19 SOCIO-ECONOMIC

19.1 Introduction

19.1.1 This section of the ES describes the existing environment in relation to socio-economics and the potential impacts of the construction, operation and decommissioning phases of the proposed scheme.

19.1.2 It sets out the methods and assumptions used to assess potential effects, the relevant baseline conditions and context around the proposed scheme footprint, and presents a qualitative and (where possible) a quantitative assessment of the potential effects of the proposed scheme, appropriate mitigation measures and the residual effects that could remain after mitigation.

19.2 Legislation, policy and guidance

19.2.1 **Appendix 19.1** sets out the legislation, policy and guidance which are relevant to this section of the ES.

19.3 Consultation

19.3.1 **Table 19-1** provides a summary of the comments included in the PINS Scoping Opinion (**Appendix 4.2**) and received during consultation under Section 42 of the Planning Act 2008 with specific regard to socio-economics.

19.4 Methodology

Scope and objectives of the assessment

19.4.1 The objectives underlying the socio-economic impact assessment are to provide an assessment of:

- gross employment opportunities related to construction and operation;
- the effect of this gross employment creation in the context of the labour market and within the proposed schemes travel to work area;
- the potential effect with respect to demand for accommodation associated with the construction and operation stage employees;
- assessment of the net economic impacts, taking into account the extent of deadweight and the displacement of economic impacts;
- socio-economic impacts arising as a result of other impacts (e.g. noise and landscape and visual impacts) due to the construction and operation of the proposed scheme and their likely impact on tourism;
- the potential wider economic impacts, including the likely effects of spending, investment, exports, tax, supply chain and multiplier impacts, and economic effects of national significance; and,
- mitigation and enhancement options.

Table 19-1 Summary of comments in the PINS Scoping Opinion and received during consultation under Section 42 of the Planning Act 2008 with specific regard to socio-economics

Comment	Response / Section of ES in which the comment is addressed
Scoping comments (January 2014)	
Secretary of State	
The applicant is advised to consult with the local planning authority on the approach to the assessment as they may be able to provide relevant data.	Consultation was carried out under Section 42 of the Planning Act. No comments were received from the local planning authority on the proposed approach to the socio-economic assessment.
The Secretary of State recommends that the assessment criteria should be locationally specific and consider the potential significance of impacts within the local and regional context.	**Section 19.4**
The Secretary of State recommends that the types of jobs generated should be considered in the context of the available workforce in the area.	**Sections 19.6 and 19.7**.
The ES should quantify the likely influx of people to the area and therefore consider the impact of bringing workforce into the area, including impacts upon housing, healthcare and potential educational needs.	**Sections 19.6 and 19.7**.
Section 42 comments	
Homes and Communities Agency	
The Homes and Communities Agency (HCA) was mindful of the importance of this development to the Teesside economy and the potential new employment opportunities that will flow from the development. The HCA felt it necessary and important to demonstrate their support for this scheme and in particular the benefits that would be derived from it.	Noted.
The scope of the EIA makes reference to socio-economics as being one of the key topics to be investigated. As part of this, consideration should be given to the employment potential of the scheme and notably should refer to the capture of skilled jobs, full time jobs, locally sourced jobs, the advantages of using employers within the local supply chain and the knock on effect of spending in the local economy that might result.	**Sections 19.5, 19.6 and 19.7**.
Various operators	
A number of representations were received from various operators with regard to potential disturbance / disruption to existing assets within and adjacent to the footprint of the proposed scheme.	These issues are addressed within **Section 18.**

Methodology for determining baseline conditions and sensitive receptors

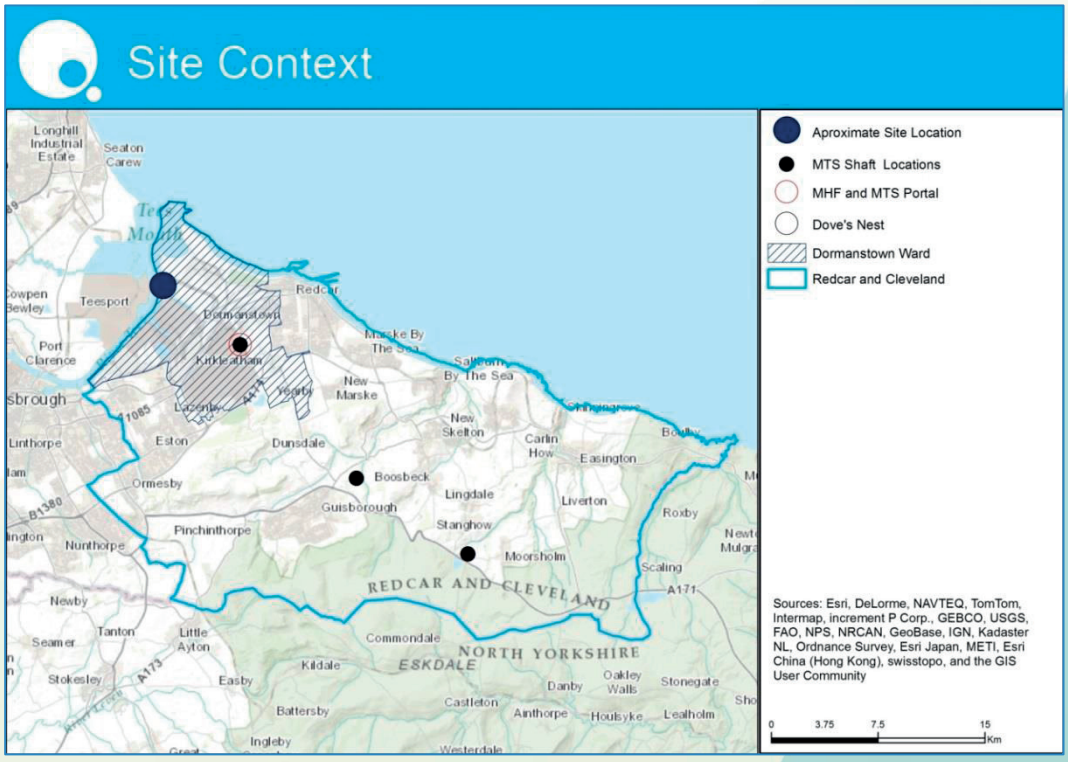
19.4.2 In order to assess the potential impacts of the proposed scheme, it is essential that the socio-economic characteristics of the baseline environment are identified and described. Baseline socio-economic conditions have been established through the interpretation of nationally recognised research and survey information, and work undertaken for other environmental topics, including:

- 2001 Census Data (ONS).
- 2011 Census Data (ONS).
- Business Register and Employment Survey (BRES) (ONS).
- Indices of Multiple Deprivation (IMD) (2010) (DCLG).
- Claimant Count Data (ONS).
- Department for Work and Pensions Labour and Benefits Data (ONS).
- Annual Population Survey (ONS).
- Annual Survey of Hours and Earnings (ONS).

