Permit

Environmental Protection Act 1994

Environmental authority EPPG00302913

This environmental authority is issued by the administering authority under Chapter 5 of the Environmental Protection Act 1994.

Environmental authority number: EPPG00302913

Environmental authority takes effect on 07 April 2016

Environmental authority holder(s)

Name(s)	Registered address
SURAT 18 PTY LTD	Gio Level 1 200 Mary St BRISBANE CITY QLD 4000 Australia

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
Non-Scheduled Petroleum Activity Petroleum Lease - PL	PL18

Additional information for applicants

Environmentally relevant activities

The description of any environmentally relevant activity (ERA) for which an environmental authority (EA) is issued is a restatement of the ERA as defined by legislation at the time the EA is issued. Where there is any inconsistency between that description of an ERA and the conditions stated by an EA as to the scale, intensity or manner of carrying out an ERA, the conditions prevail to the extent of the inconsistency.

An EA authorises the carrying out of an ERA and does not authorise any environmental harm unless a condition stated by the EA specifically authorises environmental harm.

A person carrying out an ERA must also be a registered suitable operator under the *Environmental Protection Act 1994* (EP Act).

Contaminated land

It is a requirement of the EP Act that an owner or occupier of contaminated land give written notice to the administering authority if they become aware of the following:

- the happening of an event involving a hazardous contaminant on the contaminated land (notice must be given within 24 hours); or
- a change in the condition of the contaminated land (notice must be given within 24 hours); or
- a notifiable activity (as defined in Schedule 3) having been carried out, or is being carried out, on the contaminated land (notice must be given within 20 business days);

that is causing, or is reasonably likely to cause, serious or material environmental harm.

For further information, including the form for giving written notice, refer to the Queensland Government website www.qld.gov.au, using the search term 'duty to notify'.

Take effect

Please note that, in accordance with section 200 of the EP Act, an EA has effect:

a) if the authority is for a prescribed ERA and it states that it takes effect on the day nominated by the holder of the authority in a written notice given to the administering authority-on the nominated day; or
b) if the authority states a day or an event for it to take effect-on the stated day or when the stated event happens; or
c) otherwise-on the day the authority is issued.

However, if the EA is authorising an activity that requires an additional authorisation (a relevant tenure for a resource activity, a development permit under the *Sustainable Planning Act 2009* or an SDA Approval under the *State Development and Public Works Organisation Act 1971*), this EA will not take effect until the additional authorisation has taken effect.

If this EA takes effect when the additional authorisation takes effect, you must provide the administering authority written notice within 5 business days of receiving notification of the related additional authorisation taking effect.

If you have incorrectly claimed that an additional authorisation is not required, carrying out the ERA without the additional authorisation is not legal and could result in your prosecution for providing false or misleading information or operating without a valid environmental authority.

Department of Environment and Science
Delegate of the administering authority
Environmental Protection Act 1994

Date issued: 21 December 2020

Enquiries:
Petroleum and Gas Unit
Department of Environment and Science

Phone: 3330 5715
Email: petroleumandgas@des.qld.gov.au

Obligations under the *Environmental Protection Act 1994*

In addition to the requirements found in the conditions of this environmental authority, the holder must also meet their obligations under the EP Act, and the regulations made under the EP Act. For example, the holder must comply with the following provisions of the Act:

- general environmental duty (section 319)
- duty to notify environmental harm (section 320-320G)
- offence of causing serious or material environmental harm (sections 437-439)
- offence of causing environmental nuisance (section 440)
- offence of depositing prescribed water contaminants in waters and related matters (section 440ZG)
- offence to place contaminant where environmental harm or nuisance may be caused (section 443)

INTERIM POLICY

Environmental Management for Activities under Petroleum Tenures

Environmental Management Policy

Code of Practice

Triggers for an Environmental Management Plan

Environmental Management Plan (EM Plan)

Environmental Audit

Environmental Management Policy for Activities under Petroleum Tenures

Introduction

The Petroleum Act 1923 (P Act) regulates the search for and the production and transport of petroleum and natural gas within the State of Queensland.

The Petroleum (Submerged Lands) Act 1982 (PSL Act) provides for the exploration for and the exploitation of the petroleum resources of certain submerged lands adjacent to the coast of Queensland.

In addition, the Environmental Protection Act 1994 (EP Act) requires environmentally relevant activities such as those conducted on petroleum tenures to be authorised.

Under the transition provisions of the EP Act, tenures granted under the provisions of the P Act and the PSL Act are termed mining authorities and are deemed to be environmental approvals under the Environmental Protection Act.

