Environmental Impact Classification
Pursuant to Section 98 of the *Petroleum and Geothermal Energy Act 2000*

Stuart Petroleum Limited, Statement of Environmental Objectives (SEO) for the Cooper Basin Petroleum Production Operations (Gibber Uplands), dated December 2011

15 December 2011

INTRODUCTION

Pursuant to section 98 of the *Petroleum and Geothermal Energy Act 2000* (the Act) the Minister must classify the regulated activities covered by a prepared Environmental Impact Report (EIR) as either of low, medium or high environmental impact.

The classification must be made on the basis of:

- The prepared EIR;
- Criteria established for classifying the level of environmental impact of regulated activities, a copy of which is found on the PIRSA Petroleum and Geothermal Group (PIRSA) web page:

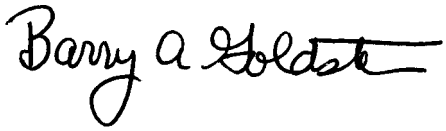
  (http://www.pir.sa.gov.au/__data/assets/pdf_file/0008/27728/sigactv6.pdf; and
- Comment received from relevant Government departments in accordance with established administrative arrangements between these departments and Department for Manufacturing, Innovation, Trade, Resources and Energy (DMITRE).

This document summarises the classification made by DMITRE on Senex Energy's reviewed Stuart Petroleum Limited, SEO for the Cooper Basin Petroleum Production Operations (Gibber Uplands), dated December 2011. This classification is based on information provided in the EIR prepared by Senex Energy and Fatchen Environmental Pty Ltd.

SUMMARY OF CLASSIFICATION

1) From an analysis of the environmental significance of the events and potential impacts associated with the proposed activities against the classification criteria referred to above (assessment provided as Attachment 1), these regulated activities have been classified as **low environmental impact**.
2) The majority of events associated with the Stuart Petroleum Limited, SEO for the Cooper Basin, Petroleum Production Operations (Gibber Uplands), dated December 2011, were assessed to be of low environmental significance. This is due to the fact that appropriate management measures will be implemented by Senex Energy Ltd to avoid or mitigate any potential environmental consequences.
3) For a low environmental impact classification, DMITRE is required to consult with Department of Environment and Natural Resources (DENR) and the Environment Protection Authority (EPA) in accordance with the administrative arrangement dated 11 November 2005 and 29 September 2010 respectively.
4) Comments received from DENR and EPA on 5th and 8th August 2011 respectively, agreed with the low environmental impact classification.

Pursuant to delegated powers, I hereby classify this regulated activity as **low environmental impact**.



BARRY A. GOLDSTEIN
Executive Director
Energy Resources Division
Department for Manufacturing, Innovation, Trade, Resources and Energy
Delegate of the Minister for Mineral Resources and Energy

