

I am Dr Tony Dobbs, a doctor of science, now a retired environmental chemist living in Weymouth. I previously worked for ~~UK~~ Dept of Environment and the Water research centre.

I want to make some points on this application based on my local and professional knowledge and experience.

1. I contend that the proposed location makes the predictions of atmospheric dispersion uncertain with consequential higher risks of adverse local impacts
2. Also, in my view the assessment of the effect of the extra road transport is flawed and plant operation would cause significant adverse local impacts.

I know assessment of atmospheric effects through air dispersion modelling has followed UK guidance but I think there are two related points that ~~have been~~^{were} given inadequate attention.

- First the use of weather data from the far side of the island of Portland in the air dispersion and plume modelling. In my view the distance would not be the major ^{problem} factor it is rather the irregular nature of the terrain between the two sites and their differing aspect that causes me disquiet.
- Second, the close proximity of the high cliff face to the proposed stack which will introduce turbulence and downwash with implications for plume dispersal (the stack is at 174ft/80m while the cliff tops are at 492ft/150m). There is an illustration of this situation in the Statement of Case Appendix B.

I also believe the assessment of transport impacts was flawed because

- First ~~the~~ it included hypothetical future increases in traffic flow over and above that from this plant, thereby diluting the impact of increases from the plant and also ignoring the fact that current traffic flows frequently overwhelm local roads causing substantial traffic jams.
- Second it treated the lorries to be used as simple HGVs. Based on a diagram in the applicants submission papers the lorries envisaged will be 5 axle articulated lorries. This type of HGV represents only 2% of registered HGVs in Britain in 2021, based Dept of transport stats, so these artics are not typical HGVs, as was implicitly assumed in the applicant's assessment procedure. Also based on information submitted by the applicants there will be one of these large, heavy lorries passing

along local roads on average every 9 minutes, in my view a significant adverse impact. Further may I remind the Inspector that an HGV is any vehicle with a loaded weight greater than 3.5 tonnes, lorries taking fuel to the proposed plant will be approx ten times heavier than this.

The applicants make many predictions about the possible adverse impacts of the plant, plume dispersion and traffic impacts to mention two that I have just criticized. In evidence presented at an open meeting in Weymouth, Powerfuels stated that, if the plan is approved, they would not be responsible for day to day plant operation which is a key factor in determining the impacts. It is also worth recalling that the proposal is for a “merchant plant” that is one accepting waste from many sources. I think it reasonable to assume that wastes from different sources will be of different composition within the broad specification of “refuse derived fuel” and thus will give rise to differing releases and impacts.

Plume visibility predictions rely not only on the air dispersion modelling predictions which I have already cast doubt upon but also on the properties of the fuel used and aspects of the weather. So it is entirely possible that the key predictions of the extent and size of plume visibility will prove to be exceeded in practice. This could happen if the predictions proved inaccurate because procedures or data were unreliable, or because the fuel feedstock had different characteristics, or because weather conditions were not as envisaged. I might be wrong but it seems to me that the available scope of possible planning conditions ^{is} are insufficient to ensure that none of these occur. Therefore, if approved it is possible that at times the plume would have a significant visual impact on the World Heritage Site. In which case the proposal surely becomes unacceptable in principle.

It seems frequently the case that Planning conditions and predictions of impacts are exceeded once a plant becomes operational. In such cases the operator may be invited to submit a planning application to vary the conditions, which then goes through another planning process. With the widespread concerns you have heard about the potential impacts of this proposal and the inability of planning controls or conditions to prevent adverse impacts I contend that the only course of precautionary action is to uphold the decision of Dorset County Council and refuse this application.