N-03000-FM0831 Revision 8 January 2015

Report of an accident, dangerous occurrence or environmental incident

For instructions and general guidance in the use of this form, please see the last page.

Part 1 is required within 3 days of a notified incident.

What is the date and time of this written incident report?

Thursday 1st December 2016

Part 2 is required within 30 days of notified incident.

What was th	e date and time of the initial verbal incide	ent notification to	NOPSEMA?	
Date	Monday 28 th November 2016	Time	15:20	

NOTE: It is a requirement to request permission to interfere with the site of an accident or dangerous occurrence. Refer OPGGS(S)R, Reg. 2.49.

Date Illuisuay 1 L	recember 2010	Tittle	13,	.00			
What type of incident is be	ing reported?		Please tick appropriate incident type				
Accident or dangerous occu	irrence			Complete parts 1A, 1B & part	2		
Environmental Incident			✓	Complete parts 1A, 1C			
BOTH (Accident or dangerous occurrence AND environmental incident)				Complete ALL parts (1A, 1B, 1C			
Please tick all applicable (one or r	nore categories)	To use ele	ectron	ically: MS Word 2007-10 – click in ch	neck box		
	Accidents	Death or Sei Lost time in					
Categories Please select one or more	Dangerous occurrences	Fire or explo Collision ma Could have Damage to	osion arine v cause safety event ident 50 bai	rrels	00000000		
	Environmental incidents	Hydrocarbo Chemical re Drilling fluid Fauna Incide Other	lease I/mud		8 000		



Part 1A – Information required within 3 days of an accident, dangerous occurrence or environmental incident

	Where did the incident	Facility / field / title name	Atwo	od Osprey / Keast Dockrell / WA-5-L
1.	occur?	Site name and location Latitude/longitude		KDA01 115° 47' 07.337"E, 19° 45' 28.929"S
	Who is the registered	Name		Woodside Energy Ltd
2.	operator/titleholder or other person that controls	Business address		240 St Georges Tce, Perth, WA 6000
	the works site or activity?	Business phone no.		9348 4000
_	When did the incident	Time and time zone	09:00 Sheen observ	ved, 15:00 Source confirmed (AWST)
3.	occur?	Date		Monday 28th November 2016
	Did anyone witness the incident?	Yes or no If yes, provide details below		Yes
	Witness details	Witness no 1	Witness no 2	Witness no 3
	Full name	Atwood Osprey		
	Phone no. (Business hours)			
4.	Phone no. (Home) (Mobile)			
	Email (Business) (Private)			
	Postal address			
	NB: If	more witnesses, copy and insert this s	ection (4) here , and add extro	I witness numbers appropriately
		Name		
5.	Details of person submitting	Position		
J.	this information	Email	@woodside.d	com.au
		Telephone no.		



Part 1A – Information required within 3 days of an accident, dangerous occurrence or environmental incident

Gen	eral information – all incidents	
		Whilst performing a planned discharge from the clean drain water tank, a sheen was observed from the port side of the rig.
		A rig based search was immediately conducted to determine the source of the sheen.
		Discharge from the clean drain water tank was stopped, and the sheen then stopped increasing.
	1	The volume of the spill was calculated using the AMSA oil spill calculator and estimated at 106 litres of hydrocarbons.
		The clean drain tank water discharge is normally protected by an automatic oil in water sensor that will automatically divert discharge to the oily water separator in event that there is more than 15ppm oil in water.
6.	Brief description of incident	While formal technical investigations are continuing, initial findings indicate that the water sample line that feeds the oil in water content meter for the clean drain water tank had become blocked, resulting in a continuous and non-representative oil in water measurement of less than 15ppm, allowing the automatic process of direct discharge overboard.
		Initial investigations indicate that water draining from the main decks over 6 years has resulted in a previously unknown collection of residues (including particles of solids) in the bottom of the clean drain water tank, blocking the sample line for the oil in water content meter.
		The source of the hydrocarbons in the clean drain water tank are, at the time of this report, considered to be a normal accumulation of floating hydrocarbon residue that is collected from all areas of the decks over a period of time. Initial investigations indicate that the blocked oil in water content meter prevented the normal protection system from functioning (protection would have been the automatic bypass via the oil water separator in event of the oil in water content meter reading > 15ppm.)
7.	Work or activity being undertaken at time of incident	Routine drilling activities at KDA01