Identification of relevant spatial scale

19.4.3 The geographical extent of the Local Area for this socio-economic assessment is Dormanstown ward; the ward in which the proposed scheme is located. In terms of socio-economic baseline data, the wider study area is based on areas of administrative geography, including national boundaries (England and Wales); regions (Yorkshire and Humber and the North East); and districts (Redcar and Cleveland, Middlesbrough and Stockton-On-Tees). The local area is mapped on **Figure 19-1.**

Figure 19-1 Site context



Identification of sensitive receptors

19.4.4 The spatial spread of effects varies depending on the different topic area. The sensitive receptors against which impacts have been assessed are:

- the economy at all spatial scales;
- businesses within the immediate area, the surrounding districts and the region;
- existing residents within surrounding districts; and,
- potential employees within the surrounding districts.

Receptor sensitivity

19.4.5 The main sensitive receptors for the socio-economic assessment are the accommodation and labour markets, businesses and communities at a number of spatial levels. It is not possible to ascribe specific 'values' to socio-economic sensitive receptors due to their diversity in nature and scale. There has, therefore, been a focus on the qualitative (rather than quantitative) "sensitivity" of each receptor and, in particular, their ability to respond to change based on recent rates of change and turnover. The socio-economic environment is a dynamic and adaptive one with constant background change and turnover, for example people moving into and out of the area and changing jobs. This is a particular feature of the construction sector.

19.4.6 This qualitative sensitivity is based on professional judgement but broadly ascribes low sensitivity to those receptors that are easily adaptive to change and high sensitivity to those receptors that are not easily adaptive to change. Broadly speaking, in the context of the size, change and turnover of the three districts' population and economy, these factors are of lower sensitivity, whilst provision of local services for which there is greater lead time and less dynamism, are of higher sensitivities. More specific quantitative values in order to assess these changes cannot be realistically made. This methodology has been widely and successfully applied by the authors of this assessment and subject to extensive review by Local Planning Authorities, including for the Applications for the other elements of the YPP.

Magnitude and significance

19.4.7 The assessment of significance levels combines an assessment of the overall magnitude or scale of the effect, and compares this to the ability of each receptor to respond to change. .

19.4.8 The assessment process aims to be objective and to quantify impacts as far as possible. However, some impacts cannot be quantitatively assessed; in such cases a qualitative assessment has been undertaken. In addition, the magnitude of the effect does not necessarily correlate with the impact significance. The key influences on the determination of impact significance include:

- the magnitude of the potential effect;
- the geographical extent of the effect;
- the duration and reversibility of the effect;
- the capacity of the relevant area to absorb the effect; and,
- recent rates of change in the locality.

19.4.9 The duration of effects are assessed as either temporary or permanent, as follows:

- short term (<5 years);
- medium term (5-10 years);
- long term (> 10 years); or,
- permanent (e.g. once the proposed scheme is completed and operational).

19.4.10 Impacts are defined as follows:

- beneficial classifications of significance indicate an advantageous or beneficial impact;
- neutral classifications of significance indicate no significant beneficial or adverse impact; and,
- adverse classifications of significance indicate disadvantageous or adverse impacts .

19.4.11 Where adverse or beneficial impacts are identified they are assessed against the following scale:

- negligible;
- minor;
- moderate; or,
- major.

19.4.12 For example, an impact of major or moderate significance (in either construction or operation) would be likely to be of major or at least moderate magnitude, affect a wide area, be permanent or irreversible and difficult to absorb in the relevant area.

19.4.13 Most of the temporary assessments focus on the 'peak' of the construction period. This enables the assessment to both demonstrate the maximum scale of beneficial impacts and ensure mitigation measures meet the worst case for adverse impacts.

Acknowledging a degree of uncertainty

19.4.14 It is necessary to acknowledge that there is a degree of uncertainty in the accuracy of the baseline characterisation, the prediction of the magnitude of effects and the vulnerability of receptors. Wherever possible, baseline characterisation and predictions in this ES have been supported by large volumes of data and high level technical expertise of the project team.

19.4.15 Where there is a significant level of uncertainty, sensitivity testing has been undertaken to obtain a range of potential values and capture the likely worst case scenario.

Assumptions and limitations

19.4.16 There are no further assumptions and limitations over and above those detailed in this sub-section.

19.5 Existing environment

Population

19.5.1 The total population of Dormanstown ward is approximately 6,755. The population profile of Dormanstown is similar to Redcar and Cleveland as a whole. As set out in **Table 19-2** and **Figure 19-2,** the proportion of the total population aged 65 and over is higher in Dormanstown than in the North East and in England and Wales.

19.5.2 Dormanstown experienced a significant decline in population between 2001 and 2011, of -7%. This is in the context 8% growth across England and Wales. The population of under 16s and 16 to 64 year olds both declined over this period while the population of over 65s remained the same. The population of under 16s in the ward declined significantly (by 24%).

Redcar and Cleveland's population also declined, although projections for 2021 show that this decline will stop, but no growth in population is predicted between 2011 and 2021. Population projections are not available at a ward level. Population dynamics data is presented in **Table 19-3.**

Table 19-2 Population and age profile of local, regional and national areas

Area	All	% Under 16	% 16-64	% 65+
Dormanstown (ward)	6,755	19%	62%	19%
Redcar and Cleveland	135,177	18%	63%	19%
Middlesbrough	138,412	20%	65%	15%
Stockton-On-Tees	191,610	19%	65%	16%
Yorkshire & the Humber	5,283,733	19%	65%	17%
North East	2,596,886	18%	65%	17%
England and Wales	56,075,912	19%	65%	16%

Figure 19-2 Age profile of local, regional and national areas

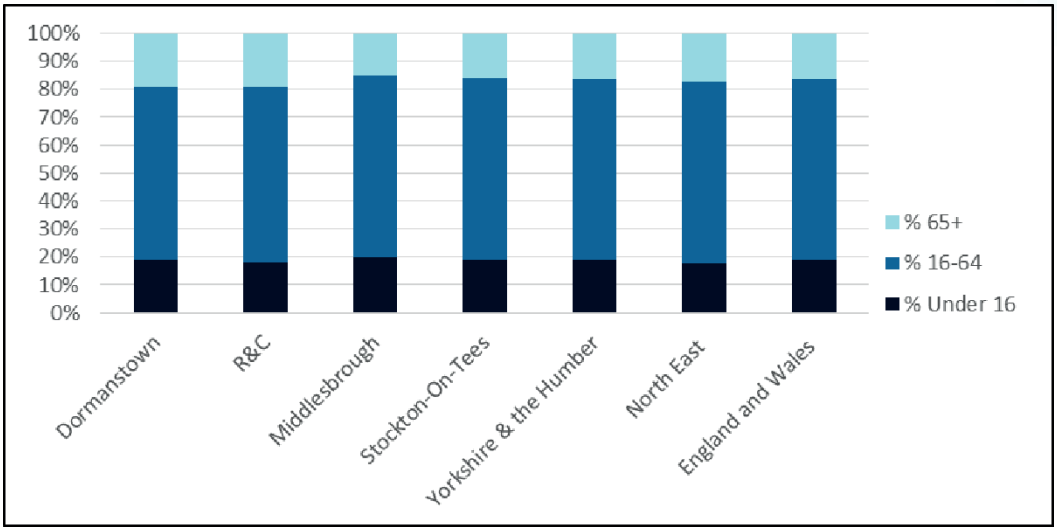


Table 19-3 Population dynamics within local, regional and national areas

	Population 2001	Population 2011	Projected Population 2021	% growth 2001-2011	% growth 2011-2021
Dormanstown (ward)	7,267	6,755	N/A	-7%	N/A
Redcar and Cleveland	139,130	135,177	135,466	-3%	0%
Middlesbrough	134,863	138,412	144,275	3%	4%
Stockton-On-Tees	178,414	191,160	206,717	7%	8%
Yorkshire & the Humber	4,964,830	5,283,730	5,657,240	6%	7%
North East	2,515,450	2,596,890	2,723,840	3%	5%
England and Wales	52,041,920	56,075,910	60,868,800	8%	9%

