid-19 Pandemic measures did not include for travel restrictions during the traffic surveys. TII traffic statistics for the M4 motorway show that ordinary traffic characteristics in 2021 have returned to near pre-Covid levels. Given that the pandemic may still have had some effect on surveyed network traffic flows we have examined the 5-day moving average traffic flow statistics for M4. The traffic surveys were undertaken in the first week in November. Comparing the TII statistics for that week in 2019 and 2021 confirms that the current flows are close to pre-pandemic values. The statistics show that car traffic in 2021 is 4% lower than in 2019 whilst HGV traffic is practically the same. To account for the possible effects of Covid-19 the base traffic flow data has been factored. The 2019 and 2021 TII data sets show similar profiles and similar volumes of HGV traffic. Based on this assessment the September and November 2021 traffic data is considered valid for use in these analyses.

**Figure 16 COVID Implications of Traffic Surveys**

Consequently, the rational underpinning the last sentence quoted in Figure 16 which concludes the data is considered valid for use, is fundamentally flawed.

### 1.6 R400 Forecasted Cumulative HGV increases (71K to 102K)



**Figure 17 Rhode Village - (Left) 2021 HGV Trips & (Right) 2024 HGV Trips**



**Figure 18 Rhode Village - (Left) 2029 HGV Trips & (Right) 2039 HGV Trips**

Note: Calculations use the 276 working days used by the applicant.

Year	HGV Trips
2021	71484
2024	73140
2029	85254
2039	102396

## Rhode & Croghan Residents Association

Analysis of the *Trafficwise* daily surveys for 2021 and associated forecasted daily surveys for 2024, 2029 and 2039 show HGV trips through Rhode village growing from 71K to 102K over this period. Given the R400 capacity and quality issues outlined herein; permitting further development on the R400 cannot be reasonably argued, to be in compliance with the “restricted designation” outlined in the Offaly County Development Plan discussed earlier.

CLIENT:

Oxigen Environmental Unlimited Company

PROJECT NAME:

EIAR for the Demolition of Agricultural Structures and the Development of a Materials Recovery Facility at Derryarkin, Rhode, Co. Offaly.

SECTION:

Chapter 13 – Traffic and Transportation

Table 13.7: Forecast Daily Traffic Generation (90,000t/a)

Stream	Import/Export	Typical Average Vehicle Payload		Daily Trips	
		Import	Export	Import	Export
MSW	40,000t	10-12t	20t	12-14	7
C&D	30,000t	3.2-4.8t	25t	23-34	4
DMR	8,000t	5-10t	15t	3-6	3
	12,000t	5-8t	15t	5-9	
			TOTAL	43-63	14

Figure 19 Summary Import & Export HGVs from EIAR Chapter 13

### Calculation of Import HGVs

- 63 (HGVs) x 2 (include return trip empty) x 276 (working days in year) x 0.44 (44 percent on R400) = 15301 additional vehicles

### Calculation of Export HGVs

- 14 (HGVs) x 2 (include return trip empty) x 276 (working days in year) x 0.05 (5% percent on R400) = 386 HGVs

### Calculation of Total Export and Import HGVs

The combined import and export trips totals equate to 15684 HGVs. Therefore 50% of the growth in HGVs through Rhode village into the future would result directly from the proposed Oxigen waste facility.

## 1.7 An Bord Pleanála Condition 8 Ref. 19.PA0032

An Bord Pleanála Case Ref. 19.PA0032 is for the proposed construction of a wind farm known as Yellow River Wind Farm. Offaly County Council has indicated that construction is expected to commence later in 2022. The permission granted by An Bord Pleanála dated 03-July-2014 under Condition No. 8 requires that prior to commencement of the development a condition survey of the R400 roads and bridges is to be carried out both before and after construction of the wind farm development. These surveys are required to include a schedule of required works to enable the haul routes, including R400, to cater for construction-related traffic.

Figure 20 An Bord Pleanála Condition 8 Ref. 19PA0032

An Bord Pleanála stipulated condition number 8 (Ref. 19.PA0032)<sup>7</sup> which required condition surveys of the R400 to be undertaken prior to commencement of construction and also afterwards. Given this stipulation, the PMS road survey discussed herein and the proposed increase in HGV numbers, it is prudent for Offaly County Council to ensure these surveys have been undertaken and that they are considered as part of any decision made on the proposed development.

