## Environmental Impact Classification Pursuant to Section 98 of the *Petroleum Act 2000*

# Drilling Pad and Access Road Construction on Private Land, Otway Basin – South Australia

### 14<sup>th</sup> May 2001

#### INTRODUCTION

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

The classification must be made on the basis of:

- The prepared Environmental Impact Report (EIR);
- Criteria established for classifying the level of environmental impact of regulated activities, a copy of which is found on the PIRSA Petroleum Group web page: (<a href="http://www.pir.sa.gov.au/dhtml/ss/section.php?sectID=437&tempID=8">http://www.pir.sa.gov.au/dhtml/ss/section.php?sectID=437&tempID=8</a>); and
- Comment received from Planning SA, Department of Environment and Heritage (DEH) and Department for Water Resources (DWR) in accord with established administrative arrangements between these respective departments and PIRSA.

This document summarises the classification made by PIRSA on Drilling Pad and Access Road Construction on Private Land in the Otway Basin in South Australia. This classification is based on the information provided in the EIR and draft Statement of Environmental Objectives (SEO) both dated May 2001 as submitted to PIRSA by Origin Energy Ltd on the 7 May 2001.

### SUMMARY OF CLASSIFICATION

- From an analysis of the environmental significance of the various potential impacts associated with this operation – summarised in attachment #1 against the classification criteria – this regulated activity has been classified as **low impact**.
- 2) Comments received from DEH concur with this classification.

 Therefore pursuant to delegated powers dated 25 September 2000, gazetted28 September 2000, I hereby classify this regulated acted as low impact.