19.5.3 The population across Redcar and Cleveland is projected to age significantly between 2011 and 2021. The proportion of people aged 65 and over is projected to rise from 19% of the population in 2011 to 23%. The proportion of individuals under 16 is projected to remain steady at around 18% with the working age population declining from 63% to 58%.

19.5.4 Overall this will result in a rising dependency ratio across Redcar and Cleveland from 0.59 dependent residents per working age resident to 0.71, which could put increasing pressure on the working age population to support the remainder of the population.

The size of the labour market

19.5.5 As set out in **Table 19-4**, there are 4,837 people aged between 16 and 74 within Dormanstown ward. Of these, 54% are economically active. Unemployment within Dormanstown is relatively high, at 7% of

the population aged 16 to 74, although this is in line with the average across Redcar and Cleveland (but lower than the rate in Middlesbrough).

Table 19-4 Labour market within local, regional and national areas

	All persons 16-74	Active: part time	Active: full time	Active: self employed	Active: unemployed	All economically active 16-74 (not including full time students)
Dormanstown (ward)	4,837	16%	34%	6%	7%	2,644
Redcar and Cleveland	99,177	15%	34%	6%	7%	54,558
Middlesbrough	100,551	15%	31%	5%	8%	51,535
Stockton-On-Tees	140,654	16%	38%	6%	6%	83,938
Yorkshire & the Humber	3,875,219	15%	37%	8%	5%	2,513,141
North East	1,924,206	14%	37%	7%	5%	1,209,222
England and Wales	41,126,540	14%	38%	10%	4%	27,249,399

19.5.6 The proportion of those aged 16 to 74 who have retired within Dormanstown is 18% of the population, significantly higher than the average across England and Wales (14%), Middlesbrough (14%) and Stockton-On-Tees (15%), but slightly lower that the average in Redcar and Cleveland (19%).

19.5.7 The overall employment rate measures the proportion of people aged 16 to 65 who are in employment (full-time, part-time or self-employed) as per the European Commission official statistics. As **Table 19-5** sets out, the Employment Rate within Dormanstown is 64%, which is in line with average for Redcar and Cleveland but lower than the average for the North East and significantly lower than the Government's target of 73%, which is currently not achieved in any of the comparator areas.

Table 19-5 Employment rate within local, regional and national areas

Area	Employment Rate 16 to 64
Dormanstown (ward)	64%
Redcar and Cleveland	65%
Middlesbrough	60%
Stockton-On-Tees	69%
Yorkshire & the Humber	69%
North East	67%
England and Wales	71%

Area	Employment Rate 16 to 64
Government Target	*73%*

Job seekers claimants

19.5.8 The Claimant Count measures the number of people who are claiming Job Seekers Allowance. Within Dormanstown (2003 Ward) the latest claimant count, for February 2014, was 5.5%. This is relatively high compared to rates in comparator areas, as set out in **Table 19-6**. The only area reporting a higher claimant count rate is Middlesbrough with a rate of 6.7%.

Table 19-6 Job seekers claimants rate (population aged 16 to 64)

Area	Job Seekers Claimant Rate
Dormanstown	5.5%
Redcar and Cleveland	5.3%
Middlesbrough	6.7%
Stockton-On-Tees	4.8%
Yorkshire & the Humber	3.9%
North East	4.4%
Local Enterprise Partnership (LEP)	2.5%
England and Wales	3.0%

19.5.9 The majority of job seekers in Dormanstown ward are looking for personal service, sales, customer service, process, plant and elementary positions, as is the pattern generally in the economy. Within Dormanstown ward, there are approximately 170 job seekers looking for work in these types of occupations. However, there is still a small proportion of local job seekers (9%) looking for work in managerial and professional occupations and in administrative and secretarial occupations as set out in **Table 19-7**.

Table 19-7 Job seekers claimants by sought occupation (population aged 16 to 64)

Area	Managers, professionals and associate professionals	Administrative and secretarial occupations	Skilled trades	Personal services, sales and customer services	Process, plant and machine operatives and elementary occupations
Dormanstown (ward)	10	10	20	80	90
Redcar and Cleveland	245	250	405	1,550	1,705
Middlesbrough	295	280	445	2,080	2,545
Stockton-On-Tees	460	355	520	2,040	2,240

Figures have been rounded to the nearest 5 for confidentiality reasons.

Youth unemployment

19.5.10 Between 20% and 30% of Job Seekers Allowance claimants in each of the study areas are aged under 24. Within the Dormanstown ward this amounts to 65 young people; 1,155 within Redcar and Cleveland; 1,470 within Middlesbrough; and 1,620 within Stockton-On-Tees.

Benefit claimants rate

19.5.11 As shown in **Table 19-8**, Dormanstown has one of the highest rates of working age benefit claimants of the comparator areas. Both Middlesbrough and Redcar and Cleveland have relatively high benefit claimant rates. Redcar and Cleveland district has a benefit claimant rate of 19.7%, which is 6.2 percentage points higher than the England and Wales average. Dormanstown also records a high rate of out-of-work benefits when looking at the wider area; at 16.2% compared to 14.5% in the North East, and 10.8% across England and Wales.

Table 19-8 Working age benefit claimants rate (population aged 16 to 64)

Area	All working age benefit claimants 16-64	Out-of-work benefits for working age claimants 16-64
Dormanstown (ward)	20.1%	16.2%
Redcar and Cleveland	19.7%	15.8%
Middlesbrough	23.5%	19.6%
Stockton-On-Tees	17.1%	13.7%
Yorkshire & the Humber	15.1%	12.2%
North East	17.9%	14.5%
England and Wales	13.5%	10.8%

Qualifications

19.5.12 As set out in **Table 19-9** and **Figure 19-3**, the population of Dormanstown is relatively poorly skilled, with the highest rate of residents with no formal qualifications amongst the comparator areas. A third of the population (33%) has gained a Level 1 or 2 qualification. Dormanstown and surrounding districts show a much lower proportion of the population holding a Level 4+ qualifications compared to 27% across England and Wales.

19.5.13 Levels of apprenticeships are slightly higher in Dormanstown at 6% of the working aged population when assessed to the comparator areas of 4 to 5% of the population aged 16 to 74.