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<sup>7</sup> [View Files \(eplanning.ie\)](#) (further Info Doc Received Page 6 of 172 as scanned in PDF)

### 1.8 Ground Water Vulnerability - Peat Coverage (Hydrology)

The developer's submission as shown in Figure 21 argues that groundwater vulnerability is moderate *"due to the presence of low permeability deposits of peat"*; yet state categorically that **"No peat was noted during the site investigation"**. The area is situated on an Esker whereby only a small percentage of the rain fall in the catchment area flows onwards via the Yellow river. The majority of the rainfall flows via gravel beds beneath the surface. Concluding that the area is protected via blanket bog but simultaneously noting that no peat coverage exists highlights the potential risk of disturbance to ground water flows.

#### 9.2 Baseline Environment

The subsoils present at the proposed development site were taken from the GSI 1:50,000 Quaternary Geology of Ireland map (GSI, 2021) and comprise of 'cut over raised peat' (Cut). Other deposits in the study area include 'gravels derived from limestones' (GLs) west and southwest of the proposed development site and 'till derived from limestones' (TLs) northeast of the proposed development site.

The intrusive site investigations completed within the proposed development site generally encountered concrete, made ground/fill or topsoil ranging from 0.1 to 0.8m in thickness overlying clayey and/or fine to coarse sandy gravel with occasional to many cobbles to a maximum depth of 12.0m BGL. Layers of silt, clay, sand and clay were noted at some locations.

**No peat was noted during the site investigation**, but shallow soils in TP1, TP3 and TP4 were noted as 'organic' or containing 'organic matter' to 1.1m.

Soils during the site investigation were closer to the GSI description of 'gravels derived from limestones' located west and southwest of the site.

The Groundwater Vulnerability is classified by the GSI as 'Moderate' at the proposed development site due to the presence of low permeability deposits (peat). **GSI mapping indicates a total thickness of overburden of 5 to 10 metres (GSI, 2021).**

Figure 21 Contradictory Peat Coverage Statements<sup>8</sup>

<sup>8</sup> EIAR Non-Technical Summary page 20 of 36

[iDocs Web \(eplanning.ie\)](http://eplanning.ie)



### **1.9 Proximity of a Tributary Stream of the Yellow River (<6m)**

As stated above, the proposed development site is within the Yellow River sub-catchment. The Yellow River drains an estimated catchment area of 44.5 km<sup>2</sup> in Co. Offaly to the west of Edenderry which includes Rhode and Castlejordan. The EIAR states *“the WFD risk status of the Yellow River waterbody is ‘At Risk’. The water quality is Poor due to less than Good biological status and elevated phosphate and ammonia. Peat extraction significant impacts water quality throughout this subcatchment. In addition, urban wastewater treatment and urban diffuse pollution is likely to be also impacting”*. The presence of the proposed facility, given its purpose, extensive diesel storage, increased traffic etc can only disimprove the quality noted within the report. The developer’s submission includes the site map superimposed in Figure 22 which notes the presence of a stream opposite the main entrance of the proposed facility.



**Figure 22 Stream Located 6 Metres from Site Boundary**



### 1.10 Designated Proposed Route Through Rhode

The proposed route for imports via the R400 as shown in Figure 23. The shortest distance from Edenderry to Rhode (R441) is 12Kms whereas the proposed designated route is via the R402 which is 20kms. No commercially operated company will choose to travel 8kms extra per trip. Whilst on paper this may be a plan, in practice there is no incentive or policing that will ensure this route will be followed. This would equate to Oxigens HGV's travelling an extra 125,472 kms (15684 trips x 8km additional). The reputation of the developer as discussed herein, gives zero confidence that the designated route would be followed.

