

NON TECHNICAL SUMMARY

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**Non-Technical Summary
of the Environmental Impact
Statement for the Land Reclamation
project at Kilmartin, Coynes Cross,
Newcastle, Co. Wicklow**

Introduction

Buchpa Ltd. propose to carry out a land restoration project on their own lands at Kilmartin, Coynes Cross, Newcastle, Co. Wicklow

An Environmental Impact Statement (EIS) in relation to the proposed development has been prepared by White Young Green Environmental (Ireland) Ltd. (WYG) on behalf of Buchpa Ltd. to accompany both the Planning Application and the Waste Licence Application to the Environmental Protection Agency (EPA).

The EIS describes the receiving or existing environment into which the proposed development will be placed. Potential impacts resulting from the development are outlined in the EIS together with proposed mitigation measures, which will prevent or reduce the identified potential impacts.

This document summarises the EIS and describes the scale and scope of the proposed development.

Proposed Development

The Kilmartin development will comprise the reclamation of a deep steep sided valley comprising wet ground at the base of the valley with recovered clean inert clays and soils and stones,. The proposal will in effect comprise a landraise operation by infilling the valley with the recovered materials. The site is located between the Wicklow Mountains and the Irish Sea, along the N11 dual carriageway about 5 km south of Newtownmountkennedy and 4km north of Ashford (see Figure 1.1.1), in the townland of Kilmartin. The project will be carried out on the Norse family lands who are the directors of Buchpa Ltd. The footprint of the reclamation area will cover an area of some 22.6 ha. The lands to the north, east and west of the site are also in family ownership. The southern side of the site is bounded by the Kilmartin stream and then high ground with coniferous forestry to the south of the stream. The western boundary of the footprint area is defined by the Coynes Cross road that links the Cullenmore interchange to Coynes Cross and the eastern boundary of the footprint area is defined by an access lane that links the L5064 to the R761 coast road linking Newcastle to Rathnew. Land in the area is primarily agricultural with a mixture of sheep and cattle grazing and some arable uses. There is a relatively small area of coniferous plantation to the south of the site. The site is drained by the Kilmartin stream which forms much of the southern boundary and

the Coynes Cross stream which drains west to east about 300m to the north of the footprint area. Both of these streams join together to the southeast of the site and then flow into Broad Lough where they join with the Vartry river and discharge to the Irish Sea at Wicklow town as the Leitrim river.

The development of the soils recovery facility is consistent with current development planning in County Wicklow and is compatible with the objectives and aspirations of both regional and national waste management strategies including those contained in the national policy documents "Changing our Ways", "Delivering Change" and "Taking Stock and Moving Forward" and in the updated Regional Waste Management Plan 2005 to 2010 for County Wicklow.

It is proposed to backfill in the deep valley to a height consistent with the existing high ground along the eastern and western sides of the valley. The lowest point of the valley is approximately 35mOD and the highest point is approximately 65mOD in the northwestern corner of the site. The final cap and finished contours will be designed with a gentle dome shape to facilitate the shedding of rainwater.

The void space of the valley has been calculated at 2.35 million m³. Using a typical conversion factor of 1.8 tonnes per m³ for Construction and Demolition (C&D) materials indicates an overall tonnage of

4.23 million tonnes will be required to complete the project. Buchpa Ltd. (Norse Family) applied for and were granted a waste permit by Wicklow County Council to restore the base of the valley floor with clean clays and soils in January 2007. This entailed placing c. 1.5m of clays over an area of some 5.8 ha at the base of the valley and is presently ongoing. This operation is proceeding in full compliance with the conditions of the waste permit and the requirements of Wicklow County Council and there have been no reported incidents or complaints to date. The Norse family wish to restore 22.6 ha of the site by infilling that part of the valley with clean inert clays and soils to provide level surfaces and the scale of this development requires planning permission and a waste licence from the EPA. The proposed development will be similar in every way to that presently being carried out under waste permit save for it will be at a greater scale in terms of area, height and volumes of material to be used for restoration. It is submitted that the company have demonstrated their ability and expertise in undertaking such an operation efficiently and in compliance with all regulatory controls and requirements.

Lands to the west, north and east of the landfill will be kept as buffer zones and maintained as agricultural land.

The facility will be designed, built and operated in compliance with EU and national environmental legislation. The facility will operate in compliance with the environmental standards set out in the

Waste Permit that may issue by Wicklow County Council.

Existing Environment

The development site is set in a rural landscape in the townland of Kilmartin. There are approximately 30 houses within 500 metres of the landfill footprint.

Average annual rainfall in the order of 796mm is expected at the site. The prevailing wind is from the west and south.

