

# Health, Safety and Environmental Impact Assessment (HSEIA)

The health, safety and environmental impact assessment (HSEIA) is a systematic process of identifying the impact of existing, new or substantially altered projects related to health, safety and/or the environment. The main objectives of a HSEIA report are to demonstrate: compliance with HSE legislation and standards; that all HSE hazards, including major accident hazards and occupational health hazards, have been systematically identified, assessed and mitigated; and that environmental impacts have been identified, assessed and mitigated.



## THE Applus+ SOLUTION

Applus+ initially identifies the HSE impacts and risks of a project through a combination of workshops and scoping studies, and then compiles these into a Hazards and Effects Register. The HSEIA then involves an environmental impact assessment (EIA), a control of major accident hazards (COMAH) and an occupational health risk assessment (OHRA).

Our solution begins by benchmarking our client's current activities and highlighting potential exposure to significant HSE risk. We then look at the bigger picture to see what changes can be made in the way the client works.

An HSE impact assessment will then be conducted to demonstrate that:

- A streamlined prevention plan for major accidents and HSE management system are in place
- Health and safety hazards and environmental impacts have been identified, recorded and assessed
- Environmental impacts and risks are being managed

- Suitable measures have been identified and the critical equipment and systems are in place
- Onsite and offsite emergency plans have been drawn up
- The risks of project activities are ALARP (as low as reasonably practicable)
- A sound overall plan is in place to safeguard life, property, the environment and the business

## Target customers

The HSEIA process can take place at four distinct stages of a construction project. At the end of each stage, an HSEIA study report can be prepared and submitted for client approval.

The following four phases are defined for the project-approval process:

- **Phase 1:** HSEIA report is prepared at the front-end engineering and design stage of the project and is approved prior to project moving to engineering, procurement and construction (EPC) stage
- **Phase 2:** HSEIA report is prepared when EPC contractors are at the detailed design stage of the project. This report is approved prior to construction and assesses the health, safety and environmental impact of the works
- **Phase 3:** HSEIA report is prepared when the construction is underway and is approved prior to the facility going into operation. It includes a review of operational manuals and maintenance procedures to ensure safe operation
- **Phase 4:** HSEIA report is prepared at the end of an installation's life and approved before the shutdown of the facility

## Key customer benefits

Identifying potential HSE risks and taking the necessary measures to deal with them quickly and effectively can result in significant cost savings by removing the risk of unnecessary downtime, avoiding preventable injuries and preventing environmental disasters.