Table 19-9 Qualifications (population aged 16 to 74) within local, regional and national areas

Area	None	Level 1	Level 2	Apprenticeship	Level 3	Level 4+	Other
Dormanstown (ward)	32%	15%	18%	6%	13%	13%	4%
Redcar and Cleveland	28%	13%	16%	6%	13%	19%	4%
Middlesbrough	30%	14%	15%	4%	13%	19%	5%
Stockton-On-Tees	24%	14%	17%	5%	14%	23%	4%
Yorkshire & the Humber	26%	14%	15%	4%	13%	23%	5%
North East	26%	14%	16%	5%	13%	22%	4%
England and Wales	23%	13%	15%	4%	12%	27%	6%

19.5.14 The number of apprenticeships achieved in Yorkshire & the Humber and the North East increased steadily between 2005/6 and 2011/12 from an annual total of 33,950 to 52,420. Redcar and Cleveland Local Education Authority experienced a growth in apprenticeship achievements of 640, to 1,140 in 2011/12. In 2011/12, 60 of these apprenticeships (9%) were in construction, planning and the built environment sectors and 150 (23%) were in engineering and manufacturing technologies.

Occupational and industrial sector of working residents

19.5.15 The occupation profile of the population of Dormanstown and comparator areas is set out in **Table 19-10**. Dormanstown has a higher proportion of residents engaged in process and elementary occupations and service occupations than the comparator areas. A much lower proportion of Dormanstown residents are engaged in managerial, professional and associate professional occupations than comparator areas at 31% compared to Redcar and Cleveland at 32% and nationally at 41%.

19.5.16 The industry of employment of working age residents in Dormanstown is set out in **Table 19-10**. As is the case generally in the economy of England and Wales, wholesale and retail trades and health and social work are amongst the most significant employers. The proportion of residents engaged in manufacturing is slightly higher than the national average (10.3% compared to 8.9%). Information and

communication sectors, professional and scientific sectors and financial services are all significantly under represented as employers of local people (listed amongst other in **Table 19-11**).

Figure 19-3 Qualifications profile (population aged 16 to 74)

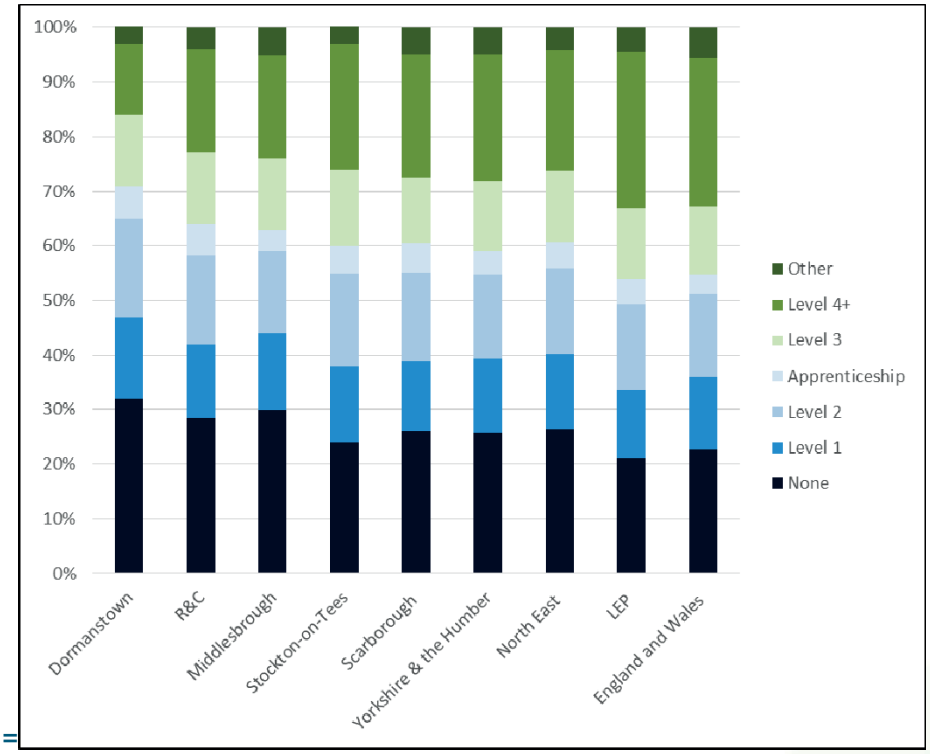


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Table 19-10 Occupation profile (resident population aged 16 to 74)

Area	Managers	Professionals and associate professionals	Administrative and secretarial occupations	Skilled trades	Caring, leisure, service occupation, sales and customer services	Process, plant and machine operatives and elementary occupations
Dormanstown (ward)	7%	17%	10%	15%	25%	26%
Redcar and Cleveland	8%	24%	11%	14%	22%	22%
Middlesbrough	7%	23%	10%	12%	23%	25%
Stockton-On-Tees	9%	28%	11%	12%	20%	20%
Yorkshire & the Humber	10%	27%	11%	12%	19%	21%
North East	9%	26%	12%	12%	21%	21%
England and Wales	11%	30%	11%	11%	18%	18%

19.5.17 **Table 19-12** below sets out the numbers of residents engaged in the manufacturing sector in Dormanstown and in comparator areas. There are approximately 280 residents of Dormanstown engaged in manufacturing. Almost half of these employees take part in low-tech manufacturing (C23-25) which has been defined by the ONS as the manufacture of non-metallic mineral products, basic metals and of fabricated metal products, except machinery and equipment. The rate of low-tech manufacturing is higher in Dormanstown and Redcar and Cleveland, at 4%, when compared to other areas which range from 1 to 2%.

Table 19-11 Industrial profile of Dormanstown (resident population aged 16 to 74)

Sector	% of residents Dormanstown	Total employed residents Dormanstown (figures have been rounded)	% of residents R&C	Total employed residents R&C (figures have been rounded)
Wholesale and retail trade; repair of motor vehicles and motor cycles	18.1%	500	15.7%	8,830
Human health and social work activities	14.7%	400	15.6%	8,790
Manufacturing	10.3%	280	10.3%	5,820
Construction	8.6%	240	8.8%	4,980
Education	8.2%	220	9.8%	5,550
Accommodation and food services	6.5%	180	5.4%	3,030
Administrative and support service activities	6.0%	160	4.3%	2,440
Transport and storage	5.6%	150	4.7%	2,650
Public administration and defence; compulsory social security	5.5%	150	6.4%	3,620
Other	16%	450	19%	10,658
TOTAL		2,730		56,370

Table 19-12 The manufacturing sector (resident population aged 16 to 74)

Area	% of residents	Total employed residents (figures have been rounded)	% of residents manufacturing low-tech (C23-25)	Total employed residents (figures have been rounded)
Dormanstown (ward)	10%	280	4%	115
Redcar and Cleveland	10%	5,815	4%	2,310
Middlesbrough	8%	4,430	2%	1,301
Stockton-On-Tees	10%	8,670	2%	2,090

Area	% of residents	Total employed residents (figures have been rounded)	% of residents manufacturing low-tech (C23-25)	Total employed residents (figures have been rounded)
Yorkshire & the Humber	11%	272,750	2%	58,815
North East	10%	117,995	2%	23,650
England and Wales	9%	2,370,000	2%	404,800

19.5.18 The construction sector broadly represents 8% of working aged residents across all spatial scales. This equates to 240 residents engaged in the construction sector in Dormanstown and 4,980 in Redcar and Cleveland, as set out in **Table 19-13**.