Activities take place on petroleum tenures which may not cause significant environmental impacts. These activities could include:

- seismic surveys and exploration drilling on petroleum exploration tenures; and
- production drilling and producing well operations for petroleum leases.

The Department of Minerals and Energy (DME) will use this Policy to administer the environmental provisions in the P Act and the PSL Act and delegated responsibilities under the EP Act, the Contaminated Land Act and the Water Resources Act.

The components of this policy (Code of Practice, Environmental Management Plan and Final Rehabilitation Report) provide the mechanisms for meeting the requirements of the EP Act including the standard Criteria and any requirements for an Integrated Environmental Management System (IEMS) pursuant to s42(2) of the Environmental Protection (Interim) Regulations 1995.

Key Elements

This policy sets out the objectives and procedures for achieving acceptable environmental management of activities on petroleum tenures (excluding pipeline licences) ie.

- Petroleum Act 1923 - Authorities to Prospect (for exploration) and Petroleum Leases (Pls) (for production).
- Petroleum (Submerged Lands) Act 1982 - Exploration Permits for Petroleum (EPPs), Special Prospecting Authorities (for exploration) and Production Licences.

The policy relies upon a Code of Practice for managing environmental impacts of most onshore activities and an additional Environmental Management Plan (EM Plan) for activities which have significant impact and which cannot be managed solely by the Code and for offshore activities.

A condition of authorities to prospect and petroleum leases is that the holder carries out activities in accordance with the Code of Practice except where an approved EM Plan for a particular activity specifically overrules the Code. In respect of tenures under the PSL Act the holder shall conduct activities in accordance with an approved EM Plan.

Objectives

The objectives of environmental management for activities on petroleum tenures are as follows:

- activities shall be planned and coordinated to minimise environmental impact and conducted in conformity with relevant Queensland legislation, conditions of tenure and all licences and permits concerning pollution control, nature conservation, and social, cultural, and heritage matters;
- rehabilitation shall maximise the potential for returning disturbed areas to a stable land form; and
- activities should take account of all relevant government policy, including regional and local environmental management planning processes and requirements such as integrated catchment management plans and land care strategies.

Code of Practice

The objectives of this policy will be achieved, in most circumstances, if the *Code of Practice* (Environmental Management for Activities under Petroleum Tenures) is followed.

Planning Triggers

Criteria have been developed to trigger the need to apply for an Environmental Management Plan (EM Plan) where environmental impact cannot be controlled adequately by the Code of Practice.

Environmental Management Plan

An Environmental Management Plan (EM Plan) for any particular activity will be required if the activity is unable to be conducted in accordance with the Code of Practice and/or the activity meets any one of the criteria listed in Attachment I to the Code.

The EM Plan is related to an activity, and may be independent of the process of granting the tenure. However, once an EM Plan is required by the Minister, that EM Plan must be approved before the activities described therein are commenced. An EM Plan may apply to a short term activity.

The Department will provide a response (approval or request for further information) to an application for an EM Plan within 28 days.

Security

The security deposit required by the Minister for an authority to prospect and a petroleum lease may comprise two parts.

- Initially a standard rate is set by the Minister based on the type of work program and the sensitivity of the area. This security is deposited before grant.
- Additionally an amount may need to be calculated by the holder based on activities outlined in any EM Plan and on third-party costs to rehabilitate the disturbed area for those activities to a condition consistent with the objectives of this policy. The Minister may either accept or adjust the amount and take into account any security already deposited. Additional security, if required, must be deposited before the activities described in the EM Plan commence.

For offshore tenures, the security deposit shall be calculated by the holder based on activities outlined in the EM Plan as outlined above.