ACTIVITY:	Environmental Significance Assessment																		
PROJECT:	Cooper Basin Petroleum Production Operations (Gibber Uplands) - Stuart Petroleum																		
ASSESSOR:	PIRSA																		
				ABBREVIATIONS: H = High certainty; M = Medium certainty; L = Low certainty															
				PREDICTABILITY						**MANAGEABILITY**									
REF	TYPE OF IMPACT	EVENT(S)	POTENTIAL CONSEQUENCES	SIZE	SCOPE	DURATION	FREQUENCY	STAKEHOLDERS	SIGNIFICANCE	AVOIDANCE	PROBABILITY	DURATION	SIZE AND SCOPE	CUMULATIVE EFFECTS	STAKEHOLDERS	SIGNIFICANCE	COMMENTS	Environmental significance
	Natural Environment Impacts																	
	Soil Impacts																	
2.5.2, 4.10.3, Table 1 - Obj 11		Disposal of hydrotest water	Soil erosion/scouring	H	H	H	H	H	1	NO	LOW					1	Flowlines are constructed and hydrotested in accordance with AS2885 Pipelines - Gas and Liquid Petroleim - Design and Construction. Hydrotest water is only disposed through the facility wastewater infrastructure, and bleeds for rectifying overpressure during testing are small (under 2L volume) and caught by a small bucket.	**LOW**
2.5.1, 4.3.2		Flooding of facilities and ponds	Soil contamination	H	H	H	M	H	2	NO	LOW					1	Oil facility siting is out of major drainage, minimises impact on minor drainage and is not prone to significant flooding. Locations of evaporative areas and pondages will need to be selected on a site-specific basis to avoid impacts which might result from external flooding. It is not possible to make a clear cut selection in a general document such as this, and the need for detailed site-specific information as new sites become neccessary is emphasised.	**LOW**
4.10.4, 4.10.8		Spills associated with tanker load-out and storage	Soil contamination	H	H	H	H	H	1	YES						1	The highest risk of spillages at a production facility come from road tanker filling operations and from storage tank overfill. Bunding is provided at each facility as a secondary containment about the stock and dewatering tanks. The volume enclosed by the bund is at least sufficient to cope with a catastrophic failure of the largest tank. Loading pumps have their own secondary containment bund, The tanker loading bays are clay sealed and bunded to protect against both local spillage and catastrophic failure of a road train trailer. Operations produce minimal oily waste and contaminated soil. Stuart Petroleum does not operate a land treatment area. Current provisions in the event of major soil contamination is removal to the landfarm facility at Moomba, by arrangement with Santos.	**LOW**
4.3.2, 4.3.3		Infiltrative disposal of produced water	Soil contamination	H	M	M	M	H	2	NO	LOW	MED	CONF			3	Acrasia PPF, as the only oil production facitlity at present on gibber land systems, it is likely to hold true for any future production facility on the Innamincka Dome, where surface disposal erosion risks are too high to manage. The gibber soil itself is erosion prone on any slope >2% if gibbers are disturbed. Detailed engineering investigation, however, revealed that the topography would not allow a simple free-form pond, and the neccessary bunding and permanently ponded water would result in permanent impact. Water disposal thus continues as infiltrative disposal, using multiple infitration points, into the dry near-surface Winton Formation sediments. Produced water is of low salinity, at 1500-4000ppm. Water at the