Table 19-13 The construction sector (resident population aged 16-74)

Area	% of residents	Total employed residents (figures have been rounded)
Dormanstown (ward)	8.6%	240
Redcar and Cleveland	8.8%	4,980
Middlesbrough	8.5%	4,620
Stockton-On-Tees	8.3%	7,200
Yorkshire & the Humber	8.0%	193,645
North East	7.9%	91,300
LEP	7.8%	43,296
England and Wales	7.7%	2,043,229

Deprivation

19.5.19 The Indices of Multiple Deprivation measures relative deprivation of neighbourhoods in England, taking into account a range of indicators including employment, crime, health and access to services. As set out in **Figure 19-4**, there are areas within the three district areas of Redcar and Cleveland, Middlesbrough and Stockton-on-Tees which are amongst the most and least deprived in England.

Figure 19-4 Deprivation in Three District Area

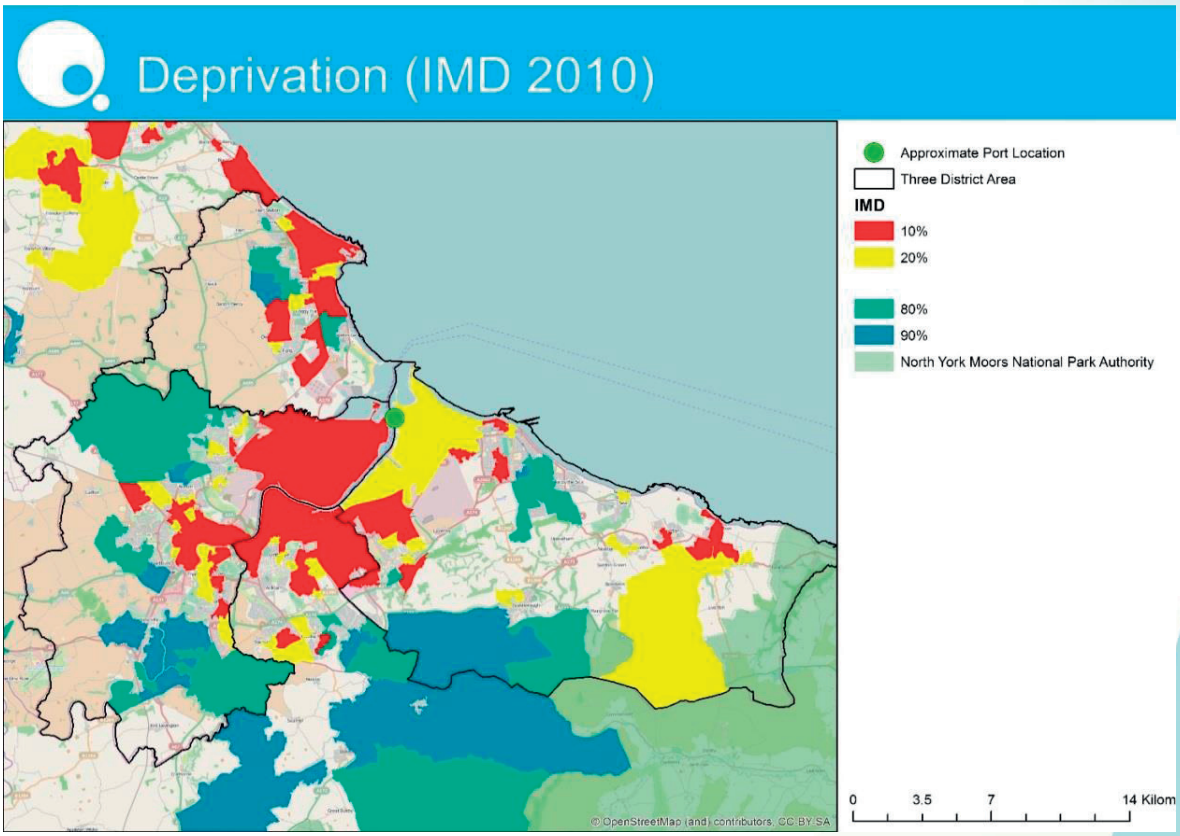

Figure 19-4 shows the three district areas of Redcar and Cleveland, Middlesbrough and Stockton-On-Tees. High deprivation is concentrated where these districts meet along the River Tees and along the coast in Stockton-On-Tees, including the proposed scheme footprint, which is an area that is amongst the 20% most deprived in England. Low deprivation is concentrated in rural areas around the North York Moors National Park.

The Local Economy

Employment

19.5.20 There are approximately 10,000 people working within Dormanstown ward. The largest sector of employment is the manufacturing sector making up 34.6% of all employment in Dormanstown ward. Other major employment sectors within Dormanstown ward are transportation/storage, administrative and support service activities, wholesale and retail trade, and public administrative and defence.

19.5.21 Transportation and storage is a proportionately large and important sector here, linked to the operation of the ports with 1,740 people engaged in the sector in Dormanstown alone, and 2,240 people engaged in the sector across Redcar and Cleveland. Further detail regarding employment within Dormanstown and Redcar and Cleveland as a whole is provided in **Table 19-14**.

Table 19-14 Employment (employees + proprietors, workplace)

Industry	Employment (Employees + proprietors) (Dormanstown Ward)	Proportion	Employment (Employees + proprietors) (Redcar and Cleveland)	Proportion
Manufacturing	3,457	34.6%	6,558	16.4%
Transportation and storage	1,744	17.4%	2,636	6.6%
Administrative and support service activities	1,101	11.0%	2,099	5.3%
Wholesale and retail trade; repair of motor vehicles and motorcycles	656	6.6%	6,137	15.4%
Public administration and defence; compulsory social security	598	6.0%	1,956	4.9%
Real estate activities	507	5.1%	857	2.1%
Water supply; sewerage, waste management and remediation activities	416	4.2%	595	1.5%
Professional, scientific and technical activities	383	3.8%	1,774	4.4%
Human health and social work activities	310	3.1%	5,609	14.1%
Education	192	1.9%	4,407	11.0%
Other	*336*	*3.3%*	*3,184*	*7.9%*
	10,000		39,907	

Employment in construction

19.5.22 The Business Register and Employment Survey, from which this data is drawn, is survey based and therefore subject to sampling errors which means that it should be used with caution, especially when used for time series or at a local level.

19.5.23 However, recent trends indicate that the number of people engaged in construction in the three districts considered within this section of the ES declined between 2009 and 2012 (the most recent data available), with an unconsolidated increase in 2011. This is set out in **Table 19-15**.

