

PROCEDURE

PET-HSE27-EN-PRD-00001 Defining the Area of Influence



Objective

To establish the process for preparing a map(s) that identifies key features and defines the area of influence in accordance with *Our Requirements – Environment and Climate Change*.

Audience

HSE Team, GIS Support, Corporate Affairs Managers, Regulatory Specialists, Operations

Note: This procedure also applies to contractors unless formally agreed to (and documented) through the *Contractor Management Procedure* (PET-SUP68-SU-PRD-00001).

Owner

Edwin Mongan, Head of E&R CEM A&I

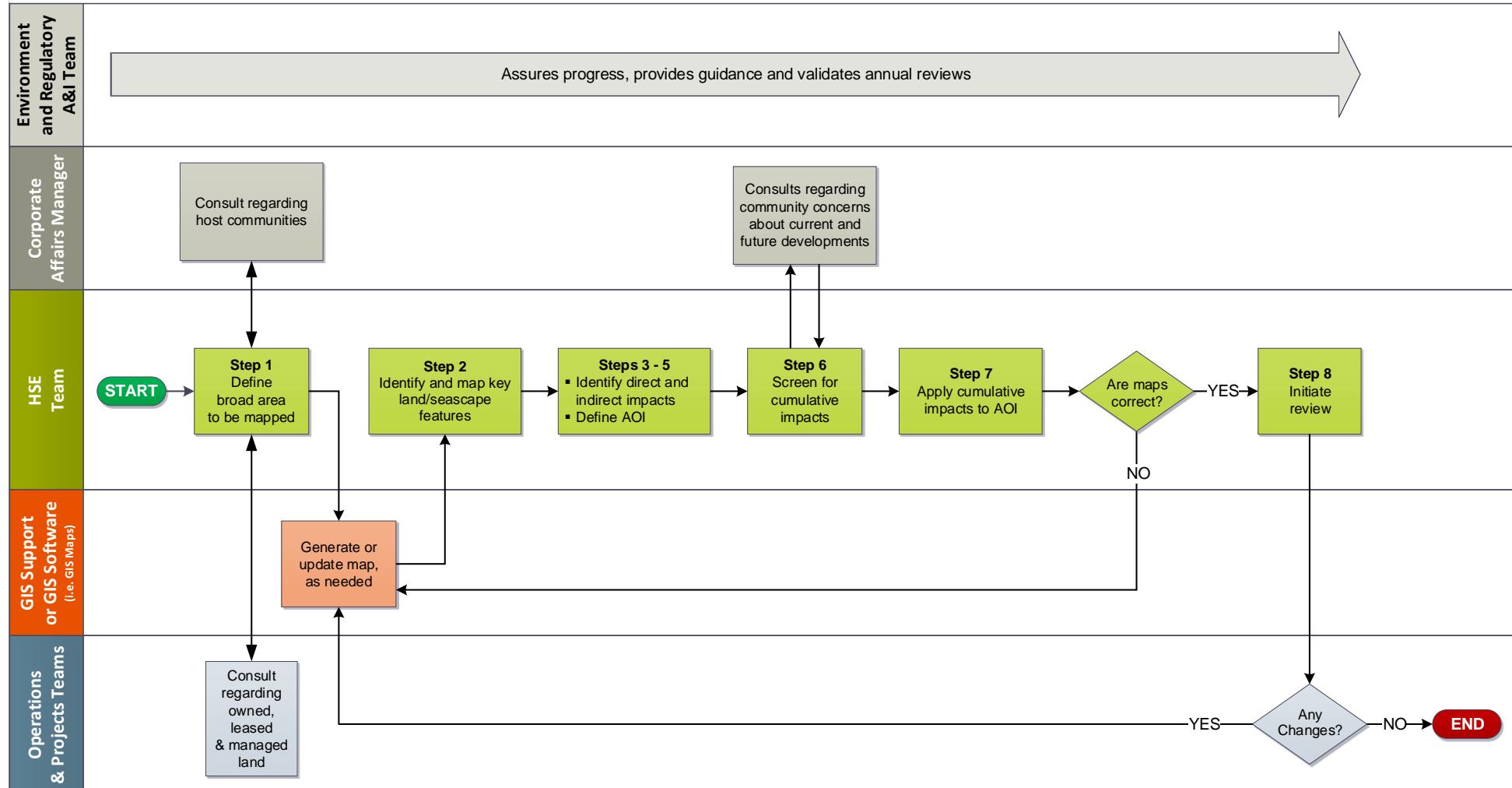
Glossary

Please [click here](#) for a list of glossary terms related to this document.

Document Signatures (e-signatures are permissible)

	Business Role	Name	Signature
Approver	Vice President HSE Petroleum	Rachel Archer	 R Archer (Jun 4, 2019)

Process Summary



Procedure

Step 1. Define broad area to be mapped

- HSE Team, with GIS Support (if needed), to map the large-scale key features in and around an operation/project area using GIS Maps (or an equivalent mapping tool) in accordance with Appendix 1 of *Our Requirements Environment and Climate Change*.
- HSE Team to consult with Corporate Affairs Manager regarding host communities and any areas of cultural significance, according to Appendix 1 of *Our Requirements Environment and Climate Changes*.
- HSE Team to consult with Operations or Projects Teams regarding location of owned, leased and managed land and areas of operations.