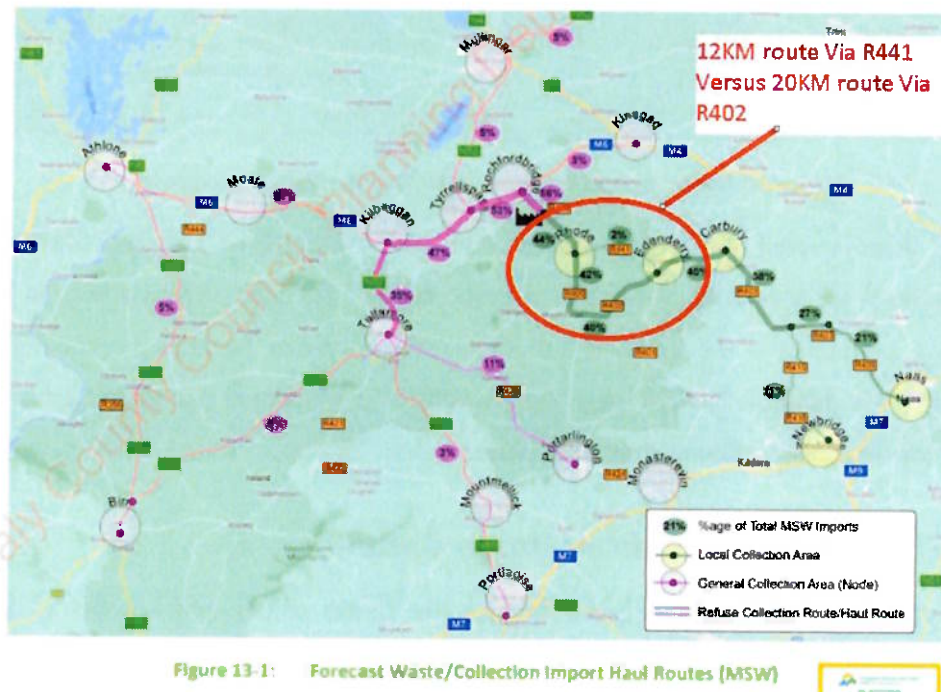


Figure 23 Theoretical Proposed Route (12 Versus 20kms)

### 1.11 Contradictory AADT Figures

The AADT, as defined by TII, is the Annual Average Daily Traffic volume passing a point or segment of a road for one full calendar year divided by the number of days in a year (365). Figure 24 contrasts

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the “Do Nothing Scenario” included for this application Ref 22490 and the same “DO Nothing scenario” for the previously mentioned submission for Bord Na Mona reference PL21/291 <sup>9</sup>.



Figure 24 Differing AATT values for R400 (“Do Nothing Scenario”)

The AADT values quoted for R400 North of Rhode is 3976 (Ref 22/490) versus 2444 (Ref 21/291) and similarly the % HGV of 6.9% versus 15.1 % respectively. The lack of consistency in the quoted values gives no confidence in the reports and the forecasted scenarios that are subsequently presented remain significantly dubious. I would urge the council to seek updated Automatic Traffic Counter Surveys and ensure accurate forecasting takes place.

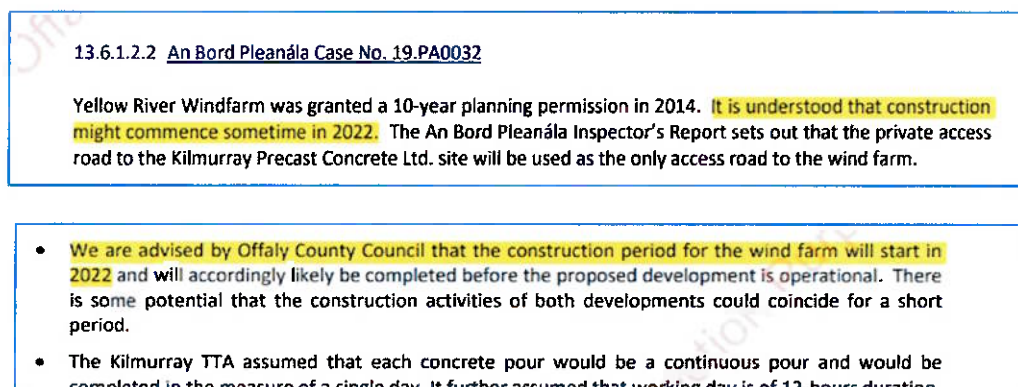
### 1.12 Transfer of Waste from Urban Centres