Reporting

Performance Report

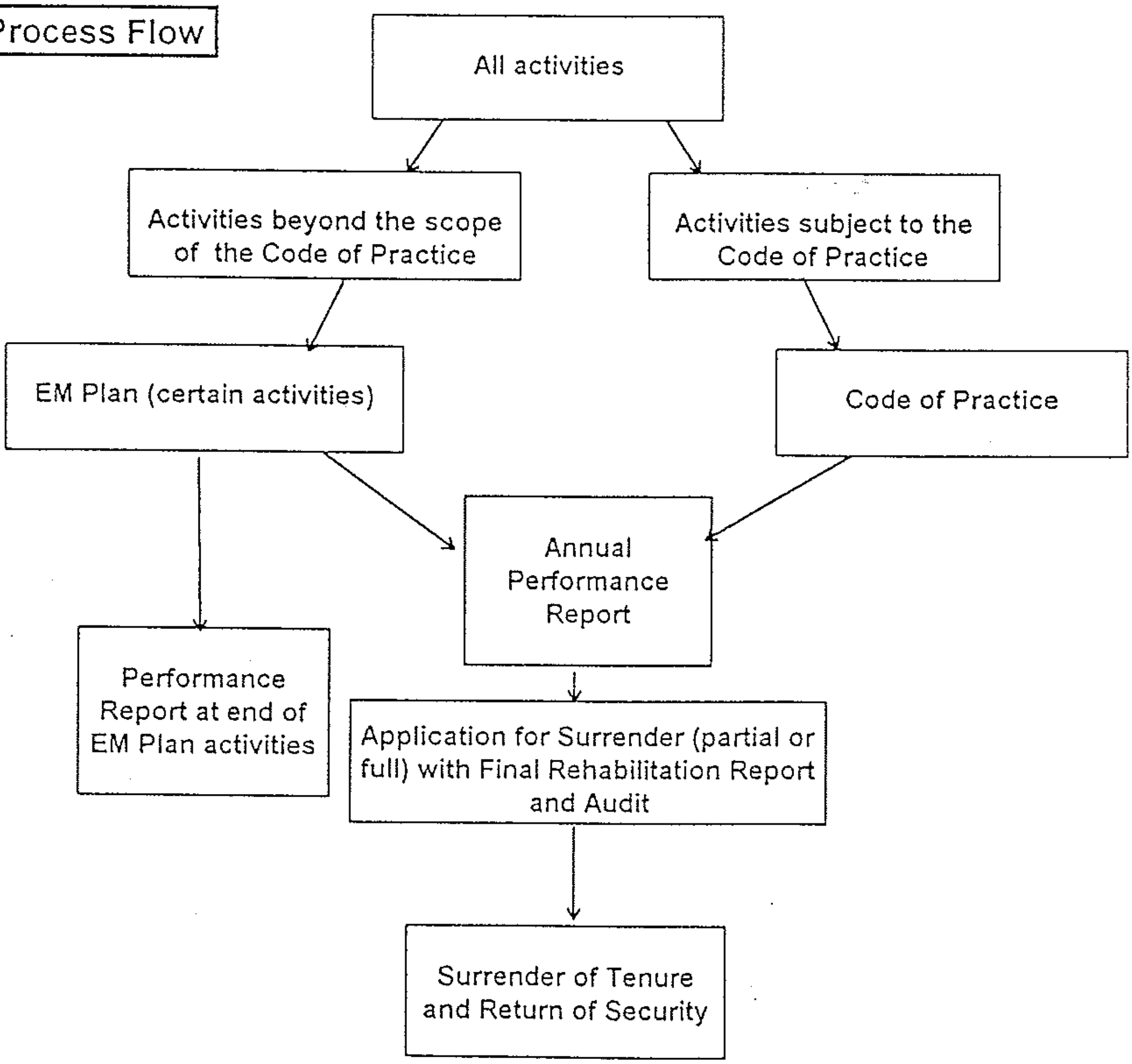
A condition of the tenure (pursuant to s9A(1A) and s35 of the P Act and s33, s56 and s111 of the PSL Act) shall be that the holder submit a Performance Report on each anniversary date of the tenure outlining the activities conducted on the tenure and the measures taken to comply with the Code of Practice and/or any EM Plan commitments. This will form part of the existing annual report. A similar report will be required when the activities described in an EM Plan are completed.

Final Rehabilitation and Audit

The holder shall submit a Final Rehabilitation Report prior to the surrender of the whole or any part of the tenure. This report shall incorporate an audit in respect of compliance with the Code of Practice and/or with the commitments made in any approved EM Plan. Although this final rehabilitation audit may be carried out by a third party, responsibility for it shall remain with the holder.

The level of detail in the audit report should be commensurate with the diversity and intensity of the disturbance activity.

Process Flow



Code of Practice (Environmental Management for onshore Petroleum Tenures)

This Code provides the basis for environmentally sound activities under authorities to prospect and onshore petroleum leases. The rehabilitation aspects apply to all areas *except the areas which will be subject to ongoing exploration or development* under a subsequent tenure.

Compliance with this Code (including Attachments I,II and III) is a condition of authorities to prospect and onshore petroleum leases. (pursuant to s9A(1A) of the Petroleum Act 1923)

In some circumstances, in addition to this Code, the tenure holder will be required to implement an Environmental Management Plan (EM Plan) for an activity where impacts cannot be managed within the Code. In relation to offshore tenures, the environmental impacts of activities will be managed through an EM Plan (see criteria 8).

The Australian Petroleum Exploration Association Limited (APEA) *Code of Environmental Practice* dated January 1991 provides additional guidance on managing environmental impacts on all petroleum tenures. Compliance with the APEA Code of Environmental Practice is not a regulatory requirement.

