

Considerations for five-year environment plan revisions

Purpose

This information paper provides advice to titleholders on items to consider in the preparation of five year revisions to environment plans for long-term activities.

Background

The Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009 (Environment Regulations), regulation 19, requires that a titleholder must submit to the Regulator a proposed revision of the environment plan for an activity at least 14 days before the end of each period of five years.

Typically, environment plans for long-term activities like operating facilities are complex, as they cover activities that evolve throughout the life of a hydrocarbon field, often involve emissions and discharges to the environment, and include the risk of spills from large hydrocarbon inventories. NOPSEMA offers this advice in an effort to increase the efficiency with which five-year revisions are prepared and assessed, and to increase the effectiveness of these plans in managing environmental impacts and risks through the life of the petroleum activity.

1 Complying with changes to legislation

When preparing a five-year revision, be sure to do a comprehensive check of legislative requirements to identify any changes that have occurred since the last time the environment plan was accepted. Some relevant updates include the following (this is not an exhaustive list):

- Changes to the Environment Regulations since 2014, including financial assurance requirements (regulation 5G), integration of matters protected by the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), and changes to definitions of environmental incidents and reporting requirements
- Changes to matters protected by the EPBC Act, such as new Australian Marine Parks and associated management plans, and updates to recovery plans and conservation advices for threatened species
- Replacement of the *Quarantine Act 1908* with the *Biosecurity Act 2015*, and new Australian Ballast Water Requirements for vessels.

New or updated government policy and guidelines should also be considered by titleholders when revising environment plans. Some relevant recent updates include:

- NOPSEMA's guidance material on preparation of environment plans and oil pollution emergency plans, and on assessment decision making
- Australian Government Guidance on Offshore Petroleum and Greenhouse Gas Activities: Consultation with Australian Government agencies with responsibilities in the Commonwealth Marine Area
- Australian Government Offshore Petroleum Decommissioning Guideline
- Changes in oil spill response administrative arrangements by State government agencies
- Progress by the Australian Government toward implementing improved transparency of the offshore petroleum regulatory regime, including publication of all environment plans.

2 Scope and description of the activities

A five-year environment plan revision for a long-term activity must describe the stage of field life that the operations have reached, and what is planned for the next five years. Titleholders are reminded to describe all the stages of the activity that might occur within the period of the environment plan, such as maintenance, well intervention, production upsets, expansion, commissioning and decommissioning, as well as occasions when mobile facilities are off station. These different stages are relevant in the environment plan if they involve changes in emissions and discharges to the environment, and/or different control measures to reduce impacts and risks.

It is recognised that long-term offshore petroleum activities are dynamic and that a management of change process can facilitate minor changes during the life of the environment plan. However, in NOPSEMA's experience, improved consideration should be given to the full scope of the activity during preparation of the revised environment plan to reduce reliance on management of change processes, and uncertainty about the scope of activities provided for in the environment plan.

A comprehensive inventory of equipment (particularly subsea) should be included in the description of the activity in the environment plan, with consideration of items that go out of service and might be removed or maintained in a 'mothballed' state. The long-term fate of facilities and equipment should be considered throughout the operations phase of the activity to reflect the titleholder's responsibilities under Section 572 of the *Offshore Petroleum and Greenhouse Gas Storage Act*.

All petroleum titles relevant to the activities must be listed and clearly shown in maps.

3 Key focus areas for environmental management

The following are priority aspects of operating facilities that should be the focus for environmental management, and should be described in detail in the environment plan:

- The risk of hydrocarbon spills to the environment must be continuously lowered by considering new technologies, or through the titleholder's improved understanding of the hydrocarbon field and production system over time. The assessment of spill risk in the environment plan must recognise and explain the control measures in place to prevent loss of containment to the marine environment, distinct from the measures taken to maintain the safety of personnel or the integrity of wells (which are covered in the safety case and well operations management plan, respectively).
- Oil spill response arrangements should focus on control and treatment of a spill at its source, and protection of priority receptors. ALARP positions should consider including continued enhancement and expansion of improvements to response capability and timeliness possible through further cooperative industry arrangements with other industry members to increase preparedness to respond to spills, beyond the capabilities that would be possible on an individual titleholder basis.
- Environmental impacts from long-term discharges must be properly understood and continued to be reduced to as low as reasonably practicable and acceptable levels. The environment plan should describe the ongoing improvements made, informed through learnings from environmental monitoring.
- The purpose and function of the environmental management system must be explained in enough detail to form a basis for compliance monitoring. This means describing what the system will deliver when it is implemented, rather than simply outlining its framework or components.