initial infiltration sump returns hydrocarbon levels in analysis which are in the range of 2ppm or less to 9ppm. No oil visible (ie. <30ppm hydrocarbon content). Produced water may contain traces of emulsion breaker, and or biocides. As the water is being disposed into dry sediment, will not appear as seepage in surface drainage, and in even short residence time sediments have the hydrocarbons attaching to sediments (which themselves may contain hydrocarbon traces as coal fragments), the water quality presents no detectable risk.	**LOW**
2.5.2		Construction and operation of flowlines	Soil erosion	H	H	H	H	H	1	YES						1	Flowlines are low-pressure pipelines for transporting oil from wellheads to production and storage facilities within a licence area. Due to the saline and sodic nature of soils, flowlines are generally laid above ground supported on timber sleepers. These supported flowlines are clear of the ground surface which also minimises damming and redirection of overland water flows, and hence the attendant erosion risk.	**LOW**
3.5		Construction earthworks - (flowlines, pads, roads, borrow pits)	Soil erosion	M	H	M	H	H	2	NO	MED	SHORT	CONF			3	The current solutions, which are proving reasonably successful, are to keep the gibber surface intact, retaining the original microtopographic profile, by constructing pads, roads etc by direct fill laid over the uncut surface. No cuts into the soil profile in areas of more than minimal slope (<2%). Natural drainage paths and lines left unimpeded, overland flow to be as unimpeded as possible and borrow for fill obtained from areas where the construction of borrow pits will not itself initiate erosion.	**LOW**
4.10.8		Spills or leaks associated with disposal and treatment of sewage.	Soil contamination	H	H	H	H	H	1	NO	LOW					1	Sewage wastes and greywater are disposed via a permanent septic treatment system. Sewage volumes are not measured. There is minor potential for very localised soil and near surface groundwater contamination resulting from system leaks.	**LOW**
4.10.6, 4.10.9		Spills associated with transport of oil/condensate	Soil contamination	H	M	M	H	H	2	NO	LOW					1	There will be no movement in wet conditions. No wet wheel crossing of temporary local flows other than at sealed areas which are specifically engineered for that purpose (at present only Innamincka causeway). Procedures in place for safe use of the Innamincka causeway.This movement is no different in principle from other hazardous goods movements on the public road system, and is already governed by AS1940, The Storage and Handling of Flammable of Flammable Liquids.	**LOW**
4.10.4, Table 1 - Obj 11		Loss of containment of oil outside area designed to contain spills (ie. Pipe rupture, equipment failure)	Soil contamination	M	M	H	H	H	1	NO	LOW					1	To minimise loss of fluids for production items located outside bunded areas the following is applied: Steel piping will be used, product containment integrity will be assured by compliance with AS4041 (Pressure Piping), piping and equipment systems are appropriately routed, guarded and signage in place. Installation and operation provide for preventing overpressure from thermal and production shock effects. Regular inspections apply and an emergency response plan is in place.Vehicle movement directed away from unprotected pipes. No flowlines alongside regular public access routes.	**LOW**