Land Management

Disturbance shall be kept to a minimum necessary to conduct activities and significant disturbance should not exceed 500m^2 at any one location.

Erosion prevention

Diversion banks should be constructed across inclined tracks.

Blade spillage windrows should be constructed on the contour when reshaping areas of disturbance.

Pits and sumps should be backfilled upon completion of use.

Landform management

All backfilled excavations should be overfilled to allow for settlement.

Any disturbed land that is to be rehabilitated should be rehabilitated after completion of use.

Disturbed land should be re-shaped to be similar to adjacent undisturbed land.

Drill holes shall be plugged and backfilled upon completion of use.

Existing tracks and roads should be used where possible.

Excavations should be made safe at all times. Upon completion of sampling, mapping, etc of excavations, stockpiled overburden shall be returned to the excavation and the sides and surface graded and contoured consistent with adjacent undisturbed landform.

Waste management

Maintenance activities shall be carried out such that spillage of hazardous material (oils, fuels, drilling chemicals, radioactive materials and industrial refuse) will be collected for disposal at an approved waste disposal site, unless bioremediation or land farming can be conducted satisfactorily on site.

All domestic refuse shall be removed from the project area or buried at a depth of at least 1.5m and covered with rock material and at least 100m from a water course.

Topsoil utilisation

All areas of significant disturbance should be stripped of topsoil and/or surface material useful for regeneration or revegetation and the topsoil or other material immediately reused or managed in a way which maintains the biological and nutrient quality.

Stripped material shall be spread over all disturbed areas as a rooting medium for the revegetation process.

Revegetation

All disturbed areas should be allowed to regenerate or be revegetated on completion of use. Compacted areas should be contour ripped to 0.5m depth where practicable using rippers with a minimum spacing of 1m.

Vegetation similar to adjacent vegetation should be established on all revegetation areas.

Suitable nutrient conditions should be provided for all plantings using fertiliser if necessary.

All revegetation processes will be continued until the potential for vegetation development to a similar extent as in undisturbed land is established. Stock proof fencing should be erected if necessary.

Water storage structures

All pits and excavations shall be backfilled and any constructed access rehabilitated, unless they contain water for beneficial use agreed by the landowner.

All excavations that are to remain after termination of tenure should be left with safe and stable access for livestock/native fauna and should comply with any landowner agreement.

Contaminated land

Contamination of land should be avoided.

Any contaminated land occurring as a result of activities shall be remediated prior to termination of tenure so that there is no risk of hazard to public health and the environment.

Weed importation and weed succession should be avoided.

Water Management

Natural waters

Clean storm water should be diverted away from disturbed areas.

Removal of riparian material shall be limited to 500kg/km of water course and clearing of riparian vegetation shall be limited to 500m^2 at any one location.

Surface, ground or coastal water impacts should be managed in conformity with any Environmental Protection Policy for Water.

The volume of groundwater discharged from petroleum bores shall be minimised.

Discharge of water from groundwater resources underlying the tenement shall not exceed 250ML per annum, and shall not cause a reduction in any water supply bore of more than 5% of the pressure existing at the commencement of operations, at any time during the period of the tenure.

Waste and waste water containment

All waste oil and grease shall be removed off-site for recycling or disposal at an approved waste disposal site, unless bioremediation or land farming can be conducted satisfactorily on site.

All domestic waste and effluents shall be managed in accordance with local health requirements.

All liquid/slurry waste containments (including fuel tank spillage bunds and process water ponds) shall have a volume at least equal to the design volume (volume of fuel tank, process water volume etc) PLUS an additional 10% of that volume.

Storm water treatment

Storm water treatment using silt traps or silt fences shall be installed where necessary.

Storm water treatment silt traps shall be maintained at least annually.

Social

Noise nuisance to the public and sensitive wildlife should be managed in conformity with any Environmental Protection Policy for Noise.

Dust nuisance to the public should be managed in conformity with any Environmental Protection Policy for Air.

Vibration and light nuisance to the public should be minimised.

Disruption to any native title rights and interests shall be minimised.

Environmentally Sensitive Areas

For impacts to nature conservation and community cultural, historic and landscape values and sites, etc, site specific conditions will need to be developed through consultation with the Department of Minerals and Energy and the relevant administering authority. These conditions will then form part of this Code of Practice.

Guidance in respect of environmentally sensitive areas and relevant administering authorities is at Attachment II.

Record Keeping

To demonstrate compliance, records should be kept of land, water, and nature conservation and social impact management.