R A LAWS

Director Petroleum Group

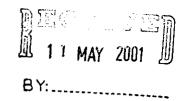
Office of Minerals and Energy Resources

Delegate of the Minister for Minerals and Energy

	ing Pad and Access Roa d Otway Basin - Signific																Attachment #1		
				ABBREV	IATIONS	: H = High	h certaint TABILITY	y; M = Me	edium			MANA	AGEABIL	ITY					
REF	TYPE OF IMPACT	EVENT(S)	POTENTIAL CONSEQUENCES	SIZE	SCOPE	DURATION	FREQUENCY	STAKEHOLDERS	SIGNIFICANCE	AVOIDANCE	PROBABILITY		SIZE AND SCOPE	IVE EFFECTS	STAKEHOLDERS	SIGNIFICANCE	COMMENTS	Environmental significance	
	Natural Environment Impacts																		
	Soil Impacts																		
1.2, 1.4.1, 2.2.1, 3.1.2, 4.1, table 2		Construction of access track	Soil compaction, erosion, loss of soil productivity, dust generation	н	н	н	н	н	1	o <sub>N</sub>	High	Short	Small	Small	Low	2	Where present, existing roads and tracks will be utilised. Some widening may have to take place and vegetation trimming, but no native vegetation will be cleared. Roads will be sheeted with gravel and kept to a maximum of 5 m wide. Landowner will be consulted on the placement of the access road, and it will be located to minimise disturbance to the environment. All vehicles involved in construction will use existing tracks and speed limits will apply.	Low	
1.2, 1.3.1, 2.2.2, 3.1.2, 4.1, table 2		Construction of drilling pad	Soil compaction, erosion, loss of soil productivity, dust generation	н	н	н	н	н	1	o <sub>N</sub>	High	Short	Small	Small	Low	2	Area for drilling pad will be cleared up to 150x150 m. Gravel will be laid directly onto topsoil to a height of 30 to 50 cm. If required, an area 18x10 m will be skimmed to a depth of 70 cm maximum and built up with compacted gravel to help support the drilling rig. Any topsoil removed will be stockpiled for use during rehabilitation. The landowner will be consulted on the placement of the drill pad. All vehicles involved in construction will use existing tracks and speed limits will apply.	Low	
2.1.1.2, 3.1.4, 4.3.6, table 2		Spills from chemicals and diesel fuel, and improperly disposed of waste materials	Soil contamination, loss of productivity	М	Н	Н	М	Н	2	oN N	Low			Small	Low	1	Waste products will be removed from the site by the construction contractor. Waste grease and oil will be stockpiled in drums before removal. Is an OCA/OEL waste management plan in place. Is a risk when transporting fuel and chemicals to the site. Soil removal and on-site bioremediation are proposed if a spill does occur. Drivers training and other mitigation strategies will be in place to avoid an incident.	Low	
	Vegetation Impacts																		
1.2, 2.1.1.2, 2.2.3, 3.1.3, 4.1, table 2	Together.	Construction of access track	Damage to or removal of native vegetation, loss of productivity	Н	н	н	н	н	1	Yes	Low	Short	Small	Low	Low	1	As existing roads will predominantly be used, there will be minimal impact on vegetation of any kind. A site survey will be undertaken before any work is undertaken to ensure no vegetation of significance is impacted upon. Some widening of tracks may be required, but as most properties in the region are used for grazing there will be little impact. There could be low grasses cut back or some tree trimming. No trees will be removed. Landowners will be consulted on track location where a suitable track is not available.	Low	
			Removal of endangered and	М	Н	Н	М	Н	2	Yes	Low				Low	1	Proposed locations of access tracks will be scouted for endangered and	Low	
1.2, 2.1.1.2, 2.2.3, 3.1.3		Construction of drilling pad	vulnerable species  Damage to or removal of native vegetation, loss of productivity	Н	н	Н	Н	Н	1	Yes	Low				Low	1	vulnerable species before commencement of work.  A site survey will be undertaken before any work is undertaken to ensure no vegetation of significance is impacted upon. Drilling pads will be sited to avoid removal of large trees. Any native vegetation habitat will be avoided, and landowners will be consulted on their preferred location to avoid or minimise impacts on crops, plantations, or pasture.	Low	
3.1.3, 3.2.1,		Construction of drilling pads	Introduction of weeds or	М	М	М	М	Н	2	Yes						1	Procedures will be in place to prevent the introduction of weeds or disease	Low	
table 2, SEO		and access tracks	diseases Removal of endangered and	М	н	Н	М	Н	2	Yes	Low				Low	1	to vegetation in the region.  Proposed locations of access tracks will be scouted for endangered and	Low	
			vulnerable species			· · ·		· · ·	-	<b>&gt;</b>	ĭ				۲	<u> </u>	vulnerable species before commencement of work.		
	Surface Water Impacts	0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1															Ment I also a la companya di managara di m		
3.1.5, 4.3.1, table 2		Construction of drilling pads and access tracks	Changes in surface flow direction, erosion	н	н	М	Н	н	2	2	Med				Low	1	Will be located to minimise number of creek crossings. Where required culverts will be installed to ensure drainage not interrupted. Surface water drainage will be directed away from the drilling pad.		
table 2		Stockpiling of soil and fill material	Contamination of surface streams by particulate run-off	М	М	М	М	Н	2	2	Med	Short			Low	2	Natural surface water will be kept free of stockpiled material. Work undertaken outside of the rainfall season to minimise risks.	Low	
2.1.1.2, 3.1.4, 3.1.5, SEO		Spills from chemicals and diesel fuel	Contamination of surface streams	М	н	н	М	н	2	8	Med	Short	Small	Low	Low	2	Acknowledges the chances are higher of contamination with maintenance and refuelling occurring on site. Contingency plan in place for spills. Procedures will be in place for the handling of chemicals and fuel.	Low	
	Groundwater Impacts																		
3.1.4, table 2	,	Spills from chemicals and diesel fuel	Groundwater contamination	М	М	М	М	М	3	°Z	Гом	Short	Small	Low	Low	1	There is an acknowledgment that spills may occur, but the volume of contaminants and the time of year that work is to be conducted should allow for cleanup before contamination of groundwater. The volume of spill will be such that penetration of fluid will not be expected to occur more than a few cm below the surface. Hence the gravel is expected to act as a buffer. Contaminated gravels will be recovered for treatment if a spill occurs. Will be procedures in place for handling potential contaminants, and for transporting them.	Low	

