### **SECTION 3: HUMAN BEINGS**

#### 3.1 INTRODUCTION

This section of the Environmental Impact Statement addresses the impact of the restoration works at the former sand and gravel quarry at Blackhall, Punchestown, Co. Kildare on the human environment. The Environmental Impact Statement is being prepared in support of an application by Behan's Land Restoration Ltd. for a waste licence for continuation of the existing site restoration works and associated construction and demolition recovery activities.

In undertaking this study, regard has been had to the requirements of the EPA publication 'Guidelines on the Information to be contained in Environmental Impact Statement' for waste facilities, and includes, but is not limited to consideration of the economic activities, existing amenities and sensitive receptors in the vicinity of the site.

#### 3.2 RECEIVING ENVIRONMENT

## 3.2.1 Outline of Baseline Study and Methodology

The baseline study of the area, with regard to Human Beings, involved study of the Census Report (2006) information for the District Electoral Division (DED) of Newtown, Co. Kildare. Other statistics were derived from use of local knowledge.

A survey of housing in the Blackhall area was carried out, the results of which are illustrated on Figure 3.1. Ordnance Survey maps and aerial photography were also examined, as well as local knowledge of recent and potential future housing developments, to establish the local housing pattern.

## 3.2.2 Site Context

The former sand and gravel quarry which is currently being restored is located within the townland of Blackhall, Punchestown, Co. Kildare approximately 5km south-east of Naas and 5km northwest of Blessington, Co. Wicklow The site is currently accessed from a local road which runs from the R410 Regional Road at Beggars End Crossroads to Walshestown townland.

There are a number of isolated residences in the immediate vicinity of the site. Of these, one, along the western site boundary which is surrounded on three sides by the application site is the private residence of John Behan, a Director of Behan's Land Restoration Ltd (the Applicant).

#### 3.2.3 Demography

The former sand and gravel quarry is located within the townland of Blackhall, in the District Electoral Division (DED) of Newtown, in which some 473 people reside. The demographic trends for the DED over the past ten years, shown in Table 3.1, illustrate a moderate increase in population in that time, most of it in the four year period between 2002 and 2006.

Year	Newtown DED			
1996	418			
2002	420	(+2)	(+0.5%)	
2006	473	(+53)	(+12.6%)	

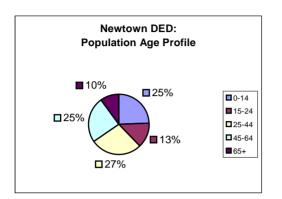
Source: Census of Population 1996,2002,2006 C.S.O.

**Table 3.1: Recent Population Trends** 

The age profile at local and national level is indicated in Table 3.2 below. In all age groups in Newtown DED, there are slight variations with State averages. Although a high proportion (almost one quarter) of the local population is in the 0-14 age group, the proportion of adults in the traditional household formation age category (25-44) is less than that for the State as a whole.

	0-14	15-24	25-44	45-65	65+
Newtown DED	116	63	130	117	47
	24.5%	13.3%	27.5%	24.7%	10.0%
Ireland	20.4%	14.9%	31.7%	21.9%	11.0%

Source: Census 2002, Small Area Population Statistics



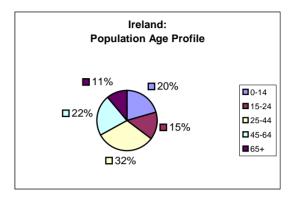


Table 3.2: Age Profile

The lower proportion of adults in the 15-24 and 25-44 age groups and the higher proportion in the 44-65 and 65+ age groups is not untypical of rural areas, where older children and young adults generally migrate to urban centres to work and study, leaving parents and/or other older relatives in the family home.

The recent increase in population, may suggest that the area has recently come into favoured with family units, possibly on account of its proximity to two rapidly expanding urban centres, in Naas and Blessington and a major employment centre in Dublin.

Combining the 0-14 and 65 plus age groups gives an indication of the level of dependency within an area. The result is that the Newtown DED has a level of dependency of 34.5% compared to the state average of 31.4%. The implications for the dependency percentage are on service provision such as schools, healthcare etc.

# 3.2.4 Employment

The employment statistics as presented in Table 3.3 below indicate that there are good employment levels amongst residents in the area. The percentage of the population at work is 6.8% percentage points higher than the State average, the level of unemployment is approximately 69% of the average. The proximity of this area to urban centres such as Naas and Blessington, and to a major employment centre such as Dublin (25 miles) suggests that a high proportion of those "at work" commute outside the area.

	Available Workforce	At Work	Unemployed	
Newtown DED	357	59.9%	3.1%	
State	3,089,775	53.1%	4.5%	

Table 3.3: Employment

A breakdown of the industry in which those at work are employed is provided below in Table 3.4. The level of participation in the agricultural sector is more than double the national average, reflecting the predominantly rural nature of this area. While employment in manufacturing is broadly in line with national levels, it is noticeably lower in building and construction and somewhat higher in business and service industry.

	Agriculture	Manufacturing	Building and Construction	Commerce	Services	Other
Newtown DED	10.7%	12.1%	14.9%	25.7%	10.7%	26.1%
State	4.6%	12.6%	11.1%	28.1%	13.8%	29.8%

Table 3.4: Employment by Industry

#### 3.2.5 Economic Activities

There are three principle types of economic activity prevalent in the Newtown area:

- 1. Agriculture
- 2. Extractive Industry
- Leisure Industry

The location of these activities relative to the application site is shown on the land use map in Figure 3.2

# 1. Agriculture

Almost the entire land area within Newtown DED is used for agricultural purposes, principally grassland with a small proportion of tillage or forestry. Grassland is mainly used to support rearing of beef and dairy cattle. There is only limited sheep grazing in the area, including some around the application site.