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				PREDICTABILITY						MANAGEABILITY								
REF	TYPE OF IMPACT	EVENT(S)	POTENTIAL CONSEQUENCES	SIZE	SCOPE	DURATION	FREQUENCY	STAKEHOLDERS	SIGNIFICANCE	AVOIDANCE	PROBABILITY	DURATION	SIZE AND SCOPE	CUMULATIVE EFFECTS	STAKEHOLDERS	SIGNIFICANCE	COMMENTS	Environmental significanc
4.10.8		Storage and disposal of contaminated soil	Soil contamination	H	H	H	H	H	1	YES						1	Operations produce minimal oily waste and contaminated soil. Stuart Petroleum does not operate a land treatment area. Current provisions in the event of major soil contamination is removal to the landfarm facility at Moomba, by arrangement with Santos.	**LOW**
2.4.3, 5		Temporay storage of product in interceptor ponds	Soil contamination	M	H	M	H	H	2	NO	LOW					1	Interceptor pond is lined with artificial liner of minimal permeability. Associated with this pond will be a skimming system and a small storage for recovered slop oil. Slop will periodically be transferred by vacuum truck to Moomba for appropriate treatment and disposal. The long term rehabilitation of the field and access once reservoirs are ehausted requires bioremediation of any contaminated soil surfaces.	**LOW**
	Surface Water and Groundwater Impacts																	
2.5.2, 4.10.3, Table 1 - Obj 11		Disposal of hydrotest water	Surface water contamination	M	H	H	H	H	2	NO	LOW					1	Flowlines are constructed and hydrotested in accordance with AS2885 Pipelines - Gas and Liquid Petroleim - Design and Construction. No additional chemicals are added to hydrotest water. Depending on where the water was from, there will be chemicals typically found in poteble water (eg. chlorine), in local stock and road water wells, or produced water from Stuart Petroleum facilities(eg. scale inhibitor, demulsifiers). On completion of hydrotest, test water is disposed through the produced water disposal system.	**LOW**
4.10.4, 4.10.8		Spills associated with tanker load-out and storage	Surface water contamination	H	H	H	H	H	1	YES						1	The highest risk of spillages at a production facility come from road tanker filling operations and from storage tank overfill. Bunding is provided at each facility as a secondary containment about the stock and dewatering tanks. The volume enclosed by the bund is at least sufficient to cope with a catastrophic failure of the largest tank. Loading pumps have their own secondary containment bund, The tanker loading bays are clay sealed and bunded to protect against both local spillage and catastrophic failure of a road train trailer. Operations produce minimal oily waste and contaminated soil. Stuart Petroleum does not operate a land treatment area. Current provisions in the event of major soil contamination is removal to the landfarm facility at Moomba, by arrangement with Santos.	**LOW**
4.10.6		Storage and disposal of pond formation water	Surface water contamination	H	H	H	H	H	1	YES						1	The water handling sequence consistently results in water with no oil visible (i.e. <30ppm hydrocarbon content) disposed by evaporation and infiltration without entering surface waters, and without posing significant threat to wildlife.	**LOW**
2.5.2		Construction operation of flowlines	Surface water flow disturbance	M	H	M	H	H	2	NO	LOW					1	Flowlines are low-pressure pipelines for transporting oil from wellheads to production and storage facilities within a licence area. Due to the saline and sodic nature of soils, flowlines are generally laid above ground supported on timber sleepers. These supported flowlines are clear of the ground surface which also minimises damming and redirection of overland water flows, and hence the attendant erosion risk. Flowlines are laid subject to survey, including environmental assessment.	**LOW**
4.10.6, 4.10.9		Spills associated with transport of oil/condensate	Watercourse contamination	H	M	M	H	H	2	NO	LOW					1	There is a possibility of transportation spills resulting in some hydrocarbon pollution of natural surface waters. Risks are greatest where roads cross intermittent streams, or travel over active floodplains. There will be no movement in wet conditions. No wet wheel crossing of temporary local flows other than at sealed areas which are specifically engineered for that purpose (at present only Innamincka causeway). Procedures in place for safe use of the Innamincka causeway.This movement is no different in principle from other hazardous goods movements on the public road system, and is already governed by AS1940, The Storage and Handling of Flammable of Flammable Liquids.	**LOW**
4.3.3		Infiltrative disposal of produced water	Ground water and Surface water contamination	H	M	M	M	H	2	NO	LOW	MED	CONF			3	Water disposal thus continues as infiltrative disposal, using multiple infitration points, into the dry near-surface Winton Formation sediments. Produced water is of low salinity, at 1500-4000ppm. Water at the initial infiltration sump returns hydrocarbon levels in analysis which are in the range of 2ppm or less to 9ppm. No oil visible (ie. <30ppm hydrocarbon content). Produced water may contain traces of emulsion breaker, and or biocides. As the water is being disposed into dry sediment, will not appear as seepage in surface drainage, and in even short residence time sediments have the hydrocarbons attaching to sediments (which themselves may contain hydrocarbon traces as coal fragments), the water quality presents no detectable risk.	**LOW**
4.10.8		Spills or leaks associated with disposal and treatment of sewage.	Surface water contamination	H	H	H	H	H	1	YES						1	Sewage wastes and greywater are disposed via a permanent septic treatment system. Sewage volumes are not measured. There is minor potential for very localised soil and near surface groundwater contamination resulting from system leaks.	**LOW**
4.10.4, 4.10.8, Table 1 - Obj 11		Loss of containment of oil outside area designed to contain spills (ie. Pipe rupture, equipment failure)	Surface Water contamination	H	H	H	H	H	1	NO	LOW					1	To minimise loss of fluids for production items located outside bunded areas the following is applied: Steel piping will be used, product containment integrity will be assured by compliance with AS4041 (Pressure Piping), piping and equipment systems are appropriately routed, guarded and signage in place. Installation and operation provide for preventing overpressure from thermal and production shock effects. Regular inspections apply and an emergency response plan is in place. Current provisions in the event of major soil contamination is removal to the landfarm facility at Moomba, by arrangement with Santos. Vehicle movement directed away from unprotected pipes. No flowlines alongside regular public access routes.	**LOW**
	Vegetation Impacts																	