Dust and air samples were collected at the development site and the results were broadly typical of a rural environment.

Noise measurements were made at nearby locations and the baseline values were low and are representative of a rural setting.

Drainage from the site flows via seasonal drainage ditches into two small streams (the Kilmartin and the Coyne's Cross streams). The water quality in both streams was tested and found to be of good quality.

Trial pits excavated at the site indicate a minimum overburden thickness of 2m. The overburden comprises mainly of glacial till consisting of sandy clays and silts. The glacial overburden overlies bedrock consisting of greywacke and quartzite units of the Bray head Formation.

Three boreholes were installed at the site and bedrock consisting of weathered shaly bedrock was encountered at depths ranging from 11 to 14.2m below ground level. Groundwater contours based on water levels in these wells indicated groundwater flow in a southerly direction.

The proposed development site is not affected by any nature conservation designation. The Murrough coastal wetland complex (pNHA) is the nearest designated area and it is located about 2.3km to the east.

Mammal, bird and flora surveys indicate that the site contains a number of habitats that are of moderate to low ecological value. These include improved grasslands, hedgerows, recolonising bare ground, horticultural and tilled land. The site is considered very typical of lands in the region with no distinguishing features or habitats.

Common species of mammal expected at the site include the fox, brown rat, house mouse, wood mouse and rabbit. A number of protected species such as the pygmy shrew, badger and hedgehog are also likely to be present. Bats were not observed but may be present in some of the ivy clad trees.

No Bird species of conservation concern were recorded on site. A number of common bird species were recorded including blackbird, wood pigeon, robin, wagtail, coal tit, magpie, rooks and jackdaw.

Many of these were observed flying to and from the adjoining woodland to the south of the site.

The local area is situated in the Newcastle district electoral division whose population has seen an increase of 11.2% (Newcastle Upper) and 4.8% (Newcastle Lower) between 1996 and 2002. The local housing comprises farms and single-family detached bungalows and houses. The nearest house to the site, the Norse Family home is located near to the northern site boundary, c.150m north of the proposed area (footprint). The nearest town land is Coynes Cross consisting mainly of residential homes.

The vast majority of vehicular traffic at the site will be bulk haulage vehicles. Access from the N11 National Primary road will be via the Cullenmore interchange and along approximately 325m of the Coynes Cross road to the site entrance. Vehicles will not pass any houses en route to or from the site. The N11, the Cullenmore interchange and the Coynes Cross road are all relatively newly constructed roads and all have abundant capacity for additional traffic including HGVs.

The general landscape character of the area is one of hills and valleys with steep slopes at and to the west of the site with rolling fields to the east towards the coast.

The site itself ranges from some 35mOD at the base of the valley to a high point of 65mOD in the northwest of the site.

The valley shaped physiography of the site is such that there are very limited views into the site from most directions. The site cannot be seen from the east or west unless standing at the very site boundaries and looking down into the valley. Views from the south are limited to the high ground in the fields immediately to the south of the southern boundary and also from parts of the western suburbs of Wicklow town some 8km distant. Views from the north are limited to a few areas of high ground in the townlands of Ballyvolan, Timore and Kiltimon about 1km distant.

The vast majority of local houses within 1km of the site including those in the Coynes Cross area and Cullenmore have no views into the site due to the unique physiography of the site and adjoining ridges, high ground etc. Some houses immediately to the north of the site along the L-5064 road have limited views of the very northern part of the proposed site. These include the Norse family home and their two immediate neighbours to the west. There are a few views of the site from isolated houses located on high ground to the north of the site in Ballvolan, Timore and Kiltimon though these are approximately 1km distant.

There are no protected views or aspects, amenity, landscape or scenic designations at or in the vicinity of the site.

There are no designated routes or walkways at or in the vicinity of the site and no views of the site from walkways.

An archaeological assessment was undertaken within the area prior to the construction of the N11 dual carriageway between Newtownmountkennedy and Ballynabarny and the Kilmartin site area was included in the assessment (carried out by Wicklow County Council as part of the EIS for the N11 project). The results for the Kilmartin area indicated that there were no sites of archaeological interest on the proposed footprint of the project area. There are church ruins (SMR19:18) located on the property to the northeast of the footprint. Other sites such as a ringfort and Fulacht Fiadh's are located further north from the site, along with circular earthworks and a mound located further south of the property.

The site is well served by road infrastructure with the N11 and Cullenmore interchange adjacent to the site. There are ESB transmission lines running north to south to the west of the site and through the northwestern corner of the site and another line of ESB lines running east to west through the site. The Dublin to Rosslare railway line runs north south about 2.5 km to the east of the site. There are no known quarries within 1km of the site. There are no tourist features or areas of tourist importance at or in the vicinity of the site.