The Transport Section (13) of the EIAR depicts the traffic routes and sources of municipal, construction/demolition and commercial/industrial waste to the proposed facility. It can be seen from Figure 23 that more than 30% of the import municipal waste will come from large urban centres of Newbridge and Naas. **Hauling 30,000 tonnes of waste from large urban centres situated close to Dublin, back to the midlands for processing only then to export it back to Dublin for incineration is an environmentally unsound strategy.** Such processing facilities should be located in an industrial estate, serviced by main roads, which can cater for the traffic and serve as better

<sup>9</sup> Page 120 of 172 of the scanned Further Information Document Submitted for PL21/291 [View Files \(eplanning.ie\)](#)

locations for monitoring compliance with associated licensing. The site selection in Derryarkin is economically advantageous for the developer only but is clearly environmentally unsound.

### **1.13 Failure to Update EIAR Obsolete Information**



**Figure 25 Examples of outdated Documentation**

The developer simply resubmitted the same documentation without updating the status of the information contained within. The approach undermines the quality and standing of the overall submission. The significance of the development for the local residents should necessitate an up-to-date application which gives comfort to decision makers that it has been reviewed and updated in full. References to 2022 being in the future as shown in Figure 25 demonstrate the documentation was not reviewed.

### **1.14 Site Selection Methodology**

The EIAR noted six other locations across three counties that were ruled out for consideration. The criteria noted were almost exclusively based on economic and business factors impacting only the applicant. No detail on comparisons across the six sites was provided in the EIAR. The environmental and local impact received only minimal secondary consideration. The cumulative impact (traffic, noise, air pollution, road degradation etc) on locals from other industry were not fully considered. These sources were named but not robustly evaluated in a cumulative fashion. These include:

- an active quarry / concrete batching facility located c.80m west of the site which has permission for expansion

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- the Yellow River Windfarm project, which has been granted planning consent. This has been extremely invasive for residents during the construction period; causing the failure of a bridge at the river. Any suggestion that this was not the root cause of the failure is not truthful. The construction phase for the 32 turbines is only in its infancy
- Bord na Móna's Drumman timber storage, seasoning and chipping facility is situated c. 1.5 km north-east of the development site

I note council representative raised traffic and transport assessment at the Pre-Application Meetings. The first-hand experience of the cumulative impact on traffic, noise and air pollution from these industries/projects does not equate to the modelling assumptions and conclusions outlined in the EIAR.

### **1.15 Lack of Public Consultation and Evasive Approach**

The citing of traditional landfills and similarly more modern waste management/recovery/processing facilities, such as the proposed development, are and remain both contentious and pervasive. The strategy deployed by the applicant (Oxigen Environmental Unlimited Company) has been designed to minimise and evade notice by residents. Despite the application being submitted almost a year ago, not a single public submission was made until the 30th of August 2023. The original application remained completely unknown to residents in both Rhode in County Offaly and Rochfortbridge in neighbouring Westmeath; until Tuesday the 29th of August 2023. Hence the flurry of submissions that followed the day after. I note:

- no engagement or consultation with the public took place
- erection of the original site notice was out of public view in an area with no footfall
- inclusion of the site notice on one local paper with much reduced readership and with the development title quoting "*demolition of existing agricultural sheds*" as the primary element of the proposal. The 90,000 tonnes per annum being only secondary.
- erection of the RFI site notice in a similar location during an extended period when the R400 to Rhode village was (and remains) closed by Offaly County Council.

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The circular waste management principles call for better communication and increased education of the public. The strategy deployed falls well short of these principles. I have also experienced difficulty in attempting to research the contents of the National Waste Management Plan, which was not accessible from the County Council website<sup>10</sup> on Sept 1<sup>st</sup> 2023.