# 2. Extractive Industry

There has been active and ongoing extraction of sand and gravel in this area for the past 30 to 40 years. It is a long established activity in the area and has provided employment over many years. The application site was a former sand and gravel quarry operated by Readymix (Ireland) Limited, which ceased production in the late 1990s Two major sand and gravel quarries in this area which continue to operate are

- the Cemex (Ireland) Ltd quarty at Walshestown, immediately west of the application site (sand and gravel extraction) and
- the CPI quarry at Newtown Great, south-east of the application site (sand and gravel extraction)

Immediately beyond the Newtown DED, there is another major sand and gravel quarry at Redbog, operated by Roadstone Dublin Limited. There are also several other relatively small scale sand and gravel quarries operating across the East Kildare Uplands within a 5-10km radius in Philipstown, Athgarrett and Wolfstown townalnds.

## 3 Leisure Industry

Punchestown Racecourse, which lies approximately 1km west of the application site, is one of the leading horseracing venues in Ireland. A national hunt meeting held at Punchestown each spring attracts large crowds and is one of the annual highlights of the Irish racing calendar. In recent years, the construction of additional facilities at the racecourse has seen increased use of the site for conferences and exhibition events.

# 3.2.6 Existing Amenities

The Newtown DED is predominantly rural in nature and has only a few small population clusters, most notably at Eadestown. While there is a church and national school at Eadestown, it has no retail outlets or service industry. The principal community organisation in the area is the local GAA club in Eadestown. Club facilities include a floodlit playing pitch and a clubhouse.

## 3.2.7 Sensitive Receptors

At the present time, the principal sensitive receptors in the vicinity of the application site comprise residents of four properties immediately beyond the application site. Of these, two properties lie beyond the south-eastern corner of the site, where the surrounding land has already been

restored to final ground level and returned to agricultural use. The two remaining properties are located immediately beyond the north-western corner of the site (house marked 'A' on Figure 3.1) and immediately beyond the north-eastern corner (house marked 'B' on Figure 3.1). Other residential properties located a distance beyond the application site are also identified on Figure 3.1

#### 3.3 IMPACT OF RESTORATION WORKS

The proposed site restoration works at Blackhall will require continued importation of inert soil and stones and recyclable construction and demolition waste from construction sites across the Greater Dublin Area. All imported soil and stones will be used to backfill the site, while the processed construction and demolition wastes will be either exported off site or used in the backfilling of groundwater and/or surface water ponds at the Blackhall site.

The duration of site restoration works is likely to be of the order of 15 years, although the environmental impacts will vary according as the active backfilling area moves across the site over that period.

Ultimately, all of the effects of a development on the environment impinge upon human beings. Direct effects relate to matters such as water and air quality, noise, and changes to landscape character. Indirect effects relate to such matters as flora and fauna.

The impact of the proposed remediation works on human beings is addressed in the succeeding sub-sections of this report by means of an appraisal of the effects of the development on the environment in general, of which human beings are an integral part.

# 3.3.1 Short-Term Impacts

The impacts on human beings will arise mainly through environmental factors that are detailed in other sections of this report; most notably reise and air quality (including dust). While there will be negligible or no impact on much of the local residential housing identified on Figure 3.1, there may be some limited minor impacts at the two residences closest to the application site when the active restoration area is closest to each property (i.e. during Phase 4C for the property at the north-east corner and Phase 3C for that in the south-west corner). The impacts which are likely to arise at these locations are associated with operational activities, specifically the importation and placement of soil and stones. These impacts are classified as temporary, minor and negative.

The potential and predicted impacts are detailed elsewhere in this report (Section 6 - Water, Section 7 – Air, Section 8 – Noise, Section 10 – Landscape and Section 12 – Material Assets).

As backfilling and restoration activities have been established for some considerable time at the application site (in excess of 6 years), the continued importation of inert / construction and demolition materials via the existing local road network will have no adverse implications for existing traffic levels or travel patterns, provided traffic levels remain essentially unchanged (as is proposed). As no additional traffic movements will be generated by the continued operation of the existing facility, there will be no adverse traffic related impacts (noise, dust etc.) on the existing human environment.

The proposed restoration of the former sand and gravel quarry will have no impact as regards existing employment levels. It is envisaged that the number of staff permanently employed at the facility will remain at 2. Qualified contractors will be brought on site to carry out any necessary infrastructure construction works. Environmental monitoring will be undertaken by independent consultants.

# 3.3.2 Long-Term Impacts

The long-term impact of backfilling and restoration of the application site, beyond its 15 year operational life, will be the elimination of established traffic movements over the local road network going to and from the site, with consequent improvement of the human environment. This impact is classified as permanent, minor and positive.

The infilling of the existing void and backfilling to former ground level will remove an unsightly feature in the existing landscape and restore the area to a more pristine agricultural landform. This impact is classified as permanent, minor and positive.

## 3.3.3 Interaction with other Environmental Receptors

As mentioned above, all environmental factors ultimately impact upon, and interact with human beings. These impacts are discussed in detail in the relevant sections of this report.

#### 3.4 MITIGATION MEASURES

Mitigation measures to be adopted during this restoration project will relate primarily to minimising any impacts of the project on surrounding sensitive receptors. These measures are discussed elsewhere in this EIS, in the sections to which they relate.

The duration of restoration activities in the immediate vicinity of local residences will be kept to a minimum. Existing screening berms will be maintained for the duration of restoration activities at the north-eastern corner of the site during Phase 4A in order to minimise noise and dust impacts and reduce visual intrusion at the nearby residences. Where necessary, some screening can also be provided by constructing temporary earth mounds at the south-western corner of the site during Phase 3C, when backfilling activities are closest to existing residences.



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