Attachment I to Code of Practice

Criteria to determine the need for an environmental management plan for certain activities under petroleum tenures

Normal exploration activity and other low impact activities under onshore petroleum tenures should be managed under the Code of Practice and would not invoke an EM Plan.

Land Resources Impacts

(1)An EM Plan is required for any activity if: • that activity cannot comply with the Code of Practice with respect to matters concerning contaminated land; or • Schedule I of Attachment III values are exceeded.	Comment: Normal exploration activity and low impact activity under an onshore petroleum tenure will not cause land contamination and invoke an EM Plan.
(2) An EM Plan is required for any activity if: there is potential to disturb significantly an area of more than 500m² in any one location.	Comment: "Disturb significantly" is where the disturbance cannot be rehabilitated satisfactorily by ripping of compacted areas and natural regeneration alone.

Water Resources Impacts

(3)An EM Plan is required for any activity if: • that activity cannot comply with the Code of Practice with respect to matters concerning impact to ground or surface water resources including coastal waters; or • water which can cause environmental harm is to be discharged from the activity site.	Comment: Normally activities that do not discharge water which could cause environmental harm (total containment), or which do not cause significant diminishment of groundwater resources would not invoke an EM Plan.
(4)An EM Plan is required for any activity if: • in excess of 500kg of surface material is to be removed within any 1 kilometre length of a watercourse; or • in excess of 500 square metres of riparian vegetation is to be cleared along a water course.	Comment: This is related to a requirement to obtain a permit under the Water Resources (Water Course Protection) Regulation 1994, to carry out such activities.

Native Title Impacts

(5)An EM Plan is required for any activity if: that activity impacts on native title and cannot comply with the Code of Practice.	Comment: Native Title - In all cases where native title has not been extinguished (by tenure or use inconsistent with the continued existence of native title) native title holders and claimants (where registered) are regarded as "owners" under the Act. The prescribed "consultation, mediation and entry processes" under an onshore petroleum tenure will allow entry only for activities that comply with the Code of Practice. Activities that will not comply with the Code of Practice will require an EM Plan and trigger a negotiation process.

Social Impacts

(6)An EM Plan is required for any activity if: • that activity cannot comply with the Code of Practice in respect of noise, vibration or light nuisance or air pollution that may impact upon the health and welfare of human communities.	Comment: Normally activities that are remote from habitation would not invoke an EM Plan. Those locations that are close to habitation may require an EM Plan.

Environmental Protection Act - Environmentally Relevant Activity - Level 1

(7)An EM Plan is required for any activity if: • one or more environmentally relevant activities (L1) occur on the site	Comment: An EM Plan will be required if one or more environmentally relevant activities (L1) (as defined in Schedule 1 of the Environment Protection Regulations 1995) could occur on the site. Compliance with the EM Plan will be a condition of the EP Act Licence for the activity.

Petroleum Offshore Activities

(8) An EM Plan is required for all offshore exploration/production activities.

ENVIRONMENTALLY SENSITIVE AREAS

The following schedule refers to lands that are constrained for the purposes of environmental protection under various statutory provisions or other recognised procedures.

Land Area Classification	Administering Legislation and Notes
Aboriginal or Torres Strait Islander Site	Cultural Record (Landscapes Queensland and Queensland Estate) Act 1987 (DEH)
Coastal Management Control Districts	Beach Protection Act (DEH)
Co-ordinated Conservation Area	Nature Conservation Act 1992 (DEH)
Declared Catchment or Irrigation Areas	Water Resources Act (DPI)
Department and Official Purposes Reserve	Land Act 1962 (DL) Management Plan may apply
Designated Landscape Area	Cultural Record (Landscapes Queensland and Queensland Estate Act 1987 (DEH)
DPI Research Site	Interdepartmental Agreements (DPI)
Fauna Refuge	Fauna Conservation Act to be replaced by Nature Refuges under Nature Conservation Act (DEH)
Fish Sanctuary	Fisheries Act 1976 (DPI)
Flora Preservation Area	Lands Act 1962 (DL)
International Agreement Area	Nature Conservation Act 1992 (DEH)
Nature Refuge	Nature Conservation Act 1992 (DEH)
Places listed or interim listed on the Queensland Heritage Register	Queensland Heritage Act 1992 (DEH)
Places listed or interim listed on the Register of the National Estate	Australian Heritage Commission Act (AHC)
Queensland Marine Park	General Use Zones A and B only Marine Parks Act 1982 (DEH)
Resource Reserve	Nature Conservation Act 1992 (DEH)
State Forest	Forestry Act 1959 (DPI)
State Forest Feature Protection Area	Forestry Act 1959 (DPI)
State Forest Park	Forestry Act 1959 (DPI)
Wetland Reserve	Fisheries Act 1976 (DPI)
World Heritage Area	World Heritage Properties (AHC) Conservation Act 1983 (DEH) Queensland Wet Tropics World Heritage Protection and Management Act (DEH)

AHC Australian Heritage Commission, Federal.
DEH Department of Environment and Heritage, State.
DL Department of Lands, State.
DPI Department of Primary Industries, State.

