

Thank you for consulting Public Health Dorset (PHD) on this application. PHD is a shared service between BCP Council and Dorset Council with a number of core functions including a responsibility to improve the health of the population of both local authority areas. Our review of the application, and the scope of our response, is therefore limited to the potential impact of the proposed development on the health and wellbeing of the local population. The applicant highlights a number of concerns relating to the impacts of ERFs on human health, often expressed by the public, in Chapter 6 of the Environmental Statement (ES). These include the impact of emissions produced by ERF operation, and associated road transport of waste, on air quality and human health. The Health Impact Assessment states that: 'The Human Health Risk Assessment (HHRA) has concluded that the health effects associated with emissions of NO<sub>2</sub>, SO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> from the ERF are shown to be very small and could reasonably be described as negligible.' It should be noted that this does not mean that there will be no impact on human health associated with emissions from the operation of the proposed development. In 2013 the World Health Organisation (WHO) concluded that 'there is no evidence of a safe level of exposure to PM (particulate matter) or a threshold below which no adverse health effects occur'[1]. The proposed development, and associated increased traffic and transport, will lead to increased exposure of the local population to this pollutant, and others, even if they are, as the applicant asserts, 'very small'. The application refers to the potential for the proposed development to provide 'shore to ship' power for vessels in Portland harbour. The applicant highlights that this would lead to a reduction in emissions levels by negating the need for vessels to use their own engines for power while in harbour. Providing a means of reducing emissions from vessels in Portland Harbour would, in principal, be beneficial but as detail of the current impact on air quality of this source is not provided it is not possible to understand the degree of potential benefit. We would welcome baseline information on emissions levels and health impacts of vessels in Portland Harbour, and modelled data on how the proposed development would reduce overall emissions levels. The Health Impact Assessment (HIA) included in the application emphasises the need to consider the impact of the proposed development on both physical and mental health. As the community profile in the HIA notes, the site is located within a community characterised by higher levels of deprivation than much of Dorset, and a population that experiences worse outcomes than Dorset's wider population across a number of health indicators. This includes levels of depression higher than the England average[2] with 22.9% of adult primary care patients in Weymouth & Portland living with depression. The site of the proposed development is also, as detailed throughout the application, unique in it's topography and built environment. For example, the site's near sea level location would result in the proposed stack terminating below the height of nearby residential areas. With these observations in mind, the recommendations of the HIA (paragraph 7.2) are generally welcome, but we recommend that the applicant extends their intention to 'communicate the findings of the Air Quality Assessment' (as a means of allaying public concern) to

encompass communication to the community of how assessment of the potential impact of the development on air quality during construction and operation has taken account of the specific characteristics of the site (e.g. topography, weather conditions etc) prior to determination of the application. The HIA includes an assessment of the potential impacts of the proposed development on vulnerable groups and health inequalities. The proposed development is sited in close proximity to neighbourhoods which are among the 10% most deprived in England. Research demonstrates ongoing inequalities in exposure to air pollution, with deprived areas worst affected by high concentrations of particulate matter and nitrogen dioxide[3]. Given that the proposed development has the potential for cumulative adverse impacts on the physical and mental health and wellbeing of the local population, potentially exacerbating existing health inequalities, we would welcome more detailed consideration of the likely impacts and mitigations. It is not clear whether the applicant has specifically considered the potential impact of emissions on the resident population of HMP Verne, and to a lesser extent, HMP/YOI Portland. Prisoners face particular challenges to leading healthy lives[4] and, in comparison to the wider population, are more likely to be exposed to any emissions associated with construction and operation of the proposed development. We would suggest that the applicant clarifies how they have taken account of 'static' prisoner populations in the Environmental Statement prior to determination of the application. Section 6.181 of the ES concludes with the following statement: 'No potentially significant cumulative air quality, noise, landscape and visual or traffic and transport effects have been identified in the assessments, so there is no potential for significant cumulative community and health effects with the proposed development.' It is our view that this statement cannot be supported, at this time, without further detail on the questions and points of clarification raised above. I hope that these comments are helpful and please do contact me if you have any questions. Rupert 1. Air quality: a briefing for directors of public health, LGA, DEFRA &PHE 2. <https://www.publichealthdorset.org.uk/intelligence/localities/2020-locality-profiles/2020-01-15-draft-weymouth-portland-narratives-template-v8.pdf> 3. Fecht, D. et al. 'Associations between air pollution and socioeconomic characteristics, ethnicity and age profile of neighbourhoods in England and the Netherland', Environmental Pollution (2014) 4. Prison Health, Twelfth Report of Session 2017-19, House of Commons Health & Social Care Committee Rupert Lloyd Princes House, Princes Street, Dorchester, DT1 1TP