

## **BOC Ravenhead – Acoustic Screen.**

### Background

BOC operates a vacuum swing adsorption plant to supply oxygen to Knauf Insulation at their site in Ravenhead, St. Helens. The site is situated on a compound within Knauf's site.

The site has received a number noise complaints from local residents. A thorough investigation has been conducted to identify possible improvements that can be made to the plant's operation, to reduce the offsite impact.

One potential noise source that has been identified is the filter housing on the plant's main air inlet. A photo shown below shows the blue filter housing.



### Proposed Solution

A number of options have been considered for improvement on this area, but the method selected is to construct an absorptive acoustic screen around the filter housing. This was based on the recommendation of expert consultant.

The screen itself is 5.5m to give the maximum height possible, without impinging on vents or other plant operations. Openings have also been left for the pressure relief devices and to allow access to a ladder so the filter housing can be accessed by operations staff.

The colour selected for this wall is RAL7042 – Traffic Grey. This is similar to the colour of the surrounding plant items and is likely to blend into the plant setting.

The BOC plant is well within Knauf's site boundary so is unlikely to be visible outside of the Knauf boundary.

Civil plinths will be required for the footings which will be constructed in accordance BS 5328.