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Table 1 - Obj 7		Construction earthworks - (flowlines, pads, roads, borrow pits)	Loss of vegetation	M	H	M	H	H	2	NO	HIGH	MED	CONF			3	Location and development of facilities, new access, and borrow sources subject to environmental inspection and evaluation as part of the route selection process. No clearing category 1 trees, minimised removal of tall shrubs or small trees >1.5m both on access and at facility. Flagging of trees/groves for avoidance where appropriate.	**LOW**
Table 1 - Obj 9		Vehicle movement and introduction of borrow material	Introduction/spread weeds	H	H	H	H	H	1	NO	LOW					1	Activity associated with facility and access construction, particularly movement of vehicles and equipment, is a potential source of weed introduction and spread. The most effective prevention technique is to ensure that vehicles and equipment are cleaned prior to entry and movement off construction sites and easements minimised. Borrow sourcing can result in the spread of weeds also. Borrow sources should be in areas free of weed species.	**LOW**
4.8		Access and activity of personnel outside designated facility area / work areas	Damage to vegetation	M	H	M	H	H	2	NO	LOW					1	For general environmental aspects, Stuarts Petroleum's nominated representatives will be responsible for supervision of initial site preparation, enforcement of vehicle movement limitations.	**LOW**
2.5.2		Construction and operation of flowlines	Damage to vegetation	H	H	H	H	H	1	NO	LOW					1	Flowlines are low-pressure pipelines for transporting oil from wellheads to production and storage facilities within a licence area. Due to the saline and sodic nature of soils, flowlines are generally laid above ground supported on timber sleepers. Flowlines are laid subject to survey, including environmental assessment. Where possible flowlines are laid along existing tracks or utilising seismic lines.	**LOW**
4.10.5, 4.11		Fire at the production facility or during transport	Burning of vegetation	H	M	H	H	H	2	NO	LOW					1	The mitchell grasslands of the gibber land systems area only rarely capable of carrying more than small and mild fire, even under extreme temperature and wind conditions, because surface fuel loads are usually low. In an emergency event where an item of plant is on fire, production flows will be manually isolated where it is safe to do so. In the case of a fire associated with storage tanks, it is intended to simply let it burn out. All facilities are provided with firefighting first attack fire extinguishers at the loading pump, tanker bay, engine (generator, jet pump). Ignition potential is minimised by providing earthing in accordance with AS3000. Transportation fires will be left to burn out. Stuart Petroleum ERP provides for the use of earthmoving equipment to contain and extinguish secondary fires.	**LOW**
4.3.3		Infiltrative disposal of produced water	Loss of vegetation	H	H	H	H	H	1	NO	LOW					1	Water disposal thus continues as infiltrative disposal, using multiple infitration points, into the dry near-surface Winton Formation sediments. Produced water is of low salinity, at 1500-4000ppm. Water at the initial infiltration sump returns hydrocarbon levels in analysis which are in the range of 2ppm or less to 9ppm. No oil visible (ie. <30ppm hydrocarbon content). Produced water may contain traces of emulsion breaker, and or biocides. As the water is being disposed into dry sediment, will not appear as seepage in surface drainage, and in even short residence time sediments have the hydrocarbons attaching to sediments (which themselves may contain hydrocarbon traces as coal fragments), the water quality presents no detectable risk.	**LOW**
Table 1 - Obj 12		Spills or leaks associated with chemical and fuel storage, handling and transpotation.	Damage to vegetation	H	M	M	H	H	2	NO	LOW					1	There is a severe risk of pollution and impact on vegetation, where spills occur in periods or locations where oil can be easily spread, particularly wet areas and flowing watercourses. Procedures in place for safe movement of hydrocarbon/chemical transport and no movement on wet roads or in wet conditions. Contaminated soil on gibber fenced, monitored and allowed to remediate naturally, contaminated soil from spillage at a watercourse or floodway crossing removed. Spill contingency and emergency response plans in place.	**LOW**
	Fauna Impacts																	
4.10.4, 4.10.8, Table 1 - Obj 11		Loss of containment of oil outside area designed to contain spills (ie. Pipe rupture, equipment failure)	Faunal injury, death and habitat loss	H	H	H	H	H	1	NO	LOW					1	To minimise loss of fluids for production items located outside bunded areas the following is applied: Steel piping will be used, product containment integrity will be assured by compliance with AS4041 (Pressure Piping), piping and equipment systems are appropriately routed, guarded and signage in place. Installation and operation provide for preventing overpressure from thermal and production shock effects. Regular inspections apply and an emergency response plan is in place. Current provisions in the event of major soil contamination is removal to the landfarm facility at Moomba, by arrangement with Santos. Vehicle movement directed away from unprotected pipes. No flowlines alongside regular public access routes.	**LOW**
Table 1 - Obj 8		Construction and operation activities.	Faunal injury, death and habitat loss	H	H	H	H	H	1	NO	LOW					1	Proposed facilities, flowlines, new access and borrow areas assessed for rare, vulnerable and endangered species before construction. Inductions emphasisng minimisation of damage to vegetation and habitat; controls on movement of vehicles and people off prepared sites; fire procedures in place.	**LOW**
Table 1 - Obj 12		Spills or leaks associated with chemical and fuel storage, handling and transportation.	Access to contaminants by stock and wildlife	M	M	H	H	H	2	NO	LOW					1	There is a severe risk of pollution and impact on fauna, where spills occur in periods or locations where oil can be easily spread, particularly wet areas and flowing watercourses. Procedures in place for safe movement of hydrocarbon/chemical transport and no movement on wet roads or in wet conditions. Contaminated soil on gibber fenced, monitored and allowed to remediate naturally, contaminated soil from spillage at a watercourse or floodway crossing removed. Spill contingency and emergency response plans in place.	**LOW**

