

Considerations for five-year environment plan revisions

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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.

Since 2018, when this information paper was first published, NOPSEMA has assessed twelve five-year revisions to environment plans for operating facilities. This updated information paper offers advice for efficient preparation of these plans, and for increasing their effectiveness in managing environmental impacts and risks through the life of the petroleum activity.

1. Changes to legislation and other requirements

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 requiring publication of all environment plans on NOPSEMA's website
- 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
- The Australian Government Offshore Petroleum Decommissioning Guideline, and NOPSEMA's Section
 572 Maintenance and removal of property policy



- NOPSEMA's Consultation with Commonwealth agencies with responsibilities in the marine area guideline
- NOPSEMA's Financial assurance for petroleum titles policy and guideline
- NOPSEMA's Oil spill modelling environment bulletin
- NOPSEMA's Reducing marine pest biosecurity risks through good practice biofouling management information paper
- Changes in oil spill response administrative arrangements by State government agencies
- The National Greenhouse and Energy Reporting scheme, including recent updates to the safeguard mechanism for facilities with large volumes of air emissions.

Any changes to international standards or other industry guidance should also be considered in order to define good practice and demonstrate ALARP in an environment plan.

2. Describing the activities

An environment plan five-year revision for a long-term activity must describe the point in the field life that the operations have reached, and what is planned for the next five years. Titleholders should describe all the parts of the activity that might occur within the period of the environment plan, such as inspection, maintenance and repair, well intervention, production upsets, shut-downs and start-ups, expansion, installation, commissioning and decommissioning, as well as occasions when mobile facilities are off station. These different parts of the activity 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 can involve changes that are not easy to forecast. The regulations provide for changes to be managed during the life of the environment plan, either by the titleholder via a management of change process, or more formally via submission of a proposed revision of the environment plan to NOPSEMA. Advice on managing changes in activities is provided in NOPSEMA's When to submit a proposed revision of an environment plan guideline (GL1705).

In NOPSEMA's experience, environment plans for long-term activities require fewer revisions when a more detailed activity scope is described. A more thorough description of the activity reduces the subjectivity applied to decisions on revisions, both for the titleholder and NOPSEMA, by reducing ambiguity and reducing reliance on the management of change process.

A comprehensive inventory of subsea equipment and wells in each title must be included in the description of the activity in the environment plan, along with information on the titleholder's ongoing maintenance of this equipment and long-term plans for its decommissioning. NOPSEMA has recently published detailed guidance on these requirements in the Section 572 Maintenance and removal of property policy, and will be focussing on these areas of environment plans. Many environment plan revisions for activities that have been operational for some time are likely to require more detail on subsea equipment and wells than in past revisions, to improve the longer-term decommissioning options for all offshore petroleum activities.

All petroleum titles that authorise the petroleum activity must be listed and clearly shown in maps, with accurate identification of all titleholders (as required by Regulation 15). This is important for defining the



full extent of the petroleum activities, ensuring financial assurance requirements have been met and for calculating environment plan levies.

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 that have been made, informed through learnings from
 environmental monitoring over the life of the activity.
- 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.
- As mentioned in Section 2, NOPSEMA's focus on maintenance and removal of subsea equipment and property has increased. The titleholder's process for monitoring the condition of subsea equipment, and maintaining it in good order, must be described in the environment plan.

Titleholders should also review NOPSEMA's feedback on previous environment plan assessments for the activity (or other activities by the same titleholder where relevant issues are raised), and any inspection recommendations received in the last five years. These are important sources of information about the particular areas of environmental management that are of interest to the regulator, and are very relevant to development of the environment plan revision. In NOPSEMA's recent experience, failure to review these previous pieces of regulatory feedback has resulted in less-efficient assessments for environment plan five-year revisions.

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.



This information must be considered during the impact and risk assessment process undertaken by the titleholder to inform the development of the environment plan revision.

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. NOPSEMA expects to see up-to-date information in these parts of the environment plan revision, in recognition that the environment, and/or the titleholders' understanding of the impacts and risks of the activity, could change across a five-year period.

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 environment plan must define the acceptable level of environmental impacts from the activity to the values of the Commonwealth marine area, informed by up-to-date knowledge of the environment, consultation with relevant persons and current legislative instruments. The environment plan should use the results of on-site environmental monitoring to demonstrate that the activity meets this acceptable level of environmental impact. This should provide evidence that control measures have been effective, and in some cases might indicate that control measures can be modified; 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 titleholder must consult 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.

NOPSEMA expects to see how information gained through consultation for the environment plan revision has been utilised by the titleholder, particularly where control measures have been adopted in response to consultation with relevant persons.



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 8700, or
- Email: information@nopsema.gov.au

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

- N-04750-PL1347 Environment plan assessment policy
- N-00500-PL1903 Section 572 Maintenance and removal of property policy
- N-04750-GL1721 Environment plan decision making guideline
- N-04730-GL1381 Financial assurance for petroleum titles guideline
- N-06800-GL1887 Consultation with agencies with responsibilities in the Commonwealth marine area guideline
- N-04750-GN1344 Environment plan content requirements guidance note
- N-04750-GN1488 Oil pollution risk management guidance note
- N-04750-IP1349 Operational and scientific monitoring programs information paper
- N-04750-IP1899 Reducing marine pest biosecurity risks through good practice biofouling management information paper