Outputs 1. Map of large scale key features on the area of the project or operations.

Step 2. Identify and map the key land/seascape features

- HSE Team to identify and map important key features in and around an operation/project area in accordance with Appendix 1 of *Our Requirements Environment and Climate Change*.
- HSE Team to consult with GIS Support for available Petroleum map spatial databases, or contact applicable agencies for access to additional overlays.

Outputs 1. Map(s) of important key features in the operational or project area. The output may be a separate map(s) or overlay onto the map of large-scale key features developed under Step 1.

Step 3. Identify and map direct impacts

- HSE Team to identify and map direct impacts (e.g., water extraction) due to the risks identified under the *Defining Target Environmental Outcomes Procedure* (PET-HSE27-EN-PRD-00003).

Outputs 1. Map(s) showing direct impacts from the project or operations.
The output may be a separate map or overlay onto the map(s) developed under previous steps.

Step 4. Identify and map indirect impacts

- HSE Team to identify and map indirect activities that are essential to the Company's operations but may not be directly owned, operated or managed (e.g., roads, pipelines, utilities, warehouses, logistics terminals, helicopter base and offshore vessels, adjacent mines/ operators, waste disposal locations) and which may materially contribute to impacts from the operation or project:
 - identify external stakeholders contributing to impacts on key features
 - identify and map the impacts
 - include indirect impacts on the biodiversity or ecosystems upon which the host communities are dependent.

Outputs 1. Map(s) showing indirect impacts from the project or operations.
The output may be a separate map or overlay onto the map(s) developed under previous steps.

Step 5. Define the Area of Influence

- HSE Team to define the Area of Influence (AOI) on the map(s) developed in steps 1 – 4.

Outputs 1. A map(s) of key features and the defined area of influence.

Step 6. Screen for cumulative impacts

Note: Regulatory permits or Environmental Impact Assessments may have already considered cumulative impacts from planned activities of others (e.g., US air, water and general permits) and may have GIS map overlays. Seek guidance from environment and regulatory specialists before proceeding with this step.

- HSE Team to conduct a desktop review, in consultation with regulatory agencies where required, host communities and other stakeholders to reveal whether cumulative impacts are likely to materially affect the AOI, for example:
 - identify actual and reasonably foreseeable activities of others that may materially affect the same resources (e.g., oil and gas operations, mining permits/ leases) - if possible, consult with regulatory agencies to determine if anticipated future projects may result in significant, cumulative impacts and if they have been evaluated
 - for use with GIS Maps: consult GIS Support for availability of map overlays from regulators showing planned operations within or adjacent to the AOI
 - identify natural and social external influences that may affect the same resources (e.g., drought, flood, wildfires, predators, human migration, and community or agricultural development)
 - review any available ESIA and cumulative impact assessments of planned projects
 - consult Corporate Affairs regarding community concerns about current and future developments that may impact key resources.

Outputs 1. Document results of desktop review and consultations.

Step 7. Apply cumulative impacts to Area of Influence

- HSE Team to develop a list of cumulative impacts from Step 6 that may occur within the AOI (e.g., adjacent leaseholders may withdraw water from same aquifer, reducing flow).
- HSE Team to overlay any ongoing cumulative impacts onto the map of key features. Seek assistance from the business-level Environment team.

Outputs 1. Area of Influence map with any identified cumulative impacts that may materially contribute to the severity of existing impacts.

Step 8. Establish a baseline within the Area of Influence and review annually

- HSE Team to prepare and update the *Land and Biodiversity Management Plan* or equivalent baseline, or reference conditions, within the AOI developed in the preceding steps.
- HSE Team to review the AOI baseline annually and update for any changes.
- HSE Team with Operations to review AOI map for any changes, and update annually as needed.
- Environment and Regulatory A&I Team ensures progress, provides guidance and validates annual review/update of AOI.

Outputs 1. Annual review, update and validation of the AOI that may include the *Land and Biodiversity Management Plan*, or equivalent, baseline.

Roles and Responsibilities

Role	Responsibilities
HSE Team	<ul style="list-style-type: none"> Facilitates the development of the Area of Influence.
Corporate Affairs Manager	<ul style="list-style-type: none"> Engages with the host communities within the Area of Influence and has knowledge of the physical boundaries of the host communities that are impacted by Petroleum operations.
Operations and Projects Teams	<ul style="list-style-type: none"> Provides locations of owned or leased land (including offshore leases/titles). Provide information on activity to accurately assess direct, indirect, and cumulative impacts.
Environment and Regulatory A&I Team	<ul style="list-style-type: none"> Provides guidance and support to HSE teams. Validates annual reviews of AOI.
GIS Support	<ul style="list-style-type: none"> Develops maps or Petroleum spatial databases and layers (e.g., the Petroleum Proteus tools or equivalent) for use in mapping tools. May be an internal or external resource.