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4.10.6		Storage and disposal of pond formation water	Access to contaminants by stock and wildlife	H	H	H	H	H	1	NO	LOW					1	Pondages should be fenced, at a minimum with stockproof fencing, to exclude stock and larger terrestrial wildlife. The water handling sequence consistently results in water with no oil visible (i.e. <30ppm hydrocarbon content) disposed by evaporation and infiltration without entering surface waters and without posing significant threat to wildlife.	**LOW**
4.10.5, 4.11		Fire at the production facility or during transport	Loss of fauna habitat	H	M	H	H	H	2	NO	LOW					1	The mitchell grasslands of the gibber land systems area only rarely capable of carrying more than small and mild fire, even under extreme temperature and wind conditions, because surface fuel loads are usually low. In an emergency event where an item of plant is on fire, production flows will be manually isolated where it is safe to do so. In the case of a fire associated with storage tanks, it is intended to simply let it burn out. All facilities are provided with firefighting first attack fire extinguishers at the loading pump, tanker bay, engine (generator, jet pump). Ignition potential is minimised by providing earthing in accordance with AS3000. Transportation fires will be left to burn out. Stuart Petroleum ERP provides for the use of earthmoving equipment to contain and extinguish secondary fires.	**LOW**
Table 1 - Obj 7		Presence of borrow pits	Entrapment of fauna in borrow pit leading to injury or death	H	H	H	H	H	1	YES						1	Borrow pits, trenches and similar designed are designed and constructed as far as practicable to minimise fauna entrapment.	**LOW**
Table 1 - Obj 9		Domestic waste storage	Fauna attraction	H	H	H	H	H	1	YES						1	Securing of food wastes to avoid encouraging feral animals.	**LOW**
	Sensitive Area Impacts																	
1.2.4, 3.1, Table 1 - Obj 4		Disturbance to Coongie Lakes Wetlands	Loss of conservation value	H	H	H	H	H	1	NO	LOW					1	Present production operations on gibber areas do not impinge on the Ramsar Wetlands to any measurable extent, because of their locations distant from the key wetland areas, the minimal drainage links between PEL 90 areas and the key wetlands, and the long distances of drainage links from PEL 102 gibber areas to the key wetlands. Transport operations and procedures to prevent spills are in place to minimise spill risk in wet conditions.	**LOW**
3.1, 4.10.10		Disturbance to Innamincka Regional Reserve	Loss of conservation value	M	H	M	H	H	2	NO	LOW	MED	CONF			3	Stuart Petroleum's licence areas in gibber, Acrasia PPF and its associated wells, and access within South Australia all lie within the Innamicka Regional Reserve, but in an area where primary land use has been livestock grazing. Stuart Petroleum initiating rehabilitation on cessation of activities.	**LOW**
	Air impacts																	
Table 1 - Obj 18		Flare or venting hydrocarbons during well testing, blowdown and ancillary machinery.	Atmospheric pollution	H	H	H	H	H	1	NO	LOW					1	Production Operation in accordance with appropriate industry and legislative standards, maintenance of motorised equipment and exploration of alternative power sources with regard to emissions as well as fuel efficiency.	**LOW**
	Social Environment																	
	Community Resource Impacts																	
4.4.3		Visual appearance of the area due to construction and long-term persistence of facilities and access	Reduction in aesthetic value	M	H	M	H	H	2	NO	LOW					1	Current facilities at Acrasia PPF are distant from the public access Cordillo Road, by the tendency for oil reserves to be reflected by surface topography in the Innamincka Dome means that developments is often on summits, and future developments could well be clearly visible from visitor access roads. As well, an oil haul road is not in any way disguisable, and its presence must be advertised by signage, for safety reasons.	**LOW**
4.10.9		Transport of oil/condensate via road network	Increase public risk on these roads	H	H	H	H	H	H	NO	LOW					1	This movement is no different in principle from other hazardous goods movements on the public road system, and is already governed by AS1940, The Storage and Handling of Flammable of Flammable Liquids.	**LOW**
	Cultural & Heritage Impacts																	
3.8, 4.4.1, 4.4.2		Construction of facilities, sourcing material for road maintenance and cleaup of transportation spills	Disturbance to cultural heritage sites	H	H	H	H	H	1	NO	LOW					1	All current installations and transport routes are already on areas cleared for use by representatives of the signatories to the Native Title Agreements covering individual blocks. All proposed installations are subject to clearance before any actions are taken. Non-indigenous heritage is noted in field inspections prior to development. Over all present production areas, there are no notable items or areas of non-indigenous heritage. Simple avoidance is the preferred approach: where this is not possible, consultation with DENR may be sought for mitigation approaches.	**LOW**
4.8		Access and activity of personnel outside designated facility area/work area	Disturbance to cultural heritage sites	H	H	H	H	H	1	NO	LOW					1	For general environmental aspects, Stuarts Petroleum's nominated representatives will be responsible for supervision of initial site preparation, enforcement of vehicle movement limitations.	**LOW**
	Community Health & Safety																	

