

# LanzaTech

## Port Talbot AtJ Project

### Odour Briefing Note

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1	7 July 2023	Update for utility area	WGE	PSDR	JJW
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## 1 Introduction

This document has been prepared by LanzaTech UK Ltd to present the estimated levels of odour caused by the Port Talbot ATJ facility. The information within this document is considered the most up-to-date information at the time of writing.

## 2 Odours

There are no strong odours anticipated to be produced at the ATJ facility that could affect the surrounding areas to the facility. The intent of the plant design is to mitigate any fugitive emissions. Hence, no odours are expected from the inventory of any of the gas and liquids on site. The site will also incorporate the best available techniques which include:

- Periodic monitoring of odour from identified sources.
- Regular review of an odour management plan, as part of an environmental management system.
- Reduce odour emissions from wastewater collection and treatment, as well as from sludge treatment, by using one or a combination of the following techniques: minimise residence times, employ chemical treatment, optimise aerobic treatment, employ enclosure measures, and utilise end-of-pipe treatment.

### 2.1 Handling solids

Any solids on site, such as catalysts, that are handled in the open will be opened by specialists following standard procedures. These specialists, in conjunction with standard procedures, will mitigate dust production from the handling of catalysts. In addition, for this specific process, the catalysts are not treated with sulphide or materials otherwise prone towards producing odours.

### 2.2 Handling liquids and chemical additives

The feedstock to the process is undenatured fuel grade ethanol, which means it will not have significant sulphur or other odour causing contaminants and no gasoline or other odour causing material added to it. Hence, it will not have odours if it was somehow exposed to the atmosphere on site.

There are no chemical additives to the process that contain odours or odour causing materials, therefore no inadvertent products or by-products will result in the process to cause odours.

The Effluent Waste Water Treatment Plant has been identified as a potential source. However, odour emissions are not anticipated due to the low levels of sulphur and nitrogen present in process streams. Moreover, wastewater and sludge collection and treatment will be designed by a specialist vendor to mitigate odour emissions consistent with the best available techniques.

### 2.3 Process upset

Though the main processing unit is not anticipated to generate odours, the supporting utilities on the site may generate infrequent nominal odors due to the presence of organic materials. While no

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appreciable odour outside the fence line is normally anticipated, an upset could occur. In such instances the source of the odour will be investigated and addressed consistent with the odour management plan developed during project EPC phase (consistent with the best available techniques).