PRESCRIBED PURPOSE LAND USE ACTIVITIES ON PETROLEUM TENURES

The Queensland *Contaminated Land Act 1991*, administered primarily by the Department of Environment and Heritage, provides for the assessment, management and registration of contaminated land. It requires that all land used for "Prescribed Purposes" be notified on the Contaminated Sites Register as "Probable" sites.

Exploration and petroleum tenures are exempt from the provisions of the *Contaminated Land Act* where remediation of the tenure is dealt with under the *Petroleum Acts*. However this exemption from the regulatory process of the *Contaminated Land Act* does not include an exemption from requirements for tenure holders and Department of Minerals and Energy to provide notification on the Contaminated Sites Register for "Prescribed Purposes" that exist or have existed on exploration and petroleum tenures.

Significant activities and land uses under the control of an exploration tenure holder that may constitute "prescribed purposes" include:

ACTIVITY	POTENTIAL CONTAMINATION SOURCES
abrasive blasting external to booths or blasting material disposal areas	metals, solvents, acids, paints
airports and aerodromes, including helicopter landing pads and refuelling	aviation fuels, lubricants, solvents
analytical laboratory sites	expired and waste chemicals, geological cores of a hazardous nature, experimental ore processing wastes
asbestos handling and disposal of fibrous asbestos or greater than 5 tonnes of bonded product	fibrous asbestos insulation, asbestos cement sheeting
battery maintenance, including sites where lead cell accumulators have been destroyed for scrap	lead, nickel, cadmium, acids
chemical storage in excess of 10 tonnes total where the chemical may cause contamination	expired and waste liquid and solid chemicals, excluding chemicals unlikely to cause land contamination, eg. LPG, anhydrous ammonia, liquid oxygen
chemical formulation (including blending and mixing of chemicals) in excess of 1 tonne per week	expired and waste liquid and solid chemicals, excluding chemicals unlikely to cause land contamination, eg. LPG, anhydrous ammonia, liquid oxygen
coal handling and storage areas (including coal fired power stations)	coal tars and distillates containing phenols and PAH's, acids, metals and solvents
crushing, grinding and milling works	waste ore and gangue mineral waste rock, lubricants, solvents
drum reconditioning works	surplus chemicals, metals, solvents, waste oils
explosives production and storage	refer storage and formulation of chemicals
metal treatment (including anodising, galvanising, heat treatment using cyanide compounds and powder coating, and spray painting external to booths)	metals, solvents, acids, paints, oils
mineral processing, metallurgical, smelting and refining works	acid and caustic solutions, metals, sulphides, cyanide, xanthates, fuels, lubricants
pesticide storage in excess of 100 L	organochlorin and organophosphate residues
petroleum handling and disposal areas	fuels, oils, lubricants, metals
railway facilities	metals, solvents, processed ores, pesticides, fuels, oils, lubricants, chemicals
scrap yards	fuels, oils, lubricants, solvents, metals
tailings dams	acid and caustic sludges, sulphide mineral wastes, cyanide

vehicle and machinery fuelling, maintenance and repair areas	fuels, oils, lubricants, solvent, metals
waste rock dumps	low grade sulphide ores and pyritic gangue mineral wastes, saline and sodic material
waste storage and treatment in which wastes are crushed, stored, processed, recovered, incinerated or disposed of	low grade ore, gangue minerals, waste and expired chemicals, metals, acids, solvents, fuels, oils, lubricants

Included in the list of 'prescribed purposes' are areas where fill may have been introduced to raise the level of the land or provide a stable building platform. Typically filled ground should be investigated to determine whether the material was potentially contaminated material (eg. mine waste rock or tailings).

Guideline, *Assessment and Management of Land Contamination in the Queensland Mining Industry*, provides maximum quantities of typical hazardous substances associated with the above 'prescribed purposes' which are permissible on an exploration or mining tenure, without requiring notification of a 'probable' status on the Contaminated Sites Register. This Schedule 1 should be used in conjunction with the above list of potential 'prescribed purpose' exploration and petroleum land uses, when evaluating the need to notify 'probable' sites to apply on existing or proposed tenures.