### **1.16 Compliance History of the Developer "Oxygen"**

The applicant proposing the development (Oxygen) has an extremely poor record with serious fires at their facilities in Ballymount in 2014 and in 2022 in Dundalk Co. Louth<sup>11</sup>. The former incident was investigated by the EPA who quoted in their report that *"there was an extensive smoke plume from the fire and the smell was reported widely throughout Dublin and received extensive media coverage from Figure 26"*. The fire burned for 4 days<sup>12</sup> with the air quality and consequently the public health being put in jeopardy. It is evident that the applicant did not learn from the initial incident given the serious recent reoccurrence. Offaly county council should learn from both incidents and avoid putting the welfare of local residents in Rhode, Croghan and in adjacent Rochfortbridge, Co. Westmeath in danger.

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<sup>10</sup> [National Waste Management Plan - Offaly County Council](#)[Offaly County Council](#)

<sup>11</sup> <https://youtu.be/kw0v5NTRnMI?si=PSLusg2K3PinVo3W>

<sup>12</sup> [Report-on-Air-Quality-Assessment-for-the-Oxygen-Fire-Incident.pdf \(epa.ie\)](#)

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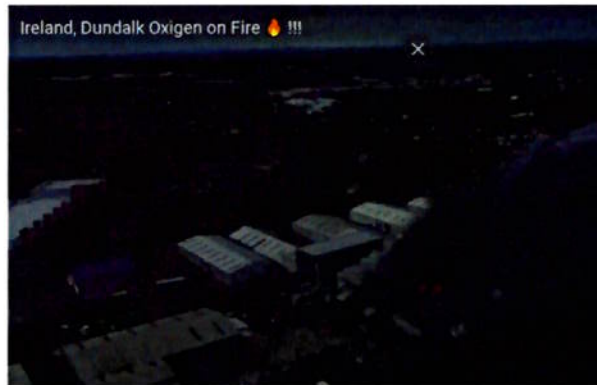


Figure 26 Sept 2022 Reporting of Fire in Dundalk at Oxygen Facility / Youtube Image



### Report on Air Quality Assessment for the Oxygen Fire Incident



Environmental Protection Agency

28/03/14

Figure 27 EPA Report from Oxygen's Ballymount Fire



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I refer to another submission by a concerned local resident which highlights the Corranure landfill site in Cavan also operated by Oxigen Environmental Ltd from 2007. *As a result of the volume of complaints the EPA carried received due to nuisance smells, Cavan County Council were issued with a non-compliance notification in terms of its license for operating this facility. Oxigen stated that they had implemented corrective action to prevent further release of nuisance odours yet records from the EPA indicate that complaints regarding the smell continued to be lodged. Following legal action by the EPA, Cavan County Council was fined €260,00 and Oxigen was fined €780,000 (€10,000 per week that they failed to address the issue). This facility was subsequently closed to waste in 2010 when the EPA decided to retain Cavan County Council as the licensee of the site and refused to allow the transfer of the license for full operations to Oxigen who had been running the facility. I believe this is a key indicator of the lack of trust the EPA had in Oxigen<sup>13</sup>, Offaly County Council should be sufficiently concerned regarding granting of permission for such a scenic area within the county.*

### **1.17 Lack of independent means of Monitoring Activities**

The proposed site is located off the main R400 road. The submission from the developer includes no provision for independently monitoring of activities that are proposed to take place. The reputation of the developer is cited again as a cause of concern for local residents and a high degree of scepticism from Offaly County Council is prudent.

### **1.18 Future Granting of an EPA License**

I note both a Waste Facility Permit (WFP) and Industrial Emissions (IE) Licence applications to Offaly County Council and the EPA are required. The IE licence application review process takes approximately 2 years and was only submitted after the original planning submission took place in Sept 2022. The business case for the facility requires both phase 1 and phase 2 to be viable. Proceeding with a facility with the uncertainty of receiving a valid EPA license is premature and presumptive.

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<sup>13</sup> Submission to OCC from Dr Hillary Cassidy [View Files \(eplanning.ie\)](#)

### 1.19 Flawed and Pervasive Methodology of Biodiversity Surveys

The EIAR report states “No bat evidence or sightings were recorded during an on-site survey undertaken on 17th June 2021”. It goes on to say “There were no observations of whooper swans using the proposed development site to roost or feed during the vantage point surveys and no other species were observed within the boundary of the proposed development site during the survey undertaken on 17th June 2021. It is not possible to extrapolate and draw conclusions categorically on surveys conducted on one single day. The quantitative assessment methodology is flawed and designed to be evasive. Figure 28 which was included in the appendices section of the EIAR amongst 48 miscellaneous documents demonstrates high levels of Whooper Swans present in Derryarkin. Failing to adequately survey the site at a time when the protected species would be expected to be present is the least that would be expected of any developer.

