

A22.0 Vulnerability to major accidents and disasters

The EU EIA Directive (Directive 2014/52/EU) introduced a requirement (for projects in EU Member States) to include “*the expected effects deriving from the vulnerability of the project to risks of major accidents and/or disasters [such as flooding, sea level rise or earthquakes] that are relevant to the project concerned*” when assessing the potential environmental impacts of a project.

For projects that may be vulnerable to major accidents and/or disasters, it is important to consider their vulnerability (exposure and resilience) to major accidents and/or disasters, the risk of those accidents and/or disasters occurring and the implications for the likelihood of significant.

The proposed scheme is not considered a type of project that is particularly vulnerable to major accidents or disasters which could result in significant adverse environmental impacts. The vulnerability of the proposed scheme to sea level rise and flooding has been assessed in **Section A17.0** and **Section A20.0**. As reported in **Section A17.3** and **A17.4**, no impact is predicted from a flood risk perspective during the construction and operational phase. From a sea level rise perspective, the IPCC recommends various allowances for sea level rise depending on the effectiveness of efforts to control global warming. The proposed scheme assumes the RCP8.5 scenario (Representative Concentration Pathways 8.5 is the most pessimistic ‘greenhouse gas emissions scenario’) for the proposed design life of 50 years. The 50th percentile value yields a sea level rise under RCP8.5 of 400mm over this timespan. This has been factored into the design for the proposed scheme. As a result, **Section A20.4** concludes that the risk rating of the proposed scheme from sea level rise and storm surges is low.

The new fuel lines to be constructed are to run below ground and onto the quay adjacent to the proposed access road within a dedicated utilities corridor. The fuel lines will be fitted with alarms along its length that will detect if a leakage has occurred and where it is located. The fuel lines running onto the quay will terminate in formal bunkering pits with recognised end-connectors. Isolation valves located on the quay provide the ability to isolate sections of pipe and maintenance and repair. This is a significant improvement beyond the current set up on FIPASS where the fuel lines run above ground (and the fuel lines are currently in a degraded condition). The measures which have been built into the proposed scheme therefore significantly reduce the risk of a major accident occurring due to release or spillage of fuel during the operational phase of the proposed scheme.

The proposed temporary accommodation block for construction workers has been sited outside of the blast radius of the SSL fuel tanks located to the east of FIPASS Road. This design measure removes the potential for injury / death to construction workers from a major disaster (explosion) at the fuel tank area.