SCHEDULE 1 - MAXIMUM QUANTITIES OF HAZARDOUS SUBSTANCES PERMISSIBLE ON AN EXPLORATION OR PETROLEUM TENURE NOT REQUIRING NOTIFICATION OF A "PROBABLE" STATUS ON THE CONTAMINATED SITES REGISTER

Fuel Depots and Storage Facilities

Above ground storage of

- 2 500 litres of Class 3.1 flammable liquids (eg. petrol, aviation fuel)
- 5 000 litres of Class 3.2 flammable liquids (eg. kerosene)
- 15 000 litres of Class 3.3 or 3.4 flammable liquids

All fuels are to be stored in aboveground tanks or in purpose built flammable liquid storage support vehicles.. Safety bunds are to be constructed in accordance with:

- Flammable and Combustible Liquids Regulations, 1990
- AS1940 The Storage and Handling of Flammable and Combustible liquids (SAA Flammable and Combustible Liquids Code).

Underground storage of

- 100 litres of any Class flammable liquid

Chemical Storage

- 10 tonnes of chemicals designated as dangerous goods under the Australian
- Code for the transport of dangerous goods by Road and Rail

Solvent Storage

- 500 litres of solvents stored above ground
- any solvent stored in an underground tank

Workshop

- 500 litres of Class 6.1 dangerous goods are stored

Pesticide Storage

- 100 litres of pesticides are stored, including parking areas for vehicles fitted with tanks of 100 litres or more of liquid pesticide

Environmental Management Plan (EM Plan)

Purpose of an EM Plan

An EM Plan is required when applying for a Special Prospecting Authority or Production Licence pursuant to the provisions of the Petroleum (Submerged Lands) Act 1982.

For an A to P or a petroleum lease the need for an EM Plan will be investigated by the holder where proposed exploration or feasibility-study activities trigger one or more of the criteria set out in Attachment I to the Code of Practice.

An EM Plan may cover specific works such as an exploration activity in a particular sensitive area for the life of the specific works; all other activities on the onshore tenure shall be conducted in compliance with the Code of Practice

An EM Plan is a strategic plan to deal with potential environmental impacts and their control, and must contain strategies and commitments that are technically feasible. All impact control and rehabilitation commitments must be costed to enable sufficient financial resources to be allocated. Commitments should be actioned during the life of an EM Plan, verified by an environmental audit process, and recorded in the Final Rehabilitation Report.

An EM Plan should:

- conform to the basic objectives of this environmental management policy, particularly with respect to landform stability and preservation of downstream water quality; and
- describe expected environmental impacts, comment on their consequences, and set down strategies and commitments to control those impacts.

Content of an EM Plan

Activity Description

An EM Plan should provide a general statement, describing the location (include plans for any area disturbed), type and scale of operation, project name (and any project numbers), tenure numbers and the planned life of the activity including the implementation, operation and rehabilitation phases. Supporting documents may be attached or listed.

Environmental Impacts and Controls

An EM Plan shall contain statements on the expected level of impact, as well as strategies and commitments to control those impacts to an acceptable level.

Environmental controls are prescribed in existing legislation and regulations and possible controls are listed by government and local authority in policy and planning documents, and in relevant environmental impact assessment studies, technical guidelines, and research publications.

Impacts to nature conservation and community cultural, historic and landscape values and sites in respect of onshore tenure are dealt with under the Code of Practice.

An EM Plan shall, where relevant to the specific activities, contain statements and commitments in relation to the following.

Land Resources

- A statement of the pre- and post-activity land-use capability of land to be disturbed.
- A commitment to the control strategies :
  - to achieve an agreed post-activity land-use capability for the disturbed areas,
  - to achieve stable post-disturbance land forms, by such methods as reshaping, overburden and top-soil management, erosion control and revegetation, and
  - to remediate any contaminated land.

Water Resources

- A statement of the potential sources of contamination of surface and ground waters within the activity areas.
- A statement of the impacts likely to be caused by any contamination, disruption or diminishment of water resources.
- A commitment to the control strategies to be adopted to avoid or minimise impacts to any water resource.

Social

- A statement of the social impacts including noise nuisance, air quality, vibration and light nuisance on local communities, and any native title impacts.
- A commitment to the control strategies adopted to minimise or avoid adverse impacts on local communities.

Research

- A statement of strategic objectives of any relevant research related to waste management, pollution control and rehabilitation.
- A commitment to any adopted program of relevant research activities.

Environmental Monitoring

- A statement on monitoring the impact of the activity on the environment. The strategy may include monitoring the proposed impact control system, waste characteristics and rehabilitation program.