**Table 1.** Numbers of Whooper Swans using grassland feeding fields at Derryarkin, winter 2013/14

Date	Whooper Swans
15/10	0
29/10	0
08/11	0
17/11	3
24/11	37
04/12	59
16/12	56
29/12	53
09/01	78
18/01	30
29/01	40
07/02	65
19/02	64
27/02	79
05/03	108
13/03	98
19/03	95
25/03	54

**Figure 28 Whooper Swan Survey at Derryarkin Rhode**

### **1.20 Croghan Hill - Offaly County Development Plan**

*The Council recognises the scenic quality and recreational value of the Croghan Hill area. Croghan Hill, Raheenmore Bog (which is a designated Nature Reserve under the Wildlife Act 2000, as amended) and Cannakill Deserted Medieval Village are the main elements of the Area of High Amenity. **The Council, through its development management function, will seek to preserve the scenic amenity and recreational potential of this area and to protect it from development that would damage or diminish its overall attractiveness and character.***

The County development plan goes on to say – “*It is Council policy, to ensure that issues of scale, siting, design and overall compatibility (including particular regard to environmental sensitivities) with a site’s location within an Area of High Amenity are of paramount importance when assessing any application for planning permission. The merits of each proposal will be examined on a case-by case basis.*” The citing of a waste processing facility at the foot of Croghan Hill isn’t seeking to preserve the scenic amenity.

I also note the Council advised on environmental matters that needed to be considered and evaluated in the prospective EIAR including views from Croghan Hill at the outset of the planning process.



**Figure 29 Panoramic View from Croghan Hill**

The presence of Croghan Hill as a local amenity and the associated environmental consideration is completely disregarded in the EIAR. No attempt is made to realistically depict the views from Croghan hill which are included above and below in Figure 29 Panoramic View from Croghan Hill and Figure 30. The addition of a Waste Management Facility in such a scenic location will unnecessarily destroy what is a unique location within the county. A conclusion that suggests “*the proposed development will*

*result in a few negligible to slight, slight, slight to moderate” impacts is clearly flawed. The report states “In terms of, visual sensitivity of these six selected viewpoints, these ranged from ‘Low,’ in the case of a busy motorway corridor, to ‘High-medium,’ in the case of the summit of Croghan Hill”. The report acknowledges the High-Medium impact but doesn’t factor it into the overall conclusions.*



**Figure 30 Alternative View from Croghan Hill**

### ***1.21 Impacts of Cumulative Development on the Local residents***

The existing developments in the area have had a significant impact on local residents most recently with the R400 being closed due to a bridge failure. The site in question for this waste facility is located in an area with a number of large scale industries

- Yellow River Windfarm - 28 Turbines (Currently under construction)
- Board Na Mona; Derrygreenagh Gas Fired Power Station (Planning Granted in 2010, updated application due to be lodged later this year under Strategic Infrastructure Development process to An Bord Pleanala)



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- Future Renewable Energy Projects planned under Board Na Monas “Derrygreenagh Energy Park” 3,000 H/A site in which Derryarkin is located.
- Derryarkin Sand and Gravel extraction quarries – In operation at present
- Srah Solar Farm (132 HA)
- Clonin Solar Farm (96 HA)
- Cloncrean WindFarm (R400 used to transport aggregates)
- Moanvane Windfarm (R400 used to transport aggregates)
- Kiernan Milling Pig Farm (In operation at present)

The proliferation of future developments is significant and is beyond what any one area can be expected to tolerate.

