

Balfour Beatty are committed to delivering low and zero carbon solutions to support the decarbonisation of our projects and hydrogen is going to form a key role in achieving our ambitions and those of our clients. It is critical that the adoption of hydrogen is undertaken in a safe and sustainable manner and to this end any hydrogen fuelled assets will require careful management ahead of deployment to site.

Whilst specific regulations around use of hydrogen in the context of construction are not available yet; Balfour Beatty will follow a cautious, best practice approach in relation to adoption of all hydrogen assets.

To ensure our projects are clear on the additional management requirements around hydrogen fuelled assets we have introduced a checklist for our internal teams which must be completed prior to any hydrogen fuelled asset being mobilised.

Our sites will require information and guidance from suppliers to enable them to establish exclusion zones, suitable locations, management of peripheral activities such as hot works & vehicle movements, site induction specific to hydrogen fuelled assets, safety and fire risk management systems.

Our expectation is that suppliers will provide a fully managed maintenance and hydrogen fuelling service, this ensures that Balfour Beatty staff and contractors have no involvement in the handling, connection or disconnection of any hydrogen fuel containers.

To enable our supply chain to support our sites to implement best practice hydrogen management, our suppliers must provide the following information prior to any asset being made available to Balfour Beatty projects:

- Third party verification and summary of the manufacturer's DSEAR Risk Assessment compliant with current regulations, hazardous area calculations undertaken in compliance with BSEN 60079 and clearly identified venting points.
- Exemplar layout of enclosure incorporating all exclusion zones including any hydrogen fuel storage, signage and access requirements for fuel movements to enable sites to identify suitable locations in their compound.
- Manufacturer's instructions to include O&M and HSE file.
- Details of safety controls such as remote Auto Stop/Isolation buttons and leak detection.
- Information on proposed hydrogen quantity and fire response systems to be shared with local fire services and to inform Fire Risk Assessment.
- Minimum competencies for supplier operatives to carry out tasks on Hydrogen Plant – where no industry recognised standard exists, details of training content and frequency should be submitted.
- Details of the managed hydrogen fuelling system
 - ordering process/remote monitoring of fuel levels,
 - clear confirmation that no BB involvement is expected in refuelling or any other interaction with the hydrogen cylinders,
 - confirmation of the training standard for supplier operatives to be able to undertake refuelling and deployment of hydrogen fuelled assets,
 - Risk assessment and method statement for your operatives when refuelling.

- Planned maintenance schedule for site to be able to verify all expected maintenance is being undertaken.
- Familiarisation training for sites on delivery of units and any training materials for the site to share with all staff at induction.