8.	What are the internal investigation arrangements?	Initial investigations carried Environmental Incident rep 0001). Formal investigations into t	ort attached - Enviro	nment	efer to land all Incident - EI-1611-		
9.		Yes or no If Yes, provide details below				Yes	
		Type of fluid (liquid or gas) If hydrocarbon release please complete item no.15 as well	Please specify: Contaminated deck Please specify	drain	Hydrocarbon water Non-hydrocarbon		
		Estimated quantity Liquid (L), Gas (kg)			106L		
	Was there any loss of	Estimation details	Please specify:				
	containment of any fluid (liquid or gas)?	Composition Percentage and description	Accumulated hydrocarbons that have collected in the clean drain water tank.				
		Known toxicity to people					
		and/or environment	Toxicity to environment				
		How was the leak/spill detected?	F&G detection ☐ ☐ CCTV ☐		Visual Other		
			No Yes		Immediate Delayed		
		Did ignition occur?	No If yes, what was the likely ignition source		Hotwork ark electrical source ark metallic contact Hot surface Other		
		Yes or no	Yes				
10.	Has the release been stopped and/or contained?	Duration of the release hh:mm:ss	early and the start of identifiable on the concept accurate application estimate process.	of the s ocean s n of the	surface, allowing e AMSA oil spill calcu	ılator	
		Estimated rate of release Litres or kg per hour	as the discharge is k would have been a hydrocarbon.	oy grav combi		9	
11.	Location of release	What or where is the location of the release?	Discharge valve from via overboard disch		clean drain water tai ne.	nk',	



				<u></u>
		What equipment was involved in the release?	Clean water drain tank Oil in water content mete Automatic system (contai Vessel Management Syste Automatic overboard disc by VMS as determined by meter. Gravity discharge (head p	ned within the electronic em) charge valve, controlled oil in water content
		Is this functional location	No	ressure only)
		listed as safety-critical equipment?	NO NO	
		Ambient temperature c°	28 degrees	
		Relative humidity %	Not recorded	
		Wind speed m/s NB: for enclosed areas use Air change per hour	8 knots	
12.	1.2. Weather conditions Please complete as appropriate	Wind direction e.g. from SW	194 degrees	
I		Significant wave height m	1.1m at 12 to 15 seconds	(direction 250 degrees)
l		Swell m	0.03m at 16 to 19 seconds	s (direction 250 degrees)
I		Current speed m/s	Not recorded	
l		Current direction e.g. from	Not recorded	
		System of hydrocarbon release	Process ⊠ Drilling □ Subsea / Pipeline □	Utilities □ Well related □ Marine □
	Hydrocarbon release details	Estimated inventory in the isolatable system Litres or kg	Hydrocarbons released w Hydrocarbons were floati contained in the clean dra	ng on top of the water
13.	If hydrocarbon fluid (liquid or gas)	System pressure and size	Pressure MPag	Gravity head pressure,
	was released, please complete this	of piping or vessel		no pumps in system
	section as well	diameter (d in mm)	Size Piping (d)	Clean drain tank total volume
		length (I in m) or volume (V in L)	and Piping (I) or Vessel (V)	112cubic metres (was not full)
		Estimated equivalent hole	Not applicable	
		diameter	st applicable	
		d in mm		
	ı	I	I	



