

Proposed Sand and Gravel Quarry, Lea Castle Farm

Planning Inspectorate ref: APP/E1855/W/22/3310099

Note regarding Changes in Heights to Bunds

1. Introduction

1.1. The following is provided in response to the request from the Inspector on the effectiveness of the reduced bunds in the amended scheme in preventing dust migration and clarification of paragraph 3.4 of the Response on Rule 6 Party Impact on Local Amenities: Chapter 4 Public Rights of Way.

1.2. Para. 3.4 stated:

As discussed in my Proof the Proposed Development would incorporate extensive in-design and subsequent management and control measures to mitigate against the generation and off-site dispersion of dust. It is acknowledged that bunds do not serve to fully contain any generated dust within a site. However, the primary mechanisms of dust control are both other in-design features and the management and control measures. As detailed in Table 5.1 the resulting dust source potential is small to medium for the various sources during the operations

2. Comments

2.1. The amended scheme includes for a reduction in height of several of the proposed bunds. Bund 3 is to be reduced in height from 4 / 6m to 4m, Bund 7 from 6m to 4m and Bunds 13, 14, 16 and 19 from 4m to 3m.

2.2. Bund 3 is to be constructed on the western edge of the plant site and is to be retained for the duration of the scheme until final restoration. It will be seeded on construction and maintained.

2.3. Bunds 7, 13, 14, 16 and 19 will be temporary associated with different phases, Bund 7 being constructed on the eastern edge of Phase 1, Bunds 13, 14 & 16 during Phase 3 and Bund 19 during Phase 4.

2.4. Other bunds proposed within the original scheme and which are to be retained within the revised scheme are Bunds 1, 2, 4, 9, 10, 12, 15, 17 and 20

2.5. All proposed bunds remain at least 3m height.

2.6. As noted above bunds do not serve to fully contain any generated dust within a site. They do however aid in reducing off-site migration of any generated dust, primarily through creating turbulence and aiding dispersion, and reducing wind speeds across a site. They can therefore assist in both reducing the likelihood of generation of wind-blown dust from loose surfaces and in reducing the *pathway effectiveness* of any dust towards receptors. Primary mitigation is however achieved through other in-design, physical and management measures, with the aim

to minimise dust at source. The inherent nature of the material to be handled also is an important factor in the likelihood of dust generation.

- 2.7. It is of note that temporary bunds are to be created to each phase, providing screening both upwind and downwind of the prevailing wind direction across the phases. These will serve to assist in the reduction of wind speeds across each phase whilst being worked and restored as well as aiding dispersion of any generated dust. It is considered given the number, location and orientation of bunds to be provided both for the duration of the scheme and additional temporary bunds to be provided to each phase, that the provision of bunds of at least 3m in height is sufficient to ensure the revisions do not result in a significant increased risk of off-site dust migration compared to the original proposals.
- 2.8. As set out in the ES Addendum: Chapter 6: Air Quality it remains concluded that the proposed revised bunds, in conjunction with the wider in-design and management mitigation measures, remain appropriate and the proposals would not result in significant adverse impacts due to fugitive dust.