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2.5.1, 4.10.5, 2.5.1		Fire at the production facility or during transport	Danger to health of employees, contractors and visitors.	H	M	H	H	H	2	NO	LOW					1	The tanks must be in accordance with AS1692 (Tanks Flammable and Combustible Liquids). Filling systems and operation of the storage tanks and tankers will be in accordance with AS1940 (The Storage and Handling of Flammable and Combustible Liquids). In an emergency event where an item of plant is on fire, production flows will be manually isolated where it is safe to do so. In the case of a fire associated with storage tanks, it is intended to simply let it burn out. All facilities are provided with firefighting first attack fire extinguishers at the loading pump, tanker bay, engine (generator, jet pump). Ignition potential is minimised by providing earthing in accordance with AS3000. Transportation fires will be left to burn out. Stuart Petroleum ERP provides for the use of earthmoving equipment to contain and extinguish secondary fires. Seperation distances allow safe manual isolation in the event of fire in any area.	**LOW**
4.10.8, Table 1 - Obj 22		Domestic waste storage and disposal	Danger to health of employees, contractors and visitors.	H	H	H	H	H	1	YES						1	Domestic waste is currently returned to EPA-licensed facilities at Moomba. Wastes on site are confined to bins or skips.	**LOW**
4.10.8		Spills or leaks associated with disposal and treatment of sewage.	Danger to health of employees, contractors and visitors.	H	H	H	H	H	1	YES						1	Sewage wastes and greywater are disposed via a permanent septic treatment system. Sewage volumes are not measured. There is minor potential for very localised soil and near surface groundwater contamination resulting from system leaks.	**LOW**
	Economic Environment																	
	Existing Land Use Impacts																	
3.1, 4.9		Construction and operation activities.	Disturbance to land use (eg. grazing and tourism)	H	H	H	H	H	1	NO	LOW					1	Acrasia PPF and its associated wells, and access all lie within the Innamincka Regional Reserve, but in an area where the primary land use has been grazing livestock. Tourism use to the particular area is limited to transit along the Innamincka Cordillo Downs public road. Notifications of operations are provided to stakeholders. Under the Petroleum and Geothermal Act 2000, the EIR and SEO process itself provides for formal consultation.	**LOW**