Table 19-15 Employment in construction

Date	Redcar and Cleveland	Middlesbrough	Stock-On-Tees	Total
2009	2,510	4,550	6,710	13,770
2010	2,210	3,630	5,640	11,470
2011	2,280	3,780	6,760	12,820
2012	1,780	4,000	5,650	11,430

The public sector

19.5.24 Exact numbers of people working in the public sector at a ward level was not available from national datasets. However, estimates of public sector prevalence can be made using the health, education and public administration and defence sectors as a proxy, although this likely to be an overestimate as some of these jobs could be in the private sector. For wider spatial scales, BRES provides an estimate of public sector reliance. Comparative levels of estimated public sector employment are set out in **Table 19-16** below. Public sector employment in Dormanstown is estimated to be higher than the comparator areas with the exception of Middlesbrough.

Table 19-16 Public sector employment estimates

Area	Public Sector Number BRES	Public Sector Proportion BRES
Dormanstown (ward)	780*	*28%**
Redcar and Cleveland	8,280	21%
Middlesbrough	19,740	33%
Stockton-On-Tees	16,880	22%
Scarborough	9,000	22%
Yorkshire and Humber	483,180	22%
North East	256,670	25%
England and Wales	4,816,810	19%

Housing and accommodation

19.5.25 According to the 2011 Census there are 2,953 households in Dormanstown. The majority (65%) of these are semi-detached houses; 20% are terraces; and a very small proportion are flats and detached houses. **Table 19-17** sets out the number and type of dwellings in Dormanstown and comparator areas.

Table 19-17 Housing type within Dormanstown

Area	Unshared Dwelling	Detached	Semi-detached	Terrace	Flat/maisonette
Dormanstown	2,953	6%	65%	20%	9%
Redcar and Cleveland	59,534	18%	45%	28%	9%
Middlesbrough	57,070	14%	41%	32%	13%
Stockton-On-Tees	79,091	25%	42%	23%	10%
Scarborough	49,181	23%	33%	22%	22%
Yorkshire & the Humber	2,219,167	21%	37%	28%	14%
North East	1,129,032	16%	39%	30%	14%
England and Wales	23,286,109	23%	31%	25%	21%

19.5.26 The predominant tenure in Dormanstown is private ownership, accounting for nearly two thirds of all dwellings. There is a significantly lower proportion of private rented housing within the ward than in comparator areas, and a significantly higher proportion of social rented households, as set out in **Table 19-18.**

Table 19-18 Housing tenure in Dormanstown

Area	Unshared Dwelling	Owned	Social Rented	Private Rented	Other
Dormanstown	2,953	63%	27%	9%	2%
Redcar and Cleveland	59,534	67%	19%	12%	2%
Middlesbrough	57,070	57%	24%	17%	2%
Stockton-On-Tees	79,091	69%	17%	13%	1%
Scarborough	49,181	66%	12%	20%	2%
Yorkshire & the Humber	2,219,167	64%	18%	16%	2%
North East	1,129,032	62%	23%	14%	2%
LEP	483,178	71%	11%	16%	2%
England and Wales	23,286,109	64%	18%	17%	2%

Private rented bedrooms

19.5.27 There are 67,500 private rented bedrooms in the three districts, of which nearly 18,000 are in Redcar and Cleveland and 730 are in Dormanstown, with the majority in three bedroom units.

Wages

19.5.28 Wages in the area vary according to location and between resident based measures and workplace based measures. Figures for both the gross annual pay of full time residents and those working in the same geographies were obtained from the Annual Survey of Hours and Earnings from the ONS.

19.5.29 Resident based average annual pay in Redcar and Cleveland is £3,090 lower than the national average; Middlesbrough is £5,460 lower than the national average. Middlesbrough and Stockton-On-Tees have large discrepancies between resident based and workplace based incomes. Residents in Middlesbrough earn significantly less than employees in the district, indicating that higher value jobs tend to go to residents who live outside the borough. The opposite is true in Stockton-On-Tees.

19.5.30 **Table 19-19** below outlines the figures for gross annual pay based on residents and workplaces.

Table 19-19 Median gross annual pay 2013 (resident based and workplace based)

Area	Resident based median gross annual pay (full time) £	Workplace based median gross annual pay (full time) £
Redcar and Cleveland	24,105	23,684
Middlesbrough	21,732	24,030
Stockton-On-Tees	26,659	24,070
North East	24,229	24,084
Yorkshire and Humber	24,982	24,954
England and Wales	27,193	27,177

19.5.31 Over the period from 2002 to 2012, workers based in all areas analysed experienced an increase in gross annual pay, however wages for both residents and employees in Redcar and Cleveland experienced significantly smaller increases than the national average.

19.5.32 It should be noted that some figures have been omitted by ONS due to being statistically unreliable and therefore data for all years is not always available to accurately represent the changes over a period of time.

Wider economic context

19.5.33 In 2012, Tees Valley contributed £10.7 billion of Total Gross Value Added (GVA) to the national economy[9]. The Total GVA in all areas in the wider area increased in the seven year period from 2005 to 2011. The LEP economy experienced a rise of 15.9% over this period, lower than the England percent increase of 18.8% but higher than the North East region with an increase of 12.6%.

19.5.34 The Total GVA (£ million) over the period of 2005 to 2011 for the wider economic area (where available) is outlined in **Table 19-20** below.

[9] Tees Valley Unlimited, *Tees Valley Strategic Economic Plan*, April 2014

Table 19-20 Total GVA (£ million) 2005 to 2011

Area	2005	2006	2007	2008	2009	2010	2011	2012
Tees Valley LEP	-	-	-	-	-	-	-	10,700
North East[10]	36,572	38,630	39,249	40,261	38,866	40,271	41,188	-
England	947,218	997,356	1,056,933	1,080,363	1,063,683	1,099,713	1,124,881	-

19.6 Assessment of impacts during construction

Peak construction employment

19.6.1 The construction of the proposed development at the Mine would generate construction employment, the level of which has been forecast using information produced by YPL with extensive input from contractors, together with Quod. This has been a "bottom-up" approach to gain the best understanding of the potential size, nature and timing of demand for the construction workforce.

19.6.2 The duration of the construction phase for Phase 1 of the proposed harbour facility would be 17 months, with a further 17 months for Phase 2. The total person months required to construct the harbour facility would be 4,140 (2,070 for each phase of construction). This would equate to an average of 122 construction employees per month and a peak of 175, reached at month 5 of each phase, and represents 1.7% of the total employment in Dormanstown ward. In this context the impact on the churn of the labour market would be of negligible significance.

19.6.3 YPL is committed to maximising the number of firms within the LEP that are able to access and succeed in tendering for opportunities and is currently working in partnership with the LEP stakeholders towards this goal. In the context of the LEP economy, the indirect effects of investment and job creation could, therefore, have **minor beneficial impacts** in terms of local employment.

19.6.4 The anticipated change in employment as a result of the proposed scheme is considered unlikely to be of such significance that it would affect the local population composition.