	ing Pad and Access Road																Attachment #1		
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REF	TYPE OF IMPACT	EVENT(S)	POTENTIAL CONSEQUENCES	SIZE	SCOPE	DURATION	FREQUENCY	STAKEHOLDERS	SIGNIFICANCE	AVOIDANCE	PROBABILITY		AGE AND SCOPE	ULATIVE EFFECTS	STAKEHOLDERS	SIGNIFICANCE	COMMENTS	Environmental significance	
	Native Fauna Impacts																		<del>                                     </del>
2.1.5, 2.2.4, 3.1.3, table 2	Nauve rauna impacts	Construction of drilling pads and access tracks	Fauna injured or killed	М	н	Н	Н	Н	2	o N	Low			Small	Low	1	Due to the clearance that has been undertaken on most private land the incidence of fauna traversing the sites should be low, and the construction activity is expected to deter most, including birds.	Low	
	Social Environment																		<del>                                     </del>
1	Community Resource Impacts																		
1.4.1, 2.5, 3.2.2	Impacts	Vehicle movement to and fror construction site	n Degradation of local roads	н	н	Н	Н	Н	1	<sup>0</sup> Z	Low	Short	Small	Small	Low	1	Local roads will be utilised for a short period of time only, so the risk of degradation is very low.	Low	
	Cultural & Heritage Impacts																		<del>                                     </del>
1.2, 2.1.1.2, 2.3, 2.4, 3.2.3, 3.2.4, 4.2, table 2		Construction of drilling pads and access tracks	Impact on or loss of aboriginal or European heritage sites	н	н	н	н	Н	1	Yes						1	The Kungari Aboriginal Association will inspect all sites for any cultural heritage sites. No sites of European heritage are expected where drilling pads and access tracks will be located, so will not be impacted on.	Low	
	Community Health & Safety																		-
1.1. 2.5. 3.2.2.	Community From a Caroty																		
4.3.2, table 2		construction site	n Accident resulting in injury or death	М	М	М	М	Н	2	Š	МОТ	Short	Small	Š	Low	1	Transport activities will be scheduled to avoid periods of high public usage of public roads. Local authorities will be notified of heavy vehicle movements. There will still be a risk to third party road users.	Low	
1.2, 4.3.2		Construction of drilling pads and access tracks	Accident resulting in injury or death	н	н	н	н	н	1	Yes						1	Precautions will be taken to restrict third party access to the construction site. As this is private land, and subject to the laws of trespass this is expected to be a further deterrent to third party access.	Low	
3.2.2, 4.3.4, SEO		Dust generation	Accident resulting in injury or death	Н	н	н	н	Н	1	2	Гом	Short	Small	2	Low	1	Higher risk of dust generation to other road users because the activities will be undertaken predominantly in drier periods. There is an undertaking to spray roads with water to minimise dust and for vehicles to drive at reduced speed limits to minimise risk.	Low	
2.1.1.2, 3.2.1, 3.2.2, table 2		Fire from equipment use, vehicles or smoking	Injury or death, loss of social amenities, wildfire	М	М	М	М	Н	2	Yes						1	Procedures are in place to prevent the onset of wildfire, such as clearing around designated work areas.	Low	
1.2, 4.3.5, SEO		Noise and visual impact	Discomfort to local community	н	н	н	н	Н	1	Yes						1	All precautions to be taken to minimise noise and visual impact on the local community. This will be done through undertaking activities during the day and locating well pads away from public view, where possible.	Low	
	Existing Land Use Impacts																		
3.1.3, 3.2.1, table 2, SEO		Introduction of weeds/diseases	Loss of productivity, loss of income	М	М	М	М	Н	2	Yes						1	Transport SA advice indicates that material sourced from borrow pits in the region, that will be used in access track and drill pad construction, is of relatively low risk provided that the topsoil is removed. Topsoil is considered the element that creates the highest risk of the introduction of weeds. All vehicles entering the region will be assessed for risk and treated accordingly. Plus landowners will be consulted on procedures.	Low	
		Fire from equipment use, vehicles or smoking	Loss of productivity, loss of income	Н	Н	Н	Н	Н	1	Yes						1	Procedures will be in place to ensure that fire is not initiated by any operations to do with access road and drill pad construction.	Low	
SEO		Construction of drilling pads and access tracks	Injury to livestock	н	н	Н	М	Н	2	Yes						1	operations to do with access road and drill pad construction.  Where livestock are present during construction, fencing will be provided to isolate the work site and staff will be briefed on animal behaviour. Landholders will be consulted where stock are an issue.	Low	





10-May-01

Chief Executive Department of Primary Industries and Resources GPO Box 1671 ADELAIDE SA 5001

Dear Sir,

The Department for Environment and Heritage has considered the application described below by consulting with the various groups within the Department. The following comments are offered:

**DME reference:** 1581/99

type:

**SEOprelim** 

locality:

Otway Basin

applicant: Origin Energy Resources Limited

comments:

In accordance with the terms of the Memorandum of Administrative Arrangement between PIRSA and DEH, we are in agreement with PIRSA's assessment that the proposal is one of low impact, and have only a few comments to make on the draft Environmental Impact Report and Statement of Environmental Objectives.

It is noted that the proponents intend consulting the Kungari Aboriginal Association to help identify sites of significance. It is suggested that the Department of State Aboriginal Affairs should also be consulted in this regard, as sites may not be obvious.

It is not entirely clear what 'scouting' for threatened species entails - it is suggested that this include consulting with the relevant officers of the Department for Environment and Heritage in regard to location and identification of threatened species.

Consultation with the Heritage Branch of Department for Environment and Heritage should be mentioned in relation to avoiding sites of European historical significance.



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