Part 1	LB - Complete for accide	nts or dangerous occur	rrences					
Accide	nts and dangerous occurrences	information						
	Was NOPSEMA notified throu notification phone line? Phon	, 	Yes				No	0
		Was permission given by a	NOPSEMA inspector	to inte	rfere \	with the	e site?	
		OPGGS(S)R 2.49.	Yes				No	
15.	Action taken to make the work-site safe	Action taken						
		Details of any disturbance of the work site						
	Was an emergency response initiated?		Yes				No	
16.		Type of response	Manual Automatic alarm				/luster uation	
		How effective was the emergency response?						
	Was anyone killed o	r injured? Provide details below	Yes				No	
	Injured persons (IP)		Casualty No 1					
	If different from item 2. Employer name		Employer address					
	Employer phone no.		Employer email					
	IP full name							
	IP date of birth			Sex	М		F	
	IP residential address							
17.	IP phone no. (Work)		IP phone no. (Home) Nobile)				
	IP occupation/job title		Contractor or core	crew				
	Details of injury							
	Based on TOOCS	a. Intracranial injury	d. Burn					
	(refer last page)	b. Fractures	e. Nerve or s					
	Nature of injury	c. Wounds, lacerations, amputations, internal	f. Joint, ligan				njury	
		organ damage G1. Head or face	☐ G5. Hip or leg					
		G2. Neck	☐ G6. Multiple lo	ocations				
	Part of body	G3. Trunk	G7. Internal sy	/stems				
		G4. Shoulder or arm	G8. Other			- +		



Part :	LB - Complete for accide	nts or dangerous occui	rrences		
Accide	nts and dangerous occurrences	information	200		
	Mechanism of injury	G0. Falls, stepping, kneeling, sitting on object G1. Hitting object G2. Being hit or trapped	G3. Exposure to sour G4. Muscular stress G5. Heat, cold or rad G6/7 Chemical, biolog G8. Other	iation gical substance	
	Agency of injury	Machinery or fixed plant Mobile plant or transport Powered equipment Non-power equipment	5/6. Chemicals, mate 7. Environmental ag 8. Human or animal 9. Other	gencies agencies	
	Details <mark>o</mark> f job being undertaken				
	Day and hour of shift	Day e.g. 5 th day of 7 (5 / 7) NB: If more casualties, please copy/p	Hour e.g. 3 rd hour of 12 (3)		
		s damage? Provide details below	Yes	No	
	Details	Item 1	Item 2	Item 3	
18.	Equipment damaged				
	Extent of damage				
	Will the equipment be shut down? Yes or No				
19.	If Yes, for how long?				
		NB: If more equipme	nt seriously damaged, please co	ppy/paste this section as re	quired
	Will the facility be shut down?	Yes or no If yes provide details below			
20.		Date		dd/mm/yyyy	
	Facility shutdown	Time		24 hour clock	
		Duration		days / hours / minu	ıtes
		Action	Responsible party	Completion date Actual or intended	
	l control of				
21.	Immediate action taken/intended, if any, to prevent recurrence of				
	incident.				
	-2.1				
					_
22.	What were the immediate causes of the incident?				



Attach	ments			
Are you attaching any documents?		Yes or no If yes provide details below	No	
No.	ID	Revision	Date	Title/description
	1			
				Insert or delete rows as required

Par	t 1C – Complete for env	ironmental incidents					
Envi	ronmental Impacts						
23.	What is the current environment plan for this incident?	Environment plan	Greate A1806			Tieback Environment	Plan
		Yes or no If yes provide details below	No				
		Incident details e.g. estimated area of impact, nature/significance of impact	NA				
	Has the incident resulted	ENVIRONMENTAL RECEPTO	RS				
	in an impact to the environment?	Sh Population Stakel	nolders		Macroalgae Coral Ree Benthic invertebrates Seagrass		00000
24.		Other sen				Mangrove	
	Details	Further details Environment 1	E,	wiron	ment 2	Environment 3	
	Location of receiving environments Lat/Long	S, 115 ⁰ 47' 07.337" E, 19 ⁰ 45' 28.929"S		IVIIOII	ment Z	Literonnent	
	Date & time of impact	28/11/2016 0900 - 15:00					
	Action taken to minimise exposure	Investigate source of sheen on ocean surface, followed by action to stop the source					
	Specify each matter protected under Part 3 of the EPBC Act impacted	None					
				d, pleas	e copy/paste this	section (Item E3) and add ext	ra data
25.		Yes or no If yes, provide details	No				