Demand for temporary accommodation by construction employees

19.6.5 It is expected that the vast majority of construction employees would be home based and would travel from within the three districts. Even if a proportion of construction workers were to require temporary accommodation, there are 67,500 private rented bedrooms in the three districts, of which nearly 18,000 are in Redcar and Cleveland and 730 are in Dormanstown, with the majority in three bedroom units. In addition, there would be hotel and B&B bed spaces.

19.6.6 In this context, the impact of construction workers on temporary accommodation would be of **negligible significance.**

[10] Office for National Statistics, *Regional Gross Value Added (Production Approach)*, December 2013

Indirect employment effects resulting from construction expenditure

19.6.7 Expenditure on construction of the proposed harbour facility would result in indirect beneficial economic effects in the wider supply chain. Indirect employment has been estimated using a breakdown of construction spending provided by YPL and drawing on the ONS Input-Output tables. These show that 60% of construction spending goes on materials and other parts of the supply chain – the remaining 40% is the Value Added. Most of the purchases (nearly 65%) remain within the construction supply chain, with a further 20% going to manufacturing companies and the remainder split between energy and business and financial services. The methodology used to derive these figures is set out in detail in the *Economic Impact Report* that accompanied the mine, MTS and MHF application and which has also been submitted in support of the DCO application.

19.6.8 **Table 19-21** sets out the expected indirect effects resulting from construction expenditure required for Phase 1.

Table 19-21 Total indirect spending effects during construction of Phase 1 (rounded figures)

Impact	Spending (Phase 1; 6.5mtpa)
Investment	£74,800,000
Purchases	£42,000,000
Of which: Construction	*£32,000,000*
Manufacturing	*£740,000*
Utilities and Services	*£9,100,000*
Indirect jobs (one year)	413

19.6.9 Through the supply chain, the indirect effect of spending would result in 413 indirect jobs in the economy. In the context of the UK economy, this expenditure and job creation would result in an impact of negligible significance.

19.6.10 As set out above, YPL is committed to maximising the number of firms within the LEP that are able to access and succeed in tendering for opportunities. In the context of the LEP economy, the indirect effects of investment and job creation could, therefore, have temporary **minor beneficial** impacts at a LEP level.

19.6.11 For Phase 2, a further £306m of investment would take place. This is spread across the YPP as a whole and cannot be disaggregated by element at this stage. The further indirect employment generated by Phase 2 of the proposed harbour facility is considered as part of the CIA.

Induced employment effects resulting from construction expenditure

19.6.12 The additional construction employees would spend some of their increased incomes and thereby increase employment in local shops and services. In some cases workers would move directly from unemployment to employment at the proposed harbour facility. In other cases they would move from existing jobs, thereby creating vacancies that other residents can fill. The overall result is that more

people would have a job and there would be an overall increase in wages and in spending. This spending would then support more employment and economic activity at other local businesses.

19.6.13 Induced employment resulting from increased local expenditure is estimated to be a further 70 jobs (one year) for Phase 1. The methodology used to derive these figures is set out in detail in the *Economic Impact Report* submitted in support of the DCO application. The geographical distribution of this expenditure cannot be accurately estimated but a significant proportion could be within the three districts and the LEP, resulting in a negligible to minor beneficial impact. As with indirect employment (see above), the further induced employment generated by further investment at the proposed harbour facility is considered as part of the CIA.

Increase in GDP resulting from construction expenditure

19.6.14 The ONS estimates that approximately 40% of spending on construction is "value added", which is the sub-national measure of GDP.

19.6.15 For a £75m of construction investment, the direct GVA would, therefore, be approximately £30m, all of which would relate to the initial phase of production at 6.5mtpa (Phase 1). The estimated annual GVA generation by 6.5mtpa of £21m represents 0.2% of the current estimated GVA of the Tees Valley LEP. This would result in an impact of minor beneficial significance at a LEP level. The methodology used to derive these figures is set out in detail in the *Economic Impact Report* submitted in support of the mine, MTS and MHF application and also accompanies the DCO application.

19.6.16 As with employment, this would result indirect and induced GVA effects via the supply chain and labour market, predicted to be a total of £20.3m of additional GVA in the wider economy (at 6.5mtpa), as set out in **Table 19-22**, resulting in total GVA uplift of £50.3m over the construction period to 6.5mtpa or £35.4m annually.

Table 19-22 GVA effects during construction

Impact	Phase 1 (6.5mtpa)
Direct GVA	£30,000,000
Indirect GVA	£18,000,000
Induced GVA	£2,300,000
Total GVA	**£50,300,000**
GVA per year (over 1.6 years)	£35,400,000

19.6.17 The geographical distribution of this indirect and induced increase in output cannot be accurately estimated but effects would be negligible or beneficial at a LEP level. At a UK level, the impact with respect to GVA would be negligible.

19.6.18 GVA effects with respect to the increase in output from 6.5mpta to 13mpta cannot be disaggregated from the YPP as a whole and is considered as part of the CIA.

19.7 Assessment of impacts during operation

Operational employment

19.7.1 The operational workforce at the proposed harbour facility would be 26 employees per day (Phase 1) and 34 employees per day (on completion of Phase 2). These jobs would be across a wide range of roles. The majority of the YPP workforce would need to have relevant experience for the jobs for which they are applying, but in the case of the proposed harbour facility, this would not need to be specific to the polyhalite industry and would not, therefore, put pressure on the existing employment supply of experienced workers in this industry.

19.7.2 In the context of natural labour churn (approximately 25% of the private sector workforce year on year), unemployment in the local labour market (16,320 people across the three districts) and relatively low economic activity rates, and the existing size of the transportation and storage sector (1,750 people within Dormanstown; 2,640 within Redcar and Cleveland); there would be no significant impact with respect to pressure on the labour market.

19.7.3 YPL is committed to maximising local employment and on-the-job training. This would be achieved through stakeholder consultation and partnership and would result in **minor beneficial** local impacts with respect to employment.

19.7.4 The anticipated change in employment as a result of the proposed scheme is considered unlikely to be of such significance that it would affect the local population composition.

Indirect and induced effects of operation

19.7.5 As with the construction phase, there would be wider multiplier benefits during the operational phase as YPL spends money through the supply chain, supporting jobs in the wider economy and as these employees spend their wages.

19.7.6 Unlike the construction phase, during operation, some account of deadweight and displacement must be taken. Allowance needs to be made for product market displacement that could affect other UK producers of potash.

19.7.7 There are no means of knowing in advance whether the YPP would displace UK or overseas producers from the market, but assuming both are affected equally this would equate to a loss to the UK equivalent to 1% of the YPL's impacts in the initial production phase and 0.7% under full production. It would, therefore, be of negligible significance.

19.7.8 Modelling of the expected indirect and induced economic and labour market impacts has been untaken, taking account of projected:

- operational spending at the proposed harbour facility;
- maintenance expenditure;
- salary expenditure; and,
- employment numbers (as outlined above).