Description of the Proposed Development

The development will comprise the backfill and landraise of a deep natural valley with recovered clean inert clays and soils. The development will include the installation of a Portacabin administration building to include offices, canteen, toilets, washrooms and file stores. There will be an internal road constructed of hot rolled asphalt from the entrance gate to the office, other internal haul roads constructed of recovered hardcore materials (bricks, blocks, concrete, stones), a steel container for the storage of equipment, a wheelcleaning system, a waste quarantine area, a waste inspection area, an oil tank and oil bund, a silt trap, oil interceptor, soak pit, a septic tank, percolation area, entrance gate, car parking facility, cut-off drains and settlement lagoons, fencing where required and adequate lighting. The bulk of these structures will be temporary in nature and will be removed after the project is complete (estimated between 3 and 8 years).

If granted planning permission and a waste permit the first works on site will include the installation of the cut-off drains and settlement lagoons at the northern and southern sides, the cut off swales along the eastern and western sides, the installation of the gate, internal road, offices, wheelcleaning system and other necessary infrastructural developments. The first element of the reclamation project will be the

installation of a clay bank from east to west across the northern boundary of the footprint area. This will be completed and seeded and grassed at the earliest opportunity. Thereafter the vast bulk of the site works will be carried out behind, to the south of this bank. This will mean that the bulk of the site works will be carried out inside the bowl shaped valley which will ensure significant benefits to the operation of the site in terms of potential noise emissions, visual intrusion and to a lesser extent dust emissions.

The infill operation will proceed in a southerly direction until the southern bank is constructed. The final phase of the infill programme will comprise the final capping and shaping of the area. This will include finishing the area off with a dome shape to promote surface water run-off and covering the surface with a layer of good quality topsoil, seeding and grassing the entire surface.

Only clean inert clays, soils and stones will be used in the restoration programme. Some segregated concrete, bricks, blocks and stones will be used for the construction of site haul roads and hardstand. The materials will be sourced from County Wicklow, South Dublin and North Wexford.

Typical sources of material will include foundation excavations, road cuttings, site levelling, site clearance works, pipe laying trenches etc.

There will be three designated areas for the stockpiling of incoming materials. The first designated stockpile will consist of materials destined for backfilling in the project area. The second area will consist of pre-segregated C&D hardcore materials which will either be re-used on site or exported off site for reuse in the construction industry. The third area will consist of good quality topsoils. These will be maintained on site and used for final capping. Any surplus topsoil will be resold to the construction industry, landscapers etc.

Any suspect or contaminated materials will be placed in the waste inspection area, thoroughly inspected and if necessary placed in the waste quarantine area awaiting export off site to an appropriately licensed facility.

Surface water generated at the internal road, carpark and wheelcleaning system will be collected and directed to a silt trap, oil interceptor and then discharged to ground via a soakpit. Sewage effluent generated at the site (est. 800 litres/day) will be drained to a septic tank and percolation area which will be designed in accordance with the EPA Wastewater Treatment Manual "Treatment Systems for Small Communities, Business, Leisure Centres and Hotels".

Surface water drainage from the entire site will be controlled by cut-off drains to be constructed across the length of both the southern and northern boundaries and these will drain to settlement lagoons prior to

discharge to the local stream network. This will ensure that silt and suspended solids will be allowed to settle out of the water prior to draining to the local streams.

The proposed opening hours for materials acceptance at the facility are between 08:00 and 18:30 hrs Monday - Friday and 08:00 to 14:00 hrs Saturday. The site will be closed all day Sundays and bank holidays. There will be pre-opening and post-closure activity on the site from 07:30 to 08:00 and 18:30 to 19:30 in order to prepare the site in the morning and to finish off materials handling and closing the site in the evening. On Saturdays this will be carried out between 07:30 and 08:00 in the morning and from 14:00 to 15:00 in the evening.

It is estimated that there will be 8 to 10 staff required to operate the site. .

Site machinery will include dozers, backhoe excavators, a tipper truck, tractor and water bowser. .

It is proposed that up to 250 trucks per day be permitted to import materials to the site. This will reduce to 200 trucks a day during the traditional holiday months of July and August. It is expected that the actual number of trucks per day will depend to a large degree on the level of activity in the construction industry, weather conditions, time of year etc. and will likely be lower than the maximum numbers given above.