### 1.22 Bord Na Mona Gas Generation Plant Derrygreenagh

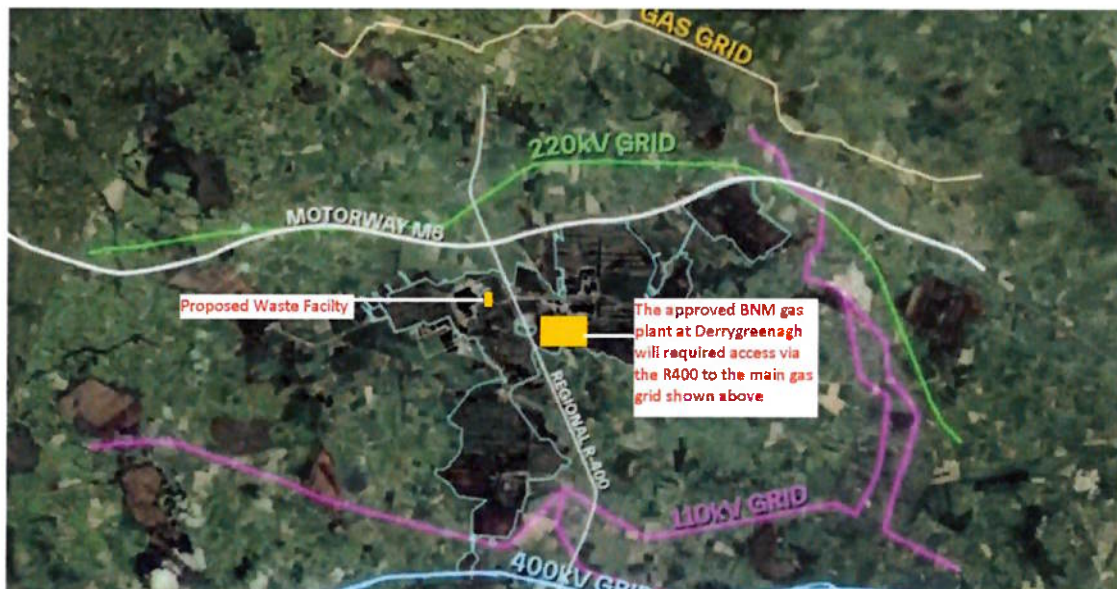


Figure 31 Approved Development of Gas Power Station at Derrygreenagh

It should be noted that the approved gas plant for Bord Na Mona at Derrygreenagh will require connection to the gas mains depicted on Figure 31. The R400 presumably will be required to facilitate this connection. Given the quality of the road outlined herein, the challenges of bog construction for a gas mains need to be considered by all granting authorities. The significance of increasing traffic on this route will likely be a restricting design constraint.

### **1.23 Private Dwellings**

The EIAR notes correctly that are private dwellings 755 and 770 metres from the proposed facility. Impacts on human health and welfare will occur should the development be approved for this location.

### **1.24 Noise**

The EIAR states *“the cumulative noise from an adjacent proposed Yellow River Windfarm and the proposed development site have been assessed. The windfarm comprises 29 No. turbines and was granted permission in 2014. Carrying out superposition analysis where neither development physically exists in practice is flawed. Installing an acoustic monitor when the windfarm is built and operational is the only means of carrying out an effective assessment. The conclusions drawn are not robust. I also note the EIAR quotes the number of turbines as 32 elsewhere in the report. This suggests the analysis was likely completed with the incorrect number of turbines.*

### **1.25 Socioeconomic Impacts**

Several studies have concluded that such waste processing facilities reduce market value by 5.5-7.3% of market value, and have further concluded that facilities accepting large volumes of waste can decreased house values in the area by 12.9%.<sup>14</sup>

### **1.26 Conclusion**

The analysis contained within this submission highlights the unsuitability of the R400 for any increased HGV traffic. The cumulative impact of the proposed developments in the area are not accurately captured in the cumulative assessments. They are underpinned by obsolete information from more than two years

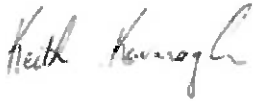
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<sup>14</sup> Separate Submission by Dr Hillary Cassidy [View Files \(eplanning.ie\)](#)



Rhode & Croghan Residents Association

ago. Thank you for considering this submission on behalf of the Residents of Rhode and Croghan and I ask that the proposed development at this location be rejected.



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**Keith Kavanagh BEng MEng MIEI**

**On Behalf of the Residents of Rhode and Croghan**