Environmental Protection Act 1994 (EPA)

Environmentally Relevant Activities Level 1 (ERA 1)-

If one or more ERA-1 occur on the site then a licence under the EPA will be required. The licence application will need to be incorporated in an EM Plan. Compliance with the EM Plan will be a condition of the EP Act Licence for the activity.

If a single licence application is submitted to cover more than one ERA-1, then the EM Plan must include the following matters in order to meet the requirements of an IEMS:

- the monitoring of releases of contaminants into the environment and an environmental assessment of the releases;
- staff training and awareness of environmental issues;
- the conduct of environmental and energy audits; and
- waste prevention, treatment and disposal.

Security Determination

The security to be lodged with the EM Plan shall be the maximum estimated cost to rehabilitate all disturbed areas subject to the EM Plan.

The security to be deposited with the EM Plan shall be determined:

- using a schedule of third party rehabilitation costs for each area of disturbance;
- based upon the maximum total estimated rehabilitation cost for all disturbed areas; and
- considering the security already deposited.

Final Rehabilitation Report

Purpose of a Final Rehabilitation Report

A holder of a petroleum tenure under the provisions of the Petroleum Act 1923 or the Petroleum (Submerged Lands) Act 1982 should lodge with a notice to surrender tenure a final rehabilitation report (FRR).

The FRR must demonstrate how the holder successfully rehabilitated land affected directly or indirectly by the holder's activities.

The policy on Environmental Management for Activities under petroleum tenures requires that an FRR be accompanied by an Environmental Audit and that activities be conducted in accordance with a Code of Practice and any EM Plan.

Content of Final Rehabilitation Report

The FRR should include the following information.

Tenure Details

- Tenure identification number, together with a brief project description and details of the responsible person for current and future contact concerning rehabilitation.

Rehabilitation Details

- Statements of how the normal requirements of the Code of Practice and commitments made in any EM Plan have been met.
- A statement of the status of final rehabilitation and any requirements for ongoing maintenance and management.
- A statement advising of any residual financial liability to complete rehabilitation and of any agreements with landholders covering water storages and access thereto.

Contaminated Land Assessment

- A site assessment (SA) describing methods used to avoid or remediate land contamination and advice on the residual land contamination status of the tenure area. Where land contamination occurred, the SA shall propose a Former Site or Restricted Site classification for listing on the Contaminated Sites Register.

Environmental Protection Act - Licences

- A statement setting out details of monitoring results and status of compliance with licence conditions since the last annual return.

Other Statutory Responsibilities

- A statement that the leaseholder has met applicable statutory responsibilities, particularly in relation to any environmentally sensitive areas where site specific conditions have been prescribed by other authorities.

Landholder Requirements

- A statement from the landholder documenting any agreed management arrangements following tenure relinquishment.

Public Safety Liability

- A statement advising of the abandonment of any wells or holes in accordance with the requirements of the petroleum legislation.

Environmental Audit

Purpose of an Environmental Audit

An environmental audit will be required with each Final Rehabilitation Report.

The environmental audit report provides a certification of compliance with rehabilitation measures described in the Code of Practice and/or any approved EM Plan.

The auditor should report any qualifications regarding compliance with the Code and/or any EM Plan

The auditor shall verify actions and targets achieved by the holder.

Persons with suitable qualifications and experience relevant to the activities conducted may be accepted as auditors and may be full time employees of the tenure holder.

Content of an Environmental Audit

Introduction

- Auditor's name
- Auditor's credentials
- Auditor's relationship to the holder
- Date of audit
- Method of audit
- Project name
- Tenure Number for Authority to Prospect, Exploration Permit for Petroleum, Special Prospecting Authority, Petroleum Lease or Production Licence.

Audit

The audit consists of an examination of the Final Rehabilitation Report in relation to the Code of Practice and/or any strategies and commitments approved in any EM Plan.

Actions to complete the audit

- The auditor and the holder derive actions and targets that would demonstrate compliance with the Code of Practice and/or any approved EM Plan.
- The auditor decides on the documentation and evidence required.
- The auditor carries out an audit of the documentation and evidence against the Code of Practice and/or any EM Plan, and produces an audit report.

Security Refund Determination

The auditor confirms the amount of security to be refunded at the time of the Final Rehabilitation Report, taking account of arrangements for any residual maintenance.

Actions to complete the determination

The auditor shall state in the audit report:

- the estimated total cost of residual maintenance for any land disturbance at the time of the Final Rehabilitation Report; and
- an estimated amount of security to be refunded on termination of the tenure.

Conclusion

The auditor shall provide a summary of any significant inconsistencies between the Final Rehabilitation Report and the Code of Practice and/or any EM Plan. If the audit report does not identify any inconsistencies, the surrender process, including refund of securities, can be expedited.