Potential Impacts, Mitigation Measures and Likely Significant Effects

The proposed development has the potential to impact on the receiving or existing environment at Kilmartin. However, the natural location and physiography of the site coupled with specific design features and the operation of the facility under a Waste Licence to be issued by the EPA will limit the potential impacts on the environment. Also, the implementation of a range of mitigation measures at the construction and operation stages will ensure that the project can be operated without causing nuisance in this rural environment.

There will be no impact on the local or global climate from the proposed operation.

Air quality will be controlled by dust controls at the site. These include the operation of a water bowser during dry windy conditions to dampen down bare soil areas, the installation of a wheelcleaning system, cleaning the internal and external roads of mud if required, and seeding and grassing completed areas at the earliest opportunity. Dust monitoring will be carried out on a regular basis in accordance with Waste Licence conditions.

There will be no significant impact from noise at any of the nearby dwellings. This is chiefly effected by the relatively low level of operating machinery, distance from the dwellings and natural screening by hills,

ridges and embankments between the site and the houses.

It is not expected that there will be any increase in vermin such as birds, rats or insects. Should an increase in rodent populations be observed then a specialist rodent control company will be contracted to deal with the problem. There should be little or no potential for any litter or fly tipping at the facility. However, weekly litter patrols will be carried out at the site and environs and any litter removed. If fly tipping occurs then measures will be adopted to deal with the problem.

There will be no impact on either the geology or hydrogeology of the area. Some minor changes to groundwater recharge mechanisms may occur but will be of no significance in terms of groundwater quantity or quality. There will be no impact on any nearby water wells from the development.

There is a potential for impact on surface water quality in that there is a potential for silt laden water to enter the local drainage network. Specially constructed cut-off drains and settlement lagoons will ensure that all drainage from the site is collected and passed through the lagoons prior to discharge to the drainage network.

The site is not located in any environmentally designated areas and local habitats were mapped as being of low to moderate importance. Site flora and fauna

are typical of this region and there are no unusual species present. Normal mitigation measures will be adopted to ensure minimal impact on the local flora and fauna. The development duration will be of short to medium term and once complete it is expected that natural flora and fauna will recolonise the area.

There will be no significant impact on the local populace in terms of socio economic, or health aspects. There may be a minor positive impact in that the facility will provide some local employment directly and to local service providers..

The traffic assessment carried out as part of the EIS indicates that the additional traffic associated with the site will not impact significantly on the roads, road safety or road users. The excellent access provided by the N11 dual carriageway and adjacent Cullenmore interchange ensures that there will be ample capacity for the predicted site related traffic volumes. It is proposed that the fence on the opposite side of the Coynes Cross road will be set back the required distance to provide the sightlines required in both directions from the site entrance/exit. The fence is located on lands in the ownership of the applicant.

There are no protected views or aspects, amenity, landscape or scenic designations at or in the vicinity of the site.

There are no designated routes or walkways at or in the vicinity of the site and no views

of the site from walkways. The construction and operation of the site will have minimal effect on the landscape character of the area and will not impact significantly on any views or prospects of the site. The landraise operation will raise the valley to a height commensurate with the existing high ground located to the east and west of the valley. The proposed final contours will blend in with the existing contours along the eastern and western sides. The area will be finished with a slight dome shape in order to promote surface water run-off from the site.

There are no sites of archaeological interest on the footprint area and therefore there will be no impact on the archaeology of the area. The old church ruins located to the northeast of the area are outside and well removed from the footprint and will be protected by additional fencing.

There are no quarries located within the immediate vicinity of the site. While tourism is noted as being an important aspect in County Wicklow generally and there are important tourist sites located regionally there are no significant tourist sites located within 1km of the site.

It is considered that this proposal will be of significant benefit to the County in terms of providing a large scale facility for the recovery of clean inert clays and soils at a site that benefits from excellent access characteristics due to its location adjacent to the N11 dual carriageway and Cullenmore interchange. At present, there are a large number of smaller similar type facilities

dotted around the County and many of these are accessed via small County or Regional roads. The proposed facility will provide a very accessible alternative and will reduce the industries reliance on these smaller facilities with a consequent reduction in the numbers of HGVs using smaller County and Regional roads.

It is not expected that there will be any significant negative impact from the interaction between impacts on various environmental media such as soil and water, water and human beings, water and ecology etc.

In summary, it is submitted that the proposed development will be of short to medium term duration (3 to 8 years) and will be designed and carried out in a manner, including for the implementation of a number of mitigation measures, such that there will be minimal impact on the local environment. In addition, the restoration project will be subject to the conditions of a Waste Licence to be issued by the Environmental Protection Agency and all activities, emissions and controls will be scrutinised rigorously by the EPA on a regular basis and this will ensure that the development is operated to the highest standards.