19.7.9 The results are set out in **Table 19-23**.

Table 19-23 Indirect and induced operational effects: labour market

Impact	6.5mtpa	13mtpa
Direct Jobs	26	34
Indirect Jobs	85	170
Induced Jobs (1 year)	60	25

19.7.10 In the context of the wider labour market, including relatively high levels of economic inactivity and unemployment, this would have a beneficial effect with respect to job creation. However in the context of the size of the labour market, the magnitude of this impact would be negligible. YPL is committed to maximising local employment and on-the-job training. This would be achieved through stakeholder consultation and partnership and would result in **minor beneficial** local impacts with respect to employment.

19.8 Assessment of impacts during decommissioning

19.8.1 The loss of direct and indirect employment at the end of operation and following the completion of decommissioning is inevitable and would result in adverse effects. However, as set out in HM Treasury Green Book: Appraisal and Evaluation in Central Government (2011), due to Social Time Preference, which attaches a greater value to present rather than future consumption, a discount rate should be applied to future benefits and costs. Under this methodology, after 100 years of operation, benefits of the proposed YPP (including employment) should be discounted to 0.0508 of their value at the start of the operation so the impact is assessed to be minor adverse at a local level.

19.8.2 In addition, YPL would seek to minimise and mitigate any adverse effects by:

- providing opportunities for staff to work on the decommissioning process;
- providing training and assistance to enhance employment opportunities outside the Company, including transferable skills; and,
- taking measures to maximise opportunities for locally based businesses to secure involvement as contractors, sub-contractors and suppliers in decommissioning work.

19.9 Summary

19.9.1 Construction employment for the proposed Harbour facilities would average at 122 employees per month with two peaks of 175 employees. This peak represents 1.7% of the total employment in Dormanstown ward. YPL is committed to maximising the number of firms within the LEP that are able to access and succeed in tendering for opportunities and is currently working in partnership with the LEP stakeholders towards this goal. In the context of the LEP economy, the indirect effects of investment and job creation could, therefore, have minor beneficial impacts in terms of local employment. The anticipated change in employment as a result of the proposed scheme is considered unlikely to be of such significance that it would affect the local population composition.

19.9.2 The operational workforce would be 26 employees at 6.5mtpa and 34 employees at 13mpta. In the context of the local labour market, this increase in demand for labour would not result in any adverse effects on skills or labour availability. YPL is committed to maximising local employment and on-the-job training. This would be achieved through stakeholder consultation and partnership and would result in minor beneficial local impacts with respect to employment.

19.9.3 In the context of the wider labour market, including relatively high levels of economic inactivity and unemployment, this would have a beneficial effect with respect to job creation. However in the context of the size of the labour market, the magnitude of this impact would be negligible. YPL is committed to maximising local employment and on-the-job training. This would be achieved through stakeholder consultation and partnership and would result in minor beneficial local impacts with respect to employment.

19.9.4 There would be beneficial indirect and induced impacts resulting from the investment in construction and through operational expenditure. Initial investment to reach an output of 6.5mtpa would be £75m – of which £42m would be purchases. Through the supply chain, this would result in 413 indirect jobs (one year) and 70 induced (one year) jobs in the economy. The geographical distribution of this expenditure cannot be accurately estimated but a significant proportion could be within the three districts and the LEP, resulting in a negligible to minor beneficial impact.

19.9.5 For a £74.8m of construction investment in Phase 1 to 6.5mtpa, the direct GVA, would be approximately £30m; all of which would relate to the initial phase of production at 6.5mtpa. The estimated annual GVA generation by 6.5mtpa represents approximately 0.2% of the current estimated GVA of the Tees Valley LEP which would result in minor beneficial effects in the LEP context. Including Induced and Indirect GVA generated at 6.5mpta, there would be a total annual GVA increase of £35.4m or a total increase over the construction period of £50m. There would be further GVA benefits created in the expansion of the harbour facility to accommodate 13mpta of output. These benefits are presented in the CIA.

19.9.6 Once operational, there would be wider multiplier benefits during the operational phase due to spending through the supply chain, supporting jobs in the wider economy and as these employees spend their wages. This would also result in indirect and induced jobs.

19.9.7 The loss of direct and indirect employment at the end of the operational phase is inevitable. However, YPL would seek to minimise and mitigate this adverse effect through the provision of opportunities and training for staff to assist with the decommissioning process, provision of training to assist with enhancement of employment opportunities outside of the company and taking measures to maximise opportunities for locally based businesses to secure involvement as contractors, sub-contractors and suppliers in decommissioning work.

19.9.8 The proposed YPP as a whole would make a significant and lasting beneficial contribution to the economies of R&C, the NYMNPA and the wider LEP areas. As set out in The Economic Impact Report and the CIA, the YPP would make substantial contributions to direct, indirect and induced employment, GVA and National Government tax. Whilst these effects are very large, especially for the effects of a single project, they may be dispersed around the country and in the context of the UK economy as a whole, they would be negligible. However, inevitably, this would be true for any single project.

Moreover, the project would have significant and positive economic benefits, directly, through employment and output and, indirectly, through the supply chain and employee expenditure. It would result in an increase in GDP; a nationally significant reduction in the trade deficit; over 1,000 high value direct jobs and many more in the supply chain, boosting the employment rate and spending power; corporate and income tax receipts; and royalty payments. The project would be effective in contributing to meeting a need to rebalance the national economy and substantially strengthen the regional and local economies.

19.9.9 The *Economic Impact Report* that was submitted in support of the mine, MTS and MHF application and which accompanies this application sets out the economic effects in detail, set in the context of national policy considerations and the Major Development Test.

Table 19-24 Summary of socio-economic impacts anticipated to arise during construction, operation and decommissioning of the proposed scheme

Impact	Sensitivity of receptor	Magnitude of effect	Significance of impact	Mitigation	Residual impact
Construction					
Peak construction employment	N/A	Minor	Beneficial	None proposed	Minor Beneficial (Local level)
Demand for temporary accommodation by construction employees	N/A	Negligible	Not Significant	None proposed	Negligible (all spatial levels)
Indirect employment effects resulting from construction expenditure	N/A See Para 19.4.6	Minor	Beneficial	None proposed	Minor Beneficial (LEP level)
Induced employment effects resulting from construction expenditure	N/A See Para 19.4.6	Negligible to Minor	Beneficial	None proposed	Negligible to Minor Beneficial (LEP level)
Increase in GDP resulting from construction expenditure	N/A See Para 19.4.6	Negligible to Minor	Beneficial	None proposed	Negligible to Minor Beneficial (LEP level)
Operation					
Operational employment	N/A See Para 19.4.6	Minor	Beneficial	None proposed	Minor Beneficial (local Level)
Indirect and induced effects of operation	N/A See Para 19.4.6	Minor	Beneficial	None proposed	Minor Beneficial (LEP level)

Impact	Sensitivity of receptor	Magnitude of effect	Significance of impact	Mitigation	Residual impact
Loss of direct and indirect employment	N/A See Para 19.4.6	Minor	Adverse	YPL would seek to minimise and mitigate any adverse effects by: providing opportunities for staff to work on the decommissioning process; providing training and assistance to enhance employment opportunities outside the Company, including transferable skills; and, taking measures to maximise opportunities for locally based businesses to secure involvement as contractors, sub-contractors and suppliers in decommissioning work.	Minor Adverse (Local level)