Any inspection recommendations issued by NOPSEMA for the petroleum activities during the previous five years should be reviewed, and any relevant improvements to control measures or the environmental management system should be incorporated into the revised environment plan.

4 Making the case for environmental management of the activity

A five-year revision must make the case that the petroleum activity should be allowed to continue operating by meeting the criteria for acceptance from the Environment Regulations (regulation 10A), as is required for any environment plan. Proper use of knowledge accrued during the last five years of operating (or longer) should help the titleholder justify its plan for good environmental management in the future. The following advice includes considerations for making this case in three key areas, and additional advice is provided in NOPSEMA's Environment plan decision making guideline.

4.1 Impacts and risks are as low as reasonably practicable

In demonstrating that impacts and risks are reduced to as low as reasonably practicable (ALARP), titleholders should review all control measures in place and consider their effectiveness in reducing environmental impacts and risks. Control measures that have been found over the last five years to be ineffective, redundant or unnecessarily onerous should be replaced or redesigned with systems, equipment or procedures that work better.

The titleholder should review the incident history and audit performance of the petroleum activity to identify any required changes to control measures, and should also consider the stage of design life of the facility and equipment, which might warrant additional or different control measures.

For lower-order environmental impacts and risks, it may be simpler and more efficient to use industry standards or reference cases to identify control measures.

4.2 Impacts and risks will be of an acceptable level

The results of environmental monitoring completed during the last five years should be used to demonstrate that the activity poses acceptable levels of impact and risk to its surrounding environment. This should provide evidence that control measures have been effective, and in some cases might indicate that control measures can be modified or even reduced; this is the cycle of adaptive management. Similarly, the scope and design of environmental monitoring programs themselves should be reviewed as the titleholder's understanding of environmental impacts and risks increases.

4.3 Measures adopted because of consultation are appropriate

The Environment Regulations require consultation with a range of relevant persons in the course of preparing a revision of an environment plan, and the titleholder should use its established consultation forums to reach community members that it knows have functions, interests and activities affected by the petroleum activity. However, also consider that the Environment Regulations require the same widespread consultation for a five year revision as for a new environment plan, to account for any new relevant persons in the area of the petroleum activity that have not been previously consulted, or for government and community interests that have changed. Contemporary stakeholder values might warrant adjustments to the control measures for environmental impacts and risks from the petroleum activity.

5 Setting the level of performance

Titleholders are encouraged to review the Environment Regulations and NOPSEMA's Environment plan decision making guideline to understand the links between:

- Environmental performance outcomes and acceptable levels of impacts and risks, and
- Environmental performance standards and the control measures adopted to reduce impacts and risks.

Setting measurable, unambiguous and enforceable levels of environmental performance is a vital component of an environment plan, and regulatory requirements in this area have changed since 2013–14. Titleholders are reminded that environmental performance standards must be set for all control measures, including those required under emergency conditions such as oil spills.



6 Engagement with NOPSEMA

Titleholders preparing a five-year revision to an environment plan for a long-term activity are encouraged to liaise with NOPSEMA well ahead of submission for advice relevant to their situation:

- Telephone: +61 (0)8 6188 8770, or
- Email: information@nopsema.gov.au

Additional relevant guidance available at www.nopsema.gov.au includes:

- GN1344 – Environment plan content requirements
- GL1721 – Environment plan decision making
- GL1381 – Financial assurance for petroleum titles
- IP1349 – Operational and scientific monitoring programs
- IP1411 – Consultation requirements under the OPGGS Environment Regulations 2009
- IP1488 – Oil pollution risk management