Part 1C - Complete for environmental incidents **Environmental Impacts** Are any environments at Details risk? e.g. zone of potential impact Including as a result of spill AT RISK ENVIRONMENTS response measures Open ocean Macroalgae Coral Reef Shoreline Population Centre Benthic Invertebrates Seagrass Stakeholders Mangrove Other sensitivity e.g. conservation area, nesting beach Details **Environment 1 Environment 2 Environment 3** Estimated location of 'atrisk' environments Estimated impact date & Action required to minimise exposure Specify each matter protected under Part 3 of the EPBC Act at risk NB: If more environments at risk of damage, please copy/paste this section (Item E2) and add extra data Yes or no Source of spill was immediately identified and If yes, what action has been Was an oil pollution isolated. Sheen was no more than rainbow in 26. emergency plan activated? implemented /planned? concentration. If yes, how effective is/was the spill response? Was an environmental Yes or no No monitoring program If yes, what actions have 27. initiated? been implemented and/or planned? Did the incident result in Yes or no No the death or injury of any (If yes provide details of fauna? species in the table below) Injured fauna Species 1 Species 2 Species 3 Species name 28. (common or scientific name) Number of individuals Killed: Killed: Killed: killed or injured Injured: Injured: Injured: NB: If more species were injured or killed, please copy/paste this section (Item E4) and add extra data



on	Responsible party	Completion date Actual or intended
ect source of the spill		28/11/2016
se draining the 'clean		28/11/2016
n water tank'		Complete
	NB: If more ac	ctions, please add extra rows as requ
on	Responsible party	Completion date Actual or intended
sor feed tube for the oil vater content meter on discharge pipe of the an drain water tank' was locked and function ored		28/11/2016 Complete
	NB: If more ac	ctions, please add extra rows as requ
on	Responsible party	Completion date Actual or intended
nplete further estigation, identify and lement long term rective measures to ure blockage of the oil rater content meter uple line does not occur		15 December 2016
•		
	on sor feed tube for the oil vater content meter on discharge pipe of the an drain water tank' was locked and function ored on splete further estigation, identify and lement long term ective measures to ure blockage of the oil vater content meter ple line does not occur	NB: If more action on the spill

Are you attaching any documents?		ny	Yes or no If yes provide details below	Vec
No.	ID	Revision	Date	Title/Description
1	Environment al Incident - EI-1611- 0001	NA	30/11/2016	Environmental Incident Report



Part 2 - Information required within 30 days of accident or dangerous occurrence

NOPSEMA acknowledges that in many circumstances an operator may not have completed an investigation within 3 days of an accident or first detection of a dangerous occurrence and agrees that these items must be provided within 30 days unless otherwise agreed, in writing with NOPSEMA. In circumstances where an investigation has been completed within 3 days, and these items are available (supplemented, as required by any attachments) this part should also be completed at that time.

	Has the investigation been completed?	Yes or no		
		Root cause 1		
		Root cause 2		
	Root cause analysis	Root cause 3		
	What were the root causes?	Other root causes		
2.	Full report			
	Describe investigation in detail,			
	including who conducted the			
	investigation and in accordance			
	with what standard/procedure			
	with reference to attachments listed in the 'attachments table'			
	(following) as applicable			
		Action	Responsible party	Completion date Actual or intended
	Actions to prevent			
	recurrence of same or			
3.	similar incident			

Are you attaching any documents?			Yes or no If yes provide details below	
No.	ID	Revision	Date	Title/description



Instructions and general guidance for use:

- 1. The use of this form is voluntary and is provided to assist operators and titleholders to comply with their obligations to give notice and provide reports of incidents to NOPSEMA under the applicable legislation.
- 2. Accidents, dangerous occurrences or environmental incidents can all be reported using this same form.
- 3. The applicable legislation for incident reporting is:
 - a. Offshore Petroleum and Greenhouse Gas Storage (Safety) Regulations 2009 [OPGGS(S)R]; and
 - b. Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009 [OPGGS(E)R], for facilities located in Commonwealth waters; or
 - c. for facilities located in designated coastal waters, the relevant State or Territory Act and associated Regulations where there is a current conferral of powers to NOPSEMA.
- 4. In the context of this form an incident is a reportable incident as defined under:
 - a. OPGGSA, Schedule 3, Clause 82.
 - b. OPGGS(E)R, regulation 4.
- 5. This form should be used in conjunction with NOPSEMA Guidance Notes available on the NOPSEMA website:
 - a. N-03000-GN0099 Notification and Reporting of Accidents and Dangerous Occurrences
 - b. N-03000-GN0926 Notification and Reporting of Environmental Incidents
- 6. Part 1 requires completion for all incidents; then ALSO complete part 2 if the incident is an accident or dangerous occurrence.
- 7. NOPSEMA considers that a full report will contain copies of documentary material referenced and/or relied on in the course of completing this form, which may include (but not be limited to) as appropriate: witness statements, management system documents, drawings, diagrams and photographs, third party reports (audit, inspection, material analysis etc.), internal records and correspondence.
- 8. This form is intended to be completed electronically using Microsoft Word by completing the unshaded cells which will expand as required to accept the information required <u>and</u> the check boxes where relevant (NB: check boxes may appear shaded and have reduced functionality in MS Word versions prior to 2010).
- 9. The completed version of this form (and any attachments, where applicable) should be emailed to: submissions@nopsema.gov.au or submitted via secure file transfer at: https://securefile.nopsema.gov.au/filedrop/submissions as soon as practicable, but in any case within three days of the incident.

References

NOPSEMA website: www.nopsema.gov.au

TOOCS – Type of Occurrence Classification System.

The *Type of Occurrence Classifications System, Version 3.0* (TOOCS3.0) was developed to improve the quality and consistency of data. This system aligns with the International Classification of Diseases –Australian Modification (ICD10-AM).

http://www.safeworkaustralia.gov.au/sites/SWA/AboutSafeWorkAustralia/WhatWeDo/Publications/Documents/2 07/TypeOfOccurrenceClassificationSystem(TOOCS)3rdEditionRevision1.pdf

OPGGS(S)R. Offshore Petroleum and Greenhouse Gas Storage (Safety) Regulations 2009. Select Legislative Instrument 2009 No. 382 as amended and made under the *Offshore Petroleum and Greenhouse Gas Storage Act* 2006. Commonwealth of Australia.

OPGGS(E)R. Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009. Statutory Rules 1999 No. 228 as amended and made under the *Offshore Petroleum and Greenhouse Gas Storage Act 2006*. Commonwealth of Australia.



Privacy Notice

NOPSEMA collects your personal information for the purpose of investigating accidents, dangerous occurrences and environmental incidents under the Offshore Petroleum and Greenhouse Gas Storage Act 2006.

NOPSEMA will not use or disclose your personal information for any other purpose without your consent, unless it is required or authorised by law, or relates to NOPSEMA's enforcement activities. Your personal information may be disclosed to the following organisations, entities or individuals:

- individuals who make a request under the Freedom of Information Act 1982
- the Australian National Audit Office and other privately-appointed auditors
- other law enforcement bodies (for example, the police or the Coroner)
- NOPSEMA's legal advisors.

NOPSEMA may occasionally be required to disclose information to overseas recipients in order to discharge its functions or exercise its powers, or to perform its necessary business activities.

Information about how you can access, or seek correction to, your personal information is contained in NOPSEMA's APP Privacy Policy at www.nopsema.gov.au/privacy. If you have an enquiry or a complaint about your privacy, please contact NOPSEMA's Privacy Contact Officer on (08) 6188 8700 or by email